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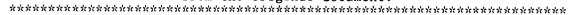
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ABSTRACT

This paper summarizes findings of three special research projects on special education teacher attrition rates. An introductory section describes the purposes of the federally funded projects, identifies the institutions and school districts involved, and notes the varying availability of attrition rates from 1987 through 1993 in the five data bases involved. Following a discussion of a general definition of "leavers" and study limitations, the attrition rates for the districts involved are presented and discussed. Characteristics of the exited special education teachers are then examined. Some of the studies' findings include the following: there was a tendency toward increased attrition rates over the time period evaluated; relatively similar exit rates were found for the six districts involved; attrition rates were substantially below previously reported figures; data from a California database suggest an average annual attrition rate of 24.2 percent for special educators, however the 6 districts in this study had only a 9.1 percent average attrition rate; the mean age of leavers in the studies ranged from 36 to 39 years; most leavers who remained in their districts transferred to general education teaching positions; and most leavers who left their districts either retired or continued teaching special education. Attached exhibits present details of the findings for each of the six school districts involved in the studies. (DB)

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WORKING PAPER # 3

The Attrition Picture: Lessons From Three Research Projects

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NATIONAL DISSEMINATION FORUM
Special Education Teacher Satisfaction, Retention, and Attrition

May 25-26, 1995



Attrition in Selected School Districts

INTRODUCTION

The study of teacher attrition and retention is important in this era of special education teacher shortages. Many teachers do not want to teach in urban settings (Feistritzer, 1990) and Haberman (1987) reports that the number of teachers leaving is markedly higher in urban schools. As a result, the Office of Special Education Programs (OSEP), Department of Education, has a substantial interest in issues related to the retention of special education teachers.

In October 1991, OSEP awarded cooperative agreements to three organizations to conduct three-year research and development projects related to the attrition of special education teachers in large urban school districts. Each award had a similar purpose, i.e., to: (a) determine each district's attrition rates for special education teachers; (b) describe the broad range of forces, including factors related to personnel preparation, that are contributing to the attrition rates; and (c) use the resulting research findings to assist each district in developing a strategic action plan to enhance the retention of its special education teachers. This document presents and discusses the findings of one component of these research projects, i.e., the computation of attrition rates.

The recipients of the OSEP cooperative agreements and the districts with which they worked are:

- The Eugene Research Institute (ERI) worked with three districts located in the western United States. The names of these districts are confidential and are noted in this document as ERI Districts 1, 2, and 3.
- The Research Triangle Institute (RTI) worked with the Memphis City Schools in Tennessee.
- San Diego State University (SDSU) and its subcontractor, the American Institutes for Research (AIR), worked the San Diego and San Jose Unified School Districts in California.
- SDSU and AIR also analyzed teacher attrition data from the California Basic Education Data System (CBEDS), a statewide electronic file that contains personnel assignment information for about 80% of the school districts in California. (Districts are required to use teachers' social security numbers to participate in CBEDS, and



several districts, including San Diego and San Jose, decided not to participate in CBEDS.)

CBEDS data is a large data base that the California State Department of Education developed (and maintains) from data reported on the Personal Assignment Information Form that is administered to all of the State's educators. The attrition rate data for the other six participating districts were gathered, scrutinized, and edited for duplications and inconsistencies by the responsible research organization (RTI, ERI, SDSU, or AIR). Although there are differences in the way CBEDS and the data bases for our six districts were developed, we have included the CBEDS attrition rate findings as an external reference or benchmark for interpreting the attrition rates for our urban districts.

Attrition rates for our data bases are available for the following school years:

	<u> 1987-88</u>	<u>1988-89</u>	<u> 1989-90</u>	<u> 1990-91</u>	<u> 1991-92</u>	1992-93
Memphis				X	X	X
San Jose				X	X	X
San Diego				X	X	X
ERI districts					X	X
CBEDS	X	X	X			

Exhibit 1 provides a basic description of each of the six districts in terms of the demographic characteristics of its students and teachers. (All referenced exhibits have been placed at the end of this document for the reader's convenience.) Districts were selected based on their availability. They include sites with a broad range of student and teacher demographics, characteristics and geographical contexts. Since districts were not randomly selected, however, it is uncertain to what extent findings may be generalized to all urban districts.

Section II of this document presents our definitions of leavers and related limitations. The attrition rates for the districts are presented and discussed in Section III. Characteristics of the exited special education teachers are presented in Section IV. Insights into the employment status of the leavers the year after they exited are presented in Section V. Summary statements or "bullets" are included in each of Sections III, IV, and V, as opposed to presenting a separate summary section.

DEFINITIONS AND LIMITATIONS

It is difficult to compare and interpret the attrition rates reported for school districts across the nation because of differences in defining "teachers" and "att_ion," the methodology used to collect and analyze attrition data, and a lack of comparability in the years for which the data are reported. We were able to minimize these types of problems by coordinating and



sharing our research approaches and findings throughout the course of this study. We used similar approaches to obtain and compute attrition data for the six study districts (CBEDS data were obtained differently but the attrition rates were computed the same as in the six districts). However, there are minor differences across districts in how a special education teacher or leaver was defined and the subgroups of teachers for which rates were computed.

For purposes of this study, a leaver was defined as a full-time or part-time special education teacher who left his/her position in the targeted year and was no longer working in that capacity at the start of the subsequent school year. This definition includes those special education teachers who terminated their employment in the district, as well as those who remained employed in the district but in another position, e.g., those who may have transferred to a general education teaching or to supervisory or administrative positions within the district.

Within this general definition, there is a difference between the three ERI districts and the other data bases as to what constitutes "leaving a position." ERI did not include as leavers those teachers who were officially listed as being on a leave of absence, unless they did not return at the end of their leave period. In CBEDS and the other study districts, these personnel were included as leavers, whether or not they returned.

There is variation across districts with respect to flexibility in including speech pathologists, deaths, and retirements in computing special education rates. This flexibility is summarized below. A "yes" means that the specified group must be included in the district's rates, a "no" means it can not be included, and a "yes/no" means that the rates can be computed both with and without the group.

	Speech Pathologists	<u>Deaths</u>	<u>Retirements</u>
Memphis	Yes	Yes/No	Yes/No
ERI Districts	Yes/No	Yes/No	Yes/No
San Jose	No	Yes/No	Yes/No
San Diego	No	Yes/No	Yes/No
CBEDS	Yes/No	Yes	Yes

About 13% of Memphis' special education teachers are speech pathologists and an examination of the exit data suggests that the exit rates of speech pathologists do not differ significantly from the rates of the other special education teachers. Therefore the inclusion of this group should not have a significant impact on comparisons of Memphis' attrition rates with the rates of other districts that do not include speech pathologists.

Although these variations limited the types of "cross-district" comparisons that could be made, the flexibility of being able to include or exclude certain groups in computing exit rates enabled us to make maximum use of our data bases in comparing attrition rates across the study districts. A complete analyses of each data set is presented in the individual final reports prepared the participating research organizations.



ATTRITION RATES

A. Overall Special Education Attrition Rates

1. Findings

Exhibit 2 presents the exit rates that were available for school years 1990-91, 1991-92, and/or 1992-93. These rates are presented in this exhibit for two groups of leavers. The top portion of the exhibit presents the rates for all the leavers, whereas the lower portion presents those for voluntary leavers, i.e., those who did not leave because of death, retirement, or Rifts (reductions in force). The rates for all leavers and voluntary leavers are depicted as bar graphs in Exhibits 3 and 4, respectively.

An average annual attrition rate was computed for each district. These "weighted" average rates are presented in Exhibit 5 for two major groups of leavers, i.e., all leavers and voluntary leavers. Overall attrition rates for each of the two groups are also included in Exhibit 5 (in the "totals" rows). Two sets of total rates are presented for all leavers; one for CBEDS data combined with the six study districts, and one for the six study districts. This was done because the large number of teachers in the CBEDS districts has a significant influence on the overall rate for the six primary urban districts, i.e., the 9.1% average attrition rate for the six districts raises to 13.9% when combined with the 24.2% attrition rate experienced by the set of California's urban districts included in CBEDS.

These average annual rates are depicted as bar graphs in Exhibit 6. The columns entitled "Totals 1" in this exhibit present the totals for the six districts, whereas the columns entitled "Totals 2" present the totals for the six districts <u>plus</u> the CBEDS Urban Districts.

2. Summary

- In four of the six districts, the attrition rates for "all leavers" and "voluntary leavers" increased over the two- or three-period for which data were gathered. San Diego and San Jose were exceptions to this trend (see Exhibits 2, 3, and 4).
 - sneueled teachers
- In general, 1% to 2% of the leavers in each of the six districts left their positions because of death, retirement, or reductions in force.
- With the exception of ERI District 2, the exit rates for the six districts are fairly similar, e.g., the average rates for all leavers range from 7.4% to 10.3% and the rates for voluntary leavers range from 5.6% to 8.3% (see Exhibits 5 and 6). The exit rates for ERI District 2 are about 3 percentage points higher than the top of these ranges.
- The rates for all six districts were well below many previously reported special education teacher attrition rates, some of which are as high as 30% (Morvant,



Gersten, Gillman, Keating, & Blake, 1995). As previously noted, it is difficult and often misleading to compare and interpret attrition rates across studies. According to Morvant, et al.:

An examination of existing research on special education attrition reveals a wide variety of approaches to defining both "teacher" and "attrition." In addition, some studies, such as these [the six studies and the CBEDS analysis] have applied a district focus; others have assumed a state focus (i.e., a teacher is only counted as a leaver if he/she is no longer teaching special education within that state); and still others have focused on a particular special education program (e.g., teachers working with students classified as seriously emotionally disturbed).

- The rates for the six urban districts in our study are substantially lower than the comparable rates for the urban districts in CBEDS. For example, the average attrition rate for all leavers in the six districts was 9.1%, as compared to a 24.2% attrition rate for the CBEDS urban districts (Exhibits 5 and 6). These findings indicate that, on the average, the six study districts will need to replace about 45% of their special education teaching force if these annual rates persist.
- Interestingly, the rates for the San Diego and San Jose Unified School Districts, the two large California urban districts that were included in our study but not in CBEDS, are also substantially lower than their CBEDS counterparts. Possible reasons for these differences are that:
 - The CBEDS results are for the school years 1987-88 through 1989-90, and the rates for the six participating districts are for 1990-91 through 1992-93. It is possible that teacher attrition rates changed over time, perhaps because of the impact that changing economic conditions have had on job opportunities.
 - Since the six study districts were not randomly selected, their attrition rates may not be representative of the rates for other urban school districts across the nation.

B. <u>Comparison of Attrition Rates for Special and General Education Teachers</u>

Comparable attrition rates for special and general education teachers were available in Memphis and CBEDS. The Memphis rates were computed for school years 1990-91 through 1992-93, and CBEDS rates were computed for school years 1987-28 through 1989-90. Attrition rates were computed for three subgroups of CBEDS districts: large urban, small urban, and suburban. Since it was not possible to compute CBEDS rates that excluded those teachers who are leavers because of death or retirement, only the rates for *all leavers* (including speech therapists) were computed and compared.



1. Findings

The annual attrition rates for Memphis and each of the three CBEDS subgroups are presented in Exhibit 7. These annual rates were also averaged to provide an average annual rate for Memphis and each of the subgroups of CBEDS districts. These average annual rates are presented in Exhibit 8.

2. Summary

- In Memphis, there is little difference in the attrition rates for special and general education teachers (all leavers), i.e., the average rates over three years for special and general educators are 7.4% and 7.6%, respectively (see Exhibit 8).
- There is a significant difference between the attrition rates of special and general educators in the CBEDS districts; i.e., the rates for special education teachers are 8.7 to 11.4 percentage points higher than their general education peers. Stated another way, the average attrition rates of general educators are 54% to 62.2% as large as the rates of special educators (see Exhibit 8).
- Within CBEDS, the special education attrition rates for the large urban districts are
 the highest, followed in descending order by small urban and suburban districts (see
 Exhibit 8). This pattern was not followed for general education rates, e.g., the
 attrition rates for small urban districts were higher than the other two types of
 districts.
- When the large urban, small urban, and suburban districts in CBEDS are combined, the average annual attrition rate for general education teachers is 12.7% versus 23.2% for special educators (see Exhibit 8).
- The average attrition rate for CBEDS general education teachers is 3.6 percentage points higher than the 9.1% average attrition rate for special education teachers in the six participating districts (see Exhibit 5).

CHARACTERISTICS OF EXITED SPECIAL EDUCATION TEACHERS

A. Findings

The findings presented in Exhibits 9 and 10 provide insight into the characteristics of leavers in the six participating districts. Exhibit 9 describes the leavers in terms of their gender and race/ethnicity. Exhibit 10 describes leavers in terms of their age, years of experience in the "exited district," and total years of teaching experience (special and general education). The



findings presented in these exhibits exclude those teachers who left their positions because of death or retirement.

B. Summary

- A large majority of leavers were female, which is not unexpected since the majority of special education teachers are female.
- With the exception of Memphis, the mean ages of leavers from the other districts are quite similar. The mean age of leavers in Memphis was 36.8 years, which is at least two years lower than the mean exit age in the in the other districts (see Exhibit 10).
- The mean years of "experience in the district" for leavers from Memphis and the three ERI districts are similar, but they are slightly lower than the values for this variable in San Jose and San Diego (see Exhibit 10).
- The greatest variation across the six districts occurred in total years of teaching experience. In Memphis, 43% of the leavers had 4 years of less of total teaching experience, followed by San Jose with 38.9% and ERI District 2 with 28.%. The percents for the other three districts were significantly lower, with a low of 7.1% in ERI District 3.

EMPLOYMENT STATUS AFTER LEAVING

A. Firgings

Exhibit 11 describes the employment status of leavers the year after they exited. This description is presented from a district perspective, i.e., leavers are classified as to whether or not they stayed in or left the district from which they exited. This exhibit gives the percentages of teachers in various employment "categories" within the two broad categories of "stayed in district" and "left the district." For example, 56% of the special education teachers who exited their special education teaching positions in ERI District 1 remained in that district, and 44% left the district. The 56% of the teachers who remained in the district were distributed as follows: 46% transferred to general education teaching, 6% transferred to non-teaching special education positions, and 4% transferred to non-teaching general education positions. (Note that data regarding the employment status of teachers in the two broad categories were not available for Memphis, and data regarding the employment status of teachers who "left the district" were not available for the CBEDS districts.)

Exhibit 12 is a bar graph that depicts a portion of the data presented in Exhibit 11, i.e., the percentages of exited teachers who remain and leave the study's districts.



Exhibit 13 presents the employment status of teachers using the broader perspective of classifying leavers as to whether or not they remain employed in education or left the field of education. For example, 59.3% of the leavers in ERI District 1 remained employed in education, versus 36.7% who left the field of education. The 59.3% of the ERI District 1 leavers who remained employed in education were distributed as follows: 46% accepted general education teaching positions, 7.3% transferred to special education teaching in another district, and 6% were in administrative or other education positions. The results are averaged across the six districts and presented in the "Totals" column. Related CBEDS data are not available.

Exhibit 14 is a bar graph of the percentages of exited teachers who "stayed in" or "left" education. These percentages are depicted for each study district, as well as for totals across districts.

B. Summary

- There was considerable variation across districts in the percentage of leavers who remained employed in their "exited" districts, ranging from a low of 13.3% in San Jose to a high of 56% in ERI District 1 (see Exhibit 12).
- The majority of leavers who remained in their "exited" districts transferred to general education teaching positions (see Exhibit 11).
- Most of the leavers who left their "exited" districts either retired or continued teaching special education (see Exhibit 11).
- There was also considerable variation across districts in the percentages of leavers who stayed in the field of education. These percentages ranged from a low of 56.5% in San Jose to a high of 83.2% in ERI District 3, with an average of 67.7% across districts (see Exhibit 14).
- Of the 67.7% of the leavers who remained in the field of education, about one-half (or 30.1%) continued teaching special education, 23.4 percent transferred to general education teaching, and 14.4% were in administrative or other education positions (see the "Totals" column in Exhibit 13).



REFERENCES

- Feistritzer, C. E. (1990). <u>Profile of teachers in the U.S.</u> Washington, DC: National Center for Educational Information.
- Haberman, M. (1987). Recruiting and selecting teachers for urban schools. New York, NY: ERIC Clearinghouse on Urban Education. (ED 292 942)
- Morvant, M., Gersten, R., Gillman, J., Keating, T., & Blake, G. (1995). <u>Attrition/Retention of Urban Special Education Teachers: Multi-Faceted Research and Strategic Action Planning</u>. Eugene Research Institute.



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Exhibit 1

ERIC Full Text Provided by ERIC

Participating School Districts: 1992-93 School Year Characteristics

12 Innent 104,947 57,700 64,047 56,282 128,000 lic Mix 104,947 57,700 64,047 56,282 128,000 128,000 lic Mix 104,947 57,700 64,047 56,282 128,000 31% mer 20% 51% 22% 69% 31% 17% 17% ic 1% 33% 72% 5% 17% 17% 17% ic 33% 736 5% 33% 20% 13%		Memphis, TN	ERI District 1	ERI District 2	ERI District 3	San Diego,CA	San Jose, CA
Ethnic Mix 57,700 64,047 56,282 128,000 Ethnic Mix 51,700 64,047 56,282 128,000 Ethnic Mix 21% 22% 69% 31% ic-Amer 79% 8% 5% 16% 17% ic-Amer 79% 8% 5% 16% 17% panic 72% 5% 17% 17% panic 72% 5% 17% 20% ter 11,619 2,116 5,600 7,316 13,000 d Enrollment 11,619 2,116 5,600 7,316 13,000 ee Ed Staff* 629 363,425 3,481 3,362 4,900 Ethnic Mix 61% 89% 5,600 7,316 4,900 Ethnic Mix 61% 3,481 3,362 4,900 ec Ed Staff* 62% 62% 62% 4,900 Ethnic Mix 89% 26% 91% <t< th=""><th>Students in K-12</th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	Students in K-12						
Ethnic Mix 51% 22% 69% 31% ro-Amer 20% 51% 52% 69% 31% ro-Amer 79% 8% 5% 16% 17% panic < 1%	Total Enrollment	104,947	57,700	64,047	56,282	128,090	28,436
ro-Amer 20% 51% 52% 69% 31% ic-Amer 79% 8% 5% 16% 17% panic 33% 72% 5% 17% 17% panic 41% 8% 17% 5% 33% 17% 17% ner 2,116 5,600 7,316 13,000 20% d Enrollment 11,619 2,116 5,600 7,316 13,000 20% ec Ed Staff* 629 363/425 364/360 , 225/284 730/850 20% Ethnic Mix 4,808 3,012 3,481 3,362 4,900 20 Ethnic Mix 8% 56% 91% 89% 20 4,900 20 ric-Amer 38% 22% 4% 1% 89% 39% 20 spanic ric-Amer	Racial/Ethnic Mix						
ic-Amer 5% 5% 15% 17% panic 33% 72% 5% 33% panic 5% 5% 33% 33% ter ter <th>Euro-Amer</th> <th>20%</th> <th>%15</th> <th>22%</th> <th>%69</th> <th>31%</th> <th>36%</th>	Euro-Amer	20%	%15	22%	%69	31%	36%
panic < 1%	Afric-Amer	%62	%8	%\$	16%	17%	%L
ter 1% 10% 20% d Enrollment 11,619 2,116 5,600 7,316 13,000 ec Ed Staff* 629 363/425 304/360 , 225/284 730/850 n Ed Staff* 4,808 3,012 3,481 3,362 4,900 Ethnic Mix 1 56% 91% 89% 1,900 ro-Amer 61% 89% 56% 91% 89% 1,900 spanic <1% 8% 37% 1% 3% 1,900 her <1% 8% 37% 1% 3% 1,900	Hispanic	<1%	33%	72%	%\$	33%	43%
d Enrollment 11,619 2,116 5,600 7,316 13,000 ec Ed Staff* 629 363/425 304/360 , 225/284 730/850 n Ed Staff* 4,808 3,012 3,481 3,362 4,900 Ethnic Mix ro-Amer 61% 89% 56% 91% 89% ric-Amer 38% 2% 4% 89% 3% spanic 1% 1% 3% her 3% 7% 5%	Other	<1%	%8	%1	10%	20%	14%
cc Ed Staff* 629 363/425 304/360 , 225/284 730/850 in Ed Staff 4,808 3,012 3,481 3,362 4,900 Ethnic Mix ro-Amer 61% 89% 56% 91% 89% ric-Amer 38% 2% 4% 1% 89% spanic <1%	Spec Ed Enrollment		2,116	5,600	7,316	13,000	2,559
4,808 3,61/25 304/360 225/284 730/850 4,808 3,012 3,481 3,362 4,900 5,012 3,481 3,362 4,900 4,900 6,02 4,808 56% 91% 89% 89% 6,02 4,900 8,90% 89% 89% 89% 89% 7,03 4,900 4,900 89% <th>Teachers</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Teachers						
t 4,808 3,012 3,481 3,362 4,5 t 61% 89% 56% 91% 8 38% 2% 4% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1%	# of Spec Ed Staff*	629	363/425	304/360	, 225/284	730/850	172/NA
61% 89% 56% 91% 8 38% 2% 4% 1% 8 <1% 8% 37% 1% 1% <1% 1% 3% 7%	# of Gen Ed Staff	4,808	3,012		3,362	4,900	1,259
Amer 61% 89% 56% 91% 8 Amer 38% 2% 4% 1% 1% iic <1%	Racial/Ethnic Mix						
Amer 38% 2% 4% 1% iic <1%	Euro-Amer	61%	%68		%16		%06
iic 1% < 1% 1% 1%	Afric-Amer	38%	7%		1%		1%
<1% 1% 3% 7%	Hispanic	%I>	%8		%1		1%
	Other	%!>			%L		%6

* Numbers prior to "/" are special ed teachers only; those after the "/" include speech therapists. Memphis includes speech therapists.

Exhibit 2

Comparison of 1990-91, 1991-92, and 1992-93 Attrition Rates for
Special Education Teachers* in Participating Districts
(Rates Are Presented With and Without the Inclusion of Retirees and Deceased Leavers)

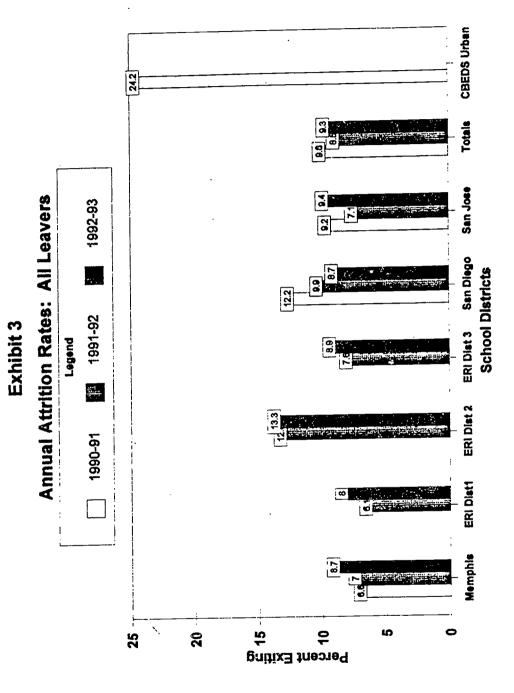
	1990-91 Sc Year	hool	1991-92 So Year	hool	1992-93 S Year	
	N	%	N	%	N	<u>%</u>
Exit Rates for All Leavers						fa
Memphis, TN*	622	6.6	629	7.0	646	8.7
ERI District One	***	***	363	6.1	389	8.0
ERI District Two	***	***	304	12.8	324	13.3
ERI District Three	***	***	225	7.6	235	8 .9
San Diego Unified, CA	744	12.2	740	9.9	727	8.7
San Jose, CA	164	9.2	168	7.1	171	9.4
Totals	1,526	9.6	2,429	8.5	2,492	9.3
CBEDS Urban Districts	2,994	24.2	***	***	***	***
Exit Rates Excluding Rifted, Deceased, & Retired Leavers**					The Atlantan	.
Memphis, TN	622	5.8	629	6.5	646	7.9
ERI District One	***	***	363	3.9	389	7.2
ERI District Two	***	***	304	10.9	324	12.7
ERI District Three	***	***	225	6.7	235	8.1
San Diego Unified, CA	744	7.9	. 740	9.2	727	7.2
San Jose, CA	164	6.7	168	6.0	171	7.6
Totals	1,526	6.9	2,429	- 7.5	2,492	8.4

^{*} The rates for Memphis include speech therapists; rates for the other districts do not.



^{**} These rates were not available for CBEDS.

^{***} Attrition data not available for year.





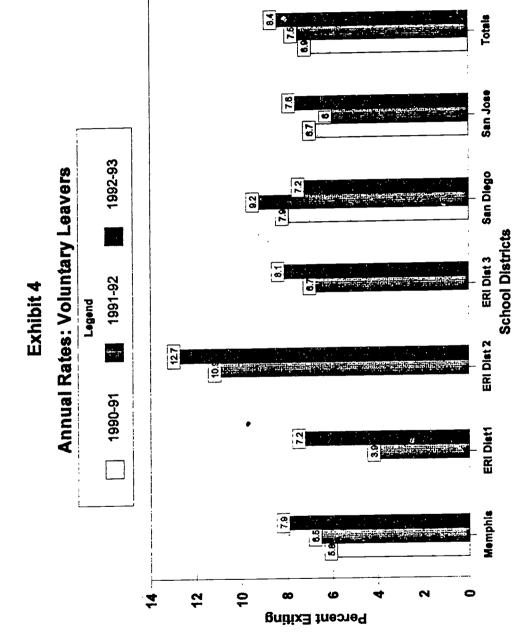




Exhibit 5 Comparison of Attrition Rates Averaged Across Years for Special Education Teachers* in Participating Districts (Rates Are Presented With and Without the Inclusion of Retirees and Deceased Leavers)

•	Totals Across	School Years_
	Total Teachers	Percent Leaving
Sit Rates (or All) cerves		mediants of the control of the contr
Memphis, TN	1,897	7.4%
ERI District One	752	7.1%
ERI District Two	628	13.1%
ERI District Three	460	8.3%
San Diego Unified, CA	2,207	10.3%
San Jose, CA	503	8.6%
Totals	6,447	9.1%
CBEDS Urban Districts	8,1992 2,994	24.2%
Totals, Including CBEDS Urban Districts	15,429 9,441	13.9% 17.
ait Rates Exclude Rifted, Deceased, & Retired Leave	IS**	and the same of th
Memphis, TN	1,897	6.7%
ERI District One	752	5.6%
ERI District Two	628	11.8%
ERI District Three	460	7.4%
San Diego Unified, CA	2,207	8.3%
San Jose, CA	503	6.8%
Totals	6,447	7.7%

The rates for Memphis include speech therapists; rates for the other districts do not. These rates were not available for CBEDS.



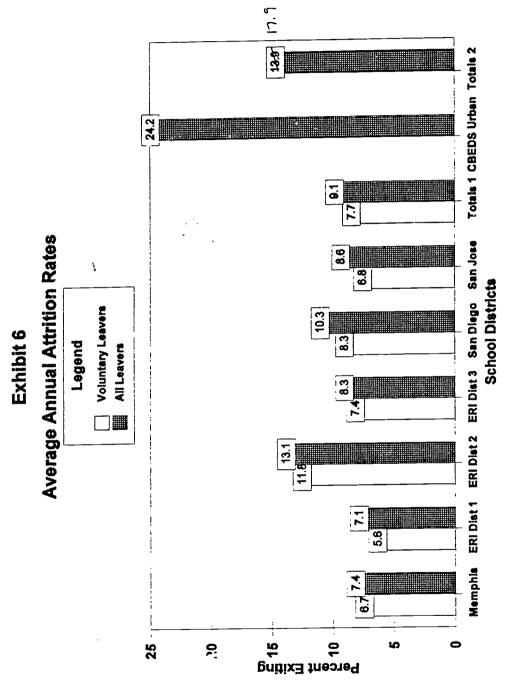




Exhibit 7

Comparison of Attrition Rates for Special and General Education Teachers in Memphis and Selected CBEDS Districts (Rates Include All Leavers, i.e., Speech Therapists, Deceased, and Retired)

	:987-88 School Year	-88 Year	1988-89 School Year	School	1989-90 School Year	School	1990-91 School Year	School	1991-92 School Year	School	1992-93 School Year	school r
	z	%	z	%	Z	%	Z	%	z	%	z	%
Memphis, TN	# 	9-41 fr	1000		131	, J.						
	*	*	*	*	*	*	622	9:9	629	7.0	646	8.7
General Education	*	*	*	*	*	*	4,898	9:9	4,808	8.1	5,006	8.3
9.7 5.4 2.7 2.7	2 1				The second secon							
Special Education	1,878	23.7	1,863	27.2	1,964	24.8			*	*	*	*
General Education	19,417	12.7	16,671	14.6	20,687	14.4			*	*	*	*
CBEDS Small Urban Districts												
Special Education	1,000	23.9	987	22.3	1,035	22.8			*	*	*	*
General Education	10,856	14.9	10,596	13.6	10,867	14.3			*	*	*	*
CBEDS Suburban Districts												
Special Education	2,811	22.7	2,816	21.2	3,069	20.2			*	*	*	*
General Education	28,387	11.9	28,687	11.5	30,634	11.2			*	*	*	*
Totals												
Special Education	5,685	23.2	5,656	23.1	6,068	21.9	622	9.9	629	7.0	646	8.7
General Education	58,690	12.6	58,954	12.8	62,168	12.6	4,898	9.9	4,808	8.1	5,006	8.3

Exhibit 8

Comparison of Attrition Rates Totaled Across Years for Special and General Education Teachers in Memphis and Selected California Districts (Rates Include All Leavers, i.e., Speech Therapists, Deceased, and Retired)

	Totals Across	School Years
	Total Teachers	Percent Leaving
Memphis TN		
Special Education	1,897	7.4%
General Education	14,712	7.6%
CBEDS Large Urban Districts		
Special Education	5,694	25.1%
General Education	59,755	13.9%
CBEDS Small Urban Districts		
Special Education	3,022	23.0%
General Education	32,349	14.3%
CBEDS Suburban Districts		A CONTROL OF THE CONT
Special Education	8,696	21.3%
General Education	87,707	11.5%
Totals for CBEDS Urban and Suburban Districts		Control of the contro
Special Education	17,412	22.7%
General Education	179,811	12.7%

Exhibit 9

Characteristics of Exited Special Education Teachers, Excluding Those Who Exited Because of Death or Retirement, in Participating School Districts by Gender and Race/Ethnicity (Leavers for Each District Are Totals Over the Number of Years That Data Were Collected)

Teacher	Memphis,TN*	ERI District 1	ERI District 2	ERI District 3	San Diego,CA	San Jose, CA
Characteristics	Leavers =128	Leavers =42	Leavers =74	Leavers =34	Leavers =132	Leavers =28
Gender						
Male	3.9%	16.7%	21.6%	35.3%	22.7%	14.3%
Female	96.1%	83.3%	78.4%	64.7%	77.3%	85.7%
Race/Ethnicity						
European-American	74.2%	66.7%	58.1%	%9′.29	86.2%	89.3%
African-American	23.4%	16.7%	4.1%	2.9%	4.6%	3.6%
Hispanic/Latino	%0.0	0.0%	28.4%	%0.0	4.6%	3.6%
Other	2.3%	0.0%	4.1%	7.9%	4.6%	3.6%
Data Unavailable	%0.0	16.7%	5.4%	26.5%	%0.0	%0:0

^{*} Speech therapists are included in the Memphis data base, whereas they are not included in the data reported for the other districts.



Exhibit 10

Characteristics of Exited Special Education Teachers, Excluding Those Who Exited Because of Death or Retirement, in Participating School Districts by Age, Years of Teaching in District, and Total Years of Teaching Experience (Leavers for Each District Are Totals Over the Number of Years That Data Were Collected)

Teacher	Memphis, TN	ERI District 1	ERI District 2	ERI District 3	San Diego,CA	San Jose,CA
Characteristics	Leavers = 128	Leavers = 40	Leavers = 60	Leavers = 29	Leavers = 145	Leavers =36
Mean Age, as of January 1 of Exited School Year	36.8 Years	40.9 Years	39.0 Years		40.3 Years	41.3 Years
Mean Years Experience in District	6.7 Years	6.8 Years	6.8 Years	6.5 Years	7.7 Years	8.1 Years
Total Teaching Yrs.						
4 Yrs or less	43.0%	10.0%	28.3%	7.1%	19.3%	38.9%
More than 4 Yrs	57.0%	%0'06	71.7%	92.9%	80.7%	61.1%

* Speech therapists are included in the Memphis data base, whereas they are not included in the data reported for the other districts. It is estimated that about 13% of Memphis' special education teachers are speech therapists; there is no reason to assume that their exit rates differ significantly from the other special education teachers.



(V)

Exhibit 11

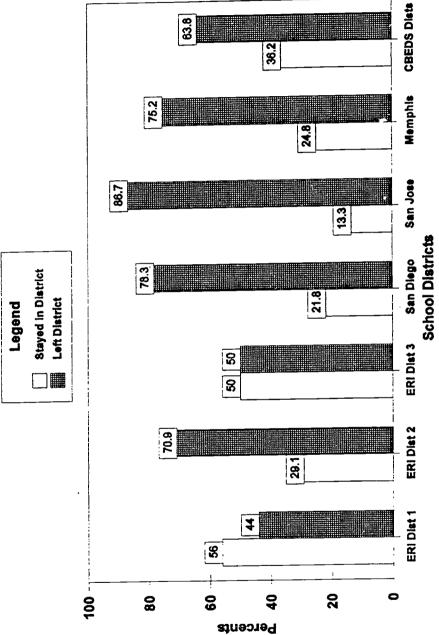
Employment Status of Leavers Immediately After Leaving, As a Percent of Leavers (Excludes Deaths and "Forced" Leavers)

	ERI	ERI Diet 2	ERI Dist 3	San D,	San Jose,	Memphis,	CBEDS Districts
	(N=50)	(6L=N)	(N=38)	(N=179)	(N=45)	(N=137)	(N=3,713)
Item Response Rate	80.0%	75.9%	94.7%	100.0%	%8.76	100.0%	
Stayed in District	%0.98	29.1%	\$0.0%	21.8%	13.3%	24.8%	36.2%
Non-teaching Special Ed	%0.9	10.1%	%6'L	%0:0	0.0%	NA	2.0%
Non-teaching General Ed	4.0%	6.3%	5.3%	0.0%	0.0%	NA	11.0%
Teaching General Ed	46.0%	12.7%	36.9%	21.8%	13.3%	NA	23.1%
Left District	44.0%	%6'04	20.0%	78.3%	86.7%	75.2%	63.8%
Teaching Special Ed	7.3%	38.3%	31.0%	27.9%	25.0%	NA	NA
Non-Teaching Special Ed	%0'0	3.8%	%0'0	1.7%	4.5%	NA	NA
Teaching General Ed	0.0%	2.0%	%0.0	1.7%	2.3%	NA	NA
Non-teaching General Ed	%0.0	2.0%	0.0%	14.0%	11.4%	NA	NA
Other employment or seeking							
In related field	%0'0	%0.0	3.1%	NA	NA	NA	AN
In non-related field	3.7%	2.0%	3.1%	4.5%	4.5%	NA	AN
Unemployed, not seeking	3.7%	13.5	0.0%	7.8% *	9.1% *	ΝA	NA
Attending College or University	NA	NA	NA	%9'0	2.3%	NA	NA
Homemaking/child-rearing	NA	NA	NA	1.7%	6.9%	NA	Ϋ́Х
Retired	29.3%	9.5%	12.6%	18.4%	20.5%	%9.9	NA

Unemployed--not known if person was seeking work. NOTE: Data are adjusted for nonresponse and may not add to 100% because of rounding.



Exiters Leaving and Staying in District





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Exhibit 13

Employment Status of Leavers Immediately After Leaving, As a Percent of Leavers (Excludes Deaths and "Forced" Leavers)

	ERI District 1	ERI District 2	ERI Dist 3	San Diego,	San Jose, CA	Memphis, TN	Totals	
	(N=S0)	(6L:=N)	(N=38)	(N=179)	(N=45)	(N=137)	(N=490)	
Item Response Rate	80.0%	74.7%	94.7%	100.0%	%8′.66	72.3%		
Employed in Education	26.508	75.2%	82.58 83.59	67.1%	\$6.5%	\$60,30	27:12	108.02
Special Education Teaching	7.3%	38.3%	31.0%	27.9%	25.0%	41.0%	30.1%	30,9%
General Education Teaching	46.0%	14.7%	36.9%	23.5%	15.6%	17.0%	23.4%	22.9
Administration/Other	%0.9	22.2%	15.3%	15.7%	15.9%	8.0%	14.2%	14,2 sam
Left Education	36.7%	25.0%	15.7%	33.0%	43.3%	34.0%	37.9%	32.0
Homemaking/child-rearing	NA	NA	NA	1.7%	%6:9	11%	3.5%	
Non-Related Occupation (or seeking)	3.7%	2.0%	3.1%	4.5%	4.5%	8.0%	4.6%	
Unemployed, Seeking Work	NA	NA	. VN	NA	NA	2.0%	0.4%	
Unemployed, Not Seeking	3.7%	13.5%	٧N	NA	NA	ΑN	2.6%	
Unemployed (Not Known If Seeking)	NA	NA	NA	7.8%	9.1%	A A	3.7%	·
Attending College/University	NA	N.A	NA	%9:0	2.3%	2.0%	0.8%	
Other	NA	NA	NA	NA	NA	3.0%	%9.0	
Retired	29.3%	9.5%	12.6%	18.4%	20.5%	8.0%	15.7%	

NOTE: Data are adjusted for nonresponse, and totals may not add to 100% because of rounding.

Exiters Leaving/Staying in Education



