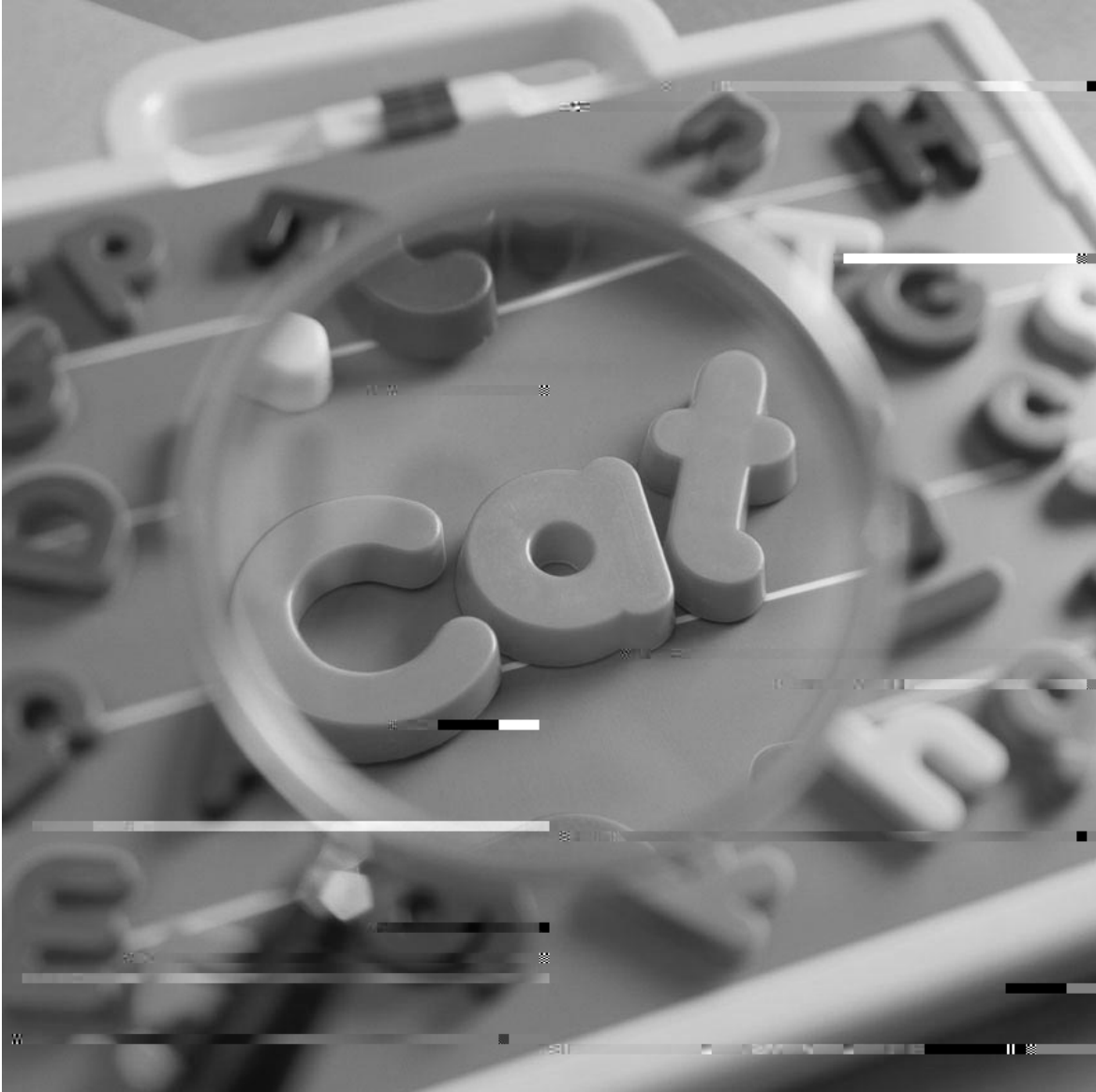


Pe de ga e
E a a , 1999-2000



Austin Independent School District
Office of Program Evaluation
September 2000

Full-Day Prekindergarten

Background

Texas Education Code, Section 29.153(a) requires school districts to offer a prekindergarten program if the district identifies 15 or more eligible (limited English proficient, educationally disadvantaged, or homeless) children who are at least four years of age. Educationally disadvantaged prekindergarten students are defined by the Texas Education Agency as students eligible to participate in the national free or reduced-price lunch program (referred to in this report as low-income students). Funding is provided for half-day prekindergarten through the State of Texas Foundation School Program.

Program Effectiveness

To measure achievement gains for pre-K students, the PPVT-III and the TVIP were administered in the fall and in the spring to a sample of students. Gains were calculated based on the pre- and posttest scores. All students were tested in English; Spanish LEP students were also tested in Spanish.

The sample was a randomly selected subset from each class at all 57 schools that offered pre-K. In fall 1999, 2,287 pre-K students were tested. Although every effort was made to posttest all students who had a valid pretest score, 268 fewer students were posttested due to withdrawals, illnesses, and relocations of eligible students. The posttest was administered to regular-calendar students in April and to year-round students in May. A total of 2,019 students (57% of all students) had valid pre- and posttest scores. The ethnicity and gender of the students tested closely matched that of pre-K overall.

The PPVT-III and the TVIP measure knowledge of receptive (hearing) vocabulary in English or Spanish, respectively. Standard test scores are based on national age norms, with a mean of 100 and a standard deviation of 15. The TVIP has the same structure and standard score system as does the PPVT-III. 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.

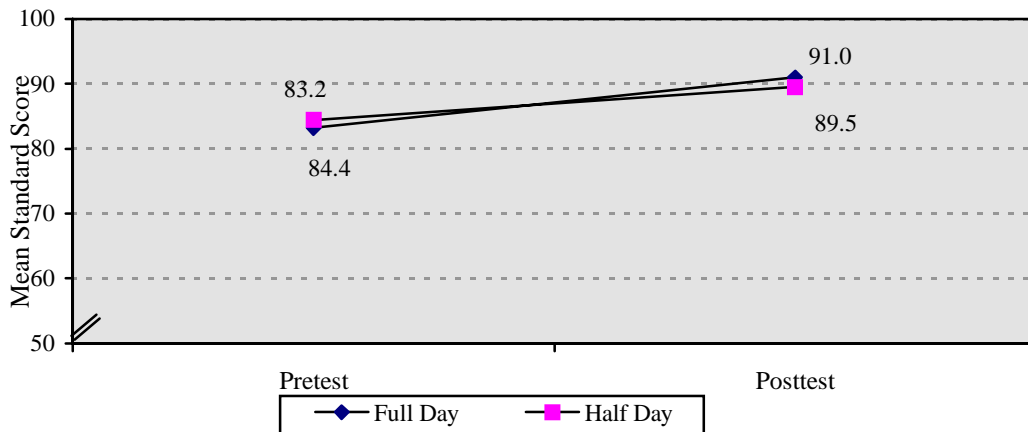
Comparisons reported in this evaluation will include half-day and full-day programs on the PPVT-III for English monolingual, Spanish LEP, and all students; and on the TVIP for Spanish-speaking students. In addition, full-day and half-day achievement gains on the PPVT-III and the TVIP for Title I and non-Title I schools are included in this report. *T* tests were performed to determine if differences found were statistically significant. A three-year longitudinal study is also included.

Half-Day and Full-Day Comparisons, 1999-2000

In 1999-2000, 34 AISD elementary schools provided full-day prekindergarten and 23 schools

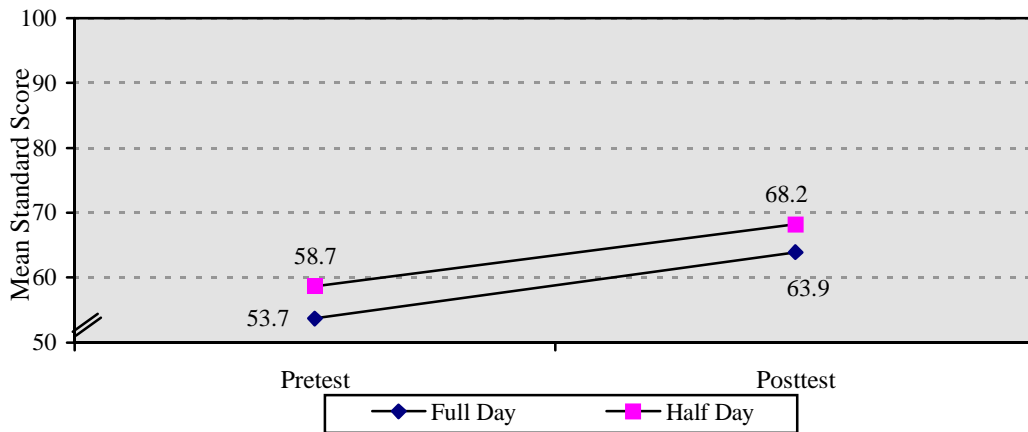
Spanish LEP full-day students outperformed half-day students on the TVIP in 1999-2000. Test results show that full-day Spanish LEP students began the year with lower average pretest scores than half-day students and ended the year at a higher average posttest score. In addition, full-day Spanish LEP students made a higher average gain (7.7 points) than did half-day Spanish LEP students (5.1 points). A *T* test of significance performed on the mean gains on the TVIP for the two groups showed that the mean gains for full-day Spanish LEP students were significantly higher than the mean gain for half-day Spanish LEP students. Figure 3 shows the average TVIP pre- and posttest scores for full-day and half-day Spanish LEP students.

Figure 3: TVIP Average Pre- and Posttest Scores for Full-Day and Half-Day Spanish LEP Pre-K Students, Fall 1999 and Spring 2000



Overall, Spanish LEP students achieved higher average pre- and posttest scores on the TVIP than on the PPVT-III. However, Spanish LEP students showed higher gains on the PPVT-III than the TVIP. Average gains on the PPVT-III for Spanish-speaking full-day pre-K students were higher (10.2 standard score points) than for half-day students (9.5 points). However, a *T* test of significance showed that the difference was not statistically significant. Figure 4 shows the average pre- and posttest PPVT-III scores for Spanish LEP students in full-day and half-day programs.

Figure 4: PPVT-III Average Pre- and Posttest Scores for Spanish LEP Pre-K Students at Schools with Full-Day and Half-Day Programs, 1999-2000



Full-day monolingual English pre-K students also showed a higher average gain (7.3 standard score points) on the PPVT-III than half-day students did (5.7 points). A *T* test of significance on the mean gains for the two groups showed that the full-day monolingual English students' mean gain was significantly higher than the mean gain for monolingual English half-day students. Figure 5 shows PPVT-III scores for monolingual English students at full-day and half-day programs.

Figure 5: PPVT-III Pre- and Posttest Scores for English Monolingual Pre-K Students at Schools with Full-Day and Half-Day Programs, 1999-2000



had full-day programs are offering half-day pre-K programs in 2000-01. Schools with full-day programs want to know how the extra half-day of instruction impacts pre-K achievement.

In order to present a more thorough analysis of the data, Figures 6-9 present 1999-2000 prekindergarten comparisons on the PPVT-III and TVIP by Title I full-day, Title I half-day, and non-Title I half-day programs. (There are not enough non-Title I full-day students to report.) All three groups showed gains from pretest to posttest. Average gains for Title I full-day and non-Title I half-day students are generally parallel on the three English language comparisons (Figures 6, 8, and 9). However, Title I half-day students had lower gains on the PPVT-III for all students (Figure 6) and for Spanish-speaking students (Figure 8).

Figure 10: PPVT-III Posttest Comparisons for All Pre-K Students
by Half-Day and Full-Day, 1997-98 through 1999-2000

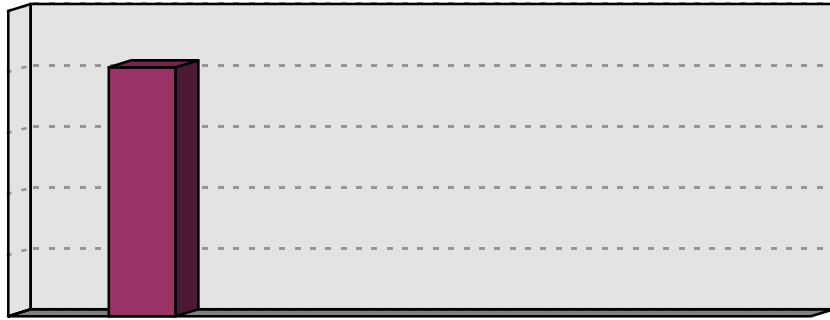
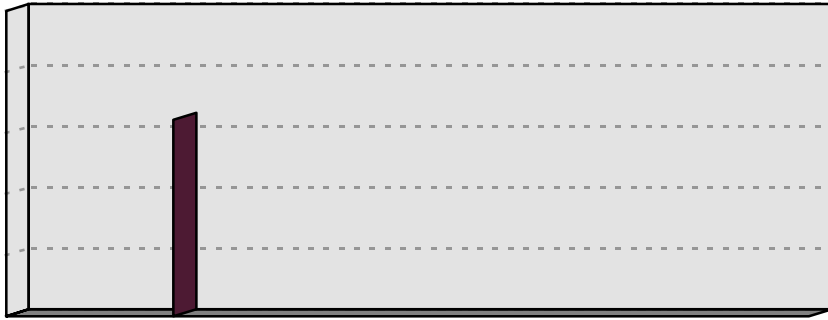


Figure 12: PPVT-III Posttest Comparisons for Half-Day and Full-Day Spanish LEP Pre-K Students, 1997-98 through 1999-2000



- 63% of all Spanish LEP students scored in the average range at the posttest on the TVIP;
- 16% of Spanish LEP students scored in the average range at the posttest on the PPVT-III;
- 82% of monolingual English students scored in the average range at the posttest on the PPVT-III; and
- 10% of Spanish LEP students scored in the average range at the posttests on both the PPVT-III and the TVIP.

In addition, 449 (22%) of all students taking the PPVT-III had a standard score of 100 or higher, and 249 (32%) of all Spanish LEP students tested had a standard score of 100 or higher on the posttest. The *minimum* goal should be to advance students to the average range on the PPVT-III or on the TVIP during prekindergarten to accelerate future learning in kindergarten.

Conclusions and Recommendations

The AISD prekindergarten program is an important part of the systemic effort to have every student reading on grade level by the end of third grade. There is promising potential in the pre-K program that can make a difference in the

assessments for pre-K in 2000-01. The district has adopted the *Texas Primary Reading Inventory* (TPRI) to satisfy the state requirement for assessment of kindergarten through grade 2 students. The TPRI does not include a pre-K assessment. Therefore, the PPVT-III and TVIP testing will continue to be an important part of the pre-K evaluation for 2000-01.

The following recommendations are offered for consideration:

- Continue to monitor progress of Spanish LEP pre-K students to substantiate the preliminary findings of differential achievement gains in full-day vs. half-day programs.
- Compare test results of pre-K students in Title I schools that have reverted to half-day programs with results of pre-K students in Title I schools that continue to serve students in a full-day setting.
 - Continue to collaborate with the early childhood education curriculum staff to evaluate the effectiveness of pre-K initiatives funded by federal and state grants.
 - Closely monitor the progress of children who are below average on PPVT-III and TVIP assessments and other teacher assessments through kindergarten and the early grades to make sure that intervention and assistance is available to them in language and literacy (e.g., S.O.A.R. or LEP summer school, Reading Recovery, literacy groups).
 - Investigate the effects of professional development on student learning in full-day pre-K programs for the

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