Prekindergarten Expansion Grant Evaluation, 2002-03



Austin Independent School District
Department of Program Evaluation
October 2003

Prekindergarten Expansion Grant Evaluation, 2002-03 Austin Independent School District

Executive Summary

In 2002-03, Austin Independent School District (AISD) offered full day prekindergarten instruction to eligible four-year-olds who were limited English proficient, economically disadvantaged, or homeless. This was the first year for AISD to offer full-day instruction to students in all 61 elementary schools with prekindergarten programs. The prekindergarten (pre-K) program is an important part of the systemic effort to have every Texas student reading on grade level by the end of third grade. AISD received \$4,401,968 from the state *Prekindergarten Expansion Grant* to support full-day instruction in 2002-03.

PROGRAM DESCRIPTION

A total of 4,414 four-year olds attended AISD prekindergarten during 2002-03. The total represents an increase of 591 students from the 2001-02 enrollment and 973 from the 2000-01 enrollment. The 2002-03 prekindergarten enrollment was the largest ever for AISD. According to AISD student records, demographics for 2002-03 prekindergarten children include the following:

- Gender was balanced with 49% female and 51% male students.
- Ninety-two percent of students (n=4,060) were from low-income families.
- Fifty percent of students (n= 2,206) had limited English proficiency (LEP).
- Forty-five percent (n=1,986) of the students met two criteria for eligibility.
- Homeless students (n=35) comprised less than 1% of the prekindergarten group.
- Hispanic students comprised the largest ethnic group (n=3,258), followed by African American (n=693), Anglo/Other (n=316), Asian (n=138), and Native American (n=9) students. The greatest increase in numbers from 2001-02 to 2002-03 was for Hispanic students with a 16% increase.
- Eight percent (n=351) of students attended more than one AISD elementary school during 2002-03.
- Thirty-eight languages were reported as home languages among this year's students. The most frequent home languages reported were Spanish (49%), English (47%), Vietnamese (1%), and Korean (1%).
- The average daily attendance (ADA) was 93.8, which is less than the rate of 95.1 for kindergarten and 95.9 for all elementary students.

In 2002-03, there were 243 prekindergarten teachers. The average years of teaching experience for pre-K teachers was 9.0 (7.1 years in 2001-02). However, 26% of these teachers had 0-1 year teaching experience.

Major Findings

In the first year of the full-day schedule for all prekindergarten students, it was important to know how the extra half day of school impacted achievement. Results indicate that there is benefit to students attending prekindergarten for a full day of instruction.

Progress in Literacy/Pre-Reading

Program effectiveness in language and literacy for prekindergarten was determined by gains from pretest to posttest on the English language *Peabody Picture Vocabulary Test-III* (PPVT-III) and the Spanish language *Test de Vocabulario en Imágenes Peabody* (TVIP). Major findings relating to language development include the following (Note: Any gain greater than zero indicates that the student's performance improved compared to the national average):

- Eighty-one percent of all Spanish language students and 71% of all English language students made measurable gains when tested in their native language.
- For all students tested, the average gain was 6.7 (6.0 in 2001-02) standard score points on the English language PPVT-III and 11.6 points (8.3 in 2001-02) on the Spanish language TVIP.
- Although Spanish LEP students entered the prekindergarten program at a lower average TVIP pretest score (84.2 standard score points) than in 2001-02 (86.3 points), they ended the program with a higher average posttest score (95.8 points) and a higher average gain (11.6) than in the previous three years.
- Eighty-one percent (80% in 2001-02) of all students scored in the average or above average range at the posttest when tested in their native language.
- Forty-two percent (38% in 2001-02) of the 2002-03 prekindergarten students were at or above the national average of 100 at the posttest when tested in their native language.
- Both English language and Spanish language students had an average posttest score of 95.8 standard score points when tested in their native language, only 4.2 standard score points short of the national average of 100.

Progress in Mathematics

Because there is no formal AISD mathematics assessment for pre-K through grade 2 at this time, mathematics ratings on the *Prekindergarten Report to Parents* were used to determine if students made progress in mathematics during prekindergarten. According to this informal mathematics assessment, 72% (73% in 2001-02) of students made progress in mathematics during prekindergarten.

Professional Development

In 2002-03, 142 (58%) teachers attended 1,929 hours of professional development relating directly to prekindergarten instruction. Fifty-one percent (n=72) of these teachers attended more that one training session. Ninety-four percent of teachers responding to the 2002-03 Prekindergarten Teacher Survey agreed or strongly agreed that the training they

attended was beneficial to their understanding of teaching and learning strategies for prekindergarten students.

The participation in 2002-03 prekindergarten training was highest in the core curriculum areas of mathematics (921 hours) and language and literacy (903 hours). Science and social studies followed with 57 hours and 48 hours, respectively.

Textbook Adoption Process

Prekindergarten teachers had the opportunity to participate in choosing a new state-adopted textbook system for use in 2003-04. There were six two-hour meetings with the curriculum publishers in December and January. In addition to the 15 member Prekindergarten Textbook Advisory Committee, 29 AISD teachers, staff, and community members participated in the meetings, which averaged 30 attendees. The Prekindergarten Textbook Advisory Committee selected the *DLM Early Childhood Express* system partially because of its strong Spanish component. Prekindergarten training in 2003-04 will focus on the new textbook materials and the correlation to the AISD Pre-K through Grade 12 Curriculum Initiative.

Impact of Prekindergarten Program

An analysis was completed on the average pre- and posttest scores for the 14 schools that provided pre-K half-day programs in 2001-02 to examine the effectiveness of full-day pre-K on 2002-03 achievement gains. Average scores for each group (all students, English only, and Spanish LEP on the PPVT-III; and Spanish speakers on the TVIP) were analyzed. In every comparison the average gains for the 14 schools were higher in 2002-03 than 2001-02 even though students began the year at lower or similar average pretest scores.

Now linked to the comprehensive AISD Pre-K through Grade 12 Curriculum Plan for academic achievement for all students, prekindergarten will improve the potential for all students to read on grade level by the end of third grade. Pre-K teachers have the state *Prekindergarten Curriculum Guidelines*, the new *DLM Early Childhood Express* curriculum, full-day schedule, instructional planning guides (IPGs), and curriculum matrices to assist them in this effort. Because the new curriculum is aligned to the *Prekindergarten Curriculum Guidelines*, professional development in the new curriculum and in TEXTEAMS mathematics will enhance the prekindergarten teachers' skills and ensure that students will be learning what is expected during prekindergarten.

RECOMMENDATIONS

Prekindergarten teachers and the administrative supervisor for prekindergarten identified some areas for improvement in the program. As state and national expectations become more rigorous, the educators of young children face many challenges. Teacher input is expressed here in the form of recommendations. Many of the recommendations for 2003-04 are the same as in 2002-03; because the prekindergarten program has been expanding to more sites over the past few years, the earlier recommendations continue to be germane for the newer sites, in particular.

- Insist on developmentally appropriate practices for prekindergarten while supporting the academic rigor required for these students to close the achievement gap.
- Implement consistent expectations for teaching and learning for prekindergarten as expressed in the instructional planning guides (IPGs).
- Redesign the *Prekindergarten Report to Parents* to include a scale that is defined with standards, and clarify expectations for student performance in each nine-week reporting period.
- Select districtwide prekindergarten assessments in literacy <u>and</u> mathematics in 2003-04 to ensure that instruction is aligned with the *Prekindergarten Curriculum Guidelines*.
- Provide quality literacy, TEXTEAMS, and *DLM Early Childhood Express* professional development for prekindergarten teachers to ensure consistency and quality in curriculum and instruction, even in the face of a limited budget.

TABLE OF CONTENTS

Executive Summary	i
List of Figures	vii
List of Tables	viii
Introduction	1
AISD Prekindergarten Program Description	2
Student Information	2
Teacher Experience	3
Prekindergarten Budget	4
Prekindergarten Program Evaluation	4
Evaluation Question 1: Did the program demonstrate evidence of gains	in
cognitive development, especially in pre-reading and language, and	
mathematics?	4
Progress in Language Arts/Pre-Reading	4
Testing Sample	5
Test Data by Native Language	6
Students Scoring in Average Range	
Progress in Mathematics	
Evaluation Question 2: Did the program demonstrate effectiveness of a	
of the expanded full-day prekindergarten in achieving its goals?	11
Professional Development	
Textbook Adoption	
Full-Day Schedule	
Evaluation Question 3: Did the program determine the impact, short-to	
long-term, of the expanded full-day prekindergarten on participants?	
Short-Term Impact of the Prekindergarten Program	
Long-Term Impact - Multi-Year Comparisons	
Strengths of the Program	
Areas for Program Improvement	
TAKS 2002-03 Baseline Data	
Conclusions and Recommendations	
Appendices	
Appendix A: Prekindergarten Expansion Grant, Cycle 7 Program Evalua	
for Austin ISD.	
Appendix B: 2003-04 AISD Prekindergarten Programs	
Appendix C: Average PPVT-III and TVIP Pretest, Posttest, and Gain Sco	
AISD schools, 2002-03	
Appendix D: 2003-04 Prekindergarten Teacher Survey	
Appendix E: AISD Prekindergarten Teacher Response to the Professiona	
Development Academy Evaluation Forms, 2002-03	31
KAIAFANDA I ICT	4)

LIST OF FIGURES

Figure 1:	Ethnicity of AISD Prekindergarten Students, 2002-03	. 2
Figure 2:	AISD Prekindergarten Teacher Experience, 2002-03	. 3
Figure 3:	Prekindergarten Expansion Grant Allocations, 2002-03	. 4
Figure 4:	Demographic Comparison of Testing Sample With All Prekindergarten	
Stude	ents, 2002-03	. 5
Figure 5:	PPVT-III and TVIP Mean Standard Scores for All Pre-K Students Tested,	
	-03	. 6
Figure 6:	Average PPVT-III and TVIP Pretest and Posttest Scores for AISD Pre-K	
Stude	ents When Tested in Their Native Language, 2002-03	. 6
_	Number and Percentage of All Pre-K Students Tested (N=1,643) Below, At,	
and A	Above Average on the PPVT-III at Pretest and Posttest, 2002-03	. 7
Figure 8:	Number and Percentage of Spanish Language Pre-K Students (N=751) Below	V,
	nd Above Average on the TVIP at Pretest and Posttest, 2002-03	
•	Number and Percentage of English Language Pre-K Students (N=892) Below	-
	nd Above Average on the PPVT-III at Pretest and Posttest, 2002-03	
•	: Number and Percentage of Spanish Language Pre-K Students (N=751) Below	-
	nd Above Average on the PPVT-III (English) at Pretest and Posttest, 2002-03	. 9
	: Number and Percentage of Prekindergarten Students at Levels 1-4 on the 1 st	
	-Weeks and 4 th Nine Weeks <i>Prekindergarten Report to Parents</i> 2002-03	
`	.,810),	
_	: Percentage of Pre-K Students by Gain Level for a Sample of <i>Prekindergarter</i>	
	ort to Parents, 2002-03	
	: Frequency of Pre-K Sessions Attended as Reported by Teachers, 2002-03 I	ı 1
_	: Prekindergarten Professional Development Participation by Subject Area,	
	-03	
	: Percentage of Prekindergarten Day Spent in Each Activity	ւ4
_	: 2001-02 and 2002-03 PPVT-III and TVIP Comparisons for 2001-02	
	-Day Prekindergarten Programs in 2002-03	15
	: Four-Year Comparison for All AISD Pre-K Students Tested on PPVT-III,	
	-2000 through 2002-03	6
	: Four-Year Comparison for AISD Spanish LEP Pre-K Students Tested on	
	P, 1999-2000 through 2002-03	ا 6
_	: Four-Year Comparison for AISD English-Only Pre-K Students Tested on	. ~
	T-III, 1999-2000 through 2002-03	[/
	: Four-Year Comparison for AISD Spanish Language Prekindergarten	. ~
Stude	ents Tested on PPVT-III, 1999-2000 through 2002-03	1/

LIST OF TABLES

Table 1: AISD Pre-K Program Information, by Category, 1995-96 through 2002-03 3

AUSTIN ISD PREKINDERGARTEN PROGRAM, 2002-03

The purpose of this evaluation report on the Austin Independent School District (AISD) prekindergarten (pre-K) program is to inform decision-makers at the local and state level about the academic progress of pre-K students. Student acquisition of language and mathematics skills, quality of professional development for pre-K teachers, and the impact of the prekindergarten program on student achievement are the main focus of this evaluation.

The program evaluation plan for the *Prekindergarten Expansion Grant*, Cycle 7 for Austin ISD is included in Appendix A. The major questions to be answered in this evaluation for the *Prekindergarten Expansion Grant* for TEA include the following:

- 1. Did the program demonstrate evidence of gains in cognitive development, especially in pre-reading and language, and mathematics?
- 2. Did the program demonstrate effectiveness of activities of the expanded full-day prekindergarten in achieving its goals?
- 3. Did the program determine the impact, short-term and long-term, of the expanded full-day prekindergarten on participants?

INTRODUCTION

National and statewide attention has been focused on improved student achievement in recent years. In 2002-03, the state of Texas launched a new initiative that requires all students to read on grade level by the end of third grade to be promoted to the next grade. The stakes are even higher in the federal *No Child Left Behind* legislation of 2001, which requires that 100% of students pass the state reading and mathematics assessments (TAKS reading and mathematics in Texas) by 2013-14.

AISD is meeting these challenges by implementing many districtwide teaching and learning initiatives, such as the *Principles of Learning* approach to learning; using instructional planning guides (IPGs) to align district curriculum with the state *Texas Essential Knowledge and Skills* (TEKS) learning standards and the *Prekindergarten Curriculum Guidelines* pre-K through grade 12; administering benchmark tests in reading and mathematics; providing reading intervention for K-8; and placing literacy specialists at all elementary campuses. As a result of the district's focus, 95% of all AISD grade 3 students tested in 2002-03 passed TAKS reading.

As stated in the U.S. Department of Education publication, *Prekindergarten in U.S. Public Schools: 2001-02*, "Research on the relationship between children's early care and education and school readiness has shown the potential importance of enriching learning experiences for young children, and in particular, the positive outcomes of early intervention for educationally disadvantaged children." In addition, the National Research Council indicates that young children who are at risk of school failure have a greater likelihood of success if they attend high-quality early childhood programs (Bowman, Donovan, and Burns, 2001).

With assistance of the state *Prekindergarten Expansion Grant*, AISD extended full-day instruction to all eligible four-year olds in 2002-03. Now linked to the comprehensive AISD plan for academic achievement for all students, prekindergarten is designed to improve the potential for all students to read on grade level by third grade.

AISD PREKINDERGARTEN PROGRAM DESCRIPTION

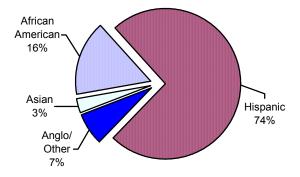
In 2002-03, AISD offered full-day prekindergarten instruction to eligible four-year olds who were limited English proficient, economically disadvantaged, or homeless. This was the first year for AISD to offer full-day instruction to students in all 61 elementary schools with prekindergarten programs. See Appendix B for a complete list of the schools that had prekindergarten programs in 2002-03.

Student Information

A total of 4,414 four-year-olds attended AISD prekindergarten during 2002-03. The total represents an increase of 591 students from the 2001-02 enrollment, and of 973 from the 2000-01 enrollment. The 2002-03 prekindergarten enrollment was the largest ever for AISD. According to AISD student files, demographics for 2002-03 prekindergarten children include the following:

- Gender was balanced with 49% female and 51% male students.
- Ninety-two percent of students (n=4,060) were from low-income families.
- Fifty percent of students (n= 2,206) had limited English proficiency (LEP).
- Forty-five percent (n=1,986) of the students met two criteria for eligibility.
- Homeless students (n=35) comprised less than 1% of the prekindergarten group.
- Eight percent (n=351) of students attended more than one AISD elementary school during 2002-03.
- Thirty-eight languages were reported as home languages among this year's students. The most frequent home languages reported were Spanish (49%), English (47%), Vietnamese (1%), and Korean (1%).
- The average daily attendance (ADA) was 93.8, which is less than the rate of 95.1 for kindergarten and 95.9 for all elementary students.
- As shown in Figure 1, Hispanic students comprised the largest ethnic group (n=3,258), followed by African American (n=693), Anglo/Other (n=316), Asian (n=138), and Native American (n=9) students. The greatest increase in numbers from 2001-02 to 2002-03 was for Hispanic students with a 16% increase.

Figure 1: Ethnicity of AISD Prekindergarten Students, 2002-03



Source: AISD Student Records

A total of 38 languages were reported as home languages among this year's prekindergarten students. The most frequent home languages reported were Spanish (49%), English (47%), Vietnamese (1%), and Korean (1%).

The number of pre-K students served at each of the 61 campuses varied widely in 2002-03, and ranged from 21 students at Casis to 158 students at Walnut Creek. The average pre-K student-teacher ratio in 2002-03 was 18.2, down slightly from 19.0 in 2001-02. Table 1 summarizes various program comparison data from 1995-96 through 2002-03. (Note: These data include all pre-K students served at any point in a given year.)

Table 1: AISD Pre-K	Program Information, b	v Category, 1995-96	through 2002-03

Category	1995-	Source: AISD Student Records				2000-	2000- 2001-	2002-
	1996	1997	1998	1999	2000	2001	2002	2003
Half-Day Classes	56	68	70	72	74	60	48	0
Full-Day Classes	138	152	153	147	142	148	177	243
Teachers	164	186	188	183	179	178	201	243
Low-Income Students*	3,267	3,437	3,364	3,310	2,890	2,762	3,153	4,060
LEP Students*	1,140	1,181	1,236	1,392	1,336	1,442	1,901	2,206
Half-Day Students	901	942	967	1,021	1,048	793	696	0
Full-Day Students	2,498	2,652	2,596	2,532	2,523	2,648	3,127	4,414
Total Students	3,399	3,594	3,563	3,553	3,571	3,441	3,823	4,414

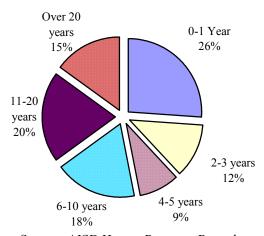
^{*} Students can be both low income and LEP.

Source: AISD Student Records

Teacher Experience

There were 243 prekindergarten teachers in 2002-03. Average teaching experience for pre-K teachers in AISD was 9.0 years (up from 7.1 in 2001-02). The majority (53%) of the pre-K teachers had more than five years of teaching experience. However, 26% of prekindergarten teachers had 0-1 years experience in 2002-03. The percentage of teachers at each AISD teaching experience level is shown in Figure 2.

Figure 2: AISD Prekindergarten Teacher Experience, 2002-03



Source: AISD Human Resource Records

Prekindergarten Budget

The State of Texas Foundation School Program provides the funding for half-day prekindergarten. The district must pay for the additional half day of instruction for the full-day pre-K classes. AISD received the Cycle 7 *Prekindergarten Expansion Grant* in 2002-03 to fund the additional half day for 47 of the 61 full-day pre-K classes. The grant amount of \$4,401,968 was allocated for pre-K teacher salaries and benefits, career ladder, substitutes for professional development, extra duty pay, reading materials and supplies, and professional support salaries for the full-day programs. In addition, \$18,171 in Title I funds and \$77,629 in local funds were used to support the program. As shown in Figure 3, the largest allocation of the *Prekindergarten Expansion Grant* was designated for teacher salaries and benefits (92%).

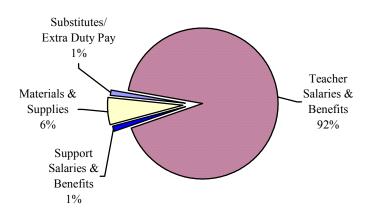


Figure 3: Prekindergarten Expansion Grant Allocations, 2002-03

Source: AISD Finance Records

PREKINDERGARTEN PROGRAM EVALUATION

The following section will focus on the evaluation questions from the Texas Education Agency (TEA). Examination of the short-term and long-term impact of the prekindergarten program on academic growth includes discussion in the following areas: results of the pre-K assessments in language/literacy and mathematics; professional development for pre-K teachers; and comments by teachers and the program director about the prekindergarten program in AISD.

1. Did the program demonstrate evidence of gains in cognitive development, especially in pre-reading and language, and mathematics?

Progress in Language Arts/Pre-Reading

Program effectiveness in language and literacy for prekindergarten was determined by gains from pretest to posttest on the English language *Peabody Picture Vocabulary Test-III* (PPVT-III) and the Spanish language *Test de Vocabulario en Imágenes Peabody* (TVIP). The PPVT-III and TVIP measure knowledge of receptive vocabulary in English or in Spanish, respectively. Standard test scores are based on national age norms, with a

mean of 100 and a standard deviation of 15 for both tests. For a student to maintain his or her standing relative to the national average, the gain score would be zero. Any gain greater than zero indicates that the student's performance improved compared to the national average.

The PPVT-III and TVIP are achievement tests of the level of a person's vocabulary acquisition. However, the tests can only be used as a screening test of verbal ability when tested in the examinee's home language. Spanish LEP students are tested in English (in addition to Spanish) to measure growth in English language acquisition that is part of the English as second language (ESL) component of pre-K. See Appendix C for the average PPVT-III and TVIP scores by school.

Testing Sample

In fall 2002 and spring 2003, the PPVT-III and TVIP were administered to a random sample of students in all AISD schools with prekindergarten programs. As shown in Figure 4, the ethnicity and gender of the students tested closely matched the overall AISD pre-K population. All students in the sample were tested in English (PPVT-III); Spanish LEP students were also tested in Spanish (TVIP).

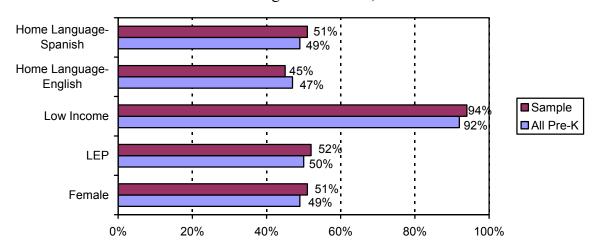


Figure 4: Demographic Comparison of Testing Sample With All Prekindergarten Students, 2002-03

Source: AISD Student Records

In fall 2002, 1,824 pre-K students (2,493in 2001-02) were pretested on the PPVT-III. Although every effort was made to posttest all students who had a valid pretest score, 181 fewer students were posttested due to withdrawals, illnesses, and relocations of eligible students. A total of 1,643 (37% of all) pre-K students had valid pre- and posttest scores on the English language PPVT-III. In addition, 752 (34%) Spanish LEP pre-K students had valid pre- and posttest scores on the TVIP. For all students tested, the average gain was 6.7 (6.0 in 2001-02) standard score points on the PPVT-III and 11.6 points (8.3 in 2001-02) on the TVIP. Figure 5 shows the average scores on the PPVT-III and the TVIP for all students with valid pre- and posttest scores in 2002-03.

145 Mean Standard Score 120 National Average = 10095 84.2 79.9 ■ Pretest 73.2 70 Posttest 45 20 PPVT-III English **TVIP Spanish** (n=1,643)(n=752)

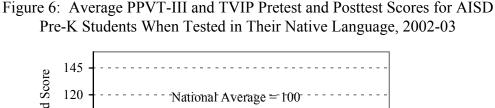
Figure 5: PPVT-III and TVIP Mean Standard Scores for All Pre-K Students Tested, 2002-03

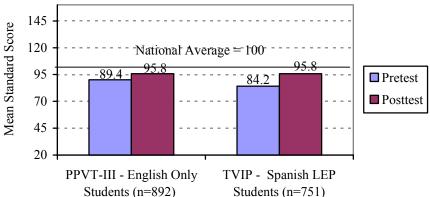
Source: AISD Program Evaluation PPVT and TVIP Records, 2002-03

Test Data by Native Language

The overall PPVT-III results in Figure 5 give a general idea where students are in their English language acquisition, but because the tests measure verbal ability when administered in the student's home language, it is necessary to look at the results by native language--PPVT-III for English language students and TVIP for Spanish language students.

Eighty-one percent of all Spanish language students and 71% of all English language students made gains on tests of their native language. Both groups had an average posttest score of 95.8 standard score points, only 4.2 standard score points short of the national average of 100. Average gains for students who had only PPVT-III scores (English only) and average gains for students who had TVIP scores (Spanish LEP) are presented in Figure 6.





Source: AISD Program Evaluation PPVT and TVIP Records, 2002-03

Students Scoring in Average Range

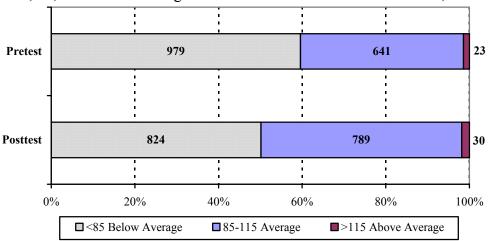
It is important to know how prepared the pre-K students will be when they start kindergarten. Although 100 is the national average score, there is an average range (low average to high average) for both the PPVT-III and the TVIP of 85-115 standard score points (one standard deviation above and below the mean). The assumption is that students who advance to the average range in the test of their native language will be ready to accelerate future literacy learning in kindergarten.

Each posttest score was examined to determine if it fell within this range for all students taking the PPVT-III, Spanish LEP students taking the TVIP, Spanish LEP students taking the PPVT-III, and English-only students on the PPVT-III. Analysis of these data reveals the following information:

- 50% (n=819) of *all students* taking the PPVT-III scored in the average or above average range at the posttest;
- 83% (n=744) of *English-only* students scored in the average or above average range at the posttest on the PPVT-III;
- 79% (n=591) of all **Spanish LEP** students scored in the average or above average range at the posttest on the TVIP;
- 81% (n=1,335) of all students scored in the average or above average range at the posttest when tested in their native language;
- 10% (n=78) of *Spanish LEP* students scored in the average or above average range at the posttest on the English language PPVT-III; and
- 9% (n=67) of **Spanish LEP** students scored in the average or above average range at the posttest on both the PPVT-III and the TVIP.

Figures 7-10 show the numbers and percentages of students who scored in the below average, average, and above average ranges at the pretest and posttest. Figure 7 shows that when examining scores for all pre-K students tested on the PPVT-III, there is a 10 percentage point gain in students in the average and above average range from the pretest to the posttest. This includes the Spanish LEP students who were tested in English.

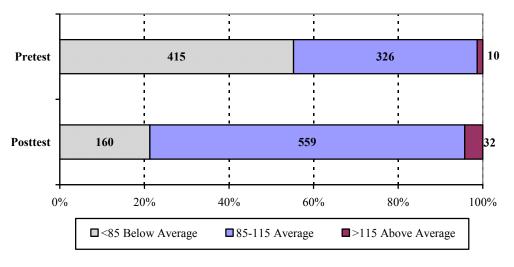
Figure 7: Number and Percentage of All Pre-K Students Tested (N=1,643) Below, At, and Above Average on the PPVT-III at Pretest and Posttest, 2002-03



Source: ASID Program Evaluation PPVT Records, 2002-03

The greatest growth was for Spanish LEP students on the TVIP moving from 45% (n=336) in the average or above range at the pretest to 79% (n=591) of students in those ranges at the posttest. Figure 8 shows the numbers and percentages of Spanish language pre-K students in the below average, average, and above average ranges at pretest and posttest.

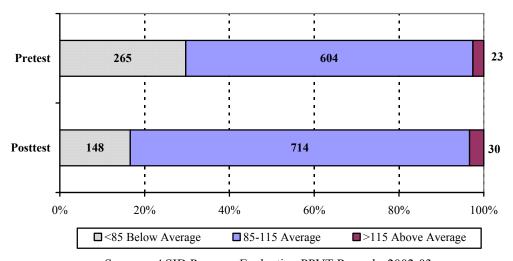
Figure 8: Number and Percentage of Spanish Language Pre-K Students (N=751) Below, At, and Above Average on the TVIP at Pretest and Posttest, 2002-03



Source: AISD Program Evaluation TVIP Records, 2002-03

Although 627 (70%) of the English language students were already in the average or above average range at the pretest, an additional 117 (13%) students moved from below average to the average or above average range at the posttest. Figure 9 shows the numbers and percentages of English language pre-K students in the below average, average, and above average ranges at the pre- and posttest.

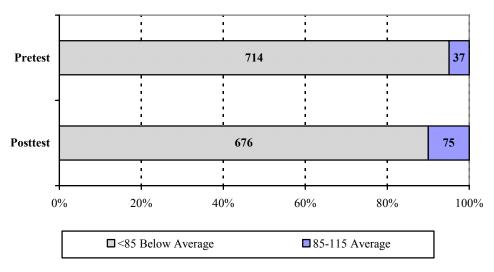
Figure 9: Number and Percentage of English Language Pre-K Students (N=892) Below, At, and Above Average on the PPVT-III at Pretest and Posttest, 2002-03



Source: ASID Program Evaluation PPVT Records, 2002-03

While the PPVT scores were low for Spanish language students, the number of students in the average range doubled from 37 at the pretest to 75 at the posttest. Figure 10 shows the numbers and percentages of Spanish language pre-K students in the below average and average ranges at pre- and posttest.

Figure 10: Number and Percentage of Spanish Language Pre-K Students (N=751) Below, At, and Above Average on the PPVT-III (English) at Pretest and Posttest, 2002-03



Source: AISD Office of Program Evaluation PPVT Records, 2002-03

In addition, 38% (n=343) of all English-only students taking the PPVT-III had a standard score of 100 or higher, and 46% (n= 342) of all Spanish LEP students tested on the TVIP had a standard score of 100 or higher on the posttest. A total of 42% (38% in 2001-02) of the 2002-03 prekindergarten students in the testing sample were at or above the national average of 100 at the posttest when tested in their native language.

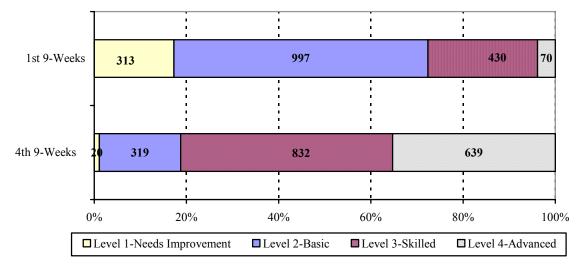
Progress in Mathematics

AISD uses the *Prekindergarten Report to Parents* four times each year to report student academic progress, which is rated by teachers for the areas of pre-reading/concepts of print, oral language, writing, listening, mathematics, social studies/science/health, and English as a second language. The performance scale used for rating academic progress is as follows: 1-needs improvement, 2-basic understanding, 3-skilled, and 4-advanced. Although there are major instructional goals listed on the *Prekindergarten Report to Parents*, there is no continuum for development by which to assess progress.

Because there is no formal mathematics assessment for pre-K through grade 2 in AISD at this time, mathematics ratings on the *Prekindergarten Report to Parents* were used to determine if students made progress in mathematics during prekindergarten. The state *Prekindergarten Curriculum Guidelines* elaborate on appropriate academic progress for pre-K students. Teachers were asked to list the mathematics performance levels for pre-K students who had reports for the first and last nine weeks of 2002-03. In a sample of data obtained, 128 (53%) pre-K teachers reported mathematics progress for 1,810 students.

A review of the number of students at each mathematics performance level indicates that, according to teachers, 17% of prekindergarten students were "in need of improvement" in mathematics skills at the beginning of the school year while only 1% of students were "in need of improvement" by the end of the year. The percentage of students who were "skilled" or "advanced" in mathematics at the beginning of the year was 28% while 81% of students were reported to be "skilled" or "advanced" on the *Prekindergarten Report to Parents* by the end of the school year. Figure 11 shows the number and percent of students at each level at the beginning and end of 2002-03.

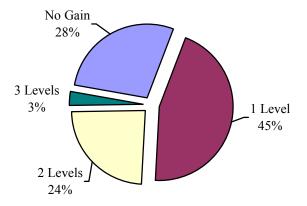
Figure 11: Number and Percent of Pre-K Students at Levels 1-4 on a Sample of the 1st Nine-Weeks and 4th Nine Weeks *Prekindergarten Report to Parents*, 2002-03 (N=1,810)



Source: AISD Prekindergarten Report to Parents Records, 2002-03

According to this informal assessment, 72% (73% in 2001-02) of prekindergarten students made progress in mathematics during pre-K, with the average gain of 1.0 level. Figure 12 shows the growth in mathematics performance ratings from first to last nine weeks reported to prekindergarten parents in 2002-03.

Figure 12: Percentage of Pre-K Students by Gain Level for a Sample of Prekindergarten Report to Parents, 2002-03



Source: AISD Prekindergarten Report to Parents Records, 2002-03

In 2003-04, the primary mathematics specialist will assist with the development of a prekindergarten mathematics assessment that will be aligned with the *Prekindergarten Curriculum Guidelines*. Teachers who have participated in TEXTEAMS training will be asked to pilot the assessment with their students in fall 2003 and spring 2004. The implementation of this assessment, scheduled to occur in 2002-03, was delayed so that the new curriculum adoption, *DLM Early Childhood Express*, could be a resource for development of the assessment instrument.

2. Did the program demonstrate effectiveness of activities of the expanded full-day prekindergarten in achieving its goals?

In 2002-03, prekindergarten instruction in AISD was aligned for the first time by having all of the students and teachers on the same full-day schedule. This standardized schedule meant that curriculum and districtwide initiatives could be implemented consistently in all prekindergarten classrooms. Professional development was important to the full-day structure of pre-K because training did not have to be specialized for half-day and full-day programs. In addition to professional development, prekindergarten teachers participated in the textbook adoption process to determine which curriculum would best suit the needs of the district.

Professional Development

In 2002-03, 142 (58%) teachers attended 1,929 hours of professional development relating directly to prekindergarten instruction. Fifty-one percent (n=72) of these teachers attended more that one training session. Ninety-four percent of teachers responding to the 2002-03 Prekindergarten Teacher Survey agreed or strongly agreed that the training they attended was beneficial to their understanding of teaching and learning strategies for prekindergarten students. See Appendix D for the Teacher Survey. Figure 13 shows the percentage of teachers who attended one to seven sessions of pre-K training in 2002-03.

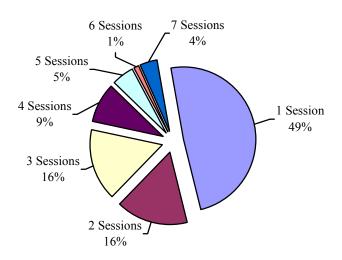


Figure 13: Frequency of Pre-K Training Sessions Attended as Reported by Teachers, 2002-03

Source: AISD Professional Development Academy Records,

During 2002-03, AISD prekindergarten teachers were offered ongoing training in language arts and mathematics through the district Professional Development Academy (PDA). The categories of training that were offered included the following:

- Implementing the Prekindergarten Guidelines Three-hour classes on these specific skill areas: Language Arts/Literacy, Mathematics, Science, and Social Studies.
- Prekindergarten TEXTEAMS training Each series of classes included three six-hour days of training. Pre-K TEXTEAMS is a TEKS/standards-based professional development program that emphasizes five content areas of the prekindergarten mathematics guidelines: statistics and probability; number and operations; patterns and algebraic thinking; geometry and spatial sense; and measurement.
- Building Language for Literacy (BLL) This curriculum, which was purchased for full-day prekindergarten teachers, was presented in two six-hour sessions. The integrated program of instruction is focused primarily on four literacy goals--oral language, phonological awareness, letter knowledge, and print knowledge.
- *Treehomes* Science training related to the GEMS, Great Explorations in Math and Science, curriculum for prekindergarten students.
- Using the Self-Assessment Tool: Pre-K Guidelines The Director of Early Childhood from the Texas Education Agency introduced the new state guide, Impacting Student Achievement Through the Language and Literacy Prekindergarten Curriculum Guidelines: A Self-Assessment Tool.

AISD prekindergarten staff participation in 2002-03 prekindergarten training was highest in the core curriculum areas of mathematics (921 hours) and language and literacy (903 hours). Science and social studies followed with 57 hours and 48 hours, respectively. Figure 14 shows the percentage of training hours by subject area.

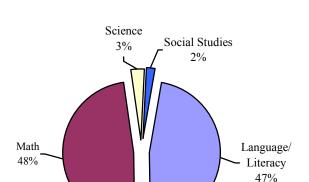


Figure 14: Prekindergarten Professional Development Staff Participation by Subject Area, 2002-03

Source: AISD Professional Development Academy Records, 2002-03

Teachers who attended prekindergarten professional development were very positive about their training. A sample of 81 Professional Development Academy Evaluation Forms indicated that 100% of teachers agreed or strongly agreed that their teaching skills improved because of the training attended. In addition, 100% of teachers responding agreed or strongly agreed that training would have a positive impact on their classroom. One teacher wrote, "Keep offering workshops for prekindergarten. It's wonderful when everything is applicable." See Appendix E for a summary of the sample of PDA Evaluation Forms for prekindergarten training.

Textbook Adoption

Prekindergarten teachers had the opportunity to participate in choosing a new state-adopted textbook system for use in 2003-04. There were six two-hour meetings with the curriculum publishers in December and January. In addition to the 15 member Prekindergarten Textbook Advisory Committee, 29 AISD teachers, staff, and community members participated in the meetings, which averaged 30 attendees.

One week was dedicated to each prekindergarten system. Materials were displayed, a presentation was given, and time was allowed for questions at each meeting. Those attending were encouraged to give their feedback by rating the English and Spanish materials, manipulatives, lesson plans, and assessment tools of the systems. The votes were tallied and, at the end of the process, all of the publishers were invited to make a presentation to answer the committee's questions. The Prekindergarten Textbook Advisory Committee selected the *DLM Early Childhood Express* system partially because of its strong Spanish component. Bilingual teachers commented that they were looking forward to the new bilingual curriculum to enrich the available classroom resources.

Full-Day Schedule

Schools had flexibility in setting their full-day schedule for prekindergarten students in 2002-03. Students attended school either 7:45am-2:00pm or 8:30am-2:45pm for a total of 375 minutes daily. These schedules allowed for a teacher planning period either at the beginning or end of the day and 375 minutes of classroom activities daily. As reported in the 2001-02 Prekindergarten Evaluation, compared to a half-day schedule, the full-day schedule allows for an additional 74 minutes of core academic time per day and a possibility of an additional 223 hours of core academics per year.

The pre-K school day is planned to be developmentally appropriate for four-year olds while providing opportunities to stimulate learning. The typical full-day schedule is guided by the *Prekindergarten Curriculum Guidelines* and includes many areas of development:

- Oral Language Development Music, sharing time, calendar, social studies;
- Language Arts Read aloud, shared reading, write aloud, and shared writing;
- Center time Areas within the classroom that contain manipulatives and/or equipment to enhance learning;
- Mathematics;
- Outside P.E. or music movement;
- Science or social studies;
- Outside play; and

• Lunch and rest time.

The learning centers (31% of the day) are an integral part of the prekindergarten program. According to the AISD Prekindergarten brochure, "Learning centers provide growth experiences for prekindergarten students in a manner that motivates learning." Young children learn through their play. In addition, the brochure says, "Through centers, students learn about new academic concepts as well as self-responsibility, how to follow directions, complete tasks, share materials, and communicate their needs." Figure 15 shows the percentage of the prekindergarten daily schedule spent in each activity.

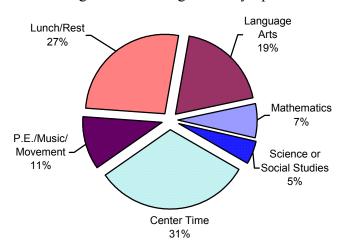


Figure 15: Percentage of Prekindergarten Day Spent in Each Activity

Because this was the first year for the expanded full-day program at all the schools with prekindergarten classes, teachers were surveyed about the benefit of full-day instruction for the prekindergarten students they serve. On the Teacher Survey, pre-K teachers (n=128) indicated the benefits of full-day pre-K are evident by having additional time in the following areas:

- Literacy instruction (n=114);
- Small group instruction (n=111);
- Development of personal and social skills (n=109);
- Math instruction (n=108);
- On-going assessment (n=103); and,
- One-on-one instruction (n=96).

One teacher said, "Having all day classes was great. Less stress for the students and the teacher." The full-day schedule is making a difference for Austin's four-year-olds, according to Anita Uphaus, administrative supervisor for prekindergarten. Mrs. Uphaus said about the full-day program, "The added instructional time has given the teachers the opportunity to enrich and reinforce individual learning."

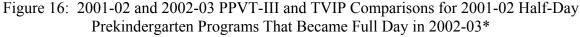
Mrs. Uphaus reported that she observed evidence of accelerated learning in the prekindergarten classrooms in 2002-03. The *Principles of Learning*, a district instructional initiative, were posted and utilized by staff in instruction with prekindergarten students. In addition, Mrs. Uphaus said that defined curriculum expectations from the IPGs were evident in student work and activities.

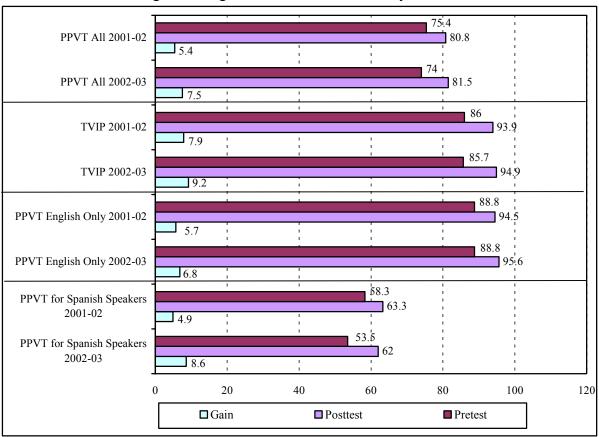
3. Did the program determine the impact, short-term and long-term, of the expanded full-day prekindergarten on participants?

Short-term Impact of the Prekindergarten Program

Because there was no half-day program in 2002-03 with which to compare full-day PPVT/TVIP test results, a comparison was made with last year's data for the 14 schools that moved from a half-day to a full-day program in 2002-03. An analysis was completed on the average PPVT/TVIP pre- and posttest scores for those schools. Average scores for each group (all students, English only, and Spanish LEP on the PPVT-III, and Spanish speakers on the TVIP) are presented in Figure 16.

Although it is not possible to say with certainty that full-day pre-K was responsible for higher gains in 2002-03, it seems that full-day prekindergarten has made an impact on achievement at these schools. In every comparison the average gains for the 14 schools were higher in 2002-03 than 2001-02 even though students began the year at lower or similar average pretest scores. Also, the average posttest scores were higher in 2002-03 than in 2001-02 for every comparison except the PPVT-III for Spanish LEP students.





^{* 2001-02} Half-Day Programs were Blanton, Boone, Casis, Cook, Hart, Joslin, McBee, Odom, Patton, Pillow, Pleasant Hill, Rodriguez, St. Elmo, and Williams elementary schools.

Source: AISD Office of Program Evaluation PPVT/TVIP Records, 2001-02 and 2002-03

Long-Term Impact - Multi-Year Comparisons

A look at the prekindergarten program over time gives an indication of the benefit of pre-K instruction on several groups of students. Average scores are reported here for years 1999-2000 through 2002-03.

The average PPVT-III pre- and posttest scores for all students were lower in 2002-03 than in 2001-02. However, the average standard score gain increased slightly this year (6.7 standard score points) from 2001-02 (6.0 points). Figure 17 shows the average preand posttest scores for all students tested on the PPVT-III, 1999-2000 through 2002-03.

145 Mean Standard Score 120 National Average = 100 95 ■ Pretest 83. 81.7 81.1 79.9 75.0ı ■ Posttest 70 45 20 1999-2000 2000-01 2001-02 2002-03 (n=2,019)(n=2,039)(n=2,228)(n=1,644)

Figure 17: Four-Year Comparison for All AISD Pre-K Students Tested on PPVT-III, 1999-2000 through 2002-03

Source: AISD Program Evaluation PPVT Records, 1999-2000 through 2002-03

Although Spanish LEP students entered the prekindergarten program at a lower average TVIP pretest score (84.2 standard score points) than in 2001-02 (86.3 points), they ended the program with a higher average posttest score (95.8 points) and a higher average gain (11.6) than in the previous three years. As shown in Figure 18, the average gain of 11.6 standard score points on the TVIP for Spanish LEP students is 3.3 to 4.6 standard score points above that of the previous three years (7.0, 7.6, and 8.3 points, respectively).

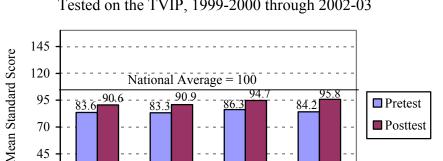


Figure 18: Four-Year Comparison for AISD Spanish LEP Pre-K Students Tested on the TVIP, 1999-2000 through 2002-03

Source: AISD Program Evaluation TVIP Records, 2002-03

2000-2001

(n=859)

45 20

1999-2000

(n=770)

2001-02

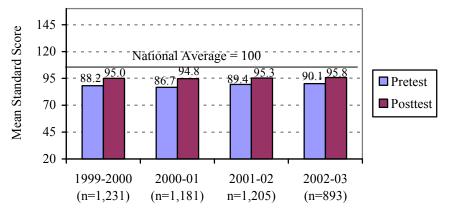
(n=1,024)

2002-03

(n=751)

In 2002-03, English-only students had a pretest average of 90.1 standard score points and a posttest average of 95.8 points, the highest averages of the past four years. Figure 19 shows the multi-year test data for English-only students on the PPVT-III, 1999-2000 through 2002-03.

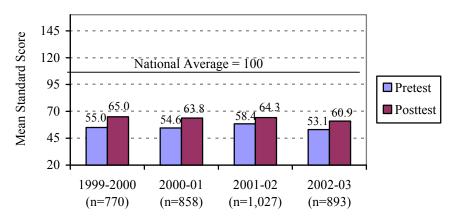
Figure 19: Four-Year Comparison for AISD English-only Pre-K Students Tested on PPVT-III, 1999-2000 through 2002-03



Source: AISD Program Evaluation PPVT Records, 1999-2000 through 2002-03.

Because English is the second language for Spanish LEP students, the average preand posttest scores on the PPVT-III are very low for these students. Spanish LEP students are tested in English to measure growth in English language acquisition. While the average gain on the PPVT-III for Spanish language prekindergarten students was higher (7.8 standard score points) in 2002-03 than 2001-02 (5.9 points), this year's Spanish LEP students began and ended the year with the lowest average pretest and posttest scores of the past four years. Figure 20 shows a four-year comparison for Spanish-language pre-K students tested with the PPVT-III.

Figure 20: Four-Year Comparison for AISD Spanish Language Prekindergarten Students Tested on PPVT-III, 1999-2000 through 2002-03



Source: AISD Program Evaluation PPVT Records, 1999-2000 through 2002-03.

Strengths of the Program

According to Anita Uphaus, a major strength of the AISD prekindergarten program is having certified, caring teachers. With the expansion of the full-day program to all prekindergarten classes, Mrs. Uphaus indicated that it was a challenge to find qualified teachers and maintain a reasonable teacher/student ratio in every classroom. The professional development offered to prekindergarten teachers was been important for preparing these teachers to work with disadvantaged four-year-olds.

Prekindergarten educators were included in AISD's language arts curriculum initiatives in 2002-03. AISD implemented a pre-K through grade 12 curriculum alignment with the TEKS, *Prekindergarten Curriculum Guidelines*, and local objectives. This included written curriculum matrices in all subjects and instructional planning guides for teacher use. Ninety percent of the teachers agreed or strongly agreed that the prekindergarten curriculum matrices gave clear guidelines for what students are expected to know and be able to learn by the end of prekindergarten and kindergarten years. The instructional planning guides (IPGs) also got a strong approval when 81% of prekindergarten teachers who responded to the survey (n=128) agreed or strongly agreed that the IPGs provide helpful direction for planning instruction and include ideas for student learning activities in specific skill areas.

The textbook adoption process was a positive experience for teachers. In fall 2002, a 15 member advisory committee of prekindergarten teachers and administrators was appointed to review and recommend selection of a new educational system. A total of 44 prekindergarten teachers and staff participated in the textbook adoption process. The final recommended selection approved by the Board in March 2003 was the *DLM Early Childhood Express*, which has both English and Spanish language instruction tools. The new curriculum is being used in classrooms in 2003-04.

Another strength, says Mrs. Uphaus, is the district collaboration with Child, Inc., the local Head Start agency, to provide instructional aides to 30 classrooms. Teachers in these classrooms are appreciative of the support provided by these aides.

Areas for Program Improvement

A major challenge during 2002-03, according to Mrs. Uphaus, was addressing the growth of the program. In addition to expanding all of the prekindergarten classes to full day, AISD experienced the largest enrollment for pre-K of any year of the program. More students and additional classrooms required close supervision.

The 2003-04 school year will see the implementation of the new curriculum. Professional development will be offered to teachers by the curriculum authors in August 2003 and February 2004. The new curriculum will be a welcomed addition as the previous DLM curriculum was purchased in 1991.

According to Mrs. Uphaus, "Curriculum alignment will continue to improve in conjunction with the development of an approved student assessment process and a revised Report to Parents." Another area of improvement will be the implementation of Texas Senate Bill 76 to increase collaboration efforts with other programs that serve young children. Senate Bill 76, passed by the Texas Legislature in 2003, represents the first step towards the coordination of prekindergarten, Head Start, and child care in the state of

Texas. In an attempt to increase efficiency and simplify access, the bill creates more flexibility for service providers to innovate with new and existing programs as well as develop a model for quality of service to guide the success of these efforts.

Small class size was the most requested improvement suggested by teachers. Many of the teachers had 20-22 students in their classrooms. As one teacher said, "Smaller class size would be of great benefit to the students. Having a class size of 20 has made it difficult to provide small group instruction. Regardless of how clear the expectations are, students at this age need guidance and reassurance while undertaking new tasks." Teachers indicated the following areas of improvement on the Teacher Survey, which follow in order of frequency:

- Smaller classes (n=93);
- Revise *Prekindergarten Report to Parents* to reflect student progress as related to the pre-K guidelines (n=76);
- Improved curriculum resources (n=54);
- Districtwide pre-K literacy assessment (n=51);
- Districtwide pre-K math assessment (n=51);
- More prekindergarten specific training (n=42); and
- More guidance from the district for specific teaching and learning goals (n=22).

The IPGs, instructional planning guides, were the topic of many of the comments from prekindergarten teachers. While most teachers liked the idea of the planning guides, some disagreed with the implementation (e.g., not flexible, hard to follow). However, one teacher wrote, "I've really enjoyed having the IPGs. It's made planning easier. It also helped me see what districtwide expectations were. Thanks for all the hard work put into making and planning them."

Teachers also expressed a need to clearly define what is developmentally appropriate for four-year olds as the prekindergarten program expands and follows the districtwide curriculum initiatives (e.g., IPGs and curriculum matrices). As one teacher wrote, "Some pre-K teachers understand that pre-K is more "easy stuff" for the children than pushing them to develop their highest potential at ages four and five. Some (few) teachers are convinced that pre-K should really prepare students to be ready to read in kindergarten."

Prekindergarten has become an integral part of AISD's plan for improved academic achievement for all students. Teachers have the *Prekindergarten Curriculum Guidelines*, the new *DLM Early Childhood Express* curriculum, full-day schedule, IPGs and curriculum matrices. It is becoming easier to see the important early role of prekindergarten instruction in the long-term goal of having all students reading on grade level by third grade. Professional development in the new curriculum and in TEXTEAMS mathematics will enhance the prekindergarten teachers' skills and thus benefit all pre-K students.

TAKS 2002-03 Baseline Data

In the first year of testing associated with the *Student Success Initiative* requirement that grade 3 students must pass the TAKS (Texas Assessment of Knowledge and Skills) reading test to be promoted, AISD had a successful experience. With much hard effort and dedication from teachers and students, 95% of all AISD third graders who

took TAKS reading passed. The teaching and learning initiatives at the campus and district level are paying off. The prekindergarten program has been and will continue to be a part of this effort and likely is related to the 95% passing rate for grade 3.

CONCLUSIONS AND RECOMMENDATIONS

As AISD moved to a full-day prekindergarten program for all eligible four-yearolds in 2002-03, a look at language and literacy achievement supports the benefit of students attending pre-K for a full day of instruction.

Program effectiveness in language and literacy for prekindergarten was determined by gains from pretest to posttest on the English language *Peabody Picture Vocabulary Test-III* (PPVT-III) and the Spanish language *Test de Vocabulario en Imágenes Peabody* (TVIP). Major findings relating to language development include the following (Note: Any gain greater than zero indicates that the student's performance improved compared to the national average):

- Eighty-one percent of all Spanish language students and 71% of all English language students made gains when tested in their native language.
- For all students tested, the average gain was 6.7 (6.0 in 2001-02) standard score points on the English language PPVT-III and 11.6 points (8.3 in 2001-02) on the Spanish language TVIP.
- Although Spanish LEP students entered the prekindergarten program at a lower average TVIP pretest score (84.2 standard score points) than in 2001-02 (86.3 points), they ended the program with a higher average posttest score (95.8 points) and a higher average gain (11.6) than in the previous three years.
- Eighty-one percent (n=1,335) of all students scored in the average or above average range at the posttest when tested in their native language;
- Forty-two percent (38% in 2001-02) of the 2002-03 prekindergarten students were at or above the national average of 100 at the posttest when tested in their native language.
- Both English language and Spanish language students had an average posttest score of 95.8 standard score points, only 4.2 standard score points short of the national average of 100.

Because there is no formal mathematics assessment for pre-K-grade 2 in AISD at this time, mathematics ratings on the *Prekindergarten Report to Parents* were used to determine if students made progress in mathematics during prekindergarten. According to this informal mathematics assessment, 72% of students made progress in mathematics during prekindergarten.

The quality of professional development was praised by pre-K teachers, when 94% of teachers who responded to the Teacher Survey agreed or strongly agreed that the training they attended was beneficial to their understanding of teaching and learning strategies for prekindergarten students. Training for pre-K teachers is optional, but 58% of the pre-K teachers attended professional development. Training was focused on the curriculum and the *Prekindergarten Curriculum Guidelines*.

Recommendations

Prekindergarten teachers and the administrative supervisor for prekindergarten identified some areas for improvement in the program. As state and national expectations become more rigorous, the educators of young children face many challenges. Teacher input is expressed here in the form of recommendations. Many of the recommendations for 2003-04 are the same as in 2002-03; because the prekindergarten program has been expanding to more sites over the past few years, the earlier recommendations continue to be germane for the newer sites, in particular.

- Insist on developmentally appropriate practices for prekindergarten while supporting the academic rigor required for prekindergarten students to close the achievement gap.
- Implement consistent expectations for teaching and learning for prekindergarten as expressed in the instructional planning guides.
- Redesign the *Prekindergarten Report to Parents* to include a scale that is defined with standards, and clarify expectations for student performance in each nine-week reporting period.
- Select districtwide prekindergarten assessments in literacy <u>and</u> mathematics in 2003-04 to ensure that instruction is aligned with the *Prekindergarten Curriculum Guidelines*.
- Provide quality literacy, TEXTEAMS, and *DLM Early Childhood Express* professional development for prekindergarten teachers to ensure consistency and quality in curriculum and instruction, even in the face of a limited budget.

APPENDICES

Appendix A: Prekindergarten Expansion Grant, Cycle 7 Program Evaluation Plan for Austin ISD

1. How will the program demonstrate evidence of gains in cognitive development, especially in pre-reading and language, and mathematics?

Language Arts/Pre-Reading - Program effectiveness for prekindergarten language arts will be determined by gains on the English language Peabody Picture Vocabulary Test-III (PPVT-III) and the Spanish language Test de Vocabulario en Imágenes Peabody (TVIP). The PPVT-III and TVIP measure knowledge of receptive (hearing) vocabulary. To measure achievement gains for prekindergarten students, the PPVT-III and the TVIP will be administered in the fall and in the spring to a random sample of students in each prekindergarten classroom. All students are tested in English; Spanish LEP students are also tested in Spanish. Gains will be calculated based on pre- and posttest scores. Test data will be reported for full-day programs by language.

Mathematics—A mathematics assessment for prekindergarten will be piloted in 2002-03. The assessment, written by the primary mathematics specialist, is aligned with the *Prekindergarten Curriculum Guidelines*. Teachers who have participated in the TEXTEAMS training offered through the district will be asked to pilot the assessment with their students in the fall and in the spring. The academic progress made by the prekindergarten students will be analyzed and reported.

2. How will the program demonstrate the effectiveness of activities of the expanded full-day prekindergarten in achieving the aims of the program?

In 2002-03, the district is implementing a pre-K through grade 12 curriculum alignment with the TEKS, *Prekindergarten Curriculum Guidelines*, and local objectives. This includes written curriculum matrices in all subjects, specific and coherent, and instructional planning guides for teacher use. Soon to follow will be grade level benchmarks and preferred teacher professional development. A task force of prekindergarten teachers and administrators, who are representative of the district, will convene in 2002-03 to review multiple assessment options, including those available in the new textbook adoption systems, and recommend appropriate assessment for prekindergarten use. Expanded goals of the prekindergarten full-day program will be explored. Evaluation staff will attend task force meeting, and report the findings of the committee and plans for implementation of benchmarks and assessment instruments.

Professional development for prekindergarten teachers will be aligned with the Prekindergarten Guidelines. The district plan is to have all prekindergarten classes be full day in 2002-03, and all teachers will be expected to follow similar schedules with the like expectations. All teachers will have opportunities to attend increased professional development. Teachers will be surveyed to examine if the curriculum benefits students and the degree to which the training was helpful in implementing the

curriculum. Observations of activities in the extended full-day program will be documented.

3. How will the program determine the impact, short-term and long-term, of the activities of the expanded full-day prekindergarten on the participants?

Short-term impact – Using the PPVT-III and the TVIP data from 2002-03 and prior years, comparisons between current year gains for all students tested will be made to previous years' gains. For the 14 schools that are completing their first year in a full-day program, gains for 2002-03 will be compared with previous years' gains to determine effectiveness of the full-day program.

Long-term impact – The TAKS 2003 data will be examined to determine student achievement for the district. This will be used as a baseline for future year's growth. As more students have completed a full-day program, the expectation is that, in the near future, the achievement of AISD student on the TAKS would also improve.

Appendix B: 2002-03 AISD Prekindergarten Programs

Appendix D. 2002		J	g
School	Number of Students Served	Title I Elementary School	Pre-K Expansion Grant Funding
Allan	59	Х	X
Allison	64	X	X
Andrews	89	X	X
Barrington	94	X	X
Becker	49	X	X
Blackshear	50	X	X
Blanton	81	X	A
Boone	36	A	
Brentwood	52		X
Brooke	38	X	X
Brown	92	X	X X
Campbell	65	X	X
Casey	73	A	X
Casis	21		Λ
Cook	117	X	
Cunningham	45	Λ	X
Dawson	57	X	X X
Galindo	86	X	X
Govalle	63		
Graham	114	X	X
Harris	109	X	X
	109	X	X
Hart		X	•••
Houston	107	X	X
Jordan	116	X	X
Joslin	56	X	
Kocurek	57		X
Lindon	122	X	X
Linder	137	X	X
Maplewood	26	X	X
MaRaa	51	X	X
McBee	101	X	
Menchaca	38		X
Metz	92	X	X
Norman	93	X	X
Oak Hill	38		X
Oak Springs	40	X	X
Odom	85	X	
Ortega	43	X	X
Palm	87	X	X
Patton	34		
Pecan Springs	98	X	X
Pickle	95	X	X

School	Number of Students Served	Title I Elementary School	Pre-K Expansion Grant Funding
Pillow	39		
Pleasant Hill	65	X	
Reilly	35	X	X
Ridgetop	44	X	X
Rodriguez	100	X	
St. Elmo	71	X	
Sanchez	51	X	X
Sims	45	X	X
Summitt	69		X
Sunset Valley	51	X	X
Travis Heights	68	X	X
Walnut Creek	158	X	X
Widen	121	X	X
Williams	55		
Winn	76	X	X
Wooldridge	112	X	X
Wooten	78	X	X
Zavala	57	X	X
Zilker	48	X	X
Total	4,414	49	47

Elementary schools without pre-K programs in 2002-03 were Baranoff, Barton Hills, Bryker Woods, Cowan, Davis, Doss, Gullett, Highland Park, Hill, Kiker, Lee, Mills, and Pease.

Source: AISD Program Evaluation Pre-K Student Records, 2002-03

Appendix C: Average PPVT-III and TVIP Pretest, Posttest, and Gain Scores by AISD School, 2002-03

	and Gain Scores by AISD School, 2002-03						
	Average	Average	Average	Average	Average	Average	
School	Pretest	Posttest	Gain	Pretest	Posttest	Gain	
	PPVT-III	PPVT-III	PPVT-III	TVIP	TVIP	TVIP	
Allan	71.5	81.9	10.4	90.7	101.0	10.3	
Allison	73.7	82.3	8.6	83.6	102.6	19.0	
Andrews	62.1	66.0	3.8	84.6	94.5	9.9	
Barrington	67.7	75.6	7.9	86.3	90.6	4.3	
Becker	88.4	92.7	4.4				
Blackshear	74.9	88.4	13.5	88.1	100.8	12.6	
Blanton	62.0	66.0	3.9	86.9	97.5	10.6	
Boone	82.9	93.8	10.9	81.8	79.8	-2.0	
Brentwood	72.2	83.1	10.9	83.1	99.0	15.9	
Brooke	77.8	84.0	6.2	86.5	99.9	13.4	
Brown	54.5	64.3	9.8	83.2	89.4	5.4	
Campbell	73.7	85.6	11.9	85.0	102.1	17.1	
Casey	84.3	91.0	6.6	76.7	81.7	5.0	
Casis	84.5	97.4	12.8				
Cook	79.7	85.3	5.6	88.1	90.9	2.8	
Cunningham	94.1	98.0	3.9				
Dawson	70.7	72.5	1.9	80.9	99.6	18.7	
Galindo	83.5	86.7	3.2	79.0	84.9	6.3	
Govalle	88.9	92.8	3.9				
Graham	70.6	76.5	5.9	92.8	102.8	9.8	
Harris	60.2	70.4	10.3	82.0	95.1	13.1	
Hart	70.0	73.9	4.0	85.4	89.6	4.3	
Houston	66.5	73.5	7.0	83.5	100.2	16.6	
Jordan	73.8	77.7	3.9	81.9	89.3	7.4	
Joslin	53.9	60.4	6.5	84.7	93.5	9.4	
Kocurek	82.4	93.5	11.2	86.5	103.8	17.3	
Langford	73.9	78.2	4.3	84.5	97.7	13.2	
Linder	60.2	63.7	3.5	80.3	92.4	12.1	
Maplewood	94.8	99.3	4.5				
Mathews	90.3	94.6	4.3	86.7	94.3	7.7	
McBee	81.0	97.3	6.3	88.9	95.7	6.8	
Menchaca	84.7	95.3	10.5	81.0	80.2	-0.8	
Metz	68.8	78.2	9.4	81.6	101.4	19.8	
Norman	63.5	71.2	7.7	76.5	85.2	8.6	
Oak Hill	61.7	73.2	11.5	83.2	92.7	9.5	
Oak Springs	74.9	80.7	5.8	81.1	100.1	19.0	
Odom	80.3	92.4	12.1	91.0	96.9	5.9	
Ortega	68.4	77.4	9.0	75.9	102.9	27.0	
Palm	74.7	83.9	9.2	89.6	100.8	11.2	
Patton	95.3	99.1	3.8				
Pecan Springs	75.1	82.7	7.5	79.9	85.1	5.3	
Pickle	64.6	69.1	4.5	78.7	95.4	16.7	
Pillow	91.4	100.6	9.3				

School	Average Pretest PPVT-III	Average Posttest PPVT-III	Average Gain PPVT-III	Average Pretest TVIP	Average Posttest TVIP	Average Gain TVIP
Pleasant Hill	75.7	84.2	8.5	91.5	104.0	12.5
Reilly	95.1	105.2	10.1			
Ridgetop	50.3	66.8	16.5	81.0	84.1	3.1
Rodriguez	66.9	76.9	10.0	83.1	98.2	15.1
St. Elmo	68.4	75.5	7.1	79.0	98.8	18.8
Sanchez	69.6	73.7	4.1	91.3	100.1	8.9
Sims	77.8	83.0	5.2	85.1	99.3	14.1
Summitt	99.4	102.0	2.6			
Sunset Valley	65.0	65.7	0.7	85.3	88.8	3.5
Travis Hts.	81.9	85.0	3.1	85.8	92.2	6.4
Walnut Creek	67.8	77.2	9.4	81.4	92.2	11.6
Widen	66.6	69.1	2.5	87.1	104.4	17.3
Williams	75.0	80.7	5.6	76.0	84.8	5.8
Winn	71.1	77.9	6.8	89.6	95.1	5.5
Wooldridge	68.6	74.4	5.8	86.2	96.4	9.7
Wooten	67.9	76.0	8.1	80.3	96.5	16.2
Zavala	69.6	79.0	9.4	81.4	100.8	19.4
Zilker	103.1	102.6	-0.6			
AISD Average	73.2	79.9	6.7	84.3	95.7	11.4
National Average	10	00		10)0	

Note: Pretest, Posttest, and Gain results expressed in standard score points.

Source: AISD Program Evaluation PPVT/TVIP Records, 2002-03

Appendix D: Summary of 2002-03 Prekindergarten Teacher Survey

128 pre-K teachers responded. To the right of each response are the numbers of teacher responses. In the

•	tes to the left of numbers 1, 2, and 4 are average response	* · · · · · · · · · · · · · · · · · · ·
1.	The prekindergarten curriculum matrices give clear guid know and be able to learn by the end of the prekindergar	
4.0	a) Strongly Agree (24)	d) Disagree (5)
	b) Agree (88)c) Unsure (6)	e) Strongly Disagree (2)
2.	The instructional planning guides (IPGs) provide helpfu include ideas for student learning activities in specific sl	till areas.
2.0	a) Strongly Agree (25)	d) Disagree (13)
3.9	b) Agree (75)c) Unsure (7)	e) Strongly Disagree (3)
3.	I have attended the following prekindergarten training/n	
	a) Implementing Pre-K Guidelines/Language (56)	f) Treehomes Science (37)
	b) Implementing Pre-K Guidelines/Literacy (63)	g) TEXTEAMS Mathematics (36)
	c) Implementing Pre-K Guidelines/Science&Math (52	
	d) Implementing Pre-K Guidelines/Social Studies (53)	
	e) Building Language for Literacy (44)	j) I did not attend prekindergarten training (20)
4.	The prekindergarten specific training that I attended this teaching and learning strategies for prekindergarten stud	
4.2	a) Strongly Agree (28)	d) Disagree
	b) Agree (68)	e) Strongly Disagree
	c) Unsure (6)	f) Not Applicable (21)
5.	A full-day prekindergarten program better prepares stud than a half-day program by providing more time in the f	
	a) On-going assessment of students (103)	e) Additional literacy instruction (114)
	b) Small group instruction (111)	f) Development of personal & social skills (109)
	c) One-on-one instruction (96)	g) Other (15)
	d) Additional math instruction (108)	h) There is no significant benefit (1)
6.	The areas of greatest need for district improvement of the following: (Circle all that apply.)	e prekindergarten program include the
	a) Improved curriculum resources (54)	f) More guidance from the district for
	b) Additional educational materials needed (48)	specific teaching and learning goals (22)
	c) More prekindergarten specific training (42)	g) Revise report for parents to reflect student
	d) Districtwide pre-K math assessment (51)	progress as related to the pre-K guidelines. (76)
	e) Districtwide pre-K literacy assessment (51)	h) Smaller class size (93)

Comments:

Appendix E: AISD Prekindergarten Teacher Response to the Professional Development Academy Evaluation Forms, 2002-03 (N=81)

Question	% Agreed or Strongly Agreed	Average Scale Score Value*
Content		
1. The objectives of the training were clear. (n=81)	100	3.9
2. The training content matched objectives. (n=81)	100	3.9
3. The environment was conducive to learning. (n=81)	100	3.9
Instructor		
4. The instructor was organized. (n=81)	100	3.9
5. The instructor was knowledgeable. (n=81)	100	3.9
6. The instructor used effective training techniques. (n=81)	100	3.9
Application	100	3.9
7. The training is applicable to my work. (n=81)	100	3.9
8. The length of this session was sufficient to cover coursework. (n=80)	93	3.7
9. I would like follow-up training to support my new skills. (n=75)		_
Implementation		
10. I have begun to implement this training into my classroom. (n=54)	100	3.8
11. My teaching skills improved because of this training. (n=61)	100	3.8
12. This training has had a positive impact on my classroom. (n=59)	100	3.7
13. I would like ongoing training to support my new skills. (n=65)	97	3.7

Note: Scale is as follows: 1=Strongly Disagree; 2=Disagree; 3=Agree; 4=Strongly Agree Any value of 3.0 and above indicates agreement with the statement.

Source: AISD Professional Development Academy Evaluation Forms, 2002-03

REFERENCE LIST

Bowman, B., Donovan, M., and Burns, M. (2001). *Eager to learn: Educating our preschools*. Washington, D.C.: National Academy Press.

Curry, J. (2002). *Prekindergarten evaluation, 2001-02* (OPE Publication 01.02) Austin, TX: Austin Independent School District.

Curry, J. (2001). *Prekindergarten evaluation, 2000-2001* (OPE Publication 00.09) Austin, TX: Austin Independent School District.

DLM Early childhood education (1991). SRA/McGraw Hill (http://www.sra-4kids.com).

Dunn, Lloyd, and Dunn, Leota. (1997). Examiner's manual for the Peabody Picture Vocabulary Test (3rd ed.). Circle Pines, MN: American Guidance Service.

Region IV Education Service Center (2002). Impacting student achievement through the language and literacy prekindergarten curriculum guidelines: A self-assessment tool. Austin, TX: Texas Education Agency.

Smith, T., Kleiner, A., Parsad, B., and Farris, E. (2003) *Prekindergarten in U.S. public schools: 2000-2001*. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.

Prekindergarten curriculum guidelines (1999). Austin, TX: Texas Education Agency. http://www/tea.state.tx.us/curriculum/early/prekguide.html.

Senate Bill 4 (1999). 76th Legislature, Austin, TX (http://www.capitol.state.tx). Senate Bill 76 (2003). 78th Legislature, Austin, TX (http://www.capitol.state.tx).

Austin Independent School District

Office of Accountability

Maria Whitsett, Ph.D.

Department of Program Evaluation

Holly Williams, Ph.D. Martha Doolittle, Ph.D.

Author

Janice Curry



Board of Trustees

Doyle Valdez, President
Ingrid Taylor, Vice President
Ave Wahrmund, Secretary
Cheryl Bradley
Johna Edwards
John Fitzpatrick
Rudy Montoya, Jr.
Robert Schneider
Patricia Whiteside

Superintendent of Schools

Pascal D. Forgione, Jr., Ph.D.

Publication Number 02.05 October 2003