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ABSTRACT

In 1986-87, the Austin Independent School District (AISD) served 4,143 students with limited English proficiency (LEP) through two programs: transitional bilingual education (TBE) programs and English as a second language (ESL) programs. TBE is available to Spanish speakers in grades pre-kindergarten through 8 and to Vietnamese speakers in grades K-6. ESL provides intensive English instruction to students in 49 other language groups. Federal funds have been used to enhance the regular secondary program for Hispanic LEP students. Evaluation shows that for AISD-funded programs, LEP students exceeded state standards in 6 of 14 comparisons, showed high Spanish language mastery rates in grade 1 and 3, had a dropout rate twice that of the district as a whole, scored well in comparison with national averages in mathematics in some grades, and have maintained achievement in reading and language above the 23rd percentile after exiting from LEP status. However, the bilingual teacher supply has diminished and programs from 1980-83 have not had long-term effects on retention, exit rate, and achievement. In federally-funded programs, English proficiency improved at four of six grade levels and in each of five subjects, Spanish language results were generally positive, tutoring program participants increased, and teachers supported development efforts. (MSE)

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**PROGRAMS FOR STUDENTS WITH LIMITED ENGLISH PROFICIENCY:
EVALUATION 1986-87**

EXECUTIVE SUMMARY

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The Austin Independent School District (AISD) served 4,143 students with limited English proficiency (LEP) in 1986-87; 87% were Spanish speakers, 5% were Vietnamese, and 8% represented 49 other language groups. LEP students in AISD are served through one of two basic programs--Transitional Bilingual Education (TBE) and English as a Second Language (ESL). TBE, which provides dual language instruction, is available to Spanish speakers at grades pre-K through 8 and Vietnamese speakers at grades K-6. ESL provides intensive English instruction to other LEP students. Only those who decline service by these programs are not served.

Title VII federal funds have been utilized in AISD since 1985-86 to enhance the regular secondary program for Hispanic LEP students. The four secondary campuses involved are those with the highest concentrations of Hispanic LEP students--Murchison Junior High plus Travis, Anderson, and Johnston High Schools. The overall budget of the 1986-87 Title VII Program was \$87,893; 274 students were impacted (for a cost of \$321 per student). Title VII provided four additional types of service:

- Staff training (through ESL endorsement courses and campus workshops),
- Student tutoring,
- Curriculum development, and
- Parent training.

MAJOR FINDINGS: AISD-FUNDED PROGRAMS

1. AISD LEP students tested in English on the TEAMS in 1986-87 compared more favorably to the State than AISD students overall. The percentage of AISD LEP students reaching mastery on the TEAMS exceeded the State average for LEP students in 6 of 14 comparisons at grades 3, 5, 7, 9, and 11.
2. AISD LEP students tested in Spanish at grades 1 and 3 showed high mastery percentages (86-96%) in all areas on the TEAMS. Mastery percentages at grade 3 were higher than the averages for LEP students statewide in all three areas. Grade 1 State results are not yet available.
3. The annual dropout rate for LEP students in 1985-86 (21.3%) was twice as high as the overall District rate (10.7%).

4. Spanish-speaking LEP students tested with the ITBS and TAP in spring, 1987 and 1986 scored closest to the national average in mathematics (with grades 1, 2, and 3 above) followed by language and finally reading. Third graders have shown strong growth towards the national average for the last four years. During the same time period, fourth graders have not.
5. Once exited from LEP status, most students are able to maintain achievement in reading and language above the 23rd percentile on achievement tests. However, a small percentage of the elementary students exited in 1984-85 (15% in reading and 1.7% in language) did fall below this criteria in the two subsequent years.
6. While the number of LEP students in need of bilingual education rose 26% between 1985-86 and 1986-87, the supply of teachers endorsed to provide bilingual education in AISD decreased 3%.
7. AISD's Title VII pre-K programs that operated in 1980-81, 1981-82, and 1982-83 do not appear to have had long-term effects on retention rates, special education status, rates of exit from LEP status, and achievement. Participants did not compare favorably to nonparticipants.
8. AISD fifth graders participating in the 1979-80 Title VII elementary program (a five-year project) showed higher rates of retention, dropping out, and failing course grades than Chapter 1, Hispanic, or all AISD students in fifth grade that year.

MAJOR FINDINGS: TITLE VII

1. English proficiency improved significantly at four of six grade levels from fall to spring (based on raw scores on the Language Assessment Battery). Most individual students (78%) made gains.
2. English achievement improved in each of five subject areas at most grade levels based on the ITBS and TAP; 1987 percentile scores were higher than 1986 scores in 18 of 23 comparisons.
3. Spanish proficiency and achievement results on La Prueba Riverside de Realización en Español (Prueba Riverside) were generally positive. The percent of students overall showing gains in language and content areas increased over 1985-86; thus, objectives were met. Additionally, when mean raw score gains were examined by subject and grade, 16 out of 20 comparisons were significant.
4. The number of LEP students tutored through Title VII increased from 76 in 1985-86 to 120 in 1986-87.
5. Four courses leading to endorsement to teach ESL were offered through Title VII; three teachers completed all courses.
6. A total of 18 parent workshops were provided in 1986-87. Evaluation ratings and comments were uniformly positive.

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LEP STUDENT FINAL REPORT**SECTION I -- DESCRIPTIVE INFORMATION**

WHAT IS A LIMITED ENGLISH PROFICIENT (LEP) STUDENT?

A LEP student has limited language proficiency in English. All students who indicate a language other than English is spoken in the home on their Home Language Survey (HLS) are tested for language proficiency and achievement in order to determine their English proficiency. The language proficiency tests used are the IDEA Oral Proficiency Test (1986-87 on) and Primary Acquisition of Language (PAL) (before 1986-87) at grades pre-K through 6 and the Language Assessment Battery (LAB) at grades 7-12.

This was the first year that the IDEA was used for the identification of LEP students. Consequently, the Teacher and Administrator Survey asked several questions dealing with the IDEA. Most of the administrators (63.4%) but fewer of the teachers (38%) surveyed in the spring were satisfied with the IDEA test for screening LEP students. Over half of the teachers (54%) were neutral, with only 8% dissatisfied with the IDEA. One problem which has arisen is that the test appears to be quite difficult for entering pre-K and K students. This will be ameliorated with the introduction of the pre-IPT (IDEA) in spring, 1988, pending approval of funds in the 1987-88 budget.

WHAT SERVICES ARE PROVIDED TO LEP STUDENTS?

Once identified, students with limited English proficiency are offered Transitional Bilingual Education (TBE) or English-as-a-second-language (ESL) services depending on their home language and grade level.

TRANSITIONAL BILINGUAL EDUCATION (TBE)

TBE is required by State law when the District enrolls 20 or more elementary LEP children of a given language at a specific elementary grade level. AISD is required to provide TBE to Hispanic and Vietnamese LEP students at grades pre-K through 6. AISD also provides bilingual service to grades 7 and 8 LEP Hispanic students.

Most Hispanic elementary students receive bilingual services at their home campuses. If a bilingual teacher is not available, transfers and transportation to other schools are offered. Vietnamese bilingual services are provided at Wooten and Walnut Creek (K-6).

For grades 7-8, bilingual education is offered at Murchison Junior High for Hispanic LEP students who are Spanish monolingual or Spanish dominant. A self-contained literacy program for recent Hispanic immigrants with little schooling and limited English skills is also available at Murchison.

The TBE program provides dual language instruction through teachers endorsed by the State in bilingual education or English-as-a-second-language methodology. Students are provided with:

- Basic concepts starting the student in the school environment in the student's primary language.
- Basic skills of comprehension, reading, and writing in the student's primary language and in the English language.
- Subject matter and concepts in the student's primary language and in the English language.
- Experiences to instill student confidence, self-assurance, and a positive identity with cultural heritage.

The amount of time spent in primary language or English language instruction for each LEP student is determined at individual campuses based on dominance and proficiency in each language.

ENGLISH AS A SECOND LANGUAGE (ESL)

ESL is one component of the Transitional Bilingual Program. However, it is also a separate program offered to LEP students with home languages other than those eligible for TBE. In addition, ESL is offered to students eligible for TBE if their parents refuse such service (to avoid a transfer or for other reasons).

ESL is a sequential English language instruction program in the skills of listening, speaking, and writing. This program also includes a component which addresses the cultural heritage of both the primary language of the LEP student and of the United States. The program is taught for a minimum of 45 minutes throughout the day, 20 minutes of direct teaching and 25 minutes of lesson adaptation by teachers endorsed in ESL or bilingual education. Secondary LEP students generally receive 50-55 minutes of ESL instruction (one class period).

An enhanced ESL program called Sheltered Bilingual or Spanish for Native Speakers was initiated in 1985-86 at Travis High School for Spanish-speaking monolingual/dominant students. This provided an extra class period of ESL support. Besides additional English instruction, students translated Spanish to English and vice versa.

If parents at any grade level refuse bilingual and ESL services, the regular all-English curriculum is provided.

TITLE VII PROGRAM

Title VII federal funds have been utilized in AISD since 1985-86 to enhance the regular secondary program for Hispanic LEP students. Title VII provides four additional types of service--

- Staff training (through ESL endorsement courses and campus workshops),
- Student tutoring,
- Curriculum development, and
- Parent training.

The four secondary campuses involved are those with the highest concentrations of Hispanic LEP students--Murchison Junior High plus Travis, Anderson, and Johnston High Schools. A total of 307 LEP students monolingual or dominant in Spanish or balanced in English and Spanish (LEP categories A, B, or C) were enrolled in these schools for part or all of 1986-87 and were therefore impacted by Title VII services; 253 LEP students were enrolled at these schools at year's end.

AISD-funded services at the campuses are shown below.

AISD-Funded Services	Title VII Campuses			
	Murchison	Travis	Anderson	Johnston
Bilingual content area instruction	X			
Literacy program	X			
English as a second language	X	X	X	X
Spanish for native speakers		X		

COMPENSATORY EDUCATION

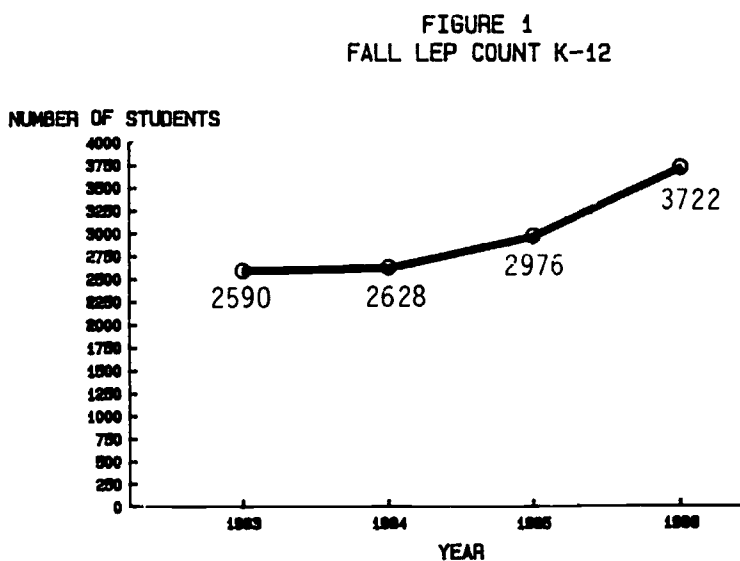
LEP students may also be served by compensatory services such as Chapter 1 or State Compensatory Education. LEP students are eligible to be served by Chapter 1 if they score at or below the 30th percentile in reading on the ITBS. In 1986-87, 1,234 (84%) of the 1,470 LEP students eligible for Chapter 1 received this supplemental reading help--1% higher than the 83% of all students eligible overall who were served.

WHAT ARE THE CHARACTERISTICS OF AISD'S LEP STUDENTS?

During the 1986-87 school year, AISD's LEP programs served 4,562 students for part or all of the year. The number of LEP students being served at the same time tends to increase until November and to decline thereafter during the year.

Official counts of the number of LEP students in AISD as of October are calculated annually. The following trends in these LEP counts are interesting to note.

- October counts for the last three years show that AISD's count of LEP students is increasing, K-12. The increase between 1983 and 1984 was 2%; the increase between 1984 and 1985 was 13% and the increase between 1985 and 1986 was 25%. The total number of LEP students served in AISD has risen 43.7% between fall, 1983 and 1986. (AISD's overall enrollment, on the other hand, increased at a much slower pace (8.4%) during this same period). Stabilization in the number of LEP students next year may occur because of the new immigration laws.



Includes all served (parent refusals excluded).

- The number of pre-K LEP students rose dramatically, tripling from 130 in 1985 to 421 in 1986 because of an expanded program.
- In the fall of 1986, 1,762 new LOTE students were processed; 1,386 or 79% were identified as LEP.
- As in the past, the number of LEP students was highest at grade 1 and generally declined through grade 12 (grades 7 and 9 are the two exceptions). Counts increased the most this year over last year at pre-K (224%), grade K (40%), grade 7 (70%), and grade 9 (52%).

- The District's objective is to help its LEP students attain English proficiency. The number of LEP students considered proficient enough to exit status as LEP in 1986-87 was 446, which was 9.5% of the LEP population. In order for a student to exit LEP status, he/she must score at least at the 23rd percentile in both reading and language on the Iowa Tests of Basic Skills (ITBS) or Tests of Achievement and Proficiency (TAP).
- There were 551 LEP students in 1986-87 whose parents requested that their children not be included in any LEP-related instructional program. This number reflects a decrease compared to 661 students in 1985-86. The decrease primarily reflects successful efforts to exit eligible students with parent denials this year (this had not been done previously). The percentage of the LEP population that parent denials represent decreased from 18% last year to 12% this year.
- In 1986-87, 87% of the LEP students served were Spanish speakers. The only other language group with over 100 students was Vietnamese (5% of the LEP population). Overall, 51 language groups were represented, with Korean, Chinese, Cambodian, Arabic, and Laotian students most common after the Vietnamese.
- Over half (57%) of the Spanish-speaking LEP students in AISD were dominant or monolingual in Spanish; almost all (93%) of the Vietnamese LEP students were dominant or monolingual in Vietnamese.
- Two thirds of the teachers responding (N=59, grades 1 through 6) to a districtwide survey had at least one LEP student who had limited or no school experience before entering AISD in 1986-87, 5% had more than 12 with limited or no school experience. There appears to be a considerable number of these LEP students; they present a special challenge to teachers.

FIGURE 2
LANGUAGES SPOKEN BY LEP STUDENTS
PRE-K TO 12 -- 1986-87

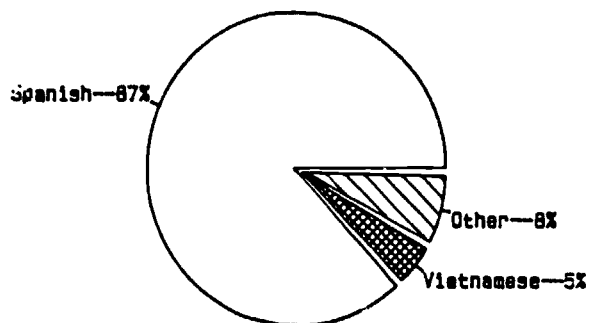
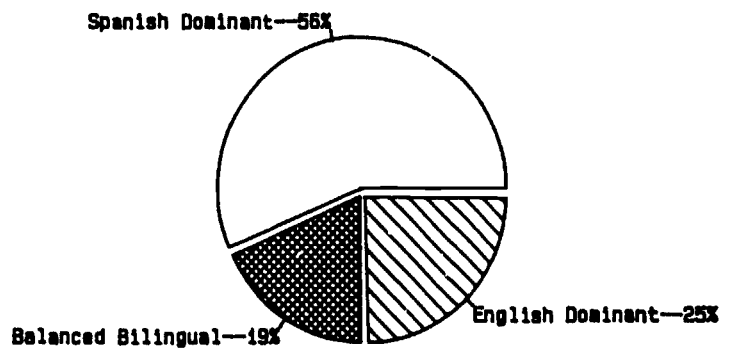


FIGURE 3
LANGUAGE DOMINANCE OF SPANISH-SPEAKING LEP
STUDENTS, PRE-K TO 12 -- 1986-87



Official October counts
of those served.

FIGURE 4
FALL, 1986-87 SUMMARY STATISTICS REGARDING LEP STUDENTS
OFFICIAL OCTOBER COUNTS*

GRADE	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Regular LEP	421	544	610	397	331	299	244	227	283	144	169	97	54	33	3,853
# Special Ed.	0	9	9	12	25	34	31	35	42	25	33	17	10	8	290
Total LEP Served	421	553	619	409	356	333	275	262	325	169	202	114	64	41	4,143
# of Students with Parent Denial for Bil./ESL Program	0	12	22	11	16	9	45	45	81	51	67	65	72	55	551
TOTAL LEP	421	565	641	420	372	342	320	307	406	220	269	179	136	96	4,694
# Students Served															
Bil. Ed. Total	385	491	540	357	285	265	218	199	79	56	0	0	0	0	2,875
Hispanic	381	482	530	346	274	260	209	186	79	56	0	0	0	0	2,803
Vietnamese	4	9	10	11	11	5	9	13	0	0	0	0	0	0	72
English as a Second Language Total	36	53	70	40	46	34	26	28	204	88	169	97	54	33	978
Hispanic	1	10	12	7	7	1	3	2	163	65	132	77	34	22	536
Vietnamese	8	2	8	8	2	8	5	8	17	11	15	9	11	2	114
All Others	27	41	50	25	37	25	18	18	24	12	22	11	9	9	328
Special Education															
Total	0	9	9	12	25	34	31	35	42	25	33	17	10	8	290
Hispanic	0	8	9	12	25	31	29	33	42	21	31	16	9	8	274
Vietnamese	0	0	0	0	0	0	1	0	0	1	1	0	0	0	3
All Others	0	1	0	0	0	3	1	2	0	3	1	1	1	0	13
LEP Status by Dominance															
Hispanic															
Span. Dominant	242	325	378	25	171	138	93	85	93	59	96	63	26	17	2,022
Balanced Bil.	0	11	66	65	68	80	80	76	103	44	37	17	7	7	661
Eng. Dominant	122	156	107	63	65	73	64	57	86	36	28	12	8	4	881
Vietnamese															
Viet. Dominant	12	10	15	18	13	8	13	18	16	10	15	7	11	2	168
Balanced Bil.	0	1	1	0	0	1	1	1	1	1	0	0	0	0	7
Eng. Dominant	0	0	1	1	0	3	1	0	0	0	0	0	0	0	6

SPRING, 1986-87 SUMMARY STATISTICS REGARDING LEP STUDENTS

Number of LEP Exits in 1987	0	19	43	67	53	49	40	35	40	28	29	19	14	10	446
Average Number of Years to Exit	0	1.1	1.7	2.3	2.8	3.4	4.2	4.3	5.1	5.6	5.2	4.8	5.0	3.7	3.6

*The LANG Masterfile is a District computer file maintained to provide up-to-date information on all students who have a "home language other than English" (LOTE). Of particular interest are those LOTE students who are of limited English proficiency (LEP). Federal, state, and local guidelines require that these students be provided special language instruction until such time as their language-related achievement and English proficiency improves to criterion levels. Identification and update information is recorded on the Masterfile as a basis for monitoring and meeting the District's responsibilities for LEP pupils.

IS STAFFING ADEQUATE TO PROVIDE BILINGUAL AND ESL SERVICE?

STAFFING PATTERNS

Teachers who provide TBE must be bilingually endorsed (see definitions below). ESL must be provided by ESL or bilingually endorsed teachers. The supply of such teachers is therefore critical. Most of the teachers endorsed as bilingual or "regular ESL" work with LEP students annually. Teachers generally have both LEP and non-LEP students in their classrooms. However, only some "Austin ESL" endorsed teachers work with LEP students. The adequacy of the Austin ESL teachers' backgrounds in meeting the needs of LEP students varies considerably.

Bilingually endorsed -- Teachers have completed a series of college courses preparing them to provide dual language instruction and passed oral and written Spanish proficiency tests.

Regular ESL -- Teachers have completed four college courses focusing on ESL techniques.

Austin ESL -- Teachers had one or more LEP students in their classes prior to 1980-81. TEA granted ESL endorsement to such teachers statewide as long as the teachers stayed in the same district.

**FIGURE 5
BILINGUAL AND ESL-ENDORSED TEACHERS 1986-87**

Endorsement	Elementary		Secondary		Teacher Total
	Teachers	Students	Teachers	Students	
Bilingual -- Spanish	321*	2,668*	8**	135*	329
Vietnamese	4	72	-	-	4
Regular ESL	61	341	13	645	74
Austin ESL	357	-	63	-	420

*Official October counts for students. March count of teachers.

**Bilingual instruction was only offered at Murchison Junior High; the other four bilingually endorsed teachers were assigned to high schools where ESL was the only program offered. The average number of students per bilingual teacher at Murchison was 33.8 (135/4). One teacher at Travis provided dual language instruction to Hispanic LEP A, B, C students (90 as of October) for one hour per day; however, this did not meet the requirements of TBE.

The number of bilingually endorsed teachers increased in 1983-84, 1984-85, and 1985-86. **The supply of bilingually endorsed teachers decreased from 342 in 1985-86 to 333 in 1986-87 (a 3% decrease). Thus, while the number of students needing bilingual service increased by 26%, the supply of teachers decreased.**

The number of Austin ESL certified teachers (420) far exceeded the number of regular ESL teachers (74) in 1986-87. The supply of regular-ESL-endorsed teachers increased by 6 (8%) in 1986-87 but the number of Austin ESL teachers decreased substantially (26%) from 567 to 420.

This year 17 elementary schools were fully staffed with a bilingual teacher at every grade level they served. The goal for next year is to have the 16 priority schools (those with primarily lower income students) fully staffed to provide bilingual service and have some designated cluster centers around the city to which LEP students can transfer if their home school cannot serve them. The best way to examine whether the supply of bilingual and ESL teachers is adequate is to examine the number of bilingual student transfers and gaps in service.

The number of pre-K to six schools which had LEP students this year at any time but no bilingual or ESL teacher to serve them at their grade level was checked by grade in March. Students had the option to be transferred to another school or decline the service. It was found that:

- In 29 cases there were LEP students but no one to serve them at that grade.
- The number of cases ranged from two at grade two to five at pre-K.
- In order to receive bilingual or ESL service, 183 students were transferred.

Transfers at the secondary level were also checked. At the junior high level, there were 91 bilingual transfers (mostly to Murchison for the TBE program). At the senior high level, 33 students were transferred (mostly to Travis).

BILINGUAL STIPENDS

In 1985-86, a salary supplement was instituted for bilingual teachers as a recruiting tool. Teachers who met criteria all year were awarded \$1,500; others were prorated according to length of eligibility. Supplements were awarded to pre-K through grade 12 teachers who:

1. Held a valid teaching certificate with a bilingual endorsement or a bilingual special permit,
2. Engaged for at least three hours during the day in basic or supplementary dual language instruction through any or all of these components of Transitional Bilingual Education: language arts, mathematics, science, and/or social studies, and
3. Worked with LEP students dominant in another language or balanced in English and another language (LEP categories A, B, and C).

There were 333 teachers with bilingual endorsement in AISD as of March, 1987. The number of individual teachers receiving a stipend was totaled as of the end of the year. Some teachers left mid-year and were replaced, increasing the total number of individual teachers receiving a stipend. At year's end:

- 302 bilingually endorsed teachers (an increase from 271 in 1985-86) had received a stipend (297 elementary, 4 junior high, 1 high school);
- 3,008 (up from 2,799 in 1985-86) LEP A, B, and C students were served by these teachers. The median number of students served by these teachers was six both years.
- 73% of the stipended teachers served 10 or fewer LEP A, B, and C students (**plus** non-LEP students).

SUMMARY

The LEP student population in AISD has been increasing. Until 1986-87, the number of bilingually-endorsed teachers was also increasing. In 1986-87, however, the number decreased. The bilingual stipend did not have enough impact to increase teacher supply this year.

On the other hand, the percentage of bilingual teachers earning the stipend increased this year. AISD appears to be utilizing bilingual teachers better with the students in greatest need. This increase also supports personnel reports that the stipend encouraged some endorsed teachers to work with LEP students who had not previously.

HOW MUCH DO SERVICES FOR LEP STUDENTS COST?

An attempt was made to determine costs incurred for bilingual and ESL services above and beyond those for the regular AISD program. The cost components analyzed are shown in Figure 6.

Most teachers' basic salaries were not included because LEP students are simply assigned to teachers endorsed in bilingual or ESL, and they provide all of the students' basic instruction. Teachers' salaries were only included if teachers acted as resource teachers in addition to regular staff (Vietnamese Centers), the programs were not required by State law (Murchison and Travis), or the program operated outside of the regular school year (summer school).

Overall, the allocated costs for bilingual programs in 1986-87 were \$1,792,260 (\$433 per LEP student or \$199 per LOTE student). The allocated costs in 1986-87 compared to 1985-86 decreased by \$453,364 primarily because two components were dropped (Hispanic Curriculum Transfer Centers and bilingual aides). However, costs for some other components did increase.

The highest costs were for components in which transportation of students was required. While transporting students may be the most efficient way to provide service, ways to reduce costs should always be explored.

- Although the cost for the Vietnamese program is high, the program is required. There are insufficient teachers to provide bilingual instruction for Vietnamese students throughout the District. Therefore, students are transported to the Vietnamese Centers. Teachers act as resource teachers, serving students for 1.5 to 2 hours per day.
- The cost per student for Murchison and Travis is slightly lower this year because more students were served. The junior high bilingual program will be at Martin rather than Murchison next year--this may reduce transportation costs.
- Summer school allocated costs and expected student enrollment for 1987 were higher than in 1986. Actual enrollment appears to be lower than expected (about 400) but final expenditures are not yet known (they will probably be considerably lower than the allocation).

**FIGURE 6
COST SPECIFICALLY FOR BILINGUAL/ESL SERVICES, 1986-87**

COMPONENT	OCT., 1986 STUDENTS SERVED	BUDGET ALLOCATION	COST PER STUDENT	STUDENT CONTACT HOURS PER YEAR	COST PER FTE
Vietnamese Centers	73	T=\$119,330.00* B=\$ 77,844.55 Total=\$197,174.55	\$1,634.66 \$1,066.36 Total=\$2,701.02	1-2 hrs. each day 25,550 hrs. total (at 2.0 hours)	\$ 8,104.17
Murchison	135	T=\$102,557.00 B=\$110,871.60 Total=\$213,428.60	\$ 759.68 \$ 821.27 Total=\$1,580.95	1-6 hrs/day, 136,500 hrs. total (at 6 hrs/student)	\$ 1,580.95
Travis	90**	T=\$ 19,494.00 B=\$ 25,959.67 Total=\$ 45,453.67	\$ 216.60 \$ 288.44 Total=\$ 505.04	1 extra (1 required, 2 provided) 15,750 total	\$ 3,030.24
Summer School 1987 (pre-k, pre-1)	700	\$291,389	\$ 416.27	4 hrs./day 8 wks. 112,00 total	\$ 2,731.69
Bilingual Stipends	3,008	\$387,500 Allocated \$445,509 Expended	\$ 128.82 \$ 148.11	3-6 hrs. per day per student	
Administration (Elementary & Secondary)	5,909***	Personnel etc. = \$389,054.00 Supplies, etc. = \$144,621.00 Total=\$533,675.00	\$ 65.84 \$ 24.47 Total=\$ 90.32		
Evaluation	8,999 LOTE****	\$ 65,629.83	\$ 7.29		
TOTAL	4,143 LEP 8,999 LOTE	\$1,792,259.65	\$ 432.60 \$ 199.16		

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KEY

E=Elementary	T=Teachers
S=Secondary	B=Busses
FTE=Full-time Equivalent Student (Annual cost of the services if provided full time -- 6 hours/day --for 175 days)	

*Allocated amount was not completely used up because only four teachers were hired rather than the five the budget called for. ***Seven staff at 4,143 LEP and four at 8,999 LOTE students.
****As of March, 1987.

SECTION II -- PROGRAM IMPACT

ARE BILINGUAL AND ESL PROGRAMS NATIONWIDE HAVING AN IMPACT?

BILINGUAL VERSUS IMMERSION PROGRAMS

The debate rages on nationally about whether bilingual or immersion programs are more effective in promoting English proficiency and achievement in LEP students. A number of reviews are now available synthesizing the results of studies of programs for LEP students nationwide. **Research generally suggests that bilingual programs are effective in improving LEP students' English proficiency and achievement and that bilingual programs may even be superior to English immersion programs for LEP students in this regard.** Caution must be exercised in interpreting trends because of methodological problems inherent in research with LEP students. The primary problem is that policies vary on how soon LEP students are tested in English; those with limited ability in English are often not tested with achievement tests in English. Thus, those tested are often a subsample of the total served and biased in favor of those in the program for some time. Two national studies which will provide more definitive information on this question are currently underway--longitudinal achievement results have not yet been released thus far.

EFFECTIVE INSTRUCTIONAL PRACTICES

Considering the changes in school boundaries and staffing planned for next year, information on effective practices to use with LEP students are particularly relevant at this time. The national literature indicates that there is a great deal of overlap in practices effective with the general population of students and LEP students per se. Thus, effective practices taught through Project BEST, for example, apply to LEP students as much as anyone else. Based on ORE observations of exemplary teachers of LEP students in 1984-85, effective teachers:

- Maximize student time-on-task,
- Organize instruction clearly,
- Handle transitions between activities efficiently, and
- Adjust to students' needs.

Some **specific** practices appear effective for LEP students in particular (Cummins, 1986; TEA, 1987; Wong Fillmore, 1983). The relevance of factors must of course be considered in light of the characteristics of particular groups of students. Wong Fillmore's work, for example, is extensive but is based on students who generally had been exposed to English for two to three years. She found qualities of teaching and instructional language especially significant. A summary is shown in Figure 7.

FIGURE 7
QUALITIES OF EFFECTIVE INSTRUCTION FOR LEP STUDENTS

86.43

1. High-quality instructional language:

- Conducting lessons in either the native language or English (a single lesson seldom includes both);
- Using the home language to explain concepts in an English lesson that cannot be explained nonverbally and are difficult to understand in English;
- Integrating English language development with academic skills instruction daily;
- Planning oral activities in each lesson to help students develop listening and speaking skills related to the academic curriculum;
- Using academic language to develop cognitive skills.

2. High-quality teaching:

- Utilizing clear, coherent language;
- Providing context clues to students;
- Paraphrasing and repeating information as needed;
- Providing comprehensive instructions and explanations;
- Employing instructional material that matches students' academic level and is challenging;
- Introducing potentially difficult vocabulary and structures before the lesson;
- Emphasizing high-level rather than low-level skills;
- Teaching students to use a variety of methods beyond simple decoding to enhance reading comprehension in English (e.g., noting or searching for salient details, asking questions, concentrating, using context clues, rereading, imaging, summarizing, predicting outcomes);
- Watching individual students' reactions to learning situations and adjusting accordingly (e.g., adjusting amount of small group versus teacher-guided activity);
- Adjusting instruction and approaches as students learn more English.

3. High-quality learning environment:

- Employing consistent, predictable structures and sequences for formal lessons and the instructional day to help students anticipate what is expected;
- Utilizing effective classroom management techniques--ensuring students are actively engaged in learning activities and spending a minimum amount of time on procedural and other activities not related to lessons;
- Focusing on content learning rather than non-academic activities;
- Communicating high expectations for learning and a belief all students can learn;
- Providing a balance of teacher-directed activities (with opportunities for language interaction) and individualized activities (with chances to work independently).

4. Ample opportunities to practice English:

- Providing all students with chances for creative discourse in English through expanded responses to teacher questions (rather than single words), heterogeneous small group activities (e.g., using cooperative learning techniques), peer tutoring, and other interactions between English-speaking and LEP students (Hispanics especially appear to benefit from working with peers);
- Analyzing instructional language used for clarity, coherence, context, paraphrasing, pace, vocabulary, and structures (perhaps through audio tapes).

5. Utilizing information from the students' home, culture, and language:

- Honoring the values and norms of the home culture while teaching those of the majority culture;
- Utilizing both verbal and nonverbal cultural information;
- Organizing instruction to build upon natural communication methods and patterns from the home culture;
- Involving parents collaboratively as partners in the learning process.

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ARE AISD'S BILINGUAL AND ESL PROGRAMS HAVING AN IMPACT?

Evaluating the success of programs for LEP students is difficult for several reasons.

First, all students except those who deny service must be served--there is, therefore, no adequate control group. Comparisons of a less exact nature (with Hispanics in AISD, AISD overall, or the national average) must, therefore, be employed.

Second, the lack of English proficiency makes it difficult to test these students for a valid score on English achievement tests. Teachers have the option to discontinue testing after the first subtest on the ITBS and TAP if students obviously cannot understand enough English to be tested. Some students are tested in some areas (like mathematics) but not others (like reading). It is, therefore, difficult to examine averages for the total group; instead we rely on the progress of those able to be tested for a certain number of years (e.g., one year follow-up) and longer longitudinal studies which examine the percentage of students able to be tested and the percentage scoring at certain levels.

Third, TEAMS scores for this year and last are difficult to compare because of the new Spanish TEAMS at grades 1 and 3 and the exemptions available at grades 1, 3, 5, 7, and 9. The LEP populations tested were, therefore, quite different in 1987 versus 1986. Also, the percentage of LEP students tested this year at grades 5, 7, and 9 is fairly small and, therefore, not representative of the total population.

TEAMS ENGLISH AND SPANISH

The Texas Educational Assessment of Minimum Skills (TEAMS) is a statewide minimum competency test. In the past, only an English TEAMS was available and there was no exemption for LEP students from grade 3 on. This year, Spanish-speaking LEP students at grades 1 and 3 could be tested in English or Spanish, other first and third grade LEP students had the option of an exemption from the test. All LEP students at grades 5, 7, and 9 could also be exempted from the testing. Exemptions can be taken only the first time LEP students are tested from 1987 on. Special Education LEP students can also be exempted based on Special Education guidelines. The Language Proficiency Assessment Committees (LPACs) at each campus decided students' LEP status. Generally, however, students dominant or monolingual in another language or balanced but limited in English and another language took the Spanish TEAMS or an exemption. Because this is the first year for the new guidelines, comparisons to last year will not be made.

English TEAMS 1986-87

Grades 1-9. Results are illustrated graphically in Figure 8. The percentage of AISD LEP students tested in English this year was:

Grade	February Enrollment	Tested	
		Number	Percent
1	560	216	39%
3	327	128	39%
5	272	158	58%
7	274	141	51%
9	192	77	40%

AISD LEP students tested in English show:

- Lower mastery percentages than for AISD non-LEP students and Hispanic students. Differences are greatest in reading.
- **The highest mastery percentages at grade 1 in all areas; mastery percentages are lowest at grade 5 in mathematics and grade 9 in reading and writing.**
- By subject, mastery rates are highest in mathematics (54% to 76%) generally followed by reading (30 to 55%) followed by writing (16% to 74%). Grade 1 mastery is higher in writing than in reading.
- **AISD LEP students showed higher mastery than State LEP students in 5 of 12 comparisons (42%) at grades 3, 5, 7 and 9.** (Grade 1 results for the State are not yet available.) Grade 3 mastery for LEP students in AISD exceeded that of LEP students in the State in all areas; grade 7 mastery was lower in all areas. The distance was greatest from the State LEP average in mathematics at grade 5 and reading and writing at grade 9. Mastery for AISD students overall does not exceed that of the State in any of these same comparisons.

Particular emphasis must continue to be placed on LEP students mastery of the TEAMS. Because the TEAMS focuses on minimum basic skills, low-achieving LEP students should be targeted for additional help in areas of need. There is some evidence that emphasis on TEAMS for LEP students has had an impact on ITBS/TAP scores as well (see one-year follow-up).

Based on districtwide survey results, most teachers at grades 1, 3, and 5 appear to use TEAMS-style items on their own tests at least three times a year. Use of TEAMS practice materials in English and Spanish was also used but by fewer teachers.

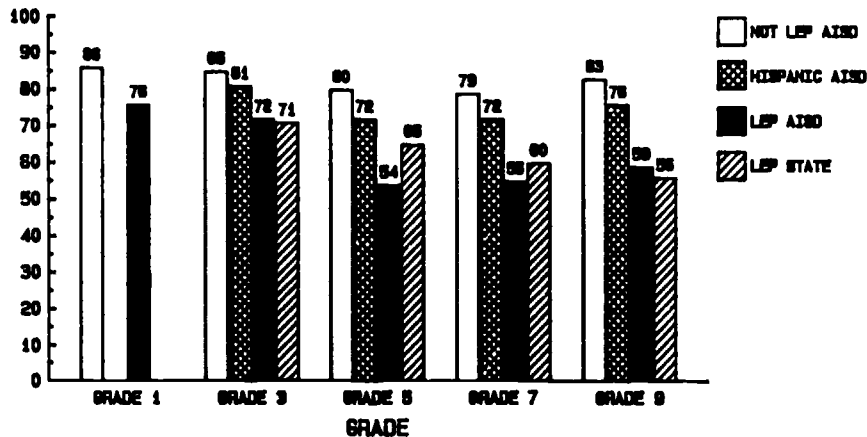
FIGURE 8

LEP MASTERY OF ENGLISH TEAMS -- 1986-87

Statewide Versus AISD Mastery Percentages

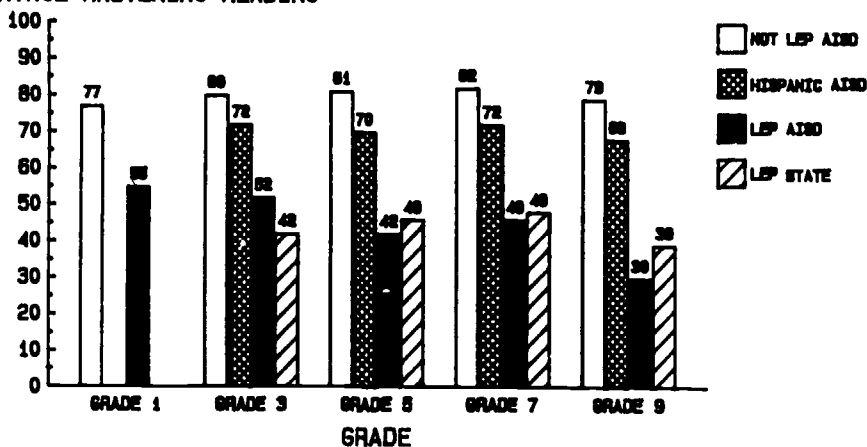
MATHEMATICS

PERCENTAGE MASTERING MATHEMATICS



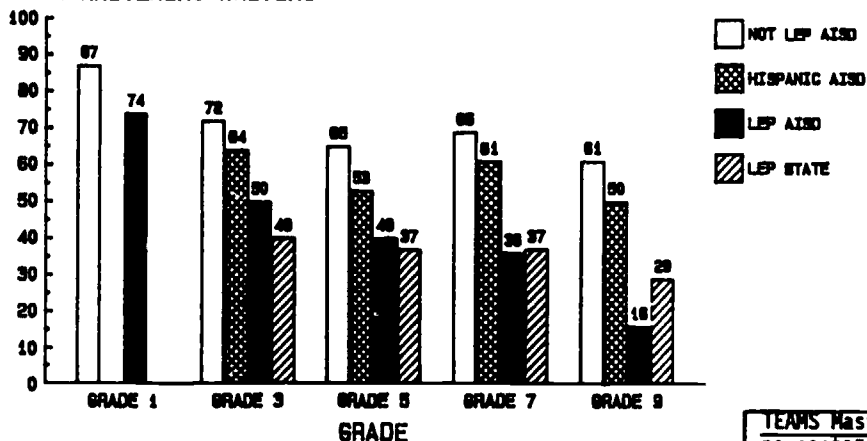
READING

PERCENTAGE MASTERING READING



WRITING

PERCENTAGE MASTERING WRITING



TEAMS Mastery Percentages: The percentage of students "mastering" each test. The number of items which must be answered correctly to master each test is set by the State Board of Education.

Scaled Score Gaps 1985-86

One way to gauge the success of programs for LEP students is to compare the performance of all bilingual/ESL students with that of non-bilingual/ESL low-income students across grades. Because most bilingual/ESL students are low income, this comparison basically measures the success of the bilingual and ESL programs in teaching LEP students English for academic purposes. In a successful program, the gap between the performance of the two groups would close across grades. This estimate of success is rough in that two factors work against finding a smaller gap across grades:

- New entries at the higher grades (the percentage of AISD LEP students who were new in 1985-86 was 26-30% at grades 5, 7, and 9),
- Exit of students successful in terms of achievement at the upper grades.

The gap between bilingual/ESL and non-LEP low-income students in AISD and the State overall is shown below in Figure 9. TEAMS scores for 1985-86 were used because all LEP students were tested at these grades -- no exemptions were allowed.

FIGURE 9
TEAMS SCALED SCORES (AVERAGES ACROSS AREAS) 1985-86

AISD			
Grade	All Bilingual /ESL	Low Income Non-Bilingual/ESL	Gap (Difference)
3	642	722	-80
5	653	726	-73
7	653	721	-68
9	642	705	-63

STATE			
Grade	All Bilingual /ESL	Low Income Non-Bilingual/ESL	Gap (Difference)
3	661	729	-68
5	669	740	-71
7	658	735	-77
9	645	726	-81

As this chart illustrates, the gap tends to close in AISD between grades 3 and 5, 5 and 7, and 7 and 9. These results are positive, especially given AISD's fairly high number of new entries in the upper grades. AISD's results also compare favorably to those of the State, where the gap widens across grades. Based on this data, AISD programs for LEP students appear more successful than is average for the State.

Exit-Level TEAMS

The exit-level TEAMS is a high-stakes test--students are required to pass both the mathematics and language arts sections to earn a diploma. Statewide, the percentage of LEP students able to pass the exit-level test is lower than for other identified groups. Students first take the test in October of grade 11. Those who fail to master one or both areas, plus anyone new to Texas, is tested subsequently. Students have three additional chances to show mastery (May of grade 11 and October and May of grade 12).

The percentage of AISD LEP students able to show mastery of the exit-level TEAMS in October and May of 1986-87 is shown below.

FIGURE 10
EXIT-LEVEL TEAMS MASTERY--1986-87

	October, 1986			May, 1987		
	Grade 11	Grade 12	Total	Grade 11	Grade 12	Total
Language Arts						
LEP AISD Tested	26	13	39	25	6	31
N Passing	9	8	17	6	2	8
% Mastering	35%	62%	44%	24%	33%	26%
State LEP % Mastering	43%	N/A	N/A	N/A	N/A	N/A
All AISD % Mastering	90%	83%	N/A	65%	79%	N/A
Mathematics						
LEP AISD Tested	27	10	37	14	2	16
N Passing	21	9	30	11	2	13
% Mastering	78%	90%	81%	79%	100%	81%
State LEP % Mastering	67%	N/A	N/A	N/A	N/A	N/A
All AISD % Mastering	93%	82%	N/A	82%	86%	N/A

NA = Not Available

Results revealed that:

- AISD LEP mastery percentages were higher in mathematics than in language arts.
- AISD's LEP October passing rates for 11th graders were higher than the State's in mathematics but lower than the State's in language arts. The mastery rate for all eleventh graders in AISD tested was higher than the State's in both comparisons.
- AISD LEP twelfth graders showed higher mastery percentages than eleventh graders.
- Only three LEP students tested in May failed the mathematics section --none were twelfth graders.
- In language arts, four LEP twelfth graders failed the TEAMS and were denied diplomas--two were Spanish Title VII students and two were oriental. All but one had only entered AISD this year; the two Spanish speakers reportedly plan to return to AISD next fall.

In AISD overall, 17 students met all graduation requirements but failed to pass the TEAMS and, therefore, were denied a diploma. In addition to the four LEP students mentioned above, three students were LEP but had denied ESL service. LEP high school students can be caught in a graduation bind. ESL can only earn graduation credit as English two years; students often deny the service after this point in order to "make room" for courses that count towards graduation in their schedule. This may have happened in two of these three cases. The problem is that, if these students do not have sufficient English skills to pass the TEAMS, ESL may have helped them more than other English classes. A change in State policy regarding ESL graduation credit might help this situation.

Spanish TEAMS

The Spanish TEAMS was first given this year at grades 1 and 3 only. The English and Spanish tests are different so results cannot be compared directly. However, skills covered are similar to those on the English TEAMS; some items are translations. One important difference is that no writing sample is included on the Spanish TEAMS; one extra objective measured by multiple-choice items is included. The results (shown in Figure 11) are quite positive.

Students tested with the Spanish TEAMS:

- **Show high mastery percentages (86%-96%).**
- **Exceed third grade mastery percentages for the State in all three areas. In addition, AISD students exceed third grade mastery for the eight largest urban districts in Texas (big 8) in mathematics and reading (but not writing).**

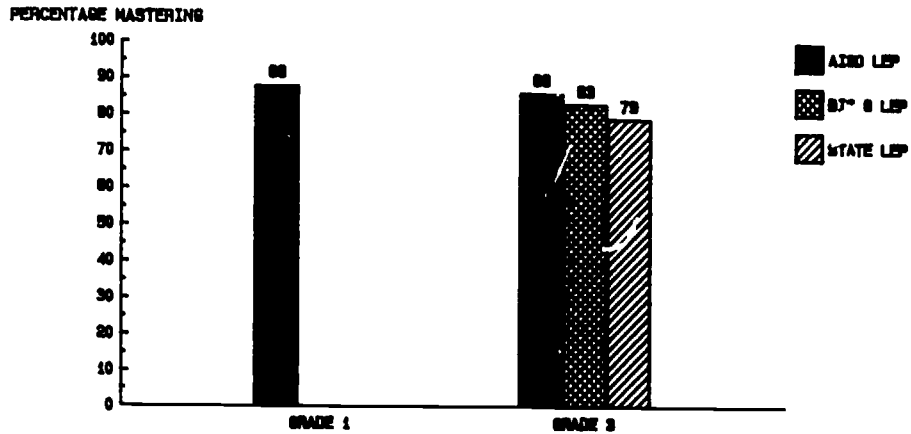
Caution must be taken in comparing AISD to other districts in the State because of possible differences in LEP populations served and exemption decisions.

FIGURE 11

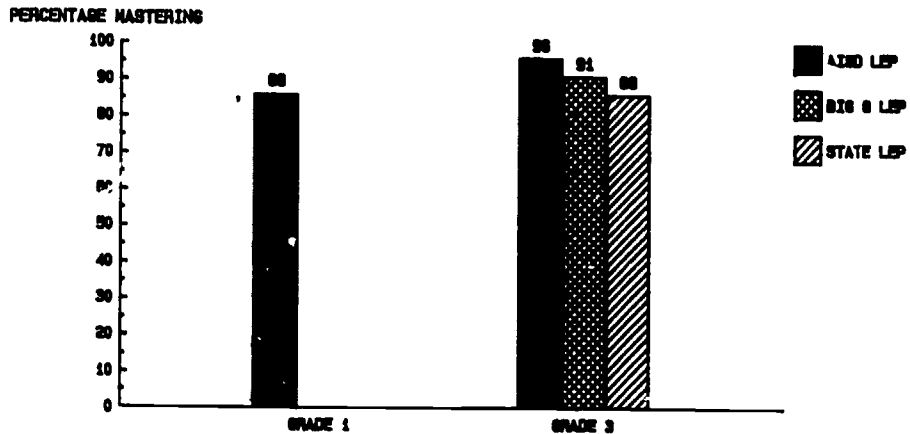
LEP MASTERY OF SPANISH TEAMS -- 1986-87

Statewide Versus AISD Mastery Percentages

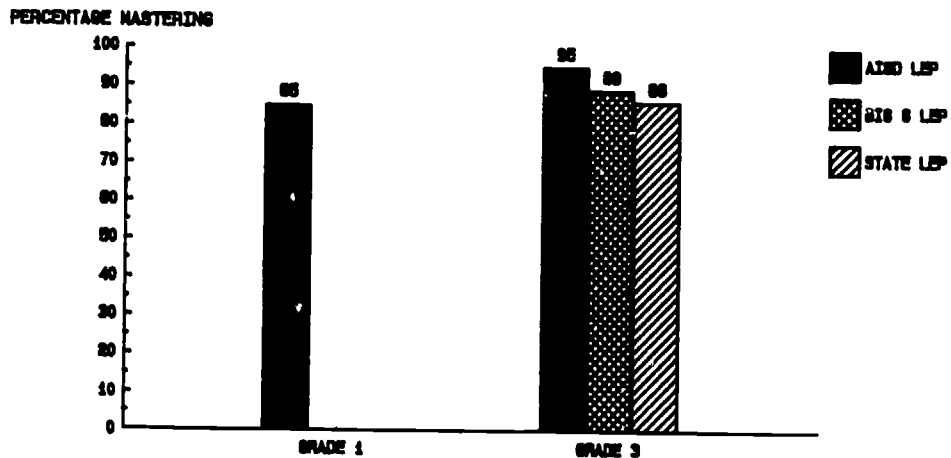
MATHEMATICS



READING



WRITING



ONE-YEAR FOLLOW-UP--ITBS AND TAP

Because many LEP students are not tested in English, analyses which report average scores from one year to the next are difficult to interpret. The students are not the same in each analysis. Therefore, the progress of LEP students in grades K-12 able to be tested with the ITBS in at least spring, 1986 and 1987 was monitored. Trends for Spanish and Vietnamese speakers will be presented here; those for the total group and speakers of other languages are available in the technical report (ORE Pub. No. 85.22).

Test scores reflected are Language Total (grades K-12), Reading Total (3-12 in 1986-87 and 1-12 in 1985-86), Reading Comprehension (1986-87 1-2), Mathematics Computation (K-8), and Mathematics Total (9-12). Mathematics Computation is the least language dependent of these scores. Comparisons of gains between 1986-87 and 1985-86 will not be made for grades K, K-1, and 1-2 because a new ITBS was adopted this year and norms differ; comparisons of gains will not be made between grades 8 and 9 because of differences between the ITBS and TAP norms.

Spanish Speakers

Less than half of the Spanish-speaking LEP students were able to be tested on the ITBS or TAP in both 1987 and 1986 for a usable score in reading and language; percentages were slightly higher in mathematics. Compared to all Spanish speakers in AISD, those tested this year and last have been in AISD longer and have more English ability (see Figure 12). Of course, it must be realized that kindergarteners are over-represented in the percentage in AISD less than two years.

FIGURE 12
SPANISH-SPEAKING LEP STUDENTS: YEARS IN AISD AND DOMINANCE

Years in AISD LEP Program	Total Group		Reading Tested 1986 and 1987	
	Number	%	Number	%
2	1,390	55%	212	20%
2-4	618	25%	425	41%
4-6	269	11%	208	20%
6-8.7	238	9%	196	19%
Total	2,515*	100%	1,041*	100%
Dominance				
Spanish Dominant	1,460	59%	415	40%**
Balanced English & Spanish	477	19%	348	34%
English Dominant	553	22%	269	26%
Total	2,490***	100%	1,032***	100%

*A few students were excluded because entry or exit codes were in error.

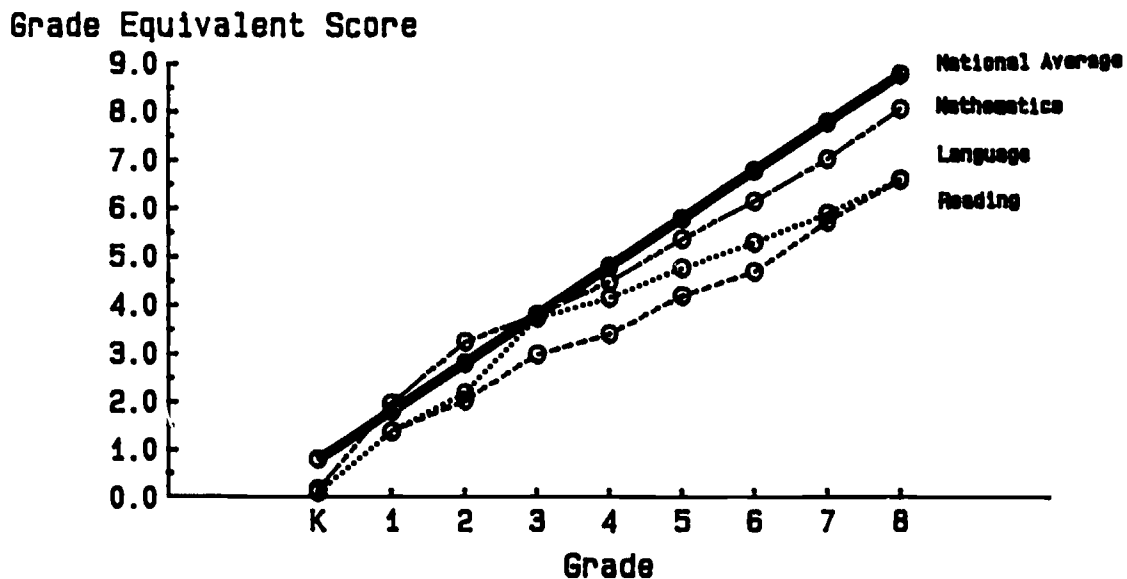
**May be slightly lower than this in reality because students are not always retested for language dominance unless eligible to exit.

***Language dominance was not available on some students.

FIGURE 13
DISTANCE FROM NATIONAL AVERAGE BY GRADE
SPANISH SPEAKERS--ITBS AND TAP

	Above/At National	GE'S BELOW NATIONAL AVERAGE					
		.1-.9	1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9
Reading		1,2,3	4,5	6,7,8,9	10	11	12
Language		K,1,2,3,4	5,6,7	8,9,10	11	12	
Mathematics	1,2,3	K,4,5,6,7,8	9,10,12	11			

FIGURE 14
1986-87 ONE-YEAR FOLLOW-UP -- SPANISH



All scores are based on students tested last 2 years except K -- K language reflects fall and spring. K mathematics reflects spring only. (See Figure 16 for numbers.)

Scores are generally closest to the national average in mathematics followed by language and finally reading. Spanish speakers score at or above the national norm in grades 1, 2, and 3 in mathematics. The gap between the national norm and LEP students' average performance tends to widen by grade (see Figures 13, 14, and 16). If examined with percentile scores, this trend is evident primarily across the elementary grades.

Another way to examine these data is in terms of gains from one year to the next. Gains of more than one year help LEP students score closer to the national average--narrowing the achievement gap. Comparisons of gains between spring, 1986 and 1987 can be made at grades 3-8 and 10-12. Pre-post comparisons are not possible at K, 1, and 2 because of the administration of a new version of the ITBS test at those grades; 9th graders cannot be compared to 8th grade because of the differences in the ITBS and TAP characteristics and norms. Results reveal that (see Figure 15):

Elementary: Grade 3 students showed the strongest growth, with gains exceeding 1 GE in reading and language but not mathematics (.8). Mathematics mean GE scores were at the national average. Grade 3 students have shown this same pattern of strong performance the last three years. For the fourth year in a row, grade 4 showed gains of less than 1 GE in all areas (about .7 GE). Gains for all AISD students and AISD Hispanic students were also less than 1 GE in all areas between 1985-86 and 1986-87.

The emphasis on TEAMS may be helping at third grade. The change in schools which many students experience at grade 4 may help to explain the grade 4 trends. Teachers may not be as familiar with the students' previous learning and therefore not capitalize on it (reteaching more than needed) or may not be emphasizing basic skills measured by the TEAMS enough.

Junior High: Gains were strong in reading and language, but smaller in mathematics.

Senior High: Gains were strong at all grades in mathematics and language but very small in reading except at grade 11. Emphasis that has been placed on helping students pass the exit-level TEAMS may be having an impact at grade 11.

FIGURE 15
1986-87 GRADE LEVELS WITH GAINS OF LESS THAN
1 GE AND 1 GE OR MORE--LEP SPANISH SPEAKERS

	<1 GE	>1 GE
Mathematics	3,4,6,7,8	5,10,11,12
Language	4,5,6	3,7,8,10,11,12
Reading	4,5,6,10,12	3,7,8,11

GE = Grade Equivalent

Examination of gains at grades K, 1, 2, and 9 are not possible because of changes in tests.

FIGURE 16
SPANISH ONE-YEAR FOLLOW-UP -- 1986 (PRE) AND 1987 (POST)

86.43

MATHEMATICS

LANGUAGE

READING

GRADE	TOTAL IN GROUP	MATHEMATICS			LANGUAGE			READING					
		NUMBER TESTED	PREMATH MEAN	POSTMATH MEAN	MATHGAIN MEAN	NUMBER TESTED	PRELANG MEAN	POSTLANG MEAN	LANGGAIN MEAN	NUMBER TESTED	PREREAD MEAN	POSTREAD MEAN	READGAIN MEAN
K	454	385		.18		212		0.11					
01	458	71		1.97		222		1.38		58		1.38	
02	306	233		3.24		143		2.18		159		2.02	
03	244	173	2.98	3.80	0.82	121	2.11	3.74	1.64	123	1.93	2.98	1.04
04	232	184	3.75	4.48	0.73	155	3.41	4.15	0.74	161	2.71	3.40	0.69
05	201	152	4.35	5.37	1.02	138	3.94	4.77	0.83	141	3.35	4.21	0.86
06	163	130	5.24	6.16	0.92	122	4.38	5.30	0.92	122	3.80	4.70	0.91
07	182	119	6.09	7.04	0.94	108	4.79	5.91	1.13	118	4.45	5.74	1.29
08	87	54	7.31	8.08	0.77	52	5.60	6.62	1.01	53	5.27	6.61	1.34
09	115	68		8.10		69		7.32		69		7.06	
10	66	32	7.81	9.28	1.47	32	6.86	8.46	1.59	32	6.75	7.20	0.45
11	24	17	8.37	9.64	1.26	16	6.69	8.21	1.52	17	6.06	7.79	1.72
12	16	9	9.64	11.14	1.50	9	6.41	7.98	1.57	9	6.74	7.16	0.41
TOTAL	2,548	1242	4.24	5.14	0.89	1399	2.67	3.58	0.90	1062	3.30	4.16	0.87

Mean GE Scores on ITBS (K-8) and TAP (9-12)

24

31

32

Vietnamese Speakers

The second largest LEP language group in AISD is the Vietnamese--159 LEP Vietnamese students were enrolled in AISD at year's end. Caution must be exercised in looking at trends by grade because of the small number at some grades (ranging from 6-21 students).

- Of those tested, in reading, 35% have been in AISD LEP programs two years or less; 74% have been in six years or less (higher than for Spanish speakers and lower than for the Vietnamese population overall).
- Of those tested, 92% were dominant or monolingual in Vietnamese (higher than for Spanish speakers), 5% were balanced in English and Vietnamese, and 3% were monolingual in English.

As with Spanish speakers, mathematics was the Vietnamese LEP students' strongest area followed by language and finally reading. This was also true for other LEP groups. Average scores are generally higher for Vietnamese and other language groups than Spanish speakers. Scores are above the national average at grades 1-7 and 10-12 in mathematics and in language at grades 1-4 and 10 (see Figure 17).

In terms of one-year gains (see Figure 18), these were weakest in reading. By grade, grades 10 and 12 were strong in all three areas. TEAMS may have had an effect at grade 12.

FIGURE 18
1986-87 GRADE LEVELS WITH GAINS OF LESS THAN
AND MORE THAN 1 GE--LEP VIETNAMESE SPEAKERS

	<1 GE	>1 GE
Mathematics	6, 7, 8	3, 4, 5, 10, 11, 12
Language	4, 6, 11	3, 5, 7, 8, 10, 12
Reading	3, 4, 5, 8	6, 7, 10, 11, 12

GE = Grade Equivalent

Examination of gains at grades K, 1, 2, and 9 are not possible because of changes in tests.

EXITED STUDENT FOLLOW-UP

The Language Proficiency Assessment Committee (LPAC) decides when LEP students exit the program. By law, those scoring at or above the 40th percentile in both language and reading on a standardized test must be exited, but the LPAC considers other information on those scoring between the 23rd and 39th

FIGURE 17
VIETNAMESE ONE-YEAR FOLLOW-UP -- 1986 (PRE) AND 1987 (POST)

86.43

MATHEMATICS

LANGUAGE

READING

GRADE	MATHEMATICS			LANGUAGE			READING						
	TOTAL IN GROUP	NUMBER TESTED	PREMATH MEAN	POSTMATH MEAN	MATHGAIN MEAN	NUMBER TESTED	PRELANG MEAN	POSTLANG MEAN	LANGGAIN MEAN	NUMBER TESTED	PREREAD MEAN	POSTREAD MEAN	READGAIN MEAN
K	7	6			.53	3	-0.43	-0.33	0.10				
01	21	2	1.50	2.10	0.60	19	0.04	1.96	1.92	2	1.35	1.60	0.25
02	17	15	2.42	3.05	1.43	15	2.30	3.29	0.99	15	2.05	2.46	0.41
03	13	11	3.75	5.07	1.33	11	3.35	4.44	1.09	11	2.63	3.25	0.63
04	11	9	4.33	5.53	1.20	8	4.67	5.61	0.94	8	3.80	4.55	0.75
05	11	9	5.69	6.80	1.11	8	4.25	5.67	1.42	8	3.45	4.20	0.75
06	21	17	6.66	7.55	0.88	17	5.66	6.35	0.69	17	4.19	5.39	1.20
07	14	11	7.35	8.15	0.79	11	5.25	6.98	1.74	11	4.05	5.90	1.85
08	9	5	7.98	8.64	0.66	5	4.90	6.14	1.24	5	4.64	5.50	0.86
09	15	7	8.49	9.51	1.03	6	5.38	6.97	1.58	6	5.00	6.73	1.73
10	8	5	13.18	14.52	1.34	5	9.60	11.48	1.88	5	9.26	10.42	1.16
11	6	4	10.35	12.30	1.95	4	9.92	9.27	-0.65	4	7.70	8.77	1.07
12	6	6	15.90	17.20	1.30	6	11.15	12.32	1.17	6	10.23	12.05	1.82
TOTAL	159	101	6.60	7.74	1.13	118	4.30	5.51	1.21	98	4.37	5.41	1.04

Mean GE Scores on ITBS (K-8) and TAP (9-12)

26

34

35

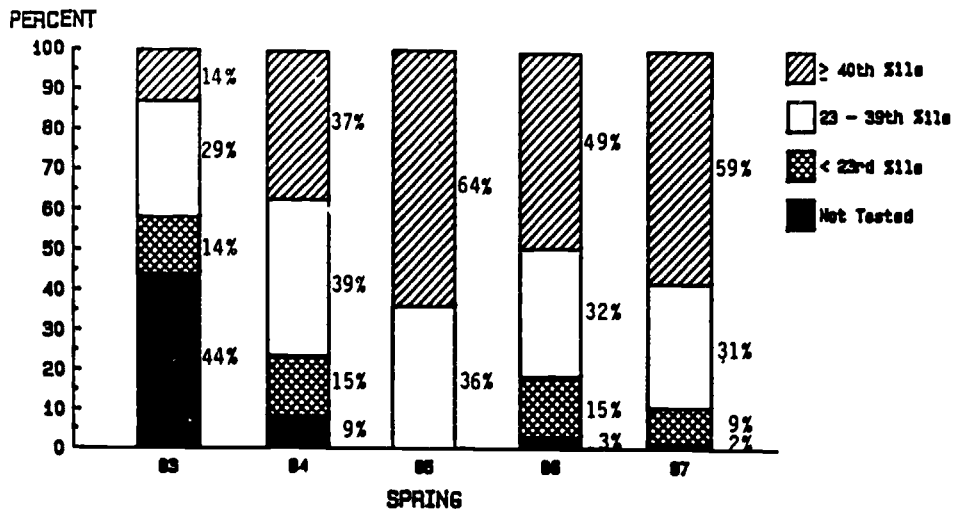
percentile in deciding when LEP students should exit. LEP students scoring below the 23rd percentile in one or both areas cannot be exited.

The achievement of students exited from LEP status (and services) in 1984-85 was checked for a five-year period--two years before exit, the exit year, and two years after exit. In 1984-85, 144 Spanish-speaking LEP students K-12 were exited. Most of those exited (129 or 89.6%) were students in grades K-6; 10 (7%) were junior high and 5 (3.5%) were senior high students. The reading and language achievement patterns of the 59 elementary students active in AISD all five years (spring, 1983 through 1987) are shown in Figures 19 and 20. (No kindergarteners and few first graders are in the sample because they could not have scores for 1983 and 1984.) **The assumption is that, in a successful program, a smaller percentage of students will not know enough English to be tested or will show low scores (23rd %ile) across time; a higher percentage will score at or above the 40th percentile.** Once exited, it is expected that students will maintain or improve their achievement. In particular, it is hoped students will not fall below the 23rd percentile in either reading or language (at which point they must re-enter LEP status).

These expectations were generally met with the 1984-85 group. The percentage of students untested or with low scores decreased in the two years preceding exit. Most students were able to maintain their achievement level once they exited. However, a small percentage of students (15% in reading and 1.7% in language) did fall below the 23rd percentile after exiting LEP programs.

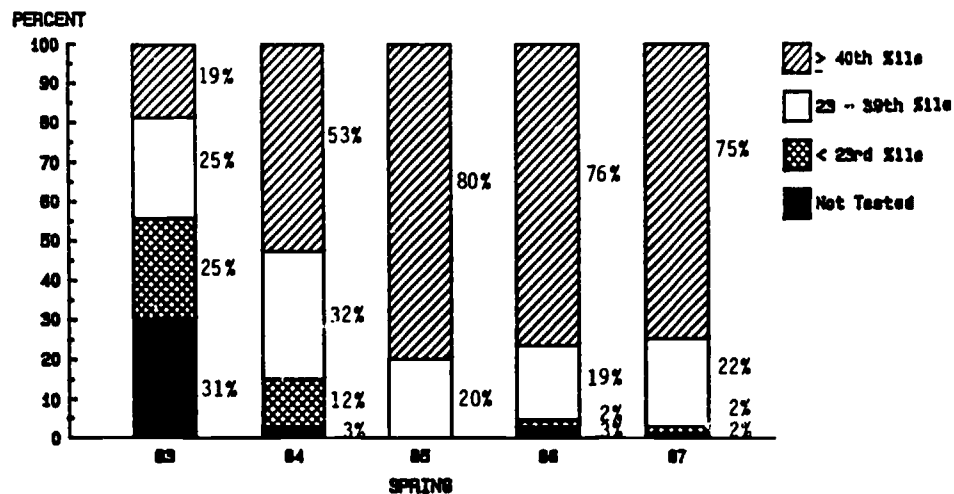
In reading, where almost all drops in scores occurred, those exiting at the 23rd-39th percentile were more likely to subsequently score below the 23rd percentile than those exiting with scores above 39 (although some in both groups later dropped). The one student who fell below 23 after exit in language scored between the 23rd and 39th percentile at exit.

FIGURE 19
ITBS ACHIEVEMENT OF SPANISH LEP STUDENTS
EXITED IN 1984-85 IN GRADES 2-6 -- READING



N = 59
All of those active each year
1983 through 1987.

FIGURE 20
ITBS ACHIEVEMENT OF SPANISH LEP STUDENTS
EXITED IN 1984-85 IN GRADES 2-6 -- LANGUAGE



N = 80
All of these active each year
1983 through 1987.

KINDERGARTEN FOLLOW-UP (PRE-K VERSUS NO PRE-K)

Title VII funded bilingual pre-K programs in AISD in 1980-81, 1981-82, and 1982-83. The project was designed to develop Hispanic students' language skills, adapt instructional materials for AISD use, involve parents in the educational process, and train teachers in pre-K and bilingual education. All interested students were screened with the Primary Acquisition of Language (PAL) oral proficiency test. Initial one-year results were quite positive. Students in both groups would now be in grades 5, 4, and 3, respectively, if never retained. There was no reason to believe those in pre-K or not in pre-K started out at an advantage over the other group because participants were randomly selected.

National research suggests that pre-K programs can have lasting effects-- especially on variables such as retention rates and special education placement. This study followed the progress of all LEP kindergarteners in AISD in 1981-82, 1982-83, and 1983-84 to see whether those who had attended an AISD pre-K program the previous year showed an advantage over those who did not enter AISD until kindergarten in terms of:

- Retention rates,
- Special Education placement,
- LEP status (dominance changes, exits), and
- Achievement growth.

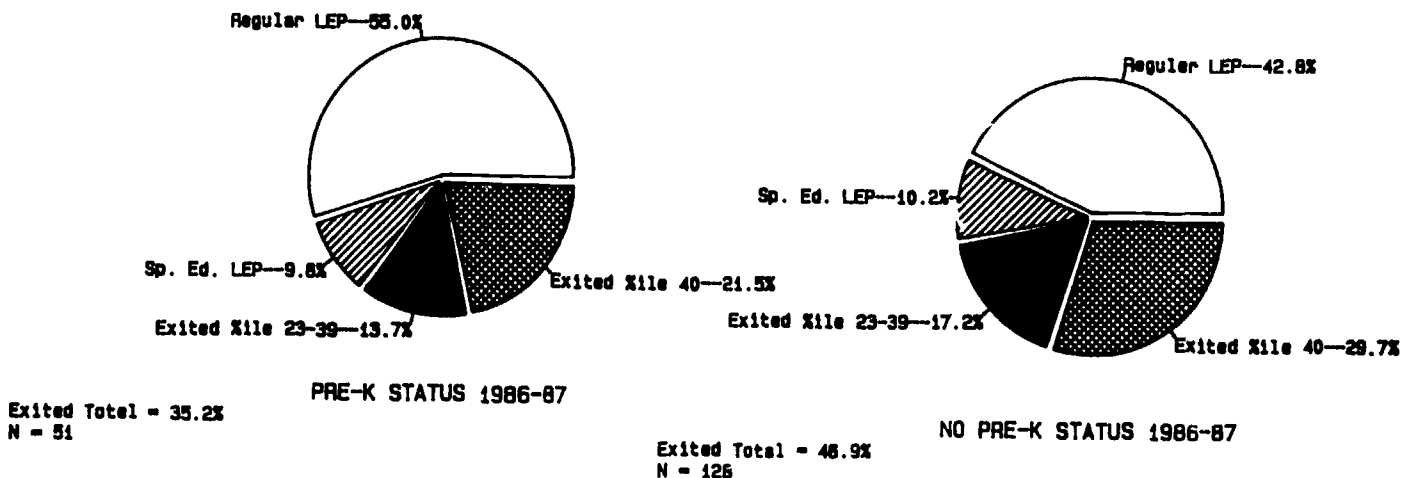
Because of the large quantity of data generated for the three groups, the group we will focus on primarily here is the 1981-82 group (for which the longest follow-up is possible). General trends across the three groups will also be included here; the technical report includes more information on all groups.

LEP and Special Education Status

AISD had 260 LEP students in kindergarten in 1981-82--195 had not attended pre-K in AISD the previous year and 65 had attended the program. Of those who attended AISD's Title VII pre-K program, 51 (78.5%) remained in AISD by 1986-87; of those who did not attend, 128 students (66%) remained. Figure 21 shows the percentage of those still active from each group who are now:

- Still LEP and in the regular program,
- Special Education LEP students, and
- Exited from LEP status.

FIGURE 21
1981-82 KINDERGARTEN FOLLOW-UP



Of students still in AISD, those attending the Title VII pre-K, compared to those not attending:

- Were referred to special education about as often (with 9.8% of the pre-K and 10.2% of the no pre-K group referred); and
- Exited less often (with 35% of the pre-K and 47% of the no pre-K group exiting).

In both groups, it was more common for students to exit with both percentile scores on the ITBS above 40 than with one or both between 23 and 39. Those exiting had been LEP for three to four years.

In the two previous years, special education rates were slightly lower for the pre-K than the no pre-K groups (15% vs. 17% for 1982-83 and 5% vs. 11% for 1983-84) but exit rates were lower as well.

Thus, there is no strong evidence that the pre-K group had lower rates of special education placement or higher exit rates (as would be expected if the program had a long-term impact). It is not known whether the fact that more of the pre-K group stayed in AISD impacted these results.

Dominance. If those served by pre-K tended to be dominant in Spanish more often than the no pre-K group, this might explain why fewer students exited. However, in the 1981-82 group, the pre-K group actually had fewer Spanish dominant students (33% versus 45%). Across time, both groups had more students become English dominant or balanced in both languages. However, the no pre-K group showed a greater degree of change (19% versus 14%). By 1986-87, 41% of the no pre-K and 50% of the pre-K group were English dominant. (It must be noted that students are often not retested until they are ready for exit, so these are conservative estimates.) In the other two follow-up years, those served by pre-K tended to be Spanish dominant more often than the other group initially, and to show a greater change towards English dominance over time.

Retention Rates

In both the 1981-82 pre-K and no pre-K groups, approximately 50% of the students were retained. Students should have been in grade 5 if not retained. The actual grade breakdowns for each of the 1981-82 groups is shown below.

	PRE-K		NO PRE-K	
	No.	Percent	No.	Percent
GRADE: 5	25	(49%)	64	(50%)
4	23	(45%)	63	(49%)
3	2	(4%)	1	(1%)
2	1	(2%)	0	(0%)
TOTAL:	51	(100%)	128	(100%)

In the 1982-83 group, 50% of the pre-K and 49% of the no pre-K group were retained. In the 1983-84 group, 43% of the pre-K and 47% of the no pre-K group were retained. **Thus, there is no consistent evidence that the pre-K program resulted in fewer retentions.**

Achievement Patterns

The progress of all students in both groups who were active in AISD all five years was followed in reading, language, and mathematics (ITBS Total scores in each area were utilized). The achievement patterns for those not retained will be discussed here. The percentage of students scoring in three categories was followed over time. This included those scoring:

- Below the 23rd percentile or not tested (it was assumed those not tested would have earned a low score because of limited English ability);
- Between the 23rd and 39th percentile;
- At or above the 40th percentile.

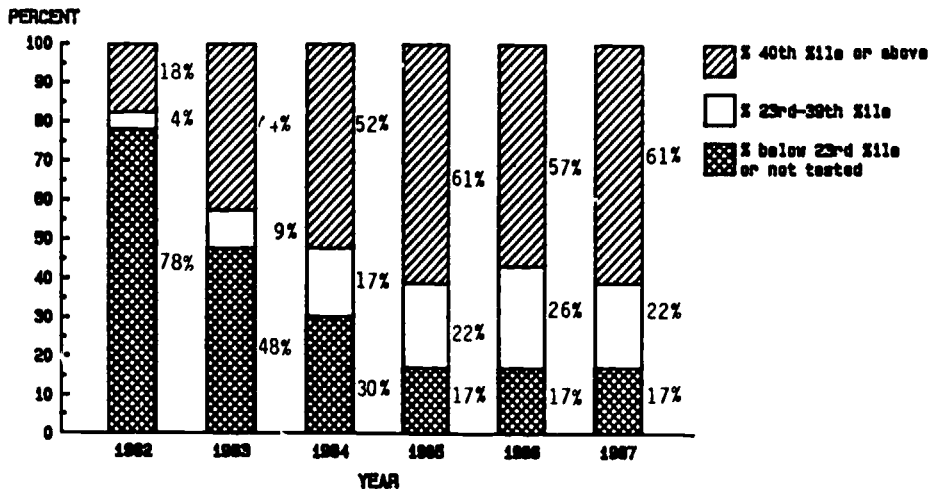
It was hoped that the percentage of students in both groups who scored below the 23rd percentile would decrease, while the percentage scoring above the 40th percentile would increase, over time. If the pre-K program had long-term effects on achievement, pre-K groups would be expected to show larger changes over time.

Two points must be kept in mind in reviewing these results:

- Reading is not tested at the kindergarten level, and
- Even the first scores listed in each area are posttests since no scores are available at the pre-K level for both groups.

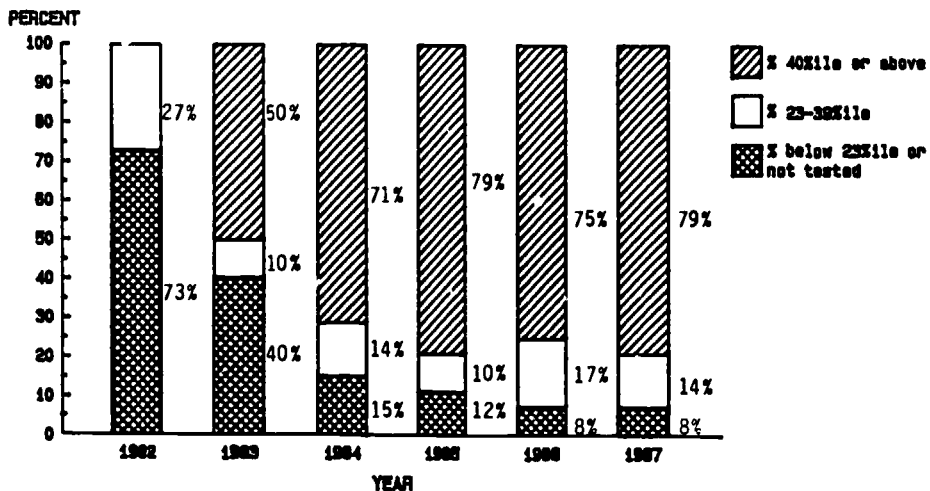
Both the pre-K and no pre-K groups showed the desired changes over time. Changes were most dramatic in language (see Figure 22), with the percentage of students scoring above the 40th percentile rising 43.5% for pre-K and 51.9% for no pre-K students. Mathematics changes were more moderate, with a 30.4% increase in the above 40 category for pre-K and a 42.4% increase for no pre-K students. Reading percentages showed the smallest changes, with 4.3% more of the pre-K and 7.6% more of the no pre-K group scoring above 40. The percentages of scores in reading, language, and mathematics in each range for both 1981-82 kindergarten groups plus the percentage of change over time are shown in Figure 23.

FIGURE 22
FOLLOW-UP ON 1981-82 KINDERGARTENERS -- LANGUAGE
TITLE VII PRE-K



N-23
ITBS LANGUAGE TOTAL PERCENTILES

NO PRE-K



N-22
Students presented all years (in grade 5
in 1986-87)

Patterns were similar for the 1982-83 and 1983-84 kindergarten follow-up groups. In terms of scoring above the 40th percentile, the degree of change was more positive for the pre-K than the no pre-K group in only two of nine comparisons (in reading and mathematics for the 1982-83 group). In terms of scoring below 23, larger decreases were seen for the pre-K versus the no pre-K group in three of nine comparisons.

Thus, pre-K students did not show better long-term achievement than did students not served. It is difficult to determine why more positive effects were not seen for the pre-K Title VII students. If time and resources permit, we hope to observe and document more fully the nature of the bilingual prekindergarten program as it now exists in AISD in the future. AISD's present program has had national recognition as exemplary and is quite different from the Title VII pre-K program. The amount of instruction provided in Spanish versus English would be one critical feature to document. Some national literature suggests that all instruction should be in the native language at this young age.

FIGURE 23
PERCENTAGE OF 1981-82 KINDERGARTEN LEP STUDENTS SCORING IN THREE PERCENTILE RANGES ON THE ITBS: PRE-K VS. NO PRE-K STUDENTS

Percentile Ranges		Percent in Each Category						Change
Reading		1982	1983	1984	1985	1986	1987	1983-87
No Score or <23	Pre-K	NA	52.2	34.7	39.0	47.7	47.8	- 4.4
	No pre-K	NA	36.6	17.3	19.0	19.2	15.3	-21.3
23-39	Pre-K	-	21.7	43.5	30.4	26.1	21.7	0
	No pre-K	-	17.3	26.9	17.3	28.8	30.8	+13.5
>40	Pre-K	-	26.1	21.7	30.4	26.1	30.4	+ 4.3
	No pre-K	-	46.2	55.8	63.5	51.9	53.8	+ 7.6
Language		1982	1983	1984	1985	1986	1987	Change
No Score or <23	Pre-K	78.2	47.8	30.4	17.3	17.3	17.4	-60.8
	No pre-K	73.0	40.4	15.4	11.5	7.7	7.6	-65.4
23-39	Pre-K	4.3	8.7	17.4	21.7	26.1	21.7	+17.4
	No pre-K	-	9.6	13.5	9.6	17.3	13.5	+13.5
>40	Pre-K	17.4	43.5	52.2	60.9	56.5	60.9	+43.5
	No pre-K	26.9	50.0	71.2	78.8	75.0	78.8	+51.9
Mathematics		1982	1983	1984	1985	1986	1987	Change
No Score or <23	Pre-K	69.6	26.0	30.4	34.7	43.4	26.0	-43.6
	No pre-K	51.8	11.6	7.7	30.8	21.2	21.2	-30.6
23-39	Pre-K	13.0	8.7	21.7	8.7	13.0	26.1	+13.1
	No pre-K	15.0	11.5	11.5	5.8	13.5	7.7	-11.5
>40	Pre-K	17.4	65.2	47.8	56.5	43.5	47.8	+30.4
	No pre-K	28.8	76.9	80.8	63.5	65.4	71.2	+42.4

The 23 pre-K and 52 no pre-K students included were active all five years in AISD and not retained.

1979-80 FIFTH GRADE TITLE VII FOLLOW-UP

From 1975-76 through 1979-80, AISD received federal Title VII funds for a bilingual demonstration project at grades K-6. The Title VII Project was to build the District's capacity to implement bilingual education through staff development, curriculum development, and parent involvement. The project operated at nine campuses in 1979-80--eight elementary (K-6) and one sixth-grade campus. All students on a campus participated--all campuses had high concentrations of LEP students. One of the major findings at the end of the five-year project was that fifth graders who had participated since first grade showed greater gains in English reading than those not participating. Small but consistent increases were also seen in fifth graders' Spanish-reading skills (gains greater than for non-project students).

Title VII students in fifth grade in 1979-80, unless retained subsequently, should have graduated in the spring of 1986-87. A follow-up was done on all fifth graders in the project in 1979-80 (92 were in the project since first grade with 129 in varying lengths of time). Their progress was compared to that of Chapter 1 students, Hispanic students, and all AISD fifth graders in terms of the following variables:

- Number still in AISD,
- Number of dropouts,
- Number retained,
- Course grades of F earned.

The Title VII students would be expected to perform somewhat less well than all AISD fifth graders, but this information provides a valuable reference point. Title VII students would be expected to show rates more similar to those of Chapter 1 and Hispanic students, although their limited knowledge of English again puts them at a disadvantage (Title VII students were excluded from those two groups in the follow-up). Thus, performance equal to any of the other groups would be quite positive.

Current Status: Still in AISD Dropouts, Transfers

Figure 24 shows the number and percent of the original 1979-80 groups still in AISD, dropped out, and transferred to other districts as of 1986-87.

FIGURE 24
1986-87 STATUS OF 1979-80 FIFTH GRADERS

	Title VII		Chapter 1		Hispanic		All AISD	
	N	%	N	%	N	%	N	%
<u>Total</u> <u>1979-80</u> <u>Status</u> <u>1986-87</u>	221	100	637	100	924	100	3,675	100
In AISD	124	56.1	204	32.0	363	39.3	1,899	51.7
Dropped Out	77	34.8	204	32.0	228	24.7	635	17.3
Transferred	20	9.0	249	39.1	333	36.0	1,141	31.0

Chapter 1 and Hispanic groups do not include Title VII students.

The four groups differed significantly in terms of the percentage dropping out. **Title VII students had the highest percentage of students still in AISD but also the highest percentage dropping out.** The population appears quite stable, in that only 9% transferred to other districts. The Title VII dropout rate of 34.8% is double that for all 1979-80 fifth graders (17.3%); it is closest to the rate for Chapter 1 students (28.9%).

Retention Rates

Retention rates also varied significantly across groups. **Of those still in AISD in 1986-87, 60% of the 1979-80 Title VII group were on grade level (grade 12) but 40% had been retained at least once between 1979-80 and 1986-87; 18.5% (23 students) had been retained more than once.** As Figure 25 illustrates, these retention rates are over twice that of all AISD 1979-80 fifth graders (15%). Retention rates were closer to those of Chapter 1 students (32%) and Hispanic students (23%).

**FIGURE 25
1986-87 GRADE LEVEL STATUS OF 1979-80
FOLLOW-UP GROUPS**

Grade 1986-87	Title VII		Chapter 1		Hispanic		All AISD Grade 5	
	N	%	N	%	N	%	N	%
12	74	59.7	139	68.1	280	77.1	1,514	85.0
11	27	21.8	43	21.1	48	13.2	174	89.2
10	19	15.3	18	8.8	25	6.9	87	4.6
9	4	3.2	4	2.0	9	2.5	23	1.2
8	-	-	-	-	1	.3	1	.1

Courses Grades -- F's Earned

The percentage of failing and passing grades earned during the spring of 1986-87 was determined for courses taken by all groups. Courses in which seven or more former Title VII students were enrolled were selected; course grades for these same courses were then examined for the other groups as well. The courses included are listed below.

English (IB, IIIB, IVB, IVB Academic)	Chemistry
Correlated Language Arts (IIIB)	U.S. History
Recordkeeping	U.S. Government
Foods and Nutrition	Sociology
Family Living	Advanced Social Studies
Informal Geometry	Health
Introduction to Biology	Vocational Office Education (VOE)
Cooperative Training	

Pass and fail rates for these courses combined are shown in Figure 26. The **Title VII follow-up group had the highest failure rate (20.2%)**, again double that of all AISD follow-up students (10.3%). Rates were more similar to those of Chapter 1 (15.4%) and Hispanic (14.4%) students.

**FIGURE 26
1979-80 TITLE VII FOLLOW-UP GROUPS
COURSE GRADES--PASS AND FAIL**

	Title VII		Chapter 1		Hispanic		All AISD	
	N	%	N	%	N	%	N	%
Pass	42	79.8	193	84.6	379	85.6	2,190	89.7
Fail	166	20.2	35	15.4	64	14.4	251	10.3
Total Grades Earned	208	100.0	228	100.0	443	100.0	2,441	100.0

Includes common courses taken by all groups, spring, 1987. Grades earned exceed number in each group because some students were enrolled in more than one course included.

Failure rates were lower for Title VII students than for the other groups for some of the 16 courses. The English IVB academic rates were lower for the Title VII than for any of the other groups. U.S. Government failure rates were lower for Title VII than for Chapter 1 or Hispanic students. Overall, Title VII failure rates were lower than Chapter 1's in three courses, lower than Hispanic's in five courses, and lower than all AISD students in four courses.

Summary

The boost provided by Title VII did not appear sufficient to overcome limited English ability in the fifth-grade follow-up. Fifth graders in Title VII in 1979-80 had higher rates of retention, dropping out, and failing than the 1979-80 Chapter 1 students as well as the other two comparison groups.

PRUEBA DE LECTURA

It is difficult to evaluate the academic achievement of Spanish-dominant or monolingual students (LEP A and B categories) because they often cannot comprehend enough English to take the ITBS. The achievement of these students was monitored using the Spanish reading achievement of LEP A and B students in grades 2-6 on the Prueba de Lectura.

The Prueba de Lectura provides a measure of level of comprehension, speed of comprehension, and vocabulary in Spanish reading. It is administered each March to LEP A and B students by ORE testers. The maximum raw score is 110. The table below shows the performance in raw scores for 1986 and 1987 of those tested both years.

- Mean scores increased by grade level;
- All groups showed increased knowledge of Spanish reading;
- The most growth occurred for those who moved from second to third grade;
- The least growth occurred for those moving from fifth to sixth grade.

FIGURE 27
PRUEBA DE LECTURA PERFORMANCE FOR SPANISH
DOMINANT/MONOLINGUAL STUDENTS 1986-87*
GRADES IN 1986-87

	3	4	5	6
1986	51.0	62.6	68.2	73.7
1987	63.2	70.7	75.5	79.9
GAIN	12.2	8.1	7.3	6.2
N	91	70	39	35

*Reflects mean raw scores only for those tested both years.

These results roughly parallel those found last year, except that students appeared to show slightly smaller gains than last year at all grade levels. The fact that gains declined somewhat across grades may reflect less time spent on Spanish at the upper elementary grades or less room for growth (many students show very high scores in grades 5 and 6). One caution for interpreting these results is that students are not retested for dominance each year. Therefore, some students may be more proficient in English than their status implies.

DROPOUT RATES

Figure 28 shows the 1985-86 high school dropout rates by ethnicity, sex, and grade for LEP students and for the District.

- LEP students' overall dropout rate (21.3%) was twice as high as the overall District rate (10.7%).
- Hispanic LEP students had the highest dropout rate (23.6%) which was about 8% higher than for Hispanics at the District level (15.3%).
- 24.3% of the LEP males dropped out while 17.3% of the females dropped out.
- LEP ninth graders were most likely to drop out (29.4%), while 12th graders were least likely to drop out (3.2%). This was also true for the District.

FIGURE 28
ANNUAL 1985-86 HIGH SCHOOL DROPOUT RATE BY ETHNICITY, SEX, AND GRADE FOR LIMITED-ENGLISH-PROFICIENT STUDENTS AND THE DISTRICT

Group	LEP STUDENTS			DISTRICT		
	Dropouts	Enrollment	Dropout %	Dropouts	Enrollment	Dropout %
Black	0	1	0.0	314	3,204	9.8
Hispanic	55	233	23.6	661	4,316	15.3
Other	15	94	16.0	936	10,374	9.0
Female	24	139	17.3	883	8,829	10.0
Male	46	189	24.3	1,028	9,065	11.0
Grade 9	48	163	29.4	511	6,393	14.2
Grade 10	13	83	15.7	456	4,500	10.1
Grade 11	8	51	15.7	354	3,713	9.5
Grade 12	1	30	3.2	190	3,288	5.8
Total	70	328	21.3	1,911	17,894	10.7

Although the dropout rate for LEP students is high, it may be a slight overestimate. One reason is that if a student goes back to their native country, that country is less likely to request a transcript than a U.S. school. Since transcript request is the basis used for calculating dropout rates, it is possible that some students who were really in school were considered dropouts because a transcript was never requested for them. Thus, caution should be used in interpreting the dropout rates.

IS AISD'S SECONDARY TITLE VII PROGRAM HAVING AN IMPACT?

PROGRAM IMPLEMENTATION AND SERVICES

Costs

The overall cost of Title VII in 1986-87 was \$87,893, or \$320.78 per student (274). Program implementation will be explored in terms of Title VII's four components.

Staff Training

Staff training provided ESL endorsement classes and teacher workshops. In 1986-87, teachers could take the third and fourth of a series of four ESL semester courses leading to endorsement certification. Interested staff could also participate in workshops at the program schools.

Endorsement Classes

The following is true about the endorsement implementation:

- This year 14 program teachers enrolled in the third ESL course and seven enrolled in the fourth and final ESL endorsement course (five finished the fourth course).
- Three teachers completed all four courses offered in 1985-86 and 1986-87 leading to endorsement.
- Three courses were finished by five teachers and six completed two courses. One course was finished by 11 teachers. Thus, 25 teachers were involved overall.
- The three teachers completing all four endorsement courses instructed students in:
 - Language
 - Social Studies
 - Vocational Arts
- Teachers completing two or more courses served students in:

Reading	Social Studies
Language	Science
Mathematics	Art
- The total cost to Title VII for the tuition of the 21 teachers who enrolled in the two endorsement classes in 1986-87 was \$4,235, or \$201.67 per endorsement participant.

The five AISD teachers who finished the last course were asked to complete a survey; three of them were program teachers who finished all courses in the ESL endorsement series. The following was expressed by these teachers:

- Of the five teachers, four responded they had learned "a lot" from the last class; one stated that "some" learning had occurred.
- Four of the teachers indicated the ESL courses were worth their expenditure of time -- one did not.
- While two teachers believed endorsement class participation had improved their LEP students' English skills; two were more neutral. One did not have any LEP students.

The number of LEP students served by teachers who had completed two or more endorsement courses in 1985-86 or 1986-87 is shown in Figure 29. Overall, 98 were served. However, the number outside of Travis is limited (13). Of course, the training will also be valuable in years to come. The Travis teacher involved was already bilingually endorsed; she took the courses out of interest. Individual scores for students impacted are shown in the technical report.

**FIGURE 29
TITLE VII STUDENTS SERVED BY
ENDORSEMENT TEACHERS IN 1986-87**

School	Number Served						
	7	8	9	10	11	12	
Murchison	1	0	0	0	0	0	1
Anderson	0	0	2	0	0	0	2
Johnston	0	0	10	0	0	0	10
Travis	0	0	39	27	14	5	85
Total	1	0	51	27	14	5	98

Includes 14 teachers in two or more endorsement courses

Teacher Workshops

Workshops were implemented as planned and focused on two topics:

- Designing lesson plans for LEP students, and
- Mainstreaming LEP students in secondary content area classes using cooperative learning techniques.

The lesson plan workshop was held in December, 1986, and was attended by nine teachers. In-service evaluation questionnaires were filled out by participants. **Teachers indicated overall satisfaction with the workshop program and presenter** in terms of:

- Presentation and meeting of objectives,
- Interest level,
- Presentation of information,
- Effective uses of printed materials,
- Usefulness of content,
- Knowledgeability and preparation of presenter.

Eight of nine respondents said they would like more related training.

The second group of workshops, which focused on using cooperative learning for mainstreamed LEP students, was held during the spring of 1987. The series of five workshops, repeated twice, was attended by 18 program teachers. Teachers were asked to complete a pre- and post workshop survey.

Participants surveyed at the beginning of the series had a wide range of familiarity with cooperative learning concepts and techniques. The seven teachers responding to the survey at the end of the course provided generally positive responses.

- All were implementing cooperative learning techniques,
- All felt adequately prepared to use the techniques.

The pre- and post-survey responses for these seven teachers were reviewed for each of the 10 items. The number of responses which became more positive varied from 4 to 7 per item. All teachers felt more comfortable defining the term "cooperative learning"; 6 of 7 believed they were able to organize effective cooperative learning groups and select appropriate materials for cooperative learning better. The two items for which only four of the seven teachers showed improved ratings at the end related to their familiarity with research on cooperative learning and their comfort in using the techniques. The three who were somewhat familiar with the literature and almost always felt comfortable with the techniques initially were the ones whose ratings did not change after the workshop series. **Thus, overall responses were positive.**

Tutor Assistance

During 1985-86 and 1986-87, University of Texas tutors from multicultural classes assisted program LEP students. Plans for 1986-87 were to assign tutors to all four campuses both semesters. Tutors were assigned to all four program schools first semester. Second semester, Anderson did not have any tutors because of problems in assignment coordination and tutor transportation. First semester, 1986-87, 39 tutors were assigned to program LEP students at the four program campuses; 30 tutors were assigned second semester to program LEP students at three schools. In 1986-87, 120 program LEP students received tutoring services. This was considerably more than the 78 program students in 1985-86 who were served.

Two data collection problems impacted counts of students served and comparisons of tutored and nontutored students' performance. Both problems may have resulted in some tutored students being assigned to the nontutored group.

- First semester, no tutor records were received from one school and both semesters data were incomplete from all schools. Also, some tutor records lacked the last names of the tutored students. Attempts were made to trace last names, but in some cases it was impossible and data were lost.
- This year other community groups have been tutoring at the four program schools. This was not determined until spring interviews. Names of those tutored by others were not available. Some program LEP students who were designated as nontutored may have actually been tutored.

Evaluation findings examining the gains of tutored and nontutored program students may be found in this final report under English Proficiency and English Achievement. Significant differences in favor of tutored students were not found for English proficiency on the LAB. While ITBS /TAP percentile scores increased more for tutored students than nontutored in 6 of 8 comparisons, they could not be tested for significance because of small sample size.

National research (Cohen, 1982) suggests peer tutoring programs are most effective when:

- Highly structured with well-planned curricula and methods,
- Focused on basic content and skills, and
- Relatively short in duration (a few weeks or months).

Title VII and UT staff should explore whether more extensive training of tutors could strengthen the program still further. More training of students in the use of ESL techniques might be particularly helpful, because most speak only English. Also, logs indicate tutors often worked with the whole class--this does not really constitute "tutoring."

Parent Workshops

This new 1986-87 component was implemented as planned. A series of six workshops, repeated twice, dealt with the following topics.

- Helping your children learn
- Extracurricular activities
- Preventing runaways
- Helping your children say "no" to drugs and alcohol
- Sexual problems of adolescence

- Ethnic differences in the role and authority of police in assisting students
- Importance of communication
- Adjustment to a new culture and country
- Hispanic conflicts and acceptance
- New immigration law

Parent workshops were given by a Spanish/English speaking clinical psychologist, with a background in education and counseling. Evaluation forms completed at each meeting indicated that parent attendance varied between 3 and 100. Attendance was reportedly even higher at some sessions based on staff reports (all may not have turned in evaluation forms). **Overall, the evaluations were uniformly positive.**

Parents wanted more discussion about the following topics:

- Approaching sex education with their children
- New immigration law
- Drugs in adolescence
- Helping children take advantage of school
- Signs and causes of homosexuality

Curriculum Development

Handbook sections on philosophy methodology/techniques, lessons, and videotapes were written and reorganized. The bibliography has been revised with new entries added. Also, a consultant prepared a synthesis of different ESL methodologies with sample lessons.

ENGLISH PROFICIENCY

The Language Assessment Battery is a language proficiency test. Title VII project students were administered the English portion in the fall and spring to evaluate progress in English oral proficiency. The highest possible score is 92.

The English proficiency objective was that students' average posttest percentile scores on the English Assessment Language Battery (LAB) would be higher than the pretest percentile scores. The objective was met by students at grades 10, 11, and 12 (see Figure 30). AISD Title VII students in grades 7, 8, and 9 had such limited proficiency that their scores remained at the first percentile despite raw score gains. Percentile norms are more sensitive to proficiency gains in the middle and upper ranges of scores. LAB norms are based on English speakers in New York City. Students with little English proficiency must earn 45 to 53 points to get beyond the first percentile (based on grade). Because percentiles were not considered an accurate measure of growth at these grade levels, raw scores were also examined.

Four out of six grade levels showed significant growth in raw scores--grades 8, 9, 10, and 11.

FIGURE 30
LAB PERCENTILE AND MEAN RAW SCORES
FOR PROGRAM STUDENTS, 1986-87 BY GRADE

GRADE	N	FALL		SPRING	
		MEAN RAW SCORE	PERCENTILE	MEAN RAW SCORE	PERCENTILE
7	18	35.22	1	38.44	1
8	10	34.80	1	42.60*	1
9	27	39.50	1	52.18*	1
10	21	51.95	4	60.00*	7
11	9	58.67	5	65.89*	8
12	5	58.20	3	67.20	6

* = Gains significant at $p < .05$ level

In terms of English proficiency the following was also found:

- A slightly greater percentage of program participants made gains in 1985-86 than in 1986-87. Of the program students with both pre- and posttests, 109 of the 131 (83.2%) 1985-86 participants made gains in the English LAB; in 1986-87, 71 (78%) of the 91 participants showed gains.
- In terms of meeting District standards for showing English proficiency (23rd percentile on the LAB), this year four students of the 91 with pre- and posttest scores reached proficiency. None reached proficiency last year.
- The mean raw score gains of both the program students who were tutored by University of Texas students and those who were not tutored were highly significant (at the .0001 level).
- Regression analysis revealed that there was no significant difference between the patterns of growth of the tutored and nontutored groups. Both groups showed raw score gains at all grade levels. In the tutored group these were significant at one out of six grade levels; nontutored raw score gains were significant at three out of six grade levels. (See Figure 31.)
- The percentage of tutored students making gains in 1986-87 (86.4%) was considerably higher than that found in 1985-86 (47.2%).

**FIGURE 31
LAB PERCENTILE AND MEAN RAW SCORES FOR
TUTORED/NONTUTORED STUDENTS IN 1986-87, BY GRADE**

TUTORED		1986-87			
		FALL		SPRING	
GRADE	N	MEAN RAW SCORE	PERCENTILE	MEAN RAW SCORE	PERCENTILE
7	7	34.14	1	38.43	1
8	5	31.00	1	36.80	1
9	16	38.88	1	53.31*	2
10	9	52.44	4	59.56	6
11	5	54.20	3	65.20	8
12	2	42.00	1	57.00	3
NONTUTORED		1985-86			
		FALL		SPRING	
GRADE	N	MEAN RAW SCORE	PERCENTILE	MEAN RAW SCORE	PERCENTILE
7	11	35.91	1	38.46	1
8	5	38.60	1	48.40	2
9	12	40.33	1	50.67*	1
10	12	51.58	3	60.33*	7
11	4	64.25	8	66.75	9
12	3	69.00	7	74.00*	11

* = Significant at $p < .05$

In summary, English proficiency mean raw score gains were seen at all grade levels; these were significant at four out of six grade levels. Most individual students showed gains (78%), and a small group were able to show English oral proficiency this year.

While no significant difference between the tutored and nontutored groups in LAB gains from pre- to posttesting was evident, several factors may have affected these outcomes. All tutor records were not returned, so some students in the nontutored group may actually have been served. Also, this year other service groups offered tutoring to students at the program schools; some LEP students may have been served but this is unknown. Some students were at schools that had tutors for two years, while others were part of a newly implemented tutoring program this year. How these variables influenced the outcomes is unknown.

ENGLISH ACHIEVEMENT (ITBS/TAP)

Most Title VII students have not been in AISD or its programs for LEP students for very long. Two-thirds (65%) of the 120 junior high and 59% of the 132 senior high students in Title VII at year's end had been participating less than two years. Students had to be in AISD a minimum of 1.1 years to be in the achievement analyses since scores for May, 1986 and 1987 were required. Overall, 56% of the Title VII students could be validly tested both years. Students in AISD LEP programs less than two years represented 42% of those tested.

Grade Equivalent Scores--1986 to 1987

Most analyses were performed using percentile scores as required by program objectives. However, grade equivalent scores offer another perspective on the growth students demonstrated. Gains at the three Title VII high schools combined and Murchison Junior High are shown in Figures 32 and 33.

Students scored below the national norm in both 1986 and 1987 in all areas. Students scored closest to the national average in mathematics. Gains of greater than 1 GE help these students close the gap between their performance and the national norm.

- **Murchison 7th and 8th graders showed average gains exceeding 1 GE in reading, language, and mathematics at grade 7. Grade 8 average mathematics gains were considerably less than 1 GE (.69). Last year's mathematics gain was also below 1 GE. Murchison had no 8th grade bilingual mathematics teacher for part of last year; this year Murchison was still understaffed in mathematics--one period each of seventh and eighth grade bilingual mathematics was taught. Thus, many Title VII students had mathematics with an English-speaking teacher.**
- **Title VII high school average gains exceeded 1 GE in mathematics and language at all grades (10, 11, 12) but were considerably less than 1 GE (.2 GE) in reading at grades 10 and 12 (.4 GE). Grade 11 reading gains were strong (1.6 GE). The number tested was less than 20 at grades 11 and 12. The reason for the low reading gains is unclear. Grade 9 gains cannot be discussed because students are tested with the ITBS in grade 8 and the TAP in grade 9. Test characteristics and norms are too dissimilar to allow valid comparisons.**

Percentile Scores (1986-87)

Overall English achievement outcomes were evaluated in terms of the formal objective which stated that program students average posttest percentiles (spring, 1987) would be higher than their average pretest percentiles (spring, 1986).

Figures 34 and 35 show that **the objective was met in each subject by most grade levels; percentiles increased in 18 of 23 comparisons by subject and grade.**

- **By subject, mathematics was the best area, with gains at all grade levels. Reading and science showed the least improvement.**
- **By grade, grade 7 showed the best performance, with gains in all areas. Grade 12 improved in the fewest areas (3 of 5).**

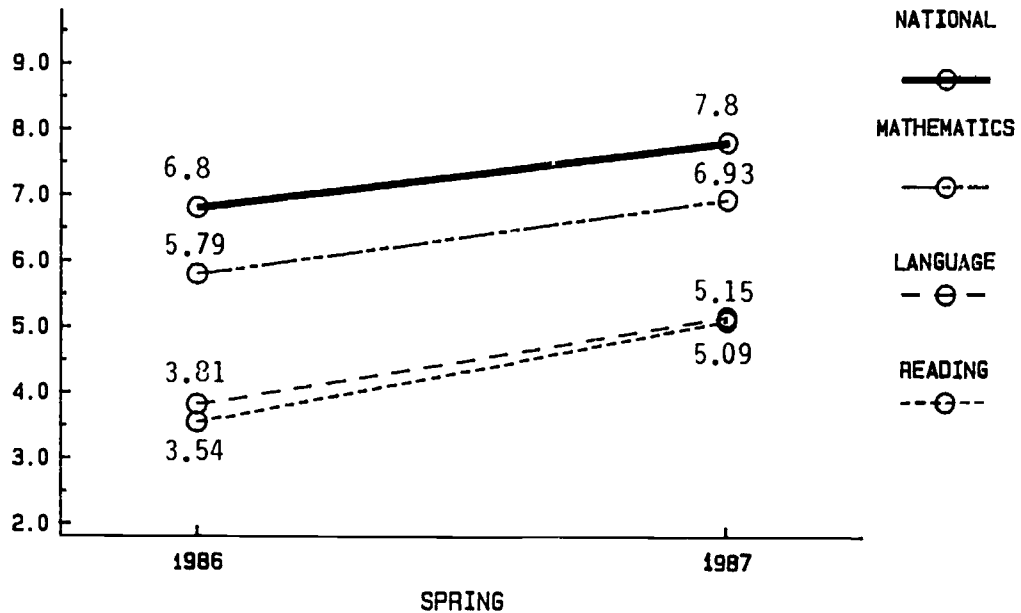
FIGURE 32
TAP MEAN GE SCORES
TITLE VII HIGH SCHOOLS ONE-YEAR FOLLOW-UP--
1986 (PRE) AND 1987 (POST)

GRADE	MATHEMATICS				LANGUAGE				READING				
	TOTAL IN GROUP	NUMBER TESTED	PREMATH MEAN	POSTMATH MEAN	MATHGAIN MEAN	NUMBER TESTED	PRELANG MEAN	POSTLANG MEAN	LANGGAIN MEAN	NUMBER TESTED	PREREAD MEAN	POSTREAD MEAN	READGAIN MEAN
09	60	32		7.89		32		6.81		32		6.24	
10	41	20	7.47	9.04	1.57	20	6.42	7.68	1.26	20	6.45	6.58	0.13
11	19	13	8.38	9.58	1.20	12	6.12	7.21	1.09	13	5.42	6.96	1.55
12	13	9	9.64	11.14	1.50	9	6.41	7.98	1.57	9	6.74	7.16	0.41
TOTAL	133	74	8.17	8.89	0.72	73	6.10	7.26	1.15	74	6.04	6.57	0.53

Note: Gains could not be calculated at grade 9 because students were tested at grade 8 with the ITBS. 1982 norms.

FIGURE 33
 GRADE 7 MURCHISON TITLE VII
 ITBS GE SCORES SPRING, 1986 AND 1987

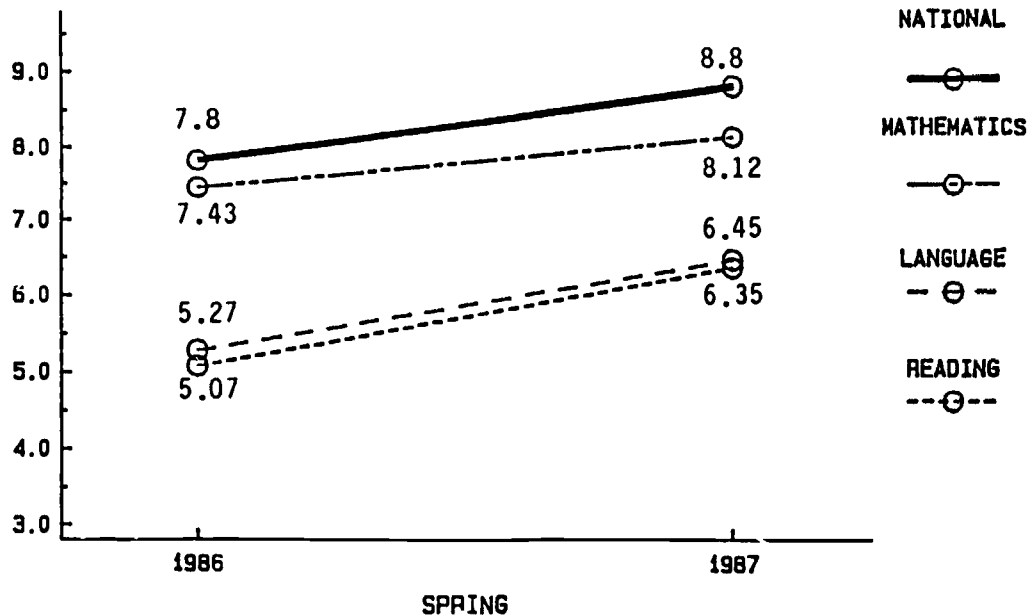
GRADE EQUIVALENT SCORE



Grade Equivalent (GE) scores for
 students tested both years.
 1982 norms. N = 30-37

GRADE 8 MURCHISON TITLE VII
 ITBS GE SCORES SPRING, 1986 AND 1987

GRADE EQUIVALENT SCORE



Includes LEP students dominant or monolingual
 in Spanish or balanced in English and Spanish.
 N = 30-33

FIGURE 34
PERCENTILE GAINS OF TITLE VII STUDENTS ON THE 1987 ITBS/TAP

Grade	Reading				Language				Mathematics				Social Studies				Science			
	N	Median		Gain	N	Median		Gain	N	Median		Gain	N	Median		Gain	N	Median		Gain
		Pre	Post			Pre	Post			Pre	Post			Pre	Post			Pre	Post	
7	36	3.5	10	6.5	31	5	10	5	37	9	18	9	32	5	11.5	6				
8	32	8	13	5	31	12	17	5	31	18	25	7	31	14	13	-1				
10	18	13	8.5	5.5	18	14.5	13	-1.5	18	13	28	15	16	13	16	3	16	5	12.5	7
11	12	1	6.5	-5.5	11	4	10	6	12	14	15	1	12	6	7.5	1.5	12	10	2.5	-7.5
12	10	12.5	12.5	0	10	16	21.5	5.5	10	28.5	39.5	11	9	15	9	-6	9	9	13	4

FIGURE 35
GRADES MEETING THE ACHIEVEMENT
OBJECTIVE ON THE 1987 ITBS/TAP

CONTENT AREA	OBJECTIVE MET	OBJECTIVE UNMET
Reading	7,8,10,11	12
Language	7,8,11,12	10
Mathematics	7,8,10,11,12	
Social Studies	7,10,11	8,12
Science	* 10,12	11

* Ninth graders were excluded from all analyses, because they took the ITBS in 1986 and the TAP in 1987.

** Grades seven and eight do not take the science test.

Additionally, the overall student gains were examined for tutored and nontutored students. Grades 7-8 and grades 10-12 were collapsed to adjust for the small numbers tutored at individual grades. As can be seen in Figure 36, tutored students exhibited more improvement than nontutored in 6 of 8 comparisons. Sample sizes were too small for significance testing.

FIGURE 36
PERCENTILE GAINS OF TUTORED AND NONTUTORED
TITLE VII STUDENTS ON THE 1987 ITBS/TAP

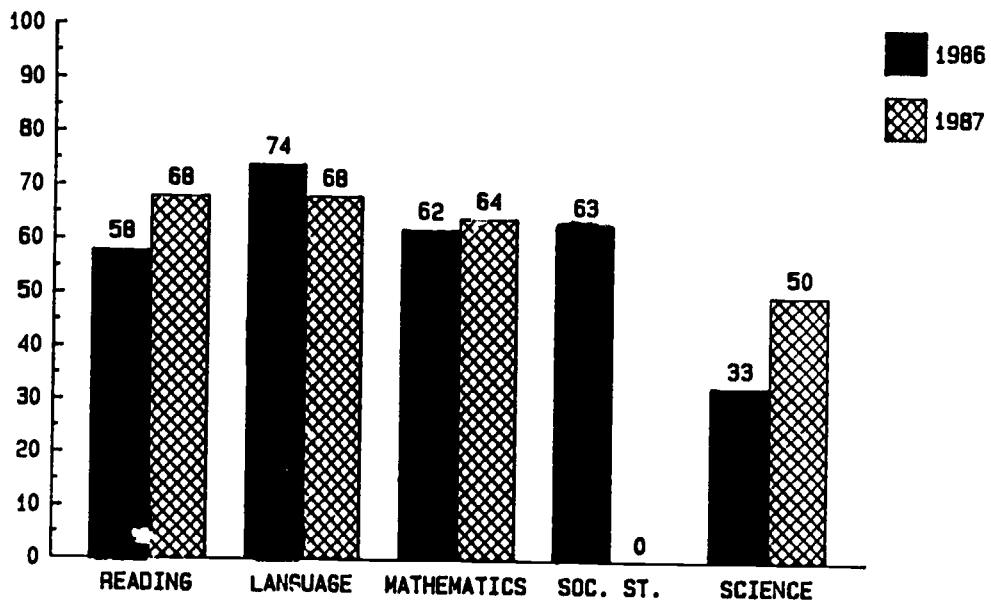
Grade	Tutored	Reading				Language				Mathematics				Social Studies				Science			
		N	Median		Gain	N	Median		Gain	N	Median		Gain	N	Median		Gain	N	Median		Gain
			Pre	Post			Pre	Post			Pre	Post			Pre	Post			Pre	Post	
7-P	Yes	19	4	13	9	18	12	19.5	7.5	11	18	23	5	0	0	0	0				
	No	49	5	11	6	44		12.5	5.5	57	12	24	12	63	11	12	1				
	Total					62				68											
10-12	Yes	3	1	11	10	7	1	8	7	3	6	20	14	2	18	7	-11	4	3	18	15
	No	37	9	8	-1	32	11	16.5	5.5	37	23	33	10	35	10	11	1	33	8	14	6
	Total	40				39				40				37				37			

Only students tutored in each area with pre- and posttests are included; no one tutored in social studies at grades 7 and 8 had both scores.

Also, the percentage of those students with gains in 1986-87 was compared to those with gains in 1985-86. The results are shown in Figure 27. In 1987, a greater percentage of tutored students made gains in reading, mathematics, and science. However, caution should be noted in interpreting the findings; the number of tutored students with ITBS/TAP scores (excluding grade nine) in 1987, was much smaller than in 1986. (The N was so small in both social studies and science that no real comparison can be made.)

FIGURE 37

PERCENTAGE OF TUTORED STUDENTS WITH
ITBS/TAP GAINS 1985-86 AND 1986-87



Scores of both years' ninth graders were excluded

SPANISH PROFICIENCY AND ACHIEVEMENT

Spanish proficiency and achievement was measured by La Prueba Riverside de Realización en Español (Prueba Riverside), which measures achievement in reading, language, mathematics, social studies, and science; it is designed to be of comparable difficulty to the Iowa Tests of Basic Skills. The highest possible raw score varies from 25 to 30, depending upon the subtest. La Prueba Riverside was administered at Murchison, because Title VII LEP students received bilingual instruction in the content areas plus ESL. At Travis, LEP students received one daily period each of Spanish for Native Speakers and ESL; content areas were taught in English. In the case of Travis, La Prueba Riverside was administered to evaluate school achievement in the students' more fluent language.

The two objectives used to evaluate students' Spanish proficiency and achievement stated that the percentage of Title VII Program students making gains in language and other content areas would be higher in 1986-87 than in 1985-86. Overall, the percentage of students making gains increased in every subject area. As can be seen below, both schools met the objective in three of five areas; Murchison's percentage remained the same in science, and Travis narrowly missed the objective in language. It should be noted that Murchison has had limited bilingual mathematics instruction over the past two years.

FIGURE 38
PERCENTAGE OF TITLE VII STUDENTS SHOWING
GAINS LA PRUEBA RIVERSIDE

SUBJECTS	MURCHISON			TRAVIS		
	N	1985-86	1986-87	N	1985-86	1986-87
Reading	75	61%	73%	12	33%	75%
Language	75	59%	72%	13	54%	53%
Mathematics	76	67%	65%	13	46%	85%
Social Studies	76	54%	60%	12	75%	62%
Science	76	57%	57%	12	42%	76%

Mean raw score gains were examined by grade level; 16 of 20 comparisons were significant (see Figure 39). Actual scores are shown in the technical report.

- Grade 7 showed significant gains in all subjects, with grades 9 and 10 showing significant gains in four of five areas. Grade 8 showed significant gains in three areas.
- Significant gains were seen at all four grade levels in reading and mathematics; gains were significant in language and social studies at three grades and in science at two.

Thus, Prueba Riverside results were quite positive.

FIGURE 39
GRADE LEVELS WITH SIGNIFICANT AND
NOT SIGNIFICANT GAINS ON LA PRUEBA RIVERSIDE -- 1986-87

SUBJECT	SIGNIFICANT	NOT SIGNIFICANT
Reading	7,8,9,10	
Language	7,8,9	10
Mathematics	7,8,9,10	
Social Studies	7,9,10	8
Science	7,10	8,9

Gains significant at $p < .01$ level or greater

DROPOUT RATES

Figure 40 shows the 1985-86 secondary dropout rate of program LEP A and B students (English monolingual, or Spanish dominant) and other LEP C, D, and E students (bilingual, English dominant, and English monolingual) attending Title VII program campuses. Rates cover the period of September through July of 1985-86. Students are considered dropouts if they leave AISD during the year and a request for a transcript is not received by July 1. LEP dropout rates could be slight overestimates to the extent that students return to other countries that do not request transcripts.

- The LEP dropout rate for Spanish speakers at the four Title VII schools overall (18%) was well above the District rate (10.7%) and slightly above the District's Hispanic rate (15.3%).
- The rate for program students (LEP A and B) was slightly lower (18%) than that for LEP C, D, and E students (20%) at the Title VII schools.
- The LEP dropout rate was highest at grade 9 (37%) with little difference between program and other LEPs at the schools for both program students and for other LEP students at the schools.
- Travis had the highest LEP dropout rate. For program LEPs it was 34% and for other LEPs it was 29%.
- Murchison Junior High LEP students were less likely to drop out (90%) than Title VII senior high schools, regardless of their LEP status.
- At Anderson, there were no dropouts among the nine program LEP students enrolled; however, 25% of the LEP C, D, E status students left school.

FIGURE 40
ANNUAL 1985-86 SECONDARY DROPOUT RATE FOR TITLE VII SCHOOLS
SPANISH DOMINANT/MONOLINGUAL (LEP A&B) VERSUS
OTHER SPANISH LEP (A, B, & C) STUDENTS

Group	LEP A & B STUDENTS			LEP C,D,E STUDENTS			COMBINED LEP STUDENTS (A,B,C,D,&E)			
	School	Dropouts	Enrollment	Dropout %	Dropouts	Enrollment	Dropout %	Dropouts	Enrollment	Dropout %
Murchison	10	109	9%	4	40	10%	14	149	9%	
Travis	20	58	34%	5	17	29%	25	75	33%	
Johnston	4	17	24%	5	21	24%	9	38	24%	
Anderson	0	9	0%	6	24	25%	6	33	18%	
TOTAL	34	193	18%	20	102	20%	54	295	18%	
<u>Grade</u>										
7	3	42	7%	2	17	12%	5	59	8%	
8	7	67	10%	2	23	9%	9	90	10%	
9	17	45	38%	13	37	35%	30	82	37%	
10	6	27	22%	2	14	14%	8	41	20%	
11	1	12	8%	1	11	9%	2	23	9%	
12	0	0	0%	0	0	0%	0	0	0%	
TOTAL	34	193	18%	20	102	20%	54	295	18%	

52

62

63

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