2000 Annual Evaluation Report

KSDE Study of Programs for At-Risk Four-Year-Olds

The Work Sampling System Developmental Checklist Section

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Planning and Research

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EXECUTIVE SUMMARY

As part of the school finance formula for 1998-1999, the legislature and governor approved funding of a half-day educational program for 1,350 at-risk four-year-olds.? The number of children enrolled in the program at the time of the October count to the Kansas State Department of Education was 1,292.? Because many districts combined the children and resources from their other programs for four-year-olds (i.e., Special Education, Head Start, Even Start, Title I) with those of the at-risk four-year-old program in order to provide better service to all of the children, a total of 2,084 children were actually served through the at-risk four-year-old program during 1998-99 at a cost of $4,680,934.? In 1999-2000, money was appropriated for 2,040 children.? There were 1,668 at-risk four-year-olds and 2,855 total children served at a cost of $7,112,574.? It is estimated that there are 35,000 four year olds in the state.? Of this number, about 10,000 children meet one or more criteria that would identify them as at risk.? Head Start and Special Education serve 4,500 of these children, which leaves 5,500 who could be served through the four-year-old at-risk program if it were fully funded and implemented.

Four-year-olds are identified for the at-risk program, by the local school districts that receive grants, using multiple criteria.? For example, a child might be included if one or more of the following are true. ?The child (1) is living in poverty, (2) is living in single parent family, (3) is a referral from SRS or from another early childhood program, (4) has teen parents, (5) has parents who lack a high school diploma or GED, (6) has limited English proficiency, or (7) is developmentally or academically delayed, based on reliable assessments.? The table below indicates some of the characteristics of the children served by the program during its first two years. In 1999-2000, fewer children were referred by another early childhood program and fewer children were delayed.

CHARACTERISTICS OF STUDENTS IN FOUR-YEAR-OLD AT-RISK PROGRAM

Characteristic	% of Children in 1999	% of Children in 2000
Is from a lower socioeconomic status family	71	69
Lives in a single parent family	35	36
Is an SRS referral	3	3
Was born to teen parents	14	16
Has at least one parent who is lacking a high school diploma or GED	24	22
Is limited-English-speaking	13	14
Is developmentally or academically delayed	35	23
Is a referral from another early childhood program	14	4

In addition to an educational program, 78 percent of the children were provided with nutrition services, 55 percent with health services, 33 percent with transportation services, 31 percent with counseling services, and 27 percent with social work services.

Approximately one-third of the children served in 1998-1999 were selected for a longitudinal study being conducted by the Kansas State Department of Education (KSDE).? To date, these children have been observed and rated by their teachers in the fall and spring of both the 1998-99 and 1999-00 school years, using The Work Sampling System Developmental Checklist developed by Jablon, Marsden, Meisels, and Dichtelmiller.? The Checklists comply with the NAEYC guidelines and assist teachers in observing and documenting individual children's growth and progress.? They cover seven domains:? Personal & Social Development, Language & Literacy, Mathematical Thinking, Scientific Thinking,

Social Studies, The Arts, and Physical Development.? Teachers complete the Checklists as the children engage in tasks appropriate to their age and skill level. The Guidelines that accompany the Checklists provide teachers with clear rationales and examples of performance so that they can complete the Checklists reliably and interpret the indicators in a consistent manner. Possible ratings[1] on the Checklists are ?Not Yet,? ?In Process,? and ?Proficient.?? A group of comparison children was selected at the beginning of the 1999-00 school year.? Teachers completed Developmental Checklists and student information sheets for each of these children.? The progress of both groups of children will be followed through the fall of the children's second grade year.? One-third of the children served in the 1999-00 school year were selected for a one year study.? Teachers completed Developmental Checklists and information sheets on these children.? Some of the major findings from the second year of the four-year-old at-risk program follow.

? As in the first year, among the preschool group, the most growth occurred in Mathematical Thinking and the least growth occurred in Physical Development.? The same was true for the Kindergarten group.

? In the first year of the program, the percent of students who entered the program proficient in a domain ranged from 6 percent in Social Studies to 28 percent in Personal & Social Development.? The percent of students who left the program with proficient ratings ranged from approximately 49 percent in Social Studies and Scientific Thinking to 78 percent in Physical Development.? In the second year of the program, the percent of students who entered the program proficient in a domain ranged from 3 percent in Social Studies to 26 percent in Physical Development.? The percent of students who left the program with proficient ratings ranged from 42 percent in Science to 85 percent in Physical Development.

? With the exception of Physical Development, pretest proficiency levels of the 1999-2000 at-risk four-year-olds were lower than the levels of the 1998-1999 group (Graphs 3 and 4).? However, the 1999-2000 group made larger gains during the year in Personal and Social Development, Language and Literacy, Mathematical Thinking, Social Studies, and Physical Development.

? There were only slight differences between the domain means of the sample Kindergarten and comparison Kindergarten students.? However, results were affected by having no comparison children for several of the sample children, attrition, and 65 of the 212 comparison children having attended preschool.? Therefore, preschool attendance is a more worthwhile disaggregation variable.

? Preschool experience was related to more children being proficient at the beginning of the Kindergarten year in all domains, but especially in the domains of Personal and Social Development, Language and Literacy, and Physical Development.? Students with preschool experience were still at a slight advantage at the time of the posttest in the domains of Language and Literacy, Mathematical Thinking, Scientific Thinking, and Physical Development.? The differences were not statistically significant.

? Effect sizes are often used to judge educational significance.? Medium and large effect sizes would be most meaningful in measuring program impact.? In both fall and spring, effect sizes for the preschool group were small in all domains, when data were analyzed by SES.? In the fall, there were medium effect sizes for the Kindergarten group, when data were analyzed by SES, in both Language & Literacy and Mathematical Thinking.? There were no differences this large in the spring.? When there were differences, higher SES students outperformed lower SES students.

? In the fall, there were medium effect sizes, when preschool data were analyzed by English-speaking

ability, in the domains of Scientific Thinking, Social Studies, and Language & Literacy; and there were medium effect sizes, when Kindergarten data were analyzed by English-speaking ability, in the domains of Scientific Thinking and Language & Literacy.? By the spring, there were no medium or large effect sizes.

? There were no medium or large effect sizes in the fall or spring when the preschool data were analyzed by gender.? Among the Kindergarten group, there were medium effect sizes in the fall in the areas of Personal & Social Development and The Arts and in the spring in the area of The Arts.? Girls received the higher ratings.

? When Kindergarten data were analyzed by preschool attendance, both fall and spring effect sizes for all domains were small.

? For the preschool group, between the pretest and the posttest, the size of the gap was reduced in the domains of Personal and Social Development, Mathematical Thinking, Scientific Thinking and Social Studies, when data were analyzed by English language proficiency; in the domains of Scientific Thinking, Social Studies, and Physical Development, when data were analyzed by delay; and in the domains of Language and Literacy and Social Studies, when data were analyzed by SES.? When data were analyzed by gender, the gap widened between the pretest and posttest in the domains of Social Studies and Mathematical Thinking.

? For the kindergarten group, between fall and spring, the gap was reduced in the domains of Personal and Social Development, Scientific Thinking, Social Studies, The Arts, and Physical Development, when data were analyzed by SES; in the domains of Personal and Social Development, Language and Literacy, Mathematical Thinking, and Physical Development, when data were analyzed by preschool attendance; and in the domains of Physical Development, Mathematical Thinking, and Scientific Thinking, when data were analyzed by gender.

? At-risk factors such as being from a lower socioeconomic family, being limited-English proficient, or not having preschool experience - made more of a difference in scores in most domains in the fall.? Both preschoolers and kindergartners tended to reduce the achievement gap during the school year.

Introduction

There are approximately 35,000 four-year-olds in the state.? Of this number, it is estimated that 10,000 children meet one or more criteria that would identify them as at risk.? Head Start and Special Education serve 4,500 of these children, which leaves 5,500 who could benefit from a four-year-old at-risk program. As part of the school finance formula for 1998-1999, the legislature and governor approved funding of a half-day educational program for 1,350 at-risk four-year-olds.? There were 1,292 at-risk four-year-olds and 2,084 total children served through the at-risk four-year-old program during 1998-99 at a cost of $4,680,934.? In 1999-2000, money was appropriated for 2,040 children.? There were 1,668 at-risk four-year-olds and 2,855 total children served at a cost of $7,112,574. Larger numbers were served because many districts combined the children and resources from their other programs for four-year-olds (i.e., Special Education, Head Start, Even Start, Title I) with those of the at-risk four-year-old program in order to provide better service to all of the children.

Any public school district in Kansas may apply for four-year-old at-risk funds through a competitive grant process.? The district programs must meet the minimum number of hours of operation as required for a kindergarten program: 2.5 hours a day or a minimum of 465 hours a year.? Teaching staff must have elementary or early childhood education certification in Kansas. Districts are required to provide a developmentally appropriate educational program that focuses on cognitive, language, social, emotional, physical, cultural, and aesthetic development.? Students receive services such as counseling, health, transportation, and nutrition services in addition to an educational program to prepare them for success in K-12 education.?

The Work Sampling Developmental Checklists measure areas of focus in the program and are providing one source of data for the evaluation of the four-year-old at-risk program.?
The Checklists -- written by Judy Jablon, Dorothea Marsden, Samuel Meisels, and Margo Dichtelmiller --? comply with the NAEYC guidelines and assist teachers in observing and documenting individual children?s growth and progress.? They cover seven domains: Personal & Social Development, Language and Literacy, Mathematical Thinking, Scientific Thinking, Social Studies, The Arts, and Physical Development.? Teachers complete the Checklists as the children engage in tasks appropriate to their age and skill level.? The Guidelines that accompany the Checklists provide teachers with clear rationales and examples of performance so that they can complete the Checklists reliably and interpret the indicators in a consistent manner. Possible ratings on the Checklists are ?Not Yet,? ?In Process,? and ? Proficient.?

Last year, preschool teachers completed Student Information Sheets for 1,804 students. Information from the sheets show that most of the children served during the 1999-2000 school year were poor, and more than one-third lived in single parent families. There were 12 percent fewer children than in the previous year selected for the program due to developmental or academic delays; and there were 10 percent fewer children who were referred from another early childhood program.? Otherwise, the characteristics of the children closely matched those of the children served in the first year of the program.
Table 1 more fully describes the characteristics of the children.

TABLE 1:? CHARACTERISTICS OF STUDENTS IN FOUR-YEAR-OLD AT-RISK PROGRAM: 1999-2000 SCHOOL YEAR

	In Sample		Not In Sample		Total	
	Count	%	Count	%	Count	%
Lower SES	378	67	859	70	1237	69
Single parent family	198	35	454	37	652	36

SRS referral	19	3	41	3	60	3
Born to teen parent	95	17	184	15	279	16
Parent has less than HS	115	20	276	22	391	22
Is limited English speaking	71	13	174	14	245	14
Developmentally or academically delayed	135	24	279	23	414	23
Referral from another EC program	19	3	45	4	64	4

In addition to an educational program, 78 percent of the children were provided with nutrition services, 55 percent with health services, 33 percent with transportation services, 31 percent with counseling services, and 27 percent with social work services.

TABLE 2:? SUPPORT SERVICES PROVIDED

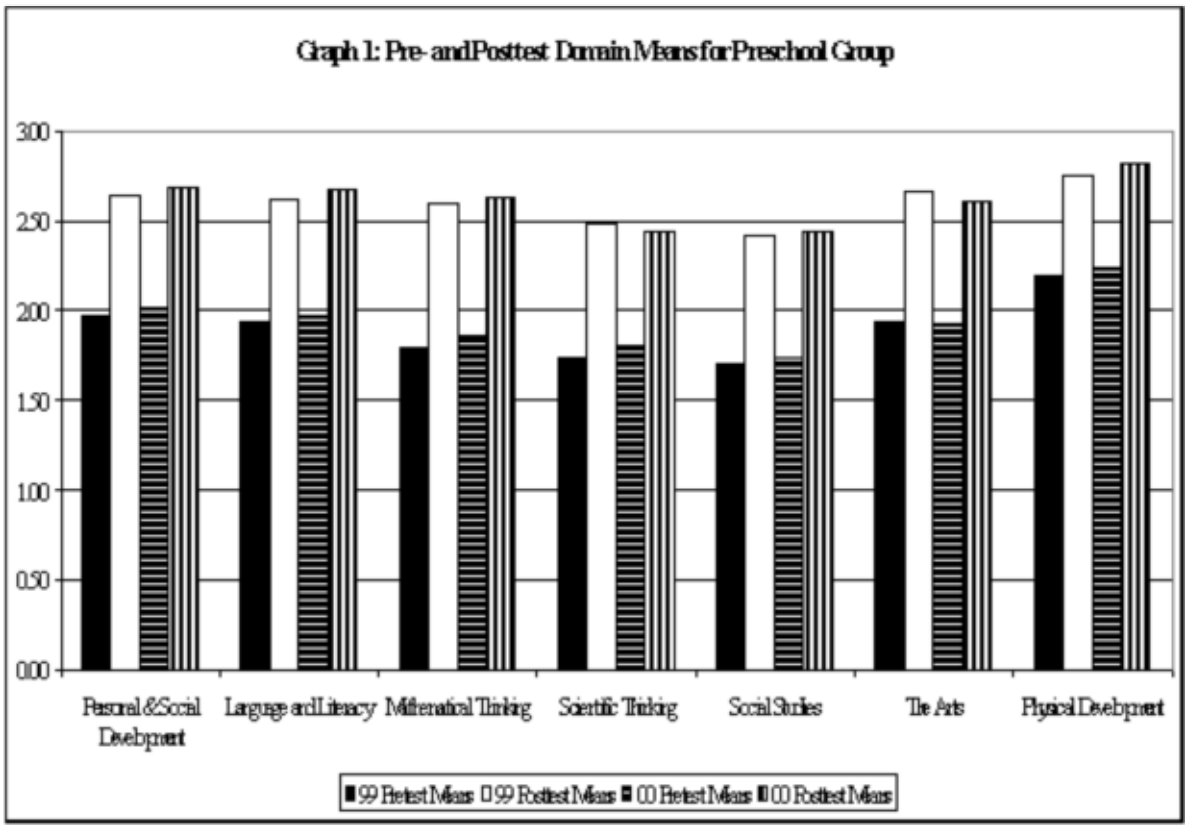
	In Sample		**Not In Sample**		**Total**	
	Count	**%**	**Count**	**%**	**Count**	**%**
Nutrition services	442	79	960	78	1402	78
Health services	332	59	662	54	994	55
Transportation services	182	32	408	33	590	33
Counseling services	187	33	365	30	552	31
Social work services	174	31	318	26	492	27

During the school year, teachers were to observe one-third of their students and then rate them, using the Work Sampling Developmental Checklists: once in the fall and once in the spring. Of the 569 children selected for the study sample, 56 percent were male and 44 percent were female. There were no significant differences in characteristics or in services received between the group selected for the one-year study and the other students served.

Do the programs for at-risk four-year-olds? prepare children for school?

Developmental Checklists were completed in the fall and spring for 569 of the children in the preschool program. The Checklists present skills, behaviors, and accomplishments in the form of one-sentence performance indicators.? Developmental Guidelines, giving detailed information about each performance indicator and about how it should be rated, were given to each teacher in the fall.? The Guidelines assist with correct use of the Checklists and with reliable ratings.

Ratings for the 61 items on the Preschool-4 Checklist collapse into 25 sub-domain and 7 domain ratings.? Fall and spring ratings are shown in Table 3.? A rating of ?1? means ?Not Yet,? a rating of ?2? means ?In Process,? and a rating of ?3? means ?Proficient.?? There was growth in all domains.? As with the group last year, the largest growth occurred in Mathematical Thinking and the least growth occurred in Physical Development.

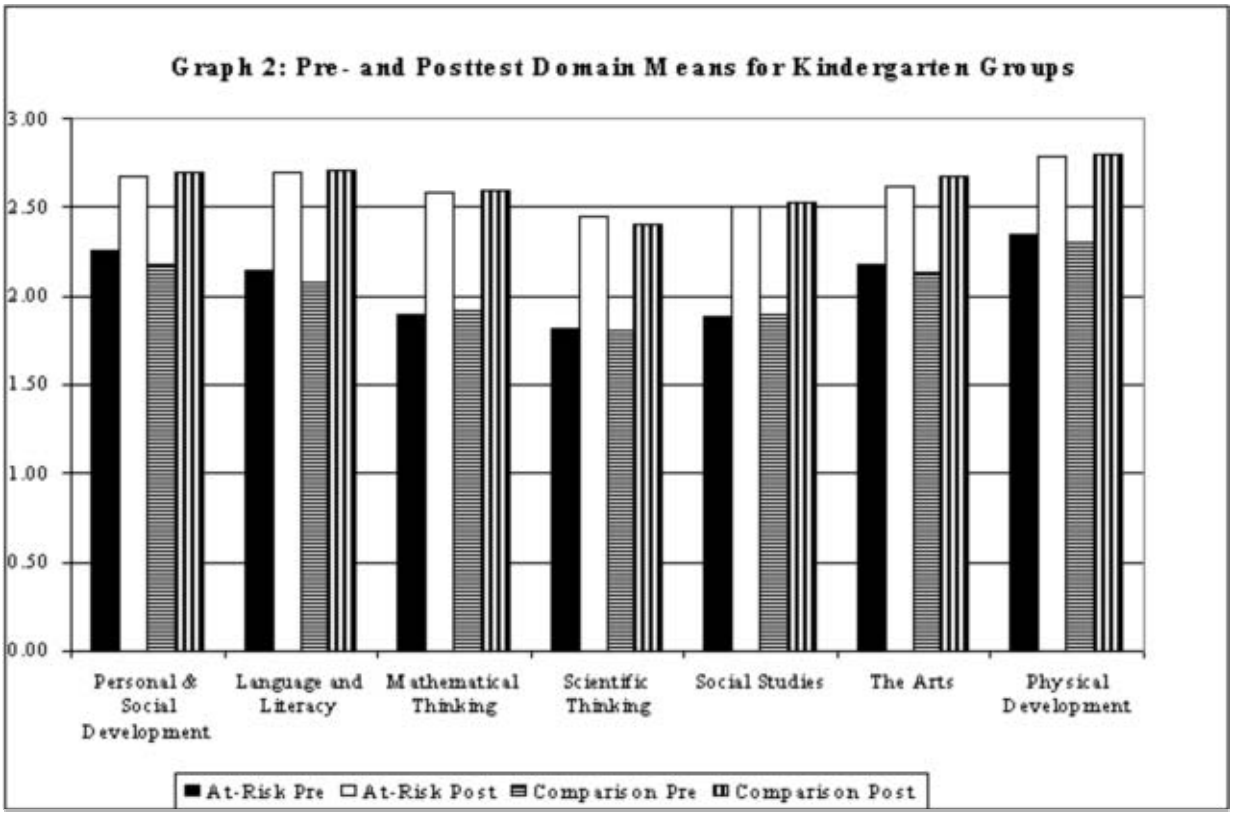


In both years, the sub-domains of Conflict Resolution, Measurement, People and Where They Live, and Artistic Appreciation were lower than other sub-domains in their respective domains Writing was lower in the fall, but not in the spring (Table 3).

??? TABLE 3:? PRESCHOOL DEVELOPMENTAL CHECKLIST MEAN RATINGS FOR FALL AND SPRING:? 1998-99 & 1999-00

Domain	Fall 98 Rating	Spring 99 Rating	Fall 99 Rating	Spring 00 Rating
Personal & Social Development				
? Self Concept	**1.97**	**2.64**	**2.02**	**2.68**
? Self Control	1.94	2.65	2.02	2.71
? Approach to Learning	2.09	2.70	2.14	2.76
? Interactions with Others	1.96	2.63	1.97	2.66
? Conflict Resolution	2.05	2.68	2.10	2.71
	1.81	2.50	1.85	2.55
Language and Literacy	**1.94**	**2.62**	**1.97**	**2.67**
? Listening	1.98	2.61	2.03	2.67
? Speaking	2.11	2.66	2.17	2.72
? Literature & Reading	1.93	2.60	1.90	2.62
? Writing	1.74	2.63	1.77	2.62
Mathematical Thinking	**1.80**	**2.60**	**1.86**	**2.63**
? Approach to Math Thinking	1.79	2.53	1.79	2.58
? Patterns & Relationships	1.74	2.60	1.83	2.65
? Number Concept & Operations	1.94	2.70	2.02	2.71
? Geometry & Spatial Relations	1.90	2.68	1.94	2.74
? Measurement?	1.62	2.42	1.69	2.43
Scientific Thinking	**1.74**	**2.48**	**1.81**	**2.43**
? Observing & Investigating	1.77	2.50	1.85	2.51
? Questioning & Predicting	1.70	2.47	1.77	2.35
Social Studies	**1.70**	**2.42**	**1.74**	**2.43**
? Human Similarities				
&???????????????????	1.82	2.56	1.92	2.60
Differences	1.70	2.43	1.75	2.41
? Human Interdependence	1.82	2.49	1.83	2.51
? Rights & Responsibilities	1.44	2.17	1.48	2.20
? People & Where They Live				
The Arts	**1.94**	**2.66**	**1.93**	**2.61**
? Expressions & Representation	2.04	2.71	2.08	2.70
? Artistic Appreciation	1.84	2.62	1.78	2.52
Physical Development	**2.19**	**2.75**	**2.24**	**2.81**
? Gross Motor Development	2.21	2.71	2.26	2.80
? Fine Motor Development	2.08	2.74	2.11	2.77
? Personal Health & Safety	2.28	2.81	2.36	2.87

Kindergarten teachers were given the names of children in the longitudinal study sample:? the sample of children upon which last year's report was based.? Teachers were asked to match each child in the study sample with a similar (comparison) child, using the matching variables of gender, socioeconomic status of family, English language proficiency, and time of year of birth.? If possible, they were to select children who had not attended preschool as four-year-olds.? Unfortunately, comparison students were not selected in each of the districts, and many comparison students who were selected had attended preschool (65 students).? Also, the number of students from the original sample remaining in schools where they could be followed was 245 children, or 53 percent of the original number.? Due to the problems encountered with the comparison group, data were analyzed both by original sample/comparison sample and by preschool/no preschool.? The latter analyses were conducted because one purpose of the evaluation is to determine if preschool readies at-risk children for school.



Kindergarten level Developmental Checklists were completed in the fall and spring for 245 original sample children and 212 comparison children.? Ratings for the 67 items on the Kindergarten Checklist collapse into 27 sub-domains and 7 domains.? There was growth in all domains.? There were only slight differences between the means of the sample and comparison student groups. Conflict Resolution, Writing (in the fall), Probability and Statistics, Explaining and Drawing Conclusions, and People and Where They Live received low scores compared with other scores in their respective domains (Table 4).

?

TABLE 4:? KINDERGARTEN DEVELOPMENTAL CHECKLIST MEAN RATINGS FOR FALL AND SPRING OF 1999-00

Domain	Fall? Study Grp.	Spring Study Grp.	Fall Comparison	Spring Comparison
Personal & Social Development	**2.25**	**2.68**	**2.18**	**2.69**
? Self Concept	2.22	2.66	2.13	2.67
? Self Control	2.41	2.77	2.31	2.77
??Approach to Learning	2.16	2.64	2.12	2.66
? Interactions with Others	2.38	2.75	2.30	2.77
? Conflict Resolution	2.09	2.56	2.01	2.59
Language and Literacy	**2.14**	**2.69**	**2.07**	**2.71**
? Listening	2.15	2.63	2.11	2.67
? Speaking	2.23	2.67	2.19	2.68
? Literature & Reading	2.19	2.73	2.08	2.74
? Writing	1.97	2.73	1.86	2.75
Mathematical Thinking	**1.88**	**2.58**	**1.91**	**2.60**
? Approach to Math Thinking	1.88	2.46	1.85	2.53
? Patterns & Relationships	2.08	2.73	2.03	2.71
? Number Concept & Operations	2.02	2.70	2.05	2.77
? Geometry & Spatial Relations	2.24	2.82	2.17	2.80
? Measurement?	1.68	2.46	1.73	2.47
? Probability & Statistics	1.68	2.39	1.64	2.36
Scientific Thinking	**1.82**	**2.45**	**1.80**	**2.40**
? Observing & Investigating	1.83	2.43	1.84	2.44
? Questioning & Predicting	1.95	2.52	1.92	2.46
?? Explaining/Drawing Concl.	1.72	2.38	1.66	2.31
Social Studies	**1.88**	**2.50**	**1.89**	**2.52**
? Human Similarities &???????????????????	1.95	2.57	1.92	2.56
Differences	2.00	2.56	1.75	2.61
? Human Interdependence	2.06	2.60	1.83	2.65
? Rights & Responsibilities	1.59	2.28	1.48	2.26
? People & Where They Live				
The Arts	**2.18**	**2.61**	**2.13**	**2.67**
? Expressions & Representation	2.24	2.61	2.18	2.67
? Artistic Appreciation	2.10	2.61	2.08	2.68
Physical Development	**2.34**	**2.79**	**2.31**	**2.80**
? Gross Motor Development	2.37	2.84	2.30	2.79
? Fine Motor Development	2.24	2.74	2.22	2.78
? Personal Health & Safety	2.40	2.80	2.40	2.79

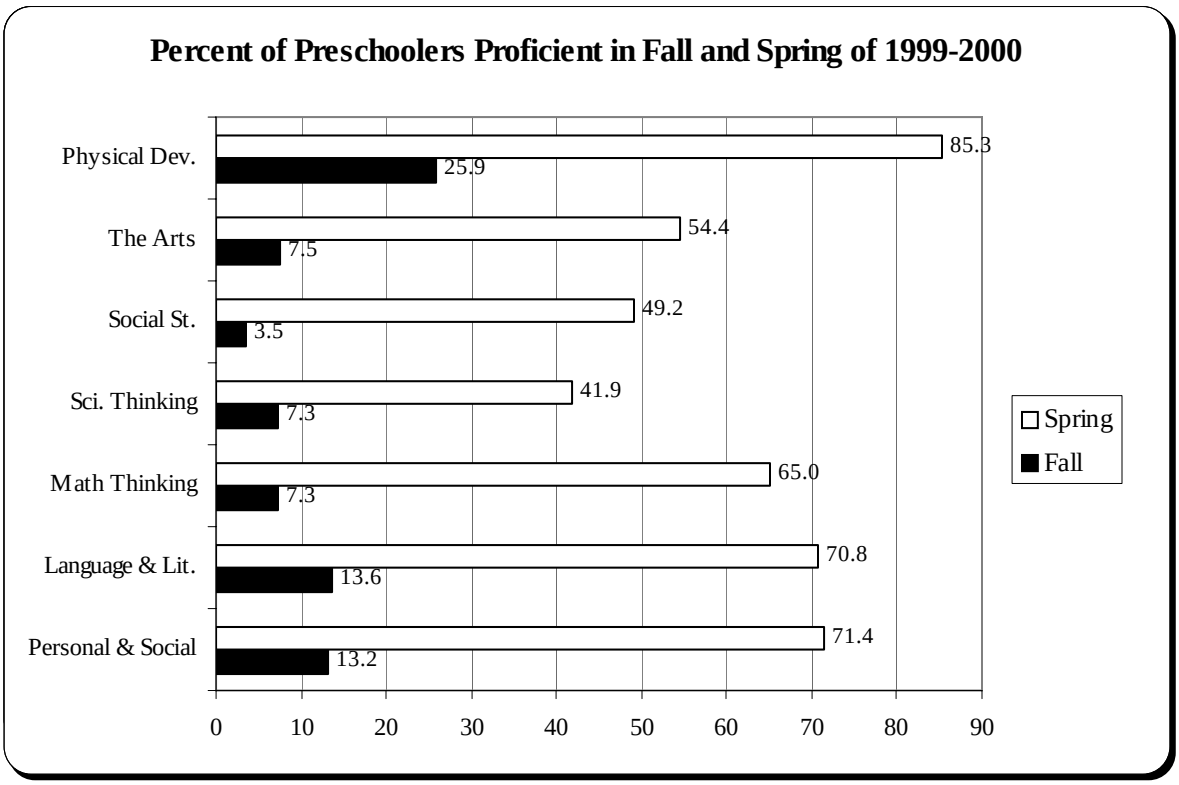
In addition to comparing means, progress can be measured by keeping track of trends in the percent of students who enter the program and who leave the program with a proficient rating (for this report, a score of 2.75 on a 3 point scale).? In the first year of the program, the percent of students who entered

the program proficient in a domain ranged from 6 percent in Social Studies to 28 percent in Personal & Social Development.? The percent of students who left the program with proficient ratings ranged from approximately 49 percent in Social Studies and Scientific Thinking to 78 percent in Physical Development.? In the second year of the program the percent of students who entered the program proficient in a domain ranged from 3 percent in Social Studies to 26 percent in Physical Development.? The percent of students who left the program with proficient ratings ranged from 42 percent in Science to 85 percent in Physical Development.

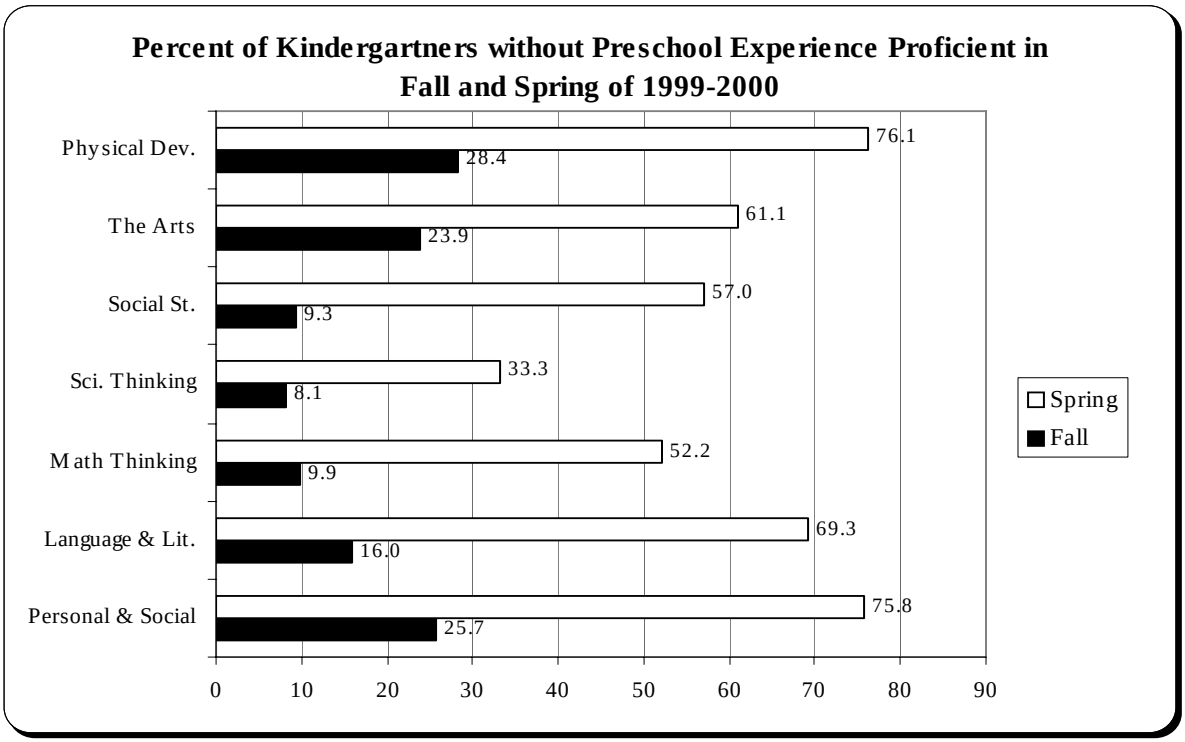
With the exception of Physical Development, pretest proficiency levels of the 1999-2000 at-risk four-year-olds were lower than the levels of the 1998-1999 group (Graphs 3 and 4).? However, the 1999-2000 group made larger gains during the year in Personal and Social Development, Language and Literacy, Mathematical Thinking, Social Studies, and Physical Development.

Kindergarten level proficiency levels were analyzed by whether or not the students had been in preschool as four-year-olds (Graphs 5 and 6).? Preschool experience was related to more children being proficient at the beginning of the Kindergarten year in all areas, but especially in the areas of Personal and Social Development, Language and Literacy, and Physical Development.? Students with preschool experience were still at a slight (not statistically significant) advantage at the time of the posttest in the areas of Language and Literacy, Mathematical Thinking, Scientific Thinking, and Physical Development.

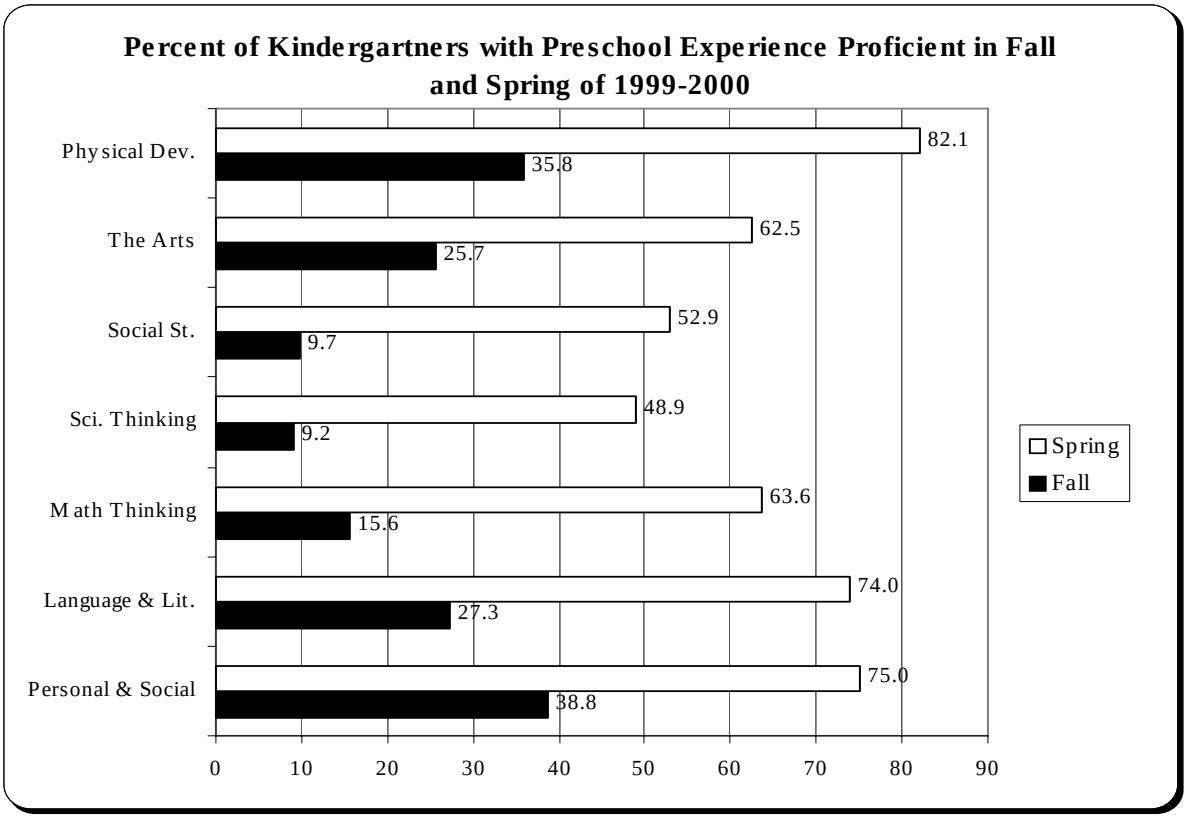
Graph 3



Graph 4



Graph 5



Graph 6

Do characteristics of children or children?s backgrounds affect gains from programs for at-risk four-year-olds?

Table A1 in Appendix A indicates Developmental Checklist domain means and student characteristic correlations for the1999-2000 preschool student group at the time of the pretest. The following correlations were significant:

.01 level
English Language Proficiency with ?????????????????? Developmental or Academic Delay
?? Language & Literacy
?? Scientific Thinking
?? Social Studies

Socioeconomic Status with??????????????????????????????? Developmental or Academic Delay

Developmental & Acad. Delay with???????????????????? Personal & Social Development
?? Language & Literacy???
?? Mathematical Thinking
?? Scientific Thinking
?? Social Studies
?? The Arts
?? Physical Development

Gender with??? Personal & Social Development
?? Language & Literacy
?? The Arts
?? Physical Development
.05 level
English Language Proficiency with???????????????????????? Personal & Social Development
?? Mathematical Thinking

Socioeconomic Status with??????????????????????????????????? Language & Literacy
?? Social Studies

Gender with??? Social Studies

Table A2 in Appendix A indicates Developmental Checklist domain means and student characteristic correlations for the1999-2000 preschool student group at the time of the posttest. The following correlations were significant:

.01 level
English Language Proficiency with ?????????????????? Developmental or Academic Delay
??? Language & Literacy

Socioeconomic Status with??????????????????????????????? Developmental or Academic Delay
Developmental & Acad. Delay with???????????????????? Personal & Social Development
??? Language & Literacy???
??? Mathematical Thinking
??? The Arts

Gender with??? Personal & Social Development
??? Language & Literacy
??? Social Studies
??? The Arts
??? Physical Development

.05 level
English Language Proficiency with?????????????????????? Scientific Thinking
??? Social Studies

Developmental & Acad. Delay with???????????????????? Scientific Thinking
??? Social Studies
??? Physical Development

Gender with??? Mathematical Thinking

When there were significant correlations, girls scored better than boys, students from higher socioeconomic families scored higher than students from lower socioeconomic (SES) families, non-delayed students scored higher than delayed students, and English proficient students scored higher than limited English proficient (LEP) students.? For the preschool group, between the pretest and the posttest, the size of the gap was reduced in the domains of Personal and Social Development, Mathematical Thinking, Scientific Thinking and Social Studies, when data were analyzed by English language proficiency; in the domains of Scientific Thinking, Social Studies, and Physical Development, when data were analyzed by delay; and in the domains of Language and Literacy and Social Studies, when data were analyzed by SES.? When data were analyzed by gender, the gap widened between the pretest and posttest in the domains of Social Studies and Mathematical Thinking.

Table A3 in Appendix A indicates Developmental Checklist domain means and student characteristic correlations for the1999-2000 Kindergarten student group at the time of the pretest. The following correlations were significant:

.01 level
English Language Proficiency with ?????????????????? Socioeconomic Status

Socioeconomic Status with??????????????????????????????? Assignment to Sample or Comparison Grp.
?? Personal & Social Development
?? Language & Literacy
?? Mathematical Thinking
?? Scientific Thinking
?? Social Studies
?? The Arts
?? Physical Development

Preschool Attendance with??????????????????????????????????? Personal & Social Development
?? Language & Literacy
?? Physical Development

Gender with??? Personal & Social Development
?? Language & Literacy
?? Social Studies
?? The Arts
?? Physical Development
.05 level
English Language Proficiency with?????????????????????? Language & Literacy
?? Scientific Thinking

Preschool Attendance with?????????????????????????????????????? Mathematical Thinking

Gender with??? Mathematical Thinking
?? Scientific Thinking

Although there were significant differences in four of the domains, depending on whether or not the student attended preschool, there were no significant differences between last year's four-year-old at-risk attendees and the comparison group.? The sample group/comparison group analysis was impacted by the following factors: not every sample child had a comparison; 65 of the 212 comparison students had also attended preschool; and nearly half of the sample group has been lost through attrition.

Table A4 in Appendix A indicates Developmental Checklist domain means and student characteristic correlations for the1999-2000 Kindergarten student group at the time of the posttest. The following correlations were significant:

.01 level
English Language Proficiency with ?????????????????? Socioeconomic Status

Socioeconomic Status with??????????????????????????????? Assignment to Sample or Comparison Grp.
?? Language & Literacy
?? Mathematical Thinking

Gender with??? Personal & Social Development
?? Language & Literacy
?? Social Studies
??? The Arts

.05 level
Socioeconomic Status with??????????????????????????????????? The Arts

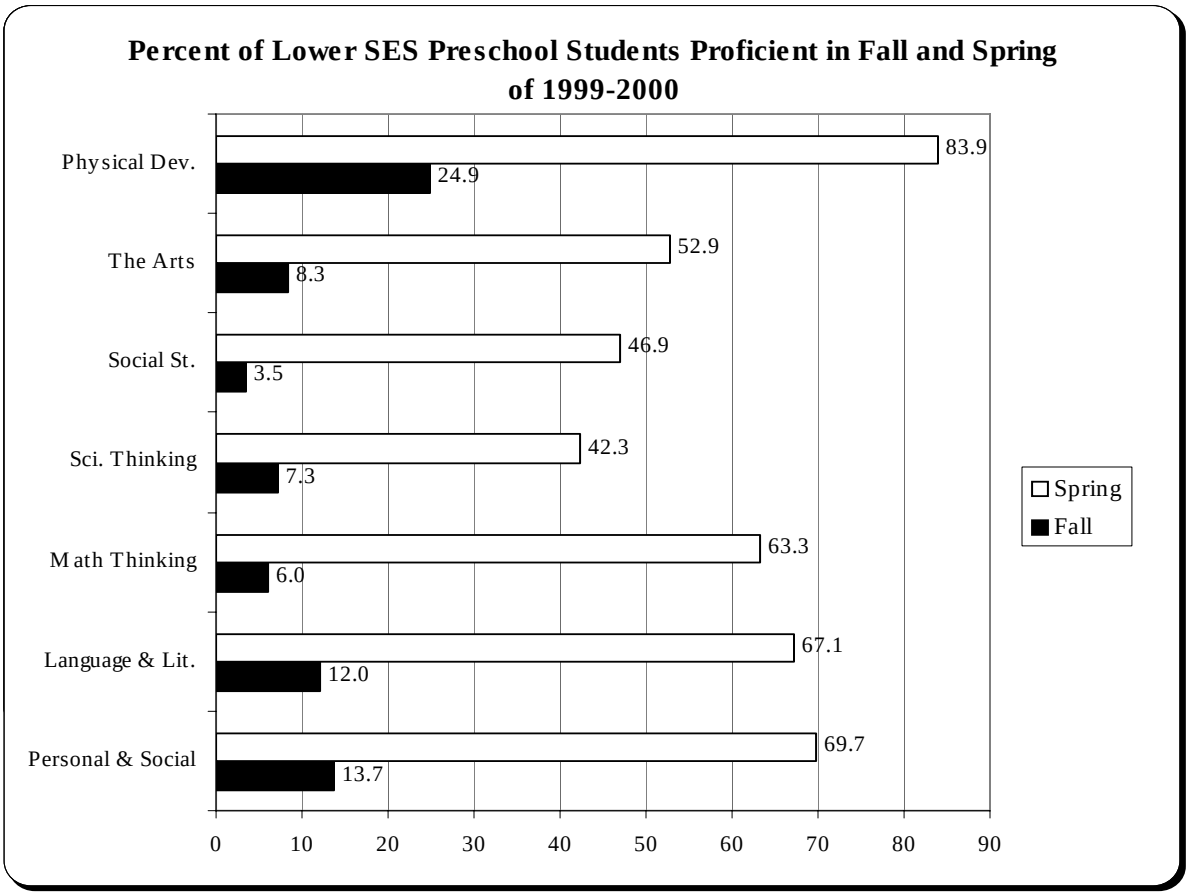
Gender with??? Physical Development
??

When there were significant correlations, girls scored better than boys and students from higher socioeconomic families scored higher than students from lower socioeconomic families.? By spring, preschool attendance was no longer related to increased proficiency in the domain areas.? Also by spring, those students who were marked as English language learners last year no longer scored significantly lower than other students.? For the kindergarten group, between fall and spring, the gap was reduced in the domains of Personal and Social Development, Scientific Thinking, Social Studies, The Arts, and Physical Development, when data were analyzed by SES; in the domains of Personal and Social Development, Language and Literacy, Mathematical Thinking, and Physical Development, when data were analyzed by preschool attendance; in the domains of Physical Development, Mathematical Thinking, and Scientific Thinking, when data were analyzed by gender.

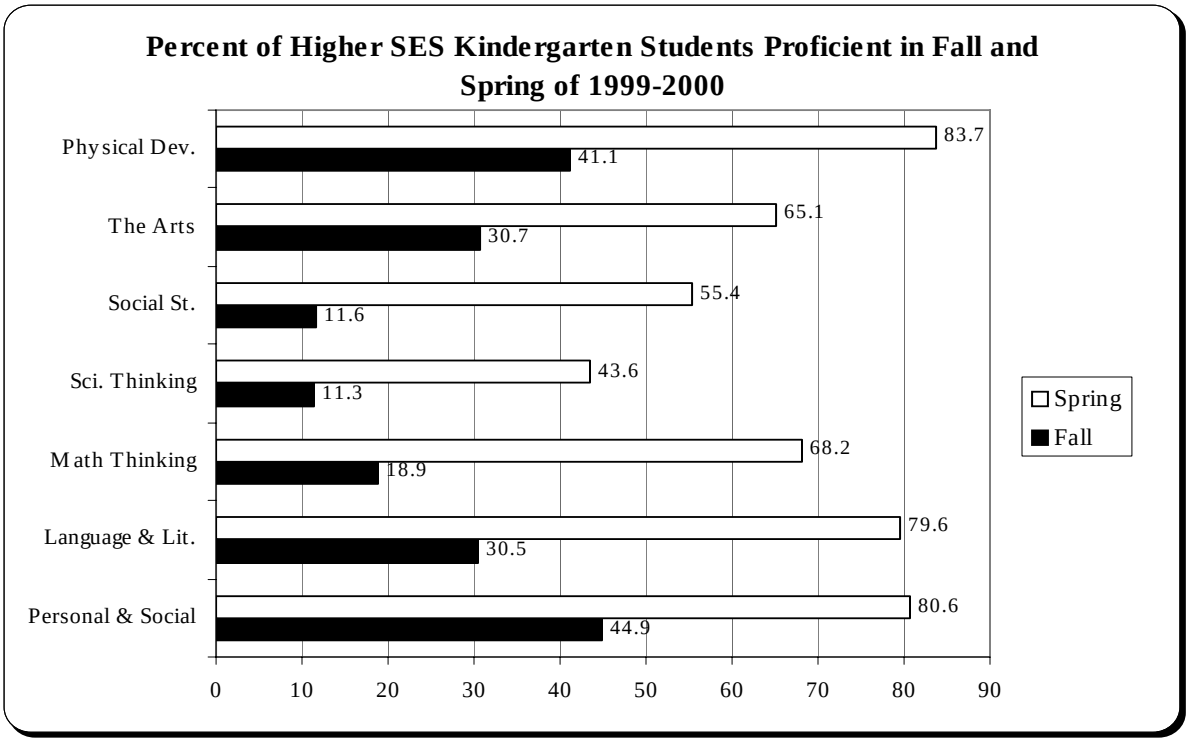
Once again, data were analyzed by percent of students who enter the program and who leave the program with a proficient rating (2.75 on a 3 point scale).? Graphs 7 through 14 show the proficiency percentages for the preschool and Kindergarten groups by socioeconomic status and English language proficiency.? As shown in graphs 7 and 8, the largest posttest difference, when data were analyzed by SES,? was in the Language & Literacy domain among the preschool group.? By the end of Kindergarten, there were sizable differences in percentages of students who were proficient, when data were analyzed by SES, in Language & Literacy and Mathematical Thinking (Graphs 9 and 10).?

When preschool proficiency levels were analyzed by English language proficiency, there were large differences at the time of the posttest in Language & Literacy, Scientific Thinking, and Social Studies (Graphs 11 and 12).? At the end of Kindergarten, the differences were largest in the areas of Personal & Social Development and Mathematical Thinking (Graphs 13 and 14).? The English language learners scored better in Personal and Social Development.

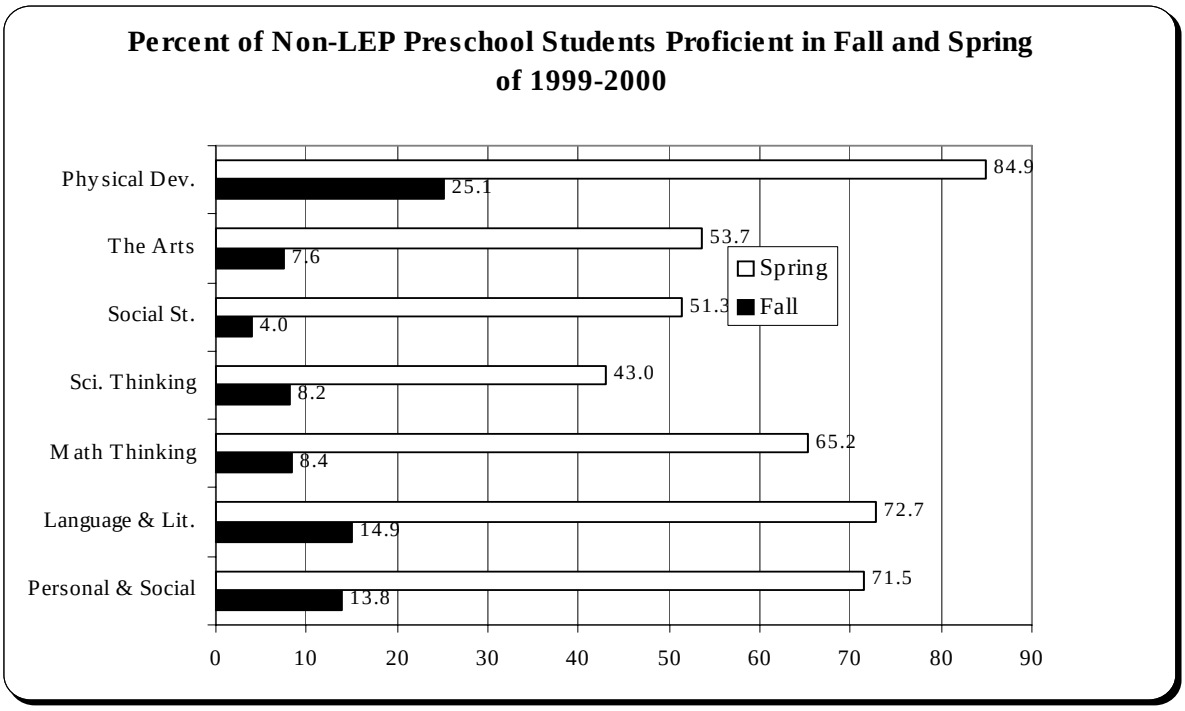
Graph 7



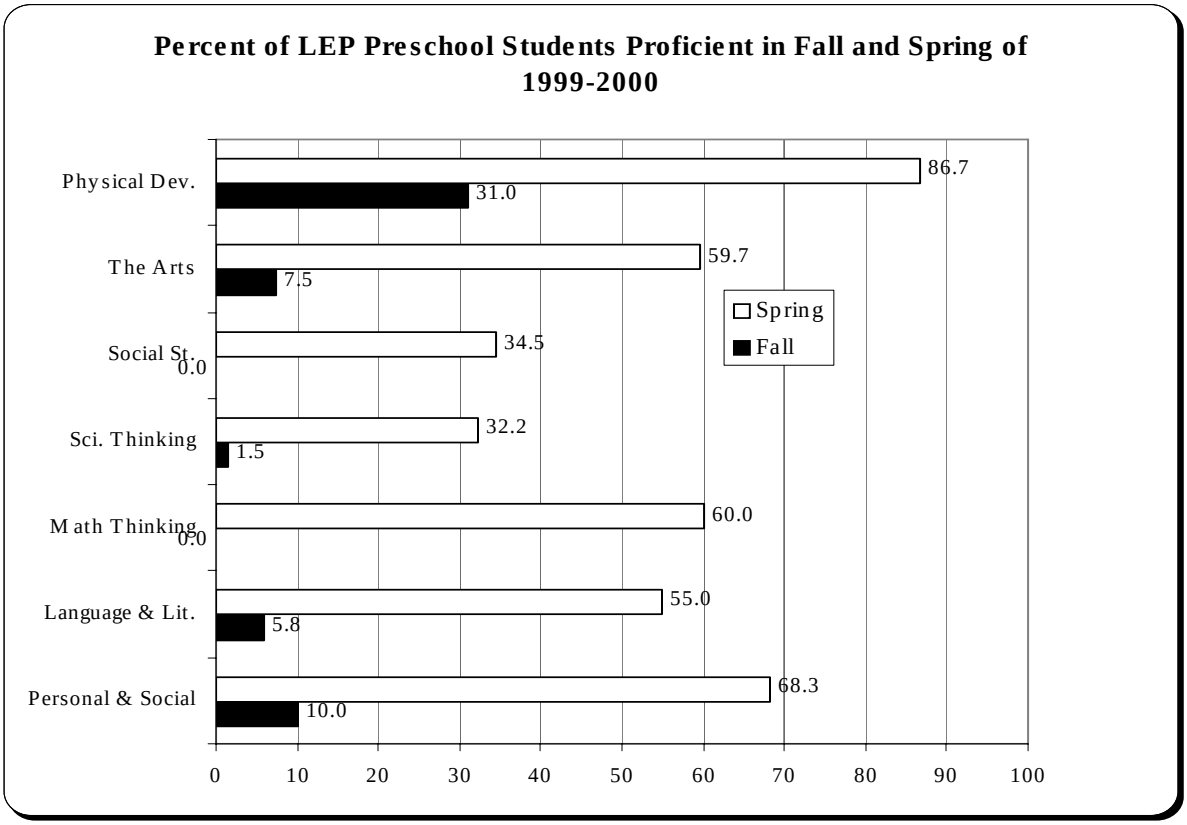
Graph 8

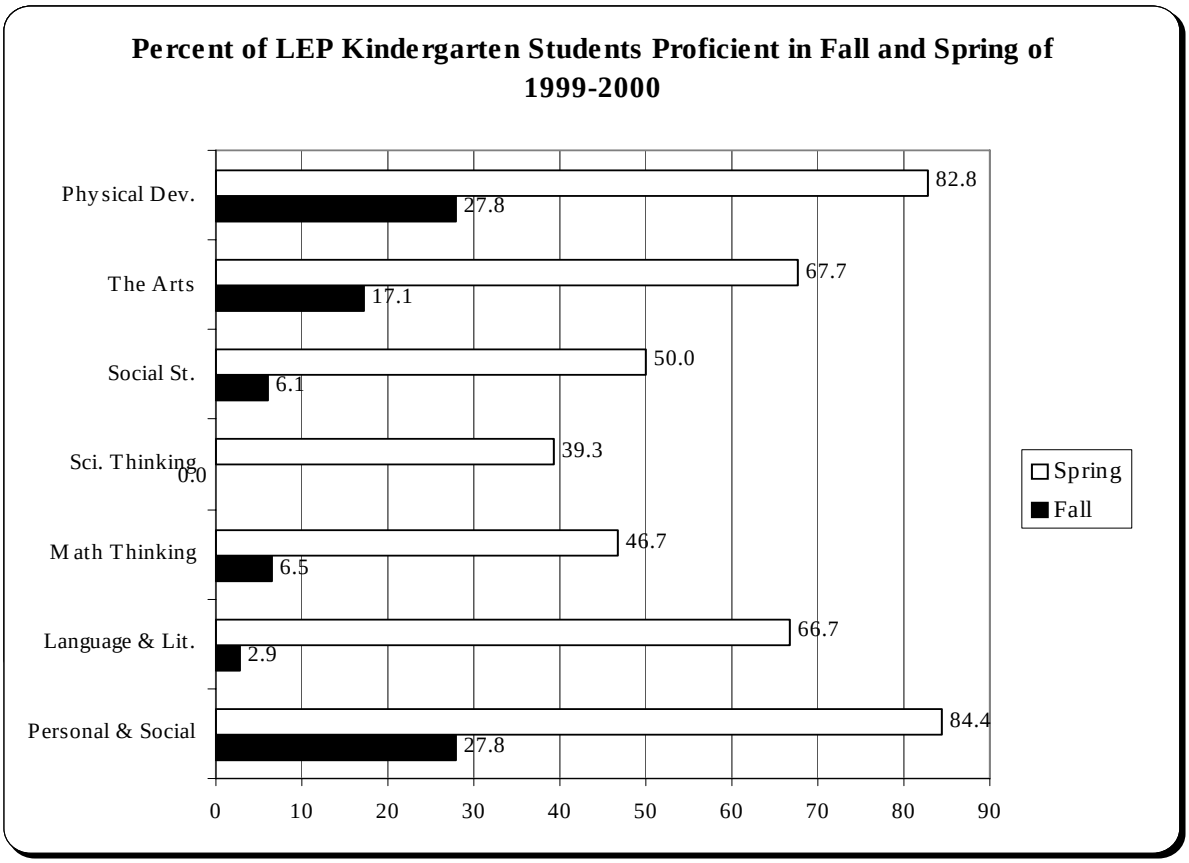


Graph 9
Graph 10



Graph 11
Graph 12





Graph 13
Graph 14

Effect sizes enable researchers to evaluate the educational significance of score differences across sample groups and across areas measured.? Effect sizes were computed in this study by subtracting one subgroup mean from the other and then dividing by the standard deviation for the combined group. The result of the calculation is a measure in standard deviation units.? An effect size under 4.0 will be called small, an effect size of 4.0 to 7.5 will be called medium, and an effect size over 7.5 will be called large.

In both fall and spring, the preschool ratings for lower SES students were not at least .4 standard deviations lower than the ratings for higher SES students in any of the domains. Therefore, all differences were small.? In the fall, the Kindergarten ratings for lower SES students were at least .4 in both Language & Literacy and Mathematical Thinking.? There were no differences this large in the spring.

In the fall, the limited-English-speaking preschool students were at least .4 standard deviations below their peers on the domains of Scientific Thinking, Social Studies, and Language & Literacy; and the limited-English-speaking Kindergarten students were at least .4 standard deviations below their peers in the domains of Scientific Thinking and Language & Literacy.? By the spring, there were no differences this large.

There were no medium or large effect sizes in the fall or spring when the preschool data were analyzed by gender.? Among the Kindergarten group, there were effect sizes greater than .4 in the fall in the areas of Personal & Social Development and The Arts and in the spring in the area of The Arts.? Girls received the higher ratings.

When Kindergarten data were analyzed by preschool attendance, both fall and spring effect sizes for all domains were small.? Table 5 shows the results of the effect size analyses.

Table 5: Effect Sizes by Characteristics of Students

SES Subgroups				
	Preschool Fall	**Preschool Spring**	**Kindergarten Fall**	**Kindergarten Spring**
Personal & Social Development	.03	.14	.38	.19
Language and Literacy	.18	.14	.41	.28
Mathematical Thinking	.17	.15	.44	.32
Scientific Thinking	.06	.02	.37	.14
Social Studies	.22	.18	.33	.14
The Arts	.06	.13	.30	.21
Physical Development	.02	.15	.33	.16

Effect Sizes by Characteristics of Students Continued

LEP Subgroups				
	Preschool Fall	**Preschool Spring**	**Kindergarten Fall**	**Kindergarten Spring**
Personal & Social Development	.28	-.05	.09	-.09
Language and Literacy	.60	.36	.42	.21
Mathematical Thinking	.33	.17	.36	.29
Scientific Thinking	.51	.30	.45	.24
Social Studies	.51	.34	.29	.18
The Arts	.11	-.08	.01	-.12
Physical Development	.11	-.01	-.15	-.14

?

Gender Subgroups				
	Preschool Fall	**Preschool Spring**	**Kindergarten Fall**	**Kindergarten Spring**
Personal & Social Development	-.28	-.35	-.46	-.35
Language and Literacy	-.23	-.29	-.36	-.30
Mathematical Thinking	-.12	-.21	-.27	-.16
Scientific Thinking	-.09	-.12	-.21	-.12
Social Studies	-.22	-.32	-.33	-.28
The Arts	-.25	-.37	-.54	-.45
Physical Development	-.22	-.39	-.39	-.25

Preschool Experience Subgroups				
	Preschool Fall	**Preschool Spring**	**Kindergarten Fall**	**Kindergarten Spring**
Personal & Social Development	NA	NA	.31	.13

Language and Literacy	NA	NA	.34	.15
Mathematical Thinking	NA	NA	.26	.18
Scientific Thinking	NA	NA	.19	.17
Social Studies	NA	NA	.19	.07
The Arts	NA	NA	.18	.04
Physical Development	NA	NA	.30	.17

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To summarize the effect size data, LEP and SES were related to scores in some domains at the beginning of preschool and/or Kindergarten.? Preschool experience was more related to higher scores at the beginning of the Kindergarten year than at the end.? Gender made some difference in scores in the Kindergarten year.

APPENDIX A

DATA TABLES

Table A1: Pretest Correlations for Preschool Group

		Lower SES	LEP	Delayed	Gender	Pers. & Soc.	Lang. & Lit.	Math Think.	Sci. Think.	Soc. St.	The Arts
LEP	Pearson Correlation	0.012									
	Sig. (2-tailed)	0.610	?								
Dev. or acad. delayed	Pearson Correlation	-0.068	-0.063								
	Sig. (2-tailed)	0.004	0.007	?							
Gender	Pearson Correlation	-0.004	-0.027	0.060							
	Sig. (2-tailed)	0.926	0.526	0.157							
Personal & Social Dev.	Pearson Correlation	-0.014	-0.093	-0.184	0.139						
	Sig. (2-tailed)	0.735	0.029	0.000	0.001	?					
Language and Literacy	Pearson Correlation	-0.086	-0.199	-0.184	0.117	0.786					
	Sig. (2-tailed)	0.043	0.000	0.000	0.006	0.000					
Mathematical Thinking	Pearson Correlation	-0.081	-0.110	-0.194	0.060	0.663	0.790				
	Sig. (2-tailed)	0.066	0.012	0.000	0.171	0.000	0.000	?			
Scientific Thinking	Pearson Correlation	-0.027	-0.165	-0.121	0.045	0.603	0.643	0.625			
	Sig. (2-tailed)	0.532	0.000	0.004	0.291	0.000	0.000	0.000			
Social Studies	Pearson Correlation	-0.101	-0.170	-0.144	0.108	0.655	0.709	0.684	0.739		
	Sig. (2-tailed)	0.021	0.000	0.001	0.014	0.000	0.000	0.000	0.000	?	
The Arts	Pearson Correlation	-0.030	-0.036	-0.174	0.125	0.712	0.620	0.566	0.588	0.628	
	Sig. (2-tailed)	0.480	0.398	0.000	0.003	0.000	0.000	0.000	0.000	0.000	?
Physical Development	Pearson Correlation	-0.009	-0.038	-0.169	0.109	0.679	0.711	0.651	0.542	0.593	0.553
	Sig. (2-tailed)	0.823	0.373	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000

Correlation is significant at the 0.01 level (2-tailed) = gray.??
Correlation is significant at the 0.05 level (2-tailed) = black.???

Table A2: Posttest Correlations for Preschool Group

		Lower SES	LEP	Delayed	Gender	Pers. & Soc.	Lang. & Lit.	Math Think.	Sci. Think.	Soc. St.	The Arts
LEP	Pearson Correlation	0.012	?								
	Sig. (2-tailed)	0.610	?								
Dev. or acad. delayed	Pearson Correlation	-0.068	-0.063	?							
	Sig. (2-tailed)	0.004	0.007	?							
Gender	Pearson Correlation	-0.004	-0.027	0.060	?						
	Sig. (2-tailed)	0.926	0.526	0.157	?						
Personal & Social Dev.	Pearson Correlation	-0.066	0.016	-0.169	0.171	?					
	Sig. (2-tailed)	0.152	0.722	0.000	0.000	?					
Language and Literacy	Pearson Correlation	-0.068	-0.119	-0.168	0.141	0.762	?				
	Sig. (2-tailed)	0.135	0.009	0.000	0.002	0.000	?				
Mathematical Thinking	Pearson Correlation	-0.069	-0.053	-0.156	0.104	0.610	0.761	?			
	Sig. (2-tailed)	0.131	0.241	0.001	0.022	0.000	0.000	?			
Scientific Thinking	Pearson Correlation	-0.008	-0.098	-0.101	0.062	0.594	0.649	0.703	?		
	Sig. (2-tailed)	0.862	0.029	0.025	0.169	0.000	0.000	0.000	?		
Social Studies	Pearson Correlation	-0.086	-0.110	-0.089	0.156	0.694	0.715	0.720	0.757	?	
	Sig. (2-tailed)	0.059	0.015	0.050	0.001	0.000	0.000	0.000	0.000	?	
The Arts	Pearson Correlation	-0.060	0.026	-0.123	0.184	0.702	0.640	0.585	0.616	0.675	?
	Sig. (2-tailed)	0.181	0.557	0.006	0.000	0.000	0.000	0.000	0.000	0.000	?
Physical Development	Pearson Correlation	-0.068	0.004	-0.116	0.193	0.586	0.691	0.554	0.470	0.549	0.590
	Sig. (2-tailed)	0.131	0.937	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Correlation is significant at the 0.01 level (2-tailed) = gray.??? Correlation is significant at the 0.05 level (2-tailed) = black.

Table A3: Pretest Correlations For Kindergarten Group

		Lower SES	LEP	Group	Pre-school	Gender	Per. & Soc.	Lang. & Lit.	Math Think.	Sci. Think.	Soc. St.	The Arts
LEP	Pearson Correlation	0.182										
	Sig. (2-tailed)	0.000										
Group	Pearson Correlation	-0.105	-0.041									
	Sig. (2-tailed)	0.008	0.297									
Preschool Experience	Pearson Correlation	0.025	0.007	-0.737								
	Sig. (2-tailed)	0.534	0.867	0.000								
Gender	Pearson Correlation	0.023	-0.023	-0.032	0.016							
	Sig. (2-tailed)	0.634	0.633	0.489	0.748							
Personal & Social Dev.	Pearson Correlation	-0.189	-0.024	-0.081	0.135	0.229						
	Sig. (2-tailed)	0.000	0.620	0.085	0.006	0.000						
Language and Literacy	Pearson Correlation	-0.201	-0.117	-0.067	0.149	0.179	0.850					
	Sig. (2-tailed)	0.000	0.017	0.156	0.003	0.000	0.000					
Mathematical Thinking	Pearson Correlation	-0.212	-0.102	0.026	0.116	0.134	0.721	0.799				
	Sig. (2-tailed)	0.000	0.060	0.617	0.034	0.011	0.000	0.000				
Scientific Thinking	Pearson Correlation	-0.181	-0.125	-0.017	0.082	0.105	0.617	0.700	0.804			
	Sig. (2-tailed)	0.001	0.017	0.741	0.119	0.037	0.000	0.000	0.000			
Social Studies	Pearson Correlation	-0.161	-0.082	0.007	0.082	0.166	0.673	0.711	0.811	0.817		
	Sig. (2-tailed)	0.002	0.112	0.891	0.119	0.001	0.000	0.000	0.000	0.000		
The Arts	Pearson Correlation	-0.147	-0.003	-0.040	0.078	0.267	0.689	0.685	0.696	0.658	0.751	
	Sig. (2-tailed)	0.003	0.952	0.399	0.111	0.000	0.000	0.000	0.000	0.000	0.000	
Physical	Pearson	-0.164	0.043	-0.037	0.132	0.192	0.695	0.716	0.695	0.595	0.639	0.719

Development	Correlation											
	Sig. (2-tailed)	0.001	0.379	0.431	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Correlation is significant at the 0.01 level (2-tailed) = gray.??
Correlation is significant at the 0.05 level (2-tailed) = black.

Table A4: Posttest Correlations for Kindergarten Group

		Lower SES	LEP	Group	Pre-school	Gender	Per. & Soc.	Lang. & Lit.	Math Think.	Sci. Think.	Soc. St.	The Arts
LEP	Pearson Correlation	0.182										
	Sig. (2-tailed)	0.000										
Group	Pearson Correlation	-0.105	-0.041									
	Sig. (2-tailed)	0.008	0.297									
Preschool Experience	Pearson Correlation	0.025	0.007	-0.737								
	Sig. (2-tailed)	0.534	0.867	0.000								
Gender	Pearson Correlation	0.023	-0.023	-0.032	0.016							
	Sig. (2-tailed)	0.634	0.633	0.489	0.748							
Personal & Social Dev.	Pearson Correlation	-0.091	0.025	0.021	0.053	0.176						
	Sig. (2-tailed)	0.079	0.625	0.676	0.304	0.000						
Language and Literacy	Pearson Correlation	-0.139	-0.059	0.027	0.063	0.149	0.790					
	Sig. (2-tailed)	0.008	0.262	0.595	0.230	0.003	0.000					
Mathematical Thinking	Pearson Correlation	-0.156	-0.078	0.016	0.077	0.080	0.624	0.812				
	Sig. (2-tailed)	0.003	0.134	0.752	0.148	0.115	0.000	0.000				
Scientific Thinking	Pearson Correlation	-0.072	-0.064	-0.043	0.075	0.058	0.543	0.704	0.768			
	Sig. (2-tailed)	0.168	0.224	0.398	0.156	0.249	0.000	0.000	0.000			
Social Studies	Pearson Correlation	-0.066	-0.048	0.024	0.030	0.139	0.629	0.714	0.764	0.715		
	Sig. (2-tailed)	0.214	0.363	0.632	0.577	0.006	0.000	0.000	0.000	0.000		
The Arts	Pearson Correlation	-0.100	0.033	0.078	0.013	0.225	0.575	0.628	0.638	0.567	0.677	
	Sig. (2-tailed)	0.050	0.518	0.114	0.794	0.000	0.000	0.000	0.000	0.000	0.000	
Physical Development	Pearson Correlation	-0.077	0.038	0.018	0.072	0.127	0.610	0.682	0.653	0.539	0.584	0.660

	Sig. (2-tailed)	0.136	0.462	0.715	0.168	0.011	0.000	0.000	0.000	0.000	0.000	0.000

Correlation is significant at the 0.01 level (2-tailed) = gray.???
Correlation is significant at the 0.05 level (2-tailed) = black.

??

Table A5: Personal & Social Development Results for Preschool Group

			?Pretest Means		?Posttest Means	
			Mean	**Std Deviation**	**Mean**	**Std Deviation**
Lower SES	No	self concept	2.02	0.54	2.71	0.41
		self control	2.13	0.53	2.78	0.36
		approach to learning	2.00	0.48	2.72	0.37
		interactions with others	2.10	0.51	2.73	0.37
		conflict resolution	1.86	0.53	2.58	0.47
	Yes	self concept	2.02	0.53	2.71	0.41
		self control	2.14	0.48	2.74	0.38
		approach to learning	1.96	0.53	2.63	0.40
		interactions with others	2.09	0.49	2.70	0.37
		conflict resolution	1.84	0.58	2.54	0.50
Is limited English speaking	No	self concept	2.04	0.53	2.71	0.41
		self control	2.14	0.49	2.75	0.38
		approach to learning	1.99	0.51	2.66	0.39
		interactions with others	2.11	0.49	2.71	0.38
		conflict resolution	1.86	0.56	2.55	0.49
	Yes	self concept	1.87	0.57	2.71	0.43
		self control	2.10	0.56	2.83	0.31
		approach to learning	1.89	0.55	2.65	0.40
		interactions with others	1.96	0.55	2.72	0.32
		conflict resolution	1.75	0.57	2.53	0.49
Gender	Male	self concept	1.95	0.52	2.66	0.43
		self control	2.08	0.50	2.69	0.41
		approach to learning	1.93	0.51	2.61	0.41
		interactions with others	2.05	0.49	2.67	0.40
		conflict resolution	1.80	0.55	2.50	0.50
	Female	self concept	2.10	0.54	2.78	0.37
		self control	2.22	0.48	2.85	0.29
		approach to learning	2.03	0.52	2.72	0.36
		interactions with others	2.15	0.50	2.76	0.32
		conflict resolution	1.92	0.57	2.63	0.47

Table A6: Language & Literacy Results for Preschool Group

?			Pretest Means		Posttest Means	
			Mean	**Std Deviation**	**Mean**	**Std Deviation**
Lower SES	No	listening	2.07	0.59	2.71	0.43
		speaking	2.17	0.60	2.74	0.42
		literature & reading	1.98	0.50	2.67	0.37
		writing	1.85	0.61	2.63	0.44
	Yes	listening	2.02	0.58	2.65	0.46
		speaking	2.17	0.62	2.71	0.44
		literature & reading	1.87	0.49	2.59	0.41
		writing	1.73	0.56	2.60	0.48
Is limited English speaking	No	listening	2.07	0.57	2.68	0.45
		speaking	2.24	0.59	2.76	0.41
		literature & reading	1.93	0.48	2.63	0.40
		writing	1.78	0.58	2.61	0.47
	Yes	listening	1.80	0.63	2.59	0.48
		speaking	1.70	0.58	2.44	0.51
		literature & reading	1.69	0.52	2.48	0.39
		writing	1.70	0.54	2.65	0.41
Gender	Male	listening	1.99	0.58	2.64	0.47
		speaking	2.13	0.62	2.67	0.46
		literature & reading	1.86	0.49	2.57	0.41
		writing	1.71	0.58	2.56	0.50
	Female	listening	2.09	0.58	2.72	0.42
		speaking	2.23	0.61	2.80	0.39
		literature & reading	1.95	0.48	2.68	0.37
		writing	1.85	0.57	2.68	0.41

Table A7: Mathematical Thinking Results for Preschool Group

			Pretest Means		Posttest Means	
			Mean	Std Deviation	Mean	Std Deviation
Lower SES	No	approach to math thinking	1.89	0.64	2.61	0.53
		patterns & relationships	1.89	0.56	2.72	0.39
		number concept & operations	2.06	0.63	2.72	0.45
		geometry & spatial relations	1.94	0.52	2.76	0.34
		measurement	1.73	0.50	2.47	0.46
	Yes	approach to math thinking	1.75	0.56	2.56	0.54
		patterns & relationships	1.79	0.53	2.62	0.45
		number concept & operations	2.00	0.55	2.70	0.48
		geometry & spatial relations	1.94	0.55	2.72	0.41
		measurement	1.68	0.47	2.42	0.50
Is limited English speaking	No	approach to math thinking	1.81	0.59	2.58	0.53
		patterns & relationships	1.83	0.55	2.65	0.44
		number concept & operations	2.01	0.58	2.70	0.47
		geometry & spatial relations	1.98	0.53	2.76	0.38
		measurement	1.73	0.49	2.46	0.49
	Yes	approach to math thinking	1.69	0.58	2.55	0.57
		patterns & relationships	1.78	0.49	2.68	0.39
		number concept & operations	2.07	0.58	2.74	0.48
		geometry & spatial relations	1.64	0.50	2.55	0.44
		measurement	1.44	0.37	2.22	0.44
Gender	Male	approach to math thinking	1.76	0.61	2.52	0.56
		patterns & relationships	1.78	0.54	2.61	0.45
		number concept & operations	2.00	0.60	2.69	0.49
		geometry & spatial relations	1.93	0.53	2.71	0.41
		measurement	1.68	0.47	2.41	0.48
	Female	approach to math thinking	1.83	0.56	2.64	0.50

		patterns & relationships	1.88	0.53	2.71	0.40
		number concept & operations	2.04	0.55	2.74	0.45
		geometry & spatial relations	1.96	0.55	2.78	0.35
		measurement	1.71	0.49	2.47	0.50

Table A8: Scientific Thinking Results for Preschool Group

			Pretest Means		Posttest Means	
			Mean	**Std Deviation**	**Mean**	**Std Deviation**
Lower SES	No	observing & investigating	1.88	0.51	2.56	0.41
		questioning & predicting	1.77	0.58	2.32	0.64
	Yes	observing & investigating	1.83	0.48	2.49	0.47
		questioning & predicting	1.77	0.65	2.37	0.62
Is limited English speaking	No	observing & investigating	1.87	0.49	2.52	0.45
		questioning & predicting	1.81	0.63	2.38	0.61
	Yes	observing & investigating	1.67	0.47	2.47	0.49
		questioning & predicting	1.49	0.56	2.14	0.71
Gender	Male	observing & investigating	1.83	0.49	2.49	0.46
		questioning & predicting	1.75	0.61	2.32	0.62
	Female	observing & investigating	1.87	0.49	2.54	0.43
		questioning & predicting	1.80	0.65	2.40	0.63

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Table A9: Social Studies Results for Preschool Group

			Pretest Means		Posttest Means	
			Mean	**Std Deviation**	**Mean**	**Std Deviation**
Lower SES	No	human similarities & differences	1.96	0.54	2.67	0.50
		human interdependence	1.82	0.43	2.48	0.43
		rights & responsibilities	1.88	0.48	2.55	0.48
		people & where they live	1.52	0.47	2.23	0.51
	Yes	human similarities & differences	1.90	0.58	2.57	0.54
		human interdependence	1.72	0.48	2.38	0.50
		rights & responsibilities	1.81	0.50	2.48	0.49
		people & where they live	1.46	0.50	2.18	0.57
Is limited English speaking	No	human similarities & differences	1.94	0.57	2.62	0.53
		human interdependence	1.78	0.47	2.43	0.48
		rights & responsibilities	1.84	0.50	2.52	0.48
		people & where they live	1.51	0.50	2.22	0.55
	Yes	human similarities & differences	1.70	0.55	2.49	0.54
		human interdependence	1.55	0.37	2.28	0.46
		rights & responsibilities	1.75	0.43	2.38	0.54
		people & where they live	1.29	0.41	2.03	0.52
Gender	Male	human similarities & differences	1.85	0.56	2.53	0.57
		human interdependence	1.73	0.47	2.38	0.48
		rights & responsibilities	1.77	0.49	2.42	0.49
		people & where they live	1.47	0.49	2.17	0.53
	Female	human similarities & differences	2.00	0.57	2.70	0.46
		human interdependence	1.78	0.45	2.46	0.47
		rights & responsibilities	1.91	0.48	2.62	0.47
		people & where they live	1.49	0.49	2.23	0.58

Table A10: The Arts Results for Preschool Group

			Pretest Means		Posttest Means	
			Mean	Std Deviation	Mean	Std Deviation
Lower SES	No	expression & representation	2.10	0.53	2.72	0.41
		artistic appreciation	1.80	0.54	2.57	0.54
	Yes	expression & representation	2.07	0.53	2.68	0.39
		artistic appreciation	1.77	0.59	2.49	0.57
Is limited English speaking	No	expression & representation	2.09	0.53	2.69	0.40
		artistic appreciation	1.78	0.57	2.51	0.57
	Yes	expression & representation	2.00	0.55	2.68	0.40
		artistic appreciation	1.76	0.58	2.60	0.53
Gender	Male	expression & representation	2.00	0.53	2.62	0.42
		artistic appreciation	1.75	0.56	2.46	0.58
	Female	expression & representation	2.17	0.51	2.80	0.34
		artistic appreciation	1.82	0.58	2.60	0.53

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Table A11: Physical Development Results for Preschool Group

			Pretest Means		Posttest Means	
			Mean	**Std Deviation**	**Mean**	**Std Deviation**
Lower SES	No	gross motor development	2.26	0.52	2.83	0.34
		fine motor development	2.14	0.53	2.81	0.34
		personal health & safety	2.35	0.52	2.88	0.27
	Yes	gross motor development	2.26	0.55	2.78	0.36
		fine motor development	2.10	0.51	2.75	0.38
		personal health & safety	2.36	0.49	2.87	0.30
Is limited English speaking	No	gross motor development	2.27	0.54	2.79	0.36
		fine motor development	2.11	0.51	2.76	0.37
		personal health & safety	2.37	0.49	2.88	0.28
	Yes	gross motor development	2.21	0.53	2.85	0.32
		fine motor development	2.12	0.57	2.79	0.35
		personal health & safety	2.27	0.58	2.81	0.33
Gender	Male	gross motor development	2.25	0.55	2.75	0.38
		fine motor development	2.05	0.54	2.73	0.40
		personal health & safety	2.31	0.51	2.82	0.33
	Female	gross motor development	2.28	0.53	2.86	0.31
		fine motor development	2.19	0.48	2.82	0.33
		personal health & safety	2.42	0.48	2.94	0.20

Table A12: Domain? Means for Preschool Group

			Pretest Means		Posttest Means	
			Mean	**Std Deviation**	**Mean**	**Std Deviation**
Lower SES	No	Personal & Social Development	2.03	0.44	2.71	0.31
		Language and Literacy	2.03	0.47	2.70	0.32
		Mathematical Thinking	1.91	0.46	2.66	0.34
		Scientific Thinking	1.82	0.49	2.44	0.48
		Social Studies	1.80	0.40	2.48	0.39
		The Arts	1.95	0.46	2.64	0.42
		Physical Development	2.25	0.45	2.84	0.26
	Yes	Personal & Social Development	2.01	0.44	2.67	0.34
		Language and Literacy	1.94	0.46	2.65	0.36
		Mathematical Thinking	1.84	0.42	2.61	0.39
		Scientific Thinking	1.80	0.51	2.43	0.50
		Social Studies	1.71	0.40	2.41	0.44
		The Arts	1.92	0.49	2.59	0.43
		Physical Development	2.24	0.44	2.80	0.28
Is limited English speaking	No	Personal & Social Development	2.03	0.43	2.68	0.33
		Language and Literacy	2.00	0.45	2.68	0.34
		Mathematical Thinking	1.88	0.44	2.63	0.38
		Scientific Thinking	1.84	0.50	2.45	0.48
		Social Studies	1.76	0.40	2.45	0.42
		The Arts	1.94	0.48	2.60	0.43
		Physical Development	2.25	0.44	2.81	0.27
	Yes	Personal & Social Development	1.91	0.49	2.70	0.33
		Language and Literacy	1.73	0.48	2.56	0.37
		Mathematical Thinking	1.73	0.37	2.57	0.37
		Scientific Thinking	1.58	0.46	2.30	0.55
		Social Studies	1.56	0.33	2.30	0.44
		The Arts	1.88	0.49	2.64	0.41
		Physical Development	2.20	0.51	2.81	0.30

Domain? Means for Preschool Group Continued

			Pretest Means		Posttest Means	
			Mean	**Std Deviation**	**Mean**	**Std Deviation**
Gender	Male	Personal & Social Development	1.96	0.43	2.64	0.35
		Language and Literacy	1.92	0.47	2.62	0.37
		Mathematical Thinking	1.84	0.45	2.59	0.39
		Scientific Thinking	1.79	0.49	2.41	0.50
		Social Studies	1.70	0.40	2.38	0.43
		The Arts	1.88	0.47	2.54	0.45
		Physical Development	2.20	0.46	2.77	0.30
	Female	Personal & Social Development	2.09	0.44	2.75	0.29
		Language and Literacy	2.03	0.45	2.72	0.31
		Mathematical Thinking	1.89	0.42	2.67	0.35
		Scientific Thinking	1.83	0.52	2.47	0.48
		Social Studies	1.79	0.39	2.51	0.41
		The Arts	2.00	0.48	2.70	0.38
		Physical Development	2.30	0.42	2.87	0.21

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Table A13: Personal & Social Development Results for Kindergarten Group

			?Pretest Means		?Posttest Means	
			Mean	Std Deviation	Mean	Std Deviation
Lower SES	No	self concept	2.35	0.65	2.72	0.41
		self control	2.46	0.53	2.79	0.36
		approach to learning	2.26	0.52	2.70	0.38
		interactions with others	2.45	0.54	2.79	0.33
		conflict resolution	2.16	0.59	2.62	0.45
	Yes	self concept	2.06	0.67	2.62	0.46
		self control	2.30	0.58	2.74	0.39
		approach to learning	2.07	0.55	2.61	0.44
		interactions with others	2.28	0.51	2.73	0.36
		conflict resolution	2.00	0.58	2.53	0.52
Is limited English speaking	No	self concept	2.19	0.67	2.66	0.44
		self control	2.35	0.57	2.75	0.39
		approach to learning	2.15	0.54	2.65	0.41
		interactions with others	2.36	0.53	2.76	0.35
		conflict resolution	2.07	0.60	2.57	0.50
	Yes	self concept	2.11	0.72	2.66	0.43
		self control	2.47	0.50	2.94	0.18
		approach to learning	2.12	0.60	2.61	0.42
		interactions with others	2.24	0.52	2.75	0.30
		conflict resolution	1.97	0.53	2.56	0.44
Gender	Male	self concept	2.08	0.66	2.62	0.46
		self control	2.26	0.56	2.71	0.41
		approach to learning	2.06	0.55	2.61	0.43
		interactions with others	2.26	0.54	2.72	0.37
		conflict resolution	1.95	0.60	2.51	0.51
	Female	self concept	2.30	0.67	2.73	0.41
		self control	2.50	0.53	2.84	0.31
		approach to learning	2.24	0.52	2.71	0.39
		interactions with others	2.45	0.50	2.81	0.31
		conflict resolution	2.19	0.55	2.66	0.44
Preschool Experience	No	self concept	2.06	0.69	2.63	0.45
		self control	2.25	0.61	2.74	0.38
		approach to learning	2.02	0.55	2.58	0.44
		interactions with others	2.27	0.54	2.75	0.34
		conflict resolution	1.98	0.56	2.54	0.52
	Yes	self concept	2.23	0.67	2.67	0.44
		self control	2.41	0.54	2.77	0.38
		approach to learning	2.20	0.54	2.67	0.41
		interactions with others	2.38	0.52	2.76	0.35
		conflict resolution	2.10	0.60	2.57	0.49

Table A14: Language & Literacy Results for Kindergarten Group

?			Pretest Means		Posttest Means	
			Mean	**Std Deviation**	**Mean**	**Std Deviation**
Lower SES	No	listening	2.26	0.54	2.72	0.43
		speaking	2.36	0.65	2.72	0.43
		literature & reading	2.26	0.51	2.79	0.34
		writing	2.03	0.63	2.77	0.37
	Yes	listening	2.04	0.60	2.59	0.49
		speaking	2.12	0.66	2.63	0.51
		literature & reading	2.06	0.57	2.68	0.42
		writing	1.86	0.61	2.70	0.43
Is limited English speaking	No	listening	2.14	0.59	2.65	0.48
		speaking	2.25	0.66	2.69	0.47
		literature & reading	2.17	0.55	2.74	0.39
		writing	1.94	0.62	2.73	0.41
	Yes	listening	2.01	0.49	2.69	0.42
		speaking	1.86	0.56	2.44	0.50
		literature & reading	1.88	0.51	2.61	0.41
		writing	1.87	0.61	2.75	0.36
Gender	Male	listening	2.08	0.60	2.64	0.48
		speaking	2.11	0.68	2.60	0.49
		literature & reading	2.06	0.57	2.69	0.40
		writing	1.82	0.60	2.68	0.42
	Female	listening	2.19	0.57	2.66	0.47
		speaking	2.34	0.63	2.77	0.44
		literature & reading	2.25	0.51	2.79	0.36
		writing	2.04	0.62	2.81	0.37
Preschool Experience	No	listening	2.00	0.56	2.63	0.46
		speaking	2.11	0.67	2.64	0.49
		literature & reading	2.00	0.55	2.68	0.42
		writing	1.79	0.63	2.65	0.43
	Yes	listening	2.18	0.59	2.65	0.48
		speaking	2.25	0.66	2.67	0.48
		literature & reading	2.20	0.54	2.74	0.38
		writing	1.99	0.62	2.76	0.40

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Table A15: Mathematical Thinking Results for Kindergarten Group

			Pretest Means		Posttest Means	
			Mean	Std Deviation	Mean	Std Deviation
Lower SES	No	approach to math thinking	1.99	0.58	2.57	0.49
		patterns & relationships	2.16	0.62	2.76	0.38
		number concept & operations	2.19	0.61	2.79	0.41
		geometry & spatial relations	2.34	0.56	2.86	0.30
		measurement	1.85	0.53	2.54	0.43
		probability & statistics	1.75	0.54	2.42	0.55
	Yes	approach to math thinking	1.79	0.59	2.41	0.55
		patterns & relationships	1.99	0.59	2.68	0.43
		number concept & operations	1.93	0.59	2.68	0.46
		geometry & spatial relations	2.10	0.57	2.76	0.41
		measurement	1.62	0.50	2.39	0.51
		probability & statistics	1.61	0.64	2.33	0.62
Is limited English speaking	No	approach to math thinking	1.89	0.60	2.49	0.53
		patterns & relationships	2.07	0.61	2.72	0.42
		number concept & operations	2.05	0.61	2.73	0.44
		geometry & spatial relations	2.22	0.58	2.81	0.37
		measurement	1.73	0.53	2.47	0.47
		probability & statistics	1.68	0.60	2.38	0.60
	Yes	approach to math thinking	1.63	0.47	2.30	0.47
		patterns & relationships	1.99	0.59	2.68	0.35
		number concept & operations	1.86	0.56	2.70	0.47
	?	geometry & spatial relations	2.03	0.48	2.77	0.34
		measurement	1.47	0.39	2.26	0.56
?		probability & statistics	1.59	0.66	2.25	0.51
Gender	Male	approach to math thinking	1.81	0.60	2.45	0.53
		patterns & relationships	1.99	0.60	2.70	0.41
		number concept & operations	1.99	0.59	2.71	0.46
		geometry & spatial relations	2.15	0.57	2.79	0.36
		measurement	1.63	0.52	2.45	0.48
		probability & statistics	1.65	0.60	2.36	0.58
	Female	approach to math thinking	1.94	0.57	2.54	0.52
		patterns & relationships	2.14	0.59	2.76	0.40
		number concept & operations	2.09	0.61	2.77	0.42
	?	geometry & spatial relations	2.28	0.57	2.84	0.37
		measurement	1.79	0.50	2.48	0.47
		probability & statistics	1.69	0.61	2.40	0.59

Mathematical Thinking Results for Kindergarten Group Continued

Preschool Experience	No	approach to math thinking	1.78	0.57	2.43	0.51
		patterns & relationships	1.93	0.60	2.65	0.43
		number concept & operations	1.94	0.59	2.72	0.42
		geometry & spatial relations	1.98	0.56	2.69	0.40
		measurement	1.66	0.51	2.44	0.46
		probability & statistics	1.57	0.62	2.31	0.59
	Yes	approach to math thinking	1.90	0.60	2.49	0.54
		patterns & relationships	2.11	0.60	2.74	0.41
		number concept & operations	2.07	0.62	2.73	0.46
		geometry & spatial relations	2.29	0.56	2.84	0.35
		measurement	1.73	0.53	2.47	0.49
		probability & statistics	1.71	0.60	2.39	0.59

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Table A16: Scientific Thinking Results for Kindergarten Group

			Pretest Means		Posttest Means	
			Mean	**Std Deviation**	**Mean**	**Std Deviation**
Lower SES	No	observing & investigating	1.96	0.53	2.49	0.44
		questioning & predicting	2.04	0.60	2.54	0.54
		explaining & forming conclusions	1.82	0.60	2.36	0.55
	Yes	observing & investigating	1.75	0.51	2.39	0.52
		questioning & predicting	1.87	0.63	2.45	0.62
		explaining & forming conclusions	1.62	0.59	2.32	0.64
Is limited English speaking	No	observing & investigating	1.85	0.53	2.44	0.49
		questioning & predicting	1.96	0.62	2.51	0.57
		explaining & forming conclusions	1.73	0.60	2.35	0.60
	Yes	observing & investigating	1.66	0.46	2.33	0.50
		questioning & predicting	1.69	0.58	2.23	0.68
		explaining & forming conclusions	1.47	0.56	2.28	0.68
Gender	Male	observing & investigating	1.76	0.53	2.39	0.49
		questioning & predicting	1.89	0.61	2.48	0.57
		explaining & forming conclusions	1.65	0.59	2.34	0.59
	Female	observing & investigating	1.92	0.50	2.50	0.46
		questioning & predicting	1.99	0.61	2.50	0.59
		explaining & forming conclusions	1.75	0.61	2.36	0.62
Preschool Experience	No	observing & investigating	1.80	0.52	2.42	0.48
		questioning & predicting	1.86	0.60	2.40	0.57
		explaining & forming conclusions	1.59	0.60	2.25	0.57
	Yes	observing & investigating	1.85	0.53	2.44	0.49
		questioning & predicting	1.97	0.63	2.52	0.59
		explaining & forming conclusions	1.74	0.60	2.37	0.62

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Table A17: Social Studies Results for Kindergarten Group

			Pretest Means		Posttest Means	
			Mean	Std Deviation	Mean	Std Deviation
Lower SES	No	human similarities & difference	2.01	0.50	2.58	0.45
		human interdependence	2.08	0.47	2.61	0.40
		rights & responsibilities	2.16	0.52	2.68	0.44
		people & where they live	1.69	0.55	2.29	0.52
	Yes	human similarities & difference	1.92	0.55	2.53	0.52
		human interdependence	1.94	0.48	2.55	0.45
		rights & responsibilities	1.96	0.52	2.57	0.50
		people & where they live	1.53	0.56	2.24	0.57
Is limited English speaking	No	human similarities & difference	1.96	0.53	2.56	0.49
		human interdependence	2.01	0.49	2.58	0.43
		rights & responsibilities	2.06	0.54	2.62	0.48
		people & where they live	1.62	0.55	2.28	0.53
	Yes	human similarities & difference	1.97	0.50	2.55	0.45
		human interdependence	1.92	0.41	2.60	0.39
		rights & responsibilities	1.84	0.42	2.60	0.47
		people & where they live	1.41	0.59	1.97	0.68
Gender	Male	human similarities & difference	1.89	0.52	2.49	0.52
		human interdependence	1.94	0.49	2.54	0.44
		rights & responsibilities	1.96	0.54	2.55	0.49
		people & where they live	1.55	0.51	2.24	0.55
	Female	human similarities & difference	2.04	0.52	2.65	0.42
		human interdependence	2.07	0.45	2.64	0.40
		rights & responsibilities	2.14	0.51	2.72	0.42
		people & where they live	1.66	0.59	2.30	0.54
Preschool Experience	No	human similarities & difference	1.92	0.54	2.52	0.53
		human interdependence	1.96	0.44	2.57	0.43
		rights & responsibilities	1.96	0.55	2.61	0.51
		people & where they live	1.54	0.54	2.19	0.52
	Yes	human similarities & difference	1.98	0.53	2.57	0.48
		human interdependence	2.02	0.50	2.58	0.43
		rights & responsibilities	2.08	0.52	2.62	0.47
		people & where they live	1.62	0.57	2.29	0.56

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Table A18: The Arts Results for Kindergarten Group

			Pretest Means		Posttest Means	
			Mean	**Std Deviation**	**Mean**	**Std Deviation**
Lower SES	No	expression & representation	2.33	0.52	2.67	0.39
		artistic appreciation	2.19	0.66	2.70	0.46
	Yes	expression & representation	2.15	0.51	2.60	0.42
		artistic appreciation	2.05	0.64	2.60	0.55
Is limited English speaking	No	expression & representation	2.22	0.52	2.63	0.41
		artistic appreciation	2.11	0.66	2.64	0.51
	Yes	expression & representation	2.23	0.53	2.67	0.36
		artistic appreciation	2.09	0.51	2.68	0.48
Gender	Male	expression & representation	2.08	0.49	2.54	0.43
		artistic appreciation	1.97	0.63	2.57	0.55
	Female	expression & representation	2.38	0.51	2.76	0.33
		artistic appreciation	2.24	0.65	2.73	0.46
Preschool Experience	No	expression & representation	2.11	0.59	2.62	0.41
		artistic appreciation	2.08	0.65	2.63	0.51
	Yes	expression & representation	2.27	0.49	2.64	0.41
		artistic appreciation	2.12	0.66	2.65	0.51

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Table A19: Physical Development Results for Kindergarten Group

			Pretest Means		Posttest Means	
			Mean	Std Deviation	Mean	Std Deviation
Lower SES	No	gross motor development	2.43	0.51	2.87	0.32
		fine motor development	2.30	0.56	2.76	0.40
		personal health & safety	2.53	0.44	2.84	0.28
	Yes	gross motor development	2.29	0.52	2.79	0.40
		fine motor development	2.19	0.54	2.74	0.41
		personal health & safety	2.33	0.52	2.76	0.37
Is limited English speaking	No	gross motor development	2.34	0.53	2.82	0.38
		fine motor development	2.22	0.55	2.74	0.41
		personal health & safety	2.41	0.50	2.79	0.34
	Yes	gross motor development	2.39	0.51	2.86	0.34
		fine motor development	2.35	0.49	2.81	0.37
		personal health & safety	2.43	0.45	2.82	0.33
Gender	Male	gross motor development	2.29	0.52	2.81	0.37
		fine motor development	2.12	0.55	2.69	0.44
		personal health & safety	2.34	0.53	2.74	0.36
	Female	gross motor development	2.41	0.52	2.82	0.38
		fine motor development	2.37	0.51	2.82	0.35
		personal health & safety	2.49	0.45	2.85	0.29
Preschool Experience	No	gross motor development	2.25	0.54	2.74	0.44
		fine motor development	2.10	0.56	2.72	0.41
		personal health & safety	2.37	0.51	2.78	0.38
	Yes	gross motor development	2.39	0.51	2.85	0.34
		fine motor development	2.29	0.54	2.75	0.41
		personal health & safety	2.44	0.49	2.80	0.32

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Table A20: Domain? Means for Kindergarten Group

			Pretest Means		Posttest Means	
			Mean	Std Deviation	Mean	Std Deviation
Lower SES	No	Personal & Social Development	2.33	0.48	2.71	0.31
		Language and Literacy	2.24	0.49	2.75	0.32
		Mathematical Thinking	2.03	0.51	2.65	0.35
		Scientific Thinking	1.93	0.51	2.46	0.45
		Social Studies	1.97	0.43	2.53	0.37
		The Arts	2.26	0.53	2.69	0.36
		Physical Development	2.42	0.42	2.82	0.26
	Yes	Personal & Social Development	2.15	0.48	2.65	0.34
		Language and Literacy	2.02	0.53	2.65	0.40
		Mathematical Thinking	1.81	0.49	2.53	0.41
		Scientific Thinking	1.74	0.52	2.39	0.53
		Social Studies	1.83	0.44	2.48	0.42
		The Arts	2.10	0.51	2.60	0.43
		Physical Development	2.27	0.46	2.77	0.33
Is limited English speaking	No	Personal & Social Development	2.23	0.49	2.67	0.33
		Language and Literacy	2.13	0.53	2.70	0.37
		Mathematical Thinking	1.91	0.52	2.59	0.39
		Scientific Thinking	1.83	0.52	2.43	0.49
		Social Studies	1.90	0.45	2.51	0.40
		The Arts	2.17	0.53	2.64	0.41
		Physical Development	2.32	0.45	2.79	0.30
	Yes	Personal & Social Development	2.18	0.47	2.70	0.24
		Language and Literacy	1.91	0.42	2.62	0.35
		Mathematical Thinking	1.73	0.37	2.48	0.36
		Scientific Thinking	1.60	0.44	2.32	0.50
		Social Studies	1.77	0.39	2.44	0.41
		The Arts	2.16	0.47	2.68	0.36
		Physical Development	2.39	0.40	2.83	0.29

Domain? Means for Kindergarten Group Continued

Gender	Male	Personal & Social Development	2.12	0.49	2.63	0.34
		Language and Literacy	2.02	0.53	2.65	0.38
		Mathematical Thinking	1.84	0.50	2.56	0.38
		Scientific Thinking	1.76	0.51	2.40	0.49
		Social Studies	1.82	0.44	2.46	0.41
		The Arts	2.03	0.50	2.56	0.42
		Physical Development	2.25	0.45	2.76	0.31
	Female	Personal & Social Development	2.34	0.46	2.75	0.29
		Language and Literacy	2.21	0.50	2.76	0.34
		Mathematical Thinking	1.97	0.50	2.62	0.38
		Scientific Thinking	1.87	0.52	2.46	0.49
		Social Studies	1.97	0.44	2.57	0.36
		The Arts	2.31	0.52	2.74	0.36
		Physical Development	2.42	0.43	2.83	0.28
Preschool Experience	No	Personal & Social Development	2.12	0.50	2.64	0.35
		Language and Literacy	1.98	0.52	2.65	0.38
		Mathematical Thinking	1.80	0.52	2.53	0.38
		Scientific Thinking	1.75	0.51	2.36	0.48
		Social Studies	1.83	0.44	2.48	0.40
		The Arts	2.10	0.57	2.63	0.41
		Physical Development	2.24	0.48	2.75	0.33
	Yes	Personal & Social Development	2.27	0.48	2.68	0.32
		Language and Literacy	2.16	0.52	2.70	0.37
		Mathematical Thinking	1.94	0.50	2.60	0.39
		Scientific Thinking	1.84	0.53	2.44	0.50
		Social Studies	1.91	0.45	2.51	0.40
		The Arts	2.19	0.51	2.64	0.41
		Physical Development	2.37	0.43	2.81	0.29

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Table A21: PRETEST PROFICIENCY LEVELS BY DOMAIN AND STUDENT CHARACTERISTICS FOR PRESCHOOL GROUP

		Lower SES				LEP			
		below proficient		proficient		below proficient		proficient	
		Count	%	Count	%	Count	%	Count	%
No	Personal & Social Proficient	159	87.36	23	12.64	417	86.16	67	13.84
	Language Proficient	149	82.78	31	17.22	406	85.12	71	14.88
	Math Proficient	149	89.76	17	10.24	415	91.61	38	8.39
	Science Proficient	168	92.31	14	7.69	447	91.79	40	8.21
	Social Studies Proficient	163	96.45	6	3.55	432	96.00	18	4.00
	Arts Proficient	170	93.92	11	6.08	452	92.43	37	7.57
	Physically Proficient	133	72.28	51	27.72	368	74.95	123	25.05
Yes	Personal & Social Proficient	321	86.29	51	13.71	63	90.00	7	10.00
	Language Proficient	322	87.98	44	12.02	65	94.20	4	5.80
	Math Proficient	332	94.05	21	5.95	66	100.00	?	?
	Science Proficient	345	92.74	27	7.26	66	98.51	1	1.49
	Social Studies Proficient	335	96.54	12	3.46	66	100.00	?	?
	Arts Proficient	344	91.73	31	8.27	62	92.54	5	7.46
	Physically Proficient	284	75.13	94	24.87	49	69.01	22	30.99

POSTTEST PROFICIENCY LEVELS BY DOMAIN AND STUDENT CHARACTERISTICS FOR PRESCHOOL GROUP

		Lower SES				LEP			
		below proficient		proficient		below proficient		proficient	
		Count	%	Count	%	Count	%	Count	%
No	Personal & Social Proficient	43	26.20	121	73.80	119	28.50	298	71.50
	Language Proficient	37	22.84	125	77.16	115	27.32	306	72.68
	Math Proficient	52	32.70	107	67.30	149	34.81	279	65.19
	Science Proficient	98	59.39	67	40.61	248	57.01	187	42.99
	Social Studies Proficient	74	45.96	87	54.04	209	48.72	220	51.28
	Arts Proficient	69	42.59	93	57.41	203	46.35	235	53.65
	Physically Proficient	20	12.42	141	87.58	65	15.08	366	84.92
Yes	Personal & Social Proficient	95	30.35	218	69.65	19	31.67	41	68.33
	Language Proficient	105	32.92	214	67.08	27	45.00	33	55.00
	Math Proficient	119	36.73	205	63.27	22	40.00	33	60.00
	Science Proficient	190	57.75	139	42.25	40	67.80	19	32.20
	Social Studies Proficient	173	53.07	153	46.93	38	65.52	20	34.48
	Arts Proficient	157	47.15	176	52.85	23	40.35	34	59.65
	Physically Proficient	53	16.06	277	83.94	8	13.33	52	86.67

Table A22: PRETEST PROFICIENCY LEVELS BY DOMAIN AND STUDENT CHARACTERISTICS FOR KINDERGARTEN GROUP

		Lower SES				LEP			
		below proficient		proficient		below proficient		proficient	
		Count	%	Count	%	Count	%	Count	%
No	Personal & Social Proficient	97	55.10%	79	44.90%	251	64.70%	137	35.30%
	Language Proficient	121	69.50%	53	30.50%	284	74.20%	99	25.80%
	Math Proficient	107	81.10%	25	18.90%	264	85.40%	45	14.60%
	Science Proficient	134	88.70%	17	11.30%	304	90.50%	32	9.50%
	Social Studies Proficient	137	88.40%	18	11.60%	307	90.30%	33	9.70%
	Arts Proficient	122	69.30%	54	30.70%	290	74.60%	99	25.40%
	Physically Proficient	103	58.90%	72	41.10%	257	66.20%	131	33.80%
Yes	Personal & Social Proficient	177	72.20%	68	27.80%	26	72.20%	10	27.80%
	Language Proficient	194	80.50%	47	19.50%	34	97.10%	1	2.90%
	Math Proficient	183	89.30%	22	10.70%	29	93.50%	2	6.50%
	Science Proficient	199	93.00%	15	7.00%	32	100.00%	?	?
	Social Studies Proficient	198	92.10%	17	7.90%	31	93.90%	2	6.10%
	Arts Proficient	194	79.20%	51	20.80%	29	82.90%	6	17.10%
	Physically Proficient	177	72.00%	69	28.00%	26	72.20%	10	27.80%

		Preschool? Experience				Comparison Group			
		below proficient		proficient		below proficient		proficient	
		Count	%	Count	%	Count	%	Count	%
No	Personal & Social Proficient	81	74.30%	28	25.70%	153	63.50%	88	36.50%
	Language Proficient	89	84.00%	17	16.00%	180	75.30%	59	24.70%
	Math Proficient	82	90.10%	9	9.90%	165	88.70%	21	11.30%
	Science Proficient	91	91.90%	8	8.10%	188	92.20%	16	7.80%
	Social Studies Proficient	88	90.70%	9	9.30%	190	91.80%	17	8.20%
	Arts Proficient	83	76.10%	26	23.90%	181	75.10%	60	24.90%
	Physically Proficient	78	71.60%	31	28.40%	164	67.80%	78	32.20%
Yes	Personal & Social Proficient	188	61.20%	119	38.80%	145	68.70%	66	31.30%

	Language Proficient	221	72.70%	83	27.30%	160	77.30%	47	22.70%
	Math Proficient	205	84.40%	38	15.60%	146	84.40%	27	15.60%
	Science Proficient	237	90.80%	24	9.20%	174	91.10%	17	8.9%
	Social Studies Proficient	243	90.30%	26	9.70%	170	89.90%	19	10.10%
	Arts Proficient	228	74.30%	79	25.70%	163	77.30%	48	22.70%
	Physically Proficient	197	64.20%	110	35.80%	140	66.70%	70	33.30%

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Table A23: POSTTEST PROFICIENCY LEVELS BY DOMAIN AND STUDENT CHARACTERISTICS FOR KINDERGARTEN GROUP

		Lower SES				LEP			
		below proficient		proficient		below proficient		proficient	
		Count	%	Count	%	Count	%	Count	%
No	Personal & Social Proficient	31	19.50%	128	80.50%	87	25.20%	258	74.80%
	Language Proficient	32	20.40%	125	79.60%	88	26.00%	250	74.00%
	Math Proficient	49	31.80%	105	68.20%	126	37.50%	210	62.50%
	Science Proficient	88	56.40%	68	43.60%	186	54.90%	153	45.10%
	Social Studies Proficient	70	44.60%	87	55.40%	151	45.50%	181	54.50%
	Arts Proficient	59	34.90%	110	65.10%	137	38.20%	222	61.80%
	Physically Proficient	27	16.30%	139	83.70%	68	19.50%	281	80.50%
Yes	Personal & Social Proficient	61	28.20%	155	71.80%	5	15.60%	27	84.40%
	Language Proficient	66	31.70%	142	68.30%	10	33.30%	20	66.70%
	Math Proficient	92	44.00%	117	56.00%	16	53.30%	14	46.70%
	Science Proficient	113	54.30%	95	45.70%	17	60.70%	11	39.30%
	Social Studies Proficient	95	46.80%	108	53.20%	15	50.00%	15	50.00%
	Arts Proficient	88	40.40%	130	59.60%	10	32.30%	21	67.70%
	Physically Proficient	45	21.40%	165	78.60%	5	17.20%	24	82.80%

		Preschool? Experience				Comparison Group			
		below proficient		proficient		below proficient		proficient	
		Count	%	Count	%	Count	%	Count	%
No	Personal & Social Proficient	22	24.20%	69	75.80%	58	26.20%	163	73.80%
	Language Proficient	27	30.70%	61	69.30%	58	26.90%	158	73.10%
	Math Proficient	43	47.80%	47	52.20%	78	36.80%	134	63.20%
	Science Proficient	60	66.70%	30	33.30%	106	50.00%	106	50.00%
	Social Studies Proficient	40	43.00%	53	57.00%	96	47.10%	108	52.90%
	Arts Proficient	37	38.90%	58	61.10%	90	39.80%	136	60.20%
	Physically Proficient	22	23.90%	70	76.10%	44	19.90%	177	80.10%
Yes	Personal & Social Proficient	70	25.00%	210	75.00%	38	21.10%	142	78.90%
	Language Proficient	71	26.00%	202	74.00%	46	25.70%	133	74.30%

	Math Proficient	98	36.40%	171	63.60%	69	38.50%	110	61.50%
	Science Proficient	138	51.10%	132	48.90%	113	62.80%	67	37.20%
	Social Studies Proficient	124	47.10%	139	52.90%	80	44.20%	101	55.80%
	Arts Proficient	108	37.50%	180	62.50%	66	34.60%	125	65.40%
	Physically Proficient	50	17.90%	230	82.10%	35	19.20%	147	80.80%

[1] For data analyses, Not Yet = 1, In Process = 2, and Proficient = 3.