

Final Evaluation of the Language Enrichment Activities Program: 2004-05

REIS05-174-4

At a Glance

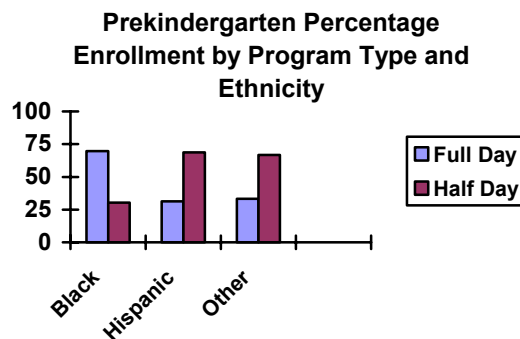
The Texas Prekindergarten Guidelines identify specific goals for students in the content areas of language and early literacy development, mathematics, science, social studies, fine arts, health and safety, personal and social development, physical development, and technology applications. These guidelines emphasize the child's conceptual learning, acquisition of basic skills, and relevant learning experiences. The Early Childhood Department of the Dallas Independent School District identified additional goals that included an interdisciplinary approach that was relevant to the everyday lives and experiences of the students, and a curriculum that was consistent across the district. The department conducted an in-depth study in 2001-02 to evaluate curriculum programs that would meet the state guidelines and district goals. Because of its emphasis on development of language across content areas, the district selected the *Language Enrichment Activities Program (LEAP)* as the core of the curriculum, augmented with the Scholastic Early Childhood Program. *LEAP* was developed at Southern Methodist University with grant support from Texas Instruments Foundation.

LEAP Program Description

LEAP is a multisensory language program, focusing on pre-academic skills in oral and written language, designed to prepare four-year olds for kindergarten and beyond. The emphasis of *LEAP*, is on first-language development – listening to stories, looking at pictures or viewing real things in the children's environment and learning vocabulary by modeling grammar. Each component of the program emphasizes the development of receptive and expressive language; building phonological awareness; knowledge of the letters of the alphabet; basic conceptual thinking and expression; appropriate development of prewriting fine motor skills; and math and science concepts such as, numeracy, prediction and investigation.

Prekindergarten Enrollment and Staffing

The district offered full day prekindergarten in 66 schools in 2004-05, up from 17 schools during the first grant year, 1999-00. Student enrollment in 2004-05 was 7,198, a slight decrease from last year. About 40% of the students were served in full day programs. Three-fourths of the students were Hispanic. Overall 57% were Limited English Proficient and 91% were from economically deprived families. The chart below shows enrollment by ethnicity and program type. African American students were more likely to be served in full day programs than either Hispanic or Other students.



The majority of the 264 prekindergarten teachers were female (29 male teachers). Three major ethnic groups, Black, Hispanic and White accounted for most prekindergarten teachers; almost 55% were Hispanic. There were 235 teacher aides, who were to act as co-teachers, taking an active role in classroom activities. All but five of the aides were female. Sixty-five percent were Hispanic, followed by 30% Black and 5% White.

Prekindergarten Outcomes

Prekindergarten students were tested in the fall and spring with the *Developmental Indicators for the Assessment of Learning (DIAL-3)*. *DIAL-3* is a norm-referenced developmental screening test

given to students on a one-on-one basis using games, building blocks, simple tasks, and dials that focus the child on only one stimulus at a time. The test is presented in an encouraging, non-threatening manner and takes only twenty to thirty minutes for each child. The three screening areas in the assessment are motor, language, and concepts. The items in these screening areas are factors that research has shown either to predict learning disabilities or to measure skills and abilities that are precursors to reading and other academic development.

The table below shows fall and spring *DIAL-3* mean Normal Curve Equivalent (NCE) scores. Scores were reported for 6,265 students on the fall assessment, and 6,680 students on the spring assessment.

DIAL-3 Mean NCE Scores

Test	Fall		Spring	
	Mean NCE	Std. Dev.	Mean NCE	Std. Dev.
Motor	44.06	23.696	80.21	18.301
Concept	23.16	19.454	52.13	22.306
Lang.	20.95	19.680	52.95	25.126
Total	25.17	19.781	64.07	23.097

DISD prekindergarten students scored very low on the fall administration of the *DIAL-3*. Fall mean NCE scores for *DIAL-3* total translated to the 12th percentile rank (PR). DISD students scored better than only 12 percent of students in the *DIAL-3* norming group, and 88% of students scored better than DISD students. However, spring administration scores showed much improvement for DISD prekindergarten students. On the *DIAL-3* total, the district overall mean NCE of 64.07 translated to the 75th percentile. In language, a strong focus of the district's prekindergarten program, mean NCE fall scores placed DISD students in the 8th percentile within the norm group, while the spring mean NCE showed DISD students had moved to the 55th percentile among their norm group peers.

By the spring administration of the test, DISD students appeared to be no more at risk academically than the norm group. These results

reflect quite favorably on the district's prekindergarten program.

To assess whether the effects suggested by *DIAL-3* remained during the kindergarten year, multiple regression analysis was conducted to evaluate whether participation in DISD prekindergarten had an effect on student achievement. The *Iowa Test of Basic Skills (ITBS)* or *Logramos* are administered to most kindergarten students in the district. The models controlled for student gender, ethnicity, Limited English Proficiency (LEP) status, and economic deprivation to determine whether participation in DISD prekindergarten had a significant effect on reading and math scores. These models lacked the ability to control for important variables such as initial achievement levels, family factors, and teacher effects. Additionally, students in the non-DISD prekindergarten group may have attended private prekindergarten programs. However, each model was statistically significant and consistently indicated that participation in DISD prekindergarten was significant and made the largest contribution to variability in test scores. Economic deprivation was also significant and contributed to explaining the variation in reading and math scores.

The Early Childhood Department continued to emphasize the importance of a *LEAP*-based curriculum and provided continuing support and training for the program. The department supported a comprehensive training program, supplemented by coaching and mentoring to ensure consistent delivery of quality instructional content and methods. Administration of the *DIAL-3* assessment and follow-up analysis of kindergarten standardized test scores provided quantitative evidence of program effectiveness.