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A STUDY OF VARIABLES THAT ATTRACT CERTIFIED SPECIAL  
EDUCATION SUBSTITUTE TEACHERS TO SELECTED URBAN  
SCHOOL DISTRICTS IN THE STATE OF MICHIGAN

by

Patsy Ann Fox

A Dissertation  
Submitted to the  
Faculty of The Graduate College  
in partial fulfillment of the  
requirements for the  
Degree of Doctor of Education  
Department of Educational Leadership

Western Michigan University  
Kalamazoo, Michigan  
December 1990

A STUDY OF VARIABLES THAT ATTRACT CERTIFIED SPECIAL  
EDUCATION SUBSTITUTE TEACHERS TO SELECTED URBAN  
SCHOOL DISTRICTS IN THE STATE OF MICHIGAN

Patsy Ann Fox, Ed.D.

Western Michigan University, 1990

Demand and supply of certified special education substitute teachers in the Middle Cities Education Association in Michigan was examined to determine the difference between supply and demand and to describe the factors that attract these teachers to substitute teach in the public schools.

A four-item letter of inquiry was used to acquire information from the membership of the Middle Cities Education Association in regards to supply and demand. Twenty-eight usable returns were received for a 100% response rate.

Questionnaires were distributed to certified special education substitute teachers in 19 school districts. The questionnaire consisted of two parts. Seventeen items related to demographic data. The other 12 items related to attracting factors. Forty-four usable questionnaires were returned for a response rate of 61.9%.

Findings indicated that the demand for certified special education substitute teachers for 1989-90 exceeded the supply by 68%. The 28 school districts holding membership in the Middle Cities Education Association needed an additional 170 certified special education substitute teachers for the 1989-90 school year.

Factors that attracted certified special education substitute teachers to the public schools were salary, spouse's job in the area, opportunity for higher education, staff helpfulness, and school assignment close to home. The districts paying \$50 or more employed 68% of the certified special education substitutes in the Middle Cities Education Association. These substitute teachers also held the highest degrees, master's and master's plus.

Recruiter personableness was ranked important as an attractor for those recruited. Ninety-six percent of the certified special education substitute teachers were not recruited. Best resources for information about special education substitute teaching positions were identified as newspaper ads, educational fairs, radio, and brochures. The use of different communication factors such as the pleasantness of the recruiter, brochures, and newspaper ads appear not to have any influence on the certified special education substitute teachers' decision to substitute teach. The fact that a full-time teaching position was unavailable was the determining factor for the individuals to seek employment as a certified special education substitute teacher.

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**Fox, Patsy Ann, Ed.D.**

**Western Michigan University, 1990**

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**300 N. Zeeb Rd.  
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Patsy Ann Fox

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## CHAPTER I

### STATEMENT OF PROBLEM

Negotiated agreements (contracts) between the teachers' union and school districts consistently reflect an increase in benefits to teachers. Days off with pay for illness, school functions, in-service or staff development, or personal business days are benefits that can disrupt the educational process (Rose & Beattie, 1986).

Kraft, as cited in The Clearing House (Augustin, 1987), stated that "the average pupil spends seven days out of every school year with a substitute" (p. 393). Friedman (1983) suggested that on any given day at the secondary level, 10% of the classrooms are staffed by substitute teachers. Some school districts use substitute staff who are not certified to teach (Augustin, 1987).

Data refer to substitute teachers in general education, yet there is no reason to expect a disproportionate teacher absentee rate in special education classrooms, since contract language is applicable to all classroom teachers. Special education teachers in Michigan must be certified to teach general education as well as in their area of specialization. Additional endorsements may be required (Michigan State Board of Education, 1986).

There are no requirements for substitute teachers in special education in Michigan other than those that must be met by general education teachers as indicated by Rule 380.1531 addressing

"licensure, certification, and endorsement" (The School Code of 1976, Michigan, 1976, p. 186). This same code, Rule 380.1236, Education of the Handicapped, August 1977, Revised Administration Rules for Special Education (Michigan State Board of Education, 1986), General School Law of Michigan (Michigan State Board of Education, 1976) does not require teachers who substitute teach in special education to be certified in special education.

Ample data regarding usage of certified special education teachers in substitute roles are not to be found in the literature (Rose & Beattie, 1986). The number of days, rate or percentage of days special education students spend with a substitute teacher, and whether certified in special education or not are not available. However, local data from the Grand Rapids Public School District indicate fewer certified special education substitutes are available on a daily basis than the need demands. During the 1987-88 school year, Grand Rapids Public Schools (1989) employed 203 prekindergarten-elementary level special education teachers and 57 teachers on the secondary level, including middle school figures. Based on contract language, the potential for absences by the 260 certified special education classroom teachers for 180 instructional day calendar was 2,860 days, 11 days per teacher. Given these figures, a student could have a substitute teacher 15.9% of the school year. Emergencies, staff development in-services, and other circumstances have increased and continue to increase these figures on an average daily basis. Eighteen certified special education substitute teachers are listed on the substitute teacher registry according to personnel

records of Grand Rapids Public Schools. Some substitutes have building or program preferences; others are available on certain days of the week. Emergency situations or illness occur rendering substitutes unavailable to substitute teach periodically causing a shortage in classroom coverage.

For the school year 1988-89, first semester, 63 special education classrooms in Grand Rapids were not staffed by certified special education substitute teachers or any other certified teacher. Therefore, the demand for certified special education substitute teachers appears to have exceeded the supply.

Rose and Beattie (1986) conducted a national survey of eight school systems randomly selected from each of the 50 states, plus the District of Columbia. Two hundred and fifty-nine school systems responded, of which 28.4% required teachers who substitute teach in special education to hold the same minimum academic degree as full-time general education teachers. Only 17.5% of all responding school systems required that teachers substituting in special education maintain the same minimum academic degree as the district's special education teachers.

The Middle Cities Education Association, composed of 28 school districts within the state of Michigan, indicates it is experiencing a similar problem with the number of certified special education substitute teachers available on a daily basis. Little is known about the extent of the problem or what actions might be taken to address it. The research problem is: To what extent does demand exceed supply of certified special education substitute teachers in

public school districts who are members of the Middle Cities Education Association in Michigan and what factors attract certified special education substitute teachers to these public school districts?

#### Operational Definitions

1. Demand is the existing need of employment of certified special education substitute teachers by the 28 member school districts of the Middle Cities Education Association within Michigan. Demand data were collected from each district using a letter of inquiry.

2. Supply is the availability for employment of certified special education substitute teachers within the 28 public school districts holding membership in the Middle Cities Education Association within Michigan. Supply data were collected from each district using a letter of inquiry.

3. Factors are the variables that influence certified special education substitute teachers to substitute teach in Michigan public schools represented by membership within the Middle Cities Education Association. Data on selected variables were collected from a sample of substitute special education teachers in Middle Cities school districts using a questionnaire.

4. Certified special education teachers are teachers certified to teach special education according to the Revised Administrative Rules for Special Education, (Michigan State Board of Education, 1986).

5. Certified special education substitute teachers (CSEST) are teachers who replace full-time special education classroom teachers

during the latter's absence from the classroom and who meet the same requirements as a certified special education classroom teacher.

6. Middle Cities Education Association is a group of 28 public school districts which have joined forces as a political agent within the state of Michigan to influence educational reform. Middle Cities' membership includes urban school districts which serve approximately 300,000 (18%) students in the state.

#### Conceptual Framework

Extensive labor market studies focusing on supply and demand of certified special education substitute teachers do not exist. Teacher labor market studies do exist (Akin, 1985; Berry, Noblit, & Hare, 1985; Bird, 1985). Three studies addressing demand and supply of certified special education substitute teachers provide relevant information (Case, 1986; Maryland State Department of Education, 1986; Rose & Beattie, 1986). Research available is indicative, in general, of an economic model of the labor market which excludes human economics. An exception, however, was posed by Eberts (1982) and Ehrenberg and Smith (1985) as they discussed human capital theory.

Conceptually, the economic model of the labor market and human capital theory (Eberts, 1982; Ehrenberg & Smith, 1985) are inter-related. The economic model and human capital theory focus on demand and supply of the labor force, the former from a monetary aspect totally, while the other emphasizes personal investment as a determining factor in demand and supply. The determination of use of

capital and labor force within an organization is based on specific elements: (a) service or product demands, (b) cost factor, and (c) technologies available to do business (Ehrenberg & Smith, 1985).

Demand, based on a need or want, implies an existing resource scarcity. If the labor force is scarce for a specific job, then a higher wage is necessary to attract individuals to that job. The employer must determine if the expenditure of capital for wages and nonwage labor costs, such as recruitment, processing, training, benefits, and length and type of contract, offset the need.

The supply of labor is the availability of individuals for employment. The supply of labor to a particular market is positively related to the prevailing wage in that market. If prospective employees are offered similar jobs, the deciding factor is based on compensation, which, at times, does not necessarily imply wages. The rule of thumb is: Don't pay any more than necessary but don't pay less. If the pay is less than what has been offered for comparable jobs in the organization or in similar organizations, then the labor supply will decrease; mobility will occur. Ehrenberg and Smith (1985) stated:

The labor market performs the task of matching employers and employees. The market is the mechanism. The labor market reflects worker preference. When jobs are pleasant many people will be willing to offer their services at each wage level. When jobs are distasteful, fewer will be willing to do so. Where duties are the same but working conditions are radically different, compensation must be higher to attract workers. (p. 34)

The human capital theory, a theory pronouncing that personal investment in the form of a better education and more experience reap

higher wages, interrelates with the economic model of the labor market. As expressed by Ehrenberg and Smith (1985), the hedonic model of education, illustrative of the human capital theory, considers the importance of voluntary mobility, training, and education of the labor force. Mobility takes place when an employee decides to move in self-interest, considering the benefits outweigh the costs. Human capital theory and the economic model can and do function in partnership.

An analysis of demand and supply of the labor force addresses positive and normative economics, what is and what should be. Economic and human theory, demand and supply, and the influences on demand and supply are scrutinized. This information provides the foundation and framework for determining to what extent the demand for certified special education substitute teachers exceeds the supply.

Certified special education substitute teachers are influenced by a variety of variables when making the decision to substitute teach, when they select a particular school district in which to teach, and when they determine length of employment. The expectancy theory (Wanous, Keon, & Latack, 1983) provides a conceptual framework by which to address these decisions. This theory can be presented algebraically representing three components: (1) attractiveness of the school district to the substitute teacher, (2) the amount of effort expended by the prospective substitute teacher to join a particular school district, and (3) the school district that is selected from others offering a substitute teaching position.

Attractiveness of an organization to an individual	=	Desirability of each outcome to the individual	x	Belief about each outcome associated with membership. (p. 67)
--	---	--	---	--

Public school districts must know what these factors are to attract certified special education substitute teachers to teach in the public schools in Michigan.

### Research Objectives

The objectives of this study are: (a) to determine the difference between supply and demand of certified special education substitute teachers in Middle Cities school districts in Michigan and (b) to determine what factors attract certified special education substitute teachers to substitute teach in the public schools. Focus was on grade levels kindergarten through 12th grade in all disability areas of special education. Public school districts selected for study were those who hold membership in the Middle Cities Education Association in the state of Michigan (see Appendix A).

Factors that attract certified special education substitute teachers to the Grand Rapids Public Schools were compared to those factors that attract substitutes to the other public school districts within the Middle Cities Education Association.



## CHAPTER II

### LITERATURE REVIEW

#### Introduction

A literature review was conducted to obtain information on (a) demand and supply of certified special education substitute teachers (CSEST) and on (b) factors that attract CSEST to public school districts. Libraries, library services, and other sources used in the review were:

1. Western Michigan University, Kalamazoo, Michigan, University Libraries: Education Library and Fast Information Delivery Service (FINDS).
2. Grand Valley State University, Allendale, Michigan, Zumberge Library: ERIC Search (Silver Platter v. 1.5, 1/83-12/88), AB/Inform Business Database (1983-88), Psychology/Literature Database (1/83-9/88), Business Periodicals Index (Vols. 27, 29, and 30, 1984-85, 1986-87, and 1987-88, respectively), and Readers' Guide to Periodical Literature (Vols. 41-48, 1981-1988).
3. Grand Rapids Public Library, Grand Rapids, Michigan: Education Index (Vols. 30, 38, and 39, 1979-80, 1987-88, and 1988-89, respectively).
4. Educational Research and Development Center, Grand Rapids Public Schools, Grand Rapids, Michigan.
5. University Microfilms International, Ann Arbor, Michigan.

6. Communications: Glenn E. Grube, Superintendent, Valley Stream, New York; Michael E. Boulus, Executive Director, Middle Cities Educational Association, East Lansing, Michigan; Mr. Nuttal, Statistics Department, Special Education Department, East Lansing, Michigan; and Nina Miller, Mathematics and Statistics Department, Western Michigan University, Kalamazoo, Michigan.

7. State of Michigan publications (1976 and 1986-1989).

8. Federal government publications (1980, 1982, 1983, 1986, 1987, and 1989).

9. Grand Rapids Public Schools personnel policies and publications (1989).

10. Bibliographies from readings.

Information from texts, periodicals, dissertations, state and federal publications, contracts, and communications published or communicated over the past 10 years compose the literature review. Several writings of particular interest written prior to 1979 are cited.

Extensive literature regarding demand and supply of CSEST does not exist. Published literature and data most often refer to substitute teachers in general education and to teachers, in general, in regards to certification areas when discussing demand and supply. Factors that influence teachers to teach in public school districts are generic. There is no indication that data related to CSEST would be contradictory of available published literature and data.

## Demand and Supply

### Conceptual Framework

The economic model of the labor market, demand and supply (Ehrenberg & Smith, 1985), and the human capital theory (Eberts, 1982) are intertwined. Demand and supply encompass projected student enrollment and identification of special education students, as well as mobility, attrition, and retirement of staff. Data from mobility, attrition, and retirement assist in determining both demand for and supply of available staff. College graduates, individuals acquiring emergency certification to teach in specific areas, and substitute teacher pools are sources of supply. All sources of supply are influenced by individual decisions, personal investment, commitment, and age. The ability to qualify for emergency certification or certification in special education, for instance, may influence an individual to teach in specific areas of need. Others may be influenced by more lucrative offers from business and industry, thus opting to move out of the teaching field.

### Shortage of Special Education Teachers

Extensive labor market studies focusing on demand and supply of CSEST do not exist although teacher labor market studies do exist (Akin, 1985; Berry et al., 1985; Bird, 1985). Statistics accumulated by individual studies as well as state and federal government agencies substantiate that a shortage of certified special education teachers exists. This shortage is apparent in specific disability

categories (Bird, 1985; Graybeal, 1983; Manlove & Elliot, 1979; Meara, 1983; Tooredman, 1987) in public and private elementary and secondary schools (see Tables 1 and 2).

Table 1

Teacher Candidate Shortages<sup>a</sup> in Public and Private Elementary Schools, as Compared With Total Teachers, by Field of Assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total teachers		Candidate shortage		Shortage per 1,000 teachers
	Number	%	Number	%	
Special education	104,000	11.5	690	29.0	4.2
Mentally retarded	32,400	2.3	80	9.9	2.5
Seriously emotionally disturbed	16,400	1.1	99	2.9	9.6
Specific learning disabled	44,000	3.1	103	4.4	2.3
Speech impaired	22,200	1.6	141	0.1	6.4
Other special education	49,900	3.5	305	13.2	6.1

Note. Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Note. From Teachers in Elementary and Secondary Education (Historical Report, p. 14) by E. Elliott, 1987, Washington, DC: U.S. Department of Education, Center for Education Statistics.

<sup>a</sup>In full-time equivalents.

Dunathan (1979) reported on results of a survey distributed to 936 superintendents within a nine-state region within the Midwest.

Table 2

Teacher Candidate Shortages<sup>a</sup> in Public and Private Secondary Schools, as Compared With Total Teachers, by Field of Assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total teachers		Candidate shortage		Shortage per 1,000 teachers
	Number	%	Number	%	
Total secondary	1,124,900	100.0	1,647	100.0	1.5
Special education	99,200	8.8	337	20.5	3.4
Mentally retarded	22,000	2.0	74	4.5	3.4
Seriously emotionally disturbed	10,300	0.9	40	2.4	3.9
Specific learning disabled	29,200	2.4	87	3.3	3.0
Speech impaired	9,900	0.5	34	2.1	6.2
Other special education	32,200	2.9	103	6.3	3.2

Note. Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Note. From Teachers in Elementary and Secondary Education (Historical Report, p. 15) by E. Elliott, 1987, Washington, DC: U.S. Department of Education, Center for Education Statistics.

<sup>a</sup>In full-time equivalents.

The respondents indicated that "fewer than one-fourth of the districts had a decrease in enrollment during the last five years" (p. 121). One of the certification areas in need of teachers was special education. These conclusions concur with the findings of the National Education Association (NEA) report, Association of

School, College and University Staffing (ASCUS) (cited in Graybeal, 1983).

Based on data acquired from the Graduate Placement Follow-up Report (GPR) used in the state of Michigan, Roth (1981) found that a shortage existed in special education specifically in the area of learning disabilities. Byrne (cited in Roth, 1981), Department of Education, Office of Special Education and Rehabilitative Services, stated that there is a significant increase in students being identified as learning disabled. Byrne noted that from 1980 to 1981, this category increased from 1.26 million to 1.43 million students. Total increase of students served in special education increased from 1.80 million in 1979-80 to 3.93 million in 1980-81 school year (Roth, 1981, p. 3). Table 3 illustrates these increases particularly in the area of learning disabilities and substantiates increased special education student enrollment for the 1984-85 school year.

A study was conducted in the state of Alabama in 1983 (Stanford & Zoellner) surveying superintendents in 128 school systems. Superintendents in those systems were surveyed in January 1983 as to their projected staff needs for 1983-84 by certification area. At the same time 25 Alabama teacher institutions were requested to submit the number of student teachers who completed educational programs in the 1982-83 school year (see Table 4). The assumption, according to Stanford and Zoellner (1983) was that this latter figure would be indicative of the supply of teachers available for employment in the state of Alabama for the 1983-84 school year. In reality, these figures may be somewhat inflated, yet the data do support Dunathan's

Table 3

Elementary and Secondary Students Served in Federally Supported  
for the Handicapped, Type of Handicap: School Years Ending

Type of handicap	1977	1978	1979	1980	1981	1982	1983
Number served <sup>b</sup> in							
All conditions	3,692	3,751	3,889	4,005	4,142	4,198	4,251
Learning disabled	796	964	1,130	1,276	1,462	1,622	1,781
Speech impaired	1,302	1,223	1,214	1,186	1,168	1,135	1,101
Mentally retarded	959	933	901	869	829	786	741
Seriously emotionally disturbed	283	288	300	329	346	339	321
Hard of hearing and deaf	87	85	85	80	79	75	71
Orthopedically handicapped	87	87	70	66	58	58	51
Other health impaired	141	135	105	106	98	79	71
Visually impaired	38	35	32	31	31	29	21
Multihandicapped	— <sup>c</sup>	— <sup>c</sup>	50	60	68	71	71
Deaf-blind	— <sup>c</sup>	— <sup>c</sup>	2	2	3	2	2
Percentage distribution of							
All conditions	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Learning disabled	21.5	25.7	29.1	31.9	35.3	38.6	40.0
Speech impaired	35.3	32.6	31.2	29.6	28.2	27.0	26.0
Mentally retarded	26.0	24.9	23.2	21.7	20.0	18.7	17.0
Seriously emotionally disturbed	7.6	7.7	7.7	8.2	8.4	8.1	8.0
Hard of hearing and deaf	2.4	2.3	2.2	2.0	1.9	1.8	1.7
Orthopedically handicapped	2.3	2.3	1.8	1.6	1.4	1.4	1.3
Other health impaired	3.8	3.6	2.7	2.6	2.4	1.9	1.7





Table 3

ry Students Served in Federally Supported Education Programs  
ped, Type of Handicap: School Years Ending 1977-1988

1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 <sup>a</sup>
Number served <sup>b</sup> in thousands									
3,889	4,005	4,142	4,198	4,255	4,298	4,315	4,317	4,374	4,446
1,130	1,276	1,462	1,622	1,741	1,806	1,832	1,862	1,914	1,928
1,214	1,186	1,168	1,135	1,131	1,128	1,126	1,125	1,136	953
901	869	829	786	757	727	694	660	643	582
300	329	346	339	352	361	372	375	383	373
85	80	79	75	73	72	69	66	65	56
70	66	58	58	57	56	56	57	57	47
105	106	98	79	50	53	68	57	52	45
32	31	31	29	28	29	28	27	26	22
50	60	68	71	63	65	69	86	97	77
2	2	3	2	2	2	2	2	2	1
Percentage distribution of children served									
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
29.1	31.9	35.3	38.6	40.9	42.0	42.4	43.1	43.8	43.4
31.2	29.6	28.2	27.0	26.6	26.2	26.1	26.1	26.0	21.4
23.2	21.7	20.0	18.7	17.8	16.9	16.1	15.3	14.7	13.1
7.7	8.2	8.4	8.1	8.3	8.4	8.6	8.7	8.8	8.4
2.2	2.0	1.9	1.8	1.7	1.7	1.6	1.5	1.5	1.3
1.8	1.6	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.1
2.7	2.6	2.4	1.9	1.2	1.2	1.6	1.3	1.2	1.0



Table 3--Continued

	1977	1978	1979	1980	1981	1982	1983
	Percentage distribution of						
Visually impaired	1.0	0.9	0.8	0.8	0.8	0.7	0.6
Multihandicapped	-- <sup>c</sup>	-- <sup>c</sup>	1.3	1.5	1.6	1.7	1.8
Deaf-blind	-- <sup>c</sup>	-- <sup>c</sup>	0.1	0.0	0.1	0.0	0.0
	Number served as a percent of						
All conditions	8.33	8.61	9.14	9.62	10.11	10.46	10.7
Learning disabled	1.80	2.21	2.66	3.06	3.57	4.04	4.3
Speech impaired	2.94	2.81	2.85	2.85	2.85	2.83	2.8
Mentally retarded	2.16	2.14	2.12	2.09	2.02	1.96	1.9
Seriously emotionally disturbed	0.64	0.66	0.71	0.79	0.85	0.85	0.8
Hard of hearing and deaf	0.20	0.20	0.20	0.19	0.19	0.19	0.1
Orthopedically handicapped	0.20	0.20	0.16	0.16	0.14	0.14	0.1
Other health impaired	0.32	0.31	0.25	0.25	0.24	0.20	0.1
Visually impaired	0.09	0.08	0.08	0.08	0.08	0.07	0.0
Multihandicapped	-- <sup>c</sup>	-- <sup>c</sup>	0.12	0.14	0.17	0.18	0.1
Deaf-blind	-- <sup>c</sup>	-- <sup>c</sup>	0.01	0.01	0.01	0.00	0.0

Note. Counts are based on reports from the 50 states and District of Columbia only (i.e., figures for Puerto Rico are not included). Because of rounding, details may not add to totals.

Note. From Annual Report to Congress on the Implementation of the Education of the Handicapped, Department of Education, Office of Special Education and Rehabilitative Services. In Project 131), by U.S. Department of Education, National Center for Education, 1989, Washington, DC: A

<sup>a</sup>Preschool figures omitted. <sup>b</sup>Includes students served under Chapter 1 and Education of the Handicapped Act on the enrollment in public schools, kindergarten through 12th grade.



1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Percentage distribution of children served									
0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.5
1.3	1.5	1.6	1.7	1.5	1.5	1.6	2.0	2.2	1.7
0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Number served as a percent of total enrollment <sup>d</sup>									
9.14	9.62	10.11	10.46	10.73	10.92	10.98	10.93	10.97	11.10
2.66	3.06	3.57	4.04	4.39	4.59	4.66	4.71	4.80	4.82
2.85	2.85	2.85	2.83	2.85	2.87	2.87	2.85	2.85	2.38
2.12	2.09	2.02	1.96	1.91	1.85	1.77	1.67	1.61	1.45
0.71	0.79	0.85	0.85	0.89	0.92	0.95	0.95	0.96	0.93
0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.16	0.14
0.16	0.16	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.12
0.25	0.25	0.24	0.20	0.13	0.13	0.17	0.14	0.13	0.11
0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.06
0.12	0.14	0.17	0.18	0.16	0.17	0.17	0.22	0.24	0.19
0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00

and District of Columbia only (i.e., figures from U.S. territories are not included).

ation of the Education of the Handicapped Act, and unpublished tabulations, by U.S. and Rehabilitative Services. In Projections of Education Statistics to 2000 (pp. 130- for Education, 1989, Washington, DC: Author.

under Chapter 1 and Education of the Handicapped Act. <sup>c</sup>Data not available. <sup>d</sup>Based on 12th grade.

Table 4

## Alabama Teacher Supply-Demand for 1983-1984

Area of certification: special education	Projected vacancies: 80 school systems	Extrapolated vacancies: 128 school systems	Student teachers from Alabama institutions for 1982-1983	Projected over- supply (+) or undersupply (-): Col. 2 vs Col. 3
Deaf-blind	3	4	10	+ 6
Early childhood education for the handicapped	9	13	13	0
Emotionally conflicted	16	23	29	+ 6
Gifted and talented	17	25	0	-25
Hearing impaired	7	10	19	+ 9
Learning disabled	51	74	6	-68
Mentally retarded	30	44	78	+34
Multihandicapped	8	12	13	+ 1
Orthopedically handicapped and other health impaired	4	6	0	- 6
Speech patholog:7	25	37	59	+22
Visually impaired	4	6	0	- 6

Note. From Alabama Teacher Supply-Demand for 1983-1984 (Research report) by R. L. Stanford & W. S. Zoellner (p. 6), Birmingham: University of Alabama. (ERIC Document Reproduction Service No. ED 230 532)

(1979) and Byrne's (cited in Roth, 1981) statements regarding a need of special education teachers, specifically in the area of learning disabilities.

Data are presented in Tables 1 and 2 indicating a special education teacher shortage as of November 1983 within the 50 states and the District of Columbia. Caution must be exercised when reading these tables as different states use varying terms and definitions, the use of which may inflate or deflate the data. Support is evident for the demand for additional special education teachers in the learning disabilities area.

Surprising is the number of uncertified teachers teaching in all special education fields (see Table 5). These figures represent shortages.

Teacher placement offices representing all the 50 states of the United States provided information to Akin (1985) regarding the demand for teachers by teaching field, region, and year (see Table 6).

In viewing Table 7, Michigan is designated as belonging to the North Central region of public education agencies. Indications are that 56 out of 6,052 institutions within the North Central region have a shortage of special education secondary-level candidates.

Akin's (1985) figures (see Table 8) appear somewhat representative of other studies; yet caution must be exercised for two reasons: (1) Teacher placement office figures may differ from what actually occurs and (2) regions are defined differently in federal government, local, and state documents. According to Akin, Michigan falls within the geographic Region 7, the Great Lakes region. In reviewing other

Table 5  
Uncertified Teachers<sup>a</sup> as Percent of Total Teachers in  
Public and Private Elementary Schools, by Field of  
Assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total teachers		Uncertified teachers		Uncertified as percent of total teachers
	Number	%	Number	%	
Total elementary	1,428,800	100.0	51,420	100.0	3.6
Special education	164,900	11.5	3,730	11.2	3.5
Mentally retarded	32,400	2.3	1,180	2.3	3.6
Seriously emotionally disturbed	16,400	1.2	710	1.4	4.3
Specific learning disabled	44,000	3.1	1,720	3.3	5.9
Speech impaired	22,200	1.6	360	0.7	1.6
Other special education	49,900	3.5	1,760	3.4	3.5

Note. Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Note. From Teachers in Elementary and Secondary Education (Historical report, p. 17), by E. Elliott, 1987, Washington, DC: U.S. Department of Education, Center for Education Statistics.

<sup>a</sup>In full-time equivalents.



Table 6  
Teaching Fields With Some Teacher Shortage:  
Continental United States

Field	1985	1984	1983	1982	1981	1980	1979
Special education--ED/PSA							
Special education--LD	3.95	3.98	4.09	4.20	4.47	4.48	4.00
Special education--multiply handicapped	3.94	3.77	3.82	3.93	4.13	3.87	
Special education--gifted	3.85	3.74	3.80	3.81	4.10	4.33	3.85
Special education--MR	3.76	3.55	3.71	3.84	4.14	4.23	2.87
Speech path/audio	4.01	3.83	3.62	3.95	4.27	4.17	3.68

Note. 5 = considerable shortage; 4 = some shortage; 3 = balanced; 2 = some surplus; and 1 = considerable surplus.

Note. From Teacher Supply and Demand 1985: A Report Based Upon an Opinion Survey of Teacher Placement Offices, Association for School, College and University Staffing (pp. 7-9) by J. Akin, 1985, Madison: University of Wisconsin, Association for School, College and University Staffing. (ERIC Document Reproduction Service No. ED 265 094)

Table 7

Institutions With Secondary-Level Shortages in Indicated Assignment Field  
by Selected Characteristics of Employing Institution:  
50 States and D.C., November 1983

Employing institution characteristics	Total educational institutions	Educational institutions ages in secondary-level					
		In any field		Bilingual education		Special education	
		No.	%	No.	%	No.	%
Public education agencies	15,319	739	4.8	10	0.1	157	1.0
Local education agencies	14,933	727	4.9	10	0.1	154	1.0
Intermediate education agencies <sup>a</sup>	367	12	3.3	0	0.0	3	0.8
Local education agencies (LEAs)--level							
Elementary	2,249	27	1.2	0	0.0	0	0.0
Secondary	452	12	2.7	0	0.0	6	1.3
Unified <sup>b</sup>	12,252	688	5.6	10	0.1	148	1.2
Public education agencies--region							
Northeastern	3,025	64	2.1	0	0.0	16	0.5
North Central	6,052	124	2.0	2	0.0	56	0.9
Southern	3,447	263	7.7	4	0.1	60	1.7
Western	2,795	286	10.2	3	0.1	25	0.9
Public education agencies-- fall 1982 enrollment							
Under 1,000	8,201	314	3.8	0	0.0	45	0.5
1,000-9,999	6,499	331	5.1	0	0.0	79	1.2
10,000 and over	619	95	15.3	10	1.6	33	5.3



Table 7

ions With Secondary-Level Shortages in Indicated Assignment Fields,  
by Selected Characteristics of Employing Institution:  
50 States and D.C., November 1983

Total educational institutions		Educational institutions with candidate short- ages in secondary-level fields indicated									
		In any field		Bilingual education		Special education		Industrial arts		Foreign language	
		No.	%	No.	%	No.	%	No.	%	No.	%
cies <sup>a</sup> (s)--level	15,319	739	4.8	10	0.1	157	1.0	26	0.2	68	0.4
	14,933	727	4.9	10	0.1	154	1.0	26	0.2	68	0.5
	367	12	3.3	0	0.0	3	0.8	0	0.0	0	0.0
	2,249	27	1.2	0	0.0	0	0.0	0	0.0	0	0.0
gion	452	12	2.7	0	0.0	6	1.3	0	0.0	0	0.0
	12,252	688	5.6	10	0.1	148	1.2	26	0.2	66	0.5
	3,025	64	2.1	0	0.0	16	0.5	19	0.6	4	0.1
	6,052	124	2.0	2	0.0	56	0.9	2	0.0	20	0.3
	3,447	263	7.7	4	0.1	60	1.7	4	0.1	33	1.0
	2,795	286	10.2	3	0.1	25	0.9	1	0.0	11	0.4
	8,201	314	3.8	0	0.0	45	0.5	19	0.2	17	0.2
	6,499	331	5.1	0	0.0	79	1.2	0	0.0	34	0.5
	619	95	15.3	10	1.6	33	5.3	8	1.3	17	2.7



Table 7--Continued

Employing institution characteristics	Total educational institutions	Educational institutions ages in secondary-level					
		In any field		Bilingual education		Special education	
		No.	%	No.	%	No.	%
Public education agencies--metropolitan status							
SMSA <sup>c</sup> central city	331	58	17.5	8	2.4	17	5.1
SMSA noncentral city	5,139	217	4.2	2	0.0	34	0.7
Nonmetropolitan area	9,849	64	4.7	0	0.0	106	1.1
Private schools	27,694	459	1.7	0	0.0	32	0.1

Note. Percentages are calculated on unrounded numbers. Because of rounding, details may not

Note. From Teachers in Elementary and Secondary Education: Historical Report (p. 23), by E.ington, DC: U.S. Department of Education, Center for Education Statistics.

<sup>a</sup>Agencies providing special services, usually vocational and special education, to areas greater by single LEAs. <sup>b</sup>LEAs providing elementary and secondary education. <sup>c</sup>Standard Metropolitan



Total educational institutions	Educational institutions with candidate short- ages in secondary-level fields indicated									
	In any field		Bilingual education		Special education		Industrial arts		Foreign language	
	No.	%	No.	%	No.	%	No.	%	No.	%
331	58	17.5	8	2.4	17	5.1	4	1.2	10	3.0
5,139	217	4.2	2	0.0	34	0.7	3	0.1	14	0.3
9,849	64	4.7	0	0.0	106	1.1	19	0.2	44	0.4
27,694	459	1.7	0	0.0	32	0.1	31	0.1	4	0.0

ated on unrounded numbers. Because of rounding, details may not add to totals.

ntary and Secondary Education: Historical Report (p. 23), by E. Elliott, 1987, Wash-  
of Education, Center for Education Statistics.

ervices, usually vocational and special education, to areas greater than those served  
ing elementary and secondary education. <sup>c</sup>Standard Metropolitan Statistical Area.





Table 8  
Teacher Shortage by Field and Region

Field	Region						
	Alaska	Hawaii	1	2	3	4	5
Special education--ED/PSA	4.00	3.00	4.40	4.20	4.60	4.00	4.14
Special education--LD	4.00	4.00	3.60	4.00	4.60	4.14	3.63
Special education--multiply handicapped	4.00	4.00	4.00	4.00	4.60	4.17	4.00
Special education--gifted	3.00	3.00	3.25	3.67	4.13	4.30	4.00
Special education--MR	4.00	3.00	3.80	4.00	4.60	3.43	3.57
Speech path/audiology	3.00	----	3.18	4.07	4.67	4.00	4.20

Note. Alaska, Hawaii, Region 1 = Northwest, Region 2 = West, Region 3 = Rocky Mountain, Region 4 = South Central, Region 5 = Southeast, Region 6 = Great Lakes, Region 7 = Middle Atl (see Appendix I).

Note. 5 = considerable shortage, 4 = some shortage, 3 = balanced, 2 = some surplus, and 1 =

Note. From Teacher Supply and Demand 1985: A Report Based Upon an Opinion Survey of Teacher for School, College and University Staffing (pp. 7-9), by J. Akin, 1985, Madison: University School, College, and University Staffing. (ERIC Document Reproduction Service No. ED 265 094)



Table 8

## Teacher Shortage by Field and Region

Region									
Hawaii	1	2	3	4	5	6	7	8	9
3.00	4.40	4.20	4.60	4.00	4.14	4.20	3.83	4.00	2.80
4.00	3.60	4.00	4.60	4.14	3.63	4.40	4.83	4.00	2.50
4.00	4.00	4.00	4.60	4.17	4.00	4.00	3.60	4.00	3.00
3.00	3.25	3.67	4.13	4.30	4.00	4.33	3.83	4.00	2.80
3.00	3.80	4.00	4.60	3.43	3.57	4.00	3.33	4.33	3.00
---	3.18	4.07	4.67	4.00	4.20	4.50	3.52	3.31	2.97

West, Region 2 = West, Region 3 = Rocky Mountain, Region 4 = Great Plains/Midwest, Northeast, Region 7 = Great Lakes, Region 8 = Middle Atlantic, and Region 9 = Northeast

me shortage, 3 = balanced, 2 = some surplus, and 1 = considerable surplus.

1985: A Report Based Upon an Opinion Survey of Teacher Placement Offices, Association of Teacher Placement Offices (pp. 7-9), by J. Akin, 1985, Madison: University of Wisconsin, Association for Teacher Placement. (ERIC Document Reproduction Service No. ED 265 094)

documents, Michigan is identified as a part of the North Central region (see Appendix K).

The staff of the Maryland State Department of Education (1986) prepared a document which contains data to support the position that the lowest proportion of supply and demand was evident in the field of special education, particularly in the 1985-86 school year.

Tooredman (1987) related Hecker and Feistritz's statement that the nation is in balance, in general, in the realm of teacher supply and demand. However, Hecker (cited in Tooredman, 1987) stated that this does not mean that every school can fill every vacancy with a certified teacher. In reality, teaching is too diverse a profession to be described adequately in terms of shortages or surpluses. Conditions vary widely by specialty, region of the country, and degree of urbanization. Bird (1985) concurred with Hecker's position.

Hecker (cited in Tooredman, 1987) stated that due to educational reform, teaching as a profession will become more attractive, thus a shortage in supply will not occur in the future. Yet, he did admit that some subject areas including special education will experience a shortage. The problem now exists as to how to benefit special needs students, realizing that "people are not all alike" (Sterns & Williams, 1986, p. 153). As recent as 1987, 20 states reporting to the National Center for Education Statistics (NCI, cited in Tooredman, 1987) indicated a shortage of special education teachers.

Hecker (cited in Tooredman, 1987) predicted an average of 170,000 new teachers will be needed each year between 1986 and 1990. The Task Force on Teaching as a Profession (cited in Tooredman, 1987)

supported the latter figure, even suggesting that it could be larger.

The 1989 publication of Projections of Education Statistics to 2000 (U.S. Department of Education, 1989) stated that "the projected annual demand for new hiring of all teachers is expected to rise from 233,000 in 1990 to a high of 243,000 in the year 2000. . . . Demands should be the greatest at the elementary level" (p. 92).

This task force (cited in Tooredman, 1987) has also suggested that approximately one-half of the teachers may be replaced over the next 4 years due to mobility. The publication, A Nation at Risk: Teachers for the 21st Century (National Commission on Excellence in Education, 1983), postulates more openings in the next 10 years than applicants. The National Center for Education Statistics (U.S. Department of Education, 1982) publication states that interest in education as a profession is dying. New teacher graduates dropped from 314,000 in 1971 to 135,000 in 1985; yet the center is predicting an increase in school population by 1994. New demands will be present. Consideration must be given to (a) more school-age children, (b) lower teacher-pupil ratios, (c) large number of anticipated retirements, and (d) attrition rate of teachers. Hecker (cited in Tooredman, 1987) stated that only two items can be validated: the number of school-age students and retirements. Sterns and Williams (1986) concurred with projected student enrollment, that is, demand for teachers, as indicated by Figure 1. However, the source of this projection does not indicate if special education students are included in the count.

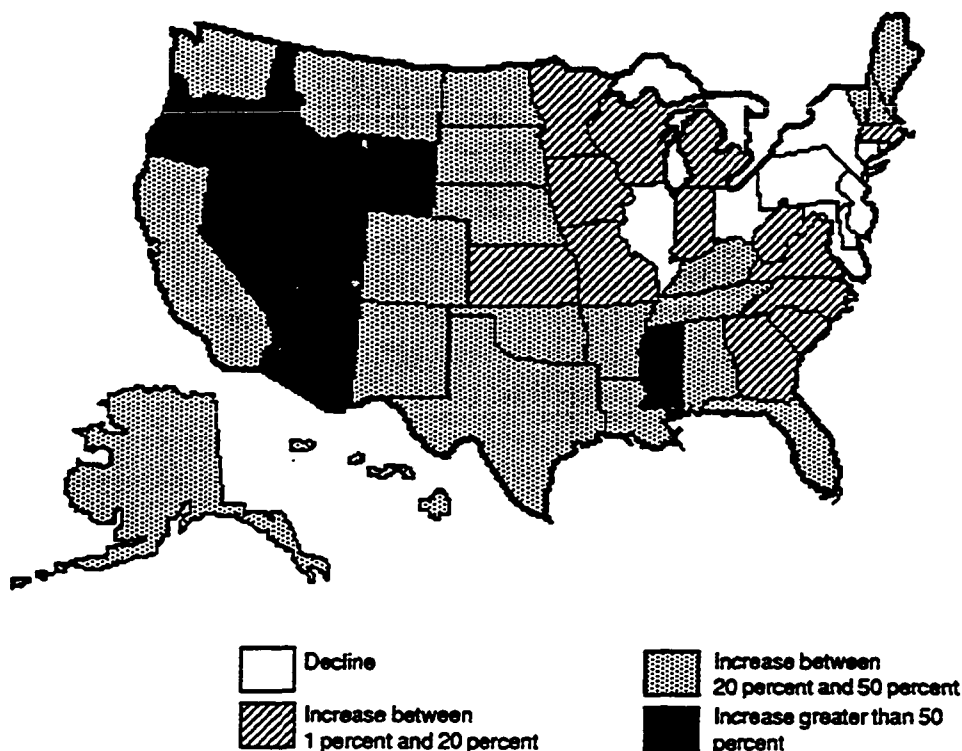


Figure 1. Projected Change in School-Age Population Between 1985 and 2000.

Source: Masnick and Pitkin, Cited in The Condition of Education: A Statistical Report (p. 145) by J. D. Sterns and M. F. Williams (Eds.), 1986, Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, Center for Education Statistics.

Murnane (cited in Tooredman, 1987) stated that 6% of all teaching jobs become vacant each year due to resignations. Bird (1985) found by studying 100 randomly selected school districts in the Southeast Region, that the turnover rate due to resignations was 66%. Frankel and Debra (1980) estimated an 8% turnover rate each year. Low enrollment in teaching institutions, retirement, resignations, attrition, and mobility deplete the teaching supply. Bird (1985)

suggested that approximately two-thirds of the resigning teachers each year either become substitute teachers or secure a job outside of the educational field; the remaining one-third move to another district.

Mobility is identified as one of the many contributing factors to the supply of teachers. Holland (1973) took the position that an individual's stability, achievement, and vocational satisfaction depend on the congruence between one's personality and the environment in which one works.

Wage differentials have an impact on the mobility of teachers. Given the characteristics of two teaching jobs being comparable but that a wage differential exists, teachers most often select the job with the best pay. When comparing a teaching position to another occupation which offers equal anticipated job satisfaction and a higher salary, teachers change jobs (Baugh & Stone, 1980; Graybeal, 1983; Sterns & Williams, 1986).

Demographic, professional and personal, and school-related factors contribute to mobility, according to Bloland and Selby (cited in Berry, 1984):

Demographic Factors. Male teachers are more likely to change than females, with single males the most mobile. Single women are less mobile than men but more likely to leave teaching than married women. There is no apparent relationship between educational attainment and teacher mobility. Black teachers were found to be more stable and less mobile than white teachers. The higher the socioeconomic status of the teacher while in college and of the teacher's parents, the more likely the teacher was to leave the field. (p. 17)

Professional and Personal Factors. Salary is an important factor in career change for male teachers and



relatively unimportant for women. The salaries of male teachers tend to fall below those of their non-teaching peers while for female teachers, salaries are slightly above the medium for female college graduates. There is little opportunity for advancement for the classroom teacher (other than for a move into administration), and even this possibility is difficult for males and severely limited for females. For many teachers, the imposition of non-teaching, menial duties and the lack of professional recognition by administrators and school boards has been a source of dissatisfaction. Some authors feel that "teacher burnout" is the cause of attrition but no evidence was cited. Preferences of teacher spouse and best friend are both important determinants of career change. (pp. 19-20)

School Related Factors. The frequency of teacher career change increases with the size of the school while teachers in small faculty groups are more satisfied with their job situations than are those in large faculty groupings. Although the research is not clear, the problems of classroom discipline and the lack of intrinsic rewards for interaction with students may be important factors in the career change decisions of teachers. Satisfactions derived from interactions with colleagues are associated with job satisfaction and occupational stability; the congruence of teacher/colleague approaches to pupil control is directly related to job satisfaction. An important factor in teacher career change is dissatisfaction with the principal which may stem in part from the principal's role, often unintentional, in reducing or eliminating teacher opportunity for creativity in the classroom. (p. 22)

A survey conducted by Metropolitan Life of American teachers in 1985 (cited in Sterns & Williams, 1986) "found that 79 percent of public school teachers were somewhat satisfied or very satisfied with teaching . . . while 21 percent expressed some degree of dissatisfaction. . . . Only 47 percent agreed that they felt respected as a teacher in today's society" (p. 84).

Currently, those who desire a good income do not enter the teacher profession. Those who do enter teaching, while less concerned with income, are also often less able than others. Clearly if we desire excellence in teaching, we need to reward it. (Berry, 1984, p. 67)

A literature review of the demand and supply of teachers in general provides insight into the patterns of demand and supply over the years including (a) student enrollment; (b) needs in specific geographic locations; (c) subject areas, specifically special education; and (d) effect of new graduates, retirement, resignations, attrition, and mobility. These patterns provide information for projections, not only for the hiring or retiring of full-time teaching staff but also for the need of substitute teachers.

The literature reinforced the idea of projected increased enrollment in special education, while also indicating that a shortage of special education teachers exists in general and in specific categories, that is, learning disabilities (see Tables 3, 4, and 5).

Data regarding resignations, retirement, attrition, and mobility specific to special education teachers are unavailable. Some information is available regarding anticipated graduates and need of special education teachers as indicated in Tables 1-8.

As the number of special education teachers increase, so should the need for certified special education substitute teacher coverage.

#### Substitute Teachers

An extensive study by Meara (1983) of the Chicago Public Schools concluded the following:

1. For 3 school years, teacher absence rates have been 5.8%, or an average of 10.4 days absent per teacher.
2. In the study sample, 22.5% of the absences are not covered by substitutes. On the average, nearly one quarter of absences

remain uncovered by substitutes.

3. Over the 3-year period of the study, from 12% to 35% of the schools had substitute coverage under 60%. Coverage in schools with high numbers of poverty level children was 10% lower than was coverage at sample schools with the lowest number of poverty level students.

4. Over \$54 million a year has been spent over the past 3 years on all costs associated with absences and substitute coverage, but \$10-11 million a year has been spent in direct payroll costs for substitute teachers. Another \$35-37 million is spent for pay to teachers who are on sick leave. An estimated \$7-11 million has been paid per year to other staff members who cover classes when substitutes are not available, thus diverting these staff members from the duties they are regularly paid to perform.

5. Over the 3 years of the study, the Chicago Board of Education has paid, on the average, \$61,500 per day for substitute coverage.

The Chicago Board of Education employs three types of substitute teachers: (1) day-to-day substitutes, teachers who daily call the Sub Center for placement; (2) cadre substitutes, substitute teachers who are guaranteed assignments every day school is in session, with the exception of the last day of school, assigned to specific schools or districts within the school system (Meara, 1983); and (3) full-time basics (FTB) substitutes. All of the substitutes hold regular certification or a provisional certificate. Reference is not made to special education certification.

During the school year, teachers were absent 10.4 days on the average, yet the number of positions unfilled is significant in regards to supply and demand as seen in Table 9.

For 1982 and 1983, approximately 64% of substitute coverage was obtained through the Sub Center. Table 10 uses information from the Sub Center's monthly reports to show rates of coverage for elementary and for high schools. A higher rate of coverage for high schools than for elementary schools is shown.

Besides the Sub Center source for substitute teachers, and the day-to-day substitutes, 750 cadre substitutes are available and guaranteed daily employment. Another source which is used when substitute coverage is unavailable is other staff members, itinerant staff, and any qualified and uncertified individuals, such as parents and security guards.

Research indicates a relationship between teachers' presence and academic achievement. A study of achievement by fourth grade students in Philadelphia describes this relationship: "The presence of the teacher . . . is important. . . . More fourth grade reading growth is associated with more direct contact of students and teachers" (Meara, 1983, p. 46). Over 45% of the principals interviewed in Chicago believed students' academic progress was influenced by teacher absenteeism. A unique situation was described whereby special education teachers who taught "pull-out" students would be used periodically as substitutes thus neglecting the students in need. Substitute teachers often were not called to teach classrooms of socially maladjusted or emotionally impaired students because they

Table 9

Sub Center Reports of Substitute Teachers Requested, Filled, and  
1981, 1982, and 1983

Month	1981				1982			
	Requested	Filled	Unfilled		Requested	Filled	Unfilled	
September	13,404	10,378	77%	3,026	8,637	6,337	73%	2,360
October	15,767	14,074	89%	1,693	13,435	10,838	81%	2,597
November	13,420	12,124	90%	1,296	14,087	13,036	92%	1,051
December	15,038	11,579	77%	3,459	11,800	10,734	91%	1,066
January	13,745	11,740	85%	2,005	15,600	11,459	73%	4,141
February	14,899	11,367	76%	3,532	16,954	11,723	69%	5,231
March	21,122	16,134	76%	4,988	23,451	15,554	66%	7,897
April	14,246	11,025	77%	3,221	12,522	9,568	76%	2,954
May	18,871	12,920	68%	5,951	17,663	13,501	76%	4,162
June	9,208	7,191	78%	2,017	12,839	10,620	83%	2,219
Totals	149,720	118,532	79%	31,188	146,988	113,370	77%	33,678

Note. Special education absences are not isolated.

Note. From Class Coverage in the Chicago Public Schools: A Study of Teacher Absences and Su  
Chicago: Chicago Panel on Public School Policy and Finance.



Table 9

Substitute Teachers Requested, Filled, and Requests Unfilled,  
1981, 1982, and 1983

1982				1983			
Requested	Filled	Unfilled		Requested	Filled	Unfilled	
8,637	6,337	73%	2,360	7,989	6,601	83%	1,388
13,435	10,838	81%	2,597	11,556	10,884	94%	672
14,087	13,036	92%	1,051	15,122	14,116	93%	1,006
11,800	10,734	91%	1,066	17,171	13,891	81%	3,280
15,600	11,459	73%	4,141	18,361	15,619	85%	2,742
16,954	11,723	69%	5,231	17,977	14,104	78%	3,873
23,451	15,554	66%	7,897	23,690	18,082	76%	5,608
12,522	9,568	76%	2,954	13,205	11,198	85%	2,007
17,663	13,501	76%	4,162				
12,839	10,620	83%	2,219				
146,988	113,370	77%	33,678	125,071	104,495	84%	20,576 (ytd)

Source: A Study of Teacher Absences and Substitute Coverage (p. 34) by H. Meara, 1983, Finance.

Table 10

Requests for Substitute Teachers Filled by Sub Center:  
High Schools and Elementary Schools Compared

Year	High schools		Elementary schools	
	No. of requests	Percent of requests filled	No. of requests	Percent of requests filled
1981	51,686	91%	98,004	73%
1982	45,326	94%	101,742	70%
1983 through April	36,682	95%	88,389	79%

Note. From Class Coverage in the Chicago Public Schools: A Study of Teacher Absences and Substitute Coverage (p. 31) by H. Meara, 1983, Chicago: Chicago Panel on Public School Policy and Finance.

could not control the students. Based on these last comments, one must infer that certified special education substitute teachers were not available to teach.

Pueblo, Colorado, schools have difficulty locating qualified special education substitutes. Palmer Mort, Principal of Elkhart Memorial High School, Elkhart, Indiana (cited in Manlove & Elliot, 1979), stated that substitutes are expected to be fully qualified for the tasks to which they are assigned.

Cost is high in regards to lack of quality learning taking place. A New York study of 18,000 teachers noted that substitute teachers were significantly less effective in classrooms than the regular teachers. The study also indicated that substitutes were



less effective than student teachers. If substitutes are as ineffective as the New York study suggests, there is concern that they actually constitute a cutback in real instructional time and, consequently, a cutback in student achievement. Data are not available on the use of certified special education substitute teachers in New York; however, in reviewing the Evaluation, Appraisal and Review of the Substitute Teacher Program (1985-86) (Case, 1986) from Albuquerque, New Mexico, 25 teachers out of 193 stated that "substitutes need to be qualified for dealing with special education populations" (p. 18).

Teaching the handicapped learner requires using efficient and effective instructional methods. The use of these methods insures that the students have an opportunity to develop skills commensurate as possible with their nonhandicapped peers. Substitute teachers must be trained to accommodate students' needs as they reinforce goals and objectives determined by the Individualized Education Program Committee (IEPC). They must be knowledgeable of the characteristics of specific disabilities and how to cope with these characteristics.

To determine what practices and procedures were in effect during the 1980s, Rose and Beattie (1986) conducted a partial replication of the 1977 Educational Research Service (ERS) study, extending it to include the use of substitute teachers in special education classes (SED). Of the 401 randomly selected school districts within the 50 states and the District of Columbia, the rate of return was 65%.

Findings were as follows:

1. Only 17.5% of all responding school systems required that

SED substitute teachers have the same minimum academic degree as the district's other special education teachers.

2. Of all responding school systems, 72.4% required SED substitutes to have the same minimum academic degree as the system's other substitute teachers. No differences were found when these data were analyzed controlling for school system size or availability of SED substitute teachers.

3. Only 13.3% of all responding school systems require SED substitute teachers to hold certification in special education.

4. Only 8.2% of all responding school systems required that SED substitutes be certified in the particular exceptionality in which they substitute.

Shown in Table 11 are the certification requirements based on district size.

Table 11  
Training and Certification

District size	Same degree	Certified in SED	Categorical certification
Very small--2,499 or fewer	28.3	16.2	9.1
Small--2,500-9,999	24.7	9.4	6.3
Medium--10,000-24,999	24.1	17.2	13.8
Large--25,000 or more	40.7	14.8	7.4

Note. From "Current Status of Special Education Substitute Teachers" by T. Rose and J. Beattie, 1986, Teacher Education and Special Education, 9(4), p. 200.

In 65.3% of the cases, a special education classroom was covered by an individual who was not certified in special education nor in general education. "Special education classes were canceled in 2.6% of the responding districts" (Rose & Beattie, 1986, p. 196), as might be expected since 4.4% of the districts indicated that they did not employ any certified special education substitute teachers. The smallest districts had less than 10 certified special education substitute teachers on duty daily, while 38.2% of the larger districts employed more than 50 certified special education substitute teachers daily. According to data available, although not statistically significant, it is indicative, based on Rose and Beattie's study (1986), that the supply of SED or CSEST is effected by the shortage of supply of full-time certified special education teachers.

Few regional differences were found for selection and releasing, pay, fringe benefits, training, orientation, and evaluation of SED. Pascale, King, and Mastrian (1984) indicated that these and other attractors do affect individual decisions to substitute teach, whether in general education or special education.

#### Attracting Factors

Herzberg's (cited in Owens, 1987) two-factor theory of motivation focuses on motivational factors in the workplace (Figure 2).

Herzberg's (cited in Owens, 1987) work has been criticized specifically because of the assertion that a relationship exists between job satisfaction and effectiveness. The research that supports this statement is inconclusive. Yet, the two-factor theory of motivation

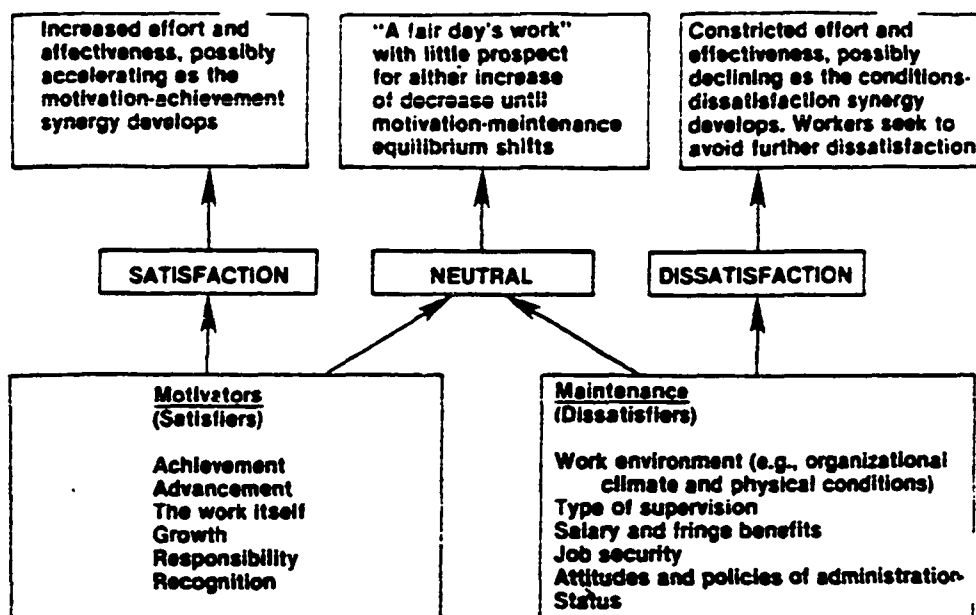


Figure 2. Model of Herzberg's Motivator-Maintenance Theory.

Source: From Organizational Behavior in Education (3rd ed., p. 107), by G. Owens, 1987, Englewood Cliffs, NJ: Prentice Hall.

appears to be supported as demonstrated by interviews of teachers in Georgia; Province of Saskatchewan, Canada; and in the Chicago, Illinois, suburbs. Sergiovanni (cited in Owens, 1987) supported this theory based on his findings that "achievement and recognition were very important motivators for teachers, along with the work itself, responsibility and the possibility of growth. Among the dissatisfiers reported were insensitive or inappropriate supervision, administrative policies, and poor relationships with colleagues and/ or parents" (p. 109). Literature exists to support Herzberg's theory in the teaching profession (Berry, 1984; Berry et al., 1985; Bird, 1985; Chapman, Suny, & Hutcheson, 1982; Clifton &

Rambaran, 1987; Davis, Giles, & Feild, 1985; Duttweiler, 1987; Elliott, 1987; Holmes, Impink-Hernandez, & Terrell, 1988; Hugh & Stone, 1980; Sendor, 1982). There is no information available which would be contradictory to applying the theory and research data to substitute teachers (Bellm & Whitebook, 1986; Cooper, Dreyfus, & Boekhoff, 1980; Dilanian, 1986; Frosch, 1984; Hinkmeyer, 1988; Koelling, 1983; Nolte, 1980; Parson & Dillon, 1978; Rawson, 1981; Seldner, 1983; Shreeve, Nicely-Leach, Radebaugh, Morrill, & Slatton, 1983; Stommen, 1986) specifically certified special education substitute teachers (CSEST) (Rose & Beattie, 1986; Willierman & McGuire, 1986).

Wanous et al., (1983) demonstrated through a review of research on expectancy theory that attractors do affect a job applicant's decision.

A review of organization recruitment procedures, recruiter characteristics, and job attributes indicates that all three factors influence a job applicant's decision to accept a job with a particular organization.

### Recruitment

"Organizational recruitment has been defined as the process of seeking out and attempting to attract individuals from the external labor market who are capable of and interested in filling job vacancies" (Taylor & Bergmann, 1987, p. 261).

Recruitment consists of a variety of activities. Organizational procedures such as the distribution of literature and advertising

(Engel & Nall, 1984; Howlett, 1981; Mangus, 1987; Reavis & Mehaffie, 1980; Rynes, Heneman, & Schwab, 1980) are as important as are the personal and behavioral characteristics of the recruiter and his knowledge of the job attributes and responsibilities, which must be conveyed to the interviewee (Boudreau & Rynes, 1985; Harris & Fink, 1987; Liden & Parsons, 1986; Rynes & Miller, 1983; Taylor & Bergmann, 1987).

As stated by Stanton (cited in Rynes et al, 1980),

a creative, innovative, and imaginative recruiting program—one that is perceived by the job applicant as unique—can be highly successful in attracting a more qualified group of potential promising employees. Thus, an organization's recruitment practices may have an impact on applicants' attitudes and choices, independent of the nature of the attributes characterizing a particular job opportunity" (p. 530).

This is probably more true for new entrants into the field of work. Taylor and Bergmann (1987) found that in the initial interview stage, recruitment activities were significantly related to applicants' reactions. One thousand two hundred and forty-six questionnaires were distributed with a response rate of 73%. A summary of the results of the initial interview stage is seen in Table 12.

Recruitment effects are likely to be greater during early recruitment stages when applicants often receive little direct information about the many job attributes. Recruitment activities influence applicants' reactions primarily through their impact on the individuals' inferences about job attributes. The belief is that firms are likely to benefit more from recruitment programs that emphasize job attributes rather than particular recruitment activities. For this

Table 12

Recruiting Practice Items: Means, Standard Deviations,  
and Varimax--Rotated Factor Matrix

Item	Mean	<u>SD</u>	Factor	
			1	2
The recruiter was able and willing to answer my questions	5.97	1.29	44	52
The recruiter was interested in me as a candidate	5.35	1.41	77	30
The recruiter was familiar with my background	4.36	1.48	59	41
The recruiter seemed to understand my point of view	5.05	1.26	74	26
The recruiter tried hard to recruit me for the job position	3.57	1.56	63	38
The recruiter seemed interested in the contribution I could give to the company	4.64	1.49	69	27
I got to know what the job would be like	4.73	1.54	19	84
I got to know what the company would be like as a place to work	4.60	1.42	35	70
The interview was relaxed and spontaneous	5.59	1.28	57	27
The interview went better than I expected	4.80	1.60	81	26

Table 12--Continued

Item	Mean	SD	Factor	
			1	2
Overall, the interview went extremely well	5.07	1.50	83	27
Eigenvalue			6.24	1.08
Percentage of variance accounted for			57	10

<sup>a</sup>Entries represent the highest factor loading a variable has on any factor. Decimals have been omitted. N for factor matrix = 196 due to missing data.

Note. From "Effects of Job Attributes and Recruiting Practices on Applicant Decisions: A Comparison" by G. Powell, 1984, Personnel Psychology, 37(4), p. 725.

reason, care should be given to insure that the attributes of vacant positions are comparable to those of competitors and that substantial information about attributes is provided throughout the recruitment process (Taylor & Bergmann, 1987) (see Table 13). Powell (1984) and Rynes and Miller (1983), using video tapes and mock interviews, advocated further research regarding recruiter affect since their medium of study had not been used before. They found job attributes more influential on new entrants into the work world. Research by Powell (1984) using path analysis, indicated that recruiter practices such as recruiter behavior did not influence graduating college students as applicants to accept jobs (see Figure 3). Rynes and Miller (1983) indicated further study is needed.



Table 13

Organizational Recruitment Activities and Applicants' Re  
Measures Used in Study

Scale/Item	Representative item
<b>Applicant reactions</b>	
1. Company attractiveness	Out of all the companies you have interviewed, how attractive is _____ as a place of employment? 1 = extremely attractive; 5 = very unattractive
2. Probability of offer acceptance	How likely is it you would accept a job from _____ if receiving one? 1 = 0-25% likely; 5 = 100% likely
3. Job offer decision	What was your offer decision? 1 = rejected it; 2 = accepted it
4. Tenure intentions	How do you rate your chances of still working for _____: six months after start? 1 = terrible; 5 = excellent
<b>Recruitment activities</b>	
1. Demographic variables	
a. Recruiter's age	Age in years
b. Recruiter's sex	Sex: Male = 1; female = 2
c. Recruiter's race	Other = 1; white = 2
d. Total recruiting experience	Total years recruiting experience
e. Recruiter's job tenure	Years on present job
f. Recruiter's degree	B.A. = 1, M.S. = 2, Ph.D. = 3
g. Interview training/seminar	Attended: 1 = no; 2 = yes
h. Job type	Personnel = 1; nonpersonnel = 2
i. Applicant's sex	Sex: Male = 1; female = 2



Table 13

nal Recruitment Activities and Applicants' Reactions:  
Measures Used in Study

Representative item	No. of items		Measurement stages				
			CI	PC	SV	JO	JOD
all the companies you have interviewed, attractive is _____ as a place of employment? 1 = extremely attractive; 5 = very unattractive	4	.78	x	x	x	x	x
likely is it you would accept a job from if receiving one? 1 = 25% likely; 5 = 100% likely	2	.85	x		x	x	
was your offer decision? 1 = rejected it; 2 = accepted it	1	NA					x
how do you rate your chances of still working _____: six months after start? 1 = terrible; 5 = excellent	6	.89					x
_____ years	1	NA	x				
male = 1; female = 2	1	NA	x				
_____ 1; white = 2	1	NA	x				
_____ years recruiting experience	1	NA	x				
_____ on present job	1	NA	x				
_____ 1, M.S. = 2, Ph.D. = 3	1	NA	x				
_____ d: 1 = no; 2 = yes	1	NA	x				
_____ el = 1; nonpersonnel = 2	1	NA	x				
_____ male = 1; female = 2	1	NA	x				



Table 13--Continued

Scale/Item	Representative item
2. Recruiter's descriptions of campus interview	
a. Time spent evaluating applicant	Within a typical 30-minute campus interview, what % of time is spent evaluating applicant?
b. Time spent selling organization	% time selling candidate on company as a place to work
c. Time spent leading conversation	% time you lead the conversation
d. Structure of interview	To what extent is your typical method of interviewing college students structured? 1 = not at all; 5 = a very great extent
e. Tell applicant how evaluated	To what extent can applicants tell how you've evaluated them at the end of the interview? 1 = none of them know; 2 = all of them know
f. Empathy behavior	I try to understand the applicant's point of view 1 = strongly disagree; 5 = strongly agree
g. Evaluation behavior	I try to evaluate applicant in terms of the job
h. Defensiveness behavior	During the interview, I become angry when the applicant asks probing questions
3. Applicant's description of recruiter's behavior	
a. Empathy behavior	During the interview, the recruiter was interested in learning about me
b. Job information behavior	The recruiter told me about the careers of others

Note. From "Organizational Recruitment Activities and Applicant's Reactions at Different Stages," Taylor and T. A. Bergmann, 1987, Personnel Psychology, 40, p. 267.



Representative item	No. of items		Measurement stages				
			CI	PC	SV	JO	JOD
typical 30-minute campus interview, time is spent evaluating applicant?	1	NA	x				
Rating candidate on company as a place	1	NA	x				
to lead the conversation	1	NA	x				
What is your typical method of rating college students structured? 1 = all; 5 = a very great extent	1	NA	x				
What can applicants tell how you've them at the end of the interview? 1 = none of them know; 2 = all of them know	1	NA	x				
Do you understand the applicant's point of view? 1 = strongly disagree; 5 = strongly agree	3	.62	x				
Do you evaluate applicant in terms of the job	3	.65	x				
During the interview, I become angry when the interviewer asks probing questions	5	.71	x				
During the interview, the recruiter was helpful in learning about me	10	.84	x				
After the interview, the recruiter told me about the careers of others	3	.60	x				

and Applicant's Reactions at Different Stages of the Recruitment Process," by M. S. Page, 40, p. 267.

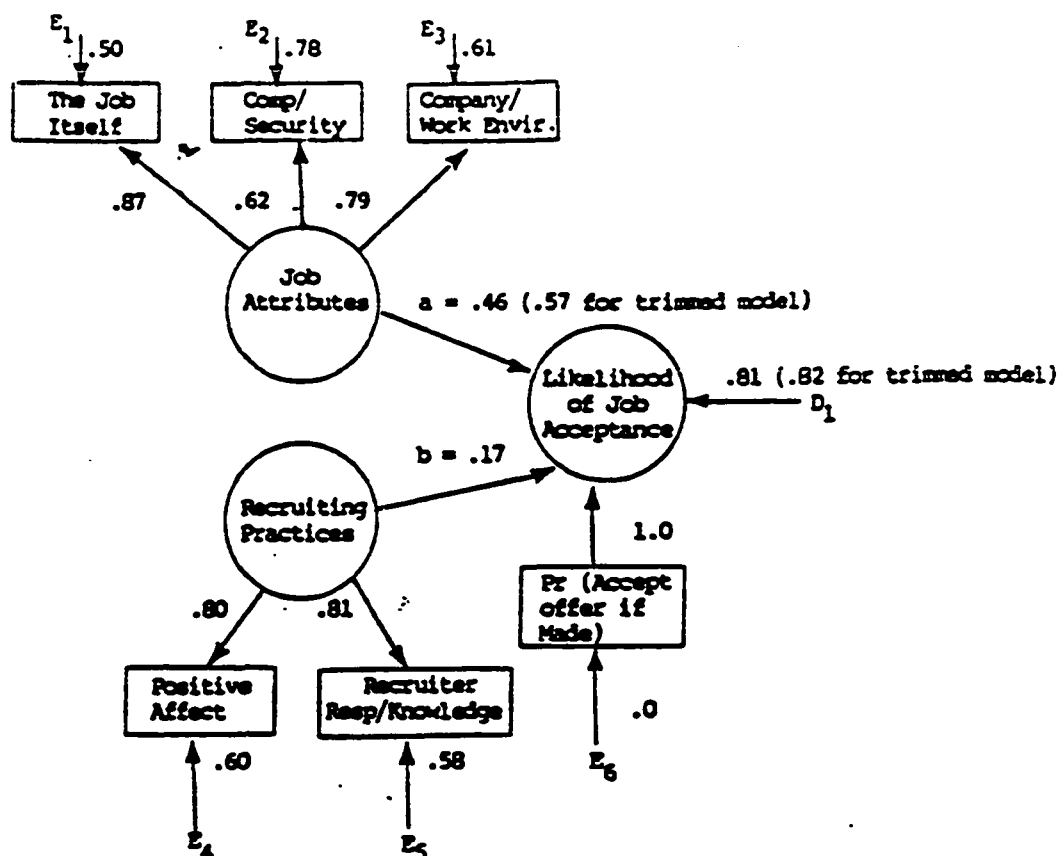


Figure 3. Path Diagram for Hypothesized Model. Rectangles represent measured variables. Circles represent latent variables.  $E_1$ - $E_6$  represent error terms for the measured variables.  $D_1$  represents a disturbance or error term for likelihood of job acceptance, the sole endogenous variable.

Source: From "Effects of Job Attributes and Recruiting Practices on Applicant Decisions: A Comparison" by G. Powell, 1984, *Personnel Psychology*, 37(4), p. 728.



Howlett (1981) stated that educators continue to try to sell education using old fashioned ideas. Times have changed. Advertising, marketing, and public relations techniques must be used to influence consumers of education. Powell (1984) stated that a survey found in "Recruiting Literature," (1981) did not address the needs of college students as prospective job applicants.

Mangus (1987) emphasized the importance of advertising. Whether using media such as professional journals, television, direct mailings, on campus college and high school recruiting campaigns, the use of employment agencies and contract recruiters, job fairs, video interviewing, computer data bases, or through the establishment of "stop and shop employment centers located in shopping malls" (p. 60), the objective is to attract the most knowledgeable and skillful individuals.

Taylor and Bergmann (1987) found recruiter influence evident in the initial stage of the recruitment process, i.e., the first interview. Rynes and Miller (1983) agreed.

Behavior of the recruiter in the positive affect condition was characterized by steady eye contact, frequent smiling and nods of encouragement, verbal indications of approval of the applicant's responses, and positive reactions to the applicant's attempts at humor. In contrast, in the negative affect condition the recruiter rarely smiled, fidgeted with items on his desk instead of maintaining eye contact, ignored the applicant's attempts at humor, and generally gave the appearance of wanting to terminate the interview as soon as possible. (p. 149)

Recruiter knowledge was included as part of recruiter influence. Results of the true experiments conducted using mock video tape interviews indicated that the greatest influence was the specialty of

information related by the recruiter as opposed to behavioral characteristics. Rynes' et al. (1980) earlier review also supported this position. Results of the Rynes and Miller (1983) study indicate that in Experiment 2 where jobs presented were on a continuum from better to worse, the recruiters' behavioral characteristics were more significant. Rynes et al. (1980) introduced credibility of recruiters and that of job incumbents, the latter being perceived as more knowledgeable.

Rynes et al. (1980) reported that (a) young job applicants prefer younger recruiters, (b) verbal fluency was not an important factor if the recruiter was young, (c) job applicants tended to respond more positively to recruiters with titles, (d) female recruiters were "better than or at least equal to their male counterparts" (p. 533), (e) that blacks responded more favorably to black recruiters, and (f) "race of the recruiter appeared to be of little or no importance to whites" (p. 533).

Other characteristics of recruiter behavior found consistently in the literature as reported by Rynes et al. (1980) were that the recruiter should not dominate talking time and that the interview should be conducted informally.

Liden and Parsons (1986) studied job applicants seeking "jobs requiring no previous training or experience" (p. 109). The results of this study indicate that there existed

racial differences in applicant reactions to interviewers. Black applicants reacted less positively than white applicants. In addition, female applicants and interviewers evoked more favorable reactions than did male applicants

and interviewers. Acceptance intentions were related to parents' pressure and friends' pressure. (p. 121)

A variety of studies indicate that recruiter characteristics including behavior, other personal characteristics, and the importance of knowledge about specific jobs are found relatively consistent in most studies.

The method of recruitment, content of message, i.e., job attributes, job requirements, and organizational procedures, including timing, are four attributes of recruitment which may influence who applies for a job (Boudreau & Rynes, 1985).

#### Job Attributes

Many substitute teachers are former full-time teachers; others are fully certified teachers who choose not to work full time. Many college graduates use substitute teaching as a step toward a full-time job. Even though the substitute teacher may be completely qualified for teaching, substitute work requires a somewhat different approach. Therefore, the role of the substitute teacher should be clearly defined. (Augustin, 1987, p. 393)

Collins (1982) stated:

Districts must affirm that substitute teachers are more than "casual laborers," that they are teaching professionals who are expected to maintain and to extend the curriculum endorsed by the district and planned by an absent teacher. Further, school districts must provide substitute teachers with training and knowledge applicable to the district's diversity of classroom settings, the district's instructional goals, and the teaching materials and methods the district has adopted to realize its instructional goals. (p. 231)

Seldner (1983) declared that "a substitute teacher is a person who functions with children, and his performance and needs should concern all" (p. 61).

Given that literature relates that specificity of information presented to the job applicant influences the decision of that applicant, it is not contraindicated that this would differ in regards to the field of substitute teaching. A content analysis of responses in Deay and Bontempo's (1986) study of 10 counties in West Virginia indicated that 50% of the substitutes needed information in the categories of classroom plans and procedures and school rules/regulations and other areas as seen in Table 14.

Table 14

Rank Order of Needed Information by Frequency  
of Mention by Substitute Teachers

Category	Number	Percentage
Classroom procedures and plans	103	29
School rules and regulations	74	21
Professional role	45	13
Organizing and managing activities	44	13
Discipline	37	10
Learner differences	26	7
Knowledge of program	16	5 <sup>a</sup>
Total	345	

Note. The total number of responses varies because some substitutes did not give three responses per question.

Note. From "Helping Substitute Teachers Contribute to School Effectiveness" by A. M. Deay and B. T. Bontempo, 1986, The Clearing House, 59(8), p. 361.

<sup>a</sup>2% miscellaneous could not be coded.

Interrate reliability of responses was 90% using definitions in Table 15.

Number and percentages based on the same study are reported differently in The Clearing House (Deay & Bontempo, 1986) and in Contemporary Education (Bontempo & Deay, 1986). Figures reported in the latter journal indicate that the two most frequent concerns of substitute teachers are discipline (25%) and classroom procedures and plans (24%). As reported in The Clearing House, percentages are 10% and 29%, respectively, with school rules and regulations being 21%.

Information regarding CSEST was lacking in both articles; however, in Contemporary Education (Bontempo & Deay, 1986), two responses indicated that substitutes should be aware of special needs students because most often a substitute teacher is not aware of what special care should be provided to a student with special needs.

Houston Independent School District and Sacramento City Unified School District developed recruitment and in-service programs to address information acquired from the Gallup Poll, which is mirrored in categories and definitions (Tables 14 and 15).

One result of the Bontempo and Deay (1986) study was the substitute teachers' function and teacher, student, and administration's attitude toward them and their expertise. As Parson and Dillon (1978) reported, student teacher reactions to the prospect of substitute teaching were as follows:

[Substitute teaching] is on the spot--a job with little or no direction. The main objective often is merely to keep the class quiet and in order. The phrase "busy work" often describes the main direction of the particular class, although the work likely has no profound effect on the week's

Table 15

Categories of Problems and Needs and Definitions Used by  
Substitute Teachers to Identify Problem Areas

Categories (problems/needs)	Definitions
Discipline	Appropriate direction/redirection of student behavior (e.g., managing a hostile student, controlling excessive noise/talking)
Classroom plans and procedures	Procedures, policies, and routines that maintain established classroom operation (e.g., lunch count, seating charts, class lists) and information, plans, directions, or materials for effective instruction (e.g., lesson plans, worksheets)
Knowledge of program	Background on texts, curriculum, and subject matter (e.g., advanced math, music, shop)
Learner differences	Developmental stages (e.g., early childhood, middle childhood, adolescence) and student special needs (e.g., medical problems, learning disabilities, handicaps)
School rules and regulations	Procedures, policies, and routines that maintain established school operation (e.g., schedules, bus duty, discipline policy)
Organizing and managing learning experiences	Selection and application of the most appropriate strategies for the given lesson, materials, and learners (e.g., pool of ideas/activities, grouping techniques, questioning, or discussion skills)
Professional role	Experiences unique to the role of the substitute teacher (e.g., legal responsibilities, salary and benefits, professional status, county-wide policies, professional development)

Note. From "Helping Substitute Teachers Contribute to School Effectiveness" by A. M. Deay and B. T. Bontempo, 1986, The Clearing House, 59(8), p. 361.

general objectives as set out by the regular teacher. Often a useful waste of time.

Substitute teaching is probably the most difficult job to do well. It is also probably the easiest thing to get away with doing poorly. (p. 31)

The use of the prefix "sub" indicates less than, such as, less than a teacher. Substitutes perform according to individual school expectations. If treated in a substandard way, their performance may be parallel. One school's principal began calling substitute teachers "guest" teachers and appointed a student from the class to act as host. Pupil manner and attitudes supposedly improved.

Shreeve et al. (1983) stated that substitute teaching demands "great flexibility and a strong sense of self, but the condition of substitutes teaching reinforce neither of these" (p. 7). This study used survey responses from substitute teachers, which revealed that a poor self-image was prevalent, and reinforced by lack of concern by administration. Rose and Beattie (1986) found that only 23.3% of the responding school districts evaluated SED. Larger school districts were more likely to have a formal evaluation process than were smaller districts.

Salary of substitute teachers may also imply that substitute teachers are not valued. Salaries, cumulative for 120 days, are often less than aide pay (Grand Rapids Public Schools, 1989). Kraft (1980) emphasized equity in pay and benefits as attractors for recruiting and retaining qualified substitute teachers. Substitute teachers are most often paid a flat rate whether certified in regular or special education. Differential pay is not usually offered based

on experience. Pay is based on the type of assignment, whether short or long term, or a temporary contract.

Koelling (1983) conducted a study using a sample of schools within the 19 state regions encompassed by the North Central Association of Colleges and Schools. Usable response rate was approximately 81%. Questions asked relevant to salary and fringe benefits with responses are seen in Tables 16, 17, 18, and 19.

Table 16  
Are Substitutes Paid by the Day?

Enrollment	Yes		No	
	Number	Percent	Number	Percent
1-999	617	99.8	1	0.2
1,000-4,999	581	99.8	1	0.2
5,000-9,999	241	99.6	0	0.0
10,000 and more	127	100.0	0	0.0
Total	1,566	99.8	2	0.1

Note. From "Substitute Teachers: School Policies and Procedures in the North Central Region" by C. Koelling, 1983, Education, 104(2), p. 157.

Rose and Beattie (1986) found that special education substitutes (SED) were paid on the average between \$31 and \$35 a day. Districts paying less than \$30 a day were classified as small, 2,500-9,999 population, to very small, 2,499 or fewer. Regional differences were



Table 17  
Amount of Salary Paid Per Day

Enrollment	Less than \$30		\$30-39		\$40-49		\$50 or more	
	No.	%	No.	%	No.	%	No.	%
1-999	115	21.2	335	61.8	85	15.7	7	1.3
1,000-1,999	75	15.1	292	58.6	120	24.1	11	2.2
5,000-9,999	14	6.7	144	68.2	48	22.8	5	2.4
10,000 and more	2	1.8	60	53.1	44	38.9	7	6.2
Total	206	15.1	831	60.9	297	21.8	30	2.2

Note. From "Substitute Teachers: School Policies and Procedures in the North Central Region" by C. Koelling, 1983, Education, 104(2), p. 158.

significant.

Fringe benefits are not ordinarily provided to substitute teachers. This is confirmed by an affirmative response of 6.7% of respondents (see Table 19).

Fringe benefits were not offered by 88.4% of all responding school districts. Of "the 11.6% providing some benefit, Social Security (65.4%) and teacher retirement (57.7%) were the benefits provided most often" (Rose & Beattie, 1986, p. 198).

In Michigan, the Middle Cities Education Association has expressed concern over demand and supply of CSEST. Concern also had been expressed regarding the factors that seem to attract regular education substitute teachers as well as CSEST to specific public

Table 18

Percentage of School Districts Paying Substitute Teachers  
the Same as Full-Time Teachers

Enrollment	Yes		No	
	Number	Percent	Number	Percent
1-999	342	55.3	276	44.7
1,000-4,999	405	69.6	177	30.4
5,000-9,999	172	71.4	69	28.6
10,000 and more	83	66.9	41	33.1
Total	1,002	64.0	563	36.0

Note. From "Substitute Teachers: School Policies and Procedures in the North Central Region" by C. Koelling, 1983, Education, 104(2), p. 159.

school districts. Why is it that one district appears to have a significantly better ratio of CSEST to special education classroom teachers than do other districts.

Results from questionnaires designed by Pascale et al. (1984) and Mastrian, King, and Pascale (1984) outline factors in the area of orientation provisions found to be important to substitute teachers. Pascale's work includes administrative rankings of importance of subscales. Both questionnaires used a ranking scale based on importance of the information and adequacy of the information. Neither study expands on other possible attractors. True (1982) asked five questions of substitute teachers relevant to recruitment, which can

Table 19  
Are Fringe Benefits Given?

Enrollment	Yes		No	
	Number	Percent	Number	Percent
1-999	20	3.2	601	96.6
1,000-4,999	42	7.1	547	92.9
5,000-9,999	23	9.5	219	90.5
10,000 and more	21	16.7	105	83.3
Total	106	6.7	1,472	93.2

Note. From "Substitute Teachers: School Policies and Procedures in the North Central Region" by C. Koelling, 1983, Education, 104(2), p. 159.

be incorporated into the design of a questionnaire for CSEST to determine attracting variables.

Grand Rapids Public Schools has operated the past 5 years with inadequate coverage by CSEST. At times regular education teachers have substituted and many times administrators have had to be creative in maintaining an educational environment. Information displayed in Table 20 documents the level and number of special education classroom teachers in Grand Rapids during specific school years for which CSEST has been inadequate. For the school year 1988-89, 18 CSEST were listed on the substitute teacher registry in Grand Rapids. During the first semester, 63 special education classrooms were not

staffed by CSEST or any other certified substitute teachers. The demand for CSEST appears to exceed the supply.

Table 20  
School Year, Level, and Number of Special Education  
Teachers, Grand Rapids Public Schools

	Elementary special education teachers	Secondary special education teachers
1983-84	169	76
1984-85	193	77
1985-86	212	80
1986-87	184	93
1987-88	203	57
1988-89	168	84

Note. Grand Rapids Public Schools, personal communication, 1989.

In summary, the literature indicates that little information is available pertinent to CSEST.

## CHAPTER III

### DESIGN AND PROCEDURES

Descriptive statistics, frequency distributions, percentages, and median ranks are used to describe (a) the difference between supply and demand of certified special education substitute teachers in Middle Cities school districts in Michigan and (b) the factors that attract certified special education substitute teachers to substitute teach in the public schools.

Literature indicates that demand exceeds supply for certified special education substitute teachers (CSEST), in general, within the United States (Rose & Beattie, 1986). This is supported by evidence gathered from the Middle Cities Education Association (MCEA) in Michigan. The 28 members of the MCEA are experiencing a shortage of CSEST on a daily basis. Due to this shortage, public school districts often use substitute teachers who are certified in disabilities other than that of the identified classroom or those who are certified in general education (Grand Rapids Public Schools, 1989) or individuals who are not certified to teach in any field as found in the Chicago study (Meara, 1983). In a communication in spring of 1989, the Michigan Department of Special Education sanctioned the use of regular education substitute teachers in special education classrooms by allotting special education funds to cover the per diem cost of said substitutes..

Factors that attract CSEST to specific public school districts are important for recruiting purposes. True (1982), Pascale et al. (1984), "Newsfront" (1981), Deay and Bontempo (1986), and other literature on the subjects of marketing, recruiting, and mobility indicate the need for public school districts to be knowledgeable of attracting factors to meet the demand for certified special education substitute teachers.

Research objectives are (a) to determine the difference between supply and demand of certified special education substitute teachers in Middle Cities school districts in Michigan and (b) to determine what factors attract certified special education substitute teachers to substitute teach in the public schools.

#### Subjects

Information was solicited from the 28 public school districts holding membership in the Middle Cities Education Association (MCEA) in 1989, in Michigan. These public school districts account for 18% of the school age population in Michigan. The major goal of the MCEA is to "create better understanding and support for the needs of central city school districts and economically and educationally disadvantaged children" (Middle Cities Education Association, undated, p. 1). Subjects were directors of personnel, special education directors, superintendents, and secretaries who could provide accurate information in regards to the letter of inquiry. Data regarding the number of CSEST were not available until after the letter of inquiry to the directors was received, answered, and returned. Therefore,

the sample size was calculated by the number of CSEST in Grand Rapids for the 1988-89 school year, 18 x 28 middle cities;  $N = 504$ ;  $S = 217$  (Krejcie & Morgan, 1970). The questionnaire was distributed to all identified CSEST and data collected accordingly.

Figure 4 is a list of the member school districts of the Middle Cities Education Association:

Albion	Monroe Public Schools
Ann Arbor	Mt. Clemens Community Schools
Battle Creek Public Schools	Muskegon Heights Public Schools
Bay City Public Schools	Muskegon Public Schools
Beecher Community Schools	Niles Community Schools
Benton Harbor Area Schools	Plymouth-Canton Community Schools
Buena Vista School District	Pontiac School District
Flint Community Schools	Port Huron Area School District
Grand Rapids Public Schools	Saginaw School District
Highland Park Public Schools	Southfield Public Schools
Jackson Public Schools	Traverse City Area Public Schools
Kalamazoo Public Schools	Waterford School District
Lansing Public Schools	Willow Run Community Schools
Midland Public Schools	Ypsilanti Public Schools

Figure 4. Members of the Middle Cities Education Association.

#### Instrumentation

A letter of inquiry and a questionnaire were the instruments used to obtain information. The two page letter of inquiry was

directed to directors of personnel, requiring a numerical response to four statements, the fifth statement being a request for the dissemination of the questionnaire to certified special education substitute teachers in their respective districts. The years for which information was requested are: 1989-90, 1988-89, 1987-88, and 1986-87.

Four years as a time frame was selected due to the fact that the Department of Special Education only has information regarding certified special education teachers on computer for the past 4 years (Michigan Department of Special Education, 1989).

The questionnaire was field tested in September 1989 with a sample of 14 CSEST within the Grand Rapids Public Schools. A return rate of 71% was obtained. Two questions were modified and the format of the questionnaire changed per the responses of the 14 participants. The edited version of the questionnaire was then distributed to the directors of personnel within the Middle Cities Education Association. Format of questions, statements, and rankings were designed based on Pascale et al. (1984) and True (1982).

Seventeen items on the questionnaire were designed to elicit personal data and are similar to Pascale's et al. (1984) personal data form. The remaining 12 items correspond to the Gallup Poll (Roth, 1981), to Deay and Bontempo's (1986) categories of substitute teacher responses (see Tables 14 and 15), and to the literature review on the subjects of marketing, recruiting, and mobility.

Anonymity was guaranteed to participants. Each questionnaire was coded in the event follow-up was needed. Return rate of the questionnaires for the entire population (EP) was 61.9%, while 100%



of the letters of inquiry were returned.

Reliability and validity of both instruments are questionable. Respondents to the questionnaire did not always follow directions in the ranking of responses. Some items were left blank. In those situations, a missing value was assigned. The information acquired from the letter of inquiry was based on the information providers' recollection of that information, an estimate based on past records, actual records, or the information was noted as not available.

#### Data Collection

The questionnaire and the letter of inquiry were approved by the Human Subjects Institutional Review Board (see Appendix I), Western Michigan University, Kalamazoo, Michigan, in September 1989.

The instruments were sent out September 30, 1989, with the letter of inquiry to the directors of personnel within the MCEA, with a return date of October 30, 1989, being suggested. A letter of inquiry, copies of the questionnaire, cover letter to CSEST, and stamped self-addressed envelopes were sent to the directors of personnel to distribute (see Appendices B, C, and D). Follow-up reminders were sent October 31, 1989, allowing a 2-week response time. A third communication was made via telephone the week of November 6, 1989, to obtain questionnaires from the remaining CSEST. The same procedure was followed with the directors of personnel.

Thank-you postcards were mailed upon receipt of the letters of inquiry from directors of personnel.

### Data Analysis

The method of data gathering provided for the acquisition of information from directors of personnel of the 28 Middle Cities regarding demand and supply of CSEST. Attracting variables that motivate CSEST to substitute teach in a particular public school district were acquired from the questionnaire.

Descriptive statistics, frequency distributions, percentages, and median ranks were used to describe individual and group responses from the letter of inquiry and the questionnaire.

### Limitations

Data used were only as accurate as the information offered by respective providers and the literature. Information regarding self-contained special education classrooms, as opposed to itinerant or part-time staff, was used in determining supply and demand of CSEST. Only those who self-selected into substitute teaching were surveyed. Certified teachers who choose not to substitute teach were not included. A school calendar of 180 days or days respective to the required days of operation was used as opposed to an extended school year encompassing 230-day programs or summer school programs.

In summary, the analysis of the data provided information as to the supply and demand of CSEST and the attracting factors as identified by CSEST. This information indicated to what extent the supply of CSEST exceeded the demand within the 28 Middle Cities Education Association in Michigan. Identification of attracting factors

assists public school districts in the development of a recruitment package to entice CSEST to their respective districts.

## CHAPTER IV

### METHODS, PROCEDURES, AND RESULTS

In September 1989, a packet of information containing a letter to the superintendent of schools, a support letter from the executive director of the Middle Cities Education Association, the letter of inquiry, the letter to be distributed to CSEST, and the CSEST questionnaire were sent to the superintendent of each of the 28 Middle Cities Education Association members. This was intended to inform superintendents that their directors of personnel, from whom information would be requested, would be contacted within 2 weeks.

Telephone contact was made with each superintendent's office to verify receipt of the above information. Lack of participation was limited to two districts after much telephoning and soliciting assistance from other influential individuals within the given school districts. In 8 of the 28 Middle Cities Education Association districts, the superintendent or contact person was not who had been originally listed in a state directory of superintendents or contact persons. Thus, a second packet of information had to be sent with a follow-up phone contact.

Participants were willing to assist with information; however, some districts lacked records or a retrieval system and could not secure specific information regarding figures requested on the letter of inquiry. These districts did, however, give estimates based on

past use of CSEST.

A sample of the packet sent to superintendents was also sent to the directors of personnel. A follow-up telephone call was made to each of these individuals once it had been confirmed by phone that the superintendents had received their packets. The directors of personnel, secretaries, or the special education department supplied the number of CSEST employed within the district by the third week in September 1989. The corresponding number of CSEST questionnaire packets were then sent to the directors of personnel to disseminate. Two districts provided address lists of the CSEST to be contacted directly. After the initial mailings, it was determined that most districts did not have as many CSEST as they had reported via telephone.

Each district was assigned an identification number which was placed on each questionnaire and letter of inquiry. This code registered the number of the questionnaires disseminated in correspondence to returns. Control of receipts could only be exhibited over those districts who had supplied a list of names and addresses to be contacted directly. A phone contact was made with the director of personnel, secretaries, or the special education department to determine the cause of slow or no responses. One district was called five times before the questionnaires began returning. For one district, an agreement had to be made with a secretary to secure specific information regarding secretarial negotiations within the Grand Rapids Public School system before evidence of returns was seen. In four cases, a second packet of information was mailed because the

districts stated that they did not receive any packets. These four districts were in one geographic location.

Twenty-eight districts responded to the letter of inquiry with a 100% response rate. Table 21 shows the return rate of questionnaires and the letter of inquiry by district.

Table 21  
Return Rate of CSEST Questionnaire and Letter  
of Inquiry by District by Percent

District	Questionnaire return rate	Letter of inquiry
100	100	100
200	20	100
300	100	100
400	100	100
500		100
600		100
700		100
800	40	100
900	82	100
1000	25	100
1100		100
1200	88	100
1300		100
1400	33	100
1500	50	100

Table 21--Continued

District	Questionnaire return rate	Letter of inquiry
1600		100
1700		100
1800	25	100
1900		100
2000		100
2100		100
2200		100
2300	100	100
2400	36	100
2500	100	100
2600	43	100
2700	33	100
2800	20	100

Eight districts stated that they had zero CSEST on file; any or all certified special education teachers they hired were needed in classroom placements immediately. Two districts inquired if Grand Rapids Public Schools had sufficient classroom coverage and urged the district to refer any possible applicants to them. It appears that one district did not disseminate the questionnaire but this could not be confirmed. One school district was on strike at the time of data collection.

The first inquiries as to how many CSEST were on file and how many questionnaires should be distributed to the districts were completed September 11, 19, 21, and 28. The second inquiry was made October 13, 23, and 24 if no follow through was received on the initial contact. A third and fourth contact took place November 11, 12, and 17; and December 3, 1989. One secretary stated that anyone would know not to request information from substitutes at the beginning of the school year. This district was particularly slow in responding to calls and inquiries even prior to the discussion above. This was the same district where the secretary to the director of personnel wanted to barter for information about secretarial negotiations.

Upon receipt of the questionnaires and letters of inquiry, thank you postcards (Appendix O) were mailed October 13, November 2, and December 4, 1989, to the participating school districts.

#### Letter of Inquiry

One hundred percent of the letters of inquiry were returned or figures were confirmed by telephone. The State Department of Education, Lansing, Michigan, supplied documents from 1988-1989 to supplement figures where districts did not have them readily available. The letter of inquiry requested information in four areas: (1) the number of certified special education classroom teachers employed full time for the years 1986-87, 1987-88, 1988-89, and 1989-90 (see Appendix J); (2) the number of certified special education substitute teachers on file for the same years as identified in number one (supply and demand) (see Appendix K); (3) the number of days CSEST



were employed for the above years (see Appendix L and Appendix M); and (4) the daily substitute pay rate for the above years (see Appendix N).

The letters of inquiry provided a basis of comparison by district. Information was provided by directors of personnel, personnel staff, and in two instances, by directors of special education. The number of certified special education classroom teachers employed for 1986-87 through 1989-90 averaged 1,981 for MCEA. This figure excludes 1987-88 as representative figures were unavailable.

The number of certified special education classroom teachers increased from 1986-87 to 1989-90 in seven districts: (1) District 200 (11), (2) District 300 (11), (3) District 900 (37), (4) District 1800 (21), (5) District 2100 (29), (6) District 2200 (6), and (7) District 2600 (57). A decrease of five or more teachers was reported by five districts: (1) District 800 (19), (2) District 1000 (9), (3) District 1100 (8), (4) District 2000 (33), and (5) District 2700 (5). The remaining districts showed an increase or decrease of less than five teachers or their figures remained constant (see Appendix J).

The number of CSEST employed within MCEA increased by 55% from 1986-87 to 1989-90; however, only six districts increased employment of CSEST during this 4-year span. The greatest growth occurred between 1987-88 and 1988-89 with an increase of 33 CSEST. Eight districts did not employ any CSEST in 1989-90.

The number of CSEST and days taught by year by district for 1989-90 includes data available from September to November (see Appendices L and M). Figures for 1989-90 are not necessarily

indicative of the actual CSEST for that school year since absentees tend to be less in the early fall of a given school year. A total of 89 CSEST were employed in MCEA for 1989-90. CSEST taught 79 days as reported by 7 districts. Data were unobtainable regarding the days taught in 19 of the 28 school districts. For the school year 1988-89, 87 CSEST were employed in 16 districts and taught a total of 3,004 days in 7 districts. The average number of CSEST used on a daily basis in 1988-89 was 34.5. In 1987-88, 54 CSEST taught an average of 2 days each. During the 1986-87 school year, 49 CSEST taught an average of 1.8 days.

A calculation of ratios of certified special education classroom teachers to substitute teachers by district indicate that for 1989-90, District 1700 had the best ratio of substitute teachers to full time classroom teachers; 1 CSEST to 3.9 classroom teachers. Four other districts with notable ratios were Districts 200 and 2800, 1:6; District 2400, 1:6.2; and District 100, 1:6.5. At the other end of the spectrum are District 2100 with zero CSEST and 185 teachers and District 2300, 1:148.

There were 1,991 certified special education classroom teachers, excluding resource rooms, in MCEA, in 1989-90. CSEST numbered 89. This is a ratio of 1:22. A comparison of ratios for 1989-90 (1:22), 1988-89 (1:23), 1987-88 (1:26), and 1986-87 (1:35), indicate that the ratios have improved. Given the number of school districts with zero CSEST, these ratios are not valid indicators of the actual need of CSEST within MCEA (see Appendix N).

Substitute teacher pay varied. The average daily rate for 1989-90 was \$49. The highest substitute teacher pay rate was \$64, paid by District 2400; the lowest rate of \$40 was paid by Districts 400 and 1900. Average pay for 1988-89 was \$1 less than 1989-90; 1987-88 was \$46, and 1986-87 was \$45.

District 2400 (11), District 900 (11), District 1200 (8), District 2600 (7), District 800 (7), and District 2800 (5) show the largest number of CSEST for 1989-90. The pay scale ranges from \$64 per day to \$40. Based on available figures, the same districts had the most CSEST for 1988-89 as well. Districts 2800, 800, 2600, and 1200 led in CSEST in 1987-88 and 1986-87. These four school districts have shown consistency in maintaining a higher number of CSEST employed over the 4-year period than their counterparts (see Table 22).

Figures were not available as to how many days regular education teachers substituted in special education classrooms or how many absences were uncovered. Demand figures are estimates by districts. The lack of data on which to base projected needs for the hiring of CSEST is apparent. However, three districts are in the process of tabulating use of CSEST for projection purposes for 1990-91. Demand for CSEST exceeds the supply by 68% for 1989-90 (see Appendix K).

A 10-page questionnaire was disseminated to CSEST within MCEA. Four pages requested personal data. Pages 5-10 consisted of questions requiring ranking of responses, questions, yes-no responses, choice response, recommendations, and comments (see Appendix B).

Table 22  
Comparison of Number of CSEST by District to Daily Substitute Pay Rate

District	1989-90		1988-89		1987-88		1986-87	
	CSEST	SP	CSEST	SP	CSEST	SP	CSEST	SP
2400	11	\$64.00	20	\$60.50	NA	\$57.00	NA	\$55.00
900	11	58.00	18	55.00	NA	55.00	NA	50.00
2500	2	56.00	NA	52.00	NA	48.00	NA	40.00
1400	6	55.00	NA	NA	NA	NA	NA	NA
1300	NA	55.00	NA	NA	NA	NA	NA	NA
1200	8	55.00	5	55.00	5	55.00	5	55.00
1000	3	55.00	2	55.00	2	55.00	2	55.00
2600	7	54.00	8	51.00	8	48.00	5	46.00
2000	0	52.00	NA	48.00	NA	45.00	NA	45.00
2800	5	50.00	10	50.00	15	45.00	15	45.00
2300	1	50.00	3	50.00	NA	40.00	NA	40.00
1700	0	50.00	NA	NA	NA	NA	NA	NA
800	7	50.00	6	50.00	11	50.00	5	50.00
700	0	50.00	NA	NA	NA	NA	NA	NA

Table 22--Continued

District	1989-90		1988-89		1987-88		1986-87	
	CSEST	SP	CSEST	SP	CSEST	SP	CSEST	SP
200	10	50.00	NA	50.00	NA	46.00	NA	45.00
2200	1	48.00	1	48.00	NA	42.00	NA	42.00
300	5	47.00	1	45.00	5	45.00	4	45.00
2700	2	45.00	NA	NA	NA	NA	NA	NA
1900	1	45.00	1	40.00	NA	40.00	NA	40.00
1500	4	45.00	NA	40.00	NA	40.00	NA	40.00
1100	0	45.00	NA	45.00	NA	45.00	NA	45.00
600	0	45.00	NA	NA	NA	NA	NA	NA
500	0	45.00	NA	45.00	NA	40.00	NA	40.00
100	2	45.00	2	45.00	1	45.00	1	45.00
2100	0	42.00	1	42.00	NA	NA	NA	NA
1800	2	40.00	4	40.00	4	38.00	4	38.00
400	1	40.00	2	40.00	NA	40.00	NA	40.00
1600	0	NA	NA	NA	NA	NA	NA	NA

Note. SP = substitute pay in dollars. CSEST = certified special education substitute teachers.  
NA = figures not available.

Descriptive statistics were calculated using the Statistical Package of Social Sciences, Personal Computer Plus (SPSS/PC+).

Median ranks were tabulated for four questions. Data from the entire population (EP) exclude one district which was on strike and one district which sent in the questionnaire after tabulation had occurred. Eight districts stated that they had zero CSEST for 1989-90 and for the past 3 years; therefore, these districts are not included in the tabulations of the questionnaire. Nineteen districts produced 50 respondents. The mean response was 2.63; 44 were usable.

#### Demographic Data

Ninety-six percent of the respondents were female. Seventy-five percent were married. Twenty percent were in the 35-39 age range; 18% in the 45-49 age range; 18% were in the 55-60 category or did not specify their age; ages 25-29 accounted for 16%. The 20-24 and 40-44 age ranges were both at 14%. CSEST were certified in one or more disability areas (see Tables 23, 24, 25, and 26). Seventy percent of the respondents hold a bachelor's degree; 22% a master's; 8% master's plus.

Based on Table 24, the highest absentee rate was in the MI and LD classrooms across MCEA. CSEST were used 68% of the time on the elementary level and 72% of the time with age groups 5-12 (see Tables 25 and 26).

Eighty-two percent of the respondents had been on the substitute list 4 years or less; 26% of the 82% had been on the list only 1 year. These figures are reported in Table 27.

Table 23

## Certifications of Respondents in Percents

MI	EI	POHI	VI	HI	LD
49	22	11	4	11	24

Note. MI = mentally impaired. EI = emotionally impaired. POHI = physically or otherwise health impaired. VI = visually impaired. HI = hearing impaired. LD = learning disabled.

Table 24

Disability Areas in Which CSEST Substitute  
Taught by Percent

MI	EI	POHI	VI	HI	LD
47	31	8	2	10	55

Note. MI = mentally impaired. EI = emotionally impaired. POHI = physically or otherwise health impaired. VI = visually impaired. HI = hearing impaired. LD = learning disabled.

Table 25

Levels Taught Most Often by Percent Within  
Middle Cities Education Association

Elementary	Middle school	Jr. high	Sr.	Post
68	24	24	24	6

Table 26

## Age Groups Taught Most Frequently by Percents

5-12	13-14	15-16	17-18	Over 18
72	34	24	22	8

Eighty percent of the respondents substitute taught in the disability area in which they were most comfortable (see Table 28). They also taught in the age group they preferred (see Table 29).

Eighty-one percent substituted in their certification areas. On the average, 50.3% taught in special education but not in their field (see Table 30).

In a given school year the median number of buildings CSEST taught in was seven. Forty-nine percent stated that they substitute taught in the district in which they lived. Fifty-two percent substitute taught in one district for the school year 1989-90, 21% in two districts, 11% in four districts, 7% in three, and 7% in five districts. One individual worked in 10 districts.

On the average, 39% of CSEST in MCEA live in the district in which they teach most often. Eighty-four percent of the respondents were not able to state enrollment figures of the school district in which they most often taught.



Table 27  
 Years CSEST Were on Substitute List  
 by District by Percent

District	Years									
	1	2	3	4	5	6	7	8	9	10
100	100									
200	100									
300	50	25		25						
400	100									
900	67		11				11		11	
1000			100							
1200	50	17	33							
1300										
1400	100									
1500	100									
1800	100									
2300		100								
2400	25	50				25				
2500	50			50						
2600		33			33			33		
2700	100									
2800	100									

Table 28  
Substitute Teaching in Certified Areas  
by District by Percent

District	Percent		District	Percent	
	Yes	No		Yes	No
100	100		1400	100	
200	33	67	1500	100	
300	60	40	1800	100	
400	100		2300	100	
800	100		2400	75	25
900	100		2500	100	
1000	100		2600	100	
1200	86	14	2700		100
1300	50	50	2800	100	

#### Summation of Questionnaire Responses

The questionnaire addressed factors that attract CSEST to specific school districts. A summation of responses for the entire population (EP) of the Middle Cities Education Association is presented. Table 31 provides the median rank for Questions 1, 2, 3, and 10.

1. What attracted you to substitute teach in special education in the school district in which you substitute the most often? Rank items in each category, i.e., economic, social, cultural, and

Table 29

Certified Special Education Substitute Teachers Teaching in  
Preferred Age Group by District by Percent

District	Percent	District	Percent
100	100	1400	100
200	100	1500	100
300	80	1800	100
400	100	2300	100
700	50	2400	100
900	100	2500	100
1000	100	2600	100
1200	67	2700	100
1300	100	2800	0

communication, if they are applicable: (1) most important; (5) least important:

Economic factors: Salary was ranked most important with a median rank of 1.

Social factors: Spouse's job in this area was most important with a median rank of 2.

Cultural factors: Important was the opportunity for higher education with a median rank of 2.

Communication factors: Communication factors had a response rate of zero. Only two respondents were recruited and neither one had been subjected to such items as in this question.

Table 30

Certified Special Education Substitute Teachers Teaching in  
Areas Other Than Their Certification  
by District by Percent

District	Percent	District	Percent
100	50	1400	-
200	67	1500	-
300	-	1800	-
400	-	2300	-
700	50	2400	25
900	50	2500	50
1000	-	2600	67
1200	43	2700	-
1300	-	2800	-

Note. Absence of a percentage indicates information was unavailable.

Table 31

Certified Special Education Substitute Teacher  
Questionnaire: Median Rank

Variable	Median rank	Label
<u>Economic factors</u>		
Salary	1	Econ--salary
Benefits		Econ--benefits
Hours	2	Econ--hours of work
Other	2	Econ--other factors

Table 31--Continued

Variable	Median rank	Label
<u>Social factors</u>		
Climate	4	Social--climate
Recreation		Social--recreation
Spouse's job	2	Social--spouse job
Relative	5	Social--parents, rel, f
Child care		Social--child care av
<u>Cultural factors</u>		
Location	3	Cultural--location st
Culture		Cultural--events
Higher ed.	2	Cultural--higher ed o
Transportation		Cultural--city transp
Cultural other		Cultural--other
<u>Communication factors</u>		
Pleasant		Communication--recrui
Brochure		Communication--brochu
Newspaper		Communication--newspa
TV ad		Communication--tv com
Billboard		Communication--billbo
Communication other		Communication--other
<u>Influences</u>		
Job avail.	1	Full time job unavai
Part time	2	Preferred part-time

Table 31--Continued

Variable	Median rank	Label
Children		Pref hrs children in
Info. other		Other--specify
<u>Recruitment</u>		
Q3A	1	Rectmt--recruiter per
Q3B		Rectmt--recruiter tho
Q3C		Rectmt--prof magazine
Q3D		Rectmt--newspaper ad
Q3E		Rectmt--radio ads
Q3F		Rectmt--tv ads
Q3G		Rectmt--rec mail adve
Q3H		Rectmt--referred by f
Q3Other		Rectmt--other
<u>School district</u>		
Admin	2	Admin--administrator
Staff help	1	Staff helpful
Staff friendly	2	Staff friendly
Plans	2	Lesson plns avail
Good pay	7	Best paying dist
Policies	5	Rules, policies, proc
Materials	5	Materials available
Students	6	Students well-behave
Child care	9	Child care available

Table 31--Continued

Variable	Median rank	Label
Other		District--other
<u>City itself</u>		
Friendly	6	City--people friendly
House avail.		City--housing avail
House afford.		City--housing afford
Cultural act.		City--cultural act av
Recreation		City--recre act avail
Close to home	1	City--school close hom

Note. Categories which do not show a rank were left blank by respondents.

2. What influenced you to substitute teach in special education? Rank the factors as to which items are (1) most important to (4) least important.

The unavailability of a job had a median rank of 1. This implies that CSEST took a substitute teaching position because full-time employment was unavailable.

3. What recruitment methods attracted you to this school district? Rank (1) most important to (9) least important.

A median rank of 1 for personableness of recruiter was acquired from the two individuals who had been recruited.

4. I applied for a substitute teaching position without being influenced by the items in #3.

Four percent responded that they had been influenced by recruiter methods in their selecting to substitute teach in this school district--recruiter personableness.

5. For each pair of items below, check the one that would be your best resource if seeking a substitute teaching position. The responses were as follows:

A. Newspaper ad or professional magazine: Newspaper ad was the best resource with a 57% response rate.

B. Brochures or professional magazines: Brochures was the best resource with a response rate of 63%.

C. Newspaper ad or brochures: Newspaper ad was the best resource with a response rate of 70%.

D. TV ad or billboard: TV ad was the best resource as reported by 68% of the respondents.

E. Ed fair or TV ad: Ed fair was the best resource with a response rate of 75%.

F. Billboard or ed fair: Ed fair was the best resource with a 66% rate of response.

G. Radio or TV ad: Radio was the best resource with a response rate of 68%.

6. Circle the appropriate response: (a) I was recruited.  
(b) I was not recruited.

Ninety-six percent of the CSEST were not recruited.

7. If you were recruited, were you told of any of the following opportunities available to substitute teachers?



Two respondents were told of such opportunities as (a) an orientation to the school district, (b) tours of the district, (c) being assigned a buddy, (d) the opportunity to attend staff meetings, (e) the opportunity to participate in staff development, and (g) the opportunity to participate in continuing education courses.

8. How were you made aware of this district's need for certified special education substitute teachers? (a) A college professor told me about the need. (b) Four respondents called personnel departments to apply for full-time jobs and were asked to go on the sub list since a full-time job was unavailable. (c) A secretary called me; an administrator called me to see if I was interested in teaching. (d) Staff friends suggested I call the local district. (e) A friend suggested I call since I'm retired.

9. Ninety-six percent stated they would substitute teach again in the district in which they substitute taught most often.

10A. CSEST were given the opportunity to rank what influenced them to teach in a particular school district. The helpfulness of the staff received a median rank of 1.

10B. In response to attracting factors of the city itself, proximity of the school in which they would substitute teach to home resulted in a median rank of 1.

11. To improve recruitment activities to attract CSEST, the following were suggested: (a) increase pay and benefits, particularly for long-term CSEST; (b) recruit on college campuses and let prospective teachers know the substitute need exists; (c) advertise in newspaper ads and professional magazines, on radio and television,

and use Western Michigan University's weekly placement bulletin; (d) provide potential CSEST with information regarding all services available to them; (e) offer in-services to CSEST such as "make it and take it" workshops; (f) staff, including teachers and aides, should be more helpful to the CSEST; (g) introduce the substitute office "voice" to CSEST during orientation; (h) inform CSEST of availability of full-time positions and recruit from pool of substitutes; (i) offer higher pay to CSEST than to regular substitutes; (j) teaching materials should be available and accessible; (k) emphasize part-time employment to reach mothers of young children; and (l) develop a "mini-contract" for CSEST.

In summary, demographic data indicated that record keeping systems, including retrieval systems, were predominantly absent within MCEA. Information regarding the use of CSEST varied within districts. In some districts the number of days CSEST taught were not tabulated in the personnel department but in individual buildings. In most districts, information was not kept for more than the immediate school year and was not used as data to rationalize projections of need for CSEST for the upcoming school year.

There is a difference between the existing need and the availability of CSEST in the MCEA. Figures (see Appendix K) indicate that only 34% of the need is being addressed. This shortage of supply of CSEST is substantiated by Rose and Beattie (1986). A comparison of the availability of CSEST and district size in MCEA to this study demonstrates inconsistencies--inconsistencies, however, that indicate the growth of the shortage of CSEST. Rose and Beattie indicated that

4.4% of the districts had zero CSEST. Within the MCEA for the 1989-90 school year, 29% of the districts had zero CSEST.

The largest districts in MCEA employed on a daily basis an average of 4.4 CSEST compared to the availability of 50 CSEST in 38.2% of the larger districts in the Rose and Beattie (1986) study. One-fifth of the larger school districts in MCEA averaged 10.6 CSEST on duty daily. The smaller districts in MCEA employed an average of 3.3 CSEST on a daily basis compared to 10 CSEST in the Rose and Beattie study.

Low enrollment in teaching institutions (Table 7), retirements, attrition, mobility, and resignations have depleted the teaching supply. Roth (1981), Bird (1985), Graybeal (1983), Manlove and Elliott (1979), Meara (1983), and Tooredman (1987) have documented the shortage of certified special education teachers in specific disability categories, that is, learning disabilities. This shortage implies a shortage of CSEST, although documentation is not available to substantiate shortages in CSEST for specific disabilities in MCEA.

The attractiveness of the district to the perspective CSEST equals the desirability multiplied by their belief about each outcome associated with membership within that school district or organization (Wanous et al., 1983). The attractors are the variables that influence CSEST to substitute teach in the MCEA. These attractors fall into the following categories: economic, social, cultural, communication, recruitment methods, school district, and city influences (see Appendix B).

Respondents ranked the importance of economic, social, cultural, and communication factors as attractors to substitute teach in public school districts within the MCEA. Respondents identified salary, spouse's job being in the (geographic) area, opportunities for higher education, helpfulness of staff, and being able to substitute teach close to home as attracting factors. Consistent with Herzberg's (cited in Owens, 1987) work and Sergiovanni's (cited in Owens, 1987) comments, these are satisfiers and dissatisfiers on the job. Comments and recommendations by CSEST support Herzberg's motivator-maintenance theory (Figure 2). The relationship between job satisfaction and effectiveness has not been measured in this study. The only indication of effectiveness would be the continued employment of the CSEST.

The use of different communication factors, such as, pleasantness of the recruiter, brochures, and newspaper ads, appear not to have had any influence on the CSEST decision to substitute teach. The fact that a full-time teaching position was unavailable was the determining factor for the individuals to seek employment as substitute teachers.

Respondents identified salary as the most important attracting factor when compared to the other economic factors. The average salary in MCEA was \$49.48, with a median of \$50.00. The average daily rate has increased the past 3 years (Rose & Beattie, 1986) by approximately \$14.

The human capital theory (Eberts, 1982) is reinforced by observing the number of CSEST in relationship to daily pay rate and

educational levels of the CSEST in specific districts (see Table 32). This theory states that highly skilled individuals will go where the money is available and where they can expand on personal growth. Sixty-one of the CSEST were paid \$50 and above on a daily rate in the MCEA. Twenty-eight CSEST were paid at \$50 and below.

Table 32

Comparison of Select School Districts: Daily Pay Rate and Educational Degrees and Number of CSEST for 1989-90

District	CSEST	SP	Degrees by percent
2400	11	\$64.00	75% Master's plus 25% Master's
900	11	\$58.00	11% Master's 87% Bachelor of arts
200	10	\$50.00	100% Bachelor of arts plus certification in special education
100	2	\$45.00	100% Bachelor of arts

Benefits were not ranked as important by CSEST in MCEA. Fringe benefits were absent in over 83% of the districts participating in the Rose and Beattie (1986) study.

Recommendations by CSEST emphasized equity as did Kraft (1980) as attractors for recruiting and retaining qualified substitute teachers.

Wanous's et al. (1983) review of the expectancy theory that attractors do affect a job applicant's decision is somewhat supported. However, it is apparent based on the respondents that

recruitment activities were not an attracting factor for the majority of the CSEST. Recruiter characteristics (recruiter personableness) was ranked important by the two respondents who were recruited. Both recruits concurred with Taylor and Bergmann (1987) and Rynes et al. (1980) regarding influence of behavior of the recruiter, taking the attitude that behavior is synonymous with personableness. Caution must be exhibited here as these statements are only based on two CSEST responses.

Job attributes, items ranked in Table 31, and particularly the items identified as "school district," were important enough for the CSEST to rank all items, the exception being "other." Staff helpfulness received a median rank of 1 with administrator helpfulness, staff friendliness, and availability of lesson plans clustered in importance with a median rank of 2. A median rank of 2 was acquired for availability of lesson plans with rules, policies, and procedures and availability of materials with a median rank of 5. These figures are somewhat inconsistent with Deay and Bontempo (1986).

In reference to Powell (1984) and Howlett (1981), college students are not being made aware of the availability of jobs as was suggested in the recommendations from the questionnaire. Recruitment has not incorporated modern day technology and techniques to influence perspective educators.

First-year CSEST did not rank good pay (salary); rules, policies, and procedures; availability of materials; student behavior; or child care availability any higher than did other respondents. This is inconsistent with Powell (1984) and Rynes and Miller's (1983) view

that attributes of the job are more influential for the new entrant into the job market. One of the two recruits stated that good pay was the most influential in helping them make a decision to work in their respective district.

All CSEST in MCEA were certified in special education. Each district reported, however, that due to the lack of CSEST, regular education teachers or teachers certified in a different disability would be called to substitute teach. None of the 28 school districts could require special education certification nor certification in a particular category because of the limited supply of teachers in general. This is inconsistent with the findings of Rose and Beattie (1986) where some districts required both of the above although 4.4% of the districts did not have adequate substitute coverage.

The ratio of CSEST to certified special education classroom teachers in some districts in MCEA is indicative of the need for CSEST. The fact that the State Department of Education (1989), state of Michigan, provided districts with funds to pay regular education teachers to substitute teach in special education is an indication of a shortage of CSEST.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### Conclusions

The objective of this study was (a) to determine the difference between supply and demand of certified special education substitute teachers in Middle Cities school districts in Michigan and (b) to determine what factors attract certified special education substitute teachers to teach in the public schools.

Based on data in Appendix K, the demand for certified special education substitute teachers (CSEST) exceeds the supply within the Middle Cities Education Association. Implications are that teacher or CSEST recruiting programs have been ineffective. This is supported by the evidence that only two CSEST respondents were recruited and the fact that eight of the school districts had difficulty filling permanent teaching positions much less having CSEST. A second implication is that the absentee rate of teachers in a specific disability area was greater than the availability of substitutes certified in a given disability. Coupled with too few CSEST, substitutes were used where needed regardless of their certification (see Table 30).

Inferences can be gleaned from the median ranked attracting factors. Implied in the median rank of 1 for salary is that CSEST salary does not attract males, as females continue to dominate the



teaching profession evidenced by the demographic data; 96% of the CSEST were female.

Female respondents are as mobile as are their spouses as evidenced by responses to the importance of the spouse's job being in the (geographic) area and by the number of years CSEST have been on the substitute list. The lack of influence by other family members is evident.

Hours of work, with a median rank of 2, may offer opportunity for maintaining a second job, pursuing leisure activities, higher education opportunities, doing chores, or other activities of interest. Other economic factors focused on gas consumption and time to get to and from work.

Considering that 70% of the respondents held a bachelor's degree and realizing that additional credits are required to retain certification, to acquire endorsements, or to earn an additional degree, the median rank of 2 for the opportunity for higher education experiences could have been anticipated.

Location in the state, with a median rank of 3, was of some importance. Location could indicate access to a full-time job, a better salary, more and better job opportunities for self and the spouse, or more opportunities to pursue studies at a university. Public schools in which to substitute teach could be closer to home if one were located in a medium size city with the above opportunities as opposed to living and teaching in a rural area. Job availability may be greater due to the number of employees in a large school system, given mobility, attrition, and the progressive nature

of districts, adding teaching positions to meet the needs of challenging students.

The ranking of responses to what is important in the school district itself implies that public relations skills are important when communicating with CSEST. The ranking of the availability of lesson plans implies the desire to continue with the teacher's instructions and daily routine.

Newspaper ads and education (ed) fairs were checked as the best sources of information regarding substitute teaching positions. Education fairs are usually held to attract full-time teachers to a school district. They generally reach a select, prescreened group of candidates who have previously applied to the district for a position. One could assume if a job were not available in the teacher's field of certification, or if the recruiter did not entertain hiring the individual for a full-time position, that a substitute teaching position might be discussed. Newspaper ads may reach more candidates, such as individuals raising a family, retired individuals, or those who are working in a different profession; all whose interest may be sparked by the newspaper ads.

Most CSEST were referred to school districts by friends or applied for a teaching position and found no vacancies. A substitute position offered to them was viewed as a way to become known in the district and to possibly increase their chance for hire in a permanent position in the future.

Ninety-six percent of the CSEST implied that they were satisfied teaching in the district in which they taught most often. This is a

tribute to those school districts.

Improvements suggested by the CSEST in regards to recruiting activities indicate that they want to be treated equally and professionally by building administrators and staff.

Because a segment of the population was not surveyed (those who are qualified but choose not to substitute teach), districts need to be warned that doing more of the same may not be defensible in recruiting qualified substitutes. A study of qualified, but not substituting teachers, is in order.

#### Recommendations

The demand for CSEST exceeds the supply within the Middle Cities Education Association. As evidenced in Appendix K, aggressive recruiting programs should be implemented to encourage high school and college students to pursue a career in special education with emphasis on alternatives to full-time teaching, specifically substitute teaching. A shortage exists specifically in the learning disabilities area as evidenced in Table 24. A multimedia approach, using newspaper ads, ed fairs, radio, and brochures, as evidenced by responses to Item 8 on the CSEST Questionnaire, should be used to reach nonpracticing teachers who are unemployed, teachers who have pursued another profession, retired teachers, and business persons. Incentives should be offered such as equitable pay, step increments, longevity, contracts, and staff development opportunities, including attending classes at a higher education facility.

CSEST substitute teach for more than one year in some school districts as evidenced in Table 27. Notification of permanent teaching positions should be posted in each school building in a location convenient for viewing by CSEST providing them the opportunity to apply for such position(s). An evaluation procedure should be used as documentation of performance and reviewed when a CSEST applies for a permanent position.

Recruiting efforts should focus on the convenience of traveling in the community, the close proximity of schools to home as evidenced by Tables 22 and 31. The person responsible for assigning substitutes on a daily basis should be made aware that CSEST prefer assignments close to home.

Recruiter personableness is a factor of influence on CSEST accepting substitute teaching positions. Prospective recruiters should be sensitized to this situation through staff development opportunities focusing on individual and group dynamics, introduction to and role playing of situational interviews, and introduction to the various ethnic characteristics that could cause a misunderstanding by either party during an interview.

Once CSEST are attracted to a school district, it is imperative for the CSEST to feel welcomed and appreciated for their talents in the varied locations they experience as evidenced by data in Table 22. Building staff should be sensitized to a substitute's role through staff development opportunities, such as peer interaction, consulting skills, and peer coaching.

CSEST often are excluded from staff meetings, in-services, and workshops. Based on recommendations suggested by CSEST, in-services emphasizing building or district expectations should be conducted, as should "make it and take it" workshops.

Districts do not have a consistent record keeping system to record use of CSEST as evidenced by Appendix M. Districts need to develop a record keeping system to include information regarding CSEST so as to be able to review the qualifications and performance of CSEST and to project need for their services for the following year. Information, at a minimum, should include degree; certification(s); how often they substitute teach in their certification area, other special education areas, and general education; how often they are requested by a building; availability; evaluations; and type of last assignment (temporary contract, long term, short term, or daily assignments). This information would provide a profile for reference for consideration for full-time placement, assignment, reassignment, training or retraining needs, or exit.

CSEST often substitute teach outside their certification area as evidenced by Tables 28 and 30. Data are not available as to their effectiveness in these areas. An evaluation should be conducted each time a certified special education substitute teacher is placed in an assignment outside their certification area. The evaluation will provide the opportunity to identify areas of knowledge and skill and to observe application of such. Course work and in-services should be provided for those needing to acquire more information about characteristics of students in other disability categories.

CSEST initiate contact with school systems because they are seeking a full-time position as evidenced by responses to Item 6 of the CSEST Questionnaire. When it is evident that a full-time position is unavailable, based on Table 31, incentives in the form of salary, opportunities for higher education, and closeness of school placement to home should be used as attractors for recruiting CSEST.

#### Recommendations for Further Study

There is a difference between the supply and demand of CSEST in the Middle Cities Education Association in Michigan. Topics for further study are as follows:

Based on the literature review regarding the effect of substitute teachers on student learning, attitudes towards substitute teachers and their perceptions of their status as substitutes, and the State Newsletter: SES Official Interpretation (Michigan Department of Special Education, 1989) providing funding for regular education teachers to substitute teach in special education due to the shortage of CSEST, a study should be conducted to determine how important it is to have certified special education substitute teachers substituting in special education.

Can only a substitute teacher certified in special education provide a quality learning situation for an identified handicapped youngster? Does certification insure quality instruction? Is it or is it not important to have consistency in programming? Who is being penalized if quality instruction is not provided? Can general education teachers provide quality instruction to handicapped youth? Can

school districts rationalize to taxpayers that their children's education isn't important on days when the teacher is absent?

Assuming the difference between supply and demand continues, how are school districts going to insure that students receive quality instruction for the approximate 10 school days classroom teachers are absent. Considering a youngster is in school K-12 and misses zero days himself, the possibility of his teachers being absent 130 days over that period of time is cause for concern. Between his absences and the projected absences of his teachers, he could miss a school year of instruction. Will school districts have to begin organizing structured educational programs for substitutes? Will districts, universities, the State Department of Education offer incentives for teachers to become certified in special education.

Is the shortage of CSEST commensurate to that of regular education substitutes? Is there a discrepancy? How can this information assist in remedying the shortage of CSEST? What alternatives are there to relying on CSEST?

Given that many of the school districts within MCEA have a shortage of special education classroom teachers, why is it that the majority of CSEST are first year substitutes? Were these individuals considered undesirable to be hired as full-time special education classroom teachers but were considered qualified to substitute teach? Did they not have the necessary certification for the openings in a given school district?

The absentee rate of special education teachers appeared to be more prevalent in the MI and LD categories based on CSEST

assignments. Why? Is this because these self-contained programs are more prevalent? Are teachers on the elementary level ill more often because they are subjected to more childhood disease? Is the burnout rate greater for these disabilities? Are MI and LD classroom teachers confident that a certified special education substitute teacher will be called to teach when they are absent? Why?

Attracting factors were identified as salary, spouse's job being in the area, opportunity for higher education, staff helpfulness, and the school assignment being close to home. Best resources for information about substitute teaching jobs were listed as newspaper ads, educational fairs, radio, and brochures. Recruiter personableness was stated as an important factor by the two recruited CSEST. Consideration should be given to the development of a recruitment plan focusing on the results of this study, implemented and monitored, to determine if a recruitment plan would make a difference in the supply of CSEST in MCEA.

Further study might be focused on those who are qualified and choose not to substitute teach. This problem could also be approached from alternative theoretical perspectives such as Herzberg's (cited in Owens, 1987) theory (what turns people on about work) or a feminist perspective where career motivation is explored.



## APPENDICES

**Appendix A**

**Superintendents, Directors of Personnel, or Designees  
of Middle Cities Education Association**

Middle Cities Education Association  
Representative Members

Albion Public Schools, 401 E. Michigan Ave. 49224  
(Calhoun) (517) 629-9166  
Albert MeLoy, Superintendent

Ann Arbor Public Schools, 2555 S. State Rd. 48104  
(Washtenaw) (313) 994-2230  
Richard C. Benjamin, Superintendent  
Delores Dawson, Asst. Superintendent for Personnel Services

Battle Creek Public Schools, 3 W. VanBuren St. 49017  
(Calhoun) (616) 965-9500  
Dr. Mike Bitar, Superintendent  
Arthur W. Angood, Associate Superintendent, Administrative and  
Personnel

Bay City Public Schools, 910 N. Walnut St. 48706  
(Bay) (517) 686-9700  
Dale Martin, Superintendent  
E. Gonzales, Administrative Assistant for Personnel/Athletic  
Director

Benton Harbor Area Schools, 711 E. Britain Ave. 49022  
(Berrien) (616) 926-1141  
James Rutter, Superintendent

Buena Vista School District, Box 4829, Saginaw, MI 48601-4829  
Dr. T. C. Wallace, Superintendent

Flint P. O. Beecher Community Schools, 1020 W. Coldwater Rd., 48505  
(Genesee) (313) 785-4731  
Dr. Nathaniel Burtley, Superintendent

Flint P. O. Carman-Ainsworth Community Schools, G-3475 W. Court St.  
48532  
(313) 732-9770  
Zane H. Stein, Superintendent  
William H. Mangrum, Director, Personnel

Flint Kearsley Community Schools, G-4396 Underhill Dr. 48506  
(Genesee) (313) 736-8000  
Thomas M. Jones, Superintendent

Grand Rapids Public Schools, 143 Bostwick N.E.,  
(616) 456-4777  
Patrick Sandro, Superintendent  
Walter Burt, Director, Personnel

Highland Park Public Schools, 20 Barlett 48203  
(Wayne) (313) 252-0440  
Eldon Martin, Superintendent  
Ernest Harrison, Assistant Superintendent, Personnel/Labor Relations

Jackson Public Schools, 1400 W. Monroe St. 49202  
(Jackson) (517) 789-8144  
William Pearson, Superintendent  
Bruce Ambs, Director, Personnel/Labor Relations

Kalamazoo Public Schools, 1220 Howard St. 49008  
(Kalamazoo) (616) 384-0100  
Dr. Frank E. Rapley, Superintendent

Lansing Public Schools, 519 W. Kalamazoo 48933  
(Ingham) (517) 374-4005  
Dr. Richard Halik, Superintendent  
Eva Evens, Assistant Superintendent of Personnel

Midland Public Schools, 600 E. Carpenter 48640  
(Midland) (517) 631-2311  
Dr. Arthur C. Frock, Superintendent  
Patricia Stetler, Director of Personnel

Monroe Public Schools, 1275 N. Macomb 48161  
(Monroe) (313) 241-0330  
William Chamberlain, Superintendent  
Laurence MacQueen, Assistant Superintendent, Human Resources

Mt. Clemens Community Schools, 167 Cass Ave., 48043  
Dr. Blanche Fraser, Superintendent

Muskegon Public Schools, 349 W. Webster Ave. 49440  
(Muskegon) (616) 722-1602  
James G. Agee, Superintendent  
Ronald L. PreFontaine, Personnel Director

Muskegon Heights Public Schools, 2603 Leahy St. 49444  
(Muskegon) (616) 739-9302  
John E. Snyder, Superintendent

Niles Community Schools, 111 Spruce St.  
(616) 684-7150  
John Huffman, Superintendent

Plymouth-Canton Community Schools, 454 S. Harvey St. 48170  
(Wayne/Washtenaw) (313) 451-3120  
John M. Hoben, Superintendent

Pontiac School District, 350 Wide Track Dr. 48058  
(Oakland) (313) 857-8123  
Dr. La Barbara Gragg, Superintendent

Port Huron Area Schools, 2720 Riverside Dr. 48061  
(St. Clair) (313) 984-3101  
Larry J. Moeller, Superintendent

Saginaw Public Schools, 550 Millard 48607  
(Saginaw) (517) 776-0200  
Dr. Foster B. Gibbs, Superintendent

Southfield Public Schools, 24661 Lahser Rd. 48034  
(313) 423-8500  
Dr. Carl Hassel, Superintendent  
William Nunez, Associate Superintendent, Personnel

Traverse City Area Public Schools, Box 32, 49685  
(616) 922-6450  
Vernon Oxender, Superintendent  
Paul Katsason, Director Personnel Services

Waterford School District, 6020 Pontiac Lake Rd.  
Dr. Alton Cowan, Superintendent

Willow Run Community Schools, 2171 E. Michigan Ave., Ypsilanti 48198  
Dr. Youssef Yamtoob, Superintendent

Ypsilanti School District, 1885 Packard Rd. 48197  
(Washtenaw) (313) 482-6614  
Dr. James Hawkins, Superintendent  
Charles A. Duerr, Director, Personnel/Labor Relations

**Appendix B**  
**Certified Special Education Substitute**  
**Teacher Questionnaire**

Personal Data Form for Certified Special  
Education Substitute Teachers

1. Sex: Male \_\_\_\_\_ Female \_\_\_\_\_
2. Marital Status: Married \_\_\_\_\_ Single \_\_\_\_\_
3. Age: \_\_\_\_\_ 1. 20-24  
\_\_\_\_\_ 2. 25-29  
\_\_\_\_\_ 3. 30-34  
\_\_\_\_\_ 4. 35-39  
\_\_\_\_\_ 5. 40-44  
\_\_\_\_\_ 6. 45-49  
\_\_\_\_\_ 7. 50-54  
\_\_\_\_\_ 8. 55-60  
\_\_\_\_\_ 9. over 60
4. Special Education Certification:
- \_\_\_\_\_ 1. Mentally Impaired
- \_\_\_\_\_ 2. Emotionally Impaired
- \_\_\_\_\_ 3. Pre-Primary Impaired
- \_\_\_\_\_ 4. Physically or Otherwise Health Impaired
- \_\_\_\_\_ 5. Visually Impaired
- \_\_\_\_\_ 6. Hearing Impaired
- \_\_\_\_\_ 7. Learning Disabled
- \_\_\_\_\_ 8. Dually Certified: \_\_\_\_\_

5. Educational Degree: \_\_\_\_\_ 1. Bachelor's  
\_\_\_\_\_ 2. Master's  
\_\_\_\_\_ 3. Master's plus  
\_\_\_\_\_ 4. Specialist  
\_\_\_\_\_ 5. PhD or Ed.D
6. In what disability area do you most frequently substitute teach?  
\_\_\_\_\_ 1. Mentally Impaired  
\_\_\_\_\_ 2. Emotionally Impaired  
\_\_\_\_\_ 3. Pre-Primary Impaired  
\_\_\_\_\_ 4. Physically or Otherwise Health Impaired  
\_\_\_\_\_ 5. Visually Impaired  
\_\_\_\_\_ 6. Hearing Impaired  
\_\_\_\_\_ 7. Learning Disabled
7. At what grade level do you most frequently substitute teach?  
\_\_\_\_\_ 1. early elementary (pre-school)  
\_\_\_\_\_ 2. elementary  
\_\_\_\_\_ 3. middle school  
\_\_\_\_\_ 4. junior high school  
\_\_\_\_\_ 5. senior high school  
\_\_\_\_\_ 6. post high school



8. What age groups do you most frequently substitute teach?
- \_\_\_\_\_ 1. 1-4
- \_\_\_\_\_ 2. 5-12
- \_\_\_\_\_ 3. 13-14
- \_\_\_\_\_ 4. 15-16
- \_\_\_\_\_ 5. 17-18
- \_\_\_\_\_ 6. over 18
9. How many years have you been on the substitute list?
- \_\_\_\_\_ years
10. Do you substitute in the disability area in which you are most comfortable teaching?
- \_\_\_\_\_ yes \_\_\_\_\_ no
11. Do you substitute teach in your certification area(s)?
- \_\_\_\_\_ yes \_\_\_\_\_ no
12. Do you substitute teach in special education but not in your certification area?
- \_\_\_\_\_ yes \_\_\_\_\_ no
13. Do you substitute teach in the age range in which you are most comfortable?
- \_\_\_\_\_ yes \_\_\_\_\_ no
14. In a typical school year, in how many different school buildings do you substitute teach?
- \_\_\_\_\_

15. In a typical school year, in how many different school districts do you substitute teach?

\_\_\_\_\_

16. Do you live in the school district where you substitute most often?

\_\_\_\_\_ yes

\_\_\_\_\_ no

17. What is the total enrollment of the school district in which you most frequently get called to substitute?

\_\_\_\_\_

Certified Special Education  
Substitute Teacher Questionnaire

1. What attracted you to substitute teach in special education in the school district in which you substitute the most often? Rank items in each category i.e., economic, social, cultural, communication, if they are applicable: (1) most important; (5) least important:

A. Economic Factors

- \_\_\_\_\_ (a) Salary
- \_\_\_\_\_ (b) Benefits
- \_\_\_\_\_ (c) Hours of work day: \_\_\_\_\_ to \_\_\_\_\_
- \_\_\_\_\_ (d) Other: \_\_\_\_\_

B. Social Factors

- \_\_\_\_\_ (a) Climate
- \_\_\_\_\_ (b) Recreational activities
- \_\_\_\_\_ (c) Spouse's job is in this area
- \_\_\_\_\_ (d) Parents, relatives or friends are nearby
- \_\_\_\_\_ (e) Child care available

C. Cultural Factors

- \_\_\_\_\_ (a) Location in the state
- \_\_\_\_\_ (b) Cultural events
- \_\_\_\_\_ (c) Higher education opportunities
- \_\_\_\_\_ (d) City transportation system
- \_\_\_\_\_ (e) Other; specify \_\_\_\_\_

## D. Communication Factors

- \_\_\_\_\_ (a) Recruiter was pleasant
- \_\_\_\_\_ (b) Brochures, pamphlets
- \_\_\_\_\_ (c) Newspaper ad; professional magazines
- \_\_\_\_\_ (d) T.V. commercials
- \_\_\_\_\_ (e) Billboards
2. What influenced you to substitute teach in special education: Rank the factors as to which items are (1) most important to (4) least important.
- \_\_\_\_\_ a). full time job unavailable
- \_\_\_\_\_ b). preferred part-time work
- \_\_\_\_\_ c). preferred to work hours my children are in school
- \_\_\_\_\_ d). other; specify \_\_\_\_\_
- \_\_\_\_\_
3. What recruitment methods attracted you to this school district? Rank (1) most important to (9) least important.
- \_\_\_\_\_ a). recruiter was personable
- \_\_\_\_\_ b). recruiter thoroughly presented job information
- \_\_\_\_\_ c). brochures, pamphlets
- \_\_\_\_\_ d). professional magazine adds
- \_\_\_\_\_ e). newspaper adds
- \_\_\_\_\_ f). radio adds
- \_\_\_\_\_ g). T.V. adds

\_\_\_\_\_ h). received a mailing from district advertising  
job openings

\_\_\_\_\_ i). referred by friends

4. I applied for a substitute teaching position without  
being influenced by the items in # 3.

\_\_\_\_\_ yes                      \_\_\_\_\_ no

5. For each pair of items below, check the one that would  
be your best resource if seeking a substitute teaching  
position:

- |   |  |
|---|--|
| A. _____ Newspaper Ad<br>or<br>_____ Professional Mag | B. _____ Brochure<br>or<br>_____ Professional Mag. |
| C. _____ Newspaper Ad<br>or<br>_____ Brochure         | D. _____ T.V Ad<br>or<br>_____ Billboard           |
| E. _____ Ed Fair<br>or<br>_____ T.V. Ad               | F. _____ Billboard<br>or<br>_____ Ed Fair          |
| G. _____ Radio Ad<br>or<br>_____ T.V. Ad              | H. _____ Newspaper Ad<br>or<br>_____ Radio Ad      |
| I. _____ Radio Ad<br>or<br>_____ Brochure             |  |

6. Circle the appropriate response:

a). I was recruited                      b). I was not recruited

7. If you were recruited, were you told of any of the following opportunities available to substitute teachers? Check all that are appropriate:
- ☐ a). An orientation to the school district
  - ☐ b). Tours of the district
  - ☐ c). Being assigned a "buddy"
  - ☐ d). The opportunity to attend staff meetings
  - ☐ e). The opportunity to attend inservices
  - ☐ f). The opportunity to participate in staff development
  - ☐ g). The opportunity for continuing education course credit
  - ☐ h). Other; specify \_\_\_\_\_
8. How were you made aware of this district's need for certified special education substitute teachers?
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
9. If you were offered a special education substitute teaching position again in the district for which you are most often called, would you accept it?
- ☐ yes ☐ no
10. If you were to tell a friend what influenced you to substitute teach in your preferred school district, which items would be applicable? Rank (1) most important, (8) least important in each category of school district and the city itself.
- A. The school district
- ☐ 1). The administrator was helpful

- \_\_\_\_\_ 2). The building staff were helpful
- \_\_\_\_\_ 3). The building staff were friendly
- \_\_\_\_\_ 4). Organized lesson plans were available
- \_\_\_\_\_ 5). This was the best paying district
- \_\_\_\_\_ 6). School rules, policies, and procedures were available
- \_\_\_\_\_ 7). Materials were readily available
- \_\_\_\_\_ 8). Students were well-behaved
- \_\_\_\_\_ 9). Child care was available through the school district
- \_\_\_\_\_ 10). Other \_\_\_\_\_

B. The city itself

- \_\_\_\_\_ 1). The people were friendly
- \_\_\_\_\_ 2). Housing was available
- \_\_\_\_\_ 3). Housing was affordable
- \_\_\_\_\_ 4). Cultural activities were available
- \_\_\_\_\_ 5). Recreational activities were available
- \_\_\_\_\_ 6). The school in which I would substitute teach were close to my home.

11. What recommendations would you suggest to improve recruitment activities to attract certified special education teachers to your preferred school district?

---

---

12. Other comments:

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Thank you. Great job!

Mail to: Patsy Fox  
615 Comstock Blvd., N.E.  
Grand Rapids, MI 49505  
1-616-361-3642

Mail by: September 30, 1989



Appendix C

Letter to Directors of Personnel or Designee  
of the 28 Middle Cities Public Schools

September 10, 1989

Ms. Judy Dobbert,  
Assistant Superintendent  
Personnel Department  
Albion Public Schools  
401 E. Michigan Ave.  
Albion, Mi. 49224

Dear Ms. Dobbert,

The Special Education and Personnel Departments within the Grand Rapids Public Schools seek your assistance in (1) identifying successful recruiting activities used to attract certified special education teachers to substitute teach in your district and (2) determining the supply and demand of certified special education substitute teachers within the Middle Cities Education Association. The purpose of this solicitation is research that will become public. Your school district will be identified in the publication of results derived from the Certified Special Education Teachers questionnaire responses. This information will allow you to compare your recruiting activities and results to school districts of comparable size within the state.

Your superintendent of schools has been contacted. Approval has been granted for your participation in this study. All that is required of you is the following:

- (1) list the number of certified special education classroom teachers, all categories, K-12, employed for the following years:
  - a) 1989-90 \_\_\_\_\_
  - b) 1988-89 \_\_\_\_\_
  - c) 1987-88 \_\_\_\_\_
  - d) 1986-87 \_\_\_\_\_
- (2) list the number of certified special education substitute teachers, all categories, K-12, employed for the following years:
  - a) 1989-90 \_\_\_\_\_
  - b) 1988-89 \_\_\_\_\_
  - c) 1987-88 \_\_\_\_\_
  - d) 1986-87 \_\_\_\_\_

- (3) list the number of days certified special education teachers substitute taught in special education, all categories, K-12, for the following years:
- a) 1989-90 \_\_\_\_\_
  - b) 1988-89 \_\_\_\_\_
  - c) 1987-88 \_\_\_\_\_
  - d) 1986-87 \_\_\_\_\_
- (4) list daily substitute pay rate for the following years:
- a) 1989-90 \_\_\_\_\_
  - b) 1988-89 \_\_\_\_\_
  - c) 1987-88 \_\_\_\_\_
  - d) 1986-87 \_\_\_\_\_
- (5) disseminate the enclosed questionnaire to certified special education substitute teachers in your school district. A stamped, self-addressed return envelope is enclosed with each questionnaire. Stamped envelopes are enclosed for dissemination as well. A sample questionnaire is attached for your convenience. All responses will be coded and confidentiality will be maintained.

Receipt of the above information by September 30, 1989, will result in our demonstrated appreciation. A copy of a Recruitment Portfolio\* will be forwarded to you upon completion of this project, projected for spring of 1990.

Thank you for you cooperation.

Sincerely,

Patsy Fox, Principal  
615 Comstock Blvd., N.E.  
Grand Rapids, MI 49505  
(Office) 1-616-361-3642

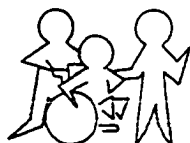
Enclosures: 4

\*Recruitment Portfolio in process of copyright by Patsy Ann Fox

**Appendix D**

**Letter to Certified Special Education Substitute Teachers  
of the 28 Middle Cities Public Schools**

Lincoln Campus...



going places.

## Lincoln Developmental Center

862 Crahen Road N.E.

Grand Rapids, Michigan 49506

Phone 957-7712

September 10, 1989

Dear Special Education Substitute Teacher,

The superintendent of your school district has agreed to participate in a study of the factors that attract certified special education teachers to substitute teach in this school district.

Please say "yes" to assisting me in this effort to develop a Recruitment Portfolio\* based on the results forth coming.

Your responses are confidential and will not be viewed by anyone in your school district.

Complete the enclosed questionnaire, return on or before September 30, 1989 in the stamped, self-addressed envelope.

Enclosed you will find fun stickers to use in your daily assignments as appreciation for your participation. Thanking you in advance for your cooperation.

Have a great day!

Sincerely,

Patsy Fox, Principal  
615 Comstock Blvd., N.E.  
Grand Rapids, MI 49505

Enclosures (2)

\* Recruitment Portfolio in process of copyright by Patsy Ann Fox

Appendix E  
Middle Cities Education Association  
Letter of Support



MIDDLE CITIES EDUCATION ASSOCIATION – SERVING STUDENTS COOPERATIVELY

517 Erickson Hall  
Michigan State University  
East Lansing, MI 48824-1034  
(517) 355-1720

*President:*  
William Pearson, Jackson

*Directors:*  
Carl Hassel, Southfield  
Frank Rapley, Kalamazoo  
James Agee, Muskegon  
Larry Moeller, Port Huron

*Executive Director*  
Michael A. Boulus

July 7, 1989

MEMORANDUM

TO: MCEA Superintendents and  
Directors of Special Education

FROM: Mike Boulus *MB*

RE: Dissertation Support Letter

I have discussed and reviewed the project being undertaken by Pat Fox for her dissertation. It is a worthwhile endeavor that, upon completion, should be of benefit to participating Middle Cities' districts. The results of her study will be shared with the appropriate Middle Cities' task forces.

I would ask your cooperation in supporting her efforts.

gc

---

Member Districts

Albion Public Schools  
Ann Arbor Public Schools  
Battle Creek Public Schools  
Bay City Public Schools  
Beecher Community Schools  
Benton Harbor Area Schools  
Buena Vista School District  
Flint Community Schools  
Grand Rapids Public Schools

Highland Park Public Schools  
Jackson Public Schools  
Kalamazoo Public Schools  
Lansing School District  
Midland Public Schools  
Monroe Public Schools  
Muskegon Public Schools  
Muskegon Heights Public Schools  
Niles Community Schools

Plymouth-Canton Community Schools  
Pontiac School District  
Port Huron Area School District  
Saginaw School District  
Southfield Public Schools  
Traverse City Area Public Schools  
Waterford School District  
Willow Run Community Schools  
Ypsilanti Public Schools

**Appendix F**

**Letter to Superintendents of the Middle Cities  
Education Association**



Lincoln Campus...



going places.

## Lincoln Developmental Center

862 Crahen Road N.E.

Grand Rapids, Michigan 49506

Phone 957-7712

*Mr. Lee*

Sept. 9, 1989

JOHN M. ROSEN,  
SUPERINTENDENT OF SCHOOLS  
PLYMOUTH-CANTON COMMUNITY SCHOOLS.  
454 S. HARVEY ST.  
PLYMOUTH, MI. 48170

Dear Superintendent,

The Special Education and Personnel Departments within the Grand Rapids Public Schools seek your assistance in (1) identifying successful recruiting activities used to attract certified special education teachers to substitute teach in your district and (2) for determining supply and demand of certified special education substitute teachers within the Middle Cities Education Association.

Join us in these efforts. As a Middle Cities Education Association member, completion of this information could lead to a "scoop" on the recruitment of future certified special education substitute teachers and will also give you an indication of your position in relationship to supply and demand of certified special education substitute teachers in other public school districts. This information could help you plan for the future.

If I do not hear from you within 7 days of the mailing of this letter, I will contact you to determine your willingness to participate in the study and to determine if we have permission to disseminate the attached letter, letter of inquiry and questionnaire. Attached find 1) a copy of the letter of inquiry to the Director of Personnel; 2) a copy of the letter to the certified special education substitute teachers; and 3) a copy of the certified special education substitute teacher questionnaire.

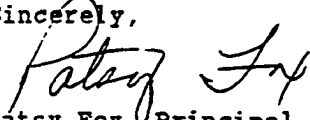
**RECEIVED SEP 18 1989**

Your support of this study is greatly appreciated. The results should be beneficial, particularly to the Personnel Department, for future recruiting activities. A Recruitment Portfolio will be developed based upon this information and will be shared with you by spring, 1990, in appreciation for your assistance.

Thank you for your cooperation.

If you have any questions, please call collect 1-616- 361-3642

Sincerely,

  
Patsy Fox, Principal  
615 Comstock Blvs., N.E.  
Grand Rapids, MI 49505

Enclosures (3)

**Appendix G**

**Letter to the Directors of Special Education Representing  
the 28 School Districts in the Middle Cities  
Education Association**

September 28, 1989

John Johnson  
Director of Special Education  
Albion Public Schools  
Albion, MI 49224

Dear Mr. Johnson,

This is to inform you that a study is being conducted in your school district to (1) identify successful recruiting activities used to attract certified special education teachers to substitute teach in your district and (2) determine supply and demand of certified special education substitute teachers within the Middle Cities Education Association.

This study has been approved by the superintendent of schools and supported by the executive director of the Middle Cities Education Association of which your district is a member.

As a courtesy, a copy of communications that have been distributed is enclosed. Do feel free to call me if you have any questions.

Sincerely,

Patsy Fox  
Lincoln Developmental Center  
862 Crahen Road, N.E.  
Grand Rapids, MI 49506

Enclosures (3)

#### Appendix H

List of Special Education Directors, Addresses, and  
Phone Numbers in the 28 School Districts Holding  
Membership in Middle Cities Education  
Association, State of Michigan

## Directors of Special Education or Designees

Albion Public Schools: Judy Dobbert, Assistant Superintendent  
401 E. Michigan Avenue  
Albion, MI 49224  
(517) 629-9166

Ann Arbor Public Schools: Dr. David Yamamoto  
Director of Pupil Personnel  
Harsley Elementary School  
825 Duncan  
Ann Arbor, MI 48103

Battle Creek Public Schools: Mr. Henry Eilers  
Special Education Director  
3 West VanBuren  
Battle Creek, MI 49017-3079

Bay City Public Schools: Sherry Kanaar  
Special Education Director  
1483 E. Midland Road  
Bay City, MI 48706  
(517) 686-3982

Beecher Community Schools: Mr. Don Ricks  
Special Education Director  
5285 Summit  
Flint, MI 48505

Benton Harbor Area Schools: Jerry Farwell  
Director of Special Education  
1651 Nickerson  
Benton Harbor, MI 49022

Buena Vista School District: Cheryl Gunderson, Director  
Special Education  
P.O. Box 4829  
Saginaw, MI 48601-4829  
(517) 777-7720

Flint Community Schools: Sherry Goodwin  
Director of Special Education  
923 E. Keasley  
Flint, MI 48502  
(313) 762-1097

Highland Park Public Schools: Dr. Thomas Lloyd  
Supervisor of Special Education  
30 Bartlett  
Highland Park, MI 48203  
(313) 252-0440, ext. 262

Jackson Public Schools: Steven Trahey  
Director of Special Education  
1400 West Monroe  
Jackson, MI 49202  
(517) 789-6138

Kalamazoo Public Schools: Marion Ross  
Director of Special Education  
1220 Howard  
Kalamazoo, MI 49008  
(616) 384-0167

Lansing School District: Dr. John Shinsky  
Director of Special Education  
519 W. Kalamazoo St.  
Lansing, MI 48933  
(517) 374-4300

Midland Public Schools: Larry Peters  
Director of Special Education/Special  
Services  
600 E. Carpenter St.  
Midland, MI 48640  
(517) 631-2311

Monroe Public Schools: Gary McLean  
Director of Special Education  
1275 North Macomb  
Monroe, MI 48161  
(313) 241-0330

Muskegon Public Schools: Sharon Prisliipsky  
Director of Special Education  
349 W. Webster  
Muskegon, MI 49440  
(616) 772-1602

Muskegon Heights Schools: John Egyed  
Director of Special Education  
2603 Leahy St.  
Muskegon Heights, MI 49444  
(616) 739-9302

Niles Community Schools: Bill Kennedy  
Supervisor of Special Education  
111 Spruce St.  
Niles, MI 49120  
(616) 683-0757

Plymouth-Canton Schools: Mr. Patrick O'Donnell  
Director of Special Education  
1024 S. Mill  
Plymouth, MI 48170  
(313) 451-6590

Pontiac School District: Mr. Allen Jones  
Director of Special Education  
600 Motor St.--Whittier St.  
Pontiac, MI 48053  
(313) 857-8315

Port Huron Area School District: Dr. Timothy Catalina  
Director of Special Education  
2720 Riverside Dr.  
Port Huron, MI 48060  
(313) 984-3101

Saginaw School District: Odahila Ranse  
Special Education  
550 Millard  
Saginaw, MI 48607  
(517) 776-0288

Southfield Public Schools: Mr. Joseph Neff  
Director of Special Education  
16299 Mount Vernon  
Southfield, MI 48075  
(313) 746-7621

Traverse City Area Public Schools: Dennie Meyers  
Director of Special Education  
P.O. Box 32  
Traverse City, MI 49685  
(616) 922-6244

Willow Run Community Schools: Dr. Stan Wixson  
2171 East Michigan Ave.  
Ypsilanti, MI 48198  
(313) 481-8230

Ypsilanti Public Schools: Iona Shea  
Director of Special Education  
210 W. Cross  
Ypsilanti, MI 48197  
(313) 482-8281



**Appendix I**

**Letter of Approval From Human Subjects  
Institutional Review Board**

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## WESTERN MICHIGAN UNIVERSITY

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Date: September 8, 1989

To: Patsy Ann Fox

From: Mary Anne Bunde, Chair *Mary Anne Bunde*

This letter will serve as confirmation that your research protocol, "A Study of Variables that Attract Special Education Substitute Teachers to Selected Urban School Districts in the State of Michigan", has been approved by the HSIRB. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the approval application. You must seek reapproval for any change in this design.

The Board wishes you success in the pursuit of your research goals.

xc: J. Sanders, Educational Leadership

Appendix J

Number of Certified Special Education Classroom Teachers,  
All Categories, K-12, by FTE, by District

Table 33

Number of Certified Special Education Classroom Teachers,  
All Categories, K-12, by FTE, by District

District	School year			
	1989-90	1988-89	1987-88	1986-87
100	13	14	14	11
200	60	64	NA	49
300	84	89	89	73
400	52	54	55	55
500	27	26	NA	NA
600	13	14	13	13
700	NA	20	NA	22
800	186	184	194	205
900	356	343	312	319
1000	28	31	35	37
1100	32	40	NA	41
1200	74	77	NA	66
1300	NA	128	NA	155
1400	45	45	NA	40
1500	30	29	28	28
1600	NA	22	NA	21
1700	27	27	23	23
1800	110	98	95	89
1900	47	48	49	45
2000	27	29	NA	60

Table 33--Continued

District	School year			
	1989-90	1988-89	1987-88	1986-87
2100	185	163	NA	156
2200	95	0	NA	89
2300	148	145	141	130
2400	68	68	74	70
2500	41	9	0	0
2600	198	163	149	139
2700	15	17	NA	20
2800	30	32	30	28
Totals	1,991	1,979	1,301	1,984

Note. NA = figures not available.

Note. Figures for 1987-88 are not complete. Several school districts did not have figures available for that year. The difference between 1989-90 and 1988-89 equals 12 teachers; 1988-89 and 1986-87, 5 teachers; and 1986-87 and 1989-90, 7 teachers.

**Appendix K**

**Certified Special Education Substitute Teachers:  
Supply and Demand for 1989-90**

Table 34

Certified Special Education Substitute Teachers:  
Supply and Demand for 1989-90

District	Supply	Demand
100	2	5
200	10	15
300	5	10
400	1	NA
500	0	3
600	0	NA
700	0	6
800	7	13
900	11	23
1000	3	NA
1100	0	15
1200	8	16
1300	NA	NA
1400	6	15
1500	4	5
1600	0	2
1700	0	6
1800	2	5
1900	1	2
2000	0	10
2100	0	20

Table 34--Continued

District	Supply	Demand
2200	1	30
2300	1	18
2400	11	NA
2500	2	12
2600	7	3
2700	2	2
2800	5	10
Totals	89	259

Note. All figures of demand are estimates. Districts without figures indicated they would take as many substitute teachers as they could get, but they were having difficulty filling classroom positions.



**Appendix L**

**Number of Days Certified Special Education Substitute  
Teachers Taught in Special Education,  
All Categories, K-12, by District**

Table 35

Number of Days Certified Special Education Substitute  
Teachers Taught in Special Education,  
All Categories, K-12, by District

District	School year			
	1989-90	1988-89	1987-88	1986-87
100	0	0	0	0
200	NA	NA	NA	NA
300	14	118	67	20
400	4	88	NA	NA
500	0	0	NA	NA
600	NA	NA	NA	NA
700	NA	NA	NA	NA
800	NA	NA	NA	NA
900	NA	2,160	NA	NA
1000	6	30	30	30
1100	NA	NA	NA	NA
1200	NA	NA	NA	NA
1300	NA	NA	NA	NA
1400	NA	NA	NA	NA
1500	17	84	23	37
1600	NA	NA	NA	NA
1700	NA	NA	NA	NA
1800	NA	NA	NA	NA
1900	0	17	0	0

Table 35--Continued

District	School year			
	1989-90	1988-89	1987-88	1986-87
2000	NA	NA	NA	NA
2100	NA	NA	NA	NA
2200	NA	NA	NA	NA
2300	1	157	NA	NA
2400	37	548	NA	NA
2500	4	0	0	0
2600	NA	NA	NA	NA
2700	NA	NA	NA	NA
2800	NA	NA	NA	NA
Totals	83	3,202	120	87

Note. NA = figures not available.

**Appendix M**

**Number of CSEST and Days Taught by Year by District**

Table 36  
Number of CSEST and Days Taught by Year by District

District	1989-90		1988-89		1987-88		1986-87	
	CSEST	Days	CSEST	Days	CSEST	Days	CSEST	Days
100	2	0	2	0	1	0	1	0
200	10	NA	NA	NA	NA	NA	NA	NA
300	5	14	1	118	5	67	4	20
400	1	4	2	88	NA	NA	NA	NA
500	0	0	0	0	NA	NA	NA	NA
600	0	NA	0	NA	0	NA	0	NA
700	0	NA	0	NA	0	NA	0	NA
800	7	NA	6	NA	11	NA	5	NA
900	11	NA	18	2,160	NA	NA	NA	NA
1000	3	6	2	30	2	30	2	30
1100	0	NA	0	NA	0	NA	0	NA
1200	8	NA	5	NA	5	NA	5	NA
1300	NA	NA	NA	NA	NA	NA	NA	NA
1400	6	NA	NA	NA	NA	NA	NA	37
1500	4	17	3	84	3	23	4	NA
1600	0	NA	0	NA	0	NA	0	NA
1700	0	NA	NA	NA	NA	NA	4	NA
1800	2	NA	4	NA	4	NA	4	NA
1900	1	0	1	17	0	0	0	0
2000	0	NA	NA	NA	NA	NA	NA	NA

Table 36--Continued

District	1989-90		1988-89		1987-88		1986-87	
	CSEST	Days	CSEST	Days	CSEST	Days	CSEST	Days
2100	0	NA	1	NA	NA	NA	NA	NA
2200	1	NA	1	NA	NA	NA	NA	NA
2300	1	1	3	157	NA	NA	NA	NA
2400	11	37	20	548	NA	NA	NA	NA
2500	2	4	0	0	0	0	0	0
2600	7	NA	8	NA	8	NA	5	NA
2700	2	NA	NA	NA	NA	NA	NA	NA
2800	5	NA	10	NA	15	NA	15	NA
Total	89	79	87	3,202	54	120	49	87

Note. NA = figures not available. Data were not readily available in most districts. Most districts stated that they did not keep this information.

Appendix N

Comparison of Certified Special Education Teachers  
Employed Full Time to Certified Special  
Education Substitute Teachers

Table 37

Comparison of Certified Special Education Teachers  
Employed Full Time to Certified Special  
Education Substitute Teachers

District	1989-90		1988-89		1987-88		1986-87	
	CT	CSEST	CT	CSEST	CT	CSEST	CT	CSEST
100	13	2	14	2	14	1	11	1
200	60	10	64	NA	NA	NA	49	NA
300	84	5	89	1	89	5	73	4
400	52	1	54	2	55	NA	55	NA
500	27	0	26	0	NA	NA	NA	NA
600	13	0	14	0	13	0	13	0
700	NA	0	20	0	NA	0	22	0
800	186	7	184	6	194	11	205	5
900	356	11	343	18	312	NA	319	NA
1000	28	3	31	2	35	2	37	2
1100	32	0	40	0	NA	0	41	0
1200	74	8	77	5	NA	5	66	5
1300	NA	NA	128	NA	NA	NA	40	NA
1400	45	6	NA	NA	NA	NA	NA	NA
1500	30	4	29	3	28	3	28	4
1600	NA	0	22	0	NA	0	21	0
1700	27	0	27	NA	23	NA	23	4
1800	110	2	98	4	95	4	89	4
1900	47	1	48	1	49	0	45	0



Table 37--Continued

District	1989-90		1988-89		1987-88		1986-87	
	CT	CSEST	CT	CSEST	CT	CSEST	CT	CSEST
2000	NA	0	NA	NA	NA	NA	NA	NA
2100	185	0	163	1	NA	NA	156	NA
2200	95	1	0	1	NA	NA	89	NA
2300	148	1	145	3	141	NA	70	NA
2400	68	11	68	20	74	NA	70	NA
2500	41	2	9	0	0	0	0	0
2600	198	7	163	8	149	8	139	5
2700	15	2	17	NA	NA	NA	20	NA
2800	30	5	32	10	30	15	28	15
Totals	1,991	89	1,905	87	1,301	54	1,709	49

Note. CT = full-time certified special education classroom teachers. CSEST = certified special education substitute teachers. These figures exclude resource room teachers.

**Appendix O**

**Thank-You Postcard**

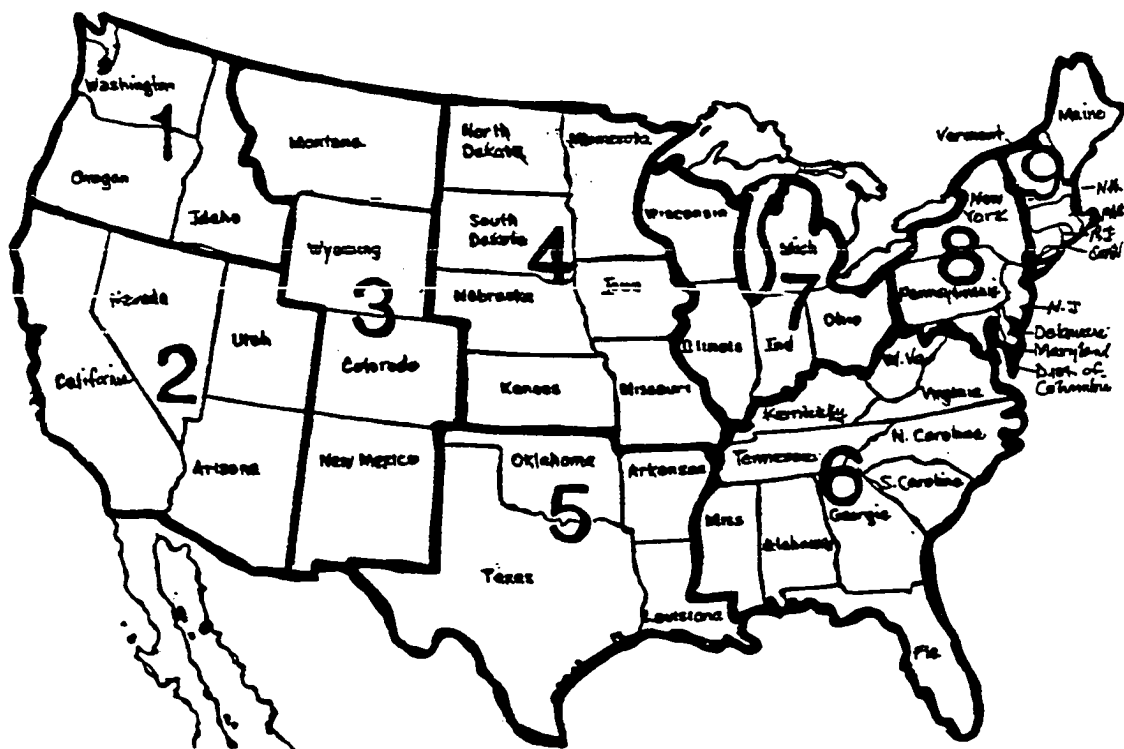
Thank you for your prompt response! The information you shared will be beneficial for determining the ratio of certified special education classroom teachers to certified special education substitute teachers within the Middle Cities Education Association. This information, along with the results of the questionnaire distributed to certified special education substitute teachers, should assist all of us in determining why a particular district seems to attract a greater ratio of substitutes. This information should assist all of us in future recruiting efforts.

Your assistance is greatly appreciated.

Sincerely,

Patsy Fox, Principal

**Appendix P**  
**Map of Regions**

MAP OF REGIONS

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