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AUTHOR Fairweather, James S.; And Others

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#### ABSTRACT

This study analyzed data from a national survey of 1600 secondary school districts to determine the numbers and characteristics of handicapped youth as well as the types of programs offered by these districts related to the transition of youth from school to post school activities. Among the findings were: (1) access to traditional vocational programs is being provided by many local education agencies (LEAs) although by fewer small school districts; (2) less than half of all LEAs offer transitional programs in helping the handicapped to obtain employment; (3) size of the LEA is a key factor in numbers and quality of programs for employment of the handicapped; (4) vocational preparedness will improve when funds are focused on improving school/community links. Appendixes provide statistical data and a bibliography. (DB)

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ANALYSIS OF A SURVEY OF SCHOOL DISTRICT PRACTICES

REGARDING SECONDARY-LEVEL HANDICAPPED STUDENTS

AND THEIR TRANSITION TO POSTSECONDARY EXPERIENCES

September 15, 1986

U. S. Department of Education Grant No. G008630138 COFA 84.023 T

Prepared by:

James S. Fairweather
Center for the Study of Higher Education
The Pennsylvania State University

The Pennsylvania State University University Park, PA 16802

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Prepared by:

James S. Fairweather Center for the Study of Higher Education The Pennsylvania State University

With Assistance by:

Marilyn Amey, The Pennsylvania State University
Miguel Escala, The Pennsylvania State University

Prepared for:

Office of Special Education Programs
U. S. Department of Education



## TABLE OF CONTENTS

I	Introduction
II	Survey Design
	Stratification
	Geographic Region
	Size of District (Envollment).
	District/Community Wealth
	Stratified Universe
	Selecting the Sample
	Weighting
	Survey Instrument
	Data Collection
	Analytical Procedures
111	Results
	Type of Disability Served.
	Size of District
	Region
	District/Community Wealth
	Number of Secondary Handicapped Students Served
	Other Agencies and IEA Service Configurations
	Size of District
	Region24
	District/Community Wealth 24



	School Resources
	Size of District 2
	Region
	District/Community Wealth
	External Services
	Typology of Programs and Services Offered by LEAs
	Crosstabulation Analyses
	Discriminant Function Analysis
ΙV	Discussion
J	Bibliography
App	endix A



## LISTING OF TABLES

Table	1	List of Secondary School Districts by Region, Enrollment Size, and District Wealth	. 8
Table	2	Survey Respondents	13
Table	3	Comparison of Population and Survey Respondents	15
Table	4	Disabilities Served by LEAs Nationwide	18
Table	5	Number of Secondary Handicapped Students Served in LEAs Nationwide	21
. ), (4	6	Service Configurations in LEAs Nationwide	22
Table	7	School Resources for Secondary Handicapped Students in LEAs Nationwide	25
Table	8	External resources for Handicapped Youth	29
Table	9	Means, Standard Deviations, and Coefficients of Variation for Estimated Population Estimates: Independent Variables	33
Table	10	Correlation Matrix for Composite Variables and Dependent Variables	36
Table	1.1	Discriminant Analysis for Programmatic Groups	3 2



ANALYS'S OF A SURVEY OF SCHOOL DISTRICT PRACTICES
REGARDING SECONDARY LEVEL HANDICAPPED STUDENTS
AND THEIR TRANSITION TO POSTSECONDARY EXPERIENCES

#### I INTRODUCTION

Until recently, the primary focus of federal, state, and, to a large degree, local policy toward educating handicapped youth centered on gaining access to education in an appropriate setting; that is, removing barriers to equal educational opportunity for the handicapped. Under the assumption that access to schooling is the major initial step toward an independent life, Congress passed Public Law (PL) 94-142, the Education for All Handicapped Children Act, to require school districts or local education agencies (LEAs) to provide education to handicapped youth in the least restrictive and most appropriate environment. Not surprisingly, during this era the major research activities focused on the degree to which PL 94-142 was implemented effectively, including, for example, the extent that LEAs used individualized educational programs (IEPs) as required by law (e.g., Wright, Cooperstein, Grogan-Renneker, & Padilla, 1982). Moreover, the major policy questions focused on the entry point in the educational system, namely elementary schools and school districts.



As federal policymakers became convinced that PL 94-142 was effectively in place at the elementary level, and as more and more research about disadvantaged groups raised questions about the effectiveness of school and other social institutions in preparing these youth for life after school (e.g., G. Fairweather, 1964), questions arose about the long-term effectiveness of special education programs in preparing handicapped students for work, postsecondary education, and an independent life. Accordingly, Congress legislated new secondary special education programs in PL 98-199 and in the amendments to PL 94-142, and mandated a longitudinal study to follow secondary handicapped students through secondary school and into adulthood. At the same time, Madeleine Will, Assistant Secretary for Special Education and Rehabilitative Services (OSERS), announced that the federal perspective on educating handicapped children had shifted from an almost exclusive focus on early school activities to include secondary school programs and, especially, the transition from school to the adult world (Will, 1984). In effect, educational policymakers no longer assumed that education, especially during the early years, was an adequate end in itself, but must be seen in tead as a mechanism toward achieving full social and economic participation after leaving school

Despite this shift in perspective, no comprehensive information describing what happens to youth with various handicapping conditions in secondary schools or afterwards is available (Ellman, Brauan, & Birman, 1984). Instead, we have studies of high school students based on samples inappropriate for the entire special education population (e.g., National



Center for Education Statistics [NCES], 1981, 1983) and a handful of follow up studies of handicapped youth in a few categories located in three or four states (e.g., Edgar, Horton, & Maddox, 1984; Hasazi, Gordon, & Roe, 1985; Mithaug, Horinchi, & Fanning, 1985). In addition, preliminary research suggests that many LEAs have not expanded their programs for handicapped students to include a postsecondary focu.

Bellamy & Wilcox (1981), for example, found that many secondary LEAs focus on the academic performance of their special education students, not on training for employment or independent living. In fact, we know little about the availability of traditional vocational preparation for handicapped students and almost nothing about the availability of transitional programs to assist handicapped students in locating jobs and in learning to live on their own.

To provide baseline data for national policymakers and for state agencies planning to conduct their own studies of transition, and to determine the availability of traditional and nontraditional preparatory programs for secondary-level handicapped students, SRI International undertook a survey to collect data on LEA characteristics suggested in



The author was working at SRI International when the survey was designed; he completed the analyses after moving to Penn State. Data collection, which was carried out by Chilton Research Services under subcontract with SRI, was done independently of SRI's contract with the U.S. Department of Education (No. 300-84-0258) to design a longitudinal study to follow handicapped students in their transition to adulthood. The analysis of these data was supported by U.S. Department of Education Grant No. G008630138

previous studies of special education (e.g., Wright et al., 1982; Edgar et al., 1984; Hasazi et al., 1985; Mithaug et al., 1985) as being associated with good secondary and transitional programs. This report presents the methods and reports the findings of this survey.



#### II SURVEY DESIGN

As described in detail in J. Fairweather, 1985a, SRI project staff created a sampling frame or master list of secondary LEAs (i.e., districts offering instruction in at least grade 7) by combining information from several sources. We started with the most current data available, the public school universe maintained by Quality Education Data (QED) based on the 1983-84 school year, as updated in the summer of 1983. These data were supplemented by data tapes from the NCES (1980-81 and 1981-82) and by telephone calls to individual states and districts. In general, we included an LEA on the master list if the district was (a) on all data tapes or (b) on at least one data tape and was verified by a telephone call to the relevant State Education Agency or LEA. The result was an estimated Jist of 13,975 secondary-level LEAs. This estimated universe was revised to 13,180 during the survey when we discovered that several of the sampled LEAs no longer offered secondary-level instruction (see p. 14).

#### Stratification

To increase the precision of estimates by eliminating between-strata variance and to ensure that the sample accounted for <u>both</u> district characteristics, such as enrollment, and the relationship between districts and number of students served, as measured by the percentage of



secondary students accounted for by districts, we stratified the sample on geographic region, size of district (enrollment), and district/community wealth.

#### Geographic Region

Regions vary in a manner likely to affect the way schools operate, including amount of financial support, how schools and school districts are organized, and the character of public concerns. To control for these differences, we divided LEAs into four geographic regions—Northeast, Southeast, Central, and West/Southwest—based on the regional classification scheme adopted by the Department of Commerce, the Bureau of Economic Analysis, and the National Assessment of Educational Progress.

#### Size of District (Enrollment)

Many important organizational and contextual school district characteristics likely to be associated with special education programs are associated with size or pupil enrollment. These include administrative/support capacity, specialization of administrative structure, and relationships with state and federal agencies. Based on a modified NCES classification scheme, we broke LEAs into five size strata: Very Large (enrollment 25,000 or greater), Large (10,000 to 24,999), Medium (2,500 to 9,993), Small (600 to 2,499), and Very Small (less than 600).



#### District/Community Wealth

To control for differences in district and especially community wealth, which might be related to the programs and services available to handicapped youth, we used the ratio of students receiving Title I funds to the total student population in an LEA. This index estimates the percentage of youth in an LEA below the poverty level. For stratification, the index was broken into four categories of district/community wealth: !igh (0 to 4% disadvantaged youth), Medium (5 to 9%), Low (10 to 19%), and Very Low (20% and over).

#### Stratified Universe

The estimated distribution of LEAs and the proportion of secondary students accounted for by all strata are displayed in Table 1.

### Selecting the Sample

Based upon a sampling strategy used successfully in the national study of school district operations under the Chapter 2 block grant (see Knapp & Blakely, 1985), we opted for a selecting sample of 1,600 LEAS (approximately 11% of the secondary LEA population). This sample was sufficient to provide estimates accurate to  $\pm$  1.5 percentage points (p \left\).05, assuming an 85% response rate).



Table 1

List of Secondary School Districts by Region, Enrollment Size, and District Wealth

			1	Northea	st			S	outhea	s t			_ (	Central				₩ <u>e</u> s	t/Sout	<u>hwest</u>		
		Dis	trict	Wealth	)		Dis	trict	Weal th		_	Dis	trict	Wealth			D1 s	trict	Wealth			
Enrollment Size		0-4 5-9		10-19	20+	Total Region	0-4	5-9	10-19	20+	Total Region	0-4	5-9	10-19	20+	Total Region	0-4	5-9	10-19	20+	Total Region	Total*
VERY	N	2	3	6	4	15	1	7	29	26	63	3	6	14	2	25	7	18	27	8	60	163
LARGE	\$ LEAS	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.2	0.5	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.2	0.1	0.5	1.2
25,000+	3 secondary students**		0.5	1.0	3.0	5.0	0.3	0.8	4.4	2.5	8.4	0.2	0.5	3.0	0.3	4.1	0.7	2.3	5.0	0.9	8.8	26.3
LARGE	N	20	21	22	7	70	1	6	53	64	124	38	38	18	1	95	22	64	61	23	170	459
10,000-	% LEAS	0.2	0.2	0.2	0.1	0.5	0.0	0.0	0.4	0.5	0.9	0.3	0.3	0.1	0.0	0.7	0.2	0.5	0.5	0.2	1.3	3.5
24,999	1 secondary students	0.6	0.8	8.0	0.3	2.5	0.0	0.2	2.0	2.5	4.7	1.3	1.4	0.7	0.0	3.6	0.9	2.7	2.6	0.9	7.1	17.8
MEDIUM	N	343	288	170	21	822	10	11	157	535	713	325	326	153	21	825	78	165	207	128	578	2938
2,500-	% LEAS	2.6	2.2	1.3	0.2	6.2	0.1	0.1	1.2	4.1	5	2.5	2.5	1.2	0.2	6.3	0.6	1.3	1.6	1.0	4.4	22.3
9,999	1 secondary students	4.0	3.2	1.9	0.3	9.4	0.1	0.1	2.2	6.7	9.1	4.0	3.7	1.5	0.2	9.4	1.2	2.3	2.6	1.4	7.5	35.4
SMALL	N	364	400	31 5	44	1123	22	9	69	481	581	432	691	849	232	2204	104	191	390	487	1172	5080
600-	3 LEAS	2.8	3.0	2.4	0.3	8.5	0.2	0.1	0.5	3.5	4.4	3.3	5.2	6.4	1.8	16.7	0.8	1.4	3.0	3.7	8.9	38.5
2,499	3 secondary students	1.4	1.6	1.1	0.1	4.3	0.1	0.0	0.3	1.9	2.2	1.4	2.4	2.6	0.6	7.1	0.3	0.6	1.3	1.5	3.7	17.3
 VERY	N	240	74	99	31	444	87	2	8	120	217	615	283	561	446	1905	1323	94	178	379	1974	4540
SMALL	% LEAS	1.8	0.6	0.8	0.2	3.4	0.7	0.0	0.1	0.9	1.6	4.7	2.1	4.3	3.4	14.5	10.0	0.7	1.4	2.9	15.0	34.4
0-599	3 secondary students	0.1	0.1	0.1	0.0	0.3	0.1	0.0	1.0	0.1	0.2	0.3	0.2	0.5	0.4	1.4	0.6	0.1	0.2	0.4	1.2	3.1
TOTALS	N	969	786	612	107	2474	121	35	316	1226	1698	1413	1344	1595	702	5054	1534	532	863	102%	3954	1 3180
	1 LEAS	7.4	6.0	4.6	0.8	18.8	0.9	0.3	2.4	9.3	12.9	10.7	10.2	12.1	5.3	38.3	11.6	4.0	6.5	7.8	30.0	100.0
	3 secondary students	6.0	6.1	5.0	3.8	21.5	0.6	1.2	8.8	14.1	24.6	7.2	8.3	8.4	1.6	25.6	3.6	8.0	11.6	5.0	28.3	100.0

<sup>&</sup>quot;Using the results of the survey of 1600 LEAs (and the 1450 respondents to that survey), the estimated total number of LEAs offering grades 7 or higher is based on eliminating the proportion of LEAs in each stratum found not to have grades 7 or higher. The estimate does not include an adjustment for nonresponse.

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<sup>\*\*</sup>Estimated.

Next, we allocated sites to strata so that (a) a certainty stratum of the 163 very large districts with student enrollments greater than 25,000, which accounted for approximately 25% of all secondary students, was created; (b) a majority of the large districts, with enrollments between 10,000 and 25,000, were included; and (c) the remaining sample sites were distributed among their strata in approximate proportion to the number of students contains in each. We then selected a stratified random sample based on this inhers.

### Weighting

Because sites have an unequal probability of being selected into the sample depending on the stratum within which they fall, sites were weighted by the inverse of the sampling fraction to permit estimation of population parameters.

#### Survey Instrument

The survey instrument was designed to gather information about secondary LEA characteristics relevant to the study of handicapped students in transition to adulthood. The interview focused on five areas:



(a) the types of disabilities served by an LEA; (b) the number of 2 secondary aged handicapped youth by category; (c) the nature of the education agency responsible for providing services to handicapped youth; (d) the richness or paucity of school resources, i.e., special education and related services provided or arranged by the LEA; and (e) the richness or paucity of external or community resources, especially those concerned with adult services and employment opportunities for handicapped individuals.

Regarding special education programs and services specifically, data were gathered on four traditional in-school preparatory programs: vocational education, counseling, occupational and/or physical therapy, and whether the local Vocational Rehabilitation (VR) agency assigned a staff member to the LEA. Data were also obtained on two nontraditional transition-related programs for special education students: (a) the LEA had a staff member whose primary function was to help special education students find jobs and (b) the LEA had a transitional program for special education students.

In a pretest of the instrument, we found that LEAs could say whether they served secondary-aged students in each of the 11 federal handicapping categories but could not provide accurate counts. We then modified the instrument to obtain categorical data on the numbers of handicapped students, i.e., less than 10, 11 to 50, 51 to 101, 101 to 500, and more than 500.

To prepare for the anal..is, a composite measuring amount of school resources was defined on the basis of the availability of school vocational programs and placement personnel, variety of settings for serving LD and educable mentally retarded (EMR) students, and existence of transitional programs and of occupational and physical therapy services. A composite measuring the richness of external or community services was comprised of several items measuring the proximity and quality of community services and employment opportunities for handicapped youth.

We also created a variable to define how each LEA, in addition to providing some services itself, served its handicapped students. "Service configurations" were defined as: (a) "Up," where some handicapped youth were served in the county office or special education district, but not in neighboring districts; (b) "across," where some handicapped youth were served in neighboring districts but not in county offices or special education cooperatives; (c) "up and across," where some handicapped youth were served in county offices or special education districts and in neighboring districts; (d) "out," where some handicapped youth were served in private day or residential schools, state-supported schools, or other institutions, but not in superordinate units or in neighboring LEAs; and (e) "in house," where all handicapped students were served within the district.

#### Data Collection

At SRI's request. Chilton Research Services conducted a telephone survey of chief academic officers responsible for special education in the



1,600 sample LEAs. During the survey, we discovered that 47 LEAs classified by QED and NCES as offering secondary-level instruction no longer did so, and that 4 LEAs had merged with other districts and were no longer distinct entities. Subtracting these 51 LEAs from the sample of 1,600 (i.e., they were not part of the universe under study), we were left with a sample of 1,549 LEAs. Of these, 1,450 responded and 99 either refused to participate or were not reached; the response rate was 93.6%. The distribution of survey respondents is shown in Table 2.

To ascertain whether the respondents adequately represented the population of secondary LEAs, we selected three variables to compare the "fit" between the respondent LEAs and the population: (a) the percentage of minority students, (b) metropolitan status (urban. suburban, rural), and (c) grade distribution (K-8, K-12, secondary only, and other).

Table 3 suggests that the respondents are representative of the population on these characteristics, and that we can have confidence in using the weighted responses from the 1,450 respondents to make national estimates about secondary LEA special education programs and resources.

#### Analytical Procedures

Descriptive statistics were calculated using weighted data to make national estimates about LEAs serving secondary-aged handicapped



## Survey Respondents

			t.	orthea				S	outhea	st			С	entral				We:	t/Sout	<u>hwest</u>		
		Die		Wealth			Dis	trict				Dis	trict	Wealth			Dis	trict	Weal th			
	•					Total	0-4		10-19	20+	Total Region	0-4	5-9		20+	Total Region	0-4	5-9	10-19	20+	Total Region	Total
	ent Size	0-4	<u>5-9</u>	10-19	20+	Region 11	3-4	<del>3-3</del> .	28	26	62	2	4	12	2	20	6	17	24	7	54	147
VERY	Sample N	1	3	6	4	15	;	,	29	26	63	3	6	14	2	25	7	18	27	8	60	163
LARGE	Pop. N	2	0 0	0.0	0.0	0.1	0.0	0.1	0.2	0.2	0.5	0.0	0.0	0.1	0.0	0.2	0.0	0.1	0.2	0.1	0.4	1.1
25,000+		0.0	0.5	0.8	2.9	4.5	0.3	0.8	4.2	2.9	8.3	0.2	0.3	2.4	0.3	3.2	0.6	2.2	4.8	0.8	8.3	24.2
	% Sec. Sts. Sampling Fraction	0.2	0.5	0.5	2.3	1:1.4	•,•				1:1					1:1.3					1:1.1	1:1.1
LARGE	Sample N	9	10	11		33	1	4	25	27	57	16	18	9	1	44	11	28	27	12	78	212
10,000-	•	20	21	22	7	70	1	6	53	64	124	38	38	18	1	95	22	64	61	23	170	459
24,999		0.1	0.1	0.1	0.0	0.3	0.0	0.0	0.2	0.2	0.4	0.1	0.1	0.1	0.0	0.3	0.1	0.2	0.2	0.1	0.6	1.6
24,535	Sec. Sts.		0.4	0.4	0.1	1.2	0.0	0.2	1.0	1.1	2.2	0.5	0.7	0.3	0.0	1.6	0.5	1.2	1.2	0.4	3.3	8.3
	Sampling Fraction	0.3	0.1	•		1:2.1					1:2.2					1:2.2					1:2.2	1:2.2
MEDIUM	Sample N	61	52	32	6	151	4	4	29	105	142	60	60	28	4	152	14	30		21	101	546
2,500-	Pop. N	343	288	170	21	822	10	11	157	535	713	325	326	153	21	825	78			128	578	2938
9,999	\$ LEAS	0.5	0.4	0.2	0.0	1.1	0.0	0.0	0.2	0.8	. 1.1	0.5	0.5	0.2	0.0	1.2	0.1	0.2		0.2	0.8	4.1
·	% Sec. Sts.	0.7	0.5	0.3	0.1	1.6	0.0	0.1	0.4	1.3	1.8	0.8	0.7	0.3	0.0	1.8	0.2	0.4	0.4	0.3	1.3	6.
	Sampling Fraction					1:5.4					1:5					1:5.4					1:5.7	):5.4 
SMALL	N	25	23	17	6	71	5	3	8	33	49	26	43	52	19	140	8	15		31	78	338
600-	Pop N	364	400	315	44	1123	22	9	69	481	581	432	691	849	232	2204	194	191		487	1172	5080
2,499	\$ LEAs	0.2	0.2	0.1	0.0	0.5	0.0	0.0	0.1	0.3	0.4	0.2	0.3	0.4	0.1	1.1	0.1	0.1		0.2	0.6	2.6
•	Sec. Sts.	0.1	0.1	0.1	0.0	0.3	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.1	0.5	0.0	0.0	0.1	0.1		1.1
	Sampling Fraction					1:15.8					1:11.9					1:15.7	. – – –	. <b></b>			1:15	1:15
VERY		10	 5	8	,	30	8		2	7	18.	24	11	22	18	75	54			17	84	207
SMALL	Pop. N	240	74	99	31	414	87	2	8	120	217	615	283	561	446		1323			379	1974	4540
0-599	\$ LEAS	0.1	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.1	0.6	0.4			0.1	0.6	1.0
	% Sec. Sts	. 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.1
	Sampling Fraction					1:14.8		•			1:12.1					1:25.4					1:23.5	1:21.9



table continues

	Northeast				Southeast				Central												
District Wealth				District Wealth				District Wealth				District Wealth									
Enrollment Size	0-4		10-19	20+	Total Region	0-4	5-9	10-19	20+	Total Region	0-4	5-9	10-19	20+	Total Region	0-4		10-19	20+	Total Region	Total
TOTALS N	106	93	72	25	296	19	19	92	198	328	128	136	123	44	431	93	98	116	88	395	1450
Pop. N	969	786	612	107	2474	121	35	316	1226	1698	1413	1344	1595	702	5054	1534	532	863	1025	3954	13180
\$ LEAS	0.8	0.7	0.5	0.2	2.2	0.1	0.1	0.7	1.5	2.5	1.0	1.0	0.9	0.3	3.3	0.7	0.7	0.9	0.7	3.0	11.0
% Sec. Sts.	1.4	1.5	1.6	3.1	7.6	0.4	1.0	5.6	5.4	12.5	1.6	1.8	3.2	0.5	7.1	1.3	3.9	6.5	1.6	13.2	40.3
Sampling Fraction					1:8.4					1:5.2					1:11.7					1:10	1:9.1



Table 3

<u>Comparison of Population and Survey Resondents</u>

## Percent Minority

Weighted Sample	Percentage of LEAs
Low ( 10%)	76.8
Medium (11-33%)	12.4
High ( 33%)	10.7
<u>Population</u>	
Low	77.7
Medium	12.3
High	10.0

## Metropolitan Status

Weighted Sample	Percentage of LEAs
Urban	2.4
Rural	63.5
Suburban	34.0
<u>Population</u>	
Urban	2.3
Rural	63.8
Suburban	33.9

## Grade Distribution

Weichted Samole	Percentage of LEAs
K - 8	14.2
K - 12	82.1
Secondary only	3.7
Other	0.0
Population	
K - 8	16.5
K - 12	70.9
Secondary only	4.4
Other	0.1



students. Crosstabulation analyses were performed to compare these results by size of district, geographic region, and district/community 3 wealth.

In addition, an IEA typology based on the number and type of traditional and nontraditional vocation-related programs offered then was developed and crosstabulation analyses used to compare the distinct programmatic groups by size of district, geographic region, and district/community wealth. Finally, a discriminant function analysis was used to examine differences between programmatic groups.



Crosstabulation results were analyzed by  $\chi$  (chi square) statistics; all results described in the text are significant at p $\zeta$ .0001. Because the  $\chi^2$  statistic is influenced by sample size, relatively minor associations can achieve statistical significance when samples are large. To avoid attributing importance to these trivial associations, relationships described in the text also had to meet a criterion of "meaningfulness":  $r \ge 1.20$  (for continuous or ordinal variables) and V (Cramer's V) .20 (for categorical variables) (Affifi & Azin, 1979).

Relationships between variables significant at p $\angle$ .01 (corrected for the number of statistical tests; see Westermann & Hager, 1986) and accounting for a partial R $^2$  of at least .01 (see Kerlinger & Pedhazur, 1982) were included in the discriminant functions.

#### III RESULTS

#### Type of Disability Served

As shown in Table 4, the typical secondary LEA serves youth in about 6 of the 1 federal handicapping categories. Almost all secondary LEAs serve youth learning disabilities (LD) and more than 3/4 serve mentally retarded (MR) students, youth with speech impairments, and emotionally disturbed/behavioral disorder (ED/BD) youth. Approximately 1/2 of secondary LEAs have and serve the students with the following disabilities: orthopedically impaired, hard of hearing, multiply handicapped, and other health impaired (OHI). For deaf students and for blind students, the proportion of secondary LEAs providing services declines to between 1/3 and 1/2, and only about 13% have and serve deaf-blind students.

#### Size of District

Most LEAs (between 80% and 90%), except for the very small (only about 1/2 to 2/3), have and serve handicapped youth in the higher frequency categories—-MR, ED/BD, and speech impaired. For six lower frequency categories—-orthopedically impaired, hard of hearing, deaf, blind, multiply handicapped, and OHI—the percentage of LEAs having and serving handicapped students varies directly by size, with the highest percentage



Table 4

# Disabilities Served by LEAs Nationwide a

Variable	Estimated Population	<u>Estimated SD of</u>	Coefficient
<del></del>	Mean (M)	the Estimate	of Variation
Disabilities Served by LEA			
Learning disabled	0.975	0.006	0.006
Mentally retarded	0.846	0.012	0.014
Speech impaired	0.839	0.013	0.015
Orthopedically impaired	0.542	0.015	0.028
Emotionally handicapped		0.014	0.019
Hard of hearing	0.545	0.014	0.026
Deaf	0.364	0.013	0.036
Visually handicapped/bl	ind 0.438	0.014	0.032
Deaf-blind	0.133	0.009	0.068
Hulti-handicapped	0.518	0.014	0.027
Other health impaired	0.475	0.014	0.029
Number of disabilities serve		0.074	0.012

<sup>&</sup>lt;sup>a</sup>The estimated population means and variances are derived from weighted survey data.



in the very large category (94% to 100%), a more modest percentage in the large and medium-sized districts (64% to 95%), and a significantly smaller percentage in the small and very small-sized districts (14% to 57%). Only very large districts are likely to have or serve deaf-blind students (about 60%); less than 1/3 of even the large LEAs provide services for these youth.

Regarding number of diabilities sorved, a majority of the very large and large-sized LEAs (about 90% and 67%, respectively) have and serve youth in at least 10 of the 11 federal handicapping conditions; medium, small, and very small LEAs are much less likely to serve this comprehensive range of special education students (39%, 14%, and 4%, respectively). In fact almost 1/2 of the very small LEAs nationwide have and serve youth in only three or fewer of the federal handicapping categories.

#### Region

As expected, type of disability does not vary significantly by region.

#### District/Community Wealth

In general, a higher percentage of LEAs located in higher wealth communities serve youth with more types of disabilities than do LEAs in lower wealth communities, although meaningful differences do not exist for individual handicapping conditions.



#### Number of Secondary Handicapped Students Served

As shown in Table 5, more than 1/2 of all LEAs serve fewer than 50 secondary handicapped students; only about 3% serve more than 500 of these students. As expected, size of district is highly positively correlated with number of secondary handicapped students served (r = .78). Although these results are generally consistent with national enrollment patterns (see J. Fairweather, 1985b), they imply that the burden for serving handicapped students may be somewhat disproportionately placed on larger LEAs.

#### Other Agencies and LEA Service Configurations

As shown in Table 6, in addition to providing some services locally about 2/3 of all secondary LEAs send some of their handicapped students to a superordinate unit, namely a county agency or special education district. More than 1/2 collaborate with neighboring LEAs, and between 1/3 and 1/2 send some of their handicapped students to state-supported institutions, private day or residential schools, or developmental disability/mental health centers.

As for service configurations, the majority of LEAs either serve some handicapped students in both a superordinate unit and neighboring LEAs (up and across) or serve some handicapped students in the county office or special education district but not in a neighboring LEA (up); about 35% and 28%, respectively. Approximately 15% send students to a neighboring



Table 5

# Number of Secondary Handicapped Students

# Ser ed in LEAs Nationwide

Variable	Estimated Population	Estimated SD of	<u>Coefficient</u>
	Mean (M)	the Estimate	<u>of Variation</u>
Under 10	0.188	0.012	0.064
11-50	0.369	0.015	0.041
51-100	0.151	0.010	0.066
101-500	0.186	0.008	0.043
More than 500	0.034	0.002	0.059



Sarvica	Configurations	in	Leas	Nationwide	

	Variabl <u>e</u>	Estimated Population	Estimated SD of	Coefficient
		Mean (M)	the Estimate	of Variation
	Association with other servi	ce		
	agencies			
	County office/special			
	education district	0.656	0.014	0.021
	Neighboring LEA	0.541	0.015	0.028
	State supported schools	0.47 ს	0.015	0.031
22	Private day/residential		0.013	0.038
	Developmental disabilit	ies/		
	mental health centers		0.013	0.039
	Other agency	0.197	0.012	0.061
	LEA Service Configurations			
	Up	0.280	: 0.014	0.050
	Across	0.155	0.011	0.071
	Up and Across	0.352	0.015	0.043
	Out	0.150	0.011	0.073

0.063



In house

0.008

0.127

LEA but not to a superordinate unit (across) or to external institutions (out). Only about 6% claim self-sufficiency in providing services to handicapped students (in house). LEAs in this latter category typically serve fewer special education students and fewer types of disabilities than LEAs in other service configurations.

These results strongly suggest that almost all secondary LEAs collaborate to some degree with other agencies or LEAs to provide some services to handicapped students. The patterns of support vary considerably, however, and the extent of cooperation for each child receiving services is unknown.

#### Size of District

Although smaller EAs are more likely than larger ones to work with county offices or special education districts (70% versus 45% of the larger LEAs), a substantial percentage of smaller LEAs (almost 1/3) do not belong to a special education cooperative. On the other hand, larger LEAs are much more likely to work with state-supported schools and other external agencies. It seems that smaller districts, having fewer youth with low frequency disabilities and fewer resources to deal with them, find it easier to let a superordinate unit locate services for these youth, whereas larger LEAs have larger numbers of students in lower frequency handicapping categories and must locate services directly, such as by developing contacts with state-supported schools.



#### Region

Consistent with historical patterns, which show a higher percentage of private schools for handicapped children in the Northeast. LEAs in the Northeast are much more likely to use private day or residential services to provide services for secondary-aged handicapped youth than LEAs in any other region.

#### District/Community Wealth

District/community wealth is not related to LEA service configurations.

#### School Resources

More than 1/2 of all LEAs provide some <u>traditional</u> vocation-related programs and services for secondary handicapped students (see Table 7). By program, 52.3% of LEAs have a VR staff member assigned to the LEA, 57.1% provide occupational and/or physical therapy for special education students, 71.9% have some or almost all of their secondary special education students enrolled in vocational education, and 86.0% arrange counseling for handicapped students. In contrast, less than 1/2 of all LEAs offer at least one <u>nontraditional</u> transition-related program for secondary-level handicapped students; about 1/3 say they have a staff member whose main function is to assist handicapped students find jobs and



Table 7

## School Resources for Secondary Mandicanned Students in LEAs Nationwide

<u>Handicapped</u>	<u>students</u>	III LLNS	Macionai	
<u>Variable</u>		<u>E</u> :	stimated	ſ
_			<u>Mean</u>	۷
LD instruction				

nand i capped	<u> </u>	111 22713		
/ariable		<u>E</u> :	<u>stimated</u>	Po

pulation Estimated SD of the Estimate

0.010

0.005

0.010

0.009

0.009

0.015

Coefficient of Variation

0.011

0.005

0.091

0.093

0.084

0.021

0.011

Regular class

resource rooms

Residential schools

Separate schools

Special educa resource ro

Separate scho

Residential s Other

EMR instruction Regular classrooms Special education clas

EMR instruction

Other

	Mean (H)
srooms	0.888
ation classes/	
ooms	0.982
ools	0.110
schools	0.097

	0.302
	0.110
	0.097
	0.107
	0.728
ses/	

0.925

0.139

0.084

0.132

0.010 0.010 0.008

0.011

34

0.072 0.095

0.083 (table continues)

Variable	Estimated Population	Estimated SD of	Coefficient
	<u>Mean (M)</u>	the Estimate	of Variation
School Resources			
Low	0.420	0.015	0.036
Medium	0.377	0.014	0.C37
High	0.203	0.011	0.054
# handicapped students	2.067	J. 025	0.012
participating in vocationa education <sup>a</sup>	1		
LEA has staff member whose m	nain 0.365	0.014	0.038
job is locating jobs for			
special ed. students			
LEA arranges for counseling	0.860	0.011	0.013
LEA provides occupational/	0.571	0.015	0.026
physical therapy			
Vocational rehabilitation	0.523	0.016	0.031
agency assigns staff to LE	A		
LEA has transition program	0.446	0.015	0.034
for special ed. students			
<sup>a</sup> Broken down by category: 2	26.8% very few, 38.5%	some, 33.4% almos	t all.

Broken down by category: 26.8% very few, 38.5% some, 33.4% almost all.



about 45% claim they have a transitional program. Overall, using the composite school resources variable described previously we find that 42% of LEAs nationwide score low, 37.8% offer a moderate amount of school resources, and 20.3% score high.

Although the content, quality, and effectiveness of these programs in unknown, it is encouraging to find that vocation-related and, to a lesser degree, transitional programs are recognized and dealt with at some level by many secondary LEAs. Clearly, however, the emphasis to date is more on the more traditional in-school programs than on newer programs aimed at life after school.

#### Size of District

For traditional programs, size of district is not related to LEAs having a VR staff member assigned to them or to LEAs having counseling programs for secondary-level handicapped students; about 1/2 to 2/3 of LEAs in each enrollment category offer the former and almost all LEAs offer the latter. Very small districts, however, are much less likely than all others to have some or almost all of their secondary-level handicapped students enrolled in vocational education (51% versus 80.6% to 96.5% in the other four enrollment categories). Even more striking, larger LEAs are much more likely than smaller ones to offer occupational and/or physical therapy to special education students, ranging in descending order from a high of 98.6% of very large LEAs offering these services to a low of 35.2% of the very small (r = .35).



For nontraditional programs, larger LEAs are more likely than smaller ones to have a staff member to assist special education students find jobs and to have a transitional program (an average of between 55% and 60% for larger LEAs versus an average of between 30% and 40% for smaller LEAs).

In general, the number of disabled students served, which is strongly positively related with the size of the district (r = .78), is positively related with school resources (r = .39). Perhaps the smaller LEAs lack sufficient numbers of handicapped students to warrant investing in these job-related services, although the question remains whether this lack of service adversely affects handicapped students in smaller districts.

#### Region

Regions do not vary meaningfully on school resources.

#### District/Community Wealth

District/community wealth does not seem to affect school resources meaningfully.

#### External Resources

As shown in Table 8, about 1/2 of all secondary LEAs rate the community services (e.g., VR facilities, sheltered workshops) available to handicapped youth as either excellent or good; only about 1/3, however,



Table 8

## External Resources for Handicapped Youth

<u>Variable</u>	<b>Estimated Population</b>	Estimated SD of	<u>Coefficient</u>
	Mean (M)	the Estimate	of Variation
External/community services	for		
the handicapped <sup>a</sup>	1.860	0.024	0.013
Rating of community service	s for		
the handicapped <sup>b</sup>	2.460	0.030	0.012
Rating of employment opport	unities		
for the handicapped <sup>b</sup>	2.954	0.028	0.009

<sup>&</sup>lt;sup>a</sup>Broken down by category: 39.3% low, 35.7% medium, 25.0% high.

bWhere 1=excellent, 2=good, 3=fair, and 4=poor.

rate employment opportunities for these youth as highly. Overall, the previously described composite indicator shows that 39.3% of secondary LEAs rate their communities "low" on external services, while the majority rate them either "moderate" (35.7%) or "high" (25.0%).

Unlike school resources, however, the availability of external resources is not strongly related with the number of handicapped students served by an LEA (r = .09); i.e., a handicapped student going to school in a larger LEA does not necessarily have greater opportunities for jobs and services after graduation than a special education student exiting a smaller LEA. On the other hand, LEAs in higher wealth communities tend to rate their community services for handicapped youth substantially higher than do their less wealthy counterparts (62% versus an average of about 41%). These findings should caution us about assuming the effectiveness of any transitional program, including those offered by larger LEAs, if the major focus is on in-school activities and school resources; successful transition may be problematic without an effort to improve the employment opportunities available in the community.

#### Typology of Programs and Services Offered by LEAs

To examine in-school vocational and transitional programs and services more closely, patterns of programmatic offerings were examined. Five combinations of traditional and nontraditional vocation-related programs offered by LEAs were evident: (a) Group 1 offers two or fewer out of the four traditional programs and none of the nontraditional ones (24.9% of



all LEAs); (b) Group 2 offers at least three out of the four traditional programs but none of the nontraditional ones (16.4% of LEAs); (c) Group 3 offers two or fewer traditional programs and at least one of the nontraditional ones (18.6% of LEAs); (d) Group 4 offers at least three traditional programs and one nontraditional one (22.8% of LEAs); and (e) Group 5 offers at least three of the four traditional programs and both of the nontraditional ones (17.3% of LEAs). The remaining analyses focus on the degree to which these postulated groups differ on demographic and programmatic characteristics.

### Crosstabulation Analyses

The five postulated group differ significantly by size of district.

Group 1 has the highest percentage of small and very small districts

(20.7% and 43.1%, respectively), whereas Group 5 has most of the large and very large LEAs (about 1/2 of each). Groups 2 and 3 are similar to each other, each having about 10% to 20% of LEAs in each enrollment category.

Group 4 has a higher percentage of the larger LEAs than all except Group 5.

In general, programmatic groups do not vary by district/community wealth, the lone exception being Group 5, which has a higher percentage of high wealth districts than do the other groups. Geographic region is not related to programmatic group.



## Discriminant Function Analysis

Several independent variables were selected to compare group differences in a discriminant function analysis, including enrollment, number of disabilities served, number of teachers. number of secondary handicapped students, district/community wealth, percent minority, metropolitan status (rural or nonrural), categorical funds per pupil, instructional dollars per pupil. LD and EMR youth provided instruction in regular classrooms, and degree of external resources available for handicapped youth (see Table 9 for the distributions of these variables). A principal components analysis was carried out to combine highly correlated variables into composites; nine composite variables were retained for subsequent analyses. The first composite combines the four size-related indicators (enrollment, number of teachers, number of secondary handicapped students, and number of disabilities served) into a single variable (hereafter called "size of district") and the remaining composites each describe one of the other aforementioned variables. Table 10 shows the correlations between the program variables and these composite variables.



Principal component scores, which are standardized variables (with means of 0 and standard deviations of 1) derived from the principal components solution, were created and used in subsequent analyses. An oblique rotation was used to create a new set of independent variables, thus reducing the problem of multicollinearity among size-related predictors (see Mosteler & Tukey, 1977).

Table 9

Conficients of Maniation for Estimated Population Estimates: Independent Variables

	Estimated Population  Mean (M)	Estimated Population  Standard Deviation (SP)	Estimated SD of the Estimate M	Coefficient  of Variation (CV)
District Enrollment <sup>a</sup> # secondary handicapped	4.004 2.464	0.895 1.127	0.021	0.009
students <sup>C</sup> # teachers <sup>d</sup> # of disabilities serve	166.551 ed 6.360	461.548 2.920	2.622 0.074	0.016 0.012

dThe relevant statistics for the  $\log_{10}$  transformation, which was used in the analysis, are: M = 1.843, SD = 0.530, SD of M = 0.006, CV = 0.003.



<sup>&</sup>lt;sup>a</sup>Broken down by category: 1.2% very large (1), 3.4% large (2), 22.4% medium (3), 39.8% small (4), 33.2% very small (5).

b<sub>Not</sub> relevant for stratification variables.

CBroken down by category: 18.8% less than 10 (1), 36.9% 11 to 50 (2), 15.1% 51 to 100 (3), 18.6% 101 to 500 (4), 3.4% more than 500 (5).

<u>Variable</u>	Estimated Population  Mean (M)	Estimated Population  Standard Deviation (SD)	Estimated SO of the Estimate M	<u>Coefficient</u> <u>of</u>
Percentage minority <sup>e</sup>	1.338	ა. 661	0.016	<u>Variation (CV)</u> 0.012
Metropolitan Status				
Urban	0.024	0.152	0.002	0.083
Suburban	0.631	0.482	0.013	0.021
Rural	0.3 ა	0.475	0.013	0.038
District/community we	alth <sup>f</sup> 2.401	1.148	<u> </u>	b
Expenditures per pupi	_	1.619	0.047	0.008
Categorical funding	1.435	0.680	0.021	0.015
· per pupil <sup>h</sup>				

eBroken down by category: 76.8% less than 10% minority students (1), 12.4% 11 to 33% minority students (?), 10.7% greater than 33% (3).

(table continues)



fBroken do 1 by category: 31.0% 0-4% disadvantaged youth (1), 20.6% 5-9% disadvantaged youth (2), 25.5% 10-19% disadvantaged youth (3), 22.8% 20% and over disadvantaged youth (4).

<sup>9&</sup>lt;sub>Broken down</sub> by category: 0.1% less than \$15 (1), 1.1% \$15-24 (2), 4.9% \$25-34 (3), 15.1% \$35-44 (4), 18.1% \$45-54 (5), 19.0% \$55-64 (6), 16.6% \$65-74 (7), 24.6% \$75-149 (3), 0.5% \$150 and over (9).

h<sub>8</sub>roken down by category: 67.4% less than \$5 per pupil (1), 21.8% \$5-10 per pupil (2), 10.8% more than \$10 per pupil (3).

<u>Variable</u>	Estimated Population  Mean (M)	Estimated Population  Standard Deviation (SD)	Estimated SD of the Estimate M	Coefficient  of
LD instruction in	0.888	0.315	0.010	Variation (CV) <sup>D</sup> 0.011
regular classrooms EMR instruction in	0.728	0.445	0.015	0.021
regular classrooms  External/community se  for the handicapped		0.789	0.024	0.013



<sup>&</sup>lt;sup>1</sup>Broken down by category: 39.3% low (1), 35.7% medium (2), 25.0% high (3).

36

Table 10

Correlation Matrix for Composite Variables and Dependent Variables a

<u>co</u>	rretaction haterix for some	1	2	3	4	5	<u>6</u>	<u>7</u>	<u>8</u>	9	<u>10</u>	11	12	<u>13</u>	14	<u>15</u>
1	Voc. Ed	1														
2	Counseling	01	1													
3	Occ. Therapy	.14	.07	1												
4	VR Staff	.12	.04	.14	1											
5	Staff to find jobs	.18	.07	٠.،	. 14	1										
6	Transitional program	.20	.08	.12	.14	. 22	1									
7	Size of district	.25	.01	.40	.15	. 31	.16	1								
8	Calegorical funding	.02	.03	.01	.04	.01	.00	. 03	1							
9	Expenditures per pupil	. 04	.04	.07	05	.08	.12	. 02	.12	1						
10	) LD Mainstreamed	.07	.00	.04	.02	06	.03	.03	08	.01	1					
1	EMR Mainstreamed	.13	01		.10				05							
13	Percent Minority	.14	.01		. 05								1	_		
1	3 District/Community	.12	.00	05	. 10	06	01	.12	. 04	23	09	03	. 39	1		
	Wealth													_		
1	4 Rural	.01	.03		.01								03			
1	5 External Services	.63	.03	.10	.06	. 15	. 23	.14	01	. 16	.02	.00	07	1	112	. 1

<sup>&</sup>lt;sup>a</sup>The composite variables were created using an oblique rotation in a principal components analysis.



The results, presented in Table 11, show that size of district, external services, and to a lesser degree instructional dollars per pupil and metropolitan status (i.e., rural or nonrural) combine to reveal differences between the five programmatic groups. Group 1 LEAs, which offer two or fewer traditional programs and none of the nontraditional ones, typically are much smaller than average, spend below average amounts of instructional dollars per pupil, and are more often located in rural communities. LEAs in this group also are typically located in communities that offer less than average external resources and services for handicapped youth.

Group 2, which consists of LEAs that offer at least three of the four traditional programs and none of the nontraditional ones, is characterized by LEAs of slightly above average size that spend less than average instructional dollars per pupil. Districts in this group are about equally split between rural and nonrural locations. Similar to Group 1, Group 2 LEAs are located in communities with less than average external resource for handicapped individuals.

Group 3 LEAs, which offer two or fewer traditional programs and at least one of the nontraditional ones, are generally smaller than average but spend higher than average instructional dollars per pupil (second only to Group 5). As for Group 2, Group 3 districts are about evenly divided between rural and nonrural locations. However, they are more likely than all but those in Group 5 to be located in communities with substantial external services for handicapped youth.



38

Table 11

<u>Discriminant Analysis for Programmatic Groups</u>

Variables in Discriminant Functions	Partial R <sup>2 a</sup>	P.	
Size of District	.19	.0001	
External/community services	. 04	.0001	
Expenditures per pupil	.02	.0001	
Rural location	.02	.0001	
Group Means on Standardized Composites			
	Group 1 Group 2	Group 3	Group 4

1 005 11001	Group 1	Group 2	Group 3	Group 4	Group 5
Size of District	64	. 14	25	. 27	.59
External/Community services	30	24	.15	.02	.37
Expenditures per pupil	19	17	. 14	.04	.17
Rural location	.12 ·	.04	03	.04	20

<sup>&</sup>lt;sup>a</sup>See Kerlinger & Pedhazur, 1982.

Not surprisingly, Group 4 LEAs, which offer at least three out of the four traditional programs and one of the two nontraditional programs, are second in average size to LEAs in Group 5. LEAs in this group are about average in every other respect, including instructional dollars per pupil, percentage in rural locations, and external services available to handicapped youth.

Group 5 LEAs, which offer the most comprehensive set of coration-related programs for special education students (at least three out of the four traditional programs and both nontraditional ones), are much larger than average and score highest of all groups on instructional dollars per pupil and external services available for handicapped youth. Districts in this group are much less likely to be located in rural locations.



#### IV DISCUSSION

Most secondary LEAs share services with other agencies in attempting to find appropriate instructional settings for handicapped youth. Very few, about 6%, claim to be self-sufficient in providing services, and these LEAs have fewer handicapped students. Most often, a secondary LEA will work with a superordinate unit (e.g., special education district, county office) or a neighboring LA to provide services. A substantial percentage also send som of their handicapped youth to state-supported schools and other institutions. We do not know, however, how many youth are involved in this sharing of services, nor whether the quality of services provided is adequate.

Not surprisingly, enrollment and related factors are strongly associated with the extent of LEA services provided to secondary handicapped students. A high service LEA, whether measured by number of disabilities served or number of secondary handicapped students enrolled, is likely to be large, offer the complete range of grades (K-12), be located in an urban or suburban community, and have more school resources. Especially for the lower frequency handicapping conditions, such as deaf or blind, the larger LEAs are more likely to have students enrolled and offer services to them. We must wonder, given these findings, whether the parents of a handicapped child under the jurisdiction of a smaller LEA, especially one not belonging to a special education cooperative, are able to obtain services and whether these services are adequate.



As for school resources, traditional vocation-related programs are offered to secondary handicapped students in more than 1/2 of all LEAs. More than 70% of all LEAs, as one example, enroll at least some of their special education students in vocational education, although once more smaller LEAs are much less likely than larger ones to provide this service. These results suggest that access to traditional vocation-related programs is being provided to many secondary special education students, although questions remain about the availability of these programs in smaller districts.

Transition-related programs, which presumably are aimed more directly at assisting handicapped students in obtaining employment, preparing for postsecondary education, and learning to live on their own, are less evident-less than 1/2 of all LEAs offer transitional programs and only about 1/3 say they have a staff member to help handicapped students find jobs. Again, larger districts are more likely than smaller ones to provise these services.

One question for future research concerns the nature of these vocational programs, including whether these traditional programs are adapted for special education students' needs and whether traditional programs are more or less important to postgraduation employment than the newer transiton related programs. Relatedly, we need to know more about the nature of transitional programs and how many resources are actually devoted to them.

The discriminant function analysis suggests that the proposed programmatic typology based on combinations of traditional and



nontraditional vocation-related programs and services is useful. In comparing districts that offer most of the traditional vocation-related programs with those that offer only a handful, we find that size of district is the key factor -larger districts offer more traditional programs than smaller ones. In comparing districts that offer at least one transition-related program with those that offer none, however, size is only one key factor--districts offering nontraditional programs are larger, spend more instructional dollars per pupil, and perhaps most important, are located in communities with more services and job opportunities for handicapped youth.

These results suggest that size of district alone does not determine the availability of all types of vocation related services for handicapped students; smaller LFAs offering fewer traditional programs located in communities with better community services for handicapped youth, for example, are more likely to offer transition-related programs for their special education students than larger districts located in communities with fewer postsecondary services. For this reason, it seems unlikely that a policy attempting to stimulate the creation of transition-related programs for handicapped students by allocating resources on the basis of district size alone will succeed; community resources for disabled people must also be considered. Relatedly, one might speculate that policies focusing on improving school/community links and on investing programmatic funds in the postsecondary or community arenas might be more likely to lead to improved vocational preparedness for special education students than policies emphasizing increased expenditures on traditional in-school programs.



#### V BIBLIOGRAPHY

- Affifi, A & Azen, S. (1979). <u>Statistical analysis: A computer oriented approach</u>. New York: Academic Press.
- Bellamy, G. & Wilcox, B. (1981). <u>From schools to what? Transition</u> <u>services for students with severe handicaps</u>. Eugene, OR: University of Oregon.
- Edgar, E., Horton, B., & Maddox, M. (1984). Postschool placements:
  Planning for public school students with developmental disabilities.
  The Journal of Vocational Special Needs Education, 6, 15-18, 26.
- Ellman, F., Brauan, M., & Birman, B. (1984). <u>The in-school experiences of secondary school handicapped students</u>. Washington, DC: Decision Resources Corporation.
- Fairweather, G. (ed.) (1964). <u>Social psychology in treating mental illness: An experimental approach.</u> New York: Wiley.
- Fairweather, J. (1985a). <u>Longitudinal study of a sample of handicapped students</u>: <u>Selecting the sample of handicapped students</u> (Design Report 4). Menlo Park, CA: SRI International.
- Fairweather, J. (1985b). <u>Longitudinal study of a sample of handicapped students: Selecting the school district sample</u> (Design Report 3). Menlo Park, CA: SRI International.
- Hasazi, S., Gordon, L., & Roe. C. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. Exceptional Children, 51(6), 455-469.
- Kerlinger, F. & Pedhazur, E. (1982). <u>Multiple regression in behavioral research</u> (2nd ed.). New York: Holt, Rinehart, & Winston.
- Knapp, M. & Blakely, C. (1985). <u>The education block grant at the local level: A description of ECIA Chapter 2 in its third year of implementation</u>. Menlo Park, CA: SRI International.
- Mithaug, D., Horiuchi, C., & Fanning, P. (1985). A report on the Colorado statewide follow up survey of special education students. Exceptional Children, 51, 397-404.
- Mosteler, F. & Tukey, J. (1977). <u>Data analysis and regression</u>. Menlo Park, CA: Addison-Wesley.
- National Center for Education Statistics (1981). <u>High schoo' and beyond:</u>
  <u>A national longitudinal study for the 1980s.</u> Washington, DC U.S.
  Department of Education.



- National Center for Education Statistics (1983). <u>National longitudinal study</u>. Washington, DC: U.S. Department of Education.
- Westermann, R. & Hager, W. (1986). Error probabilities in educational and psychological research. <u>Journal of Educational Statistics</u>, <u>11</u>(2), 117-146.
- Will, M. (1984). Bridges from school to working life. <u>Programs for the Handicapped</u>, March/April(2), 1-5.
- Wright, A., Cooperstein, R., Grogran-Renneker, E., & Padilla, C. (1982).

  <u>Local implementation of PJ. 94-142: Final report of the longitudinal study.</u> Menlo Park, CA: SRI International.



## APPENDIX

# Crosstabulation Analyses

Classification Variable	<u>Independent</u> Variable	<b>Ž</b> <sup>2</sup>	<u>df</u>	Ā	<u>r</u> *	Þ
Size of District	Total school resources	1,787	8	27	. 36	.0001
	<pre># handicapped students in voc. ed.</pre>	1,554	8	25	. 24	.0001
	LEA has staff member to help special ed students find jobs	995	4	. 29	. 29	.0001
	LEA arranges for counseling	<b>7</b> 5	4	. 08	01	. 0001
	LEA provides occupational/physical therapy	1,498	4	. 35	. 35	. 0001
	VR agency assigns staff to LEA	276	4	15	. 15	.0001
	LEA has transition program	398	4	.18	. 18	.0001
	Total external resources	305	8	. 11	. 13	.0001
	Community services for handicapped	310	12	.09	. 13	.0001
	Job opportunities for handicapped	417	12	11	. 14	.0001

Relevant only for relationships between ordinal scales or continuous variables.



Classification Variable	<u>Independent</u> <u>Variable</u>	X	₫f	Ä	<u>r</u>	p
Geographic Region	Total school resources	475	6	. 14		.0001
	<pre># handicapped students in voc. ed.</pre>	414	6	.13	-	.0001
	LEA has staff member to help special ed. students find jobs	64	3	07		.0001
	LEA arranges for counseling	51	3	. 07	pas sales dead	.0001
	LEA provides occupational/ physical therapy	142	3	. 11		.0001
	VR agency assigns staff to LEA	164	3	12		.00.1
	LEA has transition program	56	3	. 07		. 0001
	Total external resources	220	6	10		0001
	Community services for handicapped	476	9	.12	- · -	.0001
	Job opportunities for handicapped	141	9	06	A. #77-	. 0001



<u>:</u>2

Classification Variable	<u>Independent</u> Variable	χ	d <u>f</u>	<u>V</u>	<u>r</u>	Б
District/ Community Wealth	Total school resources	5 <b>77</b>	6	.15	. 05	.0001
WCCC CIT	<pre># handicapped students in voc. ed.</pre>	144	6	11	. 14	.0001
	LEA has staff member to help special ed. students find jobs	160	3	. 11	. 02	.0001
	LEA arranges for counseling	23	3	. 04	.01	. 0001
	LEA provides occupational/physical therapy	291	3	. 16	.06	.0001
	VR agency assigns staff to LEA	193	3	13	.12	.0001
	LEA has transition program	231	3	. 14	.02	. 0001
	Total external resources	233	6	. 10	10	.0001
	Community services for handicapped	438	9	. 11	. า9	.0001
	Job opportunities for handicapped	156	9	. 07	. 10	.0001



<u>Classification</u> <u>Variable</u>	<u>Independent</u> Variable	X.	<u>df</u> .	<u>v</u>	ŗ	<u>p</u>
LEA Service Configurations	Total school resources	448	8	.14		. 0001
	<pre># handicapped st dents in voc ed.</pre>	436		. 14	<del></del>	. 0001
	LEA has staff member to help special ed. students find jobs	134	4	.11		.0001
	LEA arranges for counseling	97	4	09	- <del>-</del>	. 0001
	LEA provides occupational/physical therapy	203	4	. 13		.0001
	VR agency assigns staff to LEA	42	4	06		. 0001
	LEA has transition program	199	4	. 13	** ** *	. 0001
	Total external resources	70	8	. 05		. 0001
	Community services for handicapped	2 <b>82</b>	12	.09	**	. 0001
	Job opportunities for handicapped	69	12	04		. 0001



Classification Variable	<u>Independent</u> <u>Variable</u>	Ľ	<u>df</u>	<u>v</u>	<u>r</u>	Ē
Programmatic Group	Size of district	1,918	16	. 20		0001
	District/ community wealth	855	12	. 15		. 0001
	Geographic region	400	12	. 11		. 0001
	Metropolitan status	433	8	. 13		. 0001
	Total external services	777	8	. 18		.0001
	LEA service configurations	645	16	12		.0001

