DOCUMENT RESUME

ED 338 416 PS 020 014

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TITLE Prekindergarten Program Description, 1990-91.
INSTITUTION Houston Independent School District, TX. Dept. of

Research and Evaluation.

PUB DATE 91 NOTE 43p.

PUB TYPE Reports - Research/Technical (143) --

Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS Asian Americans; Black Students; *Economically

Disadvantaged; *Educationally Disadvantaged; Hispanic

Americans; Inservice Teacher Education; Limited English Speaking; Minority Groups; *Preschool

Education; *Public Schools; Questionnaires; *Student

Characteristics; Tables (Data); *Teacher

Characteristics

IDENTIFIERS *Houston Independent School District TX

. ABSTRACT

Characteristics of the Houston, Texas, Independent School District (HISD) prekindergarten program are reported. Implemented in 1985, and largely funded by the state, the program is offered to 4-year-old students who are classified as limited English proficient (LEP) or are from families with an income at or below the subsistence level. Prekindergarten classes serving nearly 8,000 educationally disadvantaged students are offered at 150 of the 168 HISD elementary schools. The ethnicity of the students is 57% Hispanic, 37% Black, 4% White, and 2% Asian; 30% are LEP. Wearly half of their teachers have 2-5 years' experience teaching prekindergarten, and 34% have more than 10 years' total teaching experience. The teachers' ethnicity is 37% White, 33% Black, 27% Hispanic, and 3% Asian. The most frequently held Texas teaching certification is an elementary certification. Optional in-service training is offered, with most commonly attended sessions pertaining to developmentally appropriate practices. Prekindergarten teachers, on average, attended 18.1 hours of in-service training during the 1989-90 school year. The Prekindergarten Teacher Survey is appended. (LB)



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Prekindergarten Program Description 1990–91

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EXECUTIVE SUMMARY

PREKINDERGARTEN PROGRAM DESCRIPTION 1990-91

PROGRAM DESCRIPTION

The prekindergarten program, implemented in the 1985-86 school year as mandated by House Bill 72, is offered to four year old students who are classified as having limited English proficiency (LEP) or are from a family with an income at or below subsistence level. The program is designed to offer developmentally appropriate instruction for educationally disadvantaged students. Prekindergarten classes are offered at 150 of the 168 HISD elementary schools (see Appendix 3). The program enrollment was 7,923 students as of October 2, 1990.

PROGRAM COST AND FUNDING SOURCE

The prekindergarten program is predominantly funded by the state of Texas. As of November 21, 1990, the state contribution was estimated to be \$4.5 million for the 1990-91 school year. The expected cost of the prekindergarten program is estimated at \$5,956,920. The difference between the estimated cost of the program and the state contribution, \$1,457,186, represents the estimated HISD contribution to the 1990-91 prekindergarten program.

EVALUATION QUESTIONS AND FINDINGS

Research Question 1: What are the number and characteristics of students enrolled in HISD prekindergarten classes?

As of October 2, 1990, there were 7,923 students enrolled in HISD prekindergarten classes. The ethnicity of the students was as follows: 57% Hispanic, 37% Black, 4% White, and 2% Asian. Of the students identified on the student master file following the first two cycles of the 1990-91 school year, 30% qualified on the basis of having limited English proficiency, and 69% qualified on the basis or being part of a family with an income at or below subsistence level.

Research Question 2: What are the number, demographic characteristics, and academic and professional backgrounds of HISD prekindergarten teachers?

Almost half (48%) of HISD prekindergarten teachers have 2-5 years of experience teaching prekindergarten. Those teachers having 0 or 1 year experience previous to the 1990-91 school year represent 39% of the total, and those having over five years experience in the prekindergarten classroom represent 12% of the total.

Thirty-four percent of the teachers in prekindergarten classes have over 10 years total teaching experience. Those teachers having 6-10 years total teaching experience represent 26% of the total,



and those having 2-5 years total teaching experience represent 29% of the total. Teachers having only one year or no previous teaching experience represent only 10% of the prekindergarten teachers.

The majority (54%) of prekindergarten teachers also have experience teaching at the kindergarten level; almost half (48%) report having previously taught first grade.

The most frequently held Texas teaching certification by HISD prekindergarten teachers is an elementary certification (78% for teachers in non-bilingual classrooms and 80% for teachers in bilingual classrooms). Commonly held endorsements for teachers not teaching in a bilingual classroom are a kindergarten endorsement (41%) and an early childhood endorsement (32%). Commonly held endorsements for teachers teaching in a bilingual classroom are: a bilingual endorsement (63%), a kindergarten endorsement (30%), an ESL endorsement (28%) and an early childhood endorsement (18%).

Over 99% of those teachers returning surveys reported holding a Bachelor's degree, and 31% of the teachers also hold a Master's degree. The most frequently earned Bachelor's degree is in the field of elementary education, and the most frequently earned Master's degree is in the field of early childhood education.

Regarding ethnic background, 37% of the teachers are White, 33% are Black, 27% are Hispanic, and 3% are Asian.

Research Question 3: What types of in-service training are provided for HISD prekindergarten teachers, and what professional trainings do HISD prekindergarten teachers attend?

Regarding optional in-service training offered to and attended by prekindergarten teachers in the 1989-90 school year, the most commonly attended training sessions were those pertaining to developmentally appropriate practices. Prekindergarten teachers, on the average, attended 18.1 hours of optional in-service training pertaining to prekindergarten or early childhood education during the 1989-90 school year.



PREKINDERGARTEN PROGRAM DESCRIPTION 1990-91

History of Prekindergarten in HISD

Prekindergarten classes, as mandated by House Bill 72¹, were implemented in the 1985-86 school year. According to section 21.136 of the Texas Education Code (West, 1985):

- (a) Any school district may offer prekindergarten classes; but a district shall offer prekindergarten classes if the district identifies 15 or more eligible children.
- (b) To be eligible for enrollment in a prekindergarten class a child must be at least four years of age and must be:
 - (1) unable to speak and comprehend the English language; or
 - (2) from a family whose income, according to standards set by the State Board of Education, is at or below subsistence level.

According to section 75.141 of the Texas Administrative Code:²

- (A) To determine a student's eligibility for students who do not speak and comprehend the English language, the school district shall:
 - (i) administer a home language survey; and
 - (ii) screen students using informal oral inventories, adaptations of oral proficiency instruments approved by the commissioner of education, or other appropriate commercially developed instruments.
- (B) To determine eligibility for students who come from a family whose annual income is at or below subsistence, school districts shall apply the formula used to qualify students for free or reduced-price lunches under the national school lunch program."

Section 21.136 of the Texas Education Code was amended in 1989 and 1990.³ These amendments specified that prekindergarten classes for four-year olds may be extended to three-year olds in a pilot program during the 1989-90 and 1990-91 school years. Nine pilot prekindergarten programs for three-year olds have been implemented across the state during the 1990-91 school



¹ Prior to 1985-86, a prekindergarten four year old program existed under Title I. The Title I program was implemented in the mid-seventies and continued through 1985.

² Tex. Educ. Agency, 19 Tex. Admin. Code § 75.141 (West 1988) (Well-Balanced Curriculum).

³ Tex. S.B. 1, 71st Leg., 6th C.S. (1990).

year.⁴ An evaluation of the pilot programs is to be submitted to the Texas Legislature by February 1, 1993. Beginning with the 1991-92 school year, school districts may petition the Commissioner of the State Board of Education for approval and partial funding of such a program. HISD is not currently implementing such a program.⁵

HISD Procedures for Compliance With Texas Administrative Code § 75.141

Eligibility Based on Limited English Proficiency⁶

To determine eligibility of students who do not speak or comprehend the English language, each elementary campus establishes and operates a Language Proficiency Assessment Committee⁷ (LPAC) composed of a campus administrator, an appropriately certified teacher assigned to the bilingual program, an appropriately certified teacher assigned to the English as a second language program, and a parent (not employed by the district) of a LEP student. The responsibilities of this committee with respect to assessing the eligibility of students for enrollment in the prekindergarten program include:

- (1) reviewing all pertinent information about students applying for enrollment in prekindergarten who have a language other than English for the purpose of initial identification,
- (2) determining classification of the students as limited English proficient (LEP) using specific data, and
- (3) determining the instructional category of each LEP student.

The procedures to determine eligibility of students who do not speak and comprehend the English language are summarized as follows. For all prekindergarten students, a parent must fill out the Home Language Survey at the time of student registration. If the answer to either of the questions, "What language is spoken in your home most of the time?" or "What language does your child speak most of the time?" is "Spanish" or any language other than English, then an oral proficiency test (Form A of the English Pre Language Assessment Scales (Pre-LAS)) is administered to the student.



⁴ J. C. Jones, telephone communication. Director of Programs, Prekindergarten and Kindergarten Education. Texas Education Agency. Feb. 1991.

⁵ Executive Director, Bureau of Curriculum Development, HISD. personal communication. Feb. 1991.

⁶ Houston Independent School District. Department of Multilingual and Compensatory Programs. HISD Language Proficiency Assessment Committee Procedures Handbook 1989-90.

⁷ The Language Proficiency Assessment Committee is fully described in the Texas Education Code § 21.462 (West, 1990).

If the answer to both of the questions is "English," then a student is classified as non-LEP, and the student does not qualify for enrollment in prekindergarten on the basis of limited English proficiency.

For those students whose home language is Spanish, Form A of the Spanish Pre-LAS is administered.

For the Pre-Las (English or Spanish), the range of oral proficiency levels is 1-5. A score of 4 or 5 indicates that the student is a fluent speaker, a score of 3 indicates that the student is a limited speaker, and a score of 1 or 2 indicates that the student is a non-speaker of the tested language. An informal inventory (e.g. parent interview, student interview) is administered to all students whose home language is any language other than English or Spanish.

Following these procedures, the LPAC will classify a prekindergarten student as LEP if the student has a home language other than English and meets the following criteria:

- (1) The student's ability in English is so limited that assessment procedures cannot be administered; or
- (2) The student's score on the English Pre-LAS is level 1, 2, or 3.

After being identified as LEP, a student is classified and may be assigned to an appropriate program. Section 21.453 of the Texas Education Code requires that bilingual education be offered to students in school districts identifying 20 or more LEP students district-wide in any language classification at the same grade level. For school districts identifying less than 20 LEP students district-wide in any language classification at the same grade level, English as a second language (ESL) instruction must be provided. As there is a lack of curriculum and bilingual teachers, particularly for languages other than English and Spanish, ESL programs are permitted as an alternative to bilingual education. If an ESL program must be substituted, documentation for the "exception to bilingual education" must be filed with the approval of the commissioner of education, pursuant to the rules of the State Board of Education. District efforts to implement the programs as mandated must be carefully documented and reported to the Texas Education Agency (TEA).

HISD is required to offer bilingual education to all students whose primary language is Spanish or Vietnamese. There are 2,179 students enrolled in prekindergarten whose primary language is Spanish and 46 whose primary language is Vietnamese. HISD is required to offer instruction in ESL to prekindergarten students whose primary language falls into any other language classification. Students enrolled in prekindergarten have been identified as having the following other primary languages (The numbers in parentheses represent the number of students enrolled in prekindergarten identified in each language group.): Arabic (8), Cambodian (5), Urdu (5), Chinese (2), Korean (1), and Gujarati (1).

Of the 2,423 LEP students identified in prekindergarten as of the 1990-91 TEA Fall Survey, 65% (1,567) were being served by bilingual education (Spanish/English). Approximately 10% (252) of the LEP students were being instructed in ESL classes. Approximately 24% (587) of the



LEP students were not being served in either bilingual education or in classes instructed in ESL methodology. Due to the lack of curriculum and teachers who are bilingual English/Vietnamese, students whose primary language is Vietnamese are not served by bilingual education in HISD. Although students in prekindergarten through first grade may be reclassified as non-LEP following year-end testing, the procedure is not recommended in HISD.

Eligibility Based on Family Income Level

Students who are "from a family whose income, according to the standards set by the State Board of Education, is at or below subsistence level," are eligible to enroll in prekindergarten classes. The recognized standard is the eligibility contents for free or reduced-price meals through the National School Lunch and School Breakfast Programs. Students who qualify for free or reduced-price meals also qualify for enrollment in the prekindergarten program. Eligibility is based on family income and the number of family members. As an example of the 1990-91 eligibility criteria, a family with four members whose annual income is \$0-\$16,510 would qualify for free meals; \$16,510-\$23,495 would qualify for reduced-price meals. For each additional family member, the allotted increase in annual income is \$2,782 for free meals, \$3,959 for reduced-price meals.

Program Description

Prekindergarten classes are operated on a half-day basis as mandated in section 21.136 of the Texas Education Code. The are two prekindergarten sessions per day, a morning session that ends with lunch and an afternoon session that begins with lunch. Transportation is not provided. Of the district's 168 elementary schools, 150 offer prekindergarten classes. TEA recommends that the pupil to teacher ratio be 18:1 in prekindergarten classes; HISD recommends a maximum pupil to teacher ratio of 22:1. 10

School districts are not required to build additional facilities to offer prekindergarten classes. Students zoned to a campus that does not offer prekindergarten classes or to a campus where the prekindergarten spaces have been filled may attend prekindergarten classes on a space available basis at another campus. No transportation is provided. Campuses that offer prekindergarten maintain waiting lists for students who wish to attend prekindergarten classes when space becomes available.



⁸ Tex. Educ. Code § 21.136.

⁹ Houston Independent School District. Department of Food Services. *Policy Statement for Free and Reduced-Price Meals* 1990-91.

¹⁰ Houston Independent School District. Staffing Guidelines for Elementary and Secondary Schools 1990-91.

¹¹ Tex. Educ. Code § 21.136 (d).

Funding Source and Program Cost¹²

The prekindergarten program is predominantly funded by the state of Texas as described in Section 16 of the Texas Education Code. As of November 21, 1990, the state contribution for the 1990-91 school year was estimated to be \$4.5 million.

The following illustrates the state funding formula:

State funds = Prekindergarten ADA x 0.75 x Adjusted Basic Allotment x State Proportion

 $= 7,611.763 \times 0.75 \times \$2,152 \times 0.366367$

= \$4,499,734.

The expected cost of the prekindergarten program for 1990-91 is estimated at \$5,956,920. Materials and supplies are estimated at \$259,920. This figure is based on \$25 per student for supplies and \$5 per student for capital expenditures (based on 1989-90 enrollment of 7,664 students) and an additional \$30,000 for miscellaneous supplies. Teacher salaries are estimated at \$5,697,000. This figure is based on an estimated average salary of \$27,000 per teacher for 211 teachers.

The difference between the estimated cost of the program and the state contribution, \$1,457,186, represents the estimated HISD contribution to the 1990-91 prekindergarten program.

Curriculum and Instructional Materials

Currently Beginning Milestones, ¹³ a DLM Teaching Resources kit, is provided to prekindergarten teachers. ¹⁴ According to the introduction provided in the DLM materials, this prog. ... includes developmentally sequenced activities in the following areas: communication, motor development, social/emotional development--orientation to school, interacting with others, and cognition--math. social studies, science, and fine arts. Listening and oral skills are stressed in every lesson. Also stressed are the attitudes and tools for independent learning. The Teacher's Guide component of this program includes the following materials: an overview of the program, guidelines for implementing the different components of the program, scope and sequence charts, suggested instructional methods, guidelines for student assessment, multicultural materials, and management ideas. The two Resource Guides contain detailed, developmentally sequenced units of study. The Peek-at-a-Week component is a planning guide that includes suggestions regarding



¹² Manager, Budgetary Development and Control, Department of Budgeting and Planning, HISD.

¹³ Sheridan, Susan and Deborra Bruce Murphy, *Beginning Milestones* (Allen, Texas: DLM Teaching Resources, 1986).

¹⁴ Prekindergarten programs taught following Montessori methodology are featured in the Magnet programs at two campuses: Dodson and Whidby. These two School-Within-A-School Magnet programs serve a total of approximately 50 prekindergarten students. Both Dodson and Whidby have non-magnet prekindergarten programs that follow the *Beginning Milestones* curriculum.

the chronology of units, and the Photo Library component of the kit consists of 272 color photo cards which may be used in various ways throughout the curriculum.

For the bilingual classes, Beginning Milestones is available in a Spanish version. For teachers instructing Spanish-speaking students in non-bilingual classes, the English version includes selected materials presented in Spanish such as vocabulary (single words and phrases), chants and songs, parent communication materials, and assessment guides. Teachers in ESL classes use the the English version and incorporate ESL methodology in their teaching strategies.

Since the mid 1980s, the National Association for the Education of Young Children (NAEYC), the nation's largest professional association of early childhood educators, has promoted developmentally appropriate practices as the preferred instructional methodology for educational programs for four- and five-year olds. ¹⁵ The central feature of the prekindergarten instructional methodology in HISD is DAP. This methodology focuses on employing appropriate instructional strategies regarding the cognitive, emotional/social, and physical development of the child. Teachers are viewed as facilitators of the classroom activities. An important component is oral presentation of reading material; teachers are encouraged to read frequently to the students to increase their vocabulary, to introduce new concepts, and to promote a desire to read.

TEA has adopted a set of instructional objectives called the Essential Elements for prekindergarten level instruction. Appendix 2 is a list of these objectives for prekindergarten.

The prekindergarten classroom, while varied in its physical set-up from campus to campus, generally features an open area for large group activities and at least four learning centers. Each classroom should have at least the four following learning centers: art, blocks, quiet, and family life. Other learning centers frequently found in prekindergarten classrooms are the music, listening, science, math, language arts, manipulatives, and library centers. Each day, students choose which learning center to visit. Teachers create these learning centers using the instructional supplies for their classroom.

Students are assessed and receive a progress report every twelve weeks. They receive a checklist with symbols indicating "most of the time, some of the time, has not demonstrated, or not yet introduced" for student behaviors in the areas of: communication, motor development, fine arts, personal and social work habits, social/emotional development, and intellectual development.

Evaluation Design and Methods

The purpose of this report is to describe the HISD prekindergarten program. This is the first report since the program was implemented in 1985. Of particular interest is the description of the students and teachers in the program. Specifically, the following questions are addressed in this report:

Research Question 1: What are the number and characteristics of students enrolled in HISD prekindergarten classes?



¹⁵ Sue Bredekamp, ed., Developmentally Appropriate Practice in Early Childhood Programs Serving Children From Birth Through Age 8 (Washington, DC: National Association for the Education of Young Children, 1987).

Research Question 2: What are the demographic characteristics and academic and professional backgrounds of HISD prekindergarten teachers?

Research Question 3: What types of in-service training are provided for HISD prekindergarten teachers, and what types of training do HISD prekindergarten teachers attend?

Data used to describe the students in the program were obtained from the Student Master File. To describe the teachers of the program, a questionnaire (see Appendix 1) was distributed via the principals to all prekindergarten teachers. Questionnaires were mailed to all schools having prekindergarten classes. The principals were asked to distribute surveys to all prekindergarten teachers at that school. Principals were also asked to return a form to the Department of Research and Evaluation indicating the number of prekindergarten teachers at the school. Of the 150 elementary schools that have prekindergarten classes, 115 returned the form indicating the number of teachers at that school. To obtain a total count of the prekindergarten teachers, telephone calls were made to those schools not returning the distribution forms. According to the data reported from the schools, there are 211 HISD prekindergarten teachers. A total of 156 (74%) of the surveys were returned. Of these, one survey was discarded due to incomplete data, two surveys were discarded because the teachers indicated that they were substitute teachers, and two surveys were received too late to be included in the analysis. As a result, the responses from 151 surveys were included in the analysis. Descriptive statistics were used to analyze the data gathered from the surveys.

To determine the type of in-service training opportunities that were available to prekindergarten teachers, the survey instrument included questions asking teachers to provide information about their attendance of training activities. Instructional supervisors were informally interviewed to gather information concerning available training opportunities.

Limitations of the Study

The data presented reflects information reported by 74% of the current HISD prekindergarten teacher population in the form of a written survey questionnaire. Appendix 1 is a copy of the questionnaire. As with any data base constructed on the basis of voluntary participation, it is important to realize that the results of such an analysis may be distorted as a result of self-selection of the reporting population. Principals at each school were requested to return a form indicating the number of surveys distributed to the prekindergarten teachers at their school. Based on data from these forms, 14% of the prekindergarten teachers did not receive the surveys, and 12% of the teachers received the surveys but did not complete and return them. With only 12% of the teachers for whatever reason choosing not to complete and return the survey, distortion of the analysis and the resulting description of the prekindergarten teacher population based on the returned surveys should be minimal.



Research Question 1

What are the number and characteristics of students enrolled in prekindergarten classes?

Population Served in 1990-91

Table 1 presents the number and characteristics of students enrolled in prekindergarten and in all elementary schools in HISD. As of October 2, 1990, HISD had a total of 7,923 prekindergarten students. Of the prekindergarten students, 57% were Hispanic, 37% were Black, 4% were White, and 2% were Asian. Thirty percent were identified as LEP students, and 69% of the prekindergarten students qualified based on their family income status. As a comparison, HISD district-wide data indicate that for all students at the elementary level (111,342 students), 47% were Hispanic, 37% were Black, 13% were White, and 2% were Asian; 74% qualified for free or reduced-price lunches and 25% of the students had limited English proficiency. ¹⁶

Table 1. Number and characteristics of students enrolled in prekindergarten classes, 1990-91.

Population	Number of students	Hispanic	Black	White	Asian	LEP	Free or reduced lunch
Prekindergarten	7,923	58%	37%	4%	2%	30%	69%
Elementary	111,342	47%	37%	13%	2%	25%	74%

As of the 1990-91 TEA Fall Survey, 65% of the students classified as LEP were being served by bilingual education, 10% were being served in ESL classes, and 24% were enrolled in classes with instruction in English using non-ESL instructional methodology.

Data from the 1990-91 TEA Fall Survey indicates that kindergarten enrollment was 15,706 students. The enrollment in prekindergarten the previous year, 1989-90, at the same time was 7,664 students. Although the students in the two populations were not natched, this indicates that approximately 49% of this year's kindergarten population was served by the prekindergarten program.



¹⁶ Houston Independent School District. Department of Research and Evaluation. *HISD District and School Profiles* 1990-91.

¹⁷ Bureau of Pupil and School Data and Accounting, HISD.

¹⁸ Houston Independent School District, Student Master File.

Prekindergarten Enrollment and Ethnicity in 1989-90 and 1990-91

Table 2 compares the number and ethnicity of students enrolled in HISD prekindergarten classes as reported in the TEA Fall Survey for the indicated years. The change in enrollment in 1990-91 represents a 3% increase over the enrollment in 1989-90. Proportionately, there were no large changes in the ethnicity of the population. From 1989-90, the Black student population decreased by 1.8%, while the Hispanic population increased by 1.6%. The changes in the other ethnic groups were increases of 0.2% or less.

Appendix 3 is a table of enrollment and ethnicity by campus for the 1990-91 school year. The data presented in this table is based on information from the student master file as of the end of the first two grading cycles of the 1990-91 school year.

Table 2. Prekindergarten enrollment and ethnicity in 1989-90 and 1990-91*.

School Year	Number of Students	% Hispanic	% Black	% White	% Asian	% American Indian
1990-91	7,923	57.3	37.2	3.6	1.8	< 0.1
1989-90	7,664	55.7	39.0	3.4	1.9	0.0

^{*} The data presented reflects the enrollment in prekindergarten classes as of the TEA Fall Survey for the years presented.



Prekindergarten Enrollment and Eligibility Status From 1985-86 to 1989-90

Table 3 shows the number and eligibility characteristics of students who have been enrolled in HISD prekindergarten classes since the 1985-86 school year. These values represent the number of students who were enrolled at the end of the designated school year. According to year-end enrollment figures, during the first five years of the program, there was a steady decline in enrollment in prekindergarten by approximately 2% per year.

From 1985-86 to 1989-90, there was a net increase of 6.7% in the proportion of students enrolled in kindergarten who qualified on the basis of their limited English proficiency. In contrast, the proportion of students enrolled in prekindergarten based on low family income has decreased by 8.8% over the same time period.

Table 3. Prekindergarten enrollment and eligibility status from 1985-86 to 1989-90.*

School year	Total number of students enrolled	% LEP students	% low income students
1989-90	7,206	34.4	79.6
1988-89	7,307	30.9	82.6
1987-88	7,544	34.6	83.9
1986-87	7,665	34.1	86.3
1985-86	7,840	27.7	88.4

^{*} The enrollment data presented in Table 3 reflects year-end enrollment figures.



Prekindergarten Enrollment and Ethnicity from 1985-86 and 1989-90

Table 4 compares the number and ethnicity of students enrolled in HISD prekindergarten classes and the demographics of this population from 1985-86 and 1989-90. In the first five years of the program, the Hispanic population increased by 5.6%, and the Black student population cleared by 4.4%. The changes in the other ethnic groups were decreases of less than 1%.

Table 4. Prekindergarten enrollment and ethnicity from 1985-86 and 1989-90 *.

School Year	Number of Students	% Hispanic	% Black	% White	% Asian	% American Indian
1989-90	7,206	56.5	38.3	3.3	1.9	0.0
1988-89	7,307	54.0	39.5	3.9	2.5	0.1
1987-88	7,544	52.8	40.7	3.9	2.5	0.1
1986-87	7,665	51.3	42.3	3.6	2.6	0.1
1985-86	7,840	50.9	42.7	3.6	2.8	0.1

^{*} The enrollment data presented in Table 4 reflects year-end enrollment figures.



Research Question 2

What are the academic and professional backgrounds and demographic characteristics of HISD prekindergarten teachers?

Total Years Teaching and Years Teaching Prekindergarten

Table 5 compares the total number of years teaching experience of HISD prekindergarten teachers to the number of years teaching prekindergarten. The table indicates that 48% of HISD prekindergarten teachers have been teaching this level for 2–5 years. Seventeen percent of the teachers have only one year of experience at this level previous to 1990-91; 22% have no previous experience at this level. Regarding total teaching experience, 29% of the prekindergarten teachers indicate that they have been teaching at any level for 2–5 years, 26% indicate that they have been teaching for 6–10 years, and 34% indicate that they have been teaching for over 10 years.

Sixty-six percent of the prekindergarten teacher population falls below the diagonal of the table; this arrangement indicates that the majority of prekindergarten teachers have had experience teaching at other levels before shifting into the prekindergarten classroom. Ten percent of this population have over ten years total teaching experience but have been in the prekindergarten classroom one year or less. Another 10% of this population have 6–10 years total experience but one year or less experience in the prekindergarten classroom.

Table 5. Total years teaching and years teaching prekindergarten.

		Years Teaching Prekindergarten					
Total Years Teaching *	0	1	2-5	6-10	over 10	TOTAL	
0	7%					7%	
1	1%	2%		ļ		5%	
2-5	5%	6%	19%			29%	
6-10	5%	5%	16%	<1%		26%	
over 10	5%	5%	14%	4%	7%	34%	
unspecified	<1%			<1%		1%	
TOTAL	22%	17%	48%	5%	7%		

^{*} previous to the 1990-91 school year

Note: Apparent errors in totals are due to rounding.



Other Grade Levels Previously Taught by HISD Prekindergarten Teachers

Figure 1 illustrates the other levels that prekindergarten teachers have taught. The majority of HISD prekindergarten teachers also have experience teaching at the kindergarten level (54%); almost half (48%) report having previously taught first grade.

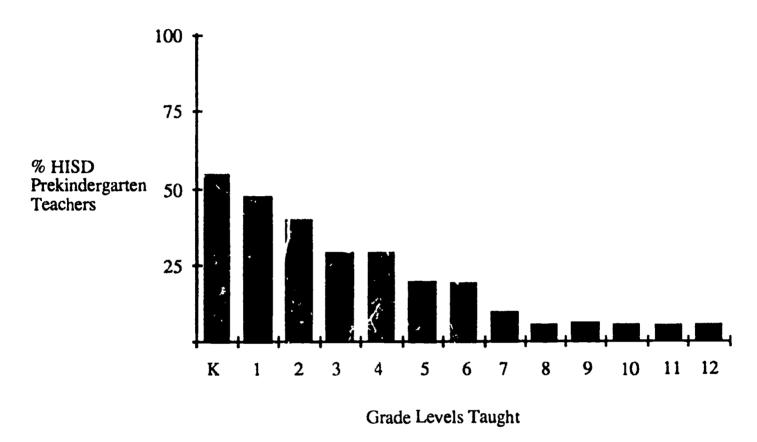


Figure 1. Percent HISD prekindergarten teachers versus grade levels taught.

The data was further analyzed to determine the proportion of teachers who have taught at the primary (K-3), intermediate (4-6) and secondary level (7-12). The largest proportion (42%) of prekindergarten teachers report previous experience at the primary level, 28% report previous experience at the intermediate level, and 20% report previous experience at the secondary level. Seventeen percent of HISD prekindergarten teachers have experience exclusively at the prekindergarten level.



Teaching Certifications and Endorsements of HISD Prekindergarten Teachers

The state currently requires that teachers hold a minimum of an elementary certification to teach prekindergarten. ¹⁹ Teachers holding a teacher of the young child (3 yrs – third grade) certification or a vocational home economics certification with a kindergarten or early childhood endorsement may also teach in a prekindergarten classroom. To teach in a bilingual classroom, the teacher must also hold a bilingual endorsement; to teach in an English as a second language (ESL) classroom, the teacher must hold an ESL endorsement.

Beginning in 1991-92, all teachers placed in a prekindergarten classroom must have an elementary certification and an early childhood endorsement. Teachers holding a teacher of the young child certification or a vocational home economics certification with an early childhood endorsement will also be qualified to teach in a prekindergarten classroom. Teachers in a bilingual or ESL classroom must be appropriately endorsed for those classrooms. Teachers not holding an early childhood endorsement (including those holding kindergarten endorsements) who were placed in prekindergarten classrooms prior to the 1991-92 school year will be given until September 1993 to acquire 90 clock hours of appropriate advanced academic training (AAT) or six semester hours in early childhood development or language acquisition. Currently the Bureau of Curriculum Development, the Department of Professional Development, and the Department of Multilingual and Compensatory Programs are considering the available options to address the pending training requirements of HISD prekindergarten teachers.



¹⁹ E. M. Vodicka, telephone communication. Director, Teachers' Professional Practices Commission and Commission on Standards for the Teaching Profession. Texas Education Agency. Feb. 1991.

²⁰ The kindergarten endorsement is no longer available; it has been replaced by the early childhood endorsement.

Figure 2 illustrates the various certifications and endorsements held by HISD prekindergarten teachers. In HISD, the most frequently held Texas teaching certification by prekindergarten teachers is an elementary certification (78% for teachers in non-bilingual classrooms and 80% for teachers in bilingual classrooms). Commonly held endorsements for teachers not teaching in a bilingual classroom are a kindergarten endorsement (41%) and an early childhood endorsement (32%). Commonly held endorsements for teachers teaching in a bilingual classroom are: a bilingual endorsement (63%), a kindergarten endorsement (30%), an ESL endorsement (28%) and an early childhood endorsement (18%).

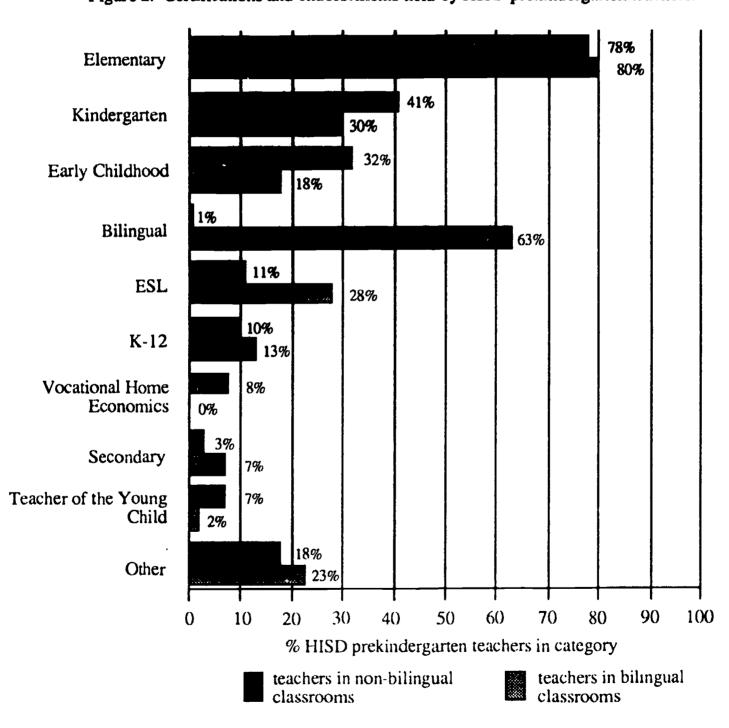


Figure 2. Certifications and endorsements held by HISD prekindergarten teachers.



Further analysis of the data gathered from the survey respondents indicates that §3% of the prekindergarten teachers teaching in non-bilingual classrooms currently hold the requisite elementary certification, vocational home economics certification and kindergarten, or teacher of the young child certification for teaching in the prekindergarten classroom (see Table 6, summed values indicated by *).

Seventeen percent of the prekindergarten teachers in non-bilingual classrooms do not hold the state certification/endorsement requirements. About half of the teachers who reported not holding an elementary certification indicated that they held emergency permits or certifications from other states or from an alternative certification program. It is possible that the remaining teachers have an emergency teaching permit for the prekindergarten classroom and are working towards meeting the prescribed requirements to teach at this level.

Analysis of the data with respect to the regulations that will take effect in September 1991 indicates that only 28% of the prekindergarten teachers teaching in non-bilingual classrooms currently hold the newly required certifications and endorsements.



Table 6. Teaching certifications and endorsements of HISD prekindergarten teachers in non-bilingual classrooms.

Non-Bilingual Prekinderg	garten Classes	
	Number of teachers	Percent of Total
Total number of teachers reporting	91	***
Elementary Certification	71	78% *
And Early Childhood Endorsement	23	25% **
No Early Childhood Endorsement	48	53%
No Elementary Certification	20	22%
Vocational Home Economics And Kindergarten Endorsement	2	2% *
Teacher of the Young Child Certification	3	3% */**
Early Childhood Endorsement	6	7%

^{*} indicates the percentage of prekindergarten teachers in non-bilingual classrooms who meet the current qualifications for prekindergarten.

Note: To avoid counting individual teachers twice, teachers holding both an elementary certification and any other certification/endorsement combination that qualifies them for teaching at the prekindergarten level were included in the elementary certification count only.



^{**} indicates the percentage of prekindergarten teachers in non-bilingual classrooms who will meet the qualifications beginning September 1991.

The data reported from the teachers also indicates that 80% of the prekindergarten teachers in bilingual classrooms currently hold the requisite elementary certification; 60% of the bilingual teachers currently hold both the elementary certification and bilingual endorsement (see Table 7). Analysis of the data with respect to the regulations that will take effect in September 1991 indicates that only 8% of the prekindergarten teachers teaching in a bilingual classroom currently hold the required elementary certification, bilingual endorsement, and early childhood endorsement. Fifty-two percent will lack only the early childhood endorsement, 8% percent will lack only the bilingual endorsement and the early childhood endorsement. It is probable, however, that some of the teachers lacking the early childhood endorsement will have already acquired a portion of the alternative 90 clock hours of AAT credit required for those teachers placed prior to the implementation of the new regulations.

Analysis of the data has further shown that 3% of the prekindergarten teachers teaching in bilingual classrooms do not hold an elementary certification but do hold a bilingual endorsement; 17% do not hold an elementary certification or a bilingual endorsement. It should be noted that some of the teachers who do not hold a bilingual endorsement do hold ESL endorsements. Further, over half of the teachers who reported not holding an elementary certification indicated that they held emergency permits or certifications from other states or from an alternative certification program. Other teachers not meeting certification and endorsement requirements may have emergency teaching permits for the prekindergarten classroom and may be currently working towards meeting the prescribed requirements to teach at this level.

The survey question pertaining to certifications and endorsements was worded: "Which of the following Texas teaching certificates or endorsements do you currently hold?" It is possible that some teachers who are on an emergency permit may or may not have indicated those permits. While the intent of the question was to determine only those certificates or endorsements actually held, it is conceded that the question may have been misinterpreted by some teachers. For this reason, the data analysis concerning certifications and endorsements of HISD prekindergarten teachers should be viewed as an estimate of the actual description.



Table 7. Teaching certifications and endorsements of HISD prekindergarten teachers in bilingual classrooms.

Bilingual Prekindergarten Classes					
	Number of teachers	Percent of Total			
Total number of teachers reporting	60				
Elementary Certification	48	80%			
And Bilingual Endorsement	36	60% *			
And Early Childhood Endorsement	5	8% **			
No Early Childhood Endorsement	31	52%			
And Early Childhood Endorsement, No Bilingual Endorsement	5	8%			
No Early Childhood Endorsement No Bilingual Endorsement	7	12%			

^{*} indicates the percentage of bilingual prekindergarten teachers who meet the current qualifications for prekindergarten.



^{**} indicates the percentage of bilingual prekindergarten teachers who will meet the qualifications beginning September 1991.

University Degrees Earned

Bachelor's Degrees

Almost all HISD prekindergarten teachers (>99%) reported having earned a Bachelor's degree. About 1% of HISD prekindergarten teachers have also earned a second Bachelor's degree. Table 8 shows the Bachelor's degree fields of HISD prekindergarten teachers. Clearly the most frequently pursued post-secondary field of study by HISD prekindergarten teachers is elementary education.

Table 8. Bachelor's degree fields of HISD prekindergarten teachers, 1990-91.

Bachelor's Degree Field	Number of Teachers ²¹	% Teachers
Elementary Education *	63	41.2
Home Economics	12	7.8
Education	7	4.6
Early Childhood Education	5	3.3
Bilingual Education	4	2.6
Communication	3	2.0
Music	3	2.0
Sociology	3	2.0
Spanish	3	2.0
Special Education	2	1.3
Not Specified	27	17.6
Other **	21	13.7

^{*} Elementary Education includes degrees that were reported as elementary education, and elementary education specializing in early childhood, bilingual, or special education.



^{**} Other includes degrees that were represented in 1% or less of the population and consisted of degrees in: accounting, advertising, art education, biology, business administration, business education, criminal justice, drama studies, English, home economics education, history, music education, natural science, petro land management, physical education and health, Slavonic languages, and speech therapy.

²¹ The sum of the numbers in this column is 153 rather than 15! (the number of actual survey respondents) due to the fact that two teachers reported earning two Bachelor's degrees.

Master's Degrees

Thirty-one percent of HISD prekindergarten teachers have also earned a Master's degree. A small percentage (<1%) of prekindergarten teachers have also earned a second Master's degree. As a comparison, HISD district-wide data indicate that 31% of the elementary level teachers have earned Master's degrees. Table 9 shows the Master's degree field, number, and percentage of teachers who have earned Master's degrees. The most frequently earned Master's degree is in the field of early childhood education. Bilingual education and elementary education are also among the most frequently pursued fields of study for a Master's degree.

Table 9. Master's degree fields of HISD prekindergarten teachers, 1990-91

Master's Degree Field	Number of Teachers	% of Teachers
Early Childhood Education	11	7.2
Bilingual Education	9	5.9
Elementary Education	6	3.9
Education	4	2.6
Child Development	2	1.3
Curriculum and Instruction	2	1.3
Other *	7	4.6
Unspecified	5	3.3

^{*} Other degrees, one each, were in the fields of administration and supervision, guidance, home economics, library science, music, special education, and speech pathology.



²² Houston Independent School District. Department of Research and Evaluation. *HISD District and School Profiles* 1990-9¹.

Demographics of the Prekindergarten Teacher Population

Age

Figure 3 illustrates the age distribution of HISD prekindergarten teachers. The largest proportion of teachers (38%) are in the range of 30-39 years of age.

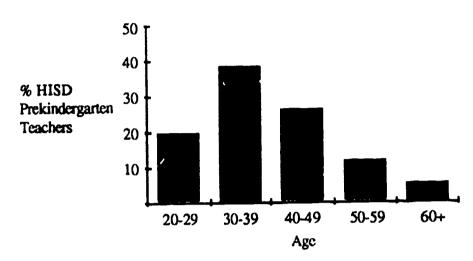


Figure 3. Age distribution of HISD prekindergarten teachers.

Ethnicity

Figure 4 illustrates the ethnic distribution of HISD prekindergarten teachers. The largest proportion of teachers (37%) are White, 33% of the teachers are Black, and 27% are Hispanic. Compared to the population of elementary level teachers district-wide, ²³ there are proportionately almost two and a half times as many Hispanic teachers among the prekindergarten teacher population (27% compared to 11%). There are proportionately fewer Black teachers in the prekindergarten teacher population (33%) compared to the district-wide elementary level teacher population (42%).

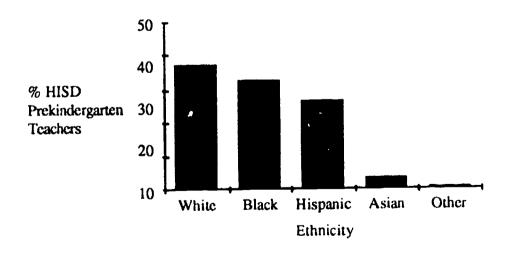


Figure 4. Ethnicity of HISD prekindergarten teachers.



²³ Houston Independent School District. Department of Research and Evaluation. HISD District and School Profiles 1990-91.

Research Question 3

What types of in-service training are provided for HISD prekindergarten teachers, and what types of training do HISD prekindergarten teachers attend?

Additional Training Opportunities Available for Prekindergarten Teachers

HISD conducts in-service workshops within each administrative district. Selected instructional supervisors assigned to the prekindergarten level prepare materials for the workshops and share these materials with the instructional supervisors in the other districts. Each supervisor uses these materials, with possible modifications, as in-service topics for the prekindergarten teachers in their district. Often they are assisted in the presentation of these materials by teachers within their district. In 1989-90, the following topics associated with Developmentally Appropriate Practices (DAP) were offered:

- 1) Active Learning,
- 2) Room Arrangement,
- 3) Labeling,
- 4) Materials,
- 5) Learning Centers,
- 6) Supportive Language, and
- 7) Whole Language.

In the 1990-91 school year, Kidwatching I and II and Conferencing with the Young Child have been offered. Kidwatching I and II was a two month series addressing record-keeping of student progress and the maintenance of student portfolios. In the Spring 1991 semester, Art and Language, Cooking and Science, and Extending Centers will be offered. These topics are generally covered in one to two hour workshops. Teachers may attend as many of these workshops as they choose; however, they may earn up to only 12 hours of Advanced Academic Training (AAT) credit per year attending these workshops.

A district-wide Saturday workshop, Fast Track to DAP, addressing DAP strategies was offered twice in the Fall of 1990. This workshop was designed to address the needs of new prekindergarten teachers and orient them to this particular instructional methodology. This workshop will be repeated in the 1991 Spring semester. Teachers attending this workshop may apply for AAT credit.

Some prekindergarten teachers attend seminars sponsored by the Harris County Department of Education. Some of these sessions carry AAT credit. DLM, the publisher of the curriculum used



in prekindergarten, also sponsors workshops, usually in both the Fall and Spring semesters. These seminars generally carry AAT credit. Some teachers also attend the annual state-wide DLM conference in Dallas. Kindergarten Teachers of Texas (KTOT) and other teacher organizations also sponsor state and local conferences that carry AAT credit. Teachers generally may apply for AAT credit for their attendance at the previously mentioned seminars and workshops.

Prekindergarten teachers may also attend Developmentally Appropriate Practices (DAP) or High Scope training sessions. It should be noted that High Scope training refers to training provided by High Scope, an education research foundation that develops instructional methodologies and trains teachers. The High Scope methodology features the use of DAP, a methodology promoted by the National Association for the Education of Young Children that focuses on employing appropriate instructional strategies regarding the cognitive, emotional/social, and physical development of the young child. In 1988, HISD instructional supervisors (one from each administrative district) received seven weeks of training from High Scope over a nine month period of time. During this time, each instructional supervisor designed training sessions focusing on developmentally appropriate practices for a pilot group of HISD prekindergarten and kindergarten teachers within their administrative district. Since that time, instructional supervisors have continued to design DAP in-service trainings offered within their administrative district. Although an effort has been made to differentiate between High Scope training (actually delivered by staff from the research foundation) and DAP training in HISD (designed and presented by HISD instructional supervisors but developed from the High Scope training), the terms High Scope and DAP are often used synonymously. Although HISD teachers receive DAP training designed by instructional supervisors, some teachers may, for a fee, enroll in training delivered by High Scope staff.



In-Service Training Opportunities Attended by HISD Prekindergarten Teachers

Tables 10 and 11 present information concerning in-service training of HISD prekindergarten teachers during the 1989-90 school year. Teachers were asked to indicate the number of hours attended for in-service training, seminars, or workshops pertaining to prekindergarten or early childhood development/education. In the analysis of the survey data, only teachers who were teaching prekindergarten in 1989-90 were included. Thirty-four surveys were discarded because 1990-91 was the teacher's first year of teaching prekindergarten.

Also, surveys were discarded if the teacher had indicated greater than 24 hours of HISD-wide in-service or greater than 24 hours within their administrative district. HISD instructional supervisors indicated that in no administrative district were there more than 24 hours of in-service offered pertaining to prekindergarten or early childhood education. Therefore, it was assumed that if a responding teacher reported greater than 24 hours then the question had been misread or misinterpreted. Surveys were also discarded if the cacher had incorrectly completed the section (e.g. entered check marks instead of numerical values). Seventeen surveys were not included in the analysis on the basis of incomplete data or misinterpretation of the question.

The analysis of in-service data included 100 surveys: 22 from teachers with one year experience, 62 with 2-5 years, 7 with 6-10 years, and 9 with over 10 years.



Table 10 illustrates the average number of optional in-service hours attended by HISD prekindergarten teachers during the 1989-90 school year. The average for all prekindergarten teachers participating in the analysis was 18.1 hours of optional in-service. Teachers reporting university course enrollment averaged 18.3 hours of in-service in addition to university course work; those reporting no university course enrollment reported an average 18.0 hours of inservice. Teachers with 6-10 years prekindergarten experience reported the greatest number of inservice hours (22.7), and teachers with one year of experience reported the least number of inservice hours (15.8) during the 1989-90 school year.

Table 10. Number of optional in-service hours* attended by HISD prekindergarten teachers during the 1989-90 school year.

	Hours of optional in-service, 1989-90					
Years teaching prekindergarten **	0	1 – 6	7 – 12	13–24	over 24	Average
1	5%	3%	5%	4%	5%	15.8
2-5	15%	7%	10%	12%	18%	18.1
6-10	1%	1%	2%	0%	3%	22.7
over 10	1%	1%	2%	1%	4%	20.1
TOTAL	22%	12%	19%	17%	30%	18.1

^{*} does not include university course hours.

Concerning university course work, 23% of the participating teachers indicated enrollment in university courses during the 1989–90 school year. Six teachers indicated enrollment in three semester hours, six indicated six hours, three indicated nine hours, and eight indicated twelve hours or more.



^{**} previous to the 1990-91 school year.

Table 11 illustrates the type of in-service training and the number of hours attended by HISD prekindergarten teachers during the 1989–90 school year. The most frequently attended optional in-service trainings were those pertaining to DAP, either presented within HISD administrative districts or by High Scope staff. The majority (60%) of HISD prekindergarten teachers attended these trainings.

Table 11. Type of in-service training and frequency of attendance by HISD prekindergarten teachers during the 1989-90 school year.

	Percentage Teachers Attending			
Type of Training	1-6 hours	7-12 hours	> 12 hours	Total
DAP training	16%	21%	23%	60%
DLM sponsored workshops	19%	11%	8%	38%
Harris Co. Dept. of Education	5%	7%	7%	19%
Other State workshops	4%	5%	2%	11%
Other training	1%	2%	4%	7%
KTOT workshops	2%	3%	1%	6%

Note: Although the survey asked teachers to indicate the number of HISD district-wide in-service hours, instructional supervisors indicated that not only was attendance at these particular in-services mandatory, but that very little of the material presented at these in-services (held in August, prior to the beginning of the school year) pertained specifically to prekindergarten or early childhood development. For these reasons, HISD district-wide in-service attendance was not included in this analysis.



Appendix 1

PRE-KINDERGARTEN TEACHER SURVEY

Instructions: Please answer the following questions. Most questions require that you check the appropriate box. Please check only one box per question unless otherwise specified. Information from this survey is intended to profile the teachers of HISD's Pre-kindergarten program. All responses from this survey will remain anonymous. This survey is not intended to identify individuals and will not be used to assess program staff.

Please return your survey by HISD mail to Nanda Kirkpatrick, Department of Research and Evaluation, Route 10 by December 14, 1990 School ______ Date _____ 1. Are you currently teaching in a bilingual pre-kindergarten class? \square No U Yes 2. Please indicate how many years (previous to the 1990-91 school year) that you have been teaching pre-kindergarten? \square 2.5 U over 10 \Box 6 - 10 3. Please indicate all grade levels that you have ever taught. (Check all that apply.) Pre-K K 10 4. How many years total teaching experience (any level) do you have previous to the 1990-91 school year? 2-5 G-10 greater than 10 \Box 5. Which of the following Texas teaching certificates or endorsements do you currently hold? (Check all that apply.) ☐ Elementary ☐ Kindergarten ☐ Early Childhood Education (pre-K – 6) Teacher of Young Children (pre-K - 3) Bilingual U ESL K-12 (Please specify specialty area(s): ______) Secondary Vocational Homemaking Other Secondary (Please specify specialty area(s): _____) Other (Please specify: ______)



6. Please fill in all that apply regarding your education	onal background:	
Degree (Circle the degree earned)	Degree Field	/ Year
B.A. / B.S.		
M.A. / M.S. / M.Ed.		
Ph.D. / Ed.D.		
7. For each of the categories below, please estimate seminars, or workshops pertaining to pre-kinder 1989-90 and 1990-91 school years. (Include Sur	garten or early childhoo	od development or education during th
Type/Sponsor	Number of Hours 1989-90	Number of Hours 1990-91
HISD District-Wide		
Within Your Administrative District		
Harris County Department of Education		
DLM Conference		
KTOT Workshops		
Other State Conference Workshops		
High/Scope Training		
University Courses (indicate semester hours) Other		
8. What is your age?		
20-29	60 o	or over
9. To which ethnic group do you belong?		
Asian Black White Hispanic Other (Please specify:)	
10. Please describe any other experience (e.g., Head		orking with young children. List also ar

other training (e.g., Montessori) that you have received that is not included in items 5, 6, or 7.

Thank you for your time.

Please return your completed survey by campus mail to Nanda Kirkpatrick, Department of Research and Evaluation, Route 10 by December 14



Appendix 2

Chapter 75 Curriculum

Subchapter B. Essential Elements-Prekindergarten-Grade Six

State Board of Education Rules

Chapter 75.21 Prekindergarten Education

- (a) Communication development, prekindergarten. Communication development, prekindergarten, shall include the following essential elements:
 - (1) Listening (receptive language). The student shall be provided opportunities to:
 - (A) respond to simple directions, commands, and questions;
 - (B) recognize and compare familiar and unfamiliar environmental sounds including sounds of animals, motors, musical instruments, and nature;
 - (C) acquire the meaning of vocabulary words related to concepts being presented;
 - (D) listen to literary selections daily for personal enjoyment;
 - (E) become aware of various speech sounds and patterns through rhymes, poems, chants, and fingerplays;
 - (F) respond to storytelling or oral reading by telling what the story is about, recalling facts and details, and recalling the sequence of events;
 - (G) focus attention on a speaker without interruption; and
 - (H) recognize voice tone as a way to express feeling.
 - (2) Speaking (expressive language). The student shall be provided opportunities to:
 - (A) participate in nonverbal communication through gesture, pantomime, and facial expressions;
 - (B) use a variety of words to express feelings and ideas;
 - (C) talk about what is seen, heard, touched, tasted, or smelled as objects, people, and events are experienced;
 - (D) engage in a conversation by sharing ideas with others;
 - (E) dictate ideas and feelings as they are recorded;
 - (F) retell a familiar story or nursery rhyme;
 - (G) speak clearly;



- (H) present fingerplays; and
- (I) use oral language in a variety of situations.

(b) Cognition development, prekindergarten. Cognition development, prekindergarten, shall include the following essential elements;

- (1) Identifying. The student shall be provided opportunities to:
 - (A) match objects in a one-to-one correspondence such as a cup to a saucer, napkin to plate, etc. (mathematics);
 - (B) orally identify the number of objects in a group (mathematics);
 - (C) recognize the empty set (concept of zero) (mathematics);
 - (D) discuss ways people can help each other (social studies);
 - (E) know and practice rules of safety pt home and school (social studies, science);
 - (F) learn social skills appropriate to group behavior (social studies);
 - (G) identify basic economic wants (food, clothing, shelter) of people (social studies);
 - (H) discuss how and why people celebrate special events (birthdays, holidays, etc.) including those that are culturally related (social studies);
 - (I) know and observe rules of the home, classroom, and school (social studies);
 - (J) know terms related to directions and location (up/down, above/below, etc.) (social studies);
 - (K) identify individuals who help students learn (family members, teachers, etc.) (social studies);
 - (L) demonstrate awareness of self in terms of name, age, and gender (social studies); (mathematics)
 - (M) discuss what families do together (play, work, etc.) (social studies);
 - (N) use the senses to gain information about the environment using taste, smell, touch, sight, and sound (science); and
 - (O) describe phenomena in the environment (science).
- (2) Comparing and contrasting. The student shall be provided opportunities to:
 - (A) use vocabulary to designate quantities such as more than, less than, equal to, as many as, etc. (mathematics);
 - (B) use vocabulary to designate relationships such as under, above, below, in front of, far away from, etc. (mathematics):



- (C) learn vocabulary to compare sets or groups (same as, different than, alike, etc.) (mathematics);
- (D) demonstrate concepts of part and whole with manipulative materials (mathematics);
- (E) use vocabulary to compare objects (taller/shorter, heavier/lighter, etc.) (social studies, science, mathematics); and
- (F) compare similarities and differences among objects using taste, smell, touch, sight, and sound. (science).
- (3) Classifying. The student shall be provided opportunities to:
 - (A) form groups by sorting and matching objects a cording to their attributes (mathematics);
 - (B) combine and separate groups of objects to form new groups (mathematics);
 - (C) identify properties as "his/her/mine/ours" (social studies);
 - (D) classify acceptable/unacceptable behavior at home and school (social studies); and
 - (E) sort objects from the environment according to one or more characteristics (use, composition, location, etc) (science).
- (4) Sequencing and ordering. The student shall be provided opportunities to:
 - (A) repeat a simple pattern using objects (mathematics);
 - (B) order two or three objects by size (length, height, etc.) (mathematics);
 - (C) count orally (mathematics);
 - (D) describe sequences in basic family and school routines (social studies); and
 - (E) sequence events in order of their occurrence (science).
- (5) Predicing ause/effect relationships. The student shall be provided opportunities to know and discuss the consequences of actions in social relationships (sharing, hitting, disturbing others, etc.) (social studies).
- (c) Motor development, prekindergarten. Motor development, prekindergarten, shall include the following essential elements:
 - (1) Physical fitness development to improve the quality of life. The student shall be provided opportunities to participate in developmental activities related to muscular strength and endurance, flexibility, and cardiovascular endurance.
 - (2) Motor skills that develop positive body image and confidence. The student shall be provided opportunities to:
 - (A) acquire fundamental movement skills:
 - (i) locomotor (walking, running, hopping, etc);



(ii) nonlocomotor (bending and stretching, pushing and pulling, twisting and turning, etc.);

(iii) manipulative (working with bean bags, large balls, long ropes, etc.); and

(iv) posture and body mechanics (standing, sitting, falling safely, etc.).

(B) develop fine motor skills:

(i) practice self-help skills (such as zippering, buttoning, buckling, snapping, and pouring liquids and solids such as sand and rice);

(ii) develop pincher control (working with puzzles with large pieces, folding paper, screwing/unscrewing, working with clothespins, punching holes, and picking up small objects and placing in containers); and

(iii) formulate patterns (using hand or foot in air, sand, stringing beads).

(C) develop perceptual awareness skills:

- (i) body awareness (an awareness of name, location, and relationship of body parts);
- (ii) spatial and directional awareness (an awareness of how much space the body occupies and where to move);
- (iii) coordination (eye-hand, eye-foot, rhythm); and
- (iv) balance.
- (3) Rhythmic activities that develop coordination, self-expression, creativity, and endurance. The student shall be provided opportunities to participate in rhythmic activities:
 - (A) fundamental skills;
 - (B) creative rhythms; and
 - (C) singing games.
- (4) Skills related to games and sports. The student shall be provided opportunities to:
 - (A) participate in skills common to games and sports (starting, stopping, dodging, throwing, kicking, catching, etc.);
 - (B) participate in co-operative games; and
 - (C) develop and practice behavior reflective of good sportsmanship and safety.
- (5) Skills and activities related to sequential gymnastics. The student shall be provided opportunities to:
 - (A) develop gross motor skills;
 - (B) develop preliminary gymnastics skills (creeping, crawling, rolling and balancing); and
 - (C) develop the ability to use apparatus appropriate for prekindergarten.
- (d) Fine arts, prekindergarten. Fine arts, prekindergarten, shali include the following essential elements:
 - (1) Art.



- (A) Awareness and sensitivity to natural and man-made environments. The student shall be provided opportunities to discover line, color, shape, and texture by seeing and feeling objects.
- (B) Inventive and imaginative expression through art materials and tools. The student shall be provided opportunities to:
 - (i) experiment informally with a variety of simple media; and
 - (ii) express individual thoughts and feelings through picture making, puppetry, modeling, constructing, and printmaking.
- (C) Understanding and appreciation of self and others through art culture and heritage. The student shall be provided opportunities to look at and talk about artworks including primary sources.
- (2) Music.
 - (A) Singing concepts and skills. The student shall be provided opportunities to:
 - (i) create vocal sounds by imitating; and
 - (ii) sing songs.
 - (B) Music listening. The student shall be provided opportunities to:
 - (i) hear music for quiet listening; and
 - (ii) hear music that tells a story.
 - (C) Responses to music through moving and playing. The student shall be provided opportunities to:
 - (i) move and dance; and
 - (ii) play simple rhythm and/or melody instruments.
- (3) Theater arts.
 - (A) Expressive use of body and voice. The student shall be provided opportunities to:
 - (i) develop body awareness and spatial perception using rhythmic and imitative movement; and
 - (ii) imitate sounds.
 - (B) Creative drama. The student shall be provided opportunities to dramatize limited-action stories and poems using simple pantomime, and puppetry.
- (e) Social/emotional development, prekindergarten. Social/emotional development, prekindergarten, shall include the following essential elements:
 - (1) Concept and skills that foster individual personal health and safety. The student shall be provided opportunities to:
 - (A) demonstrate self-help skills by:
 - (i) being responsible for personal hygiene;



- (ii) managing dressing and undressing;
- (iii) eating appropriately and independently;
- (iv) learning about the parts of the body and what they do;
- (v) recognizing routine healthy behavior;
- (vi) expanding vocabulary to include health terms; and
- (vii) recognizing common visible signs of general illness and wellness.
- (B) develop a healthy self-concept reflected by:
 - (i) accepting failure as well as successes by self;
 - (ii) praising good work and success of others;
 - (iii) willingness to try again after failure;
 - (iv) taking pride in own work;
 - (v) willingness to try new things;
 - (vi) accepting constructive criticism;
 - (vii) respecting property of others;
 - (viii) recognize own uniqueness;
 - (ix) reacting to change in a reasonable way;
 - (x) becoming aware of how others see him or her, and
 - (xi) expressing strong emotions safely.
 - (C) recognize danger of poisonous substances, including drugs; and
 - (D) recognize hazards in the environment, and acquire knowledge and skills needed to avoid injury and to prevent accidents.
- (2) Health-related concepts and skills that involve interactions between individuals. The student shall be provided opportunities to:
 - (A) demonstrate adjustment to the school setting by:
 - (i) accepting school routine;
 - (ii) recognizing that he or she is one of many; and
 - (iii) participating in leadership as well as follower roles.
 - (B) demonstrate self-discipline by demonstrating appropriate independent as well as group behav or.
 - (C) observe and follow home/school safety rules and procedures by:
 - (i) knowing what to do when lost;
 - (ii) staying away from medication and poisons;
 - (iii) knowing rules about crossing the street; and
 - (iv) knowing what to do when strange or familiar adults behave inappropriately (abuse).
 - (D) develop concept of family by:
 - (i) recognizing that there are different types of families;
 - (ii) recognizing that each person is part of a family;
 - (iii) doing simple home chores.



Appendix 3 Prekindergarten Enrollment by Campus

School Name	Number of Students	% Black	% Hispanic	% White	% Asian	% American India
Alcott	79	94	6	0	0	0
Allen	33	76	24	0	0	0
Almeda	42	12	64	21	2	n
Anderson	81	56	38	3	4	0
Askew	41	15	76	5	5	0
Atherton	38	92	8	0	0	0
Barrick	44	0	82	16	2	0
Bastian	57	95	5	0	0	0
Benbrook	44	9	73	18	0	0
Berry	85	19	80	0	0	1
Blackshear	42	100	0	0	0	0
Bonham	42	64	17	12	7	0
Bonner	83	5	84	11	0	0
Bowie	38	55	42	3	0	0
Braebum	85	9	85	5	0	1
Briscoe	73	0	97	3	0	0
Brock	20	30	70	0	0	0
Brookline	117	7	88	3	2	0
Browning	40	0	100	0	0	0
Bruce	34	59	38	0	3	0
Burbank	78	9	83	4	4	Ō
Burnet	80	Ó	100	0	0	0
Burrus	44	86	14	0	Ö	0
Cage	87	1	97	1	ĭ	Ö
Carnegie	42	93	0	0	7	ő
Chatham	43	91	9	0	Ó	Ö
Clinton Park	23	100	0	0	0	Ö
Codwell	35	97	0	3	0	ő
Concord	25	100	0	0	0	ő
	81	16	77	7	0	0
Coop	ľ			2	0	0
Cornelius	43	28	70	0	0	0
Crawford	11	91	9 97	0	0	0
Crockett	31	3	1		8	0
Cunningham	129	14	76	2	1	1
Davila	88	1	99	0	0	0
De Zavaia	75	0	99	1	0	0
DeChaumes	87	8	74	18	0	0
Dodson	73	63	19	15	3	0
Dogan	41	63	37	0	0	0
Douglass	43	100	0	0	0	G
Don.	10	0	90	10	0	0
Durhan	22	46	36	18	0	0
Durkee	44	23	59	16	2	0
Easter	42	79	21	0	0	0
Eighth Avenue	24	13	79	8	0	0



School Name	Number of Students	% Black	% Hispanic	% White	% Asian	% American Indian
Eliot	96	0	100	0	0	0
Elrod	66	74	20	2	5	0
Emerson	43	21	72	2	5	0
Fairchild	41	100	0	0	0	0
Field	87	5	87	7	1	0
Foerster	82	68	27	2	2	0
Fondren	35	31	63	6	0	0
Foster	63	97	2	0	2	0
Franklin	86	0	100	0	0	0
Frost	63	95	5	0	0	0
Garden Oaks	23	22	70	9	0	0
Garden Villas	21	52	38	10	0	0
Golfcrest	82	10	79	9	2	0
Gordon	33	33	64	0	3	o
Gregg	38	58	42	0	0	0
Gregory-Lincoln	36	58	36	3	3	0
Grimes	35	100	0	0	o	0
Grissom	86	42	52	6	0	0
Harris, J. R.	107	2	98	0	0	0
Harris, R. P.	89	27	70	3	0	0
Hartsfield	40	93	8	0	0	0
Harvard	76	0	87	12	1	0
Helms	43	2	91	7	0	o 0
Henderson, J. P.	84	0	99	1	0	0
Henderson, N. Q.	43	95	5	0	0	ő
Herod	11	18	55	27	0	ő
Highland Heights	22	100	0	0	0	ő
	43	79	19	0	0	2
Hobby Hohl	53	72	26	2	0	0
	1	21	67	10	3	0
Holden	39 35		0	0	0	0
Houston Gardens	33 44	100 59	39	0	2	0
Isaacs		2	93	4	0	0
Janowski 7- 65	90 44	2	93	0	0	0
Jefferson			1	0	3	0
Jones, J. Will	31	52	45	0	0	0
Kashmere Gardens	44	100	0	i	2	0
Kelso	44	84	14	0		1
Kennedy	42	64	36	0	0	0
Lama -	41	2	95	2	0	0
Langswn	22	96	0	5	0	0
Lantrip	89	1	96	3	0	0
Law	42	95	2	2	0	0
Lœ	29	0	100	0	0	0
Lewis	87	46	48	2	3	0
Lockhart	43	98	0	0	2	0
Looscan	71	9	92	()	0	0



School Name	Number of Students	% Black	% Hispanic	% White	% Asian	% American Indian
Love	40	3	95	3	0	0
MacArthur	45	56	42	0	2	0
Mading	64	98	2	0	0	0
McDade	61	87	13	0	0	0
McNamara	73	38	44	3	15	0
Memorial	43	2	95	2	0	0
Milam	60	15	85	0	0	0
Milne	39	77	13	3	8	0
Mitchell	40	35	60	3	3	0
Montgomery	43	74	21	2	2	0
Neff	46	9	54	13	24	0
Northline	79	8	86	6	0	0
Oates	44	5	84	11	0	0
Osborne	43	95	5	0	0	0
Park Place	84	8	70	2	19	0
Patterson	38	13	74	13	0	0
Peck	43	86	14	0	0	0
Petersen	41	76	17	7	0	0
Pilgrim	44	0	100	0	0	0
Pleasants	21	91	10	0	0	0
Pleasantville	19	100	0	0	0	0
Port Houston	42	0	98	2	0	0
Pugh	44	0	98	0	2	0
Red	33	67	21	9	3	0
Reynolds	40	100	0	Ó	0	0
Rhoads	45	100	o o	ő	0	0
Rogers, Will	15	0	87	7	7	0
Roosevelt	44	16	82	2	0	0
Ross	40	75	25	0	0	o
Rucker	45	0	89	11	0	0
Rusk	36	11	83	6	0	ő
	41	54	46	0	0	ő
Ryan Sanchez	86	13	84	1	2	ő
	64	92	8	0	0	ő
Sanderson	87	8	75	17	0	0
Scarborough	l l		50	0	0	0
Scott	40	50	94	2	2	2
Scroggins	62	2	1		16	0
Shearn	64	27	58	0		0
Sherman	73	4	96	0	0	
Sm h	43	42	47	7	5	0
Southmayd	87	2	92	6	0	0
Stevens	45	18	73	7	2	0
Stevenson	45	0	100	0	0	0
Sunny Side	46	98	2	0	0	0
Sutton	74	5	78	4	12	0
Thompson	50	92	8	0	0	0



School Name	Number of Students	% Black	% Hispanic	% White	% Asian	% American Indian
Tijerina	105	1	94	2	3	0
Travis	41	0	95	5	0	0
Turner	64	100	0	0	0	0
Twain	35	11	80	3	6	0
Wainwright	43	21	67	9	2	0
Walnut Bend	44	16	77	2	5	0
Wesley	88	94	6	0	0	0
Wharton	36	0	94	3	3	0
Whidby	67	72	10	13	5	O
White	43	9	74	0	16	0
Whittier	33	6	82	12	0	0
Wilson	33	0	97	3	0	0
Windsor Village	40	46	54	0	0	0





