

State Special Education Funding Formulas and the Use of Separate Placements for Students with Disabilities: *Exploring Linkages*

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I. Introduction ---

Background

In the early 1970s, the legal system was key in shaping national policy regarding the education of children with disabilities. Court decisions in *PARC v. Commonwealth of Pennsylvania*, and *Mills v. Board of Education of the District of Columbia*, as well as the 1975 enactment of P.L. 94-142, the Education for All Handicapped Children Act (currently known as the Individuals with Disabilities Education Act, IDEA) reflected a social policy climate of access and equity. Since the enactment of IDEA, the number of school age students with disabilities receiving special education services has increased by over 40 percent, with over 5 million children, or about 10 percent of the school age population, receiving special education during the 1993-94 school year (U.S. Department of Education, 1995). The courts are again playing an active role in establishing policy for students with disabilities through their interpretation of one of the central tenets of P.L. 94-142, the least restrictive environment (LRE) provision, which requires that

to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and that special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. [34 CFR §300.550]

As noted by Osborne and DiMattia (1994), early court decisions tended to favor the delivery of specialized services over placement in less restrictive settings,

fearing the sacrifice of a quality education at the expense of mainstreaming. However, more recent court decisions suggest an emerging trend towards the full-time inclusion of students with disabilities in regular education classrooms. In *Oberti v. Board of Education of the Borough of Clementon School District* (1992), for example, the federal district court in New Jersey held that inclusion was a right, not a privilege, and *that the IDEA requires school districts to supplement and realign their resources to move beyond the systems, structures, and practices that tend to unnecessarily segregate students with disabilities* (as cited in Osborne and DiMattia, p. 11). Similar findings were issued in *Board of Education, Sacramento City Unified School District v. Holland* (1992).

Data reported by states to the U.S. Department of Education indicate, however, that although most students with disabilities spend their time within regular school *buildings*, nationally there has been little change over time in the proportion of students with disabilities who receive special education services within the regular education *classroom*. Data for 1991-92 indicate that 28 percent of school-age students with disabilities were educated in separate classes and separate facilities (U.S. Department of Education, 1994). Ten years earlier, 30 percent of students with disabilities were served in segregated environments (U.S. Department of Education, 1984).

In looking at placement patterns for the 1985-86 school year, Danielson and Bellamy (1989) found considerable variation across states in the use of separate placements for students with disabilities. In attempting to explain some of this variation, Hasazi, Johnston, Liggett, and Schattman (1994) found that six factors influence how states implement the LRE provisions: finance, organizational structure, advocacy, policy implementors, knowledge and values, and state/local context. In that study, finance emerged as “the cornerstone of influence” at *all* of the sites examined. Unfortunately, few studies have systematically investigated the relationship between fiscal policy and the use of separate placements for students with disabilities. In fact, few studies have examined the relationship between the use of separate placements for students with disabilities and any characteristics of states.

Purpose

The purposes of this paper are to explore the relationship between alternative types of state funding formulas and the use of separate placements for students with disabilities, and to identify other characteristics of states that might be

associated with the degree to which they use separate placements for the delivery of special education services. Three research questions are addressed:

- Which states are high and low users of separate placements for students with disabilities?
- Is there a relationship between the use of separate placements for students with disabilities and the type of funding mechanism used in a state?
- What other factors may be associated with a state's high or low use of separate placements for special education?

II. Method ---

A multifaceted approach was taken to this exploratory analysis. First, states were ranked on their use of separate placements (as described in more detail below), using state level data reported to the Office of Special Education Programs (OSEP) for the 1991-92 school year. Second, components of state funding systems described by O'Reilly (1993) were reviewed to identify any patterns or likely relationships between the type of special education funding formula used by a state and its use of separate placements. Third, state special education directors and other administrators in several states that were identified as high and low users of separate placements were interviewed by telephone to discuss suggested relationships. Finally, when these interviews revealed that demographic characteristics might play an important role in the use of separate placements, geographic and regional relationships were investigated.

Data on Separate Placements

In collecting placement data from states, OSEP defines eight educational environments: regular class, resource room, separate class, public separate day school, private separate day school, public residential facility, private residential facility, and homebound/hospital. Table 1 provides definitions for each of these placement categories. The percentage of students with disabilities served in each environment is commonly presented as a percentage of each state's total special education population. As pointed out by Danielson and Bellamy (1989), calculating a state's placement rate as a function of the total special education child count could make a state with a small overall special education child count appear to be serving a large number of children in the most restrictive settings. This would be particularly acute in states that serve a low overall proportion of students with the most mild disabilities. Thus, Danielson and Bellamy defined a

Table 1
Definitions of OSEP Placement Categories

Regular Class—includes children and youth with disabilities receiving special education and related services outside the regular classroom for less than 21 percent of the school day.

Resource Room—includes children and youth with disabilities receiving special education and related services outside the regular classroom for at least 21 percent but no more than 60 percent of the school day.

Separate Class—includes children and youth with disabilities receiving special education and related services outside the regular classroom for more than 60 percent of the school day. This does not include pupils who receive education programs in public or private separate day or residential facilities.

Public Separate Day School—includes children and youth with disabilities receiving special education and related services in public separate day school facilities for greater than 50 percent of the school day.

Private Separate Day School—includes children and youth with disabilities receiving special education and related services in private separate day school facilities for greater than 50 percent of the school day.

Public Residential Facilities—includes children and youth with disabilities receiving education programs in public residential facilities for greater than 50 percent of the school day.

Private Residential Facilities—includes children and youth with disabilities receiving education programs in private residential facilities for greater than 50 percent of the school day.

Homebound/Hospital Programs—includes children and youth with disabilities receiving education programs in homebound/hospital placements, including hospital programs or homebound programs.

Source: U.S. Department of Education, Office of Special Education Programs.

cumulative placement rate for each state as the number of special education students, aged 6 through 17 years old, who were served in a selected educational placement and all more segregated placements, divided by the state's total population in that age group. As they further explained, using the total school-age population as a denominator controls to some extent for differences among states in their special education eligibility requirements, which affect the total number of children with disabilities who receive special education services within each state.¹

The percentage of students with disabilities served in each of the eight educational environments as a function of each state's total school age population is provided in table 2. The table indicates wide variability across states in the proportion of all students served in each of the placement categories. For example, the proportion of students served in regular classes ranges from a low of 0.52 percent in Arizona to a high of 9.27 percent in Massachusetts. Somewhat less variability exists in the proportion of students served in separate classes, ranging from a low of 0.07 percent in Wyoming to a high of about 4 percent in New Jersey.

Unfortunately, some of the existing variability across states may be associated more with inaccurately reported data than with differences in the actual use of the various educational environments. A 1989 report on the validity and reliability of the placement data (Decision Resources Corporation) found evidence that some state and local education agency personnel report placement data to OSEP that are not consistent with the OSEP instructions. This is particularly problematic for data related to regular class and resource room placements, where many state definitions do not conform to the percentages provided in the OSEP data reporting requirements. The data on use of home/hospital placements are also questionable due to wide variations in state applications of this category. Because the data on placements in separate classes, separate schools, and residential facilities appear to be the most valid and reliable, the analyses presented here focus on state use of these separate placements and facilities. However, it is important to keep in mind that most

¹It is important to note that a major weakness of Danielson and Bellamy's approach is that states that serve a high proportion of their school-age students in special education can appear to be serving the highest proportion of students across some or all settings. For example, using their methodology, Massachusetts, which has among the highest percentages of students served in special education, also has the highest proportion served in regular classrooms. It is impossible to determine whether this high proportion is a function of the large number of students served in special education or whether it can be attributed to other factors such as a statewide commitment to inclusive education.

Table 2
Percentage of Students with Disabilities Age 6-17 (Based on Resident Population)
Served under IDEA, Part B, and Chapter 1 of ESEA (SOP) in Different Educational
Environments, by State: 1991-92

State	All Disabilities							
	Regular Class	Resource Room	Separate Class	Public Day School	Private Day School	Public Residential School	Private Residential School	Homebound Hospital
Alabama	5.56	2.97	2.76	0.12	0.01	0.06	0.02	0.03
Alaska	4.94	4.01	1.93	0.07	0	0.02	0	0.01
Arizona	0.52	5.33	1.67	0.19	0.05	0.03	0.08	0.02
Arkansas	3.93	4.13	1.31	0.04	0.1	0.08	0.05	0.03
California	2.05	3.73	2.23	0.14	0.13	0.03	-.2 ^a	0.00
Colorado	2.09	5.20	1.26	0.06	0.01	0.05	0.06	0.05
Connecticut	6.14	2.31	2.24	0.28	0.32	0.05	0.16	0.07
Delaware	4.20	3.82	2.24	0.68	0	0.01	0.01	0.08
Dist. of Columbia	0.98	2.33	3.52	0.83	0.59	0	0.3	0.02
Florida	4.69	2.65	2.83	0.31	0.01	0.03	0.01	0.01
Georgia	3.51	2.45	1.99	0.05	0	0.11	0.01	0.01
Hawaii	2.77	2.40	1.49	0.02	0	0	0	0.04
Idaho	5.55	1.95	0.76	0.06	0.01	0.01	0	0.01
Illinois	2.79	3.76	3.21	0.31	0.24	0.07	0.03	0.03
Indiana	4.01	3.71	2.71	0.11	0	0.06	0.01	0.01
Iowa	1.97	6.79	1.33	0.16	0	0.09	0.05	0.02
Kansas	4.70	2.35	1.35	0.19	0.02	0.16	0.02	0.02
Kentucky	3.70	4.39	1.40	0.12	0	0.1	0.01	0.04
Louisiana	2.91	1.44	3.26	0.15	0	0.11	0.01	0.04
Maine	5.93	4.13	1.38	0.08	0.09	0.01	0.06	0.05
Maryland	4.94	1.89	2.49	0.46	0.16	0.06	0.07	0.03
Massachusetts	9.27	2.42	2.45	0.25	0.39	0	0.05	0.11
Michigan	4.05	2.34	2.01	0.31	0	0.06	0.02	0.01
Minnesota	1.06	6.88	0.30	0.18	0	0.15	0	0.01
Mississippi	3.29	3.23	2.20	0.05	0	0.05	0	0.04
Missouri	4.29	4.83	2.31	0.52	0.09	0.04	0.01	0.03
Montana	5.15	2.66	0.92	0.02	0	0.04	0.03	0.01
Nebraska	6.21	2.31	1.27	0.08	0.03	0.05	0.01	0.05
Nevada	2.87	4.02	1.11	0.19	0	0.01	0.01	0.05
New Hampshire	5.25	2.25	1.76	0.22	0.16	0.03	0.15	0.02
New Jersey	4.58	3.25	4.26	0.54	0.67	0.03	0.01	0.05
New Mexico	7.63	1.21	2.02	0	0	0.08	0	0.06
New York	0.78	3.79	4.10	0.59	0.32	0.06	0.02	0.05
North Carolina	5.70	2.60	1.71	0.15	0.02	0.07	0.02	0.03
North Dakota	6.95	1.08	0.81	0.07	0	0.06	0.04	0.03
Ohio	3.75	3.69	1.61	0.21	0.68	0.03	0	0.11
Oklahoma	5.10	3.32	1.71	0.07	0.02	0.07	0.02	0.03
Oregon	6.20	2.38	0.82	0.05	0.11	0.04	0.03	0.05
Pennsylvania	3.56	2.71	2.80	0.23	0.15	0.05	0.03	0.02
Rhode Island	6.50	1.98	3.13	0.12	0.26	0	0.16	0.08
South Carolina	3.62	4.31	2.68	0.16	0	0.06	0	0.02
South Dakota	3.00	4.91	0.56	0.07	0.04	0.09	0.13	0.01
Tennessee	5.70	3.33	2.13	0.1	0.05	0.06	0	0.13
Texas	2.40	5.41	1.47	0.1	0	0.01	0.03	0.15
Utah	4.25	3.44	2.06	0.19	0	0.09	0	0.03
Vermont	8.85	0.37	0.38	0.08	0.07	0.01	0.14	0.04
Virginia	3.92	3.14	2.71	0.08	0.07	0.08	0.04	0.02
Washington	4.19	2.62	1.31	0.03	0.03	0.05	0	0.02
West Virginia	0.76	8.57	2.68	0.07	0	0.07	0.01	0.02
Wisconsin	2.93	3.50	1.72	0.09	0	0.06	0	0.02
Wyoming	6.58	3.30	0.07	0.04	0.02	0.21	0.02	0.01
Total U.S.	3.54	3.60	2.28	0.22	0.13	0.05	0.02	0.04

-.2^a California did not report data for this category.

Percentages are based on resident population data provided by the U.S. Bureau of the Census.

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

students with disabilities (about 95 percent) are served in regular school buildings, with some served in regular classroom environments.

Ranking of High and Low Use States

Using the data described above, states were ranked on their use of each type of separate placement (e.g., separate class, public and private separate day school, public and private residential school), as well as their cumulative, or combined, use of such placements. Ranks were used to categorize states into high and low users of separate placements (the top and bottom 10 states, respectively).

Indepth telephone interviews were completed with administrators in four *high use* states (i.e., among the top 10) and three *low use* states (i.e., among the bottom 10). The 7 states were selected from the 10 highest and 10 lowest use states after eliminating 13 states that had made changes to their funding system over the past decade, or had changed their approach just prior to the reporting of the placement data. This was done to increase the likelihood that any perceived relationships were actually a result of fully implemented state policies.

Classification of States by Special Education Finance System

Special education finance systems described by O'Reilly (1993) were used to classify states according to the type of funding formula used and the basis for distribution of funds (e.g., disability, placement). Relationships between other factors included in state funding formulas and state use of separate placements were also explored. A review of the data available on these latter components of state funding systems revealed no relationships. For example, the existence of separate funding for private school placements was not associated with high use of private school placements. However, the available data may not have provided enough detail on other relevant state policies to detect the existence of a relationship. The increasing concerns of state and local policymakers over the high cost of private placements suggest that additional information on this topic probably should be examined. Similarly, it is likely that the share of special education funding paid by the state may also influence where students receive special education services, particularly when the state share is higher than the local share of the costs. Unfortunately, data on the state and local share of funding for special education have not been collected since 1987-88, and evidence from several states suggests that the 1987-88 state/local distribution is no longer accurate.

Use of Other Data

States were classified according to their population density per square mile after telephone interviews revealed that their geographic/population characteristics may influence their placement patterns. In addition, several states submitted district-level placement data to verify perceptions that within-state variation in use of separate placements may be as great as variations across the states.

III. Findings

Use of Separate Placements

Table 3 ranks states (1=high) on each of the five separate placement categories, as well as on the cumulative use of separate placements in each state. In most states the use of separate placements is dominated by use of separate classes, although there is considerable variation across states in the types of separate placements used. For example, New Jersey, which is ranked highest in overall use of separate placements, is a high user of separate classes and separate public and private day schools, but a fairly low user of public and private residential schools. Rhode Island, also a high user of separate schools overall and a high user of private placements, is a low user of separate public day and residential facilities. Wyoming, with the lowest combined use of separate placements, is ranked highest across all states in use of public residential placements. Minnesota, another low user overall, also ranks high in its use of public residential schools. These variations are depicted more clearly in figure 1, which provides a graphic representation of the combined use of separate placements during the 1991-92 school year. Compared to similar figures presented by Danielson and Bellamy (1989), it is clear that many states that were high users of separate placements in 1985-86 continue to be high users of separate placements. However, although the overall use of separate placements has remained fairly constant since 1985-86, it appears that there has been a decline in the use of separate *schools* in many states.

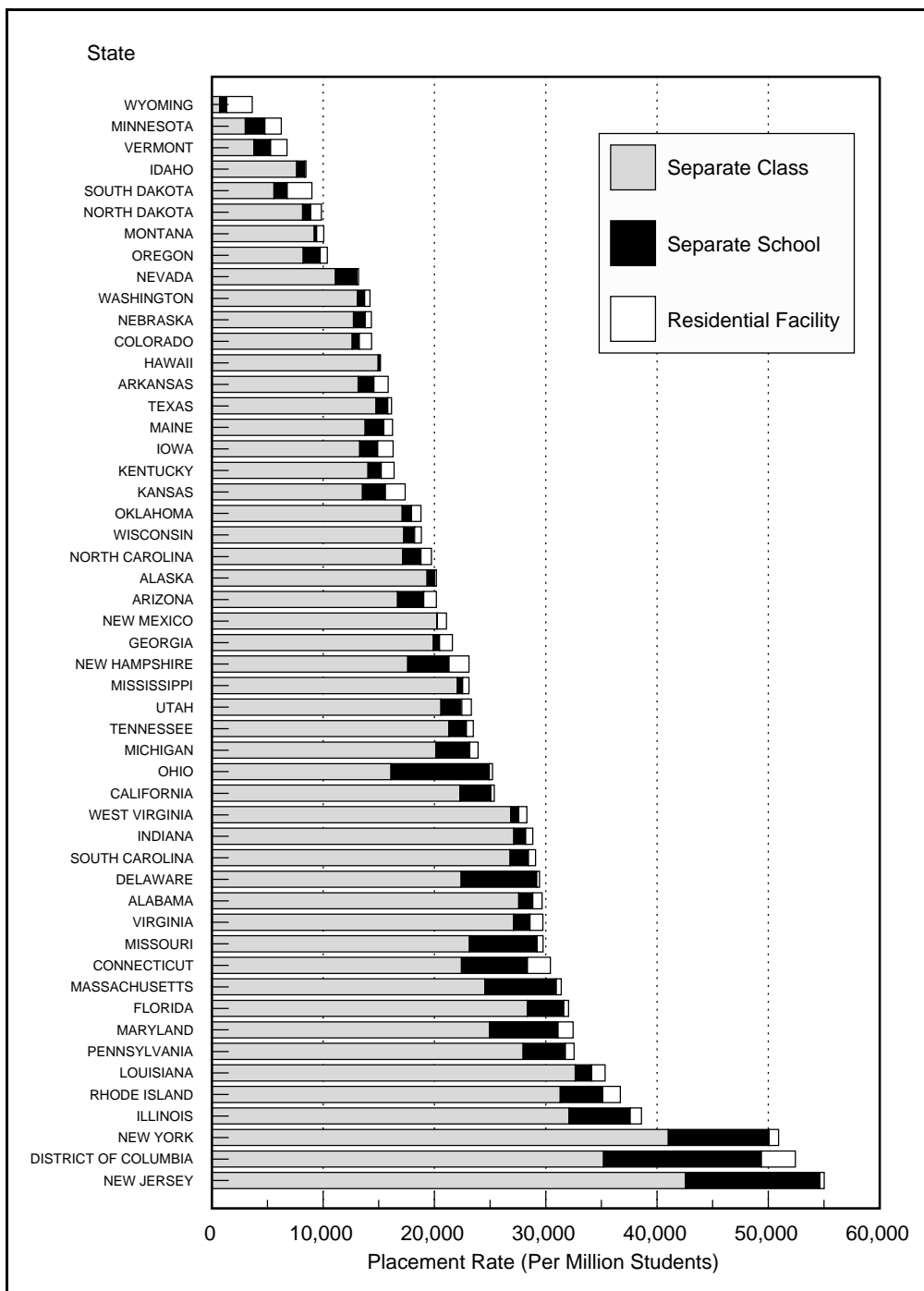
Many states that are among the highest users of separate placements are large or densely populated states (e.g., New Jersey, New York, Illinois, Pennsylvania, Florida). In contrast, the low users of separate placements are found primarily among small or sparsely populated states (e.g., Wyoming, Vermont, Idaho, North and South Dakota). This raises questions about whether use of separate

**Table 3
State Rankings on Use of Separate Placements for Students with Disabilities,
1991-92**

State	Cumulative Total	Separate Class	Separate Public	Separate Private	Public Residential	Private Residential
New Jersey	1	1	4	2	35	34
District of Columbia	2	3	1	3	48	1
New York	3	2	3	5	19	21
Illinois	4	5	8	8	14	16
Rhode Island	5	6	25	7	49	3
Louisiana	6	4	23	43	4	33
Pennsylvania	7	8	12	11	28	17
Maryland	8	14	6	9	17	8
Florida	9	7	7	28	40	29
Massachusetts	10	15	11	4	49	13
Connecticut	11	17	10	6	29	2
Missouri	12	16	5	15	32	28
Virginia	13	11	32	18	11	14
Alabama	14	9	27	29	23	23
Delaware	15	18	2	46	43	31
South Carolina	16	13	20	34	18	44
Indiana	17	10	28	44	25	32
West Virginia	18	12	37	37	16	36
California	19	19	24	12	38	N/A
Ohio	20	32	14	1	39	48
Michigan	21	24	9	46	24	27
Tennessee	22	21	29	19	20	45
Utah	23	22	18	46	9	48
Mississippi	24	20	44	41	26	41
New Hampshire	25	27	13	10	36	4
Georgia	26	25	43	33	5	35
New Mexico	27	23	51	35	12	39
Arizona	28	31	17	20	37	7
Alaska	29	26	38	46	41	48
North Carolina	30	29	22	25	13	24
Wisconsin	31	28	31	36	22	47
Oklahoma	32	30	40	27	15	26
Kansas	33	37	16	26	2	22
Kentucky	34	35	26	39	6	30
Iowa	35	38	21	46	8	11
Maine	36	36	33	16	42	9
Texas	37	34	30	38	46	19
Arkansas	38	39	46	14	10	12
Hawaii	39	33	50	40	49	40
Colorado	40	42	42	31	27	10
Nebraska	41	41	34	23	30	37
Washington	42	40	48	22	31	43
Nevada	43	43	15	42	45	38
Oregon	44	45	45	13	34	18
Montana	45	44	49	46	33	20
North Dakota	46	46	39	32	21	15
South Dakota	47	48	36	21	7	6
Idaho	48	47	41	30	44	46
Vermont	49	49	35	17	47	5
Minnesota	50	50	19	45	3	42
Wyoming	51	51	47	24	1	25

Note: Ranks are based on data provided by U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Figure 1
Variations in Combined Placement Rates for Students with Disabilities



Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).
 Note: California did not report students in private residential facilities; thus, their combined use of separate facilities is likely higher than it appears.

placements is related to geographic characteristics of the states, such as population density, or are better accounted for by policy factors such as state distribution mechanisms that may encourage or discourage the use of specific types of placements. Both of these possibilities are explored below.

Placements and Funding Formulas

One common assertion is that special education finance formulas that fund school districts based on where students receive services can encourage the placement of students into high reimbursement options. Table 4, which shows the basic components of special education funding systems for states that have been ranked according to their combined use of separate placements, does not uniformly support this notion. The table indicates that although several high use states (e.g., New Jersey, New York, Rhode Island) do indeed use student placement as a factor in allocating funds for special education, so do many states that are not particularly high users of separate placements (e.g., Texas, Arkansas). Moreover, many of the states that are among the highest users of separate environments do not include placement as a component in their funding formula. This suggests that the influences on state use of separate placements are considerably more complex than the type of funding formula used to distribute resources for special education services.

Supporting this notion is the observation that among the lowest use states (i.e., the bottom 10), none include student placement as a factor in allocating special education funds to school districts. In fact, the formulas used in most of the low use states are based on a percentage reimbursement formula, a type of formula that is generally considered placement neutral.² That is, the proportion of funds received from the state is the same no matter where a student receives services, and regardless of the cost of those services. Thus, while low use states tend to use a funding formula that can be placement neutral, there is no common pattern among high use states that suggests that the type of funding formula alone is sufficient to encourage placement in more restrictive settings. For example, another finance provision that may relate to placement is that the funding structures in high use states may lack flexibility to serve students in less restrictive environments. A case in point is New Jersey's pupil weighting

²Despite the fact that a percentage reimbursement formula does not explicitly consider student placement, the state share of funding may be very influential on the placement of students with disabilities. A low state contribution, for example, would result in high out-of-pocket expenditures for districts, particularly if high cost options are selected.

Table 4
State Funding Formula Types and Rank on Combined Use of Separate Placements

State	Rank on Combined Use of Separate Placements	Funding Formula	Allocation Basis
New Jersey	1	Pupil weights	Disability and placement
Dist. of Columbia	2	Full state funding	N/A
New York	3	Pupil weights	Student placement
Illinois	4	Resource-based	Personnel salary
Rhode Island	5	Percent reimbursement	Expenditures and placement
Louisiana	6	Percent reimbursement	Actual expenditures
Pennsylvania	7	Flat grant	Total district enrollment
Maryland	8	Flat grant	Special education enrollment
Florida	9	Pupil weights	Student disability
Massachusetts	10	Pupil weights	4x special education student FTE
Connecticut	11	Percent reimbursement	Actual expenditures
Missouri	12	Resource-based	Classroom units and staff
Virginia	13	Resource-based	Disability and placement units
Alabama	14	Flat grant	Teacher unit
Delaware	15	Resource-based	Classroom unit
South Carolina	16	Pupil weights	Student disability
Indiana	17	Pupil weights	Student disability
West Virginia	18	Resource-based	Classroom units
California	19	Flat grant	Student placement
Ohio	20	Resource-based	Classroom unit
Michigan	21	Percent reimbursement	Allowable costs
Tennessee	22	Resource-based	Student placement
Utah	23	Pupil weights	Level of services
Mississippi	24	Resource-based	Teacher unit
New Hampshire	25	Pupil weights	Student placement
Georgia	26	Pupil weights	Disability and placement
New Mexico	27	Pupil weights	Student placement
Arizona	28	Pupil weights	Student disability
Alaska	29	Pupil weights	Student placement
North Carolina	30	Flat grant	Special education enrollment
Wisconsin	31	Percent reimbursement	Allowable costs
Oklahoma	32	Pupil weights	Student disability
Kansas	33	Resource-based	Personnel unit
Kentucky	34	Pupil weights	Student disability
Iowa	35	Pupil weights	Student placement
Maine	36	Percent reimbursement	Allowable costs
Texas	37	Pupil weights	Student placement
Arkansas	38	Pupil weights	Student placement
Hawaii	39	Full state funding	N/A
Colorado	40	Percent reimbursement	Allowable costs
Nebraska	41	Percent reimbursement	Allowable costs
Washington	42	Resource-based	Disability based units
Nevada	43	Flat grant	Classroom unit
Oregon	44	Pupil weights	2x special education student count
Montana	45	Percent reimbursement	Allowable costs
North Dakota	46	Percent reimbursement	Actual expenditures
South Dakota	47	Percent reimbursement	Allowable costs
Idaho	48	Percent reimbursement	Actual expenditures
Vermont	49	Flat grant	ADM and services
Minnesota	50	Percent reimbursement	Actual expenditures
Wyoming	51	Percent reimbursement	Actual expenditures

Source: Center for Special Education Finance.

Note: Ranks are based on data provided by U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

scheme, which includes 26 weights based on student disability and placement, but makes no provision for serving students within the regular education environment. There may also be other aspects of funding formulas that affect the use of separate placements that are not captured by a formula's particular classification. For example, knowing that a state's special education funding formula is based on a weighted pupil count may not reveal other influential factors such as full state funding for students placed in public or private residential facilities. Beyond this, of course, there simply may be no impetus for more inclusionary practices within a state. The removal of fiscal barriers to inclusion may be necessary, but insufficient, to insure less restrictive placement patterns.

Placements and Geographic Trends

Although no clear patterns emerge between high users of separate placements and the type of funding formula used, figure 2 shows distinct regional patterns in the use of various special education funding models. The use of pupil weighting formulas dominates with the largest proportion of states using this type of model; however, there are obvious patterns in its use, as well as in the percentage reimbursement model. Anecdotal evidence suggests that state policymakers often pursue policies similar to their neighboring states, but are unlikely to adopt policies of states geographically dissimilar from themselves. Geographic trends in the use of separate placements are described below.

The United States is known for regional variations in its philosophies, politics, and economics. Regional influences also appear to be associated with where students with disabilities are educated. Figure 3 displays the ranking of states on their combined use of separate placements for students with disabilities as a percentage of a state's resident school-age population. As indicated in the figure, the north central and northwestern states use separate placements the least. The central farming states use separate placements at a slightly higher rate, and the mid-Atlantic states are among the highest users of separate placements. The geographic patterns of usage are the same for separate class placements in regular schools and for use of separate public day schools. That is, the northwest, north central and central plains states comprise the lowest users of separate public day schools and separate classes.

Placement of students in other types of separate environments, however, show very different patterns of use among the states. No region of the country is

Figure 2
Distribution of States Across Special Education Funding Models

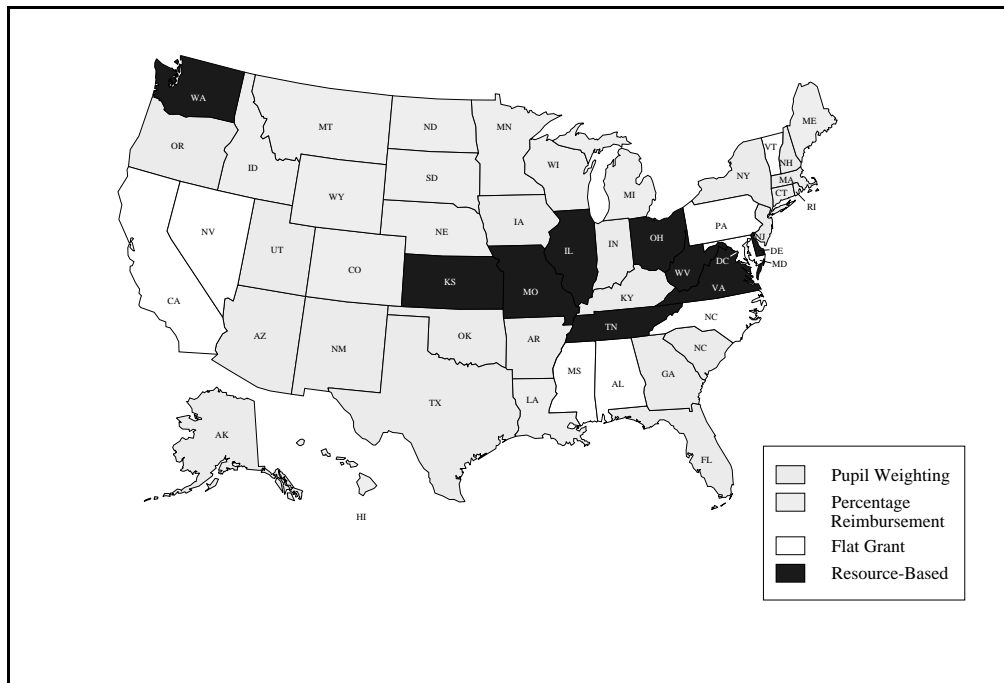
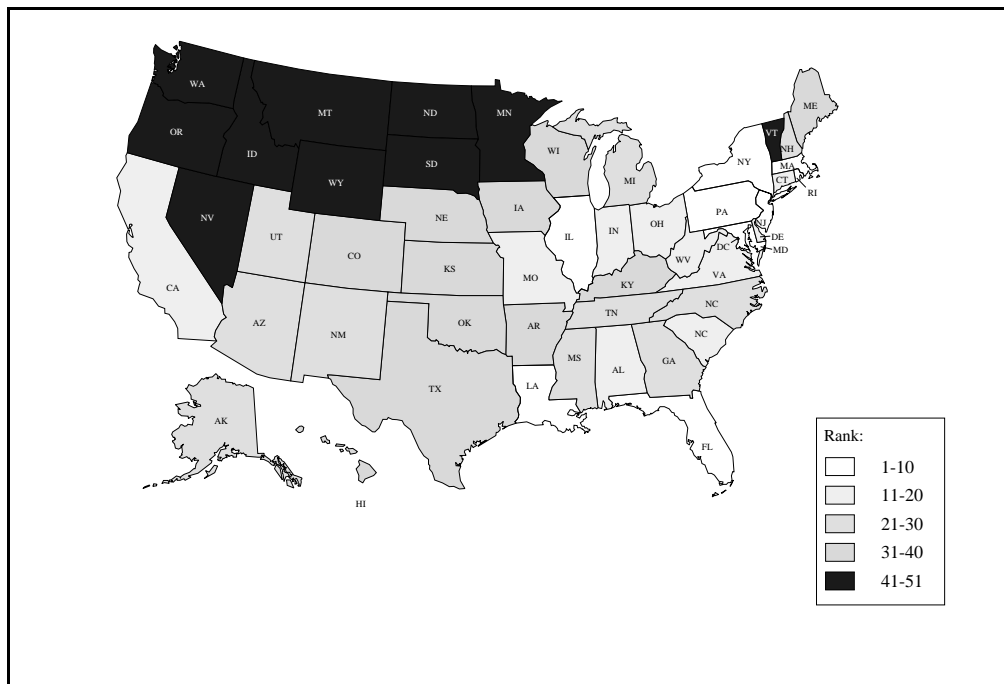


Figure 3
Distribution of States on Combined Use of Separate Placements



Source: Center for Special Education Finance (CSEF) survey data

particularly dominant in low use of either day or residential private schools. Also, while most New England states are low users of public residential facilities, these states are among the highest users of private residential schools. They are also among the highest users of private day schools, a placement option that is prevalent in the entire northeastern region. A long history of private schools enrollment is characteristic of New England states and likely influences use of such placements for students with disabilities. As a state director of special education from one New England state remarked:

History and tradition have a lot to do with it [high use of private school placements]. Parents have the perception that private schools are superior to public schools and they push for private school for their kids . . . and the availability is high.

These trends suggest that the use of separate placements may have as much to do with geographic/population characteristics and regional traditions as they do with any policy related features, such as the special education funding formula. In fact, as shown in table 5, there is a significant positive relationship between the use of many separate placements and the population density of states. The use of separate classes is the most highly correlated with population density ($r = .74$). A similarly high and significant positive correlation is found between the use of separate public schools and population density ($r = .64$). A moderately significant relationship is also found between the use of separate private schools and population density ($r = .49$). Table 5 confirms, as suggested earlier, that there is also a relationship between the use of separate classes and the use of other separate placements—specifically, the use of both separate public and private day schools. Moreover, there is a moderately positive relationship between the use of separate public schools and the use of separate private schools ($r = .34$). States that are high users of separate public schools are somewhat more likely to be high users of separate private schools than low users of separate public schools. A similar relationship exists between the use of separate private day schools and the use of private residential schools for students with disabilities ($r = .45$). In short, density of population is associated with high use of separate placements; and high use of one type of separate placement is associated with high use of other types of separate placements.

Telephone interviews with state special education administrators in low use states confirmed that the overall low use of separate placements may relate to the geographic characteristics of the state. For example, an administrator in one large rural state with no appreciable urban centers pointed out that schools and

Table 5
Relationship Between Use of Separate Placements and Population Density, per square mile (Spearman Rank Order Correlation)

	Separate Class	Separate Public School	Separate Private School	Public Residential	Private Residential	Home/Hospital	Population Density Per Square Mile
Separate class	1.0						
Separate public	.57***	1.0					
Separate private school	.28**	.34***	1.0				
Public residential	-.09	-.14	-.25	1.0			
Private residential	.02	.19*	.45***	-.09	1.0		
Home/Hospital	.10	.11	.30**	-.26	.13	1.0	
Population density per square mile	.74***	.64***	.49***	-.24	.15	.20*	1.0

*p < .10 **p < .05 ***p < .01

school districts in that state are far apart, have small populations of students with disabilities, and find it impractical and inefficient to create separate classes or separate schools for students with disabilities. It was his belief that the sparsity of population had a much greater influence on the state's low use of separate placements than the special education funding model. Perhaps of greatest importance is the value placed on inclusionary practices within an individual district or across a state. Of course, it is entirely likely that such values are also reflected in this state's funding mechanism.

In high use states, interviews revealed that the placement patterns varied greatly within the state and that the data were dominated by practices of the largest school districts. As noted earlier, an informal review of district-level data submitted by a number of states revealed that there is probably as much variation within states in their use of separate placements as there is across states. Only one of the administrators interviewed thought that the type of funding formula had an important influence on the use of separate placements for students with disabilities. In that state, a large proportion of the tuition for students with disabilities receiving services in private schools was paid by the state.

IV. Summary and Conclusions

This exploratory analysis confirms the findings of Hasazi et al. (1994) that many factors influence where students with disabilities receive special education services. Few state policymakers in this study reported that the type of state funding formula alone was a strong influence on implementation of LRE policy. States that are low users of separate placements tend to use a funding formula that is not explicitly linked to student placement. However, no single type of funding formula was found for states that rank highest in their use of separate placements for students with disabilities.

Geographic features of states, such as region and population density, which can be addressed by, but are not actually subject to, state or federal policy intervention, may also affect the extent to which states use separate placements for students with disabilities. Other factors associated with the use of separate placements include history and tradition in the provision of educational services and in the acceptability of the use of private schools and the development of special education services within a state. As a recent study in Illinois (Illinois State Board of Education, 1993) notes:

In special education the funding structure is not separate from, but was created with, and is an integral part of, the whole special education system. Special education came late to public education. Before federal and state laws mandated public education for everyone regardless of disability, in those districts where special education was provided, it was largely private, separate and segregated. When the laws were passed in the 1960s and 1970s, the existing private, separate and segregated structures were copied by the public schools. Public special education was an add-on, an extra cost, and local schools demanded to be reimbursed. So the structure

and funding were created together. Not surprisingly they mesh and reinforce each other.

There are also other factors influencing where students with disabilities receive services that were not explored here, such as general education funding mechanisms, the share of special education costs borne by states, and state initiatives to reduce the use of separate placements. In addition, specific components of state funding systems may differentially affect the use of separate placements. It is clear, however, that the use of separate placements for students with disabilities may be influenced by state fiscal policy, which may serve as a barrier to more integrated placements. Funding systems that are relics of an earlier era, when underidentification was a major concern, and when segregated placements for students with disabilities often went unquestioned, need to be redesigned to reflect current program and policy goals. Funding formulas can be modified or designed to increase the flexibility needed by districts to serve students in the most appropriate settings and to remove fiscal disincentives to least restrictive placements.

Weaknesses with currently available data related to the placements of students with disabilities further obscure the relationship between types of special education funding formulas and placements. There is much evidence to suggest that the current federal data collection system related to the placement of students with disabilities is insensitive to some of the programmatic changes taking place across the country (Westat, 1994). In addition, many states do not accurately or appropriately report the requested information on student placement. Although OSEP is currently working with state and local policymakers to address data reporting issues in this area, the existing data reporting requirements do not easily accommodate contemporary service delivery models. This suggests that it is imprudent to base conclusions about implementation of LRE policy on these data alone. This is particularly important given that a comparison of the 1985-86 data used by Danielson and Bellamy with the 1991-92 data reported here suggests that there has been a trend toward the use of less restrictive settings for students with disabilities even though the overall proportion of students served outside the regular classroom environment has not changed substantially.

In summary, although state funding policies may have some influence on where students with disabilities receive special education services, this relationship is only one piece of a complex puzzle that includes a variety of other factors. Policy changes at any level of government that attempt to influence the implementation

of the LRE provisions must take stock of all of the factors related to where students with disabilities are educated. Attempts to make policy decisions based solely on the educational placement data or on the type of special education funding mechanism, without consideration of important contextual information, would be imprudent. Furthermore, changes in the mechanism used to distribute special education funding will be unlikely to create dramatic shifts in the placements of students with disabilities in the absence of other programmatic changes such as staff training and support. Further research needs to address, in a more detailed and systematic fashion, geographic and other factors influencing the use of educational environments, state initiatives for serving students in less restrictive placements, the influence of state funding share, whether placement patterns vary both across and within states and the influences of those trends, and whether these relationships vary for students with specific types of disabilities.

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