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ABSTRACT

This report describes six studies on the educational progress of students who entered New York City public schools as non-native English speakers, or English language learners (ELLs). Studies examined number of years students were served in bilingual/English as a Second Language (ESL) programs; characteristics of students receiving these services; the longitudinal progress of ELL students; student performance after program completion; ELL high school performance; characteristics of ELLs who came to English speaking schools with little or no formal schooling, who received bilingual/ESL services for several years, and who entered mainstream monolingual classes within 3 years; and characteristics of ELLs' teachers. Although most districts showed relatively low percentages of ELLs who had been served for over 6 years, some showed substantial numbers of long-term ELLs. Bilingual/ELL programs were especially effective for ELLs entering school in kindergarten and grade 1. Relatively strong English and home-language proficiency contributed to ability to meet program exit standards. Late-entry ELLs who reached program exit standards were highly successful in completing high school. ELLs who entered New York City middle schools as sixth graders were far less likely to reach the program exit standard than those who entered in elementary school. Consistency of programmatic approach was significant in determining exit rates. ELL students may require such accommodations as extended time and/or expanded after school tutorials to meet current graduation requirements. (SM)





NEW YORK CITY BOARD OF EDUCATION

ELL SUBCOMMITTEE RESEARCH STUDIES Progress Report

- Study 1 Number of Years of Service in Bilingual/ESL Programs
- Study 2 Profile of Long-Term ELL Students
- Study 4 Examining the Longitudinal Progress of ELL Students and Their Performance After Exiting From Bilingual/ESL Programs
- Study 5 (part 1) Demographic and Performance Profile of English Language Learners on the English Regents Examination in January 1999
- Study 5 (part 2) Cohort English Regents Analysis
 Class of 2000

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Executive Summary

The Board of Education's Division of Assessment and Accountability (DAA) is conducting several research studies that are intended to inform decision-making related to meeting the instructional needs of English Language Learners (ELLs) more effectively. The studies are designed primarily to inform policy while adding to the research literature about the effectiveness of programs to develop English Language proficiency, thus ensuring the success of ELLs in the educational mainstream.

Three of the six research studies have been completed (Studies 1, 4, and 5), preliminary data are available for a fourth (Study 2), and two more are slated for completion in Fall, 2000 (Studies 3 and 6). The studies range from a snapshot of the number of years students have been served in bilingual/ English as a Second Language (ESL) programs (Study 1) to an analysis of the characteristics of students who have received bilingual/ESL services for several years (Study 2). Differentiating the characteristics of ELLs is further considered in Study 4 which examines the longitudinal progress of a cohort of ELLs, and tracks their performance after they exit from bilingual/ESL programs. ELL performance is examined at the high school level in Study 5 which presents a demographic and performance profile of ELLs who have taken the English Regents examination.

Two studies are pending, awaiting the availability of additional data. One (Study 3) will utilize survey and achievement data to examine the characteristics of ELLs. Among the profiles that will be considered are students who come to an English Language School System with little or no formal schooling (Students with Interrupted Schooling), those who receive Bilingual/ESL services for several years (Long-Term ELLs) and those ELLs who enter mainstream monolingual classes within three years (Early Exit ELLs). The final study (Study 6) will explore the characteristics of the teachers who serve ELLs in terms of years of experience and certification.

Several major conclusions have emerged from the findings of the studies completed to date. The studies are summarized in the Description of Research Studies section. Completed studies may be found in the appendices. The most significant findings and their implications are presented below:

- Although most districts showed relatively low percentages of ELLs who had been served for seven or more years, there was wide variation among them with some districts showing a substantial percentage of long-term ELLs in their populations. This finding has important implications for planning instruction in districts that show higher than average percentages of long-term ELLs (Study 1).
- Study 4 which examines the longitudinal progress of a cohort of ELLs and their performance after exiting from bilingual/ESL programs generated several interesting findings that have major implications for policy and planning.



Before presenting the findings, however, it is important to note that the study is not intended to provide an evaluative analysis of the effectiveness of different types of programs for ELLs. Specifically, inferential comparison of the relative efficacy of bilingual versus ESL programs is clearly beyond the limits of the study's methodology. No attempt has been made to control for differences in the academic or social needs or entering language proficiency levels of students served in different programs. Moreover, there are no data on the quality and level of program implementation. Accordingly, any differences in student performance between the programs are likely to be attributable to factors other than differences in their educational philosophies and methods.

With these factors in mind, however, Study 4 presents several significant descriptive findings, among them are the following:

- New York City's bilingual/ESL programs were especially effective for ELLs
 who entered the school system in kindergarten and grade 1, the grades of
 entry for the majority of ELLs. These students acquired proficiency in English
 relatively quickly and were highly successful later in the educational
 mainstream as measured by standardized test scores (Study 4).
- Relatively strong proficiency in both English and the home language (for Spanish speakers) contributed to the students' ability to meet the program exit criterion. However, large numbers of students who entered the school system with extremely low proficiency in English were also able to reach the program exit criterion within three years (Study 4).
- Conversely, students who entered with relatively low levels of proficiency in English as well as in their home language, and students who entered late in their school careers, i.e., grade 6 and grade 9, had more trouble meeting the exit criterion. Only one in seven grade 9 entrants reached the exit criterion before leaving high school (Study 4).
- Late-entry ELLs who did reach the program exit criterion were highly successful in completing high school. Although late-entrants who did not reach the exit criterion had lower graduation rates than those who did, still nearly three in five of the grade 9 entrants who remained in bilingual/ESL programs graduated (Study 4).
- ELLs who entered New York City middle schools as sixth graders were the least successful of the grade cohorts (Study 4).
- Consistency of programmatic approach (bilingual or ESL) appeared to be a
 particularly important determinant of program exit rates. That is, for each
 language group, cumulative exit rates were relatively high and parallel for
 students served exclusively in ESL and bilingual programs. The exit rates
 were substantially lower for students who received mixed services, i.e.,
 alternating between bilingual and ESL from one year to the next (Study 4).



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- Across all grade cohorts, more than one in three ELLs who failed to reach
 program exit criterion were designated as special education students. There
 is a need to learn more about these students and the relationships between
 their language needs and diagnosed educational disabilities (Study 4).
- Clearly, there are several important implications to these findings that lend themselves to the following recommendations:
- 1. Vigorous tracking and follow-up should be instituted for students receiving mixed services (i.e., alternating between bilingual and ESL from one year to the next) given the substantially lower exit rates reported for these students.
- 2. Careful examination and modification of programs, where appropriate, should be considered for bilingual/ESL programs designed for middle and high school students to ensure their greater academic success given the relatively low exit rates and academic performance reported for these students.
- 3. Additional work must be done to investigate the relationships between the language needs and diagnosed educational disabilities of special education students who fail to meet program exit criterion.
- In Study 5, more than seven times as many ELLs and three times as many English proficient students took the English Regents in January 1999 (ELLs=3,806, EP=48,556) as in January 1998 (ELLs=521, EP= 14,888); the increase in ELLs was 2.4 times that for English proficient students.
- Despite the large increase in the number of students taking the exam in January 1999, the percentage of students receiving graduation credit in English declined by only 1.5 percentage points (from 76.4 percent in January 1998 to 74.9 percent in January 1999) for English proficient students and by 4.0 percentage points (from 40.1 percent to 36.1 percent) for ELLs (Study 5).
- There was a large decline in the percentage of ELLs receiving Regents credit (i.e., scoring 65 or higher) on the two tests, from 18.8 percent in January 1998 to 12.8 percent in January 1999 (Study 5).
- ELLs who scored between 65-100 on the English Regents had, on average, higher average scores (21st percentile) on the Language Assessment Battery, a test of English language proficiency, than did students who scored between 55-64 (16th percentile) or students who failed the exam (9th percentile) (Study 5).
- The major implication of Study 5 is that:
 - ELL students may require some accommodations such as extended time and/or expanded after-school and Saturday tutorials to meet the new Regents English requirements for graduation.



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Description of Research Studies

Background

The research studies being conducted by the Division of Assessment and Accountability (DAA) are intended to inform decision-making related to meeting the instructional needs of English Language Learners (ELLs) more effectively. These studies use existing demographic and performance data to differentiate ELLs so that appropriate programs may be designed to best meet the needs of students with particular characteristics. Several of the studies are specifically intended to provide information to inform policy. In addition, Study 4, which examines the longitudinal progress of ELL students and their performance after exiting from Bilingual/ESL programs, adds to the research literature about the effectiveness of programs to develop English language proficiency, and ensuring the success of ELLs in the educational mainstream.

The research studies are a work in progress. Those already completed are summarized below. More complete information on each of these studies is appended.

Study 1: Number of Years of Service in Bilingual/ESL Programs (1997-98)

Goal: To disaggregate the number of years of bilingual and/or ESL program

services for ELLs, overall by grade and by district for the purpose of

instructional planning.

Findings: In 1997-98, 65.3 percent of ELLs were served in bilingual/ESL programs

for three years or less, 25.8 percent for 4-6 years, and 10.7 percent for seven or more years. The number of years that students are served varies by grade and by district, A similar pattern of results was observed

in the 1998-99 school year.

<u>Conclusion:</u> The data have important implications for bilingual/ESL program policy and

planning. Although most districts showed relatively low percentages of ELLs who had been served for seven or more years, there was wide variation among them with some districts showing a substantial percentage of long-term ELLs in their populations. The dissaggregation of these data for the 1997-98 school year were provided to each

superintendent so that they might better plan instructional programs for

the ELLs in their districts.

Study 4 provides additional information to that reported here about the relationship between grade of entry and exit rates, and examines the characteristics of students who exited after 6-9 years, and those who never exited from bilingual/ESL programs.



Study 2: Profile of long-term ELL Students

Goal: To examine the similarities and differences among students who are

defined as "long-term ELLs" (i.e., those receiving services for 7 or

more years).

Findings: Several of the findings from Study 4 address the issue of "long-term"

ELLs" specifically the description of the "Characteristics of Early-Exit And Late-Exit ELLs" and the summary of "School Completion

Outcomes" (See attached Study 4).

Study 4: Examining the Longitudinal Progress of ELL Students and their

Performance After Exiting from Bilingual/ESL Programs

Goal: To update earlier findings for cohorts of students who entered

kindergarten and grade 1 during fall 1990 and grades 2, 3, 6, and 9 in fall 1991. The study tracked the progress of these students in meeting the criterion for exiting bilingual/ESL programs, their achievement on standardized tests in reading and mathematics

given in English, and their progress toward school completion.

Findings: This report presented the outcomes of a longitudinal study of ELLs

who entered the New York City public schools in fall 1990 in kindergarten and first grade or in fall 1991 in grades 2, 3, 6, and 9. The study tracked the educational progress of these students for

nine and eight years, respectively.

The New York City public school system identifies students as ELLs through a home language survey and a test of English language proficiency known as the LAB. Students who score at or below the 40th percentile on the LAB are entitled for bilingual/ESL programs. The same 40th percentile is used as the exit criterion for these programs.

The study documented the time it took cohort students to reach the bilingual/ESL program exit criterion, their performance on standardized tests of reading in English and mathematics after program exit, and, for the grades 6 and 9 cohorts, school completion rates. Outcome data were broken-down by type and consistency of bilingual/ESL program and home language.

The study did not employ the methodological or statistical controls necessary to address the issue of the relative efficacy of bilingual and ESL-only philosophies or instructional methods. Nevertheless, the study is a valid description of the educational progress demonstrated by cohorts of ELLs who entered these programs at the beginning of the 1990's. The key findings are summarized below.



Grade of Entry of ELLs

- Most (63.6 percent) of the 20,060 ELLs in the study entered the New York City public schools in kindergarten.
- The next most frequent grade of entry was grade 1 (2,488 students or 12.4 percent) followed by grade 9 (1,950 students or 9.7 percent).

Years to Exit Bilingual/ESL Programs

- There was a strong relationship between grade of entry and both annual and cumulative exit rates. The early-grade cohorts exited faster and in larger cumulative percentages than the higher-grade cohorts.
- 62 percent of the kindergarten cohort reached the program exit criterion in three years and 75.9 percent within six years.
- 51.5 percent of the grade 1 cohort exited within three years and 66.1 percent within six years.
- After four years of high school, 14.6 percent of the grade 9 cohort reached the exit criterion.

Exit Rates by Type of Program

- Exit rates were faster and higher for students served exclusively in ESL or bilingual programs as opposed to those who were served alternately in one or the other each year, i.e. the mixed service group.
- For the kindergarten cohort, three-year exit rates were 84 percent for ESL students, 73 percent for bilingual students, and 20.4 percent for the mixed group. Three-year exit rates were similar for the grade 1 cohort; 80 percent for ESL, 62 percent for bilingual, and 20 percent for the mixed service students.
- There was divergence in the patterns for the grades 2 and 3 cohorts with the cumulative exit rates for bilingual students falling below those for the ESL students and above those for the mixed group. For the grade 2 and 3 cohorts respectively, cumulative exit rates were 96.2 and 93.2 percent for ESL students, 78.8 and 81.1 percent for bilingual students, and 69.0 percent and 65.8 percent for the mixed service students.

Types of Programs Serving ELLs by Home Language

 With the exception of Spanish-speaking students in kindergarten and grade 1 and Haitian speakers in grade 1, most ELLs in the grades 1 and 2 cohorts were served exclusively in ESL programs.



- Among Spanish-speakers in both cohorts, more than half of ELLs were served in bilingual programs and more than 30 percent were served in mixed programs.
- The greater numbers of Spanish-speaking ELLs provided greater administrative opportunities for the creation of bilingual classes to serve them.

Exit Rates by Home Language and Type of Program

- The relationships between type of program and cumulative exit
 rate were similar, for the most part, across language groups. That
 is, for each language group, cumulative exit rates were relatively
 high and parallel for students served exclusively in ESL and
 bilingual programs. The exit rates were substantially lower for
 students who received mixed services, i.e. alternating between
 bilingual and ESL from one year to the next.
- Among Spanish- Haitian-speaking students, those served exclusively in ESL programs had slightly higher exit rates than those served exclusively in bilingual programs. This pattern was reversed for Chinese- and Russian-speakers with slightly higher exit rates for those served in bilingual than ESL programs.
- Among Korean speakers, the cumulative exit rate of the mixed group nearly caught up to those of the ESL and bilingual groups in the third year of service.

Characteristics of Early-Exit and Late-Exit ELLs

- There was a strong relationship between time of exit from bilingual/ESL program and proficiency in both English and the home language.
- Upon entry into the New York City public schools, 83.7 percent of students who never reached the exit criterion scored at the first percentile on the English LAB, compared to 79.2 percent of lateexit (i.e. 6–9 years) students and 57.3 percent of early-exit (i.e. 1 – 3 years) students.
- For the early-exit group, 36 percent of entering Spanish-speakers scored above the 61st percentile on the Spanish LAB.
 Comparable percentages were 25.4 percent for the late-exit group and 20.3 percent for those who never exited.
- More than one-third of students who never exited the programs were identified as disabled and served in self-contained special



education classes as of June 1999. Comparable statistics were four percent for the early-exit group and six percent for all city students.

Standardized Test Performance by Year of Program Exit

- In general, students who exited bilingual/ESL programs within three years, i.e. in 1991 to 1994, outperformed the city overall on the citywide reading test administered in 1998. Those who exited after four years approached the performance of the city overall.
- Students who exited the programs within four years outperformed the city overall on the citywide mathematics test in 1998.
- Since the majority of students in the kindergarten and grades 1 and 2 cohorts exited the programs within three and four years, in general former ELLs performed well on standardized tests of reading and mathematics when they entered mainstream classes.

1998 Standardized Test Performance by Type of Program

- Students who exited ESL programs showed the same pattern of performance on the 1998 citywide reading test as did all former ELLs. That is, among those who exited in the first three years, the majority of students in the cohorts, outperformed the city overall. Those exiting after that showed lower levels of performance. The pattern of performance for students exiting bilingual programs was more variable. In many cases, students who exited bilingual programs relatively late, i.e. after six years, outperformed those who had exited these programs earlier as well as those who exited ESL programs at the same time. Although students exiting mixed programs generally scored high on the 1998 citywide reading test, these students showed relatively low cumulative exit rates.
- Students who exited all three types of programs did generally well on the 1998 citywide mathematics test.

School Completion Outcomes

 Students in the grades 6 and 9 cohorts who reached the program exit criterion showed relatively high graduation rates from high school. Conversely, these students showed relatively low dropout rates. The school completion rates of these students were better than those for New York City high school students overall.



Those who did not reach the exit criterion showed low graduation rates and high dropout rates.

Conclusion: Within the stated limitations of the study, the overall conclusion that emerges from the findings is that New York City's bilingual/ESL programs have demonstrated substantial effectiveness in developing the English language proficiency of ELLs and ensuring their success in the educational mainstream. Deeper exploration of the findings reveals considerable variation in the relative success of these students and identifies subgroups of ELLs who require additional attention.

The major conclusions are as follows:

- 1. New York City's bilingual/ESL programs were especially effective for ELLs who entered the school system in kindergarten and grade 1, the grades of entry for the majority of ELLs. These students acquired proficiency in English relatively quickly and were highly successful later in the educational mainstream as measured by standardized test scores.
- 2. Relatively strong proficiency in both English and the home language (for Spanish speakers) contributed to the students' ability to meet the program exit criterion. However, large numbers of students who entered the school system with extremely low proficiency in English were also able to reach the program exit criterion within three years.
- 3. Conversely, students who enter within relatively low levels of proficiency in English as well as their home language, and students who entered late in their school careers, i.e. grade 6 and grade 9, had more trouble meeting the exit criterion. Only one in seven grade 9 entrants reached the exit criterion before leaving high school.
- 4. Late-entry ELLs who did reach the program exit criterion were highly successful in completing high school. Indeed, the graduation rates for ELLs who entered the New York City schools in grade 6 and grade 9 and achieved the bilingual/ESL program exit criterion were higher than the general student population. Although late-entrants who did not reach the exit criterion had lower graduation rates than those that did, still nearly three in five of the grade 9 entrants who remained in bilingual/ESL programs were graduated.



- 5. ELLs who entered New York City middle schools as sixth graders were the least successful of the grade cohorts. A far lower percentage of the middle school entrants reached the program exit criterion than did those that entered elementary school. Similarly, a far lower percentage of middle school entrants were graduated from high school than those who entered New York City schools as high school students in grade 9. Fifty-five percent of the grade 6 entrants never reached the program exit criterion after eight years in the school system, and only 24 percent of these students graduated high school with 45.7 percent dropping out.
- 6. Consistency of programmatic approach appeared to be a particularly important determinant of program exit rates. In fact, consistency of approach proved more important than the program's specific educational philosophy and methods. ELLs who were served consistently in either bilingual or ESL programs exited at faster and higher rates than those who were alternately served by one and the other program in successive years. These findings were true for all language groups. The study did not investigate the quality of program implementation in terms of the qualifications of staff, the appropriateness of educational materials, and the delivery of instruction. No doubt, these factors would have accounted for a substantial portion of the variance in student outcomes.
- 7. Across all grade cohorts, more than one in three ELLs who failed to reach the program exit criterion were special education students. There is a need to learn more about these students and the relationships between their language needs and diagnosed educational disabilities.

Although this study has provided a detailed picture of the effectiveness of New York City's bilingual/ESL programs in developing the English language proficiency and academic skills of ELLs who entered the schools at the beginning of the 1990's, there are many issues that remain to be answered. Chief among these are: (1) the proper mix of instructional and support services that will ensure the educational success of those ELLs who fail to reach the exit criterion even after eight and nine years; and (2) educational strategies that will enhance the academic success of ELLs who enter New York City schools in the middle and high school grades. An effective strategy for addressing these issues is to identify replicable programs that have demonstrated success with these types of students. In doing so it is crucial to distinguish between causal and correlative effects. That is, programmatic aspects that have led to student success as opposed to those that are merely coincidental. In addition, the



identified effective factors must be adaptable for implementation elsewhere, rather than those that are unique to a situation or beyond the control of program administrators.

Study 5: Demographic and Performance Profile of English Language
Learners on the English Regents Examination in January 1999
(Part 1)
Cohort English Regents Analysis Class of 2000 (Part 2)

Goal: To examine the characteristics of ELLs who passed the English Regents examination in January 1999.

Findings: There were several findings in this two-part study:

- More than seven times as many ELLs took the English Regents in January 1999 (3,806) as in January 1998 (521); the increase in ELLs was 2.4 times that for English proficient students.
- Despite the large increase in the number of students taking the exam in January 1999, the percentage of students receiving graduation credit in English declined by only 1.5 percentage points (from 76.4 percent in January 1998 to 74.9 percent in January 1999) for English proficient students and by 4.0 percentage points (from 40.1 percent to 36.1 percent) for ELLs.
- There was a large decline in the percentage of ELLs receiving Regents credit (i.,e., scoring 65 or higher) on the two tests (from 18.8 percent in January 1998 to 12.8 percent in January 1999.
- ELLs who were recent immigrants (18 percent) were more likely to pass (score between 65-100) on the English Regents in January 1999 than were ELLs who were not recent immigrants (11 percent).
- By language group, the January 1999 pass rates (scores from 55-100) were as follows: Russian, 51 percent; Chinese, 47 percent; and Spanish, 30 percent. Students from all other language groups combined achieved a pass rate of 40 percent.
- Students who had received three years or less service in a bilingual and/or ESL program (4 percent) were more likely to achieve passing scores (55-100) on the January 1999 English Regents than were students who had received four or more years of service (32 percent).
- The pass rates of students served in bilingual (33 percent) or ESL (35 percent) programs were comparable on the January 1999 English Regents.



ELLs who scored between 65-100 on the English Regents had, on average, higher average scores (21st percentile) on the Language Assessment Battery, a test of English language proficiency, than did students who scored between 55-64 (16th percentile) or students who failed the exam (9th percentile).

Conclusion: Greater numbers of ELL students than ever before are taking the English Regents examination. Nevertheless, there are many ELLs who are in danger of not meeting the new graduation standards. Some differences in the characteristics of ELLs who passed the exam and those who failed were identified. This information is being used to modify instructional practices for ELLs.

Development of Student Profiles (To be Completed in Fall 2000) Study 3:

To develop profiles of the characteristics of different groups of ELL Goal: students

Analytic Strategy:

Work with the Office of Bilingual Education and the Division of Management Information Services to develop a procedure for collecting information about prior schooling using the Automate the Schools (ATS) data system. Develop decision rules to categorize ELL students into three groups:

- 1. Students with little or no prior schooling (No Prior Schooling)
- 2. Students who are recent immigrants (Recent Immigrants)
- 3. Students who are native born and whose primary language is not English (Native Born Non-English-Speakers)

Present a profile of students by summarizing data elements including years of service, language group, type of program, progress in attaining English language proficiency, exit rates etc. for each of the three groups

Timeline:

Collection of No Prior Schooling data on ATS is underway for the 1999-2000 school year. These data will be used to carry out this study which will be completed in Fall, 2000

Profile of ELL Staff Characteristics (Feasibility Study Underway) Study 6:

Goal: To determine the types of teachers required to teach ELL students now and in future years based on the characteristics of ELL students

1. Explore the feasibility of obtaining data on teacher Analytic:



Strategy:

licensing for current teachers in the system and matching these teacher data to student-level information

- 2. Explore strategies for obtaining projections of types of teachers needed based on information about the types of students currently in the system and on projections of the types of students who will be entering the system in the future
- 3. Conduct analysis of available information

Timeline:

Feasibility of collecting and analyzing these data is presently being explored



Appendix 1

Study 1 Number of Years of Service in Bilingual/ESL Programs





NEW YORK CITY BOARD OF EDUCATION

ELL SUBCOMMITTEE STUDY 1

Number of Years of Service in Bilingual/ESL Programs

April 20, 1999

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Years of Service for English Language Learners for 1997-98 Community School Districts and High Schools

Total	%	*	25.5%					6.4%		99.2%
To	N	1,493	44,995	35,084	28,450	20,866	13,919	11,264	20,690	176,761
Special Education	%	3.3%	9.3%	10.2%	12.3%	11.9%	11.6%	11.5%	30.0%	100.1%
Special	N	969	1,935	2,121	2,568	2,494	2,416	2,399	6,273	20,902
General Education	%	*	27.6%	21.1%	16.6%	11.8%	7.4%	5.7%	9.2%	99.4%
General E	2	767	43,060	32,963	25,882	18,372	11,503	8,865	14,417	155,859
	Years of Service	0	_	2	က	4	5	9	7+	Total

*An asterisk indicates less than one percent.

Over two-thirds (65.3) percent of general education students and 35.1 percent of special education students (61.4 percent overall)
 were enrolled in bilingual/English as Second Language programs for three years or less in 1997-98.



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BESIS 1997-98 YEARS OF SERVICE BY GRADE ... G E N E R A L E D U C A T I O N ...

TOTAL #0YRS 0YRS #1YRS	oyrs 0%				1YRS	#2YRS	2YRS	#3YRS	3YRS	# *	4YRS	#5YRS		#6YRS	6YRS	#7+YRS	7+YRS
4 0% 142 14% 136	0% 142 14% 136	142 14% 130	142 14% 130	130		_	% %	84	%	85	13%	Z	%[[211	%		Ŕ
19762 88 0% 19560 99% 114	0% 19560 99%	19560 99%	19560 99%		114		1%.			•	•	•	•	٠	•		
16487 85 1% 4863 29% 10757	1% 4863 29% 10757	4863 29% 10757	4863 29% 10757	10757			%59	775	2%	ø	. %0	•		-	. %0		
15449 62 0% 2240 14% 3680	0% 2240 14%	2240 14%	2240 14%		3680		24%	8492	25%	968	%9	7	. %0	•	•		
11108 45 0% 1935 17% 1670	0% 1935 17%	1935 17%	1935 17%		1670		15%	2108	19%	4614	45%	726	%/	10	. %0		
10593 46 0% 1830 17% 1493	0% 1830 17%	1830 17%	1830 17%		1493		14%	1462	14%	1821	17%	3147	30%	778	%_	16	% 0
9821 28 0% 1617 16% 1422	0% 1617 16%	1617 16%	1617 16%		1422		14%	1323	13%	1093	11%	1186	12%	2514	56%	638	%9
9258 33 0% 1715 19% 1424	0% 1715 19%	1715 19%	1715 19%		1424		15%	1331	14%	1096	12%	695	8%	958	10%	2006	22%
9443 37 0% 1831 19% 1465	0% 1831 19%	1831 19%	1831 19%		1465		16%	1454	15%	1163	12%	289	2%	589	%9	2217	23%
9797 45 0% 1965 20% 1598	0% 1965 20%	1965 20%	1965 20%		1598		16%	1491	15%	1281	13%	775	%8	581	%9	2061	21%
16897 163 1% 2943 17% 3191	1% 2943 17%	2943 17%	2943 17%		3191		19%	2566	15%	2104	12%	1440	%6	1157	%/	3333	20%
12942 94 1% 1381 11% 3230	1% 1381 11%	1381 11%	1381 11%		3230		25%	2233	17%	1858	14%	1199	%6	991	88	1956	15%
8704' 34 0% 791 9% 1802	0% 791 9%	791 9%	791 9%		1802		21%	1629	19%	1430	. 16%	986	11%	992	%6	1266	15%
4547 33 1% 247 5% 981	1% 247 5% 981	247 5% 981	247 5% 981	981			22%	869	19%	802	18%	543	12%	408	%6	199	15%
155859 797 1% 43060 28% 32963	797 1% 43060 28% 32963	43060 28% 32963	43060 28% 32963	32963			21%	25882	17%	18372	12%	11503	%/	8865	%9	14417	%6



BESIS 1997-98 YEARS OF SERVICE BY GRADE ... G E N E R A L E D U C A T I O N ...

7+YRS	100%						%/	12%	11%	17%	12%	%_
	-			•	•	•	=	52	20	4	19	120
#7+YRS							vo.	Q.	,e	%	%	
6YRS						2%	19%	7%	%6	4%	3%	2%
#6YRS						ω	53	15	18	Ξ.		86
5YRS #	•	•	•	·	2%	20%	24%	10%	2%	%9	%9	%/
	•		•		7	30	88	2	თ	4	o	128
#5YRS				. %/	31%	19%	14%	11%	12%	14%	% 6	11%
4YRS												
#4YRS				4	46	78	8	8	83	ક્ષ	15	205
3YRS #	•	•	%	17%	24%	20%	10%	14%	16%	16%	12%	13%
	٠		4	8	8	8	15	59	8	14	8	239
a #3YRS			37%	25%	21%	17%	15%	23%	24%	21%	33%	25%
2YRS		_					23	47 2	46 2	22	1 2	
#2YRS			æ	105	8	25	N	4	4	Ŋ		448
1YRS		%66	54%	19%	16%	17%	12%	22%	19%	21%	. 53%	29%
#1YRS 1	٠	159	85	33	54	52	8	45	37	53	88	530
	•		%9	2%	3%	%		%	%	%	%	%
S OYF			0	0	လ	ო	-	2	7	က	2	42
#0YR	<u>.</u>	. 160	o.	Q.	0	6	. 156 .	9	0	n	8	80
FOTAL		16	169	202	150	149	<u>1</u>	206	190	253	162	1798
GRADE	Unknown	×	-	8	က	4	r.	9	7	œ	თ	
DISTRICT GRADE TOTAL #0YRS 0YRS	-											TOTAL



BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

7+YRS						%0	12%	8%	12%	20%		25%		3%
(+)	-					_	4	25	42	4		_		113
#7+YRS														
6YRS					1%	13%	%9	3%	3%	13%				3%
#6YRS					3	48	19	Ξ	12	-				96
5YRS			%0	%	15%	%	2%	%9	4%		33%	25%	25%	4%
#5YRS		·	-	4	ß	28	18	19	5		-	-	-	136
4YRS #		٠	3%	28%	16%	15%	20%	14%	16%	13%				11%
#4YRS 4	•	•	13	91	56	55	88	4	22	-	•	٠	•	382
3YRS #		. %	38%	19%	13%	15%	15%	23%	13%	13%		-	•	14%
#3YRS 3\		თ	143	19	46	ន	92	82	4	-	•	•	•	480
2YRS #3		52%	34%	21%	20%	23%	17%	17%	20%	13%		. %05	. %09	25%
#2YRS 2Y	83	215	125	29	69	18	88	55	7	-	•	8	· 84	775
1YRS #2	%56	46%	24%	32%	34%	25%	79%	29%	32%		33% .			43%
#1YRS 1Y	149	189	06	501	117	8	88	85	110	•	-	٠		1522
	1%	%0	%0		%0		1%		%0	•	33%	•	25% .	%0
'RS 0YI	4	α	-		-		α		-		-		-	13
FAL #0	674	415	373	326 .	344	. 356	344	319 .	347	&	ო	4	4	3517
GRADE TOTAL #0YRS 0YRS	¥	-	2	က	4	ß	g	7	ω	6	9	Ξ	12	
DISTRICT	8													TOTAL



BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

7+YRS					4%	10%	22%	35%	37%	%8
	•	•	•	•	8	5	88	51	88	132
#7+YRS				:						
6YRS				%0	13%	30%	14%	4/	2%	%9
#6YRS				-	21	40	18	10	ß	92
5YRS			%0	%6	29%	14%	8%	10%	7%	7%
#5YRS	•	•	-	19	46	19	5	15	7	117
4YRS #	•	•	11%	48%	17%	%6	17%	13%	13%	13%
#4YRS 4	٠	•	8	62	27	12	2	19	5	215
3YRS #		%9	36%	19%	18%	11%	11%	13%	13%	14%
#3YRS 3	٠	15	88	39	53	15	4	19	13	523
2YRS #3	%	28%	39%	14%	10%	8%	14%	12%	12%	21%
#2YRS 2Y	ß	148	95	53	16	=	18	11	5	320
1YRS #2	%86	34%	12%	%6	11%	17%	13%	11%	15%	31%
#1YRS 1Y	298	87	53	18	17	22	17	91	16	520
		5%	5%	%0	1%	4%	%			1%
IS OYF		S	4	-	-	-	-		•	5
L #0YF	303	255	239	204	159	133	127	147 .	104 .	1671
E TOTA	~	- 2	2	8	4	ۍ 1	6	7	8	91
GRADE	_	·	••		•		_	•	==	
DISTRICT GRADE TOTAL #0YRS 0YRS	က									TOTAL



S						%9	30%	31%	30%	. 22%	. %
7+YRS					-	თ	88	46) 98	=	0
#7+YRS		•	•		•						140
6YRS			ē		. %9	26%	13%	14%	8%	14%	%9
#6YRS					6	4	17	2	6	7	5
5YRS #	•	•	•	7% .	32%	12%	12%	%8	%6	%	%/
#5YRS 5	٠	•		15	51	19	र्ट	12	Ξ	4	127
	•	%0	. %/	41%	19%	16%	13%	%6	12%	20%	12%
RS 4YRS		-	8	87	8	53	91	4	4	6	217
S #4YRS		3%	51%	20%	11%	14%	12%	11%	20%	22%	16%
S 3YRS		თ	137	£3 ,	8	8	₹.	17	24		. 586
#3YRS	1%.	51%	23% 1	14%	17%	11%	2%	2%	%8	10%	18%
2YRS	2		63 23	·	28 17	17 11	6	10 7	10 8	5 10	
#2YRS		148		8							322
1YRS	%66	45%	17%	17%	15%	12%	13%	18%	12%	%9	33%
#1YRS	295	131	45	36	24	19	16	27	4	ო	610
		%0	2%			2%		1%	1%		1%
YRS 0	•	-	S	•	•	ო	•	2	-	-	12
TAL #0	297 .	290	270	211 .		154	126 .	149	119	51 .	1828
GRADE TC	¥	-	8	က	4	S	9	7	80	σ	
DISTRICT GRADE TOTAL #0YRS 0YRS	4										TOTAL .



BESIS 1997-98 YEARS OF SERVICE BY GRADE ... G E N E R A L E D U C A T I O N ...

7+YRS						10%	33%	28%	24%	%8
#7+YRS						15	46	35	ည	127
		•	•	1%	13%	56%	10%	13%	%6	%/
#6YRS · 6YRS	•	•	•	-	11	8	14	16	12	86
5YRS #	•	,	•	13%	28%	21%	11%	12%	2%	%8
#5YRS		•		প্ল	37	8	15	15	7	126
4YRS		%0	11%	44%	24%	%8	11%	10%	11%	12%
#4YRS		-	27	73	3	12	15	12	14	185
3YRS		%9	29%	25%	14%	14%	%6	15%	17%	19%
#3YRS		41	139	98	18	21	12	19	8	281
2YRS		%29	20%	%6	12%	11%	12%	13%	21%	21%
		156	48	15	15	16	17	16	88	311
1YRS #2YRS	100	26%	8%	12%	%6	10%	13%	%8	12%	24%
#1YRS	195	9	20	20	12	14	18	10	16	365
0YRS		1%	1%				. 1%		1%	%0
#0YRS		N	N				-		-	9
TOTAL	195	233	236	167	130	146	138	123	131	1499
GRADE	¥	-	8	က	4	2	9	7	80	
DISTRICT GRADE TOTAL #0YRS 0YRS	ĸ									TOTAL





BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

7+YRS					%0	12%	31%	31%	27%	88
#7+YRS 7.	٠	•	•	•	4	52	275	287	258	946
		. %0		. %0	%6	29%	10%	%9	%6	%9
#6YRS 6YRS	•	-		-	100	306	06	88	83	639
	•		. %0	%6	34%	11%	%6	10%	%8	%/
#5YRS 5YRS	•		-	103	373	113	8	68	4	837
	•	. %0	%6	48%	16%	12%	12%	11%	12%	12%
#4YRS 4YRS	•	-	157	549	179	123	103	102	120	1334
		2%	%09	15%	11%	13%	14%	16%	17%	18%
#3YRS 3YRS	٠	8	1069	175	125	131	119	150	2	2023
2YRS #3	. %0	74%	20%	15%	15%	12%	13%	14%	15%	25%
#2YRS 2Y	2	1348	360	167	163	127	116	125	146	2557
1YRS #2	%66	21%	10%	13%	13%	12%	11%	11%	12%	.27%
#1YRS 1)	1859	385	184	150	1	121	96	103	114	3150
	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0
OYRS 0'	3	8	8	-	8	-	-	-	-	16
OTAL #	1869	1824	1773	1146	1087	1044	881	915	963	11502
GRADE TOTAL #0YRS 0YRS	¥	-	8	က	4	ß	g	7	ω	
DISTRICT	9									TOTAL

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BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

					٠.0	٠,0	٠,0	٠.0	0	٠.0	٠,0
7+YRS	•				1%	16%	41%	40%	46%	29%	13%
	•	·	•	·	ო	æ	96	9	108	4	349
#7+YRS											
6YRS					16%	35%	17%	10%	%6		8 %
#6YRS					49	80	40	25	, SO		214
5YRS #	•	•	%0	17%	35%	12%	%2	88	10%	7%	%6
#5YRS 5	•	٠	-	20	104	27	· 16	2	23	-	243
#2	•		. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0	. 0
4YRS			15%	48%	20%	%6	%6	8	10%	14%	12%
#4YRS			29	139	28	8	20	21	23	61	345
3YRS #	•	11%	25%	20%	11%	10%	13%	12%	10%	14%	17%
, #3YRS 3Y		20	221	28	¥	24	33	8	ន	8	473
,											
2YRS	. %	29%	18%	10%	%8	88	%9	12%	%6	21%	17%
#2YRS	Ø	257	74	59	83	18	4	8	8	က	470
1YRS #	%66	59%	11%	2%	%6	10%	%9	%8	%9	14%	24%
#1YRS 1\	387	127	46	4	56	24	4	8	15	8	675
#											
OYRS	'	%0					%0	%0	%0		%0
0YRS (ო	8					-	-	-		8
TAL#	392	436	401	290	297 .	231	232	248	233	4	2774
GRADE TO	¥	-	α	ო	4	S	9	^	œ	თ	
DISTRICT GRADE TOTAL #0YRS 0YRS	7							٠			TOTAL

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

7+YRS						4%	56%	%97	36%	27%	%
7.				•		œ	28	83	92	12	7
#7+YRS							LC)	9	7	-	217
6YRS					10%	21%	11%	88	10%	16%	%9
#6YRS					24	48	24	19	2	7	143
5YRS				%9	27%	16%	%2	14%	%9	%2	88
#5YRS				9	69	37	9	8	13	က	168
4YRS #	•	•	. %8	38%	,16%	11%	17%	11%	14%	14%	12%
#4YRS 4	•	•	30	104	4	92	88	27	53	ø	301
3YRS #4	•	2%	.48%	25%	15%	17%	13%	17%	17%	18%	18%
#3YRS 3Y	•	8	189	29	37	39	53	42	37	œ	440
	. %0	52%	25%	18%	18%	13%	11%	12%	%6	11%	19%
#2YRS 2YRS		193	88	84	4	59	52	90	8	w.	480
	%66	42%	18%	15%	13%	16%	13%	11%	%8	%/	28%
S 1YRS	305	157	85	42	೫	37	30	92	17	ო	712
#1YRS	%		1%	<u>%</u>	2%	1%	1%	%0			%
0YRS	2	~	۳. د	<u>ი</u>	6	ь Г	e 1	0	•		
#0YRS											83
TOTAL	305	372	354	272	251	227	223	242	213	4	2503
GRADE	¥	-	Ø	ო	4	S)	9	7	α	6	
DISTRICT GRADE TOTAL #0YRS 0YRS	∞							٠			TOTAL

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... G E N E R A L E D U C A T I O N ...

7+YRS						%0	13%	32%	39%	32%	10%
· +					٠	_	94	203	247	201	746
#7+YRS											
6YRS						11%	34%	18%	88	%6	88
#6YRS						76	254	112	52	27	551
5YRS #	•	•	٠	%0	13%	39%	16%	%	7%	10%	%6
#5YRS 5\	·.	•	•	-	4	276	117	2	45	2	651
4YRS #5		٠	. %0	%6	46%	19%	10%	· %6	10%	13%	12%
	•	•	-	82	355	136	22	26	29	82	854
#4YRS		•	10%	28%	21%	12%	11%	13%	12%	16%	17%
3YRS						85 1;	83	85 1:	74 1;		
#3YRS			106	557	<u>4</u>					5	1258
2YRS		%0	%99	22%	11%	%6	%8	13%	13%	10%	18%
#2YRS	٠	4	682	210	8	9	27	88	84	62	1317
1YRS #	•	%66	23%	11%	%6	%6	88	. 7%	12%	%6	25%
#1YRS 1)		1097	243	105	69	8	61	4	9/	29	1817
	100	% 0	%0	%0	1%	%0		%0	%0	%0	%0
S 0Y	-	2	ဗ	-	2	ဗ	•.	က	8	က	56
#0YR						_					_
FOTAL	-	1106	1035	926	. 12	700	738	637	1 4	635	7220
GRADE 1	Unknown	¥	-	8	ဗ	4	S	9	7	80	
DISTRICT GRADE TOTAL #0YRS 0YRS	တ										TOTAL

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

				٠.						
7+YRS					%0	%9 ·	32%	36%	33%	%6 .
#7+YRS 7	•		•	•	8	72	301	319	279	973
			•	%0	%	41%	14%	%8	%8	%2
S 6YRS				-	88	451	127	69	. 29	813
#6YRS			. %0	2%	41%	, %51	. %01	8%	%6	8%
5YRS			0			·	·			
#5YRS			-	70	481	1 0	90	. 70	74	950
4YRS			%9	25%	18%	10%	10%	11%	12%	12%
#4YRS 4	•	•	6	989	216	108	93	94	97	1391
3YRS #	٠	2%	. %49	20%	13%	10%	13%	14%	13%	18%
#3YRS 3	•	82	1054	569	148	113	126	22	106	2023
2YRS #3	. %0	71%	21%	13%	11%	%6	%6	11%	14%	20%
#2YRS 2Y	7	1154	344	170	132	2	86	96	114	2207
1YRS #2	%66	23%	%6	%6	%8	%6	12%	13%	11%	25%
#1YRS 1Y	1664	379	157	116	8	96	108	118	96	2827
	%0	%0	%0	%0	1%	%0	%0	%0	%1	%0
· SS	7	9	ო	0	7	-	4	-	ς.	36
- #0YF	gο	4	Q	4	7	ø.	Ŋ	۔ ص	&	0
TOTAL	1678	1624	1656	1314	1177	1109	935	888	838	11220
GRADE	×	-	8	က	4	2	,	7	80	
DISTRICT GRADE TOTAL #0YRS 0YRS	9									TOTAL

27% 24%

8

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#6YRS 6YRS #7+YRS 7+YRS

DISTRICT GRADE TOTAL #0YRS 0YRS #1YRS 1YRS #2YRS 2YRS #3YRS 3YRS #4YRS 4YRS #5YRS 5YRS

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

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379

20%

439

31%

989

%

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TOTAL

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

7+YRS					%0	12%	31%	45%	34%	10%
	٠	•	•		α	88	96	130	82	352
#7+YRS					•	•	•		•	
6YRS				%0	%6	36%	17%	%/	8%	2%
#6YRS				61	36	120	51	21	20	250
5YRS i	·	•	•	%2	39%	13%	%8	%2	10%	%6
#5YRS 5	٠	٠	٠	58	161	44	83	19	56	301
4YRS #£	٠	•	. %8	48%	17%	12%	12%	10%	11%	13%
#4YRS 4Y	•	•	40	195	7	40	38	53	27	440
		. %4	52%	21%	14%	%8	11%	12%	13%	16%
RS 3YRS		17	263	83	22	27	83	35	32	547
S #3YRS	1% .	74%	. %67	13%	%6	10%	10%	%6	10%	20%
2YRS	4	·		42	85.	8	30	52	52	
#2YRS		358	145							711
1YRS	%66	23%	11%	10%	13%	%6	11%	%6	13%	25%
#1YRS	482	1 08	26	4	25	88	88	88	g	864
	%0		%0	%0	%0	%0	%	%0		%0
WRS 0	-	-	-	-	-	-	0	-	•	89
TAL #0	487	4 8	505	4	416	337	306	586	248 .	3473
GRADE TC	¥	-	81	ო	4	2	ဖ	7	co .	
DISTRICT GRADE TOTAL #0YRS 0YRS	12						٠	•		TOTAL

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

7+YRS						15%	36%	20%	27%		33%	8 %
#7+YRS 7	•	•	•	•	•	6	21	œ	14	٠	-	53
6YRS #7.		•			13% .	24%	3%	12%	%8	٠		%9
#6YRS 6Y		٠		•	10	15	.01	S	4	٠	٠	36
5YRS #6				. %8	32%	11%	3%	5%	4%	•	•	%9
#5YRS 5	,	•	,	S	24	7	N	-	8		٠	14
4YRS #			. %9	39%	16%	11%	20%	17%	4%		. %29	12%
#4YRS 4			9	56	12	7	12	7	8		8	74
3YRS #		. %1	37%	30%	% 6	11%	8%	12%	25%	20%		15%
#3YRS 3	•	-	8	50	7	7	ß	S	5	-	•	97
2YRS #	•	21%	34%	% 6	16%	13%	12%	15%	12%	20%	•	21%
#2YRS 2	•	25	35	ø	12	ω	7	9	9	-	•	133
1YRS #	100	42%	23%	12%	14%	15%	17%	. 52%	20%			32%
#1YRS	88	88	54	Φ	Ξ	တ	10	თ	. 01	•	•	207
				2%						•	•	%0
#0YRS				-								-
TOTAL	88	91	103	99	76 .	. 62	. 69	4	51.	N	n	642
GRADE	¥	-	α	ო	4	S	9	7	80	တ	10	
DISTRICT GRADE TOTAL #0YRS 0YRS	13											TOTAL

ا.

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUGATION ...

Ş.						%6	20%	21%	20%	13%	%/
7+YRS						8	£	23	55	8	g
#7+YRS											189
6YRS					%6	13%	%6	88	%9	%6	4%
#6YRS					23	30	18	20	17	13	121
SYRS				%6	24%	15%	%6	%2	%9	10%	%/
#5YRS	·	·	•	22	29	88	8	48	8	4	177
4YRS #	•	•	. %9	41%	24%	14%	14%	17%	18%	19%	13%
#4YRS 4	•		2	66	9	35	59	43	51	28	364
3YRS #	•		20%	17%	17%	18%	19%	13%	13%	16%	17%
#3YRS 3\	•	17	176	42	45	4	40	83	35	23	449
2YRS #3	1%	45%	28%	19%	11%	18%	12%	16%	17%	19%	19%
	0	174	97	9	88	9	52	9	8	88	528
#2YRS	%	%	%	%	%	· %	%	%	%	%	
1YRS	%66	20%	15%	14%	15%	16%	17%	19%	19%	13%	35%
#1YRS	365	193	ß	35	8	37	35	8	ß	8	875
	%	%0	%				%	%0	%0	%	%0
YRS 0	8	-	ო	•	•	•	N	-	-	N	12
OTAL #(369	385	320	244	251 .	228	210	256	278	1	2715
GRADE TO	¥		(V)	ო	4	S	9	7	œ	თ	
DISTRICT GRADE TOTAL #0YRS 0YRS	1										TOTAL



27% 27% 5%

%6

23%

14% 23%

27%

7

152

2%

156

%9

210

12%

394

15%

519

770

34%

1157

%

TOTAL

26%

%9

%6 %

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22 30

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24

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3%

56%

82

12%

38

12%

6

12%

20%

65

15%

%

8

20%

11%

BESIS 1997-98 YEARS OF SERVICE BY GRADE

	7+YRS						
·	#7+YRS						
	6YRS				%0	7%	
	#6YRS				-	21	
	5YRS			%0	2%	34%	
	#5YRS 5	•	•	-	17	108	
:	4YRS #		•	%8	20%	15%	
N 0	#4YRS 4Y	•		42	182	47	
JCAT			. %5	54%	11%	15%	
GENERAL EDUCATION	IS 3YRS	-	52	276	33	84	
RAL	#3YRS	<u>%</u>	%02	24%	%21	14%	
, Ш , С ; Ш	2YRS				·		
? 5) :	#2YRS		377	123	8	4	
	1YRS	%66	24%	12%	17%	17%	
	#1YRS	703	131	8	6	22	
		%0	%0	%	%0		
	YRS 0		8	S.	-	•	
	TAL #0	111	535	510	364	325	
	DISTRICT GRADE TOTAL #0YRS 0YRS	×	-	8	က	4	
,	DISTRICT	15					

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... G E N E R A L E D U C A T I O N ...

						٠.0	٠.0	.0	.0	, n
7+YRS						10%	38%	14%	25%	7%
#7+YRS						0	80	-	ო	4
	٠	•	٠	٠	7% .	25%	14%	14%		. %2
6YRS					8	ω,	ຕ	· -		=
#6YRS						٦,				
5YRS				15%	22%	20%	2%		25%	%6
#5YRS				4	9	4	-		ო	48
4YRS #	•	•	. 4%	26%	37%	15%	2%	14% .	%8	11%
		•	-	7	10	က	-	-	-	54
#4YRS		. %6	28%	19%	19%		14%		17%	12%
3YRS			8							
#3YRS		4		υ	c)		ო		8	8
2YRS	7%	26%	32%	56%	11%		10%	22%	17%	25%
#2YRS 2	8	8	80	7	ო	•	8	4	7	25
	93%	30%	32%	%/	4%	30%	14%		%8	29%
S 1YRS	5 8	5	∞	8	-	9	က		-	99
#1YRS		٠,0	۰,0			•	`			
OYRS		2%	4%	%/						2%
0YRS		. ~	-	8						ß
TAL #	. 88	43	52	27	27 .	8	24.	7	12	210
GRADE TC	¥	-	α	က	4	5	9	7	89	
DISTRICT GRADE TOTAL #0YRS 0YRS	16						•			TOTAL

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

RS					%0	2%	18%	56%	24%	%/
7+YRS					_	2	33	09	55	0
#7+YRS										160
6YRS				%0	3%	29%	19%	10%	88	2%
#6YRS					9	99	40	23	17	153
5YRS				3%	40%	14%	8%	10%	%6	%6
#5YRS				9	91	33	18	23	20	191
4YRS			3%	40%	20%	10%	10%	12%	13%	11%
#4YRS			80	94	45	24	22	28	59	250
3YRS		5%	49%	27%	13%	16%	17%	14%	12%	17%
#3YRS		4	. 135	63	53	36	36	33	58	364
2YRS		21%	30%	17%	11%	14%	13%	10%	17%	19%
#2YRS		151	83	4	25	33	27	24	39	423
1YRS	100	41%	17%	13%	12%	14%	15%	. 18%	17%	59%
#1YRS	275	109	47	31	27	33	33	4	88	634
0YRS		%0	1%	%0	%0	%0		%0	•	%0
#0YRS		-		-	-	-				7
TOTAL	275	265	275	237	225	231	215	233	526	2182
DISTRICT GRADE TOTAL #0YRS	×	-	Ø	က	4	ιΩ	9	7	œ	
DISTRICT	17									TOTAL

						%8	17%	26%	16%	%9
7+YRS	.`						·			
#7+YRS	-					9	6	19	12	46
eyrs #	•	•		•	13% .	18%	%9	%/	%	2%
#6YRS 6\	•				Ξ	5	ო	2	ო	32
	•	•	•	7% .	29%	%/	10%	3%	2%	%9
R 5YRS				S	52	ည	ιc	8	4	46
#5YRS			. %41	43%	15%	22%	15%	11%	15%	14%
4YRS					•		·		·	
#4YRS	_	_	13	32	13	16	σο	σ.	=	101
3YRS		%2	%29	19%	15%	19%	17%	15%	29%	. 50%
#3YRS 3	••	80	22	4	13	4	თ	F	2	147
2YRS #3		%09	13%	15%	15%	%8	12%	13%	12%	18%
#2YRS 2Y	Ø	69	5	=	13	9	9	တ	တ	137
	%26	29%	11%	16 %	14%	19%	23%	24%	18%	30%
R 1YRS	⊉	88	10	5	5	4	5	17	13	227
#1YRS	%1	vo.		vo.				vo.		
OYRS	-	4%		7,				%		1%
OYRS (-	5		-		-	•	-	•	80
JTAL #	107	115	95	75	. 78	74	83	72	73	747
GRADE TO	×	-	Ø	ო	4	S	9	7	80	
DISTRICT GRADE TOTAL #0YRS 0YRS	18	,								TOTAL

7+YRS						7%	32%	35%	32%	%6
	•					21	85	88	46	295
#7+YRS						.,	-			
6YRS		_	_	%0	8%	36%	16%	10%	%6	7%
#6YRS				-	78	115	45	52	23	237
5YRS			·	7%	45%	15%	10%	7%	10%	%6
#5YRS	•	•	•	56	140	48	, 78	17	27	286
4YRS #	•	•	. %9	54%	21%	13%	13%	14%	13%	14%
#4YRS 4	•	•	30	207	7	43	37	8	8	456
3YRS #	•	. %9	62%	18%	14%	12%	11%	13%	12%	18%
#3YRS 3	٠	53	319	20	46	39	83	32	31	599
2YRS #	•	%99	21%	11%	· %9	12%	10%	%6	10%	18%
#2YRS 2	••	310	110	4	21	88	78	23	27	805
1YRS #2	. %26	28%	10%	% 6	7%	2%	% 6	11%	10%	24%
#1YRS 1Y	467	130	22	98	8	15	56	78	78	908
	%	%0	%0	%0	1%			%0	1%	%
/RS 0Y	12	٥	N)	-	ო	•	•	-	4	55
TAL #0\	479	471	515	385	331	320	. 589	248	568	3306
GRADE TO	¥	-	α	ო	4	2	မှ	7	œ	
DISTRICT GRADE TOTAL #0YRS 0YRS	19									TOTAL

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

7+YRS						%6	15%	14%	11%	4%
		٠	٠.	٠	•	15	85	82	78	263
#7+YRS						.0	.0	.0	.0	
6YRS		•		•	%9	16%	8%	2%	3%	3%
#6YRS					59	70	45	31	19	194
5YRS				3%	23%	%9	2%	2%	%9	4%
#5YRS	•	•	•	4	116	27	29	30	45	261
4YRS #	•	•	4 %	33%	10%	10%	%6	14%	12%	%8
#4YRS 4\	٠	•	37	174	20	45	20	06	88	534
3YRS #4	٠	3%	26%	16%	10%	14%	12%	13%	16%	14%
		32	466	88	20	8	65	. 8	E	952
#3YRS	%0	%69	23%	17%	21%	20%	21%	23%	21%	24%
2YRS	0	99		17						
#2YRS	0	681	187	91	103	88	114	140	150	1557
1YRS	0	27%	17%	31%	30%	. 30%	29%	. 56%	31%	45%
#1YRS	1400	269	138	162	149	131	159	160	218	2786
	%0	%0	%0	%0	%0	1%	%0	%0	%0	%0
YRS 0	က	ო	-	-	8	ო	8	ო	α	8
JTAL #(1405	982	829	524	499	443	549	623	71	6567
GRADE TO	¥	-	۵ı	ო	4	S	9	7	80	
DISTRICT GRADE TOTAL #0YRS 0YRS	. 50									TOTAL

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

#7+YRS 7+YRS						4 2%	23 7%	19 5%	13 4%	2%
6YRS					3%	%6	1%	3%	3%	5%
#6YRS					ω ΄	52	4	. 12	10	29
SYRS				3%	15%	7%	4%	3%	4%	3%
#5YRS				6	43	19	4	1	12	108
4YRS			3%	27%	11%	%9	7%	10%	12%	7%
#4YRS			13	73	33	15	8	38	39	233
3YRS		4%	21%	13%	15%	16%	15%	17%	21%	16%
#3YRS		2	219	8	45	43	20	92	70	547
2YRS	%0	%69	23%	50%	25%	23%	29%	25%	24%	26%
#2YRS	-	340	101	2	74	62	93	96	78	833
1YRS	100	26%	23%	36%	31%	36%	36%	36%	33%	45%
#1YRS	672	130	100	97	92	96	116	1 34	108	1545
OYRS			•	%0	•		%0	1%	%0	%0
#0YRS				-			-	81	-	2
TOTAL	673	491	433	268	295	26	323	377	331	3455
GRADE .	×	-	αi	က်	4	2	ဖ	7	80	
DISTRICT GRADE TOTAL #0YRS 0YRS	. 21									TOTAL



137 35% 18% %6 15% 16% 10% 16% 4 8 22 83 3 53 36 275 15% % 15% 14% 15% 52% 13% 15% 16% 33 9 418 204 8 ဗ္ဗ 8 27 ဗ္တ 27% %/9 % 20% 19% 23% 17% 18% 17% 23% 269 호 20 ဗ္ဗ စ္က 37 8 32 8 18% 25% %66 30% 25% 27% 35% 27% 42% 25%

얺 29 8

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195 182 22

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> 2 4

4

8%

20 8

% 18%

19%

2% :

7

#7+YRS 7+YRS

#6YRS 6YRS

DISTRICT GRADE TOTAL #0YRS 0YRS #1YRS 1YRS #2YRS 2YRS #3YRS 3YRS #4YRS 4YRS #5YRS 5YRS

118

%

336

392

621

%

625

22

99

265

g

%

283

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... G E N E R A L E D U C A T I O N ...

8%

8% %

13%

8

4%

3%

74

%

8

2%

1170

%

9

2808

TOTAL

%

17HS #27HS #37HS #47HS #47HS #47HS #47HS #57HS \$5HS #74THS #74THS \$74THS #74THS \$74THS	(0			٠			2%	26%	22%	22%	100%	%9
14	7+YRS		, ·					~	-		- 0	
14	#7+YRS						•	÷	. -	w	•	ਲ
1 65 1 2% 49 98%. 1 2% 64 98%. 1 2% 41 48% 32 38% 10 12%. 1 2% 64 98%. 1 1 2% 11 2% 11 2% 11 2% 11 2% 11 2% 11 2% 11 2% 11 2% 12 2% 33% 41 48% 32 38% 10 12%. 1 2% 11 12% 12% 12 12% 12 13% 12 12% 12 13% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12 14% 12						%9	%0E	5%	12%	14%		%9
13 K 65 1 2% 64 98%. 14 48% 32 38% 10 12%. 15 90. 1 2% 41 48% 32 38% 10 12%. 1 85 2 2% 41 48% 32 38% 10 12%. 2 90. 1 2 2% 41 12% 15 16% 20 22% 38 41% 8 9%. 3 92. 1 1 1 12% 15 16% 20 22% 38 41% 8 9%. 4 70 1 2% 7 12% 7 12% 7 12% 7 14% 10 17% 14 19% 10 19% 11 3% 4 11% 6 16% 10 19%.		•		•	•	4	8	-	9	ر ب	•	8
1 68 6 1 2% 64 98%. 1 85 2 2% 41 48% 32 38% 10 12% 6 7%. 2 90.		•	•	•	. %6	33%	25%	10%	8 %	16%	•	10%
CT GRADE TOTAL #0YHS #1YHS 1YHS #2YHS 2YHS #3YHS 3YHS 3YHS 3YHS 4YHS 4YHS 1 65 1 2% 41 48% 32 38% 10 12% 6 7% 2 90 2 2% 41 48% 32 38% 10 12% 6 7% 3 92 3 10% 28 31% 47 52% 6 7% 4 70 1 12% 1 12% 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			•	•	ω	ន	15	4	4	ဖ	•	9
1 GRADE TOTAL #0YRS 0YRS #1YRS 1YRS #2YRS 2YRS #3YRS 3YRS #4YRS 3XR			•	7% .	41%	26%	12%	21%	%9	11%	•	14%
THE GRADE TOTAL #OYRS OYRS #1YRS 1YRS #2YRS #3YRS 3YRS 3YRS 1 2% 64 98%.				· · · · · ·	38	8	7	თ	က	4	•	82
THE GRADE TOTAL #OYRS OYRS #1YRS 1YRS #2YRS 2YRS #3YRS 3YRS 3YRS 3YRS 3YRS 3YRS 3YRS 3YRS			. %2	5%	2%	%2	%8	2%	4%	3%		%8
THE GRADE TOTAL #OYRS OYRS #1YRS 1YRS 2YRS #3YRS 2YRS #3YRS 1 2% 64 98%. 1 85 2 2% 41 48% 32 38% 2 90.				•					7 1	÷		
TI GRADE TOTAL #0YRS 0YRS #1YRS 1YRS 2YRS 2YRS 2YRS 2YRS 2YRS 2YRS 2YRS 2	#3YR						,o	,	,	.0		
CT GRADE TOTAL #0YRS 0YRS #1YRS 1YRS #2YR CAN BE S 2 2% 41 48% CAN CAN BE S 2 2% 41 48% CAN CAN BE S 2 2% 41 48% CAN CAN BE S 2 2% 41 12% CAN CAN BE S 2 2% 41 12% CAN CAN BE S 2 2% 41 12% CAN CAN BE S 2 2% 41 11% CAN CAN BE S 2 2% CAN CAN BE	2YRS											
CT GRADE TOTAL #0YRS 0YRS #1YRS 1YR	#2YRS		8	8	15	on .	ന	о	5	9		
CT GRADE TOTAL #0YRS 0YRS #1YRS CAN BE TOTAL #0YRS #1YRS CAN BE TOTAL #1YRS CAN BE TO	1YRS	%86	48%	10%	12%	%9	12%	14%	14%	11%		56%
CT GRADE TOTAL #0YRS 0YRS CAN BE TOTAL #0YRS		2	4	თ	=	4	7	ဖ	7	4		153
DISTRICT GRADE TOTAL #0YRS 07 23 K 65 1 1 85 2 2 90 3 92 4 70 5 60 1 6 42 7 50 9 1.		5%	5%				5%			%8		1%
23 K 65 24 K 65 2 90. 2 90. 3 92. 4 70. 5 60 6 42. 7 50. 7 50.	YRS 0	-	0	•	٠	٠	-		•	က		7
23 K 23 K 1 1 2 2 7 7 TOTAL	TAL #0	8	82	. 06		6	9	, 2	. 20	37	-	592
DISTRICT 23 TOTAL	GRADE TO	¥	-	81	໌ ຕ	4	S	ဖ	7	ω	თ	
	DISTRICT	53							-			TOTAL

SF.						3%	12%	16%	15%	4%
7+YRS						24	88	8	o	4
#7+YRS						Ο.	∞	132	139	88 48
6YRS #	•	•	•		2% .	20%	2%	4%	2%	%
				•	37	152	48	36	47	320
#6YRS	-		•							
5YRS				4%	21%	10%	%9	8 %	. %6	2%
#5YRS			·	36	175	74	46	83	87	481
4YRS #5		%0	3%	35%	16%	10%	15%	14%	12%	%6
#4YRS 4Y		-	83	291	128	75	110	114	108	860
	-	%	. %99	20%	18%	20%	19%	17%	17%	17%
3YRS		88	618 !	170	145	151	<u>\$</u>	. 140	. 651	1545
#3YRS									·	
2YRS	4	%29	21%	15%	14%	16%	15%	18%	17%	20%
#2YRS 2	55	827	233	<u>8</u>	118	119	108	149	1 5	1843
1YRS #	%66	31%	20%	25%	26%	21%	25%	23%	25%	41%
#1YRS 1	1990	377	222	211	217	155	180	192	234	3778
	%0	%0	%0	%0	%0	%0		%0	%0	%
'RS 0Y	თ	es.	က	0	8	-		8	က	52
ral #0	2012	1236	1109	832	822	751	715 .	828	931	9236
GRADE TO	¥	-	8	က	4	2	9	7	80	
DISTRICT GRADE TOTAL #0YRS 0YRS	24									TOTAL

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... G E N E R A L E D U C A T I O N ...

S					%0	5%	4%	2%	5%	2%	%
7+YRS				•	_	ις	12	11	9	13	72
#7+YRS	•			,							
6YRS					1%	7%	2%	1%	5%	2%	1%
#6YRS					4	20	17	ო	7	13	2
5YRS #	•	•	•	2%	15%	%/	4%	3%	%9	3%	3%
#5YRS 5	•	٠	•	7	49	50	4	2	23	&	131
4YRS #	•	. %0	4%	23%	14%	11%	10%	15%	13%	19%	8%
#4YRS 4\		-	55	29	45	30	8	39	45	53	336
3YRS #4	:	5%	21%	17%	15%	16%	16%	19%	17%	30%	16%
#3YRS 3Y		4	268	49	49	46	72	19	8	87	069
		64%	22%	24%	21%	21%	23%	50%	26%	19%	23%
2YRS		4	7	69	99	29	92	99	95	72	9
#2YRS	<i>:</i>	404	117								, 1006
1YRS	100	34%	22%	34%	33%	36%	37%	40%	34%	20%	47%
#1YRS	958	216	118	9	106	100	123	129	121	28	2029
0YRS		%0						%0			%0
OYRS (•		•	•	•		•	-	•	•	8
OTAL #	928	939	525	292	320	280	330	326	359	286 .	4312
GRADE T	×	-	8	က	4	ro ,	9	7	80	6	
DISTRICT GRADE TOTAL #0YRS	, 55										·TOTAL



7-	•	•	•	•	•	_	ဗ	9	2	9	_
#7+YRS					:						2
6YRS				•	3%	2%	1%	1%	7%		1%
#6YRS		•			8	4	-	-	6		17
5YRS #	•			. %5	15%	3%	1%	3%	2%	1%.	2%
#5YRS &	•	•	•	4	9	8	-	4	9	-	88
4YRS #!		•	. 4%	17%	%9	2%	%8	12%	%6	11%	2%
#4YRS 4\		•	9	13	4	4	8	4	Ξ	6	83
3YRS #4		. %9	21%	11%	13%	10%	16%	21%	19%	20%	15%
#3YRS 3Y	•	13	92	æ	თ	æ	=	54	24	16	205
2YRS #3	2% .	%29	19%	22%	22%	25%	27%	26%	29%	32%	25%
#2YRS 2Y	7	135	31	17	15	19	19	30	37	52	335
1YRS #2	%86	26%	20%	43%	40%	49%	47%	31%	27%	28%	20%
#1YÄS 1)	363	83	32	33	27	88	33	98	8	52	671
0YRS #1	%0			1%	1%	1%			5%		%0
	-			-	-	-			81		9
TAL #0	371	201 .	161	9/	89	11	. 07	115 .	128	. 67	1346
DISTRICT GRADE TOTAL #0YRS	¥	-	81	က	4	သ	φ	7	œ	Ø	
DISTRICT	56										TOTAL

2%

7+YRS

BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

8% 2%



BESIS 1997-98 YEARS OF SERVICE BY GRADE ... GENERAL EDUCATION ...

7+YRS						4%	19%	25%	15%	2%
7+7				. •		9	49	65	35	159
#7+YRS				٠.						
6YRS		•		%0	4%	31%	13%	. 9	4%	2%
#6YRS				-	12	87	33	16	9	159
5YRS				4%	33%	11%	7%	2%	%9	%9
#5YRS				12	6	31	17	13	15	178
4YRS #	•	•	3% .	38%	17%	8 %	10%	10%	17%	10%
#4YRS 4	•	•	4	125	47	8	56	56	39	533
3YRS #	•	2%	26%	23%	15%	16%	18%	17%	16%	18%
#3YRS 3	•	α	235	75	4	45	46	4	38	532
2YRS #	1%.	%29	27%	15%	13%	13%	16%	13%	23%	25%
#2YRS 2	ღ	294	E	20	35	38	42	33	53	629
1YRS #	%86	29%	13%	20%	16%	17%	16%	23%	18%	33%
#1YRS 1	533	127	23	99	43	49	40	59	42	1012
	1%	5%	1%	1%	%		1%	1%	%	%
OYRS 0	7	7	ო	ო	α	•	α	Ø	ო	83
JTAL #	543	436	416	332	270	282	255	258	235	3027
GRADE TO	¥	-	α	ო	4	S	9	7	∞ .	
DISTRICT GRADE TOTAL #0YRS 0YRS	27									TOTAL

တ္က						4%	11%	12%	10%	%	%
7+YRS						4	31	27	. 52	ო	5
#7+YRS						-	υ,	· · ·	.,		¥
6YRS					4%	19%	7%	5%	4%	2%	3%
#6YRS (•	·	•	•	13	61	19	2	=	7	116
5YRS #	·			. %	26%	13%	2%	%9	10%	%6	%9
#5YRS 5			:	4	85	4	15	4	52	4	205
4YRS #5	•	٠		34%	17%	14%	12%	15%	10%	18%	10%
#4YRS 4Y	•	•	7	106	52	47	ဗ္ဗ	35	27	56	333
	•	3% .	23%	24%	15%	14%	15%	17%	17%	28%	17%
RS 3YRS	٠	4	223	75	47	47	42	88	4	42	572
s #3YRS	. %1	%89	26%	15%	18%	19%	26%	21%	23%	23%	24%
2YRS				'	,						
#2YRS	ю	293	112	47	28	62	72	48	99	8	789
1YRS	%66	28%	18%	23%	19%	16%	22%	27%	27%	15%	36%
#1YRS	288	123	78	۲	59	53	99		7	23	1187
	4	4	4	4%	1%		%0	%0			%0
OYRS (ო	ო	ო	Ø	ຕ ,		-	-	•	•	16
OTAL#	594	433	423	315	314	325	273	230	263	148	3318
GRADE T	¥	-	81	ო	4	ĸ	9	7	α	თ	
DISTRICT GRADE TOTAL #0YRS 0YRS	58										TOTAL

7+YRS						2%	12%	10%	17%	%
7+7	. •					7	15		′2	26
#7+YRS										
6YRS					%6	16%	7%	1%	4%	3%
#6YRS					13	24	σ	-	ς.	25
5YRS				. 88	21%	13%	%9	8%	11%	%9
#5YRS				01	30	19	7	10	4	90
4YRS			2%	35%	20%	14%	14%	12%	14%	10%
#4YRS	·	·	55	46	83	2	. 8	15	17	159
3YRS #	•	8% .	25%	25%	13%	15%	13%	21%	13%	18%
#3YRS 3	•	19	137	ន	18	8	16	92	16	287
2YRS #	•	%09	23%	%6	12%	11%	18%	14%	15%	20%
#2YRS 2	•	150	57	5	17	16	23	17	19	311
1YRS #	. %26	31%	17%	23%	22%	. 24%	29%	33%	25%	38%
#1YRS 1	279	79	4	30	31	မ္တ	37	4	31	909
	3%	1%		. 5%	3%	1%	5%	1%		%
OYRS 0	თ	ო	•	N	4	81	N	-	•	83
OTAL #	788	251	248	133	142	147	127	124	123 .	1583
GRADE T	¥	-	α	က	4	2	မှ	7	α	
DISTRICT GRADE TOTAL #0YRS 0YRS	. 59							,	•	TOTAL



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7+YRS				· ·		2%	%6	10%	6	5%
#7+YRS						5	43	51	22	158
6YRS #7				•	. %4	14%	2%	3%	4%	5%
#6YRS 6Y				•	21	62	56	16	54	149
5YRS #6			•	2% .	21%	%8	7%	7%	8%	4%
#5YRS 5Y	٠			27	107	35	33	37	49	288
4YRS #5		٠	. %2	33%	13%	11%	12%	16%	17%	%6
#4YRS 4YI			40	178	69	48		87	105	588
		2% .	25%	15%	15%	14%	18%	18%	12%	15%
#3YRS 3YRS		2	483	78	78	61	35	95	79	1020
	. %0	%59	22%	17%	20%	22%	22%	21%	17%	23%
2YRS	4	9	8	83	9	96			0	
#2YRS		, 736	192		106		112	110	110	1559
1YRS	100	30%	18%	29%	26%	28%	27%	56%	33%	44%
#1YRS	1527	339	160	156	137	119	137	139	212	2926
0YRS	%0	%0	%0		%0				%0	%0
#0YRS	8	-	4		-				-	6
OTAL	1533	1130	879	532	519	431	504	535	634	6697
GRADE 1	¥	-	8	က	4	5	9	7	∞	
DISTRICT GRADE TOTAL #0YRS 0YRS	99									TOTAL

BESIS 1997-98 YEARS OF SERVICE BY GRADE G E N E R A L E D U C A T I O N ...

						%/	15%	%8	%8		3%
7+YRS					•		·				
#7+YRS						7	F	7	6		8
6YRS #	•	•	•	•	2%.	14%	4%	%6	4%	•	%
#6YRS 6	•	•	•	•	ဖ	4	ო	ო	4	•	99
		•			28%	%8	4%		%8	•	2%
S SYRS				4.	37	∞	ო	О	80		69
#5YRS							•	•			
4YRS			2%	28%	11%	14%	2%	11%	88		%/
#4YRS	·		4	8	4	4	4	5	∞		46
3YRS #4	•	4% .	25%	22%	12%	17%	23%	18%	17%	100	17%
#3YRS 3Y	•	∞	109	24	16	18	17	, ,	18	-	227
		%59	. 55%	17%	14%	19%	23%	20%	21%		23%
2YRS	7	136	43	18	18	20	17	18	83	•	299
#2YRS		•								•	
1YRS	%26	30%	15%	29%	31%	18%	52%	26%	33%		45%
#1YRS	289	2	83	31	40	19	18	23	35		548
	%0	%	%			3%		3%	2%	٠	%
RS 0Y	-	α	8		•	က		က	8	٠	13
ال #0Y	297	210	197	. 107	131	103	73 .	88	901	-	1314
101		W									¥
GRADE	¥	-	8	က	4	5	9	7	σ.	o	
DISTRICT GRADE TOTAL #0YRS 0YRS	31						÷				TOTAL

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			-							
7+YRS	-					4%	25%	37%	25%	%9
#7+YRS 7	٠	•	•	•	٠	9	37	. 29	40	146
					. %5	33%	%6 1	%9	. 2%	%9
6YRS							_	6	80	
#6YRS					4	8	. 88	6,	۵	140
5YRS		• •	•	7%	31%	16%	%6	%9	13%	8%
#5YRS 5\			٠	11	06	33	4	9	2	191
			. %5	%	%	%	%	%	%	%
4YRS			Ω	43%	27%	14%	14%	18%	17%	13%
#4YRS '	•	·	17	110	8	35	2	53	27	319
3YRS #	•	2%	22%	27%	16%	13%	11%	14%	15%	17%
	•	9	201	69	47	31	1	8	25	417
2YRS · #3YRS		%29	29%	12%	%8	10%	12%	%6	14%	20%
				_	54	54	18	4	8	
#2YRS		241	105	31						479
IYRS	90	35%	11%	11%	12%	%6	%6	%6	12%	29%
#1YRS 1YRS	389	137	6.	59	36	23	13	15	19	701
	%0	%	%0	%		1%		7%	%	%0
⁄RS 0₹	-	4	-	8	•	8	١	-	-	12
() #0	390	388	364	258	291 .	245		159	162	2405
TOTA	Ö	Ö	Ö	Ø	Ø	Ň	÷	÷	=	24
GRADE	¥	-	8	ဇ	4	S	9	7	σ.	
DISTRICT GRADE TOTAL #0YRS 0YRS	32									TOTAL

7+YRS						31%	%29		18%
				- '		4	N		9
#7+YRS									
6YRS						88			%
#6YRS						-			-
SYRS									
#5YRS									
4YRS						15% .			%9
#4YRS	·		,		·	7			8
3YRS #	•	•	•	•	•	23%	•	20%	12%
#3YRS 3	•	•	•	•	•	ო	•	- '	4
2YRS #	•	•	•	•	•	15%	33%		%6
#2YRS 2\	•	•		٠	•	8	-	•	က
	٠	100	. %98	100	100	%8		. %09	45%
#1YRS 1YRS	•	ო	ဖ	7	-	-	•	-	4
			14%						%6
RS OYF	8		-	٠	•	-		٠	က
۱L #0YI	8	ო	7	اري	-	<u>ნ</u>	ო	N	83
DISTRICT GRADE TOTAL #0YRS 0YRS	-	α	ဇာ	4	S	ဖ	7	æ	
DISTRICT	33								TOTAL

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7+YRS						13%	30%	35%	37%	12%
#7+YRS 7+			•		•	12	22	8	65	197
	•				13% .	23%	17%	12%	%9	7%
6YRS					. 23	23	32	21	Ŧ.	109
#6YRS										
5YRS				7%	36%	18%	%/	10%	10%	%6
#5YRS				12	62	. 17	4	19	17	141
4YRS #	٠	•	. %9	%19	19%	13%	16%	10%	18%	15%
#4YRS 4	٠	•	13	106	35	5	30	18	સ	242
3YRS #2			61%	12%	13%	%/	%6	11%	10%	15%
#3YRS 3Y	•	ო	139	2	ន	7	17	8	17	247
2YRS #3	•	. 64%	27%	11%	%/	20%	%6	10%	2%	19%
#2YRS 2YI		149	61	6	5	6	11	19	თ	305
	100	34%	%/	%8	11%	2%	11%	12%	13%	22%
R 1YRS	158	79	9	4	6	S.	21	24	83	356
#1YRS		%		%					%	%0
OYRS		8		_					8	S.
#0YRS									-	
OTAL	158	233	. 622	173	171	8	188	181	175	1602
GRADE 1	×	-	Ø	ო	4	ĸ	9	7	œ	
DISTRICT GRADE TOTAL #0YRS 0YRS	82									TÖTAL

Appendix 2

Study 4 Examining the Longitudinal Progress of ELL Students and Their Performance After Exiting From Bilingual/ESL Programs





NEW YORK CITY BOARD OF EDUCATION

ELL SUBCOMMITTEE Study 4 - UPDATED

Examining the Longitudinal Progress of ELL Students and Their Performance After Exiting From Bilingual/ESL Programs THIS PAGE INTENTIONALLY LEFT BLANK



INTRODUCTION

This is the second report of a longitudinal study of the educational progress of students who entered the New York City public schools system as non-native speakers of English with limited proficiency in the English language. These students, currently identified as English language learners (ELL), were served in bilingual or English-as-a-second-language (ESL) programs until they achieved a designated level of English language proficiency. The study focused on cohorts of students who entered kindergarten and grade 1 during fall 1990 and grades 2, 3, 6 and 9 in fall 1991. The study tracked the progress of these students in meeting the criterion for exiting bilingual/ESL programs, their achievement on standardized tests in reading and mathematics given in English, and their progress toward school completion.

A preliminary report on the study was released in October 1994, four years after the kindergarten and first grade cohorts had entered New York City public schools and three years after entry for the second, third, sixth and ninth grade cohorts. The report focused primarily on the length of time it took ELLs to test out of bilingual/ESL program entitlement.

The present report provides an update of findings through June 1999, representing nine years of study for the kindergarten and first grade cohorts and eight years of study for the other grade cohorts. The report presents the bilingual/ESL program exit rates for the each grade cohort during the study period, the standardized reading and mathematics test scores of cohort students tested in spring 1998, and the percentage of the grade 6 and 9 cohorts who had graduated and dropped out of school. Data are broken-down by type of program, i.e. bilingual, ESL-only, or mixed, and home language.

BACKGROUND

Each September many new students enter the New York City public schools with little functional knowledge of English as a spoken or written language, and with a background of a non-English language spoken in the home. Although these English language learners (ELLs) may be admitted at any grade level from kindergarten through the late high school years, their greatest numbers are admitted to kindergarten and grade 1.

Since 1989, the eligibility of these students for bilingual or English-as-a-second-language (ESL) programs has been contingent on their scoring at or below the 40th percentile on the Language Assessment Battery, or LAB, a standardized test of English proficiency. The LAB was renormed for kindergarten and grade 1 in 1990, and for grades 2 and above in 1991. Whether a particular



student is assigned to an ESL or a bilingual class depends in part on the availability of a bilingual program in the child's school; there may be none, for example, if there are insufficient ELL-eligible students with the same home language in or near the student's grade. In addition, a student's parents may override the school's recommendation of a bilingual program in favor of an ESL-only program.

It should be mentioned that all ESL programs referred to in this report are properly termed "ESL-only" programs. However, all bilingual programs are designed to have an ESL component included along with instruction in the students' native language. Thus all students in ELL-entitled programs receive some training in English as a second language, but students in bilingual classes receive a significant part of their instruction in their primary language.

Once ELL-entitled students enter ESL-only or bilingual classes, their progress toward acquiring English-language proficiency is assessed each spring with a re-administration of the LAB. Those who score at or above the 41st percentile on the LAB have exceeded the entitlement cutoff and are described as having tested out of their ELL entitlement program. Normally they then transfer to regular monolingual-English classes.

METHODOLOGY

The study employed a longitudinal analysis of data on the educational progress of ELL-entitled, first-time entrants to the New York City public schools. Six cohorts of students were followed--students who entered kindergarten or grade1 in fall 1990 or grades 2, 3, 6, or 9 in the fall of 1991. The reason for using two separate entry dates was to be able to make use of the revised LAB norms, which were available in 1990 for kindergarten and first grade, but not until the next year for grades 2 and above. The particular four grades sampled for the second entry date were selected for the study to simplify the research design by choosing significant points in the developmental continuum. In addition, all four levels of the LAB test would be represented in the data.¹

The databases for these two cohorts were developed from the Office of Student Information Services' "biofile" tape. The first database included all general education and resource room students who were admitted for the first time in kindergarten or grade 1 in the fall 1990 semester. The second database included all general education and resource room students who were admitted for the first time to a New York City public school in grade 2, 3, 6, or 9 in fall 1991 semester.



¹ Level I of the LAB is administered to students in kindergarten through grade 2, Level II in grades 3-5, Level III in grades 6-8, and Level IV in grades 9-12.

The final ELL-Entitled cohorts used for this study were obtained by merging the two citywide databases described above with information from the Bilingual Education Student Information Survey (BESIS) data base, then selecting a subset of these groups. The subset of interest consisted of members of the databases who had a non-English home language, and whose BESIS record indicated that the students scored at or below the 40th percentile on the LAB test taken in the fall semester when they entered the New York City public school system.² Students who transferred out of the New York City public schools, and did not re-enter within the span of the study, were also deleted from the cohorts.

LAB data used to determine ELL eligibility each spring were obtained from the Office of Student Information Services' Test History File. Data relating to program enrollment and ELL entitlement were collected through June 1999, and were merged with the databases for the cohorts. Thus this report follows the 1990 entrants for nine school years, and the 1991 entrants for eight school years.

LIMITATIONS

This is a descriptive study of the educational progress of cohorts of ELLs who entered New York City public schools at various grades in fall 1990 and fall 1991. The study uses a longitudinal methodology that tracks the individual students across eight and nine years in the school and system describing their bilingual/ESL program exit rates, achievement on standardized tests of reading and mathematics and, for the grades 6 and 9 cohorts, their graduation and dropout rates. The report also presents outcome data separately by type of program and language of the home. The study is not intended to provide an evaluative analysis of the effectiveness of different types of programs for ELLs. Specifically, inferential comparison of the relative efficacy of bilingual versus ESL programs is clearly beyond the limits of the study's methodology. No attempt has been made to control for differences in the academic or social needs or entering language proficiency levels of students served in different programs. Moreover, there are no data on the quality and level of program implementation.



² By regulation, all ELLS are entitled to service in an ESL or bilingual program. Program assignment depends in part on the number of ELL-eligible students at a given school. If a school in a community school district has a total of 15 or more students in the same grade, or in two contiguous grades, who have the same home language, then a bilingual program must be provided by that school. On the high school level, 20 students in the same grade with the same home language would mandate a bilingual program. Students enter an ESL-only program if a bilingual program is not provided in their language or if they opt for ESL-only program despite the availability of a bilingual program.

Accordingly, any differences in student performance between programs are likely to be attributable to factors other than differences in their educational philosophies and methods.

THE COHORTS

Table 1 describes the cohorts of students that the study followed. The cohorts were comprised of all students who entered in the New York City public schools as ELLs in the designated grades and years. These numbers appear in the column labeled Beginning Cohort. The Study Cohort excludes all students from the Beginning Cohort who were discharged from the school system as transfers to other school systems or out of the country before they had exited the bilingual/ESL program. The column labeled June 1999 Grade indicates the students' grade level as of that date provided that they were promoted each year. This is included to provide a frame of reference for interpreting the data. However, it should be noted that many of these students have been held over in a grade and, therefore, would have been at a lower grade level in June 1999.

Table 1 shows that most ELLs enter the New York City public schools in kindergarten. Of the 20,060 students across the cohorts, 12,748 (63.6 percent) entered in kindergarten³. After removing students who were discharged, kindergarten students comprised 66.9 percent of the 16,476 students in the study. The numbers drop off sharply in grade 2 and continue to decline until grade 9, with 1,950 students entering the cohort.

FINDINGS

Years to Exit Bilingual/ESL Programs

Figures 1-6 show the exit rates of students in each of the grade cohorts. The bars show the percentage of students reaching the exit criterion in each of the nine years of study for the kindergarten and grade 1 cohorts and the eight years of study for the others. The lines plot the cumulative percentages of students reaching the exit criterion up to and including each designated year.

Taken together, the data shown in these graphs demonstrate a strong relationship between grade of entry and both the time required to reach the exit criterion and the cumulative percentage of students who eventually test out of bilingual/ESL programs. The majority of ELL students who entered the New York City public schools between kindergarten and grade 3 tested out within three to five years. Less than half of the students who entered in grade 6 exited after six



³ Since the PK/K cohort included only small numbers of pre-kindergarten students, this cohort is referred to as the kindergarten cohort throughout the report.

Table 1

Breakdown of the Study Cohort

Starting Grade	June 1999 Grade	Beginning Cohort	Discharges	Study	
PK/K Fall '90	8	12,748	1,733	11,015	
G1 Fall '90	6	2,488	531	1,957	
G2 Fall '91	တ	1,004	250	754	<u> </u>
G3 Fall '91	10	951	250	701	
G6 Fall '91	HS - 5 years	919	7 59	929	
G9 Fall '91	*AN	1,950	. 557	1,393	-
			-		

* Would have completed 7 years of high school in June 1998

years and less than 15 percent of students who entered in grade 9 exited during high school.

The line graph for kindergarten shows a steep slope for the first three years which levels off thereafter. (See Figure 1.) This indicates that relatively large percentages of kindergarten students reached the exit criterion in the first three years in bilingual/ESL programs. Cumulatively, 62 percent exited within three years and 75.9 percent within six years. The largest percentage, 28.3 percent, exited after one year. A residual group of kindergarten cohort students, 17.5 percent, were yet to reach the exit criterion after nine years. In considering the implications of these data, it is important to remember that kindergarten students comprised 66.9 percent of the study cohort. Thus, the highest exit rates were observed for the cohort that comprised two-thirds of all entering ELLs in the study.

The line graph in Figure 2 for the grade 1 cohort shows a steeper segment in the first two years than that for kindergarten with a more gradual leveling off in years three through nine. The steep two-year slope indicates that a large percentage (42.3 percent) of the grade 1 students reached the criterion in the first two years, with 51.5 percent exiting within three years and 66.1 percent exiting within five years. After nine years, 22.6 percent had not tested out of bilingual/ESL programs.

Figure 3 for the grade 2 cohort shows relatively equal and substantial percentages of students testing out over the first four years for a cumulative 59.2 percent by the fourth year. Exit rates for the grade 3 cohort accelerate over the first three years from 5.7 percent in year 1 (1992) to 18.7 percent in year 3, with cumulative exit rates of 38.4 percent after three years, and 64.2 percent after six years. (See Figure 4.) After eight years, 23.7 percent of the grade 2 students and 28.4 percent of the grade 3 students were yet to exit.

The relatively gradual slope of the line graph for the grade 6 cohort and the flat graph for the grade 9 cohort indicate that the annual and cumulative exit rates for these students are low. (See Figures 5 and 6.) In interpreting these data, it is inportant to remember that most of the sixth graders would have completed four years of high school by 1998 and most of the ninth graders would have done so by 1995. By 1998, after seven years in bilingual/ESL programs, 44.9 percent of the grade 6 cohort had reached the exit criterion. By 1995, after four years high school, 14.6 percent of the grade 9 cohort had exited.

Exit Rates by Type of Program

Figures 7 - 10 display exit rate data for the kindergarten and grades 1 — 3 cohorts broken-down by the types of bilingual/ESL programs in which ELLs were served. The numbers of students in each program type for the grade 6 and 9 cohorts were insufficient for this analysis. Annual exit rates are displayed in



table format at the bottom of the figures and the cumulative exit rates are plotted as line graphs. There are three types of program categories. The first are bilingual programs in which students are taught content area subjects in their home language, develop English proficiency through ESL instructional methods, and strengthen their home language skills through native language instruction. Next are ESL-only programs in which students are taught all subjects in English through ESL methods. Students in these first two categories were served exclusively in their respective programs all the time that they were designated ELLs. A third are mixed programs where students have alternated between bilingual and ESL programs from year to year. Mixed program histories usually result from administrative exigencies, such as having insufficient numbers of students to form bilingual classes one year but not the next.

As shown in Figure 7, the cumulative line graphs for kindergarten students served exclusively in bilingual or ESL programs are parallel and close in level. Both differ widely from the graph for mixed programs. Large percentages of kindergarten students in both the ESL and bilingual program groups exited the programs within the first three years; three-year exit rates were 84 percent for the ESL group and 73 percent for the bilingual group. By contrast, the three-year exit rate for the mixed group was 20.4 percent. While the exit rates of the ESL and bilingual groups gradually leveled off after three years, the exit rate accelerated for the mixed group. The cumulative exit rates after six years (1996) were 94 percent for ESL, 86.5 percent for bilingual and 46.5 percent for mixed. After nine years, 2.9 percent of the ESL group and 9.3 percent of the bilingual group had not reached the exit criterion, compared to 33.8 percent of the mixed group.

The trends for the grade 1 cohort presented in Figure 8 are similar to those for kindergarten with the line graphs for the ESL and bilingual groups closely tracking one another and diverging sharply from that for the mixed group. The cumulative exit rates were as follows: after three years, 79.8 percent for ESL, 62.1 percent for bilingual and 20.3 percent for mixed; and after five years, 91.9 percent for ESL, 79.4 percent for bilingual and 32.9 percent for mixed. After nine years, 2.4 percent of the ESL group and 12.2 percent of the bilingual group had not reached the exit criterion, compared to 39 percent of the mixed group.

There is divergence in the exit rate patterns for the bilingual and ESL groups in the grades 2 and 3 cohorts, with the line graph for the bilingual group tracking between the relatively high exit rates for the ESL group and the relatively low exit rates of the mixed group. (See Figures 9 and 10.) After five years (1996), the cumulative exit rates were as follows: for the grade 2 cohort, 91.4 percent for ESL, 67.2 percent for bilingual and 44.6 percent for mixed; for grade 3, the rates were 85 percent for ESL, 64.1 percent for bilingual and 28.8 percent for grade 3.



Types of Programs Serving ELLs by Home Language

All ELLs are entitled to be served in a bilingual program unless their parents choose otherwise or it is not administratively possible to do so. ESL programs are offered at parental option, if too few students close in age and with the same home language are available to form a class, or in the absence of a qualified bilingual teacher. The numbers of students in each language group is a key factor in determining program offerings.

Figures 11 and 12 display the percentages of students in the six most prevalent language groups and all others combined who were in the three program types for the kindergarten and grade 1 cohorts, respectively. With the exception of Spanish-speaking students in kindergarten and grade 1 and Haitian speakers in grade 1, most ELLs were served exclusively in ESL programs for both cohorts. Conversely, more than half of the Spanish-speakers were served exclusively in bilingual programs. Nearly 30 percent of the kindergarten and about one-third of the grade1 Spanish-speaking students were in the mixed group, the group that showed relatively low exit rates reported above. Less than 15 percent of the Spanish-speaking students in both cohorts were served exclusively in ESL programs.

High percentages of Haitian –speakers were in the mixed group for both cohorts, 31.2 percent for kindergarten and 54.2 percent for grade 1. Although 24.8 percent of the Russian-speakers in kindergarten were in bilingual programs, the percentage dropped to 5.7 percent for the grade 1 cohort. Among Chinese-speakers, 22.6 percent in kindergarten and 28.3 percent in grade 1 were served exclusively in bilingual programs.

Exit Rates by Home Language and Type of Program

Figures 13 – 17 display the exit rates by type of program for each of the six most frequent language groups for the kindergarten cohort. Exit rate patterns for each program group discussed above are present in the line graphs for each language group. That is, the graphs of cumulative exit rates are relatively high and parallel for the ESL and bilingual groups, with the former slightly higher than the latter, and substantially lower exit rates for the mixed group. Noteworthy exceptions appeared among Chinese and Russian speakers, with students in the bilingual group exiting at slightly faster rates than those in the ESL group. Among Korean-speaking ELLs, the cumulative exit rates of the mixed group nearly caught up to those of the ESL and bilingual groups in the third year (1993).



Comparison of the Characteristics of ELLs Who Exited Early, Exited Late and Never Exited From Bilingual/ESL Programs

Analyses were conducted in an attempt to understand some of the relationships between student characteristics and the length of time to reach the program exit criterion. Relationships between program exit and three variables were explored: proficiency in English and proficiency in the home language (Spanish-speakers only) at the time of entry into the school system; and placement in special education classes as of June 1999.

The analysis separated students across all grade cohorts into four groups. The first included ELLs who exited the programs in one to three years. The second consisted of students who exited in six to nine years. The third were students who never reached the exit criterion (i.e. still enrolled.) The last group, students who exited in four and five years, was excluded from the analysis.

Figure 18 shows performance on the English LAB for each group at the time of entry into the New York City public schools. Figure 18 shows a moderately strong relationship between entering English LAB scores and time of exit. Most of the students in the late-exit and still-enrolled groups scored at the first percentile on the LAB, 79.2 percent and 83.7 percent, respectively, compared to a little more than half, 57.3 percent, for the early-exit group. Conversely, more students in the early-exit group scored at higher percentile ranks than did the other two groups. Despite the observed relationship it is noteworthy that the majority of early-exit students entered the New York City schools at the lowest percentile on the English LAB.

Figure 19 shows a similar relationship between exit group and scores on the Spanish LAB at the time of entry. For the early-exit group, 22.7 percent scored above the 81st percentile and 13.3 percent between the 61st and 80th percentiles. Comparable percentages for the late-exit group were 14.1 percent and 11.3 percent, respectively, and for the still-entitled group, 11.4 percent and 8.9 percent, respectively.

Figure 20 shows a strong relationship between exit group and enrollment in special education as of June 1999. More than one-third of the students who failed to reach the exit criterion were identified as disabled and eventually were served in self-contained special education classes. Only four percent of the early exit students were similarly identified. System-wide, about six percent of students are served in special education classes.

1998 Standardized Test Performance by Year of Program Exit

One measure of the academic success of ELLs in mainstream classes after they have reached the bilingual/ESL program exit criterion is their performance on standardized tests in reading and mathematics. These citywide



tests are administered every spring to all students in general education and resource room programs and most students in self-contained special education classes. The citywide reading test is also administered in English to all students in bilingual/ESL programs after they have been served in an English language school system for more than 4.5 years or anytime after they reach the 30th percentile on the LAB. The same policy applies to citywide testing in mathematics, except that ELLs who are receiving instruction in the home language may take available translations.⁴

Figures 18 – 20 display the 1998 citywide reading test scores for students in the kindergarten and grades 1 and 2 cohorts by the year in which they reached the bilingual/ESL program exit criterion. Figures 21 – 23 present similar data for mathematics. In spring 1998, the citywide reading and mathematics tests, the CTB-R and CTB-M, respectively, were designed to examine attainment of the New York City standards, used a selected-response format, and used 1992 norms. Performance of New York City public schools on these tests is measured by the percentage of students who score at or above the median student in the national norm group, i.e. the 50th percentile. Schools that are performing at the national average will have 50 percent of their students scoring at or above the national median.

Reading: Figure 18 displays citywide reading test performance for the 7,862 students in the kindergarten cohort who were tested in 1998. If these students had been promoted every year, they would have been in seventh grade in 1998. Since this was true for the majority of these students, the 1998 scores of grade 7 students in the city overall were used for comparison. The data in Figure 18 show a strong relationship between the year in which students reached the exit criterion for bilingual /ESL programs and performance on the 1998 citywide reading test. Students who had tested out one or two years after entering the programs scored far above 7th graders citywide. The performance of students who tested out in three and four years approached overall citywide performance, while the scores of students who exited after six and seven years trailed that of the city overall. Very small percentages of students who did not exit the programs until 1999 and those who were still in the programs after nine years exceeded the national median.

The observed trends are elaborated in Figure 24, which shows the quartile distribution of 1998 reading scores for the kindergarten cohort by year of program exit. If a group of tested students is performing at the national average, about 25 percent will score in each of the four quartiles as follows:

- Quartile 1, very low performing students below the 26th percentile;
- Quartile 2, low to moderate performing students between the 26th and 49th percentiles;



⁴ Translated citywide mathematics tests are available in Spanish, Haitian and Chinese.

- Quartile 3, moderate to high performing students scoring between the 50th and 75th percentiles; and
- Quartile 4, very high performing students scoring above the 75th percentile.

As seen in Figure 24, students in the kindergarten cohort who exited the programs in one or two years showed larger percentages of students in Quartile 4 and lower percentages in Quartile 1 than the national norm group. Those who exited in three years were close to the national average in the percentage of Quartile 1 students but far below the national average in very high scoring (Quartile 4) students. Those who exited after five or more years had very low percentages of Quartile 4 students and very high percentages of Quartile 1 students.

These data cannot be used to infer a cause and effect relationship between time in bilingual/ESL programs and reading achievement in English. It must be remembered that the students who tested out in 1993 and 1994 spent five and six years, respectively, in mainstream classes taught in English before they took the 1998 citywide reading test; those exiting in 1995 spent three years in mainstream classes. It is likely that whatever cognitive, personal-social, familial, or programmatic factors were responsible for the early exit of many of the students in the kindergarten cohort were also responsible for their high achievement on the citywide reading test in 1998. Moreover, students who exited after one or two years (3,068) comprised 39 percent of those who were tested in 1998 and those exiting after three and four years (2,2116) an additional 27 percent. Accordingly, the group that represented two-thirds of the kindergarten cohort showed high levels of performance on the 1998 reading test.

Figures 19 and 20 show patterns of performance for the grades 1 and 2 cohorts, respectively, that are similar to that observed for the kindergarten cohort above. There are two notable exceptions. First, students in both cohorts who exited the programs after three years substantially outperformed all eighth graders citywide on the 1998 reading test. Students in both cohorts who exited after four years showed performance that approached that of all eighth graders. The 215 students (40.7 percent of those tested in 1998) in the grade 2 cohort who exited after one, two or three years all showed particularly strong performance on the 1998 reading test, with approximately three quarters of them scoring at or above the national median. It appears that the additional time in bilingual/ESL programs required for these students to achieve the level of English proficiency necessary for program exit did not hamper their reading achievement in middle school.

<u>Mathematics</u>: The trends in performance on the 1998 citywide mathematics test displayed in Figures 21 – 23 show similarities and differences to those described for reading above. Although the general pattern of mathematics performance by year of bilingual/ESL program exit for the kindergarten cohort is similar to that for reading, performance compared to seventh graders overall is better. The 5,184



students (65.5 percent of the cohort) who exited the programs in up to four years all compared well to the mathematics test performance of seventh graders citywide. Those who exited after one or two years outperformed all seventh graders by 17.3 and 18.5 percentage points respectively; those exiting after three years scored 3.5 percentage points higher; and those exiting after four years scored less than one percentage point lower.

Figure 25 shows a preponderance of very high scoring students (Quartile 4) and a paucity of very low scoring students (Quartile 1) among students in the kindergarten cohort who exited the programs in one or two years. The percentages of Quartile 1 students are relatively low to average for students exiting in from three to seven years. The percentage of students in Quartile 4 falls below average for those exiting in five years or more.

The 760 students (57.8 percent of the cohort) in the grade 1 cohort who exited within four years and the 351 students (66.7 percent of the cohort) in the grade 2 cohort who exited within five years outperformed eighth graders overall on the 1998 citywide mathematics test. (See Figures 22 and 23.) Mathematics performance continued to be relatively strong for students in the grade 1 cohort that exited after six and seven years. Grade 2 cohort students who exited within three years showed particularly strong mathematics test performance, with about 85 percent scoring at or above the national median.

1998 Standardized Test Performance by Year of Exit and Type of Program

Reading: Figure 26 displays the percentages of students in the kindergarten cohort scoring at or above the national average on the 1998 citywide reading test broken-down by year of exit and type of program: bilingual only, ESL only, or an alternating mixture of bilingual and ESL programs. 5 The ESL group shows the same pattern of relationship between year of exit and reading performance as discussed above for the full cohort. Students in the ESL group who exited in the first two years of the program had much higher performance on the 1998 citywide reading test than seventh graders overall. ESL students exiting in three years outscored the city by about 2 percentage points with steady declines in the percentage scoring at or above the national average for students exiting after four or more years. The pattern for the mixed group was similar to that for the ESL group but with lower percentages scoring at or above the national median for each exit year except 1997 and 1998, after seven and eight years of service, respectively. A somewhat different, less regular pattern is seen for the bilingual group. Bilingual students who exited after one and two years outperformed the city overall as did students in the other groups, albeit by a smaller margin. However, after falling below the city overall for students exiting after three years, bilingual student exiting after four years performed as well as the city overall.



⁵ Students categorized in the mixed program group did not have the opportunity to exit in one year since a minimum of two years of service was required for an alternating pattern of service.

Moreover, the bilingual group exceeded the performance of the ESL and mixed groups among students exiting the programs in five out of the next six years, 1994 – 1999.

As noted above, cause and effect cannot be inferred from these data. The results emerge from a complex interplay of cognitive, personal-social, familial and programmatic factors.

Figure 27 shows patterns of performance for the grade 2 cohort that are similar to those observed for the kindergarten group. Students exiting ESL programs in three or more years show a steady decline in 1998 citywide reading test performance following high levels of performance for those exiting in one or two years. Also, students in the bilingual group again showed a somewhat irregular pattern of performance with students exiting in year 3 (1993), year 6 (1996) and year 8 (1998) scoring higher on the 1998 reading test than those that exited each year before. Further, the bilingual group outscored the ESL group for six of the eight exit years. However, it should be remembered that 46 percent of the ESL group and 37 percent of the bilingual group exited in year 2, an exit year for which ESL students clearly outscored bilingual students on the 1998 reading test. Although mixed-program students scored as well as or better than the other groups for most exit years, 39 percent of mixed program students had not reached the exit criterion after nine years.

Figure 28 for the grade 2 cohort shows bilingual students outperforming the city overall for four of the first five exit-year groups. ESL students scored higher than the city overall for three of those years. Although mixed program students who exited in three years (1994) showed exceptionally high performance on the 1998 reading test, only 4.9 percent of the mixed program students exited that year with 31 percent remaining in the program after eight years.

<u>Mathematics</u>: Figure 29 for the kindergarten cohort shows that students who exited ESL programs in each of the first four years after entry scored above the city overall on the 1998 citywide mathematics test. Those who exited ESL programs over the next three years scored within 10 percentage points of the city. Students exiting bilingual programs scored above the city overall for three of the first four years. Although students exiting mixed programs after two years showed high 1998 citywide mathematics test scores, only 4.9 percent of mixed program students exited in that year.

Similar patterns are displayed in Figures 31 and 32 for the grades 1 and 2 cohorts, respectively. ESL students in the grade 2 cohort exiting over the first five years showed exceptionally high levels of performance on the 1998 citywide mathematics test for four of the five exit groups. The performance of bilingual students in this cohort was also high for those exiting in the first three years.



Although mixed program students also showed relatively high scores, few of these students exited in the first five years.

School Completion Outcomes

Students in the grade 6 cohort would have had the opportunity to complete five years of high school by June 1999; those in the grade 9 cohort would have completed seven years in June 1998. Figures 38 and 39 present the school completion status as of June 1999 for the grade 6 and grade 9 cohorts, respectively. The cohorts were divided into two groups: students who had reached the bilingual/ESL program exit criterion and those that did not. For purposes of comparison, each figure also displays the school completion outcomes for respective cohorts of all general education students.

Both figures show that newly entering ELLs who reach program exit criteria have a high degree of success in completing high school; those who do not reach the exit criterion are largely unsuccessful. For the grade 6 cohort, 77.4 percent of those who exited the programs graduated from high school and 10.1 percent dropped out. An additional 12.5 percent were still enrolled and working toward a degree. The comparable statistics for cohort students who did not reach the exit criterion were 24 percent graduated, 45.7 percent dropped out, and 30.3 percent still enrolled. The school completion data for ELLs who reached the exit criterion were better than the total Class of 1996, the comparable citywide cohort. (See figure 38.)

The school completion outcomes for grade 9 cohort students who reached the exit criterion were particularly strong. The graduation rate for these students was 92.8 percent. This is far better than the graduation rate for grade 9 cohort students who did not exit, 57.7 percent, and also better than the total Class of 1995, 70 percent. In considering the strong outcomes for the ELLs who reached the exit criterion, it should be noted that only 248 (14.8 percent) of the cohort exited the programs during high school.

SUMMARY AND CONCLUSIONS

Summary

This report presented the outcomes of a longitudinal study of ELLs who entered the New York City public schools in fall 1990 in kindergarten and first grade or in fall 1991 in grades 2, 3, 6, and 9. The study tracked the educational progress of these students for nine and eight years, respectively.

The New York City public school system identifies students as ELLs through home language survey and a test of English language proficiency known



⁶ The Division of Assessment and Accountability tracks cohorts of ninth graders for seven years and then issues final graduation and dropout rates.

as the LAB. Students who score at or below the 40th percentile on the LAB are entitled for bilingual/ESL programs. The same 40th percentile is used as the exit criterion for these programs.

The study documented the time it took cohort students to reach the bilingual/ program exit criterion, their performance on standardized tests of reading in English and mathematics after program exit, and, for the grades 6 and 9 cohorts, school completion rates. Outcome data were broken-down by type and consistency of bilingual/ESL program and home language.

The study did not employ the methodological or statistical controls necessary to address the issue of the relative efficacy of bilingual and ESL-only philosophies or instructional methods. Nevertheless, the study is a valid description of the educational progress demonstrated by cohorts of ELLs who entered these programs at the beginning of the 1990's. The key findings are summarized below.

Grade of Entry of ELLs

- Most (63.6 percent) of the 20,060 ELLs in the study entered the New York
 City public schools in kindergarten.
- The next most frequent grade of entry was grade 1 (2,488 students or 12.4 percent) followed by grade 9 (1,950 students or 9.7 percent).

Years to Exit Bilingual/ESL Programs

- There was a strong relationship between grade of entry and both annual and cumulative exit rates. The early-grade cohorts exited faster and in larger cumulative percentages than the higher-grade cohorts.
- 62 percent of the kindergarten cohort reached the program exit criterion in three years and 75.9 percent within six years.
- 51.5 percent of the grade 1 cohort exited within three years and 66.1 percent within six years.
- After four years of high school, 14.6 percent of the grade 9 cohort reached the exit criterion.

Exit Rates by Type of Program

- Exit rates were faster and higher for students served exclusively in ESL or bilingual programs as opposed to those who were served alternately in one or the other each year, i.e. the mixed service group.
- For the kindergarten cohort, three-year exit rates were 84 percent for ESL students, 73 percent for bilingual students, and 20.4 percent for the mixed group. Three-year exit rates were similar for the grade 1 cohort; 80 percent for ESL, 62 percent for bilingual, and 20 percent for the mixed service students.



 There was divergence in the patterns for the grades 2 and 3 cohorts, with the cumulative exit rates for bilingual students falling below those for the ESL students and above those for the mixed group.

Types of Programs Serving ELLs by Home Language

- With the exception of Spanish-speaking students in kindergarten and grade 1 and Haitian speakers in grade 1, most ELLs in the grades 1 and 2 cohorts were served exclusively in ESL programs.
- Among Spanish-speakers in both cohorts, more than half of ELLs were served in bilingual programs and more than 30 percent were served in mixed programs.
- The greater numbers of Spanish-speaking ELLs provided greater administrative opportunities for the creation of bilingual classes to serve them.

Exit Rates by Home Language and Type of Program

- The relationships between type of program and cumulative exit rate were similar, for the most part, across language groups. That is, for each language group, cumulative exit rates were relatively high and parallel for students served exclusively in ESL and bilingual programs. The exit rates were substantially lower for students who received mixed services, i.e. alternating between bilingual and ESL from one year to the next.
- Among Spanish- Haitian-speaking students, those served exclusively in ESL programs had slightly higher exit rates than those served exclusively in bilingual programs. This pattern was reversed for Chinese- and Russianspeakers with slightly higher exit rates for those served in bilingual than ESL programs.
- Among Korean speakers, the cumulative exit rate of the mixed group nearly caught up to those of the ESL and bilingual groups in the third year of service.

Characteristics of Early-Exit and Late-Exit ELLs

- There was a strong relationship between time of exit from bilingual/ESL program and proficiency in both English and the home language.
- Upon entry into the New York City public schools, 83.7 percent of students who never reached the exit criterion scored at the fist percentile on the English LAB, compared to 79.2 percent of late-exit (i.e. 6– 9 years) students and 57.3 percent of early-exit (i.e. 1 – 3 years) students.
- For the early-exit group, 36 percent of entering Spanish-speakers scored above the 61st percentile on the Spanish LAB. Comparable percentages were 25.4 percent for the late-exit group and 20.3 percent for those who never exited.
- More than one-third of students who never exited the programs were identified as disabled and served in self-contained special education classes



as of June 1999. Comparable statistics were four percent for the early-exit group and six percent for all city students.

Standardized Test Performance by Year of Program Exit

- In general, students who exited bilingual/ESL programs in within three years, i.e. in 1991 to 1994, outperformed the city overall on the citywide reading test administered in 1998. Those who exited after four years approached the performance of the city overall.
- Students who exited the programs within four years outperformed the city overall on the citywide mathematics test in 1998.
- Since the majority of students in the kindergarten and grades 1 and 2 cohorts exited the programs within three and four years, in general former ELLs performed well on standardized tests of reading and mathematics when they entered mainstream classes.

1998 Standardized Test Performance by Type of Program

- Students who exited ESL programs showed the same pattern of performance on the 1998 citywide reading test as did all former ELLs. That is, those who exited in the first three years, the majority of students in the cohorts, outperformed the city overall. Those exiting after that showed lower levels of performance. The pattern of performance for students exiting bilingual programs was more variable. In many cases, students who exited bilingual programs relatively late, i.e. after six years, outperformed those who had exited these programs earlier as well as those who exited ESL programs at the same time. Although students exiting mixed programs generally scored high on the 1998 citywide reading test, these students showed relatively low cumulative exit rates.
- Students who exited all three types of programs did generally well on the 1998 citywide mathematics test.

School Completion Outcomes

- Students in the grades 6 and 9 cohorts who reached the program exit
 criterion showed relatively high graduation rates from high school.
 Conversely, these students showed relatively low dropout rates. The school
 completion rates of these students were better than those for New York City
 high school students overall.
- Those who did not reach the exit criterion showed low graduation rates and high dropout rates.



Conclusions

Within the stated limitations of the study, the overall conclusion that emerges from the findings is that New York City's bilingual/ESL programs have demonstrated substantial effectiveness in developing the English language proficiency of ELLs and ensuring their success in the educational mainstream. Deeper exploration of the findings reveals considerable variation in the relative success of these students and identifies subgroups of ELLs who require additional attention.

The major conclusions are as follows:

- New York City's bilingual/ESL programs were especially effective for ELLs
 who entered the school system in kindergarten and grade 1, the grades of
 entry for the majority of ELLs. These students acquired proficiency in English
 relatively quickly and were highly successful later in the educational
 mainstream as measured by standardized test scores.
- 2. Relatively strong proficiency in both English and the home language (for Spanish speakers) contributed to the students' ability to meet the program exit criterion. However, large numbers of students who entered the school system with extremely low proficiency in English were also able to reach the program exit criterion within three years.
- 3. Conversely, students who entered with relatively low levels of proficiency in English as well as their home language, and students who entered late in their school careers, i.e. grade 6 and grade 9, had more trouble meeting the exit criterion. Only one in seven grade 9 entrants reached the exit criterion before leaving high school.
- 4. Late-entry ELLs who did reach the program exit criterion were highly successful in completing high school. Indeed, the graduation rates for ELLs who entered the New York City schools in grade 6 and grade 9 and achieved the bilingual/ESL program exit criterion were higher than the general student population. Although late-entrants who did not reach the exit criterion had lower graduation rates than those that did, still nearly three in five of the grade 9 entrants who remained in bilingual/ESL programs were graduated.
- 5. ELLs who entered New York City middle schools as sixth graders were the least successful of the grade cohorts. A far lower percentage of the middle school entrants reached the program exit criterion than did those that entered elementary school. Similarly, a far lower percentage of middle school entrants were graduated from high school than those who entered New York City schools as high school students in grade 9. Fifty-five percent of the grade 6 entrants never reached the program exit criterion after eight years in the school system, and only 24 percent of these students graduated high school with 45.7 percent dropping out.
- 6. Consistency of programmatic approach appeared to be a particularly important determinant of program exit rates. In fact, consistency of approach proved more important than the program's specific educational philosophy



and methods. ELLs who were served consistently in either bilingual or ESL programs exited at faster and higher rates than those who were alternately served by one and the other program in successive years. These findings were true for all language groups. The study did not investigate the quality of program implementation in terms of the qualifications of staff, the appropriateness of educational materials, and the delivery of instruction. No doubt, these factors would have accounted for a substantial portion of the variance in student outcomes.

7. Across all grade cohorts, more than one in three ELLs who failed to reach the program exit criterion were special education students. There is a need to learn more about these students and the relationships between their language needs and diagnosed educational disabilities.

Although this study has provided a detailed picture of the effectiveness of New York City's bilingual/ESL programs in developing the English language proficiency and academic skills of ELLs who entered the schools at the beginning of the 1990's, there are many issues that remain to be answered. Chief among these are: (1) the proper mix of instructional and support services that will ensure the educational success of those ELLs who fail to reach the exit criterion even after eight and nine years; and (2) educational strategies that will enhance the academic success of ELLs who enter New York City schools in the middle and high school grades. An effective strategy for addressing these issues is to identify replicable programs that have demonstrated success with these types of students. In doing so it is crucial to distinguish between causal and correlative effects. That is, programmatic aspects that have led to student success as opposed to those that are merely coincidental. In addition, the identified effective factors must be adaptable for implementation elsewhere, rather than those that are unique to a situation or beyond the control of program administrators.



Years to Exit Bilingual/ESL Programs Figures 1 - 6



ROGRESS ANGUAGE LEARNERS DERGARTEN LON OF A COHORT C BEGIN

Percent Testing Out

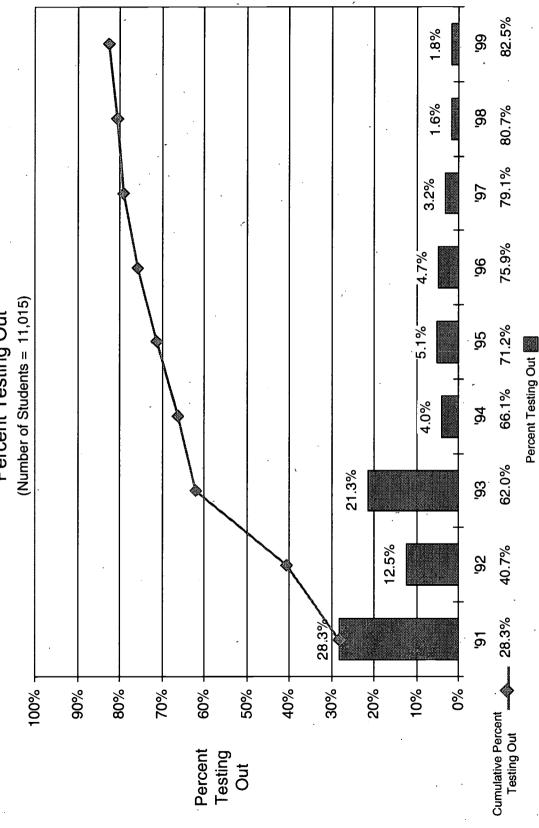




Figure 1



RESS UAGE LEARNERS BEGINNING IN GRAI LOI OF A COHORT (

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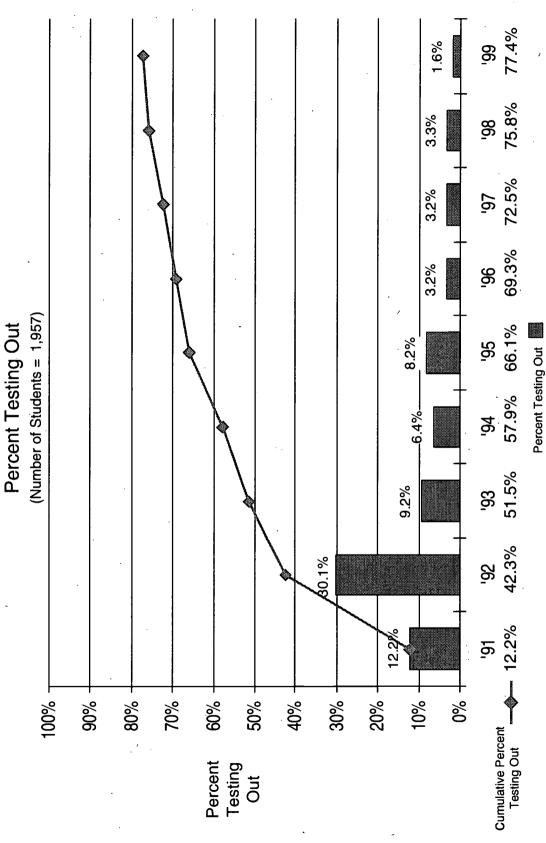


Figure 2

126

UNGITUDINAL PROGRESS T OF ENGLISH LANGUAGE LEARNERS BEGINNING IN GRADE 2 LONGI OF A COHORT OF

Percent Testing Out

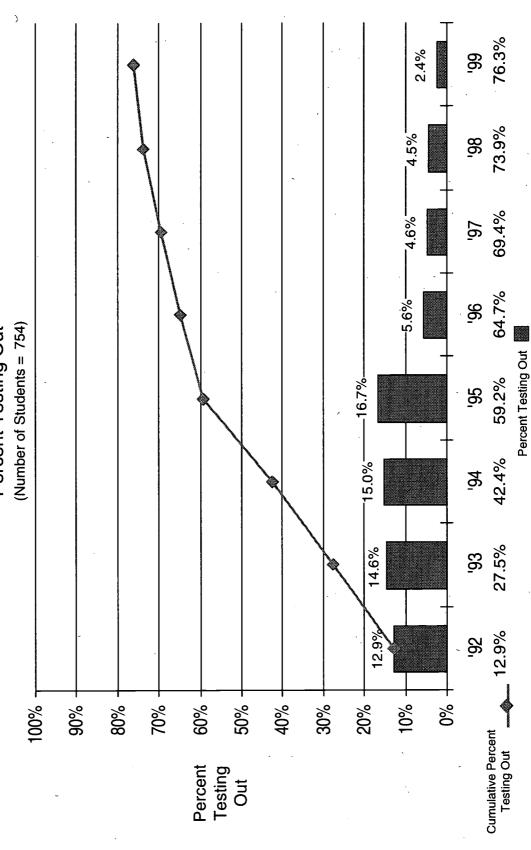


Figure 3





OGRESS NGUAGE LEARNERS 3ADE 3 INNING IN GRAD OF A COHORT

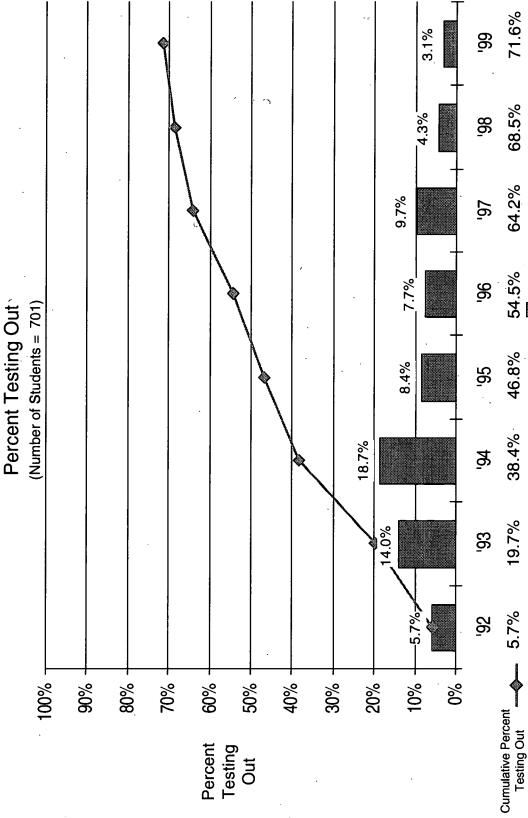


Figure 4

Percent Testing Out





GRESS GUAGE LEARNERS DE 6 INNING IN GRAI OF A COHORT

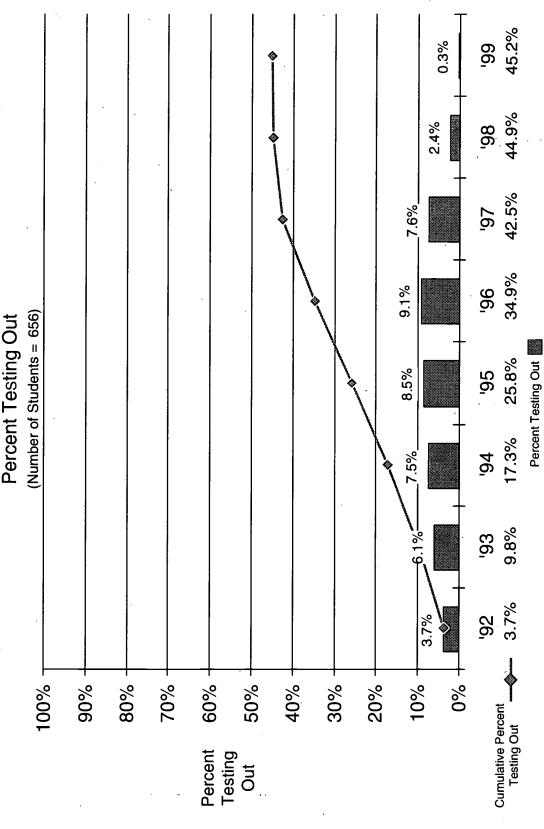
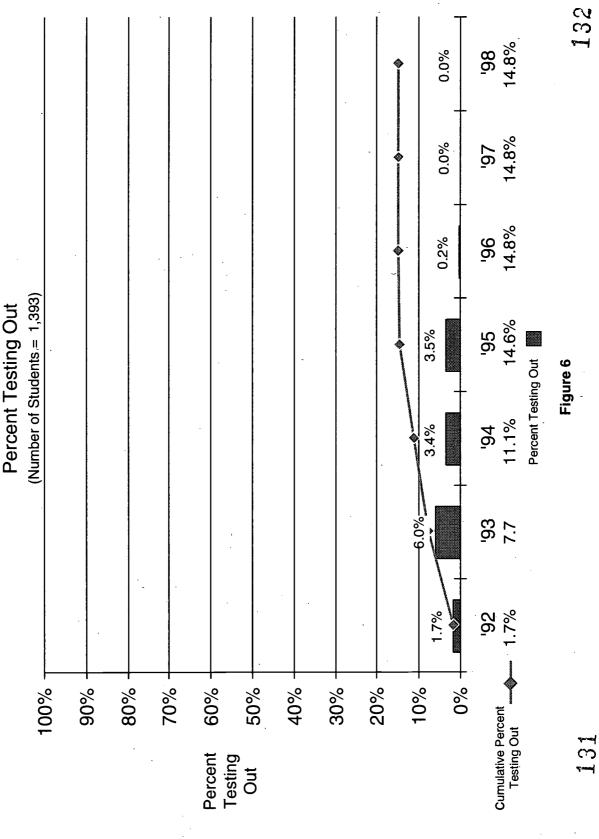


Figure 5





RESS UAGE LEARNERS DE 9 **BEGINNING I** LONG OF A COHORT OF





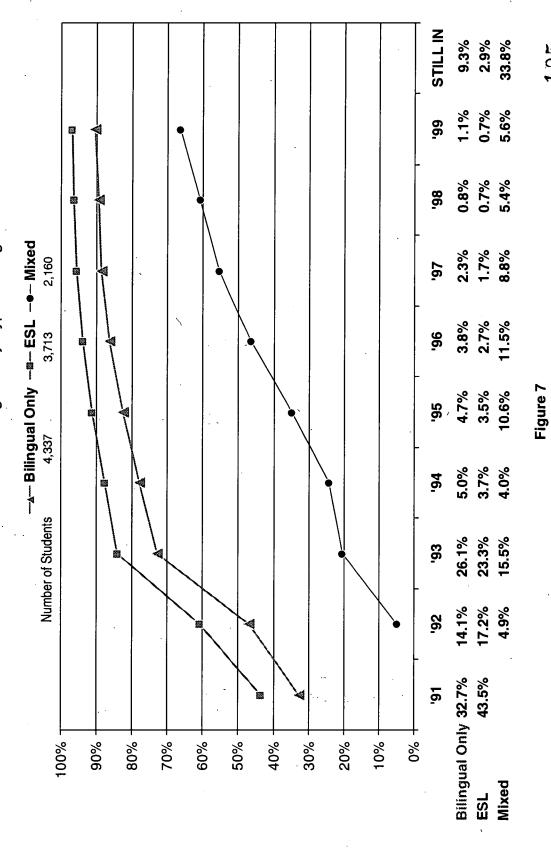
Exit Rates by Type of Program Figures 7 - 10



LONGITUDINAL PROGRESS OF A COHORT OF ENGLISH LANGUAGE LEARNERS **BEGINNING IN PK/K**

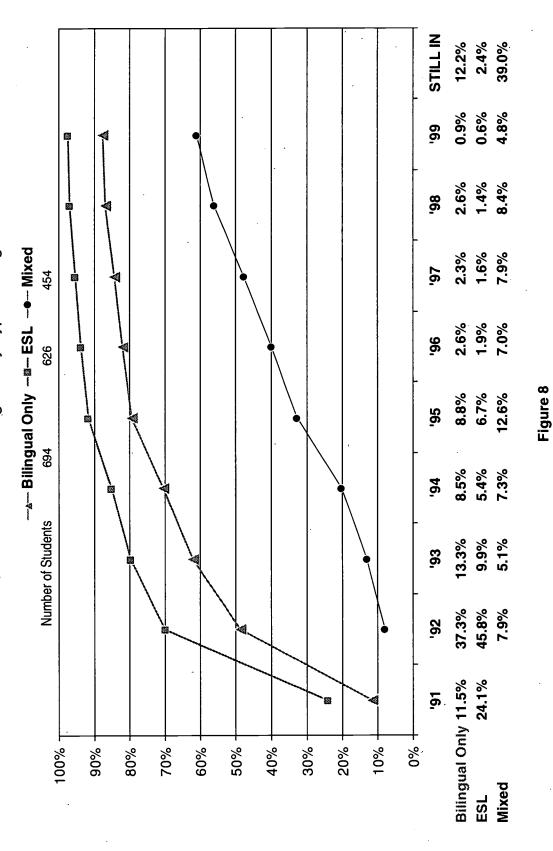
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Cumulative Percent Testing Out By Type of Program



OF A COHORT OF ENGLISH LANGUAGE LEARNERS LONGITUDINAL PROGRESS **BEGINNING IN GRADE 1**

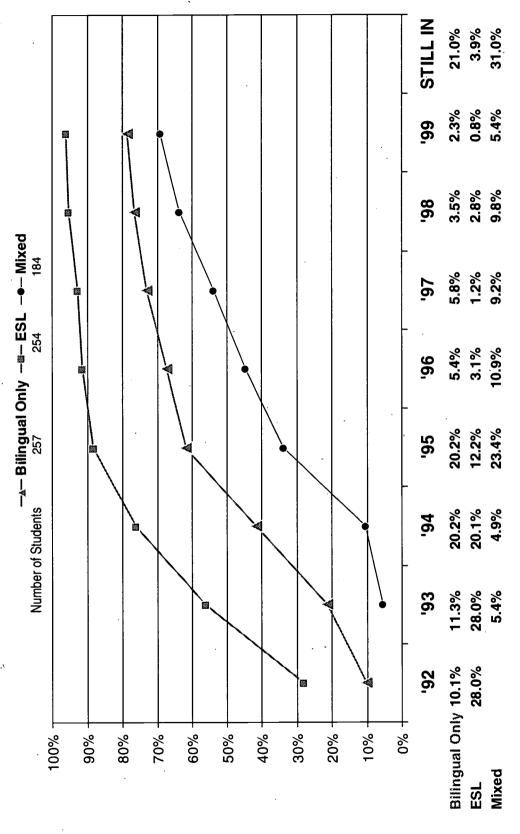
Cumulative Percent Testing Out By Type of Program







OF A COHORT OF ENGLISH LANGUAGE LEARNERS Cumulative Percent Testing Out By Type of Program **LONGITUDINAL PROGRESS BEGINNING IN GRADE 2**



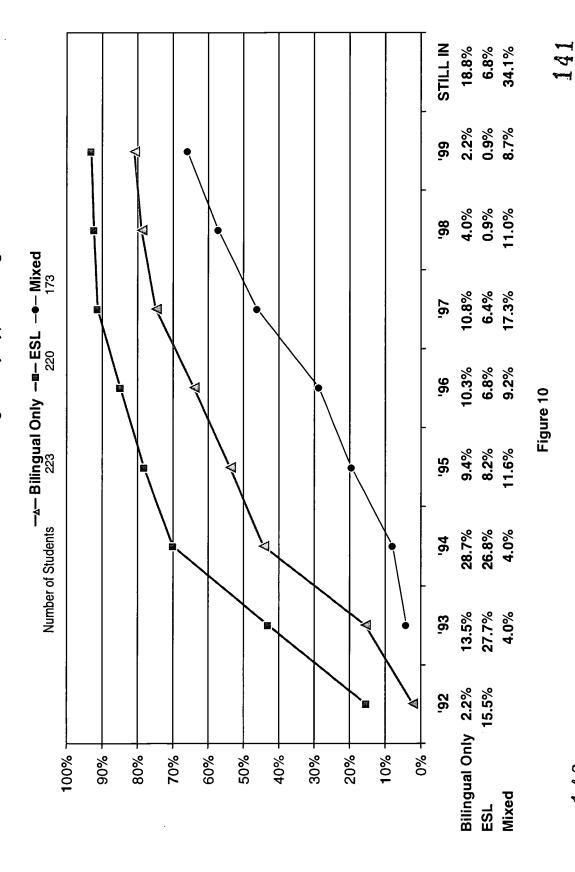






LONGITUDINAL PROGRESS OF A COHORT OF ENGLISH LANGUAGE LEARNERS **BEGINNING IN GRADE 3**

Cumulative Percent Testing Out By Type of Program



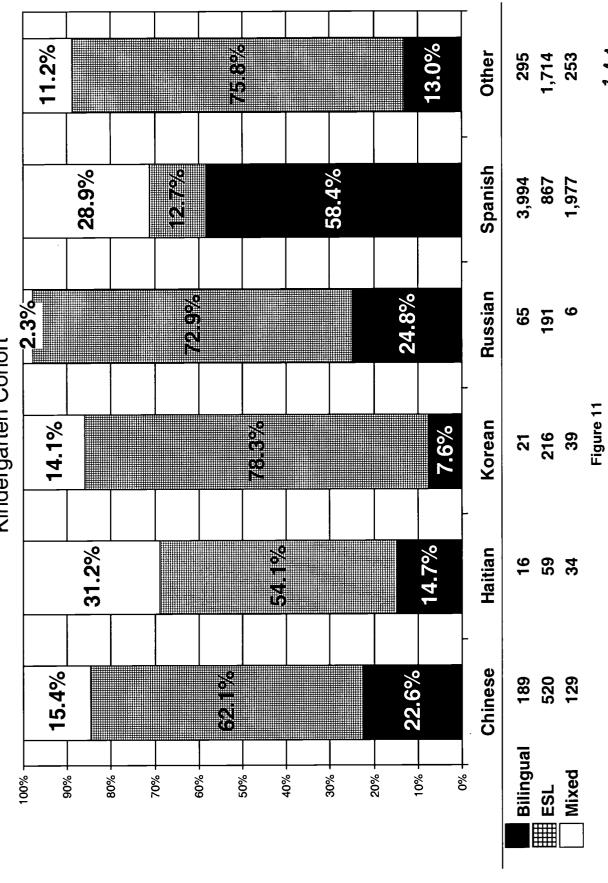




Types of Programs Serving ELLs by Home Language Figures 11 and 12



Types of Programs Serving ELLs by Home Language Kindergarten Cohort



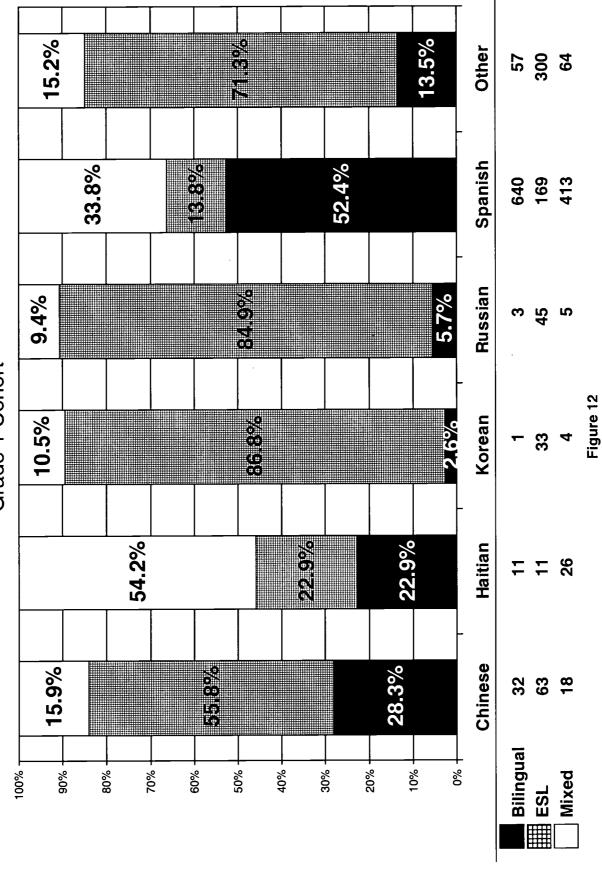


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Types of Programs Serving ELLs by Home Language Grade 1 Cohort

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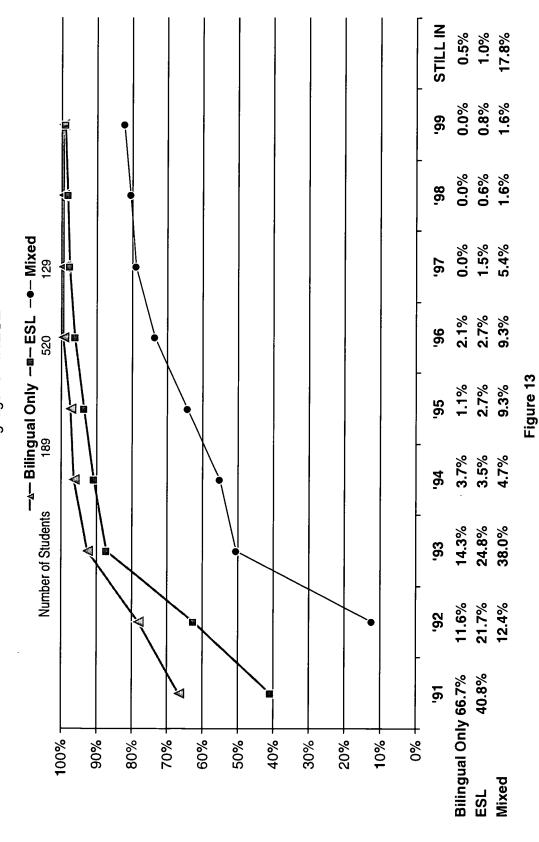


Exit Rates by Home Language and Type of Program Figures 13 - 17



LONGITUDINAL PROGRESS OF A COHORT OF ENGLISH LANGUAGE LEARNERS **BEGINNING IN KINDERGARTEN**

Cumulative Percent Testing Out By Type of Program and Home Language Home Language: CHINESE

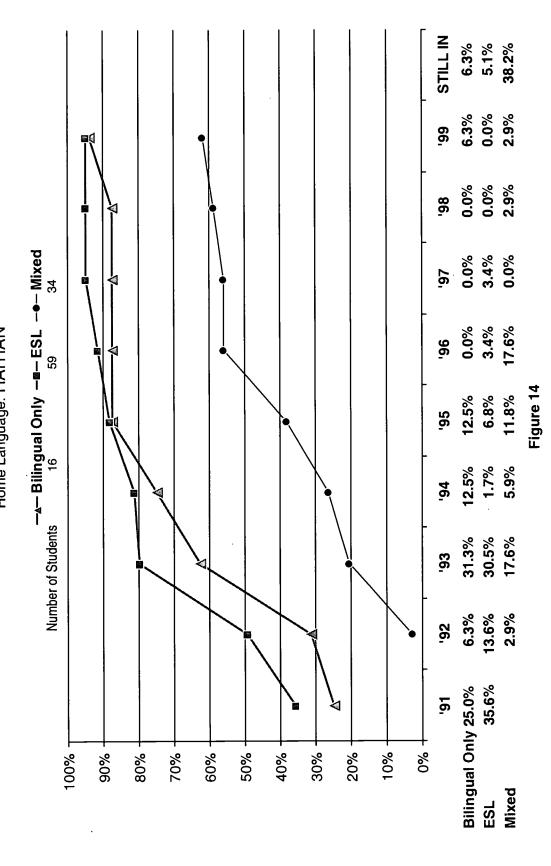




148

OF A COHORT OF ENGLISH LANGUAGE LEARNERS LONGITUDINAL PROGRESS

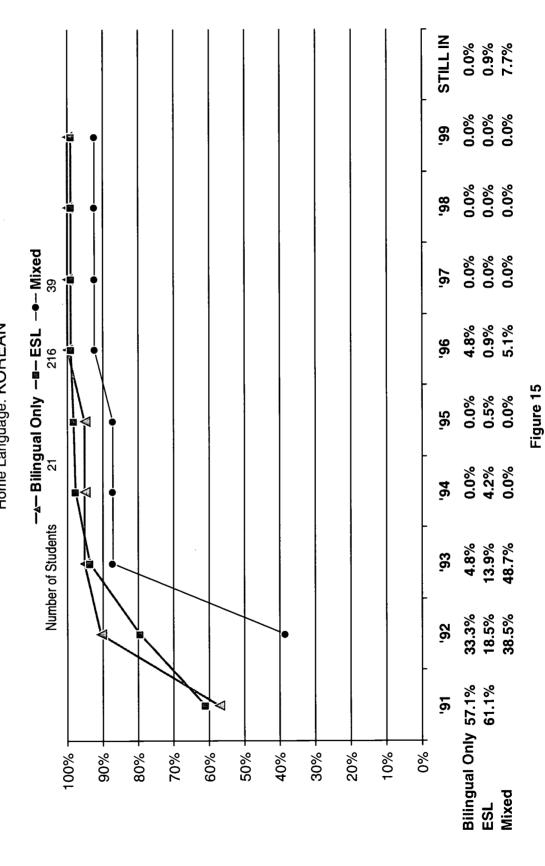
BEGINNING IN KINDERGARTEN
Cumulative Percent Testing Out By Type of Program and Home Language
Home Language: HAITIAN





OF A COHORT OF ENGLISH LANGUAGE LEARNERS **BEGINNING IN KINDERGARTEN LONGITUDINAL PROGRESS**

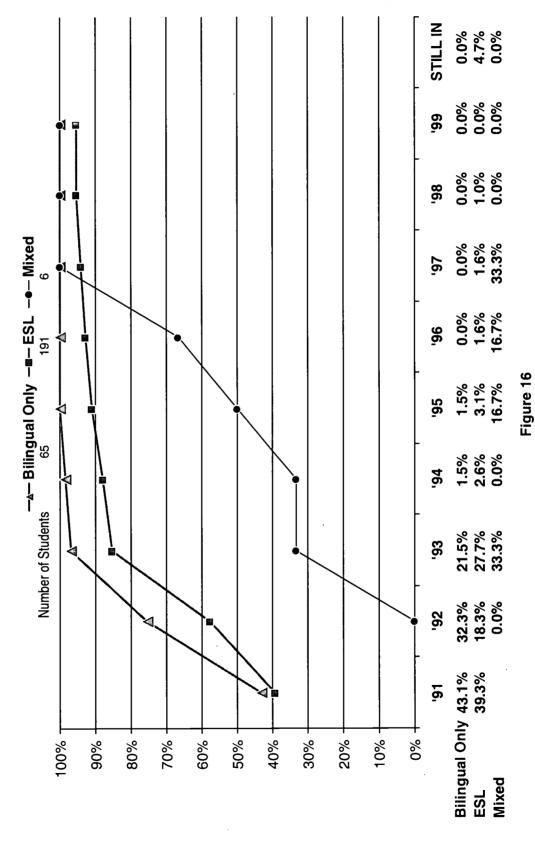
Cumulative Percent Testing Out By Type of Program and Home Language HOMEAN





LONGITUDINAL PROGRESS OF A COHORT OF ENGLISH LANGUAGE LEARNERS **BEGINNING IN KINDERGARTEN**

Cumulative Percent Testing Out By Type of Program and Home Language HUSSIAN



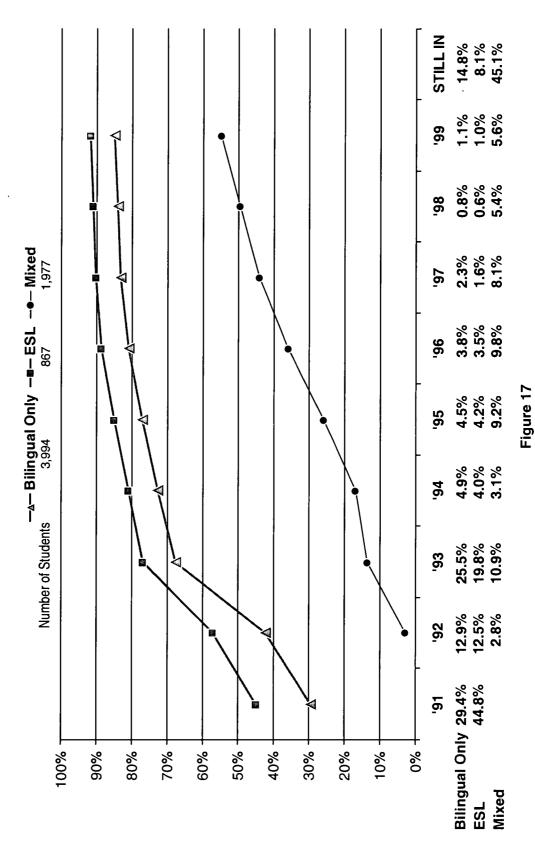




LONGITUDINAL PROGRESS OF A COHORT OF ENGLISH LANGUAGE LEARNERS **BEGINNING IN KINDERGARTEN**

Cumulative Percent Testing Out By Type of Program and Home Language Home Language: SPANISH





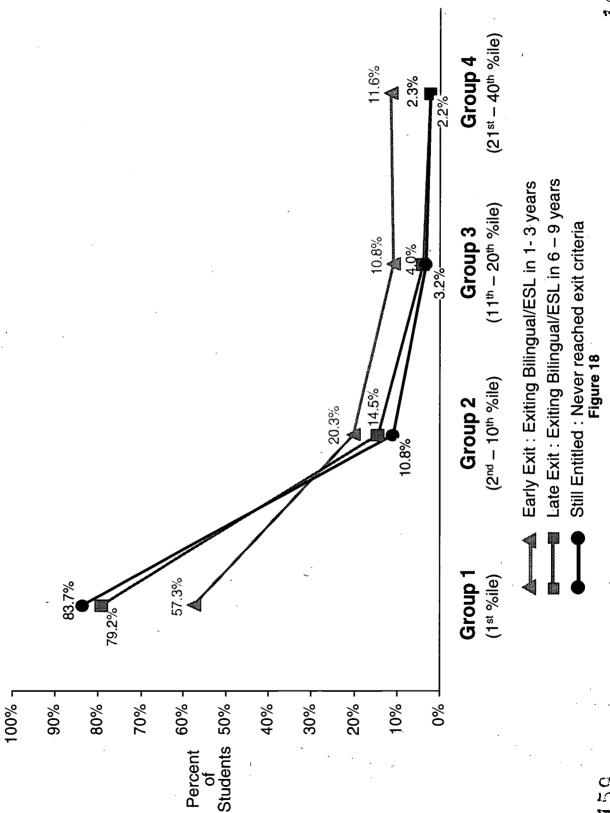




Characteristics of ELLs Who Exited Early, Exited Late and Never From Bilingual/ESL Programs Figures 18 - 20



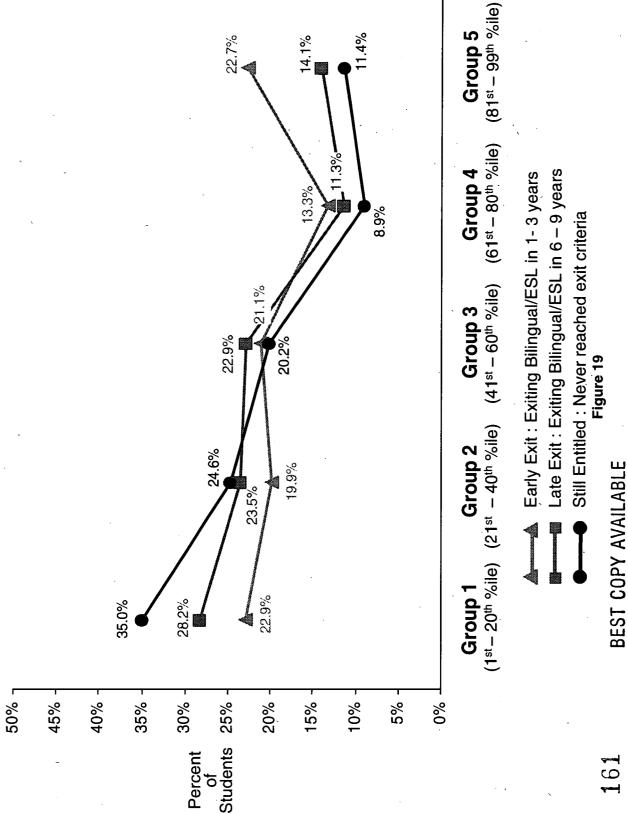
Entering Percentile Ranks on English LAB by Exit Group



153

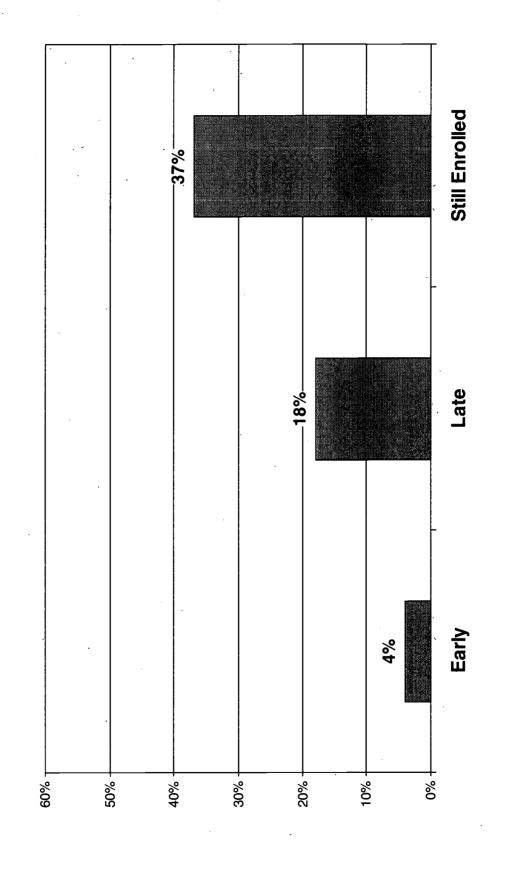
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Entering Percentile Ranks on the Spanish LAB by Exit Group





Percent of ELL Cohorts in Special Education by Exit Group



163

Figure 20

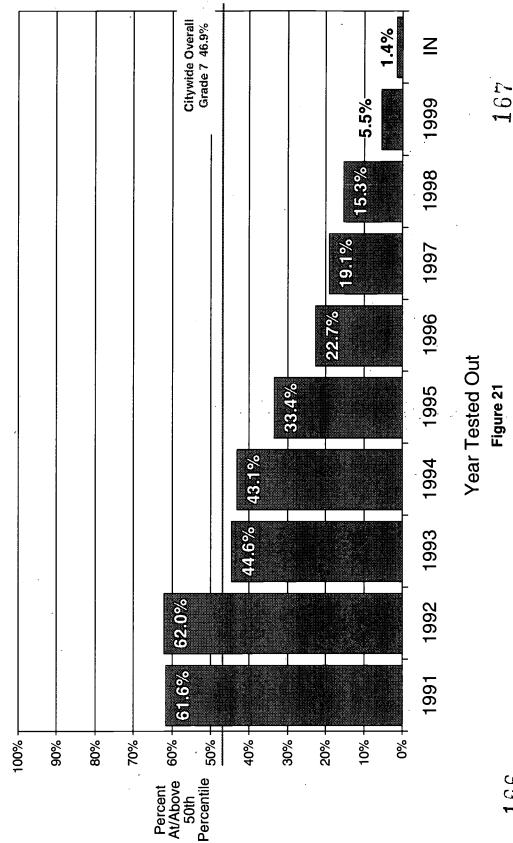




1998 Standardized Test Performance by Year of Program Exit Figures 21 - 28

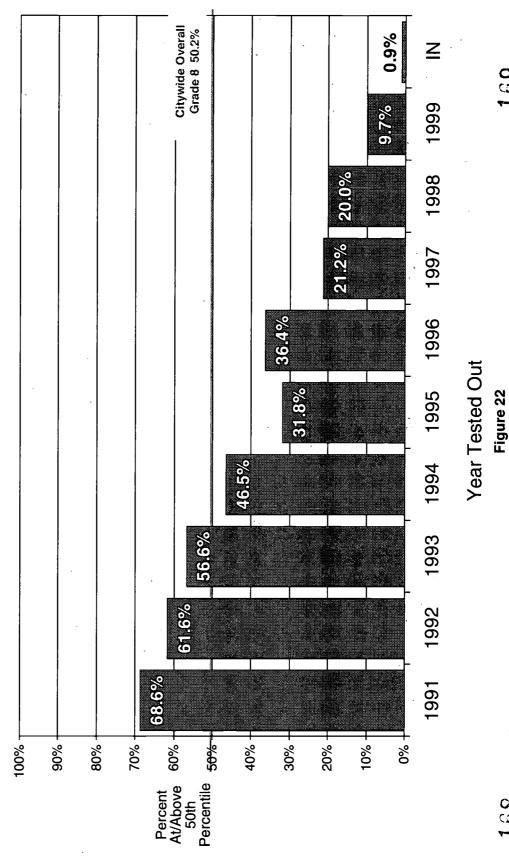


by Year of Testing Out of Bilingual/ESL Entitlement 1998 Citywide Reading Test Performance PK/K Cohort 1990-91





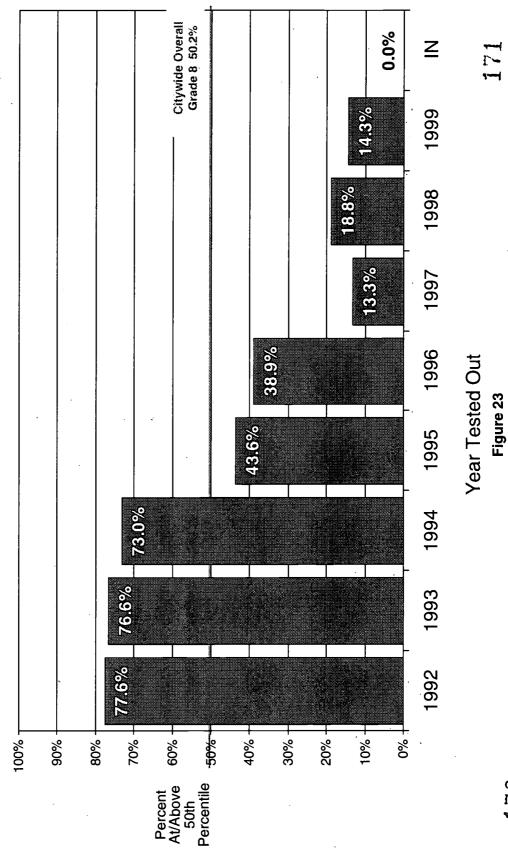
by Year of Testing Out of Bilingual/ESL Entitlement 1998 Citywide Reading Test Performance **Grade 1 Cohort 1990-91**





168

by Year of Testing Out of Bilingual/ESL Entitlement 1998 Citywide Reading Test Performance **Grade 2 Cohort 1991-92**





173

by Year of Testing Out of Bilingual/ESL Entitlement 1998 Citywide Math Test Performance PK/K Cohort 1990-91

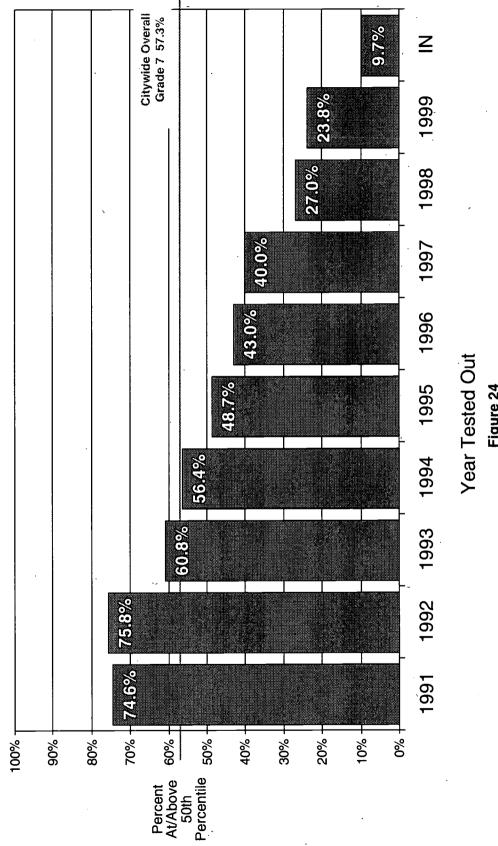
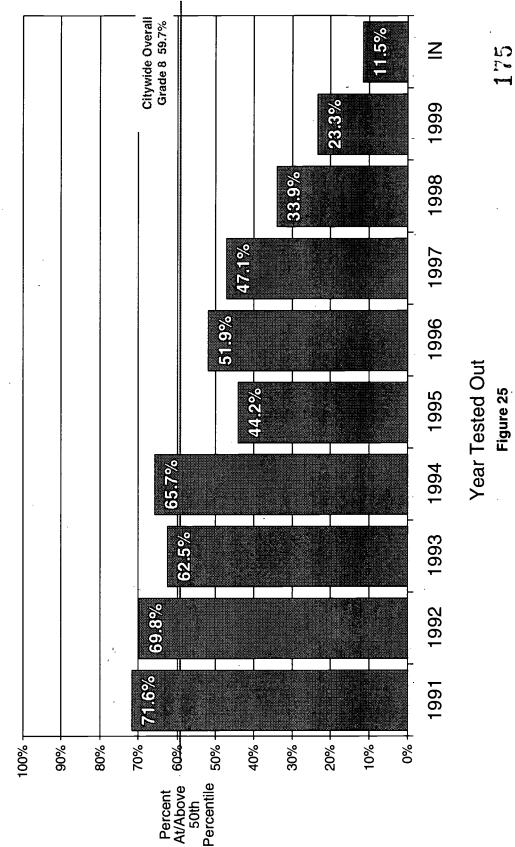


Figure 24

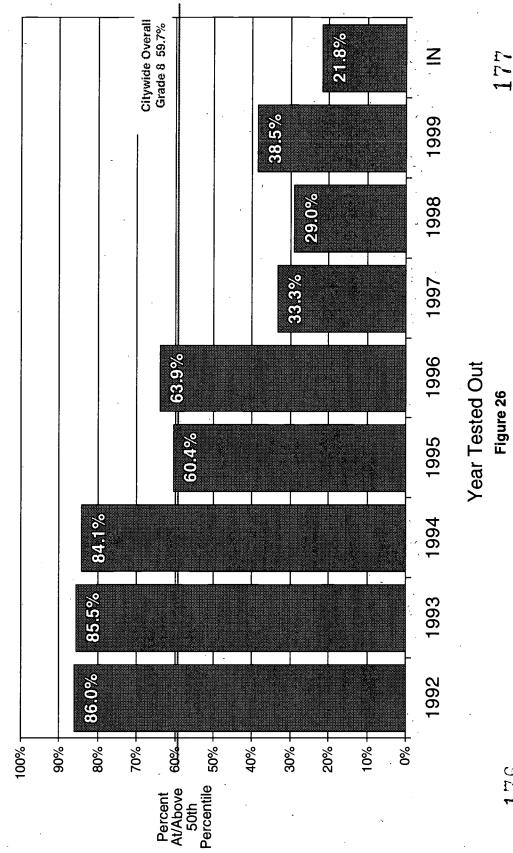
by Year of Testing Out of Bilingual/ESL Entitlement 1998 Citywide Math Test Performance **Grade 1 Cohort 1990-91**







by Year of Testing Out of Bilingual/ESL Entitlement 1998 Citywide Math Test Performance **Grade 2 Cohort 1990-91**



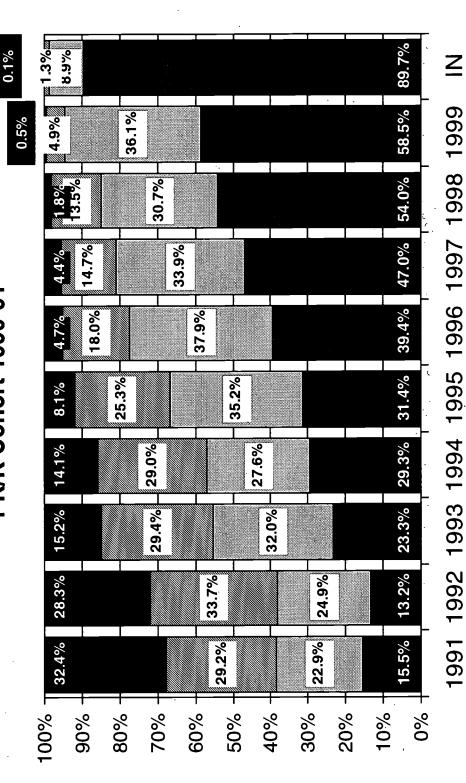
176

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■ Q1 ■ Q2 ⊠ Q3 ■ Q4

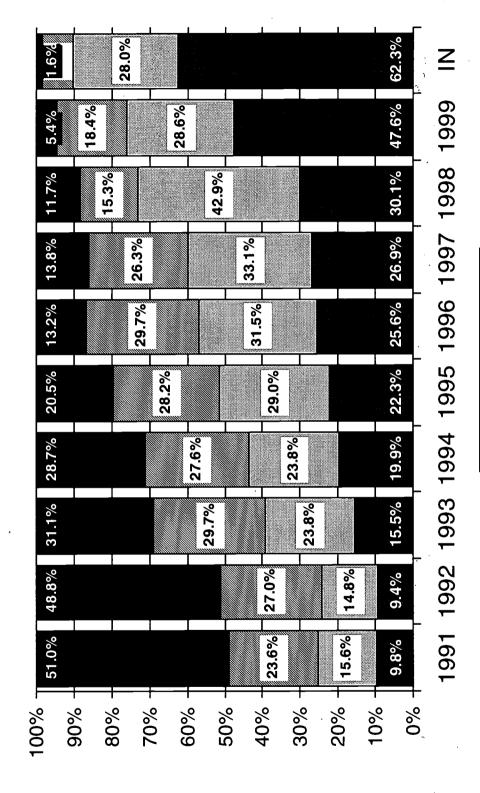
Figure 27

by Year of Testing Out of Bilingual/ESL Entitlement 1998 Reading Quartile Distribution PK/K Cohort 1990-91





by Year of Testing Out of Bilingual/ESL Entitlement 1998 Math Quartile Distribution PK/K Cohort 1990-91





■ Q4

■ Q1 🖾 Q2 🖾 Q3





1998 Standardized Test Performance by Year of Exit and type of Program Figures 29 - 40



by Year of Testing Out of Bilingual/ESL Entitlement and Program Type 1998 Citywide Reading Test Performance Kindergarten Cohort 1990-91

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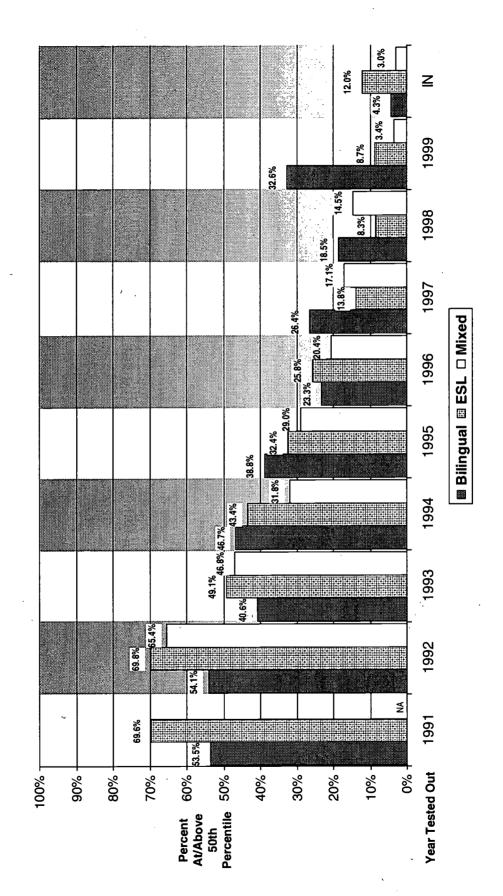
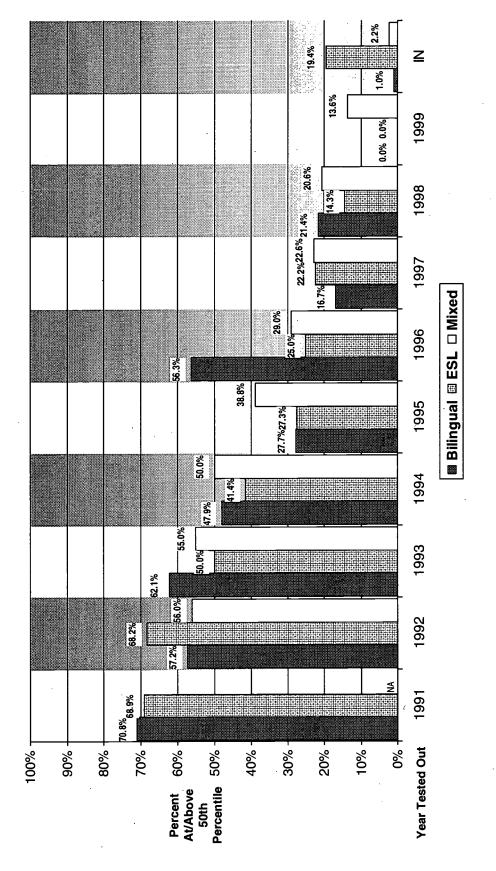


Figure 29

by Year of Testing Out of Bilingual/ESL Entitlement and Program Type 1998 Citywide Reading Test Performance **Grade 1 Cohort 1990-91**

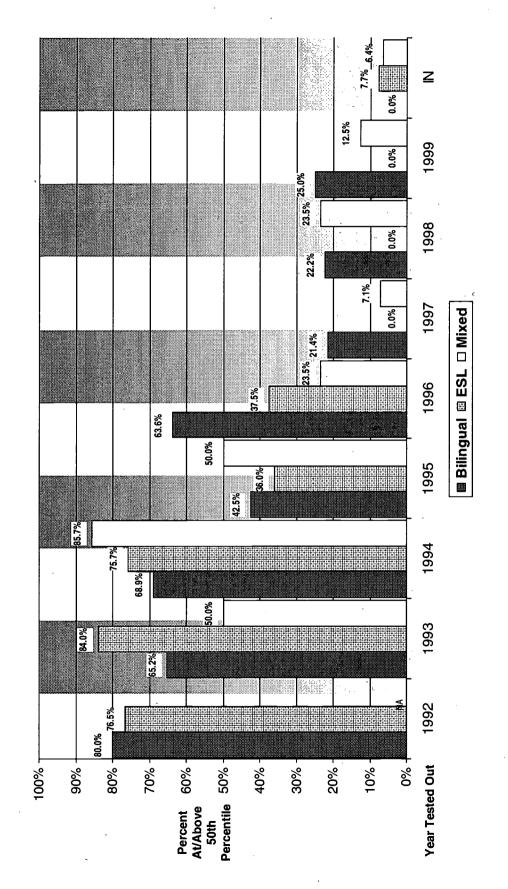
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by Year of Testing Out of Bilingual/ESL Entitlement and Program Type 1998 Citywide Reading Test Performance **Grade 2 Cohort 1990-91**

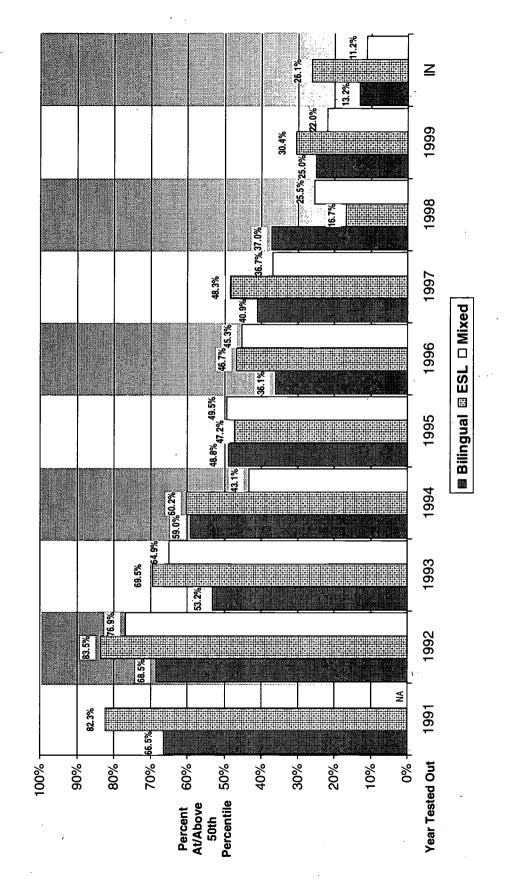






by Year of Testing Out of Bilingual/ESL Entitlement and Program Type 1998 Citywide Mathematics Test Performance Kindergarten Cohort 1990-91

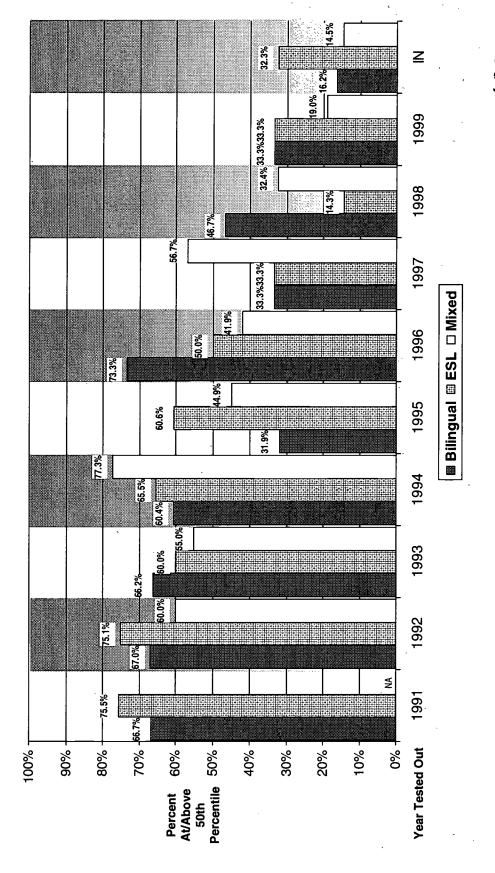
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by Year of Testing Out of Bilingual/ESL Entitlement and Program Type 1998 Citywide Mathematics Test Performance **Grade 1 Cohort 1990-91**

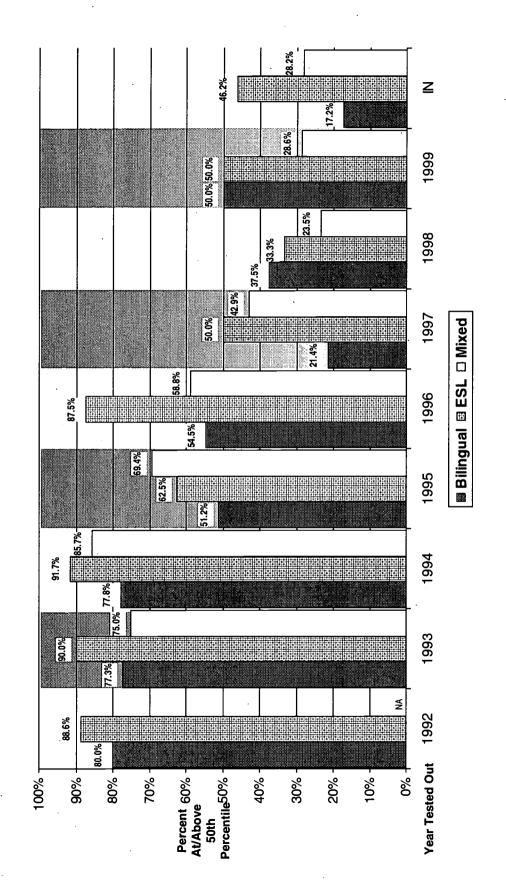
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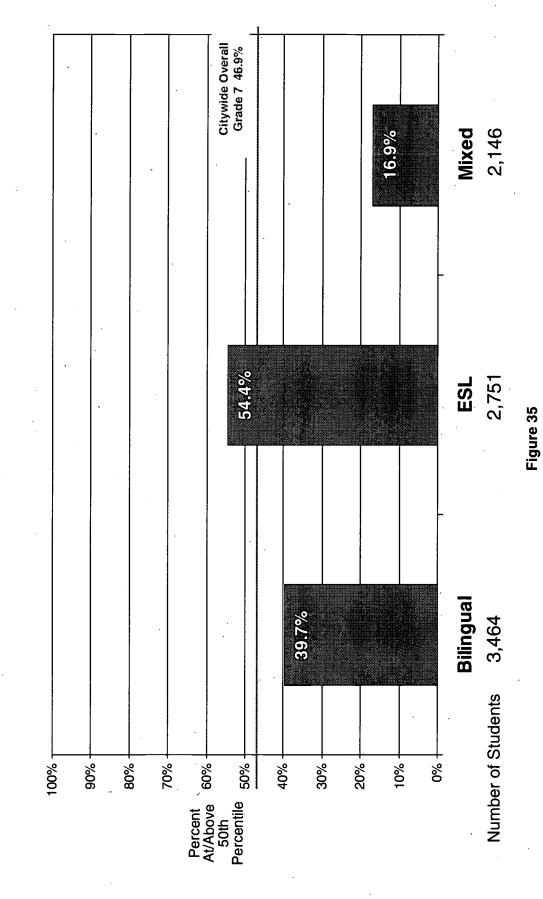
by Year of Testing Out of Bilingual/ESL Entitlement and Program Type 1998 Citywide Mathematics Test Performance **Grade 2 Cohort 1990-91**

ERIC Full Text Provided by ERIC





1998 Citywide Reading Test Performance of PK/K Cohort by Type of Program





1998 Citywide Reading Test Performance of Grade 1 Cohort by Type of Program





1998 Citywide Reading Test Performance of Grade 2 Cohort by Type of Program

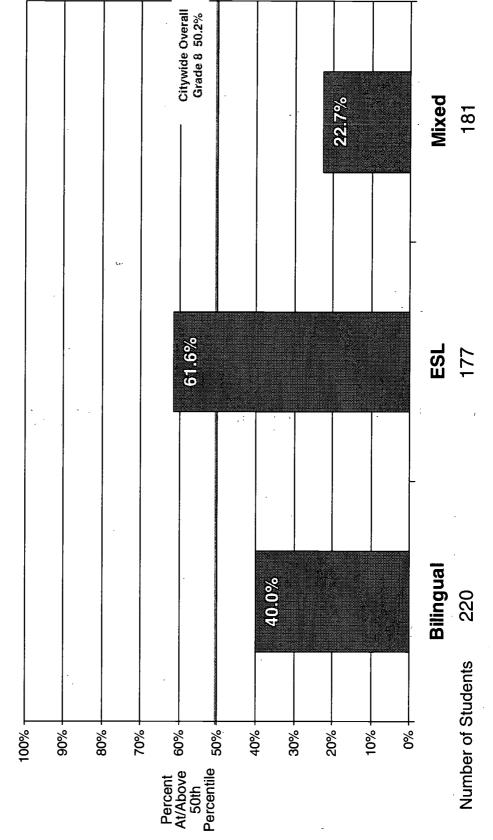
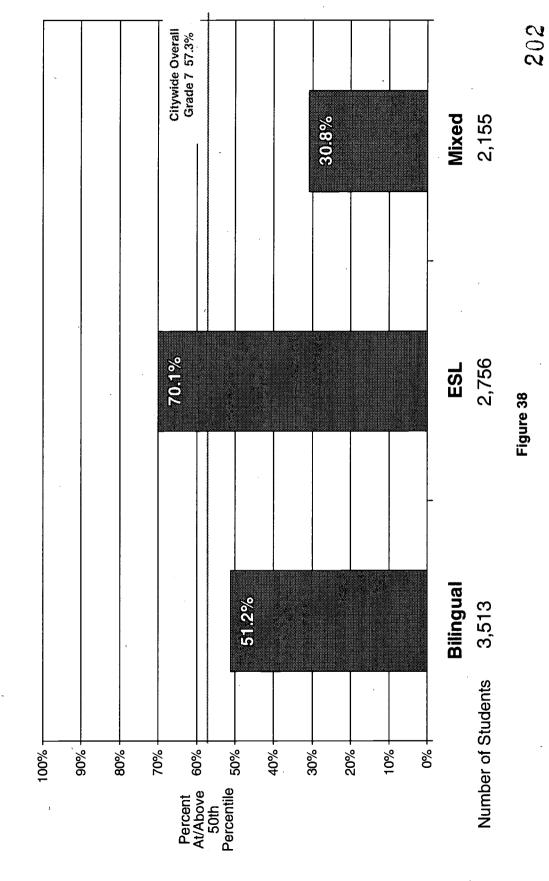


Figure 37

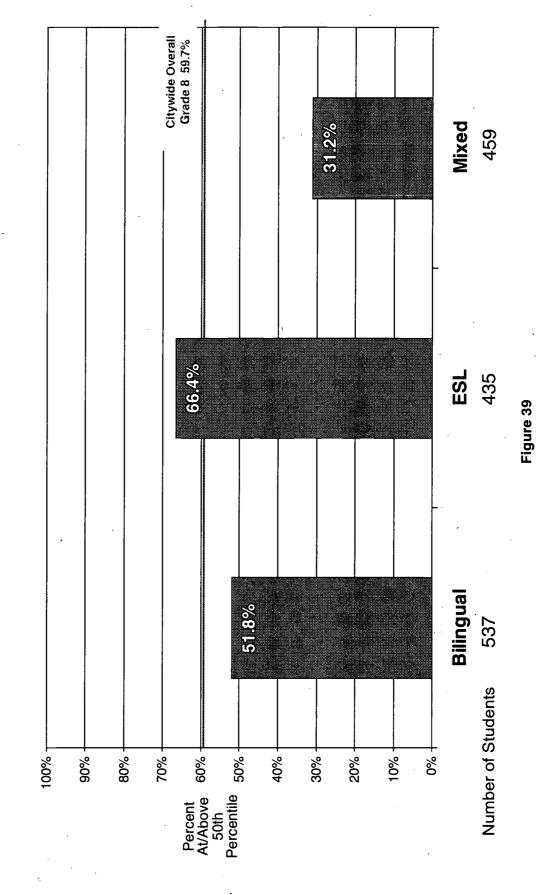


1998 Citywide Math Test Performance of PK/K Cohort by Type of Program



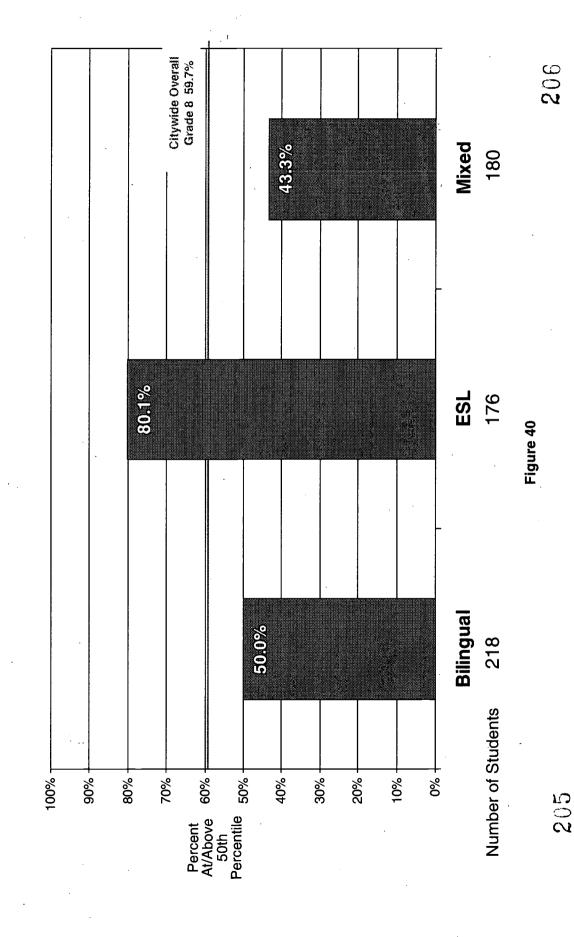


1998 Citywide Math Test Performance of Grade 1 Cohort by Type of Program





1998 Citywide Math Test Performance of Grade 2 Cohort by Type of Program



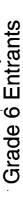


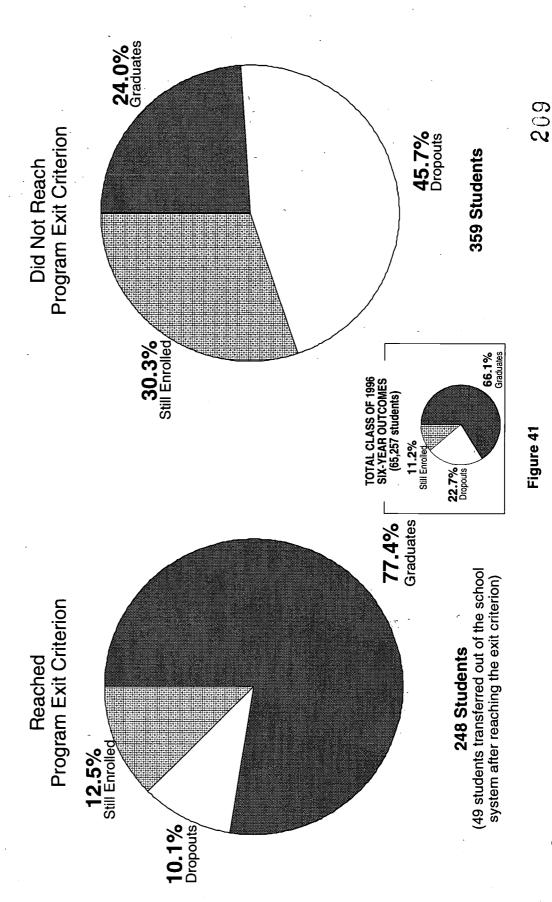
School Completion Outcomes Figures 41-42



School Completion Status of ELLs Who Reached the Program Exit Criterion and Those Who Did Not

(Based on 607 Students Who Entered New York City Schools as Sixth Graders in Fall 1991)







717

School Completion Status of ELLs Who Reached the Program Exit Criterion and Those Who Did Not

ERIC Provided by ERIC

(Based on 1,380 Students Who Entered New York City Schools as Ninth Graders in Fall 1991)



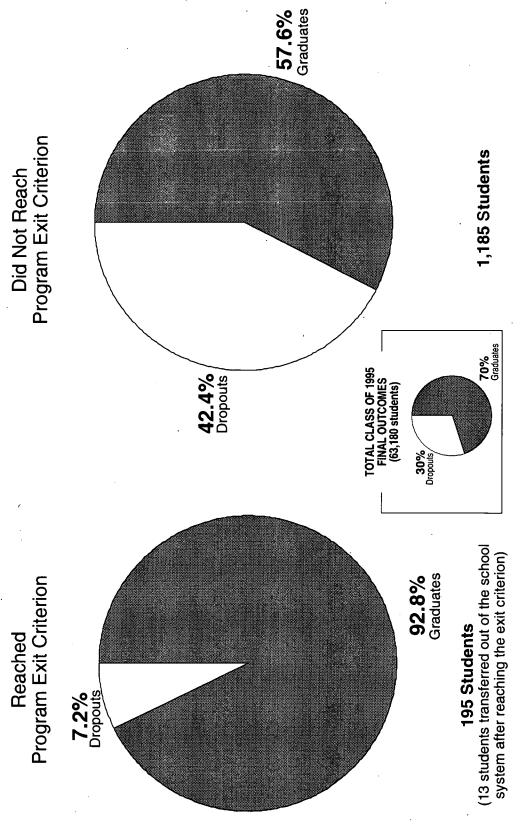


Figure 42

Appendix 3

Study 5 (part 1) Demographic and Performance Profile of English Language Learners on the English Regents Examination in January 1999



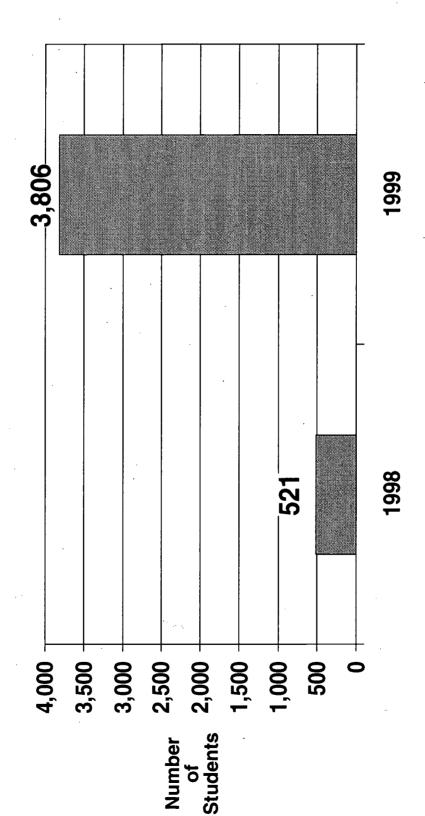


NEW YORK CITY BOARD OF EDUCATION

ELL SUBCOMMITTEE STUDY 5 Part 1

Demographic and Performance Profile of the English Regents Examination in English Language Learners on January 1999

Numbers of English Language Learners (ELLs)
Taking the English Regents Exam
in January 1998 and January 1999



- More than seven times as many ELLs took the English Regents in January 1999 than in January 1998
- The increase for ELLs was 2.4 times that for English proficient students

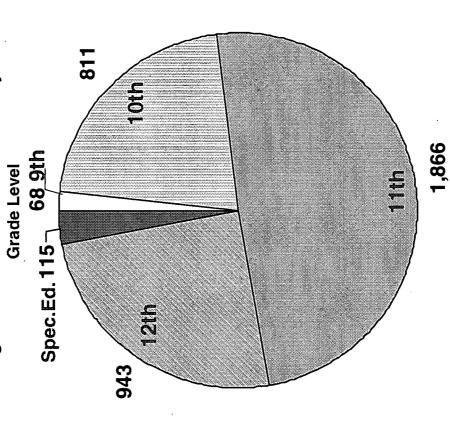


Comparison of Students Taking and Passing the English Regents Examination in January 1998 and January 1999

Change in Number Scoring 55-100			+24, 989			+1,166
ng 200 %		76.4	74.9		40.1	36.1
Scoring 55-100 N %		11,369	36,358		209	1,375
Students: Scoring 65-100 N		59.5	54.1		18.8	12.8
Students Scoring 65-100 N		8,860	26,249		86	488
Scoring 55-64 %		16.9	20.8		21.3	23.3
Scc N		2,509	10,109		111	887
Number Tested		14,888	48,556		521	3,806
Season	English Proficient	January, 1998	January, 1999	<u>English</u> <u>Language Learners</u>	January, 1998	January, 1999

- Despite the large increase in numbers taking the exam, passing rates declined by only 1.5 percentage points for ELLs.
- There was a large decline in the percentage of ELLs scoring 65 or higher.

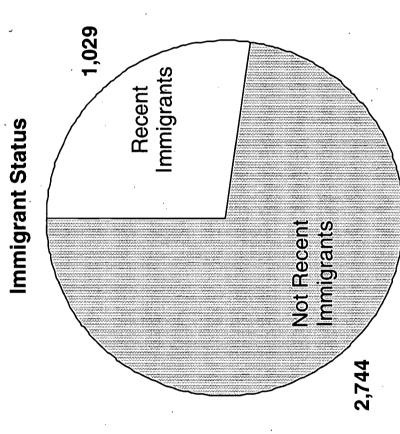
Demographic Profile of English Language Learners Who Sat for the Comprehensive English Regents Examination in January 1999



Scoring 55-100	22.1%	21.6%	37.3%	51.5%	3.5%
Scoring 65-100	7.4%	5.7%	13.0%	20.5%	%6:0
Scoring 55-64	14.7%	15.9%	24.3%	31.0%	2.6%
Grade	6	10	-	12	Spec.Ed.

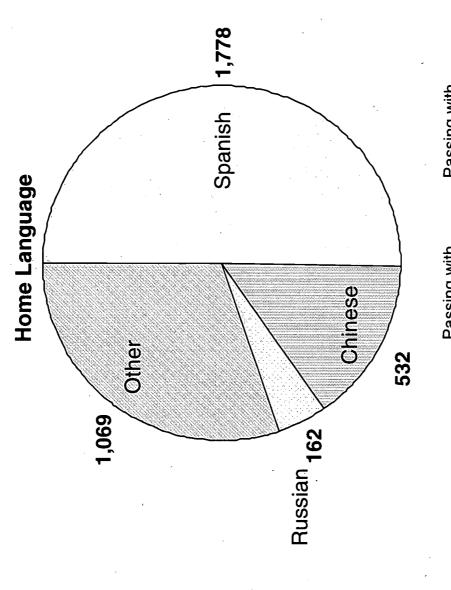


Demographic Profile (continued)



Immigrant Status	Passing with	Passing with	Combined
	Graduation Credit	Regents Credit	Pass Rate
	(55-64)	(65-100)	(55-100)
Recent Immigrant Not Recent Immigrant	25%	18%	43%
	23%	11%	34%

Demographic Profile (continued)

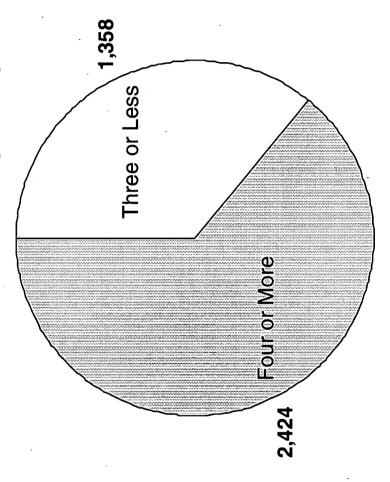


Passing with Combined Regents Credit Pass Rate (65-100)	10% 30% 16% 47% 22% 51% 14% 40%
Passing with Pas Graduation Credit Rege (55-64)	20% 31% 29% 26%
Home Language	Spanish Chinese Russian Other



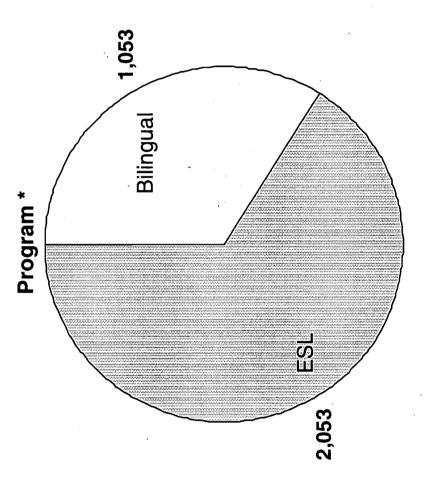
Demographic Profile (continued)

Years of Service in ESL/Bilingual Program



Passing with Combined Regents Credit Pass Rate (65-100)	19% 44% 9% 32%
Passing with Pass Graduation Credit Reger (55-64)	25% 23%
Years of Service in ESL/Bilingual Program	Three or Less Four or More

Demographic Profile (continued)



Graduation Cred (55-64) 22%

* program not indicated for 676 students



Bilingual ESL

Program



Relationship Between English Language Proficiency and Performance on the English Regents Examination January 1999

LAB Percentile Frequency Distribution for Tested ELLs

Percentile Rank	Percent of Tested Students
1 - 5	26.5%
6 - 10	20.5%
11 - 15	13.9%
16 - 20	12.8%
21 - 25	8.2%
26 - 30	7.5%
31 - 35	5.4%
36 - 40	5.3%

LAB Percentile by Performance Group

Mean Lab Percentile	16 %ile 21 %ile 9 %ile
Regents Performance	Passed (55 - 64) Passed (65 - 100) Failed (0 - 54)

Frequency Distribution of ELL Scores on the English Regents Examination January 1999

	Percent	Percent of Students
Score	Relative Percent	Cumulative Percent
Less than 40	28.8%	28.8%
40 - 44	11.6%	40.4%
45 - 49	14.1%	54.5%
50 - 54	9.4%	63.9%
55 - 64 (Passing)	23.3%	87.2%
65 - 100 (Regents Credit)	12.8%	100.0%



Appendix 4

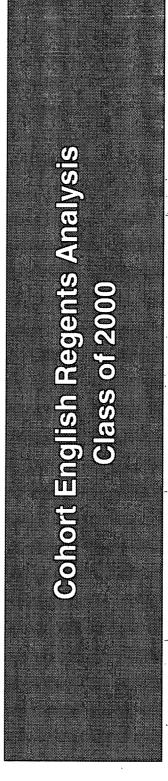
Study 5 (part 2) Cohort English Regents Analysis Class of 2000





NEW YORK CITY BOARD OF EDUCATION

ELL SUBCOMMITTEE STUDY 5 Part 2



23.9

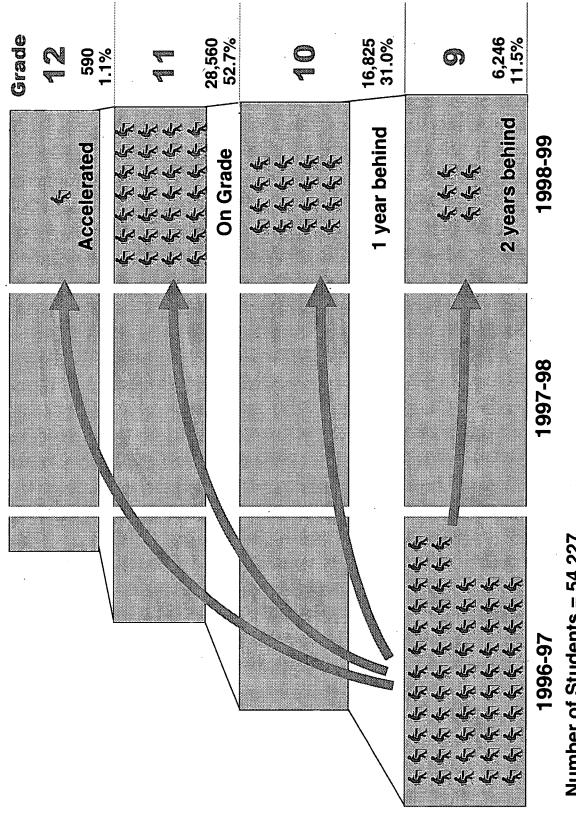
How the Cohort was Formed

- The State Education Department (SED) will be reporting on student success in meeting the new Regents Examination in English graduation requirement using a cohort method.
- The Class of 2000, which is comprised of students who entered grade 9 in fall 1996, the first class that is required to pass the Regents to graduate.
- The SED will report on the number of students who have passed the English Regents by June 1999, after three years in high school.
- The results for this class are presented in the attached tables alongside comparable data for the Class of 1999.

Note: 2,006 Students were ungraded

June 1999 Grade of Students Who Entered Grade 9 in Fall 1996 **Class of 2000**

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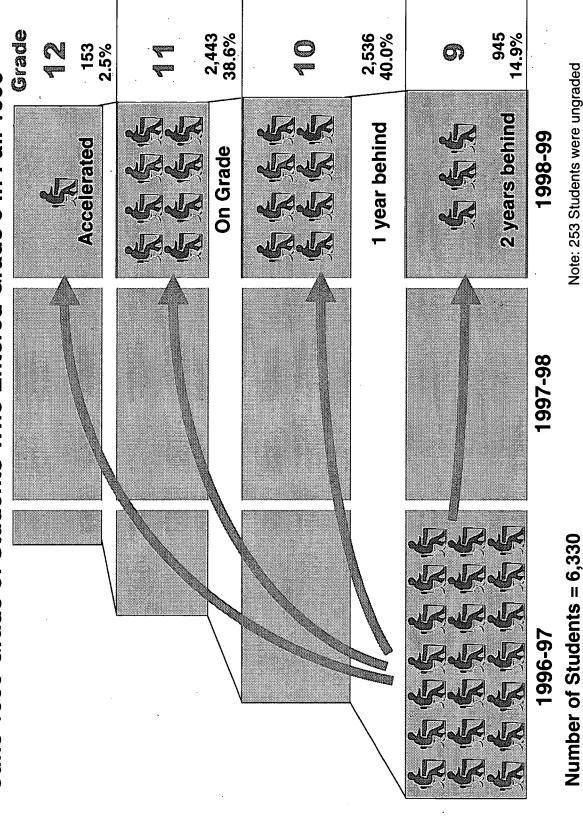
Number of Students = 54,227

243

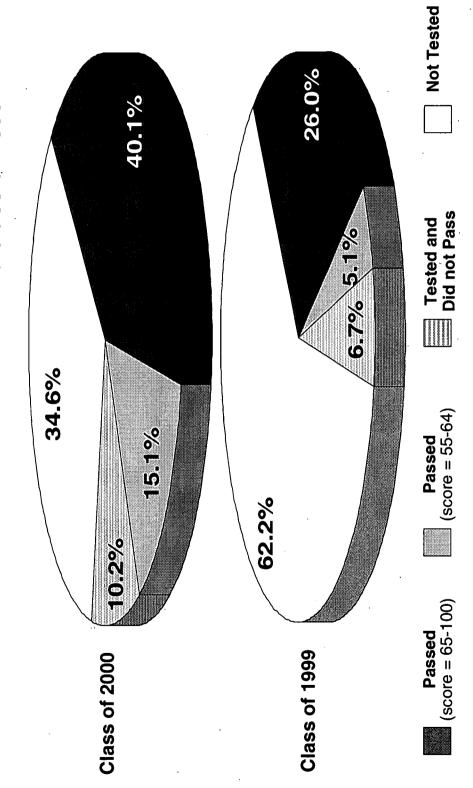


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Toward Passing the Regents English Examination Between the Class of 1999 and the Class of 2000 Comparison of Progress

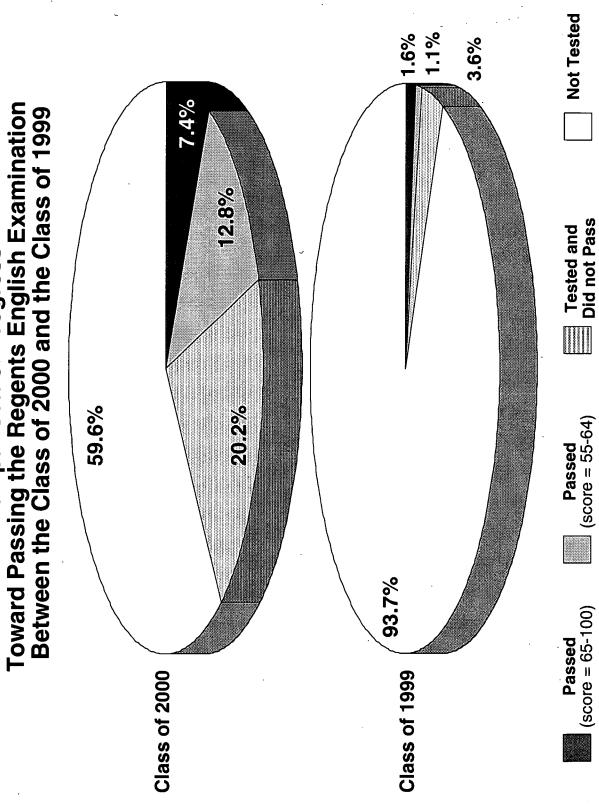


- A much larger percentage of the Class of 1999 did not take the Regents English exam (62.2 percent)) compared to the Class of 2000 (34.6 percent).
- A larger percentage of the Class of 2000 cohort (40.1 percent) passed the Regents Examination than did the Class of 1999 (26.0 percent).

Results for English Language Learners

- 6,330 of the 54,227 general education students in The Class of 2000. English Language Learners (ELLs) in The Class of 2000 must take and pass the Regents English exam to graduate. ELLs comprise
- The Class of 1999 took the English Regents exam as compared with Classes of 1999 and 2000 is illustrative. Only 6.3 percent of ELLs in Comparing the progress of English Language Learners in the 40.7 percent of ELLs in The Class of 2000.
- graduation requirement in English (7.4 percent for Regents credit) as Over one-fifth (20.2 percent) of ELLs in The Class of 2000 met the compared with only 2.7 percent (1.6 percent for Regents credit) of The Class of 1999. (See Chart 5.)

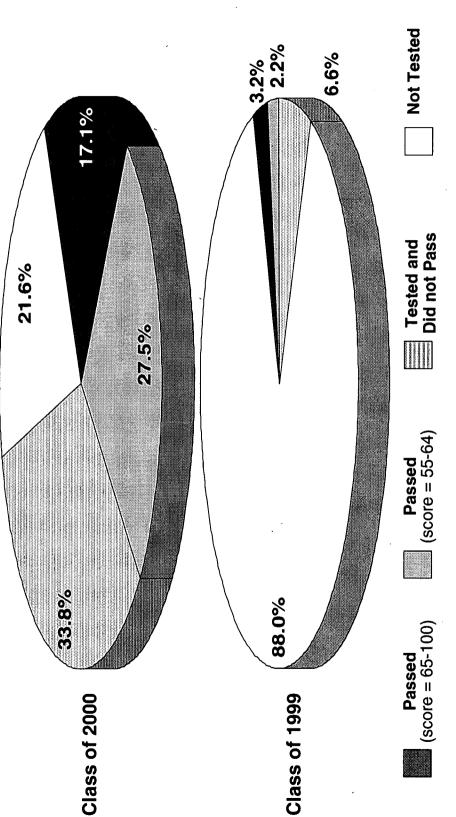






English Language Learners 11th Grade

Comparison of Progress Toward Passing the Regents English Examination Between the Class of 2000 and the Class of 1999

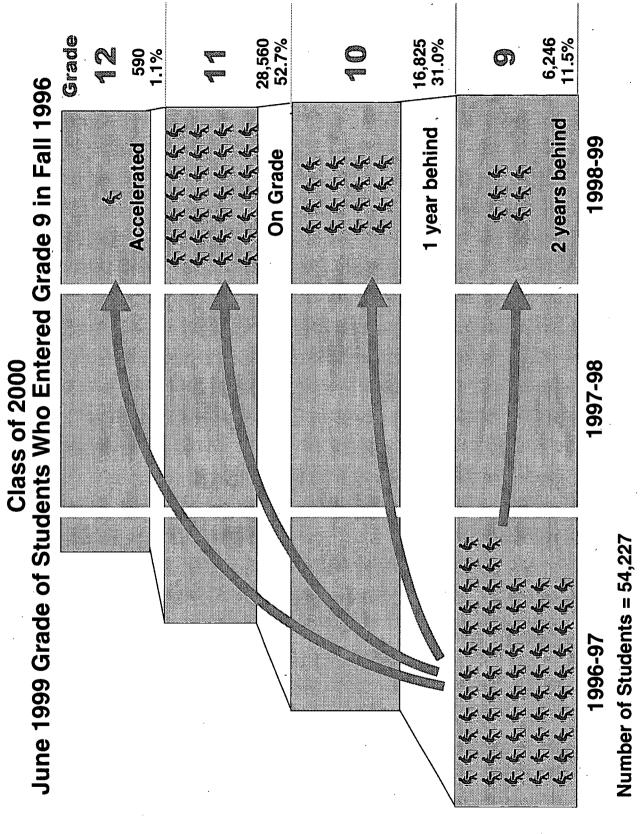


- Only 21.6 percent of 11th grade ELLs in the Class of 2000 did not take the English regents Examination as compared with 88.0 percent of 11th grade ELLs in the Class of 1999.
- A total of 17.1 percent of 11th grade ELLs in the Class of 2000 passed with scores of 65-100 as compared with 3.2 percent of 11th grade ELLs in the Class of 1999.

11th Grade English Language Learners in The Class of 2000

- Comparing the progress of the subset of 11th graders who are English Language Learners in the two Classes is also of interest.
- There were 2,443 11th grade English Language Learners in The Class of 2000.
- Over three-fourths (78.4 percent) of 11 $^{
 m th}$ grade ELLs in The Class of 2000 took the English Regents as compared with 12 percent of 11th grade ELLs in The Class of 1999.
- percent of comparable students in The Class of 1999. (See Chart 6.) A total of 44.6 percent of 11th grade ELLs in The Class of 2000 met the graduation requirement in English as compared with only 5.4

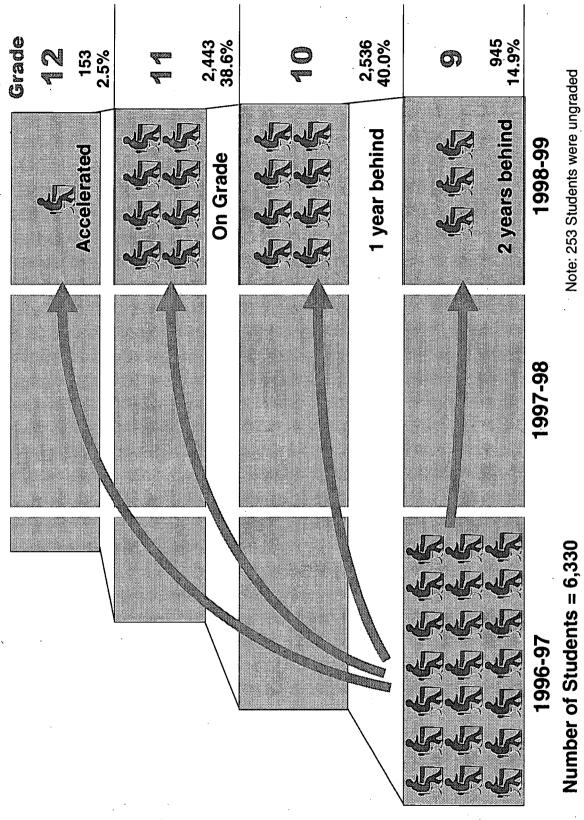




Note: 2,006 Students were ungraded

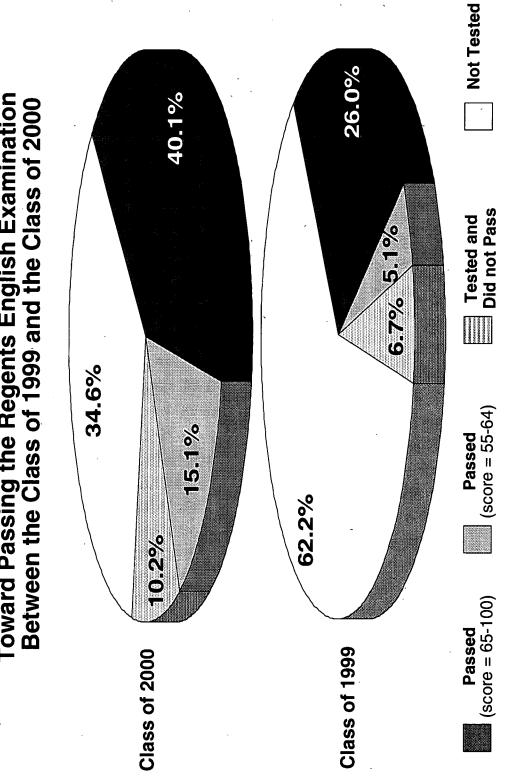
English Language Learners Class of 2000

June 1999 Grade of Students Who Entered Grade 9 in Fall 1996





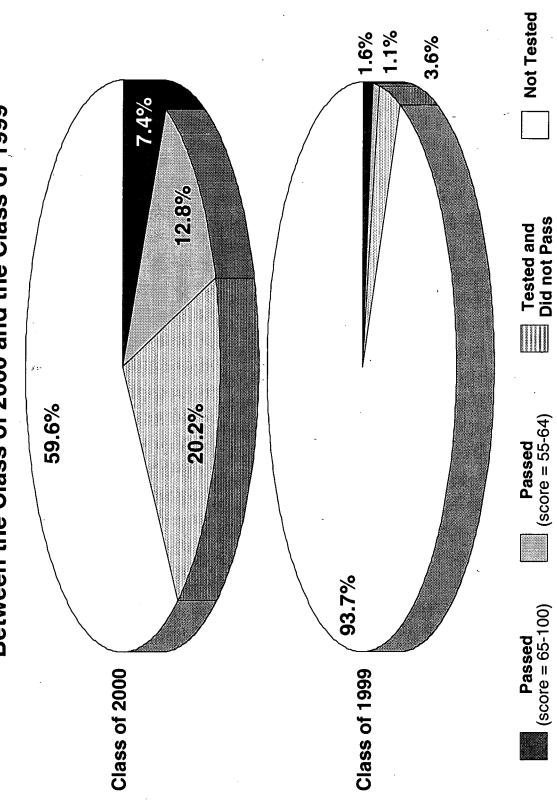
Toward Passing the Regents English Examination Comparison of Progress



- A much larger percentage of the Class of 1999 did not take the Regents English exam (62.2 percent)) compared to the Class of 2000 (34.6 percent).
- A larger percentage of the Class of 2000 cohort (40.1 percent) passed the Regents Examination than did the Class of 1999 (26.0 percent).

Results for English Language Learners

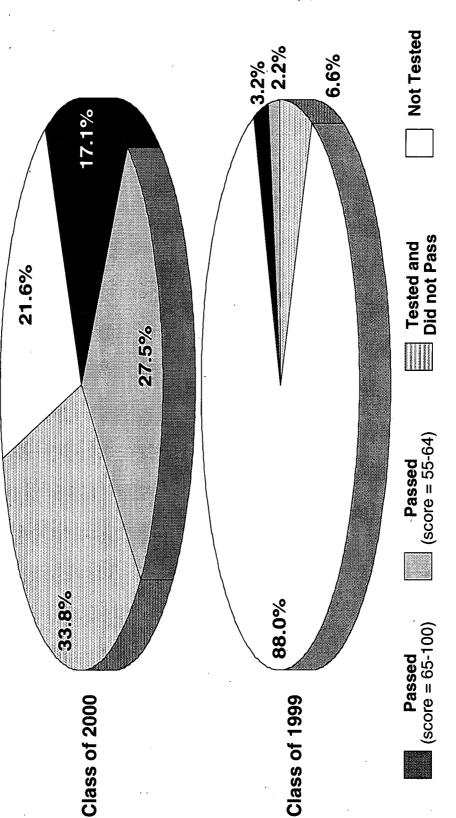
- 6,330 of the 54,227 general education students in The Class of 2000. English Language Learners (ELLs) in The Class of 2000 must take and pass the Regents English exam to graduate. ELLs comprise
- The Class of 1999 took the English Regents exam as compared with Classes of 1999 and 2000 is illustrative. Only 6.3 percent of ELLs in Comparing the progress of English Language Learners in the 40.7 percent of ELLs in The Class of 2000.
- graduation requirement in English (7.4 percent for Regents credit) as Over one-fifth (20.2 percent) of ELLs in The Class of 2000 met the compared with only 2.7 percent (1.6 percent for Regents credit) of The Class of 1999. (See Chart 5.)





English Language Learners 11th Grade

Comparison of Progress Toward Passing the Regents English Examination Between the Class of 2000 and the Class of 1999



- Only 21.6 percent of 11th grade ELLs in the Class of 2000 did not take the English regents Examination as compared with 88.0 percent of 11th grade ELLs in the Class of 1999.
- A total of 17.1 percent of 11th grade ELLs in the Class of 2000 passed with scores of 65-100 as compared with 3.2 percent of 11th grade ELLs in the Class of 1999.

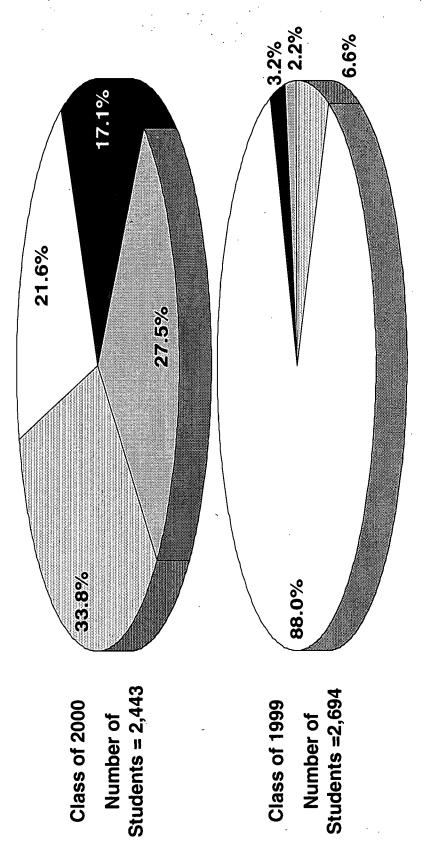


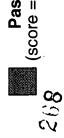
11th Grade English Language Learners in The Class of 2000

- Comparing the progress of the subset of 11th graders who are English Language Learners in the two Classes is also of interest.
- There were 2,443 11th grade English Language Learners in The Class of 2000.
- Over three-fourths (78.4 percent) of 11th grade ELLs in The Class of 2000 took the English Regents as compared with 12 percent of 11th grade ELLs in The Class of 1999.
- percent of comparable students in The Class of 1999. (See Chart 6.) A total of 44.6 percent of 11th grade ELLs in The Class of 2000 met the graduation requirement in English as compared with only 5.4



Comparison of Progress Toward Passing the Regents English Between the Class of 2000 and the Class of 1999 English Language Learners 11th Grade **Examination**





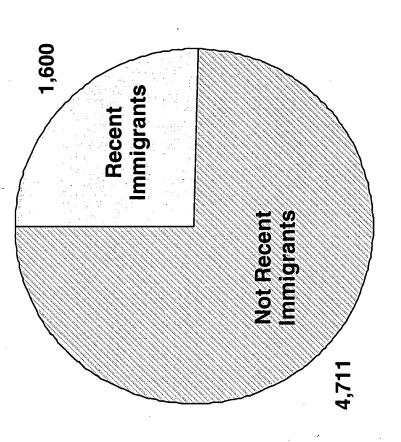
Passed (score = 65-100)

Passed (score = 55-64)

Tested and Did not Pass

Not Tested

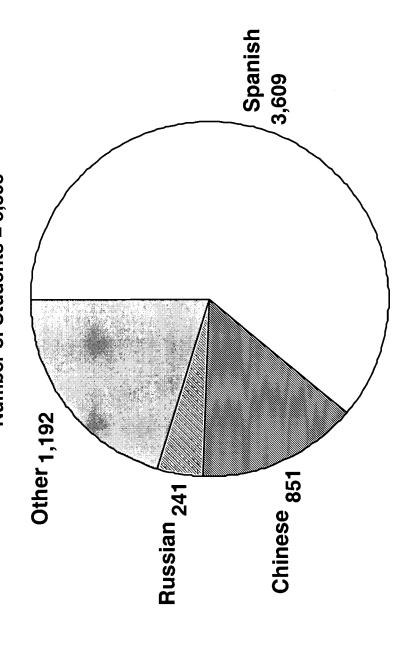
Demographic Profile Immigrant Status



Not Tested	64.6% 58.2%
Not Passing (0-54)	18.1% 22.2%
Combined Pass Rate (55-100)	17.3% 19.6%
Passing with Regents Credit (65-100)	7.6% 7.2%
Passing with Graduation Credit (55-64)	9.7% 12.4%
Immigrant Status	Recent Immigrant Not Recent Immigrant



Demographic Profile (continued) Home Language Number of Students = 5,893



Not Tested	63.3% 57.3% 45.6% 52.3%
Not Passing (0-54)	19.9% 19.2% 25.7% 26.4%
Combined Pass Rate (55-100)	16.8% 23.5% 28.7% 21.3%
Passing with Regents Credit (65-100)	6.3% 9.8% 7.8%
Passing with Graduation Credit (55-64)	10.5% 13.7% 16.3% 13.5%
Home Language	Spanish Chinese Russian Other





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