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ABSTRACT
        Preliminary findings of this research effort provide
support for the hypothesis that existing databases maintained by
federal agencies for administrative or monitoring purposes can serve
as useful data sources in special education policy research. The
research explored the relationships among a number of state-level
special education, fiscal, and demographic variables using existing
national data from governmental and private sources. Data sources
included the "Annual Report to Congress on the implementation of
Public Law 94-142," the National Center for Education Statistics, the
Census Bureau, the Bureau of Economic Analysis, the National
Education Association, and the Office of Special Education Programs.
Data were compiled for three points in time: 1976-77, the first year
that data were reported on the implementation of Public Law 94-142;
1980-81, a midpoint in the implementation process; and 1983-84, the
most recent data available when the research project commenced. Data
gathered included handicap identification rates; integration rates;
per pupil expenditures; per capita personal income; percent of total
educational revenue obtained from federal (but not special education)
sources; percent of nonfederal educational revenue obtained from
state sources; and percent of school-aged children living in rural
areas, having minority status, or living in poverty. Nine figures and
43 tables of statistical data support the project findings. (JDD)

THE USE OF EXTANT NATIONAL DATA BASES TO STUDY THE RELATIONSHIPS AMONG STATES' SOCIOECONOMIC FEATURES AND SPECIAL EDUCATION IMPLEMENTATION

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INTRODUCTION

Since the passage of the 1975 Education of All Handicapped Children Act (P.L. 94-142), the education of handicapped students has been a major responsibility of state education agencies (SEAs). The SEA now serves an important and pivotal role in administering and supporting federal special education policies, as well as in translating them into practice. As special education has established its place within the state education bureaucracy, the interaction between federal mandates and local concerns has set the stage for educational decision-making. The research presented here is based on the premise that, as the process of implementing federal policy at the state level has evolved, decisions regarding federal goals have been substantially influenced by fiscal and demographic realities within the states. More specifically, it asks the question: To what extent are differences in special education implementation practices among the states associated with states' fiscal and demographic characteristics.

This paper presents the preliminary findings of a three year research effort designed to explore the relationships among a number of state-level special education, fiscal, and demographic variables using existing national data sources.

The primary purpose of the research was to demonstrate the efficacy of using extant data bases, (those records maintained by federal agencies for administrative or monitoring purposs) in special education policy research . Thus, while new knowledge and insights about state variability in special education programs are important outcomes, also important is the confirmation of common knowledge or understandings about the implementation of those programs over time. Such confirmation demonstrates that extant data bases are valid and valuable sources for research.

Background on the Use of Existing Large-Scale Data Bases

Federal education agencies are the repositories for numerous large-scale data bases. These include data collected specifically for evaluation or policy analyses, such as the National Assessment of Educational Progress, the National Longitudinal Surveys, and studies of federal programs such as compensatory education and Chapter I. However, substantial amounts of data on student and institutional characteristics, as well as on educational programs and practices are also routinely collected and maintained in public records. Much of these data are gathered in response to monitoring and reporting requirements mandated by federal educational legislation. Unlike the large-scale, special purpose surveys which are

utilized extensively for secondary analyses, these other large national data sets are generally overlooked as a data base for research. They are used mainly to document program operation and to determine expenditures, and are infrequently, if ever, used to inform program improvement efforts (Burstein, 1984).

It is somewhat surprising that these federal data sources remain underutilized at a time when governments and their constituents alike are demanding greater accountability. Federal education program data meet the monitoring requirement of the legislation, but can also serve as a basis for program evaluation. Indeed, it is not uncommon for educational program evaluations to use administrative records and data collected for record-keeping purposes as a data source. This is done not only to avoid excessive costs and undue response burden, but also because program records are considered to be fairly reliable. As a result, survey or questionnaire data are frequently merged with records from administrative sources. A good example of this practice is illustrated in the design of the Department of Education's High School and Beyond survey. A specific file of school-level data gleaned from administrative records, is maintained as part of that data base, and can be merged with student and/or teacher data, to provide educational context data for analysts. U.S. Census data and other national educational statistics have also been merged with original survey data for analytic purposes.

In the area of special education, there have been no national studies similar to those described above. Some attention has been given to the use of existing program data, primarily to conduct meta-analyses or to synthesize a body of research (Carlberg & Kavale, 1980; Casto & Mastropieri, 1986; Cook, Scruggs, Mastropieri & Casto, 1985-86; Fuchs & Fuchs, 1988; Kavale, 1980; 1981; 1982; Kavale & Forness, 1983; 1984). While these studies have engendered much discussion and professional debate, the methodology is generally accepted and considered to have potential for providing a more global understanding of the effectiveness of special education interventions. Nonetheless, each analysis has been conscribed to a relatively small number of very specific variables contained within a single data source, often restricted to a single time point, and so was limited in scope.

The one (and perhaps only) large data base in special education that has been used for analytic purposes includes the data collected under the annual reporting requirements mandated in Section 618 of Part B of the Education For All Handicapped Children Act. Known as the Annual Reports to Congress on the Implementation of P.L. 94-142, these yearly data collection efforts have resulted in one of the more extensive and consistent national data repositories in the field of education. Beginning in the 1976-77 school year, states have been reporting the number of students served, by

handicapping condition; the types of educational placements
ii. which students are served; and the number of teachers and
other professionals employed. States are required to
include data for all children, ages 3 through 21, who
receive special education or related services. Although the
data collection requirements have increased over the years,
the core data set, on identification, placement, and
personnel, has remained consistent over time. It represents,
at a macroscopic level, a composite of the national
longitudinal implementation of special education programs.

The Annual Reports serve to document that the special
education program is operating and to determine the amount
of federal funds that each state will receive in support of
its special education program. Until recently, they have had
limited use for other than administrative accounting
purposes. However, during the past few years, some portions
of the data have been subjected to analysis (Gerber, 1984;
Forness, 1985; Brinker & Thorpe, 1985; Hallahan, Keller &
Ball, 1986). For the most part these analyses have focused
on descriptive aspects of the data, such as state-to-state
variability in identification rates, or state comparisons
with national trends in identification or placement rates.
While each of the studies utilized some data from the Annual
Reports, the methodologies varied substantially and did not
suggest a consistent conceptual approach to defining
variables or to conducting statistical analyses.

More recently, Danielson and Bellamy (1989) used data
from the Tenth Annual Report, representing the 1985-86
school year, to examine state-to-state variation in the use
of six types of educational placements for students with
handicaps: regular classes, resource rooms, separate
classes, separate schools, residential facilities, and
homebound/hospital environments. Based on placement data for
the 50 states, the District of Columbia, and Puerto Rico,
the authors found substantial variation in the use of
placements. This was cautiously interpreted to suggest that
state-level policies may be biasing the placement of
handicapped students. While Danielson and Bellamy were
careful to note that their results do not reflect
effectiveness, their research represents a further attempt
to capture empirically the implementation of national
special education policy.

While the above studies perhaps suggest an awareness of
the potential importance and usefulness of the special
educatior data for policy analysis, each has utilized data
from a single point in time and only from the Annual
Reports. One prior attempt has been made to examine Annual
Report data in relationship to other state-level
characteristics. Noel and Fuller (1985) used data from the
First, Fourth, and Fifth Annual Reports, along with data
from the U.S. Census and the National Center for Education
Statistics. They investigated the relationships among state-
level demographic and fiscal variables and identification

and placement rates. Using regression analyses, the authors found positive relationships between a state's identification rates and the amount of its financial resources, the percent of its population who are minorities and the percent of its children living in po erty. Poorer states and those with higher minority populations tended to identify more special education and learning disabled students.

The research reported in this paper was designed to expand that preliminary work by including a greater number of variables and broadening the time covered to three specified points in time, namely, the 1976-77, 1980-81, and 1983-84 school years. The focus was on demonstrating the feasibility of studying the implementation of special education policy by exploring the interrelationships among special education and other educational, fiscal, and demographic variables available in existing data sources. The research had two objectives: (1) to contribute to a better understanding of how P.L. 94-142 has been implemented over time, and (2) to demonstrate that the wealth of data currently maintained in existing national data bases has great potential for research.

Compiling and Merging the Data Bases

Two major tasks facing researchers using existing, large-scale data bases are: (1) identifying the variables

which conceptually represent the phenomenon of interest and the influences on it, and (2) identifying the data sources in which those variables are meaningfully operationalized. For this research, three categories of information were identified which were logically consistent with the overall purposes. These were special education implementation variables (identification and integration, to be described subsequently), and fiscal and demographic characteristics of the states. Since the implementation of federal legislation is a process that takes place over time, it was necessary that measures of the variables be available for multiple points in time. The Annual Report data assured that data on identification and placement were available since 1976-77. Information on states' demographic characteristics and financial resources is documented in government reports, tabulations, and data summaries available in the public record or through federal agencies like the National Center for Education Statistics (NCES) and the Census Bureau. Much of this data is also compiled annually.

Two considerations emerged as decisions were made about which variables to include in the analyses. First, because the focus was on state-level practices, it was necessary to obtain data for each of the 50 states. Some national data bases are comprised of data collected on a sample of states from which national estimates are made. Although such information is routinely used to indicate national trends, often the small sample sizes taken from low population

states make the numbers too unreliable for a state-by-state comparison. Therefore, this research only used those data sets in which the state summaries were based on either appropriate sample sizes or total censuses.

The other consideration which affected the choice and use of the variables gleaned from different sets concerned their comparability. Variables nominally similar were not necessarily operationalized in the same way. The most common example of this concerned the age ranges used as a basis for enrollment counts. For example, the age ranges for school-aged children reported by the U. S. Census are not the same as those used by states to report handicapped children. Also, K through 12 enrollments reported by the states may and may not have included preschool counts, depending on the state reporting system. When utilizing variables based on enrollment counts, it was decided that the discrepancies introduced by these slight definitional differences would not be important enough to warrant adjustment, nor did any reasonable adjustment seem possible.

Description of the Data Base

The technical procedures described here were performed on a data base which was created by compiling and merging numerous data sets that contain information on general educational, economic, and social characteristics of the 50

states and D.C., as well as data on their special education
practices. Much of the data have been reformatted and
subsetted from large and diverse national data bases. Taken
together, the data provide a means for placing special
education variables within a state context and examining how
they operate within (and are influenced by) the broader
spectrum of state-level socio-economic characteristics. From
the larger perspective of social policy analysis, the merged
data provide the opportunity to address a recurring and
prominent concern in the implementation of federal
legislation, namely, identifying the correlates of variation
in state-level implementation practices.

A total of 366 variables were compiled, and with few
exceptions, most are available for the three points in time
selected for these analyses (e.g. 1976-77, 1980-81, 1983-
84). These years were selected because they represent (a)
the first year that data were reported on the implementation
of P.L. 94-142; (b) a midpoint in the implementation process
and a time when reporting procedures should have been
routinized within the states (as well as a time when major
federal educational policies were changed as a result of the
consolidation of several large educational funding
programs); and (c) the most recent data available when this
research project commenced and the data base was being
assembled. The data base is capable of being expanded to
include additional points in time.

It should be noted that, ile the data base includes information for the District of Columbia, it was decided not to include this jurisdiction in these analyses, as it is not comparable to the 50 states either fiscally or organizationally.

A summary of the data sources appears in the Appendix. The primary sources of data include the First (1976-77), Fifth (1980-81), and Seventh (1983-84) Annual Reports to Congress, which include counts of special education students by handicapping condition, percent change in each category and in the total between the first and second and between the second and third data points, ratio of handicapped children to teachers, number of special education teachers by condition, number of non-teaching staff, and funds awarded to each state under EHA Part B. The number of colleges offering special education teacher training and the number of programs by each disability category were obtained for 1983 only from the National Directory of Special Education Teacher Training Preparation Programs. From several sources within NCES, data were obtained on the number of special education degrees earned, per pupil expenditures, revenue receipts of public schools, and public school enrollment figures. Data on race, children living in poverty, and children living in rural areas were obtained from the U.S. Census Bureau and so represent data from 1980 only. Information on per capita personal income came from the Bureau of Economic Analysis, Survey of Current Business.

Estimates of revenue receipts and teachers' salaries were
obtained from the National Education Association. Finally,
data on special training and research and demonstration
grants awarded in FY86 to each state were obtained from
unpublished documents within the Office of Special Education
Programs. Collectively, the data set represents a unique and
comprehensive collection of national educational statistics,
which has great potential as a research base within special
education.

Data Quality Issues

The data base which has been compiled is uniquely
suited for longitudinal analysis of state-level policy. Not
only is the entire universe of states available for study,
but, for most of the variables, there is very little missing
data either within or across years, due to the on-going data
collection efforts of federal agencies. Thus, sampling error
does not pose a significant threat to the integrity of this
data base. However, it is reasonable to assume that some
amount of measurement error is present in the data. From a
methodological perspective, the dual issues of measurement
validity and reliability have implications for the potential
usability of extant data sources for quantitative analyses.

The issue of whether the measures being utilized are
valid indicators of the phenomena of interest must be
addressed within the stated purposes of the investigation.

The primary goal is to explore possible relationships among the state-level variables and to see how these change over time. It is not an objective of this research to provide estimates of characteristics of special education populations or to describe individual state's efforts. Nor were these analyses intended to reveal brand new and surprising findings. To realize the major goal at this stage, it was necessary to ask whether the data behave as one would expect given what is known regarding major organizational, regulatory, service delivery, and budgetary changes since the mid-1970's. Because the data are remarkably consistent in this regard, it seems likely that they provide a valid view of state-level practices.

Regarding reliability, admittedly a limitation of this study is that the flexibility or lack of consistency among states in interpreting or reporting data is largely unknown. However, as Danielson and Bellamy (1989) noted, the staff from the Office of Special Education, USDE, have provided clarification and technical assistance each year to states to help them better categorize and report their program status. Directives such as these may lead to instrumentation artifacts which could be mistaken for year to year changes in the underlying phenomenon. However, it is difficult to say whether reduction in variability over time, if it is observed, is due to reporting changes or true changes. Further, whether or not average levels of a variable would

be affected is not clear. Presumably, any distortions due to this type of measurement error would not be strong enough to conceal true relationships.

GENERAL METHODOLOGICAL APPROACH

The focus of these analyses was on exploring possible associations between special education variables and state fiscal and demographic characteristics during the years surrounding the implementation of P.L. 94-142, namely, 1976 to 1984. A subsequent goal of the research was to develop an explanatory causal model of the factors influencing the implementation of the special education legislation. However, before this could be undertaken, it was necessary to examine the data for regularities which would provide the basis for more complex analyses. This paper reports only the initial phase of examining states' implementation efforts in relationship to their fiscal and social characteristics.

The intent of the special education legislation was to assure that states would both identify their handicapped students and serve them in the "least restrictive environment." Because identification and integration have emerged as major issues in the implementation of the federal mandate, they serve as the dependent measures in these analyses. Identification of handicapped students is important because federal reimbursements are contingent on the number of children identified as handicapped.

Integration or mainstreaming is also of concern because of the requirement that states place their handicapped students in the least restrictive environment. It was expected that, as states moved to implement the federal mandate, increases in the numbers of handicapped students identified, as well as movement into "mainstreamed" classrooms, would be observed over the years.

To examine whether differences in state-level implementation practices were related in a linear fashion to finance or demographic characteristics, bivariate correlations with the special education variables were produced. These were examined across the three years to see if patterns emerged over time. For further descriptive purposes, each of the finance and demographic variables was transformed to a categorical variable, and average differences among the categories on the dependent measures were also examined. This permitted a simplified description of the effect of each of the independant variables.

To create the categorical variables, each of the independent variables was quartile coded, and each state was assigned a value indicating whether it was in the highest, upper middle, lower middle, or lowest quartile on that independent variable. Descriptive profiles were then developed for the groups on each of the categorical variables showing their special education practices at the three points in time. More specifically, the mean and standard deviation of each of the dependent measures at each

point in time was obtained for each group on each of the categorical independent variables. The analysis examined the average differences in identification and integration rates among the groups of states within years; and whether, over the years, the differences diminished, increased, or remained unchanged.

Description of Dependent Measures

Identification Rates

The specific identification variables utilized in tnis study were based on information taken from the Annual Reports. For each state, information is given on the total number of children, ages 3 to 21, who were identified as handicapped, as well as a breakdown of the counts by handicapping condition. Data on special education counts overall and within three areas of disability for the three years mentioned were selected for this investigation. The specific disability conditions examined were learning disabled (LD), emotionally disturbed (ED), and multiply handicapped (ML). They were chosen because they seem to be fairly representative of the type and degree of disability within the entire range of handicapping conditions. [NOTE: For the category ML, multiply handicapped, data are not available for 1976-77.]

Identification rates for each state were computed for each of the three years by taking each of the handicapped

child counts (total, LD, ED, and ML) as a percent of the
total school-aged enrollment for the same year. Using
enrollment figures as the base controlled for the size of
the school-aged population, which varied greatly among the
states, and also maintained comparability with other
measures. It was decided not to compute each of the three
disability categories as a percent of the total special
education population in order to avoid any artifacts related
to the 12% cap. Using the same base also maintains
comparability with other measures.

Integration Rates

The measures of integration employed were based on the
number of handicapped students placed in various types of
educational environments. Because federal guidelines require
that the type of setting in which educational services are
provided to handicapped children be included in the Annual
Report, data are available on the number of children with
handicaps who are served in several categories of
educational placement: regular classrooms, separate
classrooms, separate day schools, and other environments
(including separate residential schools and home or hospital
environments). Use of different placement categories follows
guidelines outlined by the Office of Special Education
within the U.S. Department of Education. However, it does

seem plausible that, because federal assistance in reporting has been provided over the years, states have gained more facility in utilizing the categorization system. Thus, they may have produced more accurate figures with each reporting year.

Measures of special education integration (or use of different placements) were computed for each of the three years of interest by converting the placement counts to cumulative placement rates a statistic developed by Danielson and Bellamy, (1989). This statistic takes the number of children in a given category plus those in all more restrictive placements as a function of the school-age population. The originators of the statistic suggest that, "The cumulative placement rate statistic allows one to ask what percentage of school-aged students in a state are served in a particular educational placement and all more segregated placements" (p.449).

For the purposes of the present analyses, the statistic was computed with reference to the total elementary and secondary enrollment within a state, which differs slightly from the computation used by the original authors. School enrollment figures were considered to be appropriate denominators since annual data which are actual figures (and not estimates) are available. To facilitate interpretability, particularly for categories with relatively small numbers, rates per million we e computed.

For each of the three disability categories as well as for the total special education population, four integration measures were computed (for each of the three years). For narrative purposes, the designation given to each of the integration measures corresponds to the least restrictive environment in the numerator. Thus, "regular classes" represents those placed in either regular or special classes, separate schools, and other environments. "Special classes" includes placements outside the regular classroom (i.e. not mainstreamed), including special classes, separate schools, and other environments. "Separate schools" includes those and "other environments." As mentioned above, the most restrictive placements, i.e. "other" environments, includes residential schools and home and hospital placements.

Description of Independent Variables

Four measures of state financial resources and three measures of state demographic conditions served as the independent variables in these analyses. The four finance variables included: (1) per pupil expenditures (PPEXP); (2) per capita personal income (PIPC); (3) percent of total educational revenue obtained from federal (but not special education) sources (ADJFER); and (4) percent of nonfederal educational revenue obtained from state sources (STPCT). The demographic variables were: (1) percent of school-aged children who were living in rural areas (RURAL); (2) percent

of school-aged children who were reported as having minority status (MINORITY, i.e. black, Hispanic, Asian, or American Indian/Pacific Islander); and (3) percent of related children enrolled in school who were living in poverty (POVERTY).

Each of the independent variables was treated separately in these analyses. One reason for this was that this research represents an initial attempt to explore the possibility of using existing state-level data for policy analyses. At this stage, the goal has been to look for regularities in the data, which might suggest that more sophisticated modeling of the phenomena with this data would prove worthwhile. Examination of the bivariate correlations served as a preliminary step to developing a multivariate model Another reason for this approach was that each independent variable was viewed as providing a slightly different perspective on state context. Although they were related, most of the intercorrelations among the independant variables were in the low to moderate range (i.e. less than .50). Table 1 shows the intercorrelations among finance and demographic variables. The means and standard deviations of the independent variables are presented in Table 2.

Several relationships among the independent variables are worthy of note. States with higher levels of federal assistance tended to be those with higher proportions of children in poverty (r=.84), higher proportions of minority children (r=.54), and lower levels of per pupil expenditures

(r=-.50) and per capita p rsonal income (r=-.55). States
with higher levels of state support or involvement in their
education tended to be those having a larger proportion of
their total reveoue from federal sources (not including
special education, r=.62), and having higher proportions of
minority children (r=.57) and children in poverty (r=.45).
Of course, states with higher proportions of children in
poverty tended to have lower per pupil expenditures (r=-.45)
and lower per capita personal i.icome (r=-.56). A similar,
though slightly weaker, relationship with PPEXP and PIPC was
noted for states with higher proportions of children in
rural areas, but this was not the case for states with
higher proportions of minority children. States with higher
proportions of rural children did, however, have lower
proportions of minority children (r = -.42). Finally, it is
important to mention that the only finance variable which
showed even a modest relationship to enrollment size was per
capita p("sonal income, and those correlations were in the
.20 range. Enrollment size was more substantially related to
rural child population (r = -.44) and to children of
minority status (r = .34).

Although only 1980 census data were available on the
demographic variables, yearly data on the finance variables
were available. As shown in Table 1, these variables
displayed a great deal of stability over time. Nevertheless,
each of the categorical finance variables was created using

the data from each of the three years under investigation. A
description of the categorical independent variables
follows.

Per Pupil Expenditures

States in the lowest quartile on this measure averaged
between $1,090 and $1,305 in 1976, whereas those in the
highest quartile averaged from $1,784 to $3,389 in that
year. By the 1983-84 school year, these figures had doubled
(in current dollars), nevertheless maintaining a large
discrepancy in resources between states at the highest and
lowest end of the scale. It should be noted that the
considerable variation on this measure is partly due to
state-to-state differences in the cost of operating public
schools and providing educational services and materials, as
well as state educational priorities, wealth, and size and
needs of population served.

Per Capita Personal Income

If this variable is viewed as a fairly reasonable
indicator of a state's wealth, there is substantial
variation in taxpayers' ability to support their public
education system. The lowest quartile averaged between
$4,662 and $5,513 in 1976, whereas the highest quartile
averaged from $7,004 to $11,599. The figures for 1983-84
were about double the 1976 figures. These numbers have not
been adjusted for inflation or cost-of-living allowances.

Proportion of Total Revenue from Federal Sources

Historically, the federal contribution to state education revenue has been much smaller than that provided by the state itself or by local sources. Nationally the federal proportion averaged about 10 % in 1980, but it has decreased substantially during this decade. On a state-to-state basis, the federal contribution (after removing Part B funds) ranged from 4.6 to 22.9 % in 1976. The states in the lowest quartile of federal assistance received 6.3 % or less of their revenue from the federal government. For the highest quartile, this figure was at least 12.1 %. By 1983-84 these figures had dropped by about a third.

State Share of Nonfederal Revenue

The relative contributions of state and local governments to state educational revenue can differ markedly depending on historical trends or perceptions held by each regarding their role in supporting education. Differences in their tax base and funding priorities are also influencing factors. The measure utilized in these analyses represented the percent of the state's nonfederal education revenue that was from state sources. It can be viewed as an indicator of the state's role in providing financial support for education or the degree of state presence in education. Measured this way, it avoids the problem associated with using separate variables for state and local proportional

contributions. These are almost inversely related, and seem more reflective of regional rather than fiscal differences.

In 1976, the states in the lowest quartile of state share received between 8.82 and 38.94 % of their nonfederal revenue from state sources, and those at the highest quartile received from 65.37 to 100 %. Because of changes in school financing in recent years, this variable, while having respectable stability across the years in this study, is slightly less stable than the other finance measures.

Percent of School-Aged Children Living in Rural Areas

This variable, based on the 1980 Census, takes the number of persons 3 to 17 years of age living in rural areas as a percent of the total number of persons in that same age group. The lowest quartile had between 9.33 and 21.10 % of their child population living in rural areas. For the highest quartile, these figures ranged between 50.00 and 70.12 %.

Percent of School-Aged Children Who Are Minority

Census data also provide figures for the number of related children 3 to 17 years old who are enrolled in public schools, with breakdowns by both poverty and minority status. To compute the percent of children having minority status, the categories (1) black, (2) Spanish origin, (3) Asian and Pacific Islander, and (4) American Indian, Eskimo, and Aleut, were added, then taken as a percent of the total

figure. The lowest quartile had zero to 6.8 % minority children, and the highest had 30.75 to 75.14 % minority children.

Percent of School-Aged Children Living in Poverty

The lowest quartile of the poverty variable had 7.4 to 10.7 % of the children living in poverty, and the highest quartile had between 17.6 and 29.8 % in poverty.

RESULTS

Identification

Correlations between the identification and both the finance and demographic variables are given in Table 3. The means and standard deviations of the identification variables are presented in Table 4. While none of the individual correlations revealed more than moderate relationships, the correlations, as well as the quartile means (Tables 5, 6, 7, 8, 9, 10, 11) indicated some definite trends. (Note: FIgures 1 and 2 graphically represent the relationships among quartiles.)

Nationally, special education identification rates increased 25 % between 1976-77 and 1980-81, from 7.70 to 9.61 %. By 1983-84, they had increased another 8 % to 10.42 %. Special education identification rate did not relate systematically to any financial variables or to POVERTY and MINORITY variables. A moderate relationship was observed

with RURAL in 1976 (r =-.358), but decreased greatly by 1983
(r = -.105). More specifically, in 1976, states with the
lowest rural child populations identified a third more
special education students than those with the highest rural
population (8.28 versus 6.32 %, respectively), but by 1983-
84 this gap had all but disappeared, (10.61 versus 10.01,
for the lowest and highest rural groups, respectively).

Nationally, increases in identification rates for the
three disability areas differed from those for the total
handicapped population. Identification rates for LD
increased 80 % between 1976 and 1980, and an additional 20 %
by 1983, making the 1983 rate more than double that of 1976
(2.12 versus 4.62 %). [Note: in the 1976-77 school years, a
2% cap was in effect on the LD identification.]
Identification rates for emotionally disturbed (ED)
increased 36 % between 1976 and 1980, from .52ˆ to .721 %.
Between 1980 and 1983, they increased another 17% to .846%.
No substantial change was observed nationally in
identification rates for multiply handicapped between 1980
and 1983.

Relationships between identification rates for the
specific handicapping conditions and the independent
variables were stronger than those for total special
education. For example, states with greater financial
resources (i.e. PPEXP and PIPC) and lower rural child
populations consistently identified more LD students, and
these differences did not diminish over time. This in

illustrated by the finding that in 1983, states in the lowest quartile of PPEXP and PIPC had LD identification rates about three-fourths the size of those in the highest quartile. In the same year, states with the largest percent of rural children identified LD students at a rate 82 % that of those with very few rural children. Further, states at the lowest end of the POVERTY variable tended to identify more LD students than those with higher proportions of children in poverty, and while these differences also decreased over time, they did not completely disappear. The MINORITY variable showed no systematic relationship to LD identification rates for any of the three years.

ED identification rates showed weak but positive relationships to PPEXP and PIPC and negative relationships to the ADJFER variable. States with greater financial resources as well as those with less federal assistance tended to identify more ED students. In 1983-84, the lowest federal assistance states identified over twice as many ED students as the states in the highest quartile (x = 1.06 vs. x = .50 for each quartile respectively).

Moderate negative relationships between ED identification rates and RURAL were evident, and these relationships did not disappear over time. In 1976, states with lowest rural populations identified ED students at a rate 4 times the rate of the highest rural states. By 1983 this difference had decreased by about half, due to the

highest rural states doubling their ED identification rates between the two years.

Of further interest, was the tendency for states with lower levels of children in poverty to identify more ED students. These differences diminished somewhat over time.

No marked relationships with any of the independent variables were observed for the multiply handicapped identification rates.

Integration of Total Special Education Students

Correlations between the integration rates for total special education and both the finance and demographic variables are given in Table 12. Quartile means and standard deviations of the cumulative placement rates (integration variables) for total special education, are presented in Tables 13, 14, 15, 16, 17, 18 and 19. (Figures 3 and 4 present, graphically, the relationship among quartile cumulative placement means.)

As a baseline, it should be noted that nationally, between 1976 and 1983, cumulative placement rates of special education students in special classes (plus all more restrictive environments) increased 27 %, from 25,211 students per million to 32,064 per million. Cumulative placement rates in separate schools (includes the most restrictive placements) increased nationally by 24 % during that same time period, from 5,984 students per million to 7,388 per million. Placement rates in "other" environments

(i.e. the most restrictive placements, which include
residential schools, institutions and homes/hospitals),
however, decreased nationally by 23 %, from 1,684 students
per million in 1976 to 1,306 per million in 1983. These
national trends were not reflected uniformly among the
states, and distinct differences were observed among states
with different financial and demographic characteristics.

In 1976, there was a tendency for states with higher
PPEXP to place more special education students in special
classes, than those with lower PPEXP (r=.225). This
relationship was not observed in the use of either separate
schools or other environments. However, by 1983, differences
in the use of non-mainstreamed environments had diminished
somewhat (r=.133), and stronger differences in the use of
the most restrictive placements had emerged (r=-.261). Thus,
a tendency for states with higher PPEXP to have lower
placements in other environments had become more apparent.
More specifically, while states in the lowest quartile of
PPEXP had experienced very little change in their average
placement rates in other environments between 1976 and 1983,
the average for the highest quartile had decreased by 65 %.

The positive relationship between PIPC and the use of
special classes increased between 1976 (r =.167) and 1983 (r
=.283). Over the 8-year period, states with higher per
capita income increased their placements in special classes
more than lower PIPC states did, resulting in greater
differences in 1983 than in 1976. No systematic relationship

existed in 1976 for the use of separate schools, however. But by 1983, a pattern of higher separate school placements for higher PIPC states was observed (r=.241). In fact, states in the lowest quartile of PIPC had essentially maintained their placement rate in separate schools between 1976 and 1983, whereas the highest quartile had increased their rate by 44 %.

Finally, while no systematic relationship with the use of "other" environments had existed in 1976, by 1983 this had begun to change. States with higher PIPC tended to have fewer placements in these most restrictive environments. In fact, though the lowest quartile had decreased their placements in other environments by 25 % over the time period, the highest quartile had decreased by 57 %.

More noticeable relationships were observed between integration rates and RURAL and MINORITY variables. Higher placements in special classes tended to be in states with lower rural child populations (r=-.222) and the strength of this relationship increased over time (r=-.370 in 1983). Similarly, higher placements in separate schools tended to be in states with lower rural child populations (r=-.208), a relationship which also became stronger by 1983 (r=-.298). This appears largely due to a greater increase in separate school placements during the 8-year period by the lowest quartile, resulting in greater discrepancies by 1983. However, the tendency for states with high rural child populations to have fewer placements in other environments

in 1976 (r=-.161) was reversed by 1983 (r=.179). Placements
in other environments had increased on the average for
states at the highest quartile of rural child population,
whereas the lower rural state , had decreased their placement
rates in other environments by half.

While no systematic relationships existed between
integration rates and [NORITY in 1976, by 1983 stronger
relationships were observed with special class placements
(r=.204) and with other environment placements (r=-.227).
The direction of these relationships was opposite in the two
cases. That is, a greater use of special class placements by
states with higher minority child populations coincided with
lower placement rates in other environments. Specifically,
states in the highest quartile of minority child population
decreased their placements in other environments by 25 %
between 1976 and 1983, while the lowest quartile had
increased their placements in this category. And, while both
had increased placements in less restricted environments,
the increase for high minority child population states was
greater than that for low.

trends in the use of the different placements differed
among states with varying levels of federal assistance and
state involvement, but the patterns were not so clear-cut.

Integration of Learning Disabled Students

Correlations between the independent variables and
integration rates for learning disabled students are

presented in Table 20. Quartile means and standard deviations are in Tables 21, 22, 23, 24, 25, 26, and 27. (Figures 5 and 6 present the comparisons among quartile means.) Placements for LD students showed generally stronger relationships with the independent variables than those for the total special education population. States with greater financial resources (higher PPEXP and PIPC) tended to place more LD students in special classes than those with fewer financial resources. The strength of this association declined somewhat by 1983, yet the rates for the lowest quartiles remained only about one-fourth those of the highest quartiles.

An opposite pattern occurred for separate school placements, in that relatively unsystematic or weak relationships in 1976 became stronger and more linear by 1983. The highest quartiles of PPEXP and PIPC increased their use of separate school placements more than did the lowest quartiles during this time period. In fact, by 1983, the placement rate in special schools for the highest quartile of PIPC was six times the rate of the lowest quartile.

Relationships between PIPC and PPEXP and the use of other environments were generally not quite so systematic. However, it is worth noting that the lowest quartiles increased their placements in these most restrictive environments between 1976 and 1983, whereas the highest quartiles decreased their rates during the same time period.

Negative relationships were observed between LD placement rates and ADJFER. In particular, in 1976, in all types of placement categories, higher placement rates tended to be in states with lower levels of federal assistance. However, except for regular class placements, these relationships diminished or disappeared by 1983. Greater increases by the highest quartile in the use of special classes and separate schools helped to reduce discrepancies with the lowest quartile, but did not completely elimina e them. On the other hand, differences apparent in 1976 in the use of other environment placements did almost disappear by 1983. This was largely due to increases by the highest federal assistance quartile and decreases by the lowest quartile in the use of these most restrictive environments.

States with higher rural child populations tended to place fewer LD students in special classes in 1976 (r=-.399), and this relationship became stronger by 1983 (r=-.504). Placement rates in special classes for the highest rural quartile were generally about three-tenths those of the lowest quartile.

Negative associations with the use of separate school placements became stronger by 1983, indicating an increased tendency for high rural states to have fewer of these placements, this is reflected in the greater increase by ' a lowest quartile and very little change by the highest quartile in these placements.

On the other hand, the relationship with other environments was nonexistent in 1976 and 1980, but became positive by 1983 (r=.166). The highest quartile had doubled their other environment placements between the two years, while the lowest quartile had decreased theirs by 43 %.

An increasing positive relationship was observed between MINORITY and the use of special classes over the eight-year period (r=.140 in 1976 and r=.337 in 1983). This was due to the highest quartile increasing their special class placement somewhat more than the lowest quartile. Thus, higher special class placements remained in states with higher minority child populations. However, this coincided with decreasing negative relationships with separ e school placements (from r=-.176 in 1976 to r=.042 in 1983). In 1976, states with highest minority child populations tended to have lower placements in separate schools. The placement rate in separate schools for the highest quartile in 1976 was about half that of the lowest quartile, but the highest quartile more than doubled their rate by 1983, resulting in minimal differences between the two quartiles.

Integration of Emotionally Disturbed Students

Table 28 presents the correlations between the independent variables and integration rates for emotionally disturbed students. Quartile means and standard deviations are in Tables 29, 30, 31, 32, 33, 34, and 35. (Figures 7 and

8 present the comparison among quartile means.) Placement of ED students also showed moderate relationships with the independent variables. States with greater financial resources had higher placement rates in both special classes and separate schools in 1976. However, while the relationships between PPEXP and special classes decreased by 1983 (r=.395 to r=.243), the correlations between PIPC and special class placement increased (r=.332 to r=.406) over the eight years.

Differences in the use of separate schools became more systematic by 1983. The highest quartiles of both finance variables (i.e. PPEXP and PIPC) increased their separate schools placements more than the lowest quartiles. The placement rates for the highest quartiles were three to four times those of the lowest quartiles in 1983.

The relationships of PPEXP and PIPC with other environment placement were positive in 1976 but nearly disappeared by 1983. Again, this was due to the highest quartiles decreasing their placements in these most restrictive environments, while tne lowest quartiles increased their placement rates.

Also, states with higher proportions of federal educational assistance had a lower placement across all settings, a pattern paralleled by states with high rural child populations and high proportions of children in poverty.

Integration of Multiply Handicapped Students

The correlations between the independent variables and integration rates for multiply handicapped students are given in Table 36. Quartile means and the standard deviations are in Tables 37, 38, 39, 40, 41, 42, and 43. (Figure 9 presents, the comparison among quartile means.) Cumulative placement rates for multiply handicapped students did not appear to relate to the majority of fiscal and demographic variables. Exceptions to this were the correlations between the use of other environments and PPEXP ($r=-.288$), PIPC ($r=-.223$), and RURAL ($r=.207$) in 1983. In general, differences in the use of special classes and separate schools decreased, while the use of other environments became increasingly different. By 1983, the highest quartiles of PPEXP and PIPC and the lowest quartiles of RURAL had placement rates in other environments that were one-fourth to one-third of those of their counterparts at the opposite end of the scale.

DISCUSSION

This research was aimed at assessing the feasibility of using extant national data bases for examining the implementation of federal special education policy. Data on identification and placement of special education students taken from the Annual Reports on the Implementation of P.L. 94-142 as well as public records of state-level financial

and demographic characteristics were merged into a single data base. Relationships between the special education variables and the contextual characteristics were examined for linearity and patterns over time.

The results reported here indicate that identification and integration rates show systematic relationships with many state-level characteristics. The fact that these relationships show distinct patterns supports the view that each independent variable provides a slightly different perspective on the implementation issue. And though none of the correlation coefficients indicate more than moderate relationships, their pattern over time, as well as the descriptive view based on the quartiles, suggests that some of the variation among states in their implementation practices can be explained by selected fiscal and demographic factors. Nonetheless, it is important to remember that the data included in these analyses are state-level and represent an aggregation of local school districts as well as geographic regions. Substantial variation in wealth and educational practice exists within a state's borders, and this variation cannot be accurately represented at the national level.

These analyses illustrate that well-known national trends in the implementation of special education policy (i.e. greater identification and movement into less restrictive environments) appear to vary substantially among the states. The rather consistent relationships with

financial resource variables, such as per pupil expenditures
and particularly per capita personal income, perhaps
indicate a greater capacity for operating special education
programs by the wealthier states. Increased utilization of
less restrictive environments perhaps reflects a greater
capacity for moving toward the "least restrictive
environment" mandate by states with greater financial
resources and more centrally located service populations.
This is supported by the fact that wealthier states and
those with lower rural child populations tended to have
fewer placements in the most restrictive environments. In
addition, the data illustrate the difficulties of rural
states in delivering special education, as evidenced by
their slower movement out of the most restrictive
environments.

Of further interest were the differences in
identification rates for the specific categories of LD and
ED. These categories were much more reactive to the
independent variables than the total special education
identification rates. States with greater financial
resources and those with smaller rural child populations
tended to have higher rates than their counterparts at the
lower end of these scales. However, the weakening
correlations between rural states and identification of
total special education and LD students and rural status
suggests or confirms a "catch-up phenomena" meaning that
some states, such as those with larger rural populations,

may have had less well developed special education programs
at the beginning of P.L. 94-142 but over time have increased
their capacity to identify and serve special education
students. The weakening correlations are also likely due to
the ceiling effect given the 12 % reimbursement cap on
identification of special education students.

The relationships between the dependent variables
relating to multiply handicapped students and most of the
independent variables were almost nonexistent. There may be
several reasons for this. As a reporting category, this
classification is newer than the others and has also
undergone some definitional changes (e.g. the removal of the
deaf-blind classification). It seems possible that the
measures of the dependent variables have much unsystematic
variation (i.e. inconsistency) which may limit their ability
to detect systematic relationships with the independent
variables. While it is unlikely that fiscal or demographic
factors would influence child counts (identification rates)
in this category, it is possible that fiscal variation may
influence the placements of these students. However, more
data points are needed before any firm statements can be
made.

A similar observation can be made regarding minority
populations and identification variables. It appears that
between 1980-81 and 1983-84 there is an increased, although
very small, trend for higher minority states to identify
fewer special education students, as well as fewer

emotionally disturbed students. While other research suggests that minorities are overrepresented in special education, those trends are not reflected in the state-level data. More information is necessary to examine whether, in fact, minority status is influencing identification in some systematic way. Additionally, in this study, the measure of minority status included all racial and ethnic categories reported by Census. Perhaps if individual races or ethnic groups were analyzed separately, the patterns would differ.

The results presented here provide support for the notion that existing data, collected to monitor the operation of the federal special education program, can serve as a useful data base for research. These analyses have not only validated common knowledge, but also have raised important and interesting questions relating to implementing federal education programs. This is just a preliminary step in understanding the influence of state-level socio-economic factors on identifying and serving the nation's handicapped children. Further exploration of these relationships, perhaps in a multivariate context, is warranted.

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Note: Cautions on Interpreting Figures

As stated in the text and shown in Figures 1 through 9, each
of the dependent variables representing special education
identification and integration rates was broken down by
seven independent variables which had been quartile coded.
Thus, the mean value on the dependent variable for each of
the quartiles was computed, then graphed in a stacked bar
chart. Each stacked bar represents the data for a given
year (1976, 1980, or 1983). Within each bar, the quartile
breakdown is represented by the four differently shaded
components, with the size of each component representing the
mean of the quartile on the dependent variable and its
relative contribution to the entire bar. For a given
dependent variable, comparisons across years in the relative
height of the bars as well as in the relative size of the
components are possible. A visual inspection of the height
of the bars relative to each other gives a general idea of
how the dependent variable changes over time. Changes in
the components can also be examined by looking at their
relative sizes within a bar and across bars. If the height
of the bar is approximated and then divided by four, a rough
estimate of the national average on the dependent variable
may be obtained.

However, certain cautionary notes are in order for those who
examine the graphs without reading the text. At the very
least, graphs should be examined with data tables nearby so
as to check which figures are being graphed. Note that the
figures on which the graphs are based are all rates. Thus,
it is not possible to sum them and obtain estimates of the
total number of students within a given placement or having
a particular kind of disability.

As mentioned in the text, the quartiles were created by
dividing the distribution of a given independent variable
into four equal parts, then assigning each state to one of
the categories depending on their position within the
distribution. Thus, states were assigned to one of four
possible categories: LOW, LOW MIDDLE, HIGH MIDDLE, or HIGH.
Where complete data are available, the sample sizes in each
of the quartiles are 12, 13, 13, and 12, respectively. It
is the mean of each of the quartiles which is being graphed,
meaning that he variability with each quartile is not
evident from the graph (though it does appear in the data
tables). In many cases, this variation is substantial.

For the identification variables, data for total special
education and for learning disabled appear on the same graph
(i.e. use the same scaling for the Y-axis). A separate
graph, with a different scale for the Y-axis is used for
emotionally disturbed and multiply handicapped, which appear
together on the same graph. For the placements variables,
data for regular class and special class placements appear
together on the same graph, whereas separate school and

other environment placements appear together but on a separate graph. It is important to note here as well the differences in scaling on the Y-axis for each of these graphs. Care should be taken not to make comparisons across graphs, based on the height or size of the bars, although such comparisons are possible within a given graph.

Recall also from the discussion in the text that the dependent variables for integration (placement) are cumulative placement rates (as per Bellamy and Danielson, 1987). So, for example, cumulative placement rates in regular classes include those special education students who are in mainstreamed classes, plus those placed in more restrictive environments (i.e. special classes, separate schools, and other environments). The label assigned to a given placement represents the least restrictive environment on a continuum that extends to "other environments", the most restrictive/segregated environment. This issue is particularly relevant when comparing across placements, which should be avoided because of the confounding due to the nature of the measurement scale. Further, although the tables report cumulative placement rates per million, the graphs give cumulative placement rates per thousand.

47

Figure 1 Comparisons Among Quartile Mean Identification Rates
for Total Special Education and Learning Disabled.

**IDENTIFICATION RATES FOR TOTAL SPECIAL
EDUCATION & LEARNING DISABLED BY MINOR**
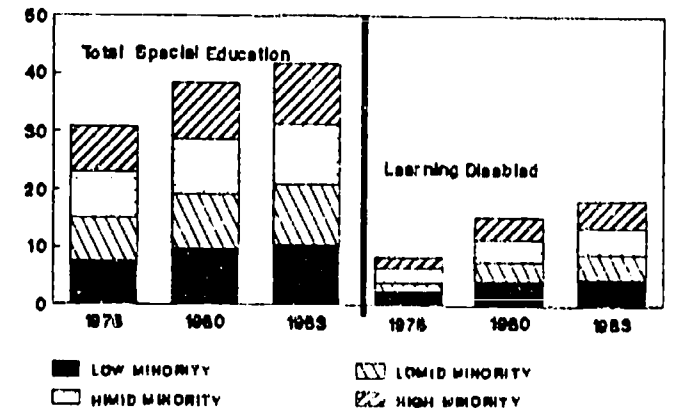
- ■ LOW MINORITY
- □ HIMID MINORITY
- ⧄ LOMID MINORITY
- ▨ HIGH MINORITY

**IDENTIFICATION RATES FOR TOTAL SPECIAL
EDUCATION & LEARNING DISABLED BY ADFED**

- ■ LOW ADFED
- □ HIMID ADFED
- ⧄ LOMID ADFED
- ▨ HIGH ADFED

**IDENTIFICATION RATES FOR TOTAL SPECIAL
EDUCATION & LEARNING DISABLED BY PIPC**

- ■ LOW PIPC
- ⧄ LOMID PIPC
- □ HIMID PIPC
- ▨ HIGH PIPC

**IDENTIFICATION RATES FOR TOTAL SPECIAL
EDUCATION & LEARNING DISABLED BY PPEXP**

- ■ LOW PPEXP
- □ HIMID PPEXP
- ⧄ LOMID PPEXP
- ▨ HIGH PPEXP

**IDENTIFICATION RATES FOR TOTAL SPECIAL
EDUCATION & LEARNING DISABLED BY STPCT**

- ■ LOW STPCT
- □ HIMID STPCT
- ⧄ LOMID STPCT
- ▨ HIGH STPCT

**IDENTIFICATION RATES FOR TOTAL SPECIAL
EDUCATION & LEARNING DISABLED BY POV**

- ■ LOW POVERTY
- □ HIMID POVERTY
- ⧄ LOMID POVERTY
- ▨ HIGH POVERTY

**IDENTIFICATION RATES FOR TOTAL SPECIAL
EDUCATION & LEARNING DISABLED BY RURAL**

- ■ LOW RURAL
- ⧄ LOMID RURAL

48

49
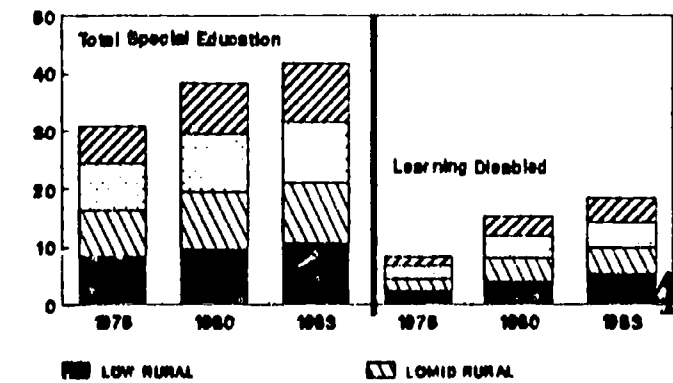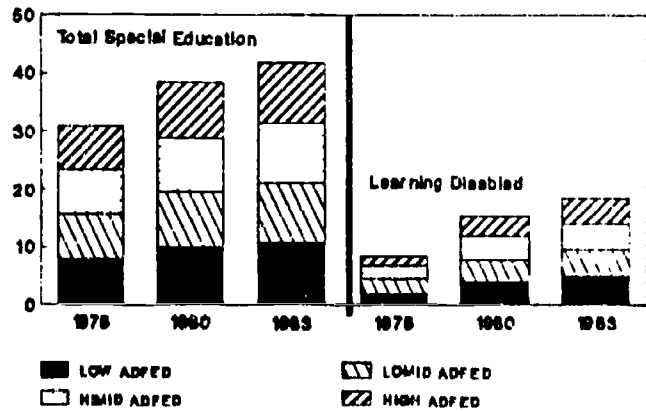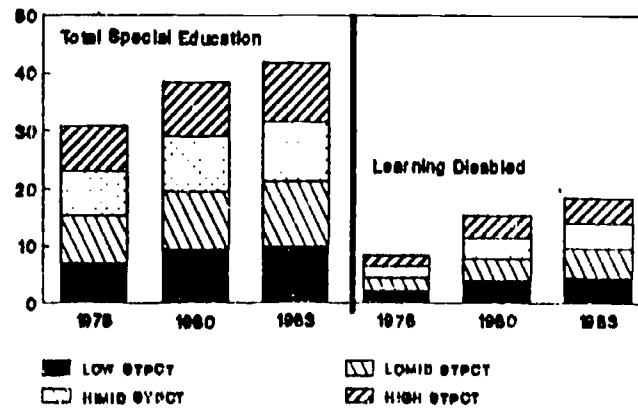
Figure   2   Comparisons Among Quartile Mean Identification Rates
for Emotionally Disturbed and Multiply Handicapped.

**IDENTIFICATION RATES FOR EMOTIONALLY
DISTURBED & MULTIHANDICAPPED BY ADFED**
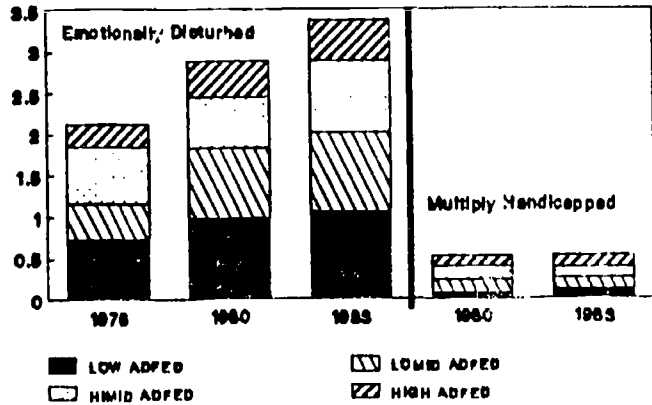
Emotionally Disturbed

Multiply Handicapped

1978   1980   1983   1980   1983

■ LOW ADFED   ▨ LOMID ADFED
▧ HIMID ADFED   ▨ HIGH ADFED

**IDENTIFICATION RATES FOR EMOTIONALLY
DISTURBED & MULTIHANDICAPPED BY PIPC**

Emotionally Disturbed

Multiply Handicapped

1978   1980   1983   1980   1983

■ LOW PIPC   ▨ LOMID PIPC   ▧ HIMID PIPC   ▨ HIGH PIPC

Emotionally Disturbed

Multiply Handicapped

1978   1980   1983   1980   1983

■ LOW MINORITY   ▨ LOMID MINORITY
▧ HIMID MINORITY   ▨ HIGH MINORITY

**IDENTIFICATION RATES FOR EMOTIONALLY
DISTURBED & MULTIHANDICAPPED BY POV**

Emotionally Disturbed

Multiply Handicapped

1978   1980   1983   1980   1983

■ LOW POVERTY   ▨ LOMID POVERTY
▧ HIMID POVERTY   ▨ HIGH POVERTY

**IDENTIFICATION RATES FOR EMOTIONALLY
DISTURBED & MULTIHANDICAPPED BY PPEXP**

Emotionally Disturbed

Multiply Handicapped

1978   1980   1983   1980   1983

■ LOW PPEXP   ▨ LOMID PPEXP
▧ HIMID PPEXP   ▨ HIGH PPEXP

**IDENTIFICATION RATES FOR EMOTIONALLY
DISTURBED & MULTIHANDICAPPED BY STPCT**

Emotionally Disturbed

Multiply Handicapped

1978   1980   1983   1980   1983

■ LOW STPCT   ▨ LOMID STPCT
▧ HIMID STPCT   ▨ HIGH STPCT

**IDENTIFICATION RATES FOR EMOTIONALLY
DISTURBED & MULTIHANDICAPPED BY RURAL**

Emotionally Disturbed

Multiply Handicapped

1978   1980   1983   1980   1983
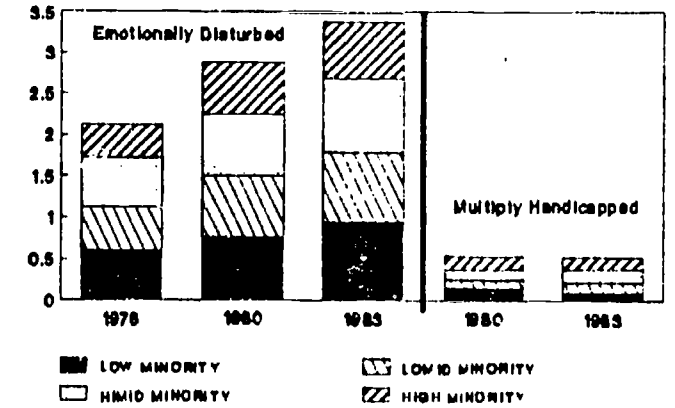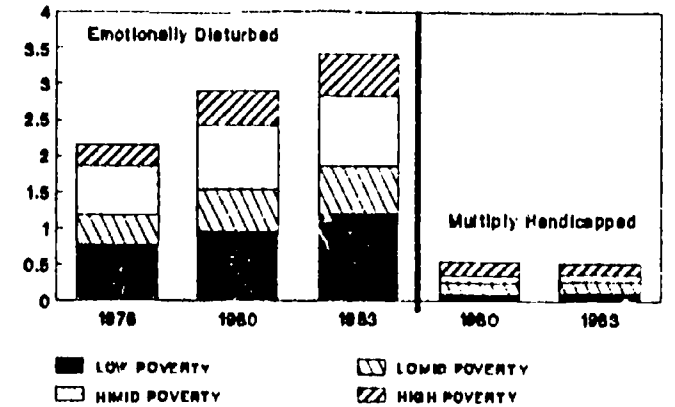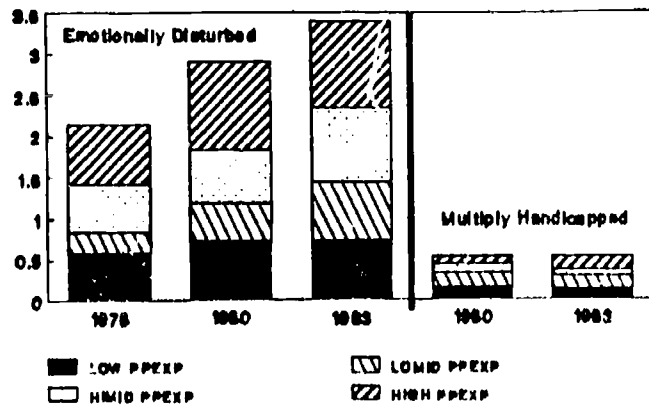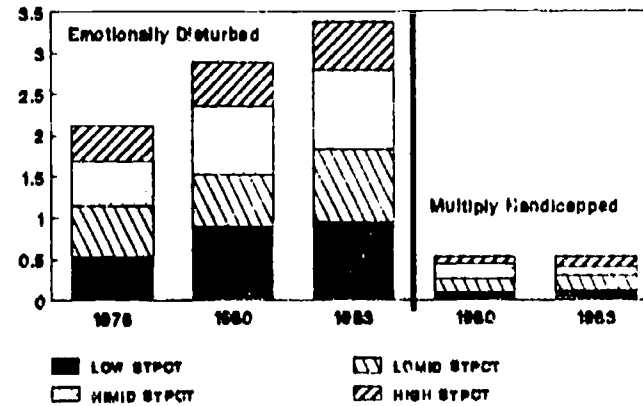
■ LOW RURAL   ▨ LOMID RURAL
▧ HIMID RURAL   ▨ HIGH RURAL
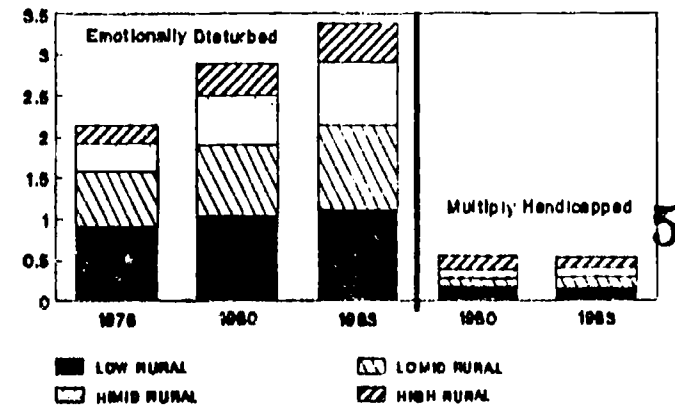
Figure 3   Comparisons Among Quartile Mean Cumulative Placement
Rates in Regular Classes and Special Classes for
Total Special Education

INTEGRATION RATES FOR TOTAL
SPECIAL EDUCATION BY ADFED QUARTILES

Thousands

Regular Class

Special Class

1976   1980   1983   1976   1980   1983

LOW ADFED   LOMID ADFED
HIMID ADFED   HIGH ADFED

INTEGRATION RATES FOR TOTAL
SPECIAL EDUCATION BY PIPC QUARTILES

Thousands

Regular Class

Special Class

1976   1980   1983   1976   1980   1983

LOW PIPC   LOMID PIPC   HIMID PIPC   HIGH PIPC

INTEGRATION RATES FOR TOTAL SPECIAL
EDUCATION BY MINORITY QUARTILES

Thousands

Regular Classes

Special Classes

1976   1980   1983   1976   1980   1983

LOW MINORITY   LOMID MINORITY
HIMID MINORITY   HIGH MINORITY

INTEGRATION RATES FOR TOTAL
SPECIAL EDUCATION BY PPEXP QUARTILES

Thousands

Regular Class

Special Class

1976   1980   1983   1976   1980   1983

LOW PPEXP   LOMID PPEXP
HIMID PPEXP   HIGH PPEXP

INTEGRATION RATES FOR TOTAL
SPECIAL EDUCATION BY STPCT QUARTILES

Thousands

Regular Class

Special Class

1976   1980   1983   1976   1980   1983

LOW STPCT   LOMID STPCT
HIMID STPCT   HIGH STPCT

INTEGRATION RATES FOR TOTAL SPECIAL
EDUCATION BY POVERTY QUARTILES

Thousands

Regular Classes

Special Classes

1976   1980   1983   1976   1980   1983

LOW POVERTY   LOMID POVERTY
HIMID POVERTY   HIGH POVERTY

INTEGRATION RATES FOR TOTAL SPECIAL
EDUCATION BY RURAL QUARTILES

Thousands

Regular Classes

Special Classes

1976   1980   1983   1976   1980   1983

LOW RURAL   LOMID RURAL
HIMID RURAL   HIGH RURAL

52

53
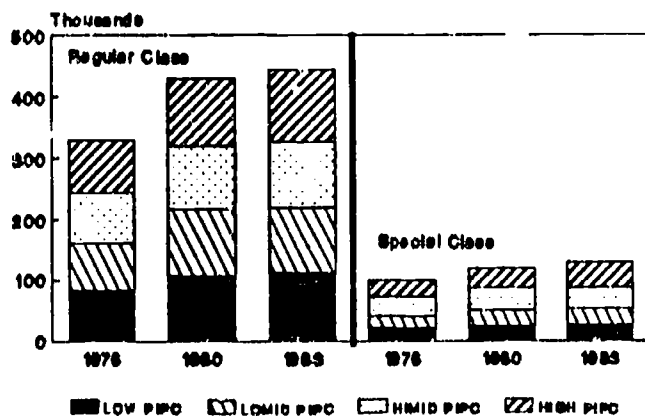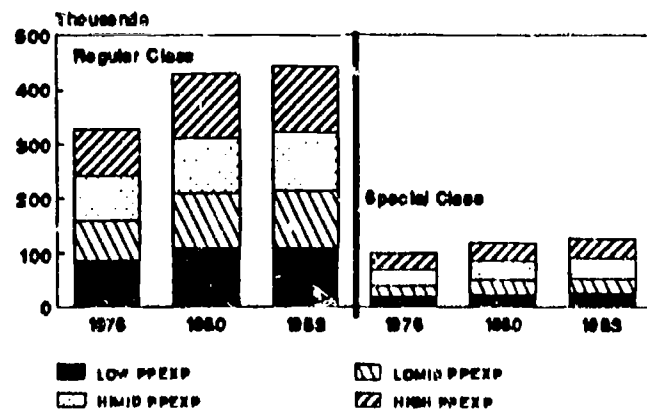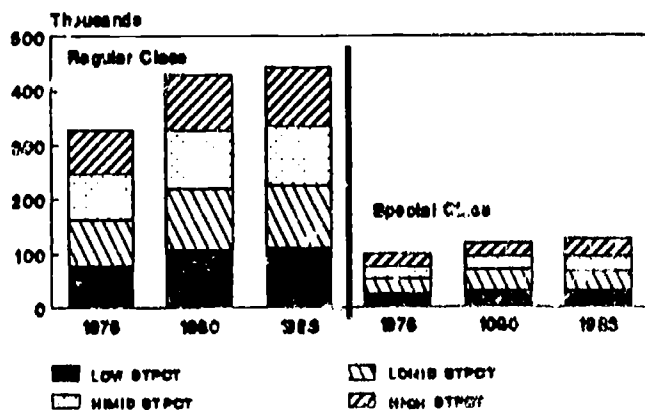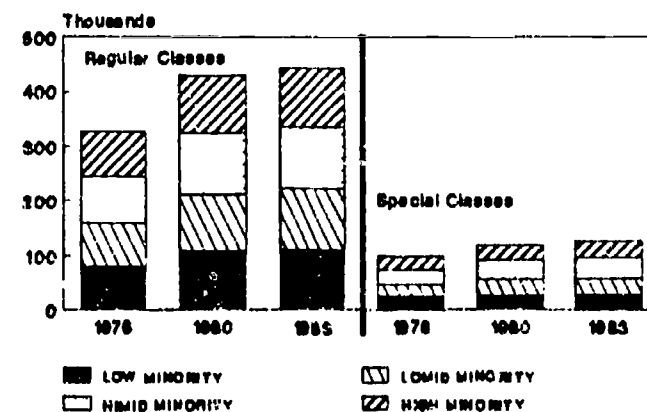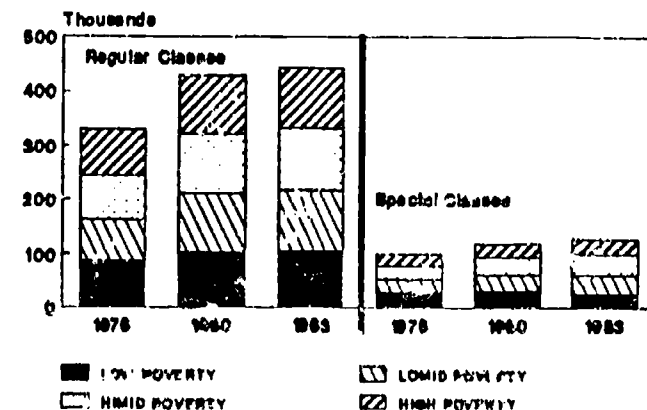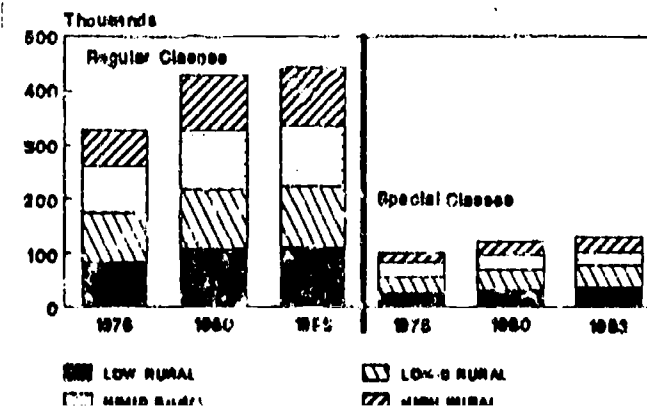
Figure 4   Comparisons Among Quartile Mean Cumulative Placement
Rates in Separate Schools and Other Environments for
Total Special Education.

SEPARATE FACILITY PLACEMENTS FOR TOTAL
SPECIAL EDUCATION BY ADFED QUARTILES
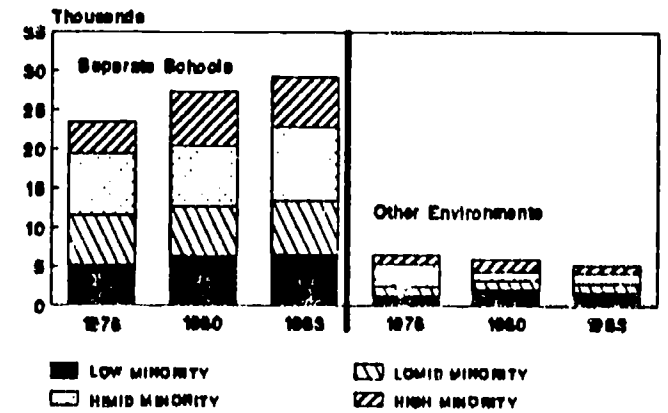
SEPARATE FACILITY PLACEMENTS FOR TOTAL
SPECIAL EDUCATION BY PIPC QUARTILES

SEPARATE FACILITY PLACEMENTS FOR TOTAL
SPECIAL EDUCATION BY MINORITY QUARTILES
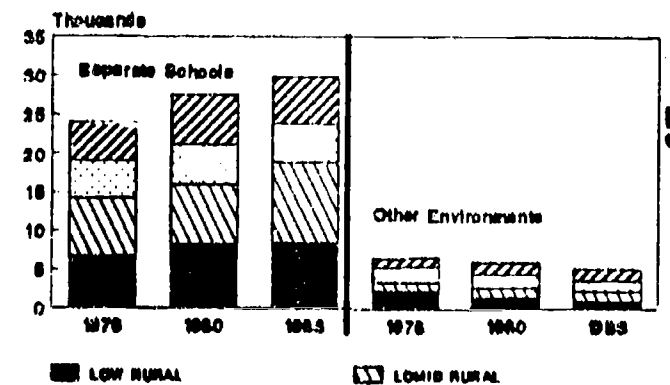
SEPARATE FACILITY PLACEMENTS FOR TOTAL
SPECIAL EDUCATION BY PPEXP QUARTILES
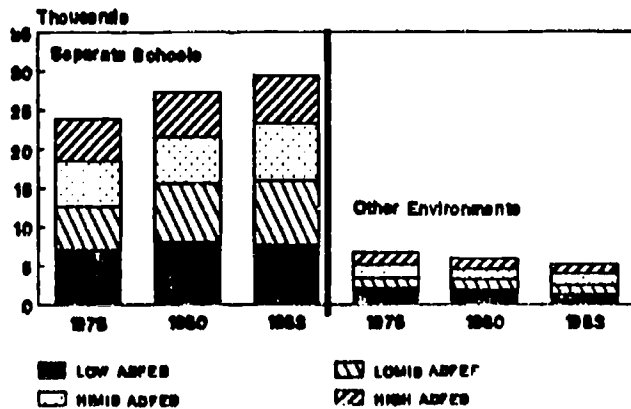
SEPARATE FACILITY PLACEMENTS FOR TOTAL
SPECIAL EDUCATION BY STPCT QUARTILES

SEPARATE FACILITY PLACEMENTS FOR TOTAL
SPECIAL EDUCATION BY POVERTY QUARTILES
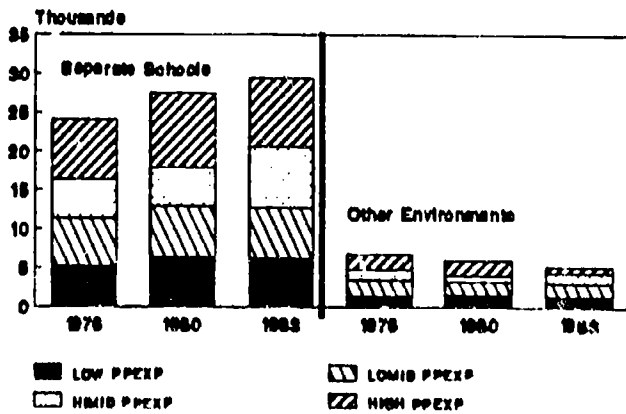
SEPARATE FACILITY PLACEMENTS FOR TOTAL
SPECIAL EDUCATION BY RURAL QUARTILES
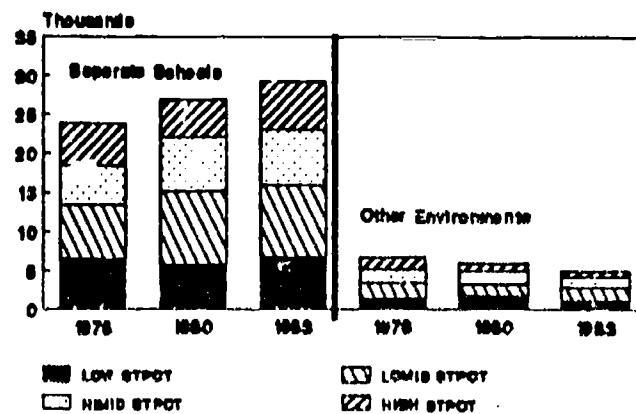
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Figure 5 Comparisons Among Quartile Mean Cumulative Placement Rates in Regular Classes and Special Classes for Learning Disabled.

INTEGRATION RATES FOR LEARNING DISABLED BY ADJUSTED FEDERAL REVENUE QUARTILES

Thousands

Regular Class   Special Class

1976 1980 1983   1976 1980 1983

■ LOW ADFED   ☒ LOMID ADFED
▨ HMID ADFED   ▨ HIGH ADFED

INTEGRATION RATES FOR LEARNING DISABLED BY PER CAPITA PERSONAL INCOME QUARTILES

Thousands

Regular Class   Special Class

1976 1980 1983   1976 1980 1983

■ LOW PIPC   ☒ LOMID PIPC   ☐ HMID PIPC   ▨ HIGH PIPC

INTEGRATION RATES FOR LEARNING DISABLED BY MINORITY QUARTILES

Thousands

Regular Class   Special Class

1976 1980 1983   1976 1980 1983

■ LOW MINORITY   ☒ LOMID MINORITY
☐ HMID MINORITY   ▨ HIGH MINORITY

INTEGRATION RATES FOR LEARNING DISABLED BY PER PUPIL EXPENDITURE QUARTILES

Thousands

Regular Class   Special Class

1976 1980 1983   1976 1980 1983

■ LOW PPEXP   ☒ LOMID PPEXP
☐ HMID PPEXP   ▨ HIGH PPEXP

INTEGRATION RATES FOR LEARNING DISABLED BY STPCT QUARTILES

Thousands

Regular Class   Special Class

1976 1980 1983   1976 1980 1983

■ LOW STPCT   ☒ LOMID STPCT
☐ HMID STPCT   ▨ HIGH STPCT

INTEGRATION RATES FOR LEARNING DISABLED BY POVERTY QUARTILES

Thousands

Regular Class   Special Class

1976 1980 1983   1976 1980 1983

■ LOW POVERTY   ☒ LOMID POVERTY
☐ HMID POVERTY   ▨ HIGH POVERTY

INTEGRATION RATES FOR LEARNING DISABLED BY RURAL QUARTILES

Thousands

Regular Class   Special Class

1976 1980 1983   1976 1980 1983

■ LOW RURAL   ☒ LOMID RURAL
☐ HMID RURAL   ▨ HIGH RURAL
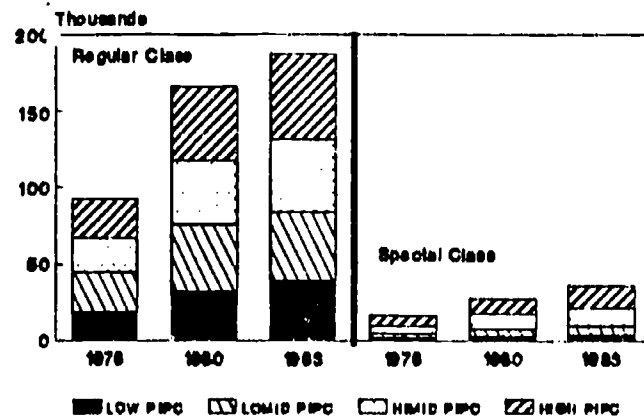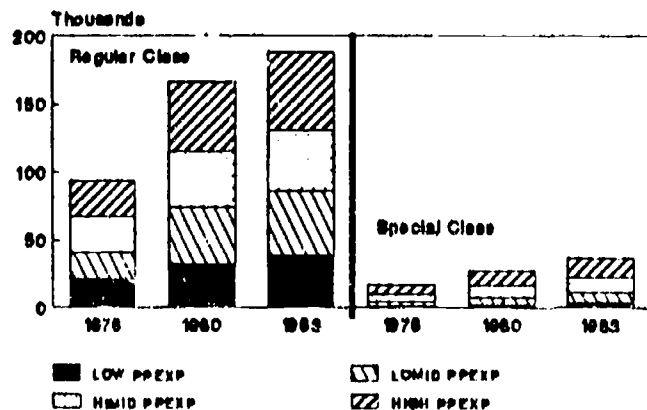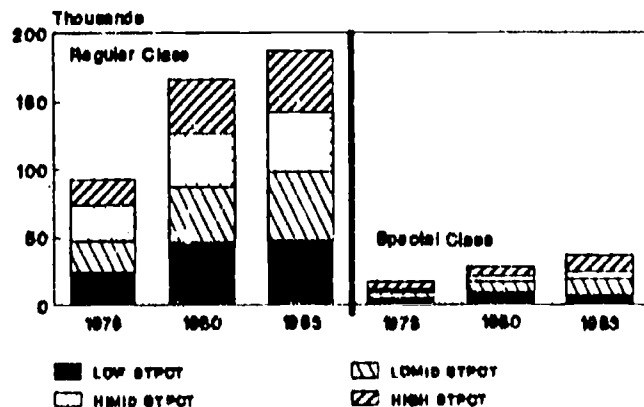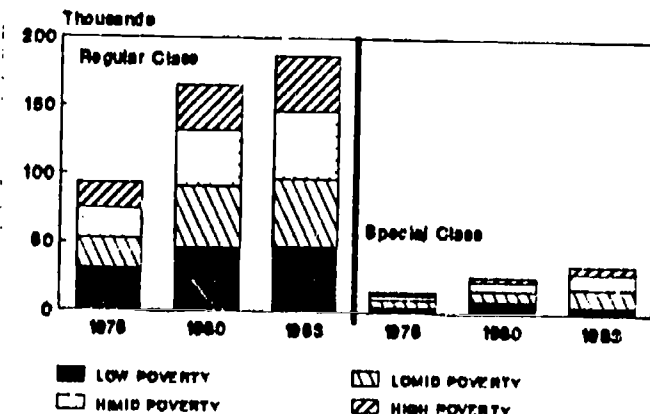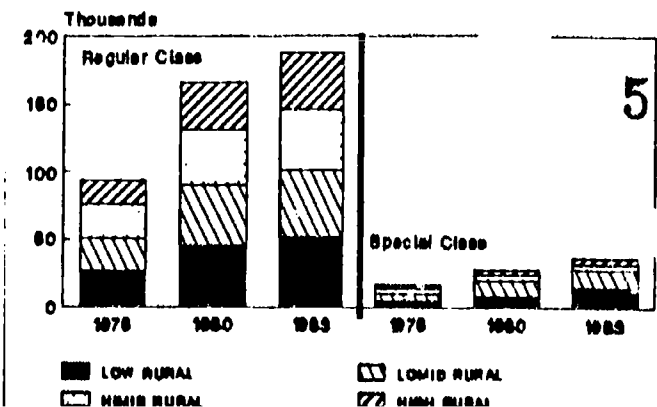
Figure 6 Comparisons Among Quartile Mean Cumulative Placement
Rates in Separate Schools and Other Environments for
Learning Disabled.

SEPARATE FACILITY PLACEMENTS FOR
LEARNING DISABLED BY ADFED QUARTILES
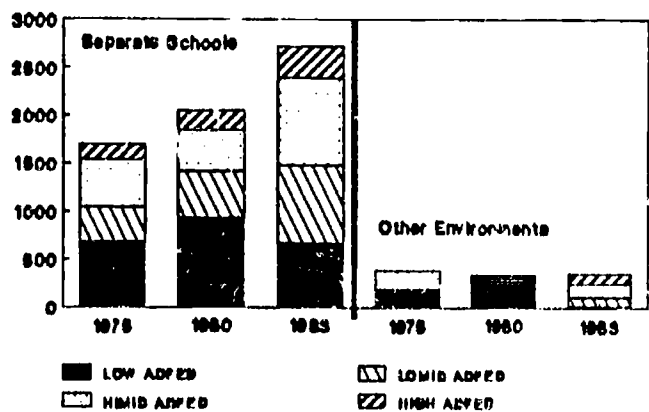
SEPARATE FACILITY PLACEMENTS FOR
LEARNING DISABLED BY PIPC QUARTILES

SEPARATE FACILITY PLACEMENTS FOR
LEARNING DISABLED BY MINORITY QUARTILES
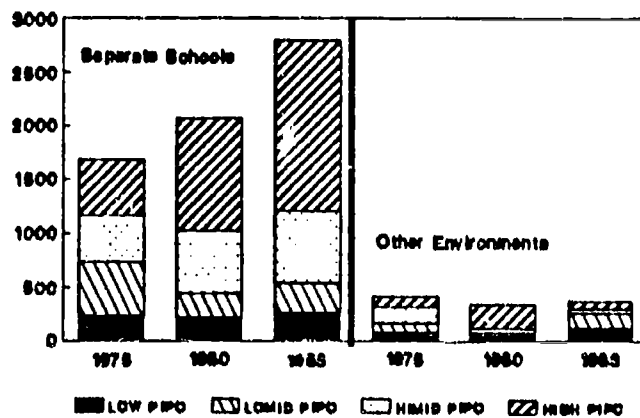
SEPARATE FACILITY PLACEMENTS FOR
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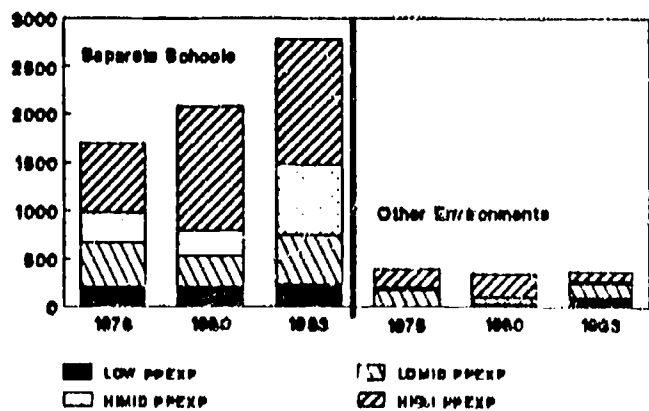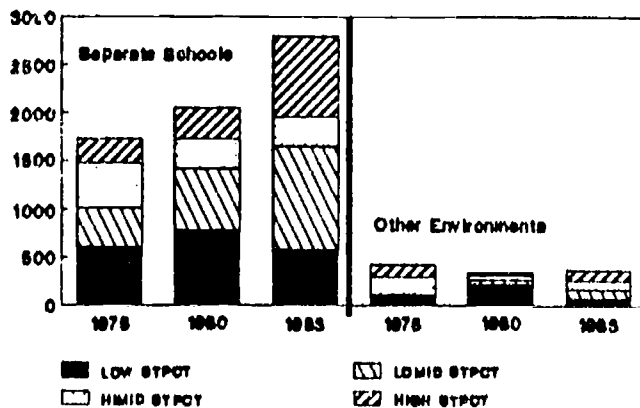
SEPARATE FACILITY PLACEMENTS FOR
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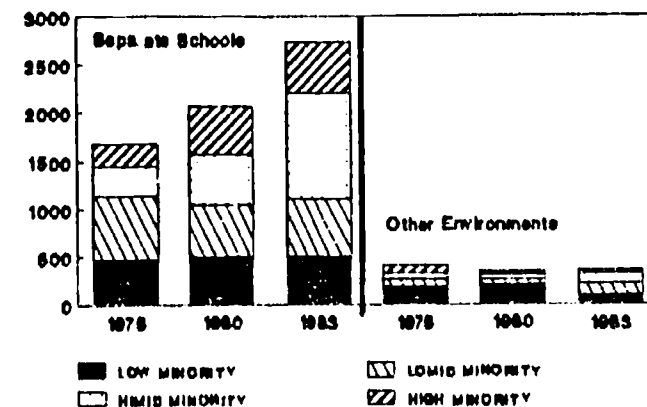
SEPARATE FACILITY PLACEMENTS FOR
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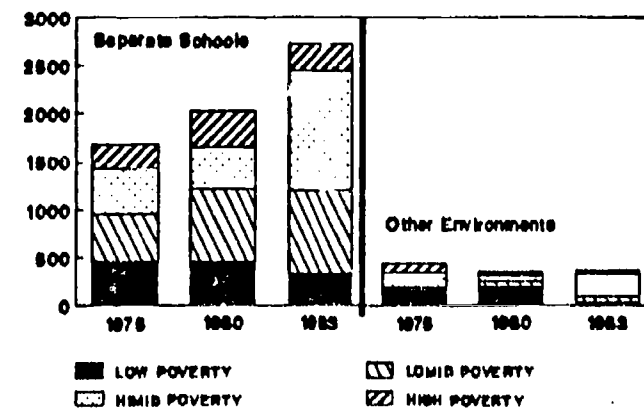
SEPARATE FACILITY PLACEMENTS FOR
LEARNING DISABLED BY RURAL QUARTILES
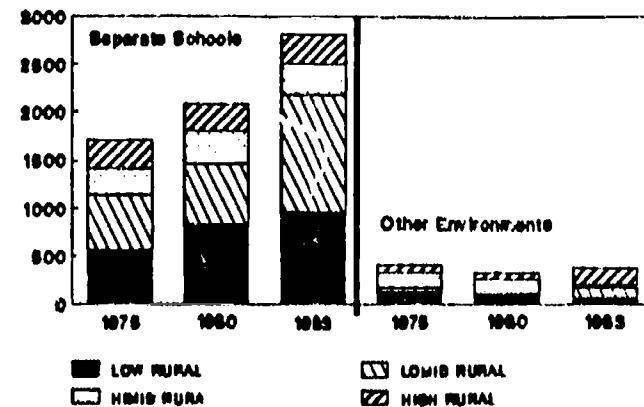
Figure 7 Comparisons Among Quartile Mean Cumulative Placement Rates in Regular Classes and Special Classes for Emotionally Disturbed.

INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY ADFED QUARTILES
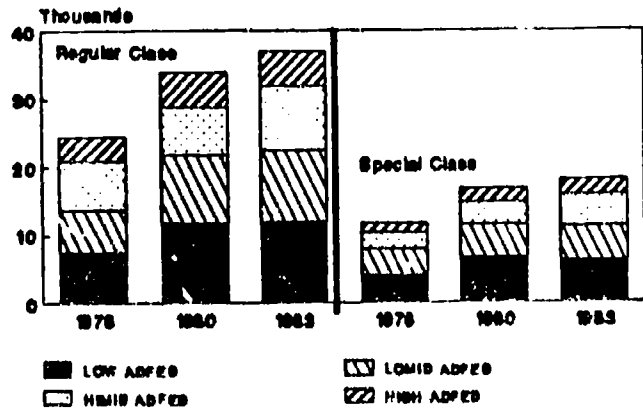
INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY PIPC QUARTILES
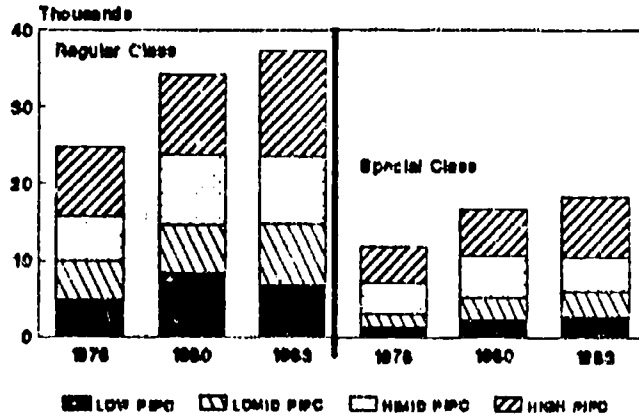
INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY MINORITY QUARTILES

INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY PPEXP QUARTILES
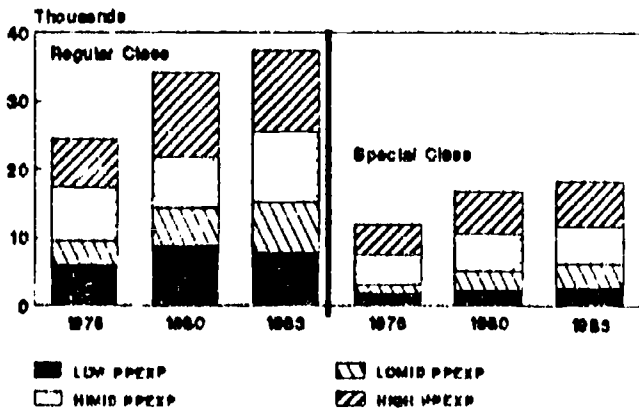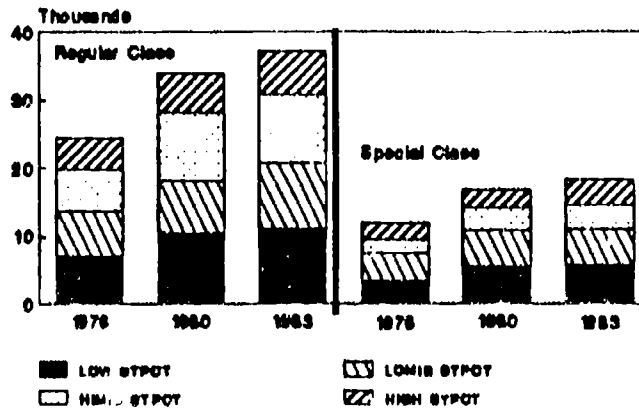
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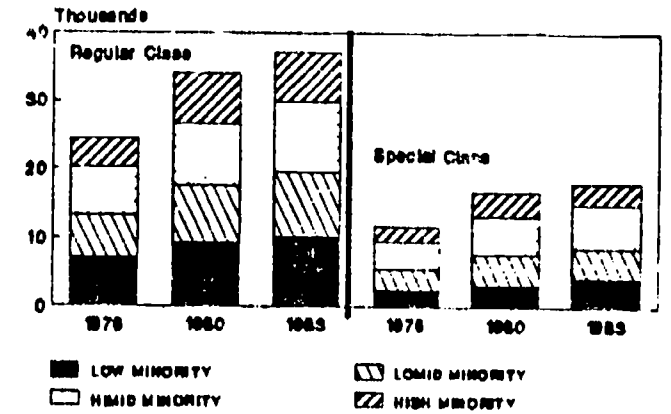
INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY POVERTY QUARTILES
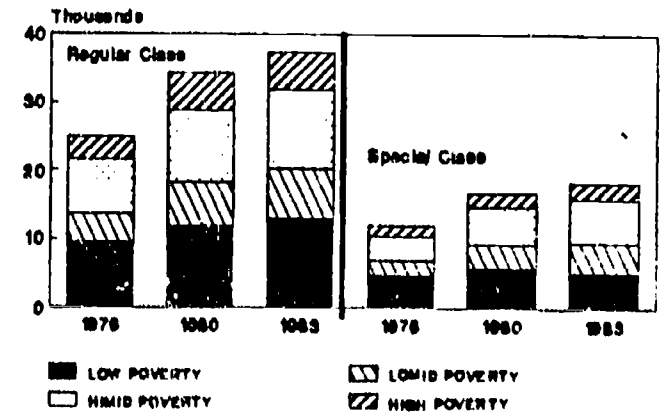
INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY RURAL QUARTILES

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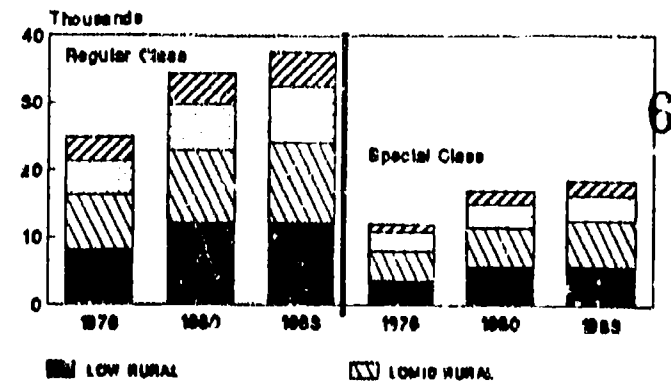
Figure 8 Comparisons Among Quartile Mean Cumulative Placement
Rates in Separate Schools and Other Environments for
Emotionally Disturbed.

SPECIAL FACILITY PLACEMENTS FOR
EMOTIONALLY DISTURBED BY ADFED Q
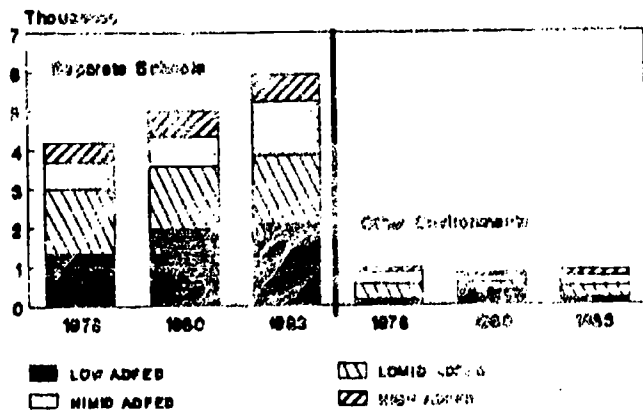
SEPARATE FACILITY PLACEMENT RATES FOR
EMOTIONALLY DISTURBED BY PIPC QUARTILES

SEPARATE FACILITY PLACEMENTS FOR
EMOTIONALLY DISTURBED BY MINORITY Q
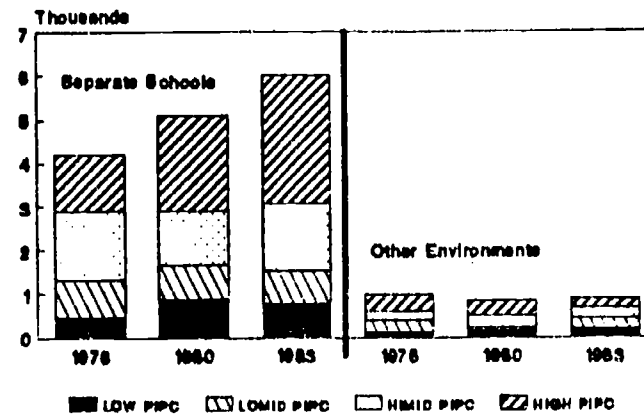
SEPARATE FACILITY PLACEMENT RATES FOR
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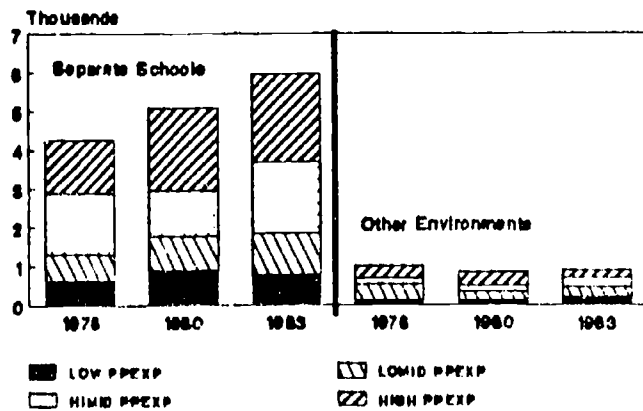
SPECIAL FACILITY PLACEMENTS FOR
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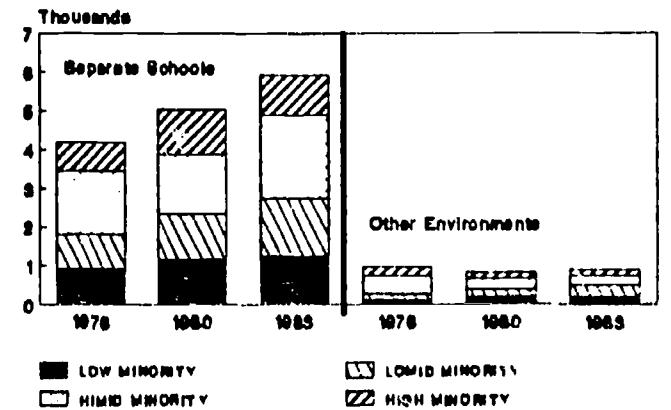
SEPARATE FACILITY PLACEMENTS FOR
EMOTIONALLY DISTURBED BY POVERTY Q

SEPARATE FACILITY PLACEMENTS FOR
EMOTIONALLY DISTURBED BY RURAL Q

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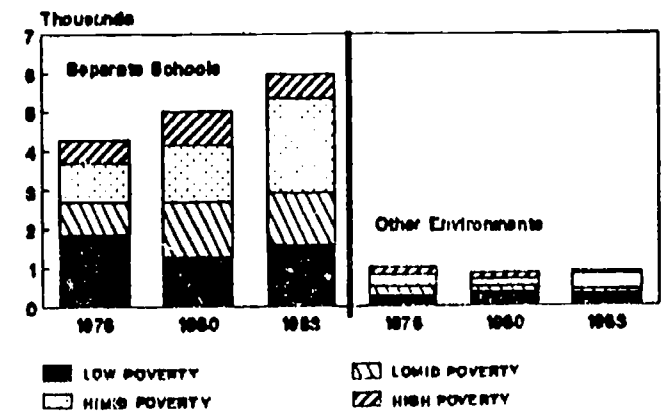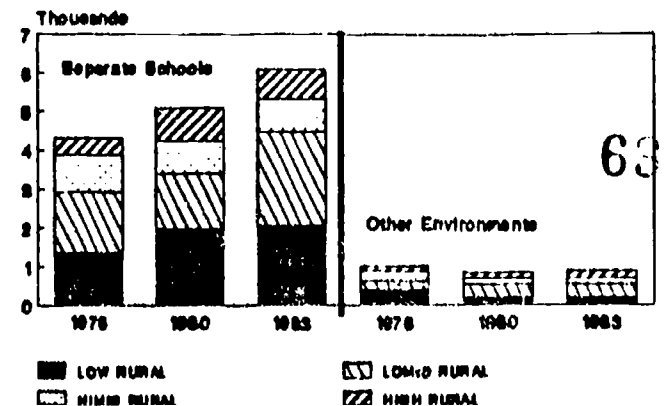
Figure 9 Comparisons Among Quartile Mean Cumulative Placement
Rates for Regular Classes, Special Classes, Separate
Schools, and Other Environments for Multiply Handicapped.

INTEGRATION RATES FOR MULTIPLY
HANDICAPPED BY MINORITY QUARTILES

INTEGRATION RATES FOR MULTIPLY
HANDICAPPED BY ADFED QUARTILES
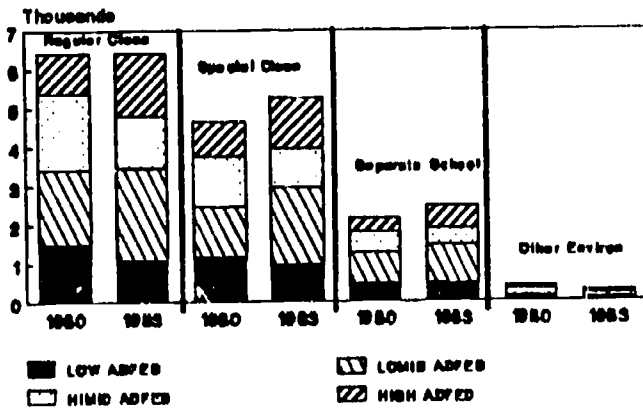
INTEGRATION RATES FOR MULTIPLY
HANDICAPPED BY PIPC QUARTILES

INTEGRATION RATES FOR MULTIPLY
HANDICAPPED BY POVERTY QUARTILES
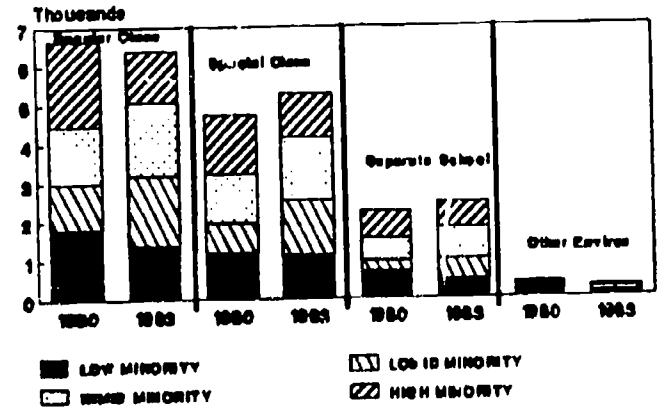
INTEGRATION RATES FOR MULTIPLY
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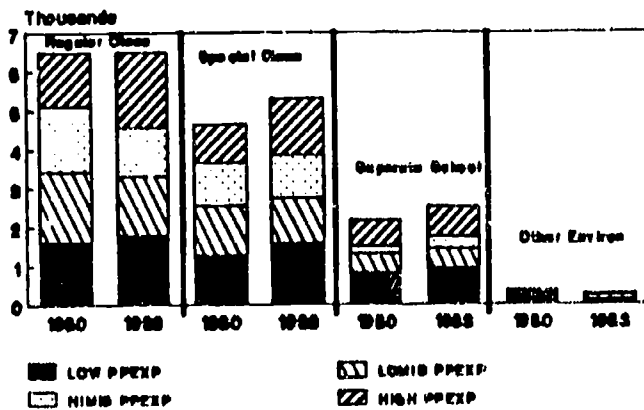
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HANDICAPPED BY STPCT QUARTILES
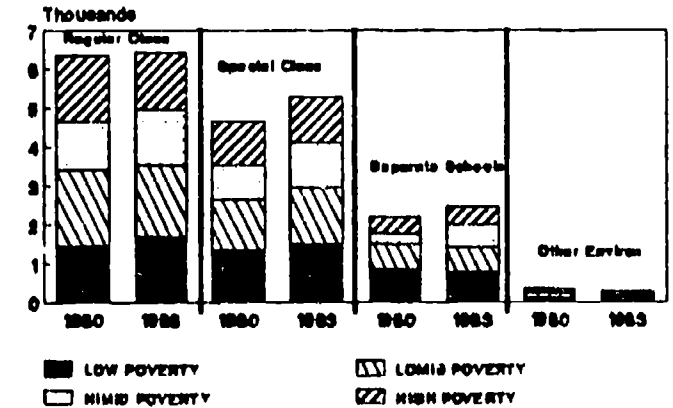
INTEGRATION RATES FOR MULTIPLY
HANDICAPPED BY RURAL QUARTILES
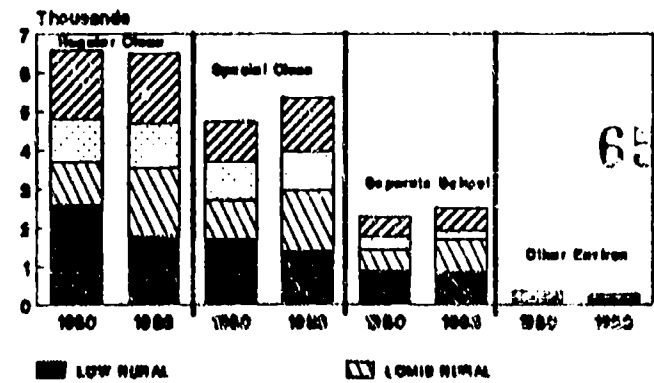
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·   Table 1   Intercorrelations Among Finance and Demographic Variables

	PPEXP 1976	PPEXP 1980	PPEXP 1983	PIPC 1976	PIPC 1980	PIPC 1983	ADJFER 1976	ADJFER 1980	ADJFER 1983	STPCT 1976	STPCT 1980	STPCT 1983	RURAL	MINORITY	POVERTY
PPEXP76	1.00	.974	.950	.879	.792	.813	-.499	-.431	-.411	-.047	-.072	-.056	-.371	-.010	-.446
PPEXP80		1.00	.969	.869	.777	.732	-.450	-.424	-.404	-.048	-.082	-.061	-.310	-.043	-.422
PPEXP83			1.00	.864	.769	.788	-.434	-.398	-.385	.069	-.088	-.058	-.229	-.079	-.406
PIPC76				1.00	.937	.927	-.554	-.481	-.465	-.073	-.012	-.016	-.481	.035	-.562
PIPC80					1.00	.957	-.641	-.599	-.602	-.234	-.112	-.153	-.604	.024	-.646
PIPC83						1.00	-.602	-.544	-.532	-.221	-.135	-.157	-.587	.063	-.551
ADJFER76							1.00	.919	.662	.615	.569	.565	.302	.545	.838
ADJFER80								1.00	.932	.629	.602	.586	.280	.573	.943
ADJFER83									1.00	.566	.555	.543	.337	.516	.943
STPCT76										1.00	.925	.920	.032	.567	.447
STPCT80											1.00	.972	-.051	.565	.388
STPCT83												1.00	.004	.516	..75
RURAL													1.00	-.419	.293
MINORITY														1.00	.453
POVERTY															1.00
ENROLLMENT*	.137	.054	-.011	.190	.240	.224	-.199	-.098	-.084	-.080	.025	-.020	-.445	.339	.110

* Correlation between enrollment for a given year and same year fiscal and demographic variable.

Table 2

Means and Standard Deviations for Independent Variables, 1976-77, 1980-81, 1983-84

		1976-77	1980-81	1983-84
PPEXP	Mean	1589	2458	3197
	SD	395	661	1031
	N	50	50	50
PIPC	Mean	6423	9540	11590
	SD	1088	1379	1852
	N	50	50	50
ADJFER	Mean	9.76	9.40	6.65
	SD	4.15	3.91	2.92
	N	50	50	50
STPCT	Mean	50.34	53.19	53.15
	SD	17.75	17.39	17.44
	N	50	50	50
RURAL	Mean	—	36.00	—
	SD	—	15.25	—
	N	—	50	—
MINORITY	Mean	—	19.44	—
	SD	—	15.35	—
	N	—	.50	—
POVERTY	Mean	—	14.35	—
	SD	—	4.55	—
	N	—	50	—

Table 3

Pearson Correlations Between Identification Rates for Total Special Education, Learning
Disabled, Emotionally Disturbed, and Multiply Handicapped, and Finance and Demographic
Variables at Three Points in Time.

			Finance			Demographic	
	PPEXP	PIPC	ADJFER	STPCT	RURAL	MIN	POVERTY
PCTSETO-1976	.072	.122	-.125	.029	-.358	-.031	-.062
PCTSETO-1980	.004	-.013	-.033	-.075	-.110	-.091	.074
PCTSETO-1983	-.072	.009	-.057	-.126	-.105	-.122	.144
PCTLDTO-1976	.309	.406	-.258	.025	-.315	-.080	-.432
PCTLDTO-1980	.342	.398	-.237	-.045	-.321	-.013	-.401
PCTLDTO-1983	.347	.430	-.258	-.127	-.406	.017	-.225
PCTEDTO-1976	.191	.143	-.264	-.054	-.432	-.095	-.224
PCTEDTO-1980	.121	.169	-.324	-.140	-.385	-.091	-.197
PCTEDTO-1983	.050	.215	-.354	-.165	-.350	-.134	-.249
PCTMLTO-1976	--	--	--	--	--	--	--
PCTMLTO-1980	-.165	-.126	-.001	-.028	.007	.055	.054
PCTMLTO-1983	.043	.131	.031	-.041	-.196	.107	-.014

Note N=50

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Table 4

Means Identification Rates for Total Special Education, Learning Disabled, Emotionally
Disturbed, and Multiply Handicapped, 1976-77, 1980-81, 1983-84

		1976-77	1980-81	1983-84
Special Education	Mean	7.70	9.61	10.42
Identification	SD	1.72	1.55	1.61
	N	50	50	50
Special Education	Mean	2.12	3.83	4.62
Identification	SD	.98	1.10	1.04
	N	50	50	50
Emotionally Disturbed	Mean	.532	.721	.846
Identification	SD	.588	.607	.665
	N	50	50	50
Multiply Handicapped	Mean	—	.135	.132
Identification	SD	—	.130	.135
	N	—	50	50

Table 5　Mean Identification Rates for Total Special Education, Learning Disabled, Emotionally Disturbed and Multiply Handicapped for Per Pupil Expenditure Quartiles.

	Total Special Education			Learning Disabled			Emotionally Disturbed			Multiply Handicapped	
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1980	1983
Low											
Mean	8.4028	9.7310	10.4788	1.9699	2.9601	4.0172	.5926	.7335	.7299	.1556	.1423
SD	2.1916	1.1507	1.2182	1.2894	.7025	.7094	.8945	.8518	.8589	.1057	.1139
N	12	12	12	12	12	12	12	12	12	12	12
Low Middle											
Mean	6.8818	9.1004	10.2136	1.8176	3.8410	4.5676	.2401	.4552	.7010	.1742	.1522
SD	1.1343	1.4927	1.1159	.7513	.6210	.6343	.1609	.2762	.4329	.1707	.1237
N	13	13	13	13	13	13	13	13	13	13	13
High Middle											
Mean	7.3517	9.2974	9.9679	2.3017	4.0752	4.4635	.5810	.6450	.9158	.1146	.0825
SD	1.6363	1.3660	1.6644	.7489	.5373	.8429	.4272	.2827	.6451	.1163	.0740
N	13	13	13	13	13	13	13	13	13	13	13
High											
Mean	8.2714	10.3781	11.0823	2.4040	4.4427	5.4389	.7356	1.0773	1.0427	.0952	.1531
SD	1.4790	1.9394	2.2003	1.0519	1.6963	1.3940	.5981	.7183	.6963	.1170	.2028
N	12	12	12	12	12	12	12	12	12	12	12

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Table 6   Mean Identification Rates for Total Special .ducation, Learning Disabled, Emotionally Disturbed and Multiply Handicapped for Per Capita P rsonal Income Quartiles.

	Total Special Education			Learning Disabled			Emotionally Distu d			Multiply Handicapped	
	1976	1980	1983	1976	1980	1983	1976	1980		1980	1983
Low											
Mean	7.9846	9.8202	10.6707	1.7396	3.1156	4.0660	.4729	.6845	.6668		
SD	2.4316	1.0389	1.0912	1.2596	.7341	.6543	.8940	.8117	.8170	.1609	.1672
N	12	12	12	12	12	12	12	12	12	.1098	.1269
										12	12
Low Middle											
Mean	7.1079	9.8764	10.3224	2.2600	4.1419	4.3993	.4114	.5523	.7456		
SD	1.6912	1.3048	1.1301	.5838	1.1528	.7238	.3017	.3851	.5086	.1469	.1020
N	13	13	13	13	13	13	13	13	13	.1029	.0923
										13	13
High Middle											
Mean	7.4638	9.0093	9.9111	1.9193	3.8317	4.6594	.3860	.7554	.7772		
SD	.8355	1.4848	1.4052	.8566	.9729	1.3647	.1969	.5046	.3141	.1129	.0824
N	13	13	13	13	13	13	13	13	13	.1878	.1072
										13	13
High											
Mean	8.3232	9.7602	10.8341	2.5693	4.2250	5.3603	.8810	.9017	1.2077		
SD	1.5356	2.1701	2.4838	1.0240	1.2449	.8929	.6465	.6858	.8462	.1214	.1834
N	12	12	12	12	12	12	12	12	12	.1102	.1860
										12	12

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Table 7   Mean Identification Rates for Total Special Education, Learning Disabled, Emotionally Disturbed
and Multiply Handicapped for Adjusted Federal Education Revenue Quartiles

	Total Special Education			Learning Disabled			Emotionally Disturbed			Multiply Handicapped	
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1980	1983
Low											
Mean	7.7403	9.3312	10.7745	1.8591	3.9526	5.0445	.7312	.97	1.0572		
SD	1.6510	2.0054	1.9646	.7729	.8951	1.4813	.5756	.6238	.5969	.0851	.1100
N	12	12	12	12	12	12	12	12	12	.0964	.1812
										12	12
Low Middle											
Mean	7.7687	9.5790	10.2698	2.5865	4.0045	4.5270	.4308	.8507	.9650		
SD	1.3487	1.6571	1.8072	.9330	1.5010	.9416	.2522	.7411	.8214	.1537	.15
N	13	13	13	13	13	13	13	13	13	.1349	.1324
										13	13
High Middle											
Mean	7.7652	9.3429	10.2224	2.3641	4.0561	4.5949	.6984	.6223	.8553		
SD	1.7505	1.2164	1.3985	.9405	.8866	.8410	.9110	.5179	.7212	.1718	.1209
N	13	13	13	13	13	13	13	13	13	.1853	.1163
										13	13
High											
Mean	7.5251	9.6099	10.4501	1.6141	3.2936	4.3133	.2632	.4300	.4949		
SD	2.2763	1.3433	1.3088	1.0312	.9325	.7599	.2548	.4058	.3298	.1261	.1446
N	12	12	12	12	12	12	12	12	12	.0671	.1127
										12	12

Table 8 Mean Identification Rates for Total Special Education, Learning Disabled, Emotionally Disturbed and Multiply Handicapped for State Percent Quartiles.

| | Total Special Education | | | Learning Disabled | | | Emotionally Disturbed | | | Multiply Handicapped | |
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1980	1983
Low											
Mean	7.1225	9.3763	10.0314	2.1437	4.0698	4.5423	.5363	.8950	.9487	.0919	.1119
SD	1.7866	2.0683	1.7510	.8304	1.3075	.9324	.5530	.6576	.6430	.1096	.1312
N	12	12	12	12	12	12	12	12	12	12	12
Low Middle											
Mean	8.1344	10.0608	11.1679	2.2714	3.7454	5.1070	.6100	.6232	.8951	.1662	.1792
SD	1.1216	1.6722	1.9546	.7238	1.1927	1.3984	.3649	.3657	.4767	.1110	.1792
N	13	13	13	13	13	13	13	13	13	13	13
High Middle											
Mean	7.8288	9.5925	10.4499	2.1784	3.7005	4.2867	.5483	.8479	.9469	.1837	.1109
SD	1.9827	1.0587	.8178	1.1962	.7747	.7111	.8466	.7698	.8315	.1861	.1207
N	13	13	13	13	13	13	13	13	13	13	13
High											
Mean	7.6778	9.3725	9.3738	1.8721	3.8424	4.5211	.4267	.5141	.5800	.0928	.1241
SD	1.9197	1.3120	1.5724	1.1556	1.1856	.9152	.5341	.5532	.6704	.0688	.0945
N	12	12	12	12	12	12	12	12	12	12	12

Table 9   Mean Identification Rates for Total Special Education, Learning Disabled, Emotion·lly Disturbed and Multiply Handicapped for Rural Quartiles.

	Total Special Education 1976	1980	1983	Learning Disabled 1976	1980	1983	Emotionally Disturbed 1976	1980	1983	Multiply Handicapped 1980	1983
Low											
Mean	8.2777	9.5623	10.6061	2.4607	4.0554	5.1463	.9120	1.0317	1.1038		
SD	1.6577	1.8660	2.2252	.9280	1.2371	1.2515	.8790	.7602	.8048	.1764	.1577
N	12	12	12	12	12	12	12	i2	12	.1987	.1841
										12	12
Low Middle											
Mean	8.1504	9.8444	10.4251	2.1621	4.1916	4.8234	.6661	.8740	1.0408		
SD	1.4995	1.6670	1.7610	.8779	1.1884	1.1664	.5309	.6197	.7689	.0936	.1363
N	13	13	13	13	13	13	13	13	13	.0947	.1431
										13	13
High Middle											
Mean	7.9986	10.0449	10.6285	2.2266	3.7615	4.2885	.3448	.6033	.7661		
SD	1.6543	.9843	1.1008	1.2172	1.0568	.7968	.2183	.3720	.4335	.1140	.1129
N	13	13	13	13	13	13	13	13	13	.0672	.1042
										13	13
High											
Mean	6.3214	8.9309	10.0103	1.6213	3.3074	4.2223	.2106	.3707	.4629		
SD	1.4751	1.5065	1.2456	.7243	.7810	.6515	.2701	.4582	.4310	.1625	.1226
N	12	12	12	12	12	12	12	12	12	.1283	.1067
										12	12

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Table 10   Mean Identification Rates for Total Special Education, Learning Disabled, Emotionally Disturbed and Multiply Handicapped for Minority Quartiles.

| | Total Special Education | | | Learning Disabled | | | Emotionally Disturbed | | | Multiply Handicapped | |
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1980	1983
Low											
Mean	7.5592	9.6489	10.4650	2.5272	4.2652	4.7848	.5982	.7719	.9480	.1543	.1014
SD	1.9306	1.7054	1.5357	.8315	1.0770	1.3698	.8731	.7674	.7951	.1302	.1194
N	12	12	12	12	12	12	12	12	12	12	12
Low Middle											
Mean	7.5775	9.5486	10.5347	1.5771	3.3307	4.2889	.5299	.7369	.8545	.0993	.1194
SD	1.5779	1.6151	1.6569	.7165	.9127	.9198	.5455	.6712	.7307	.1022	.0907
N	13	13	13	13	13	13	13	13	13	13	13
High Middle											
Mean	8.0126	9.6666	10.4548	2.4699	3.8972	4.8507	.5976	.7474	.8835	.1255	.1738
SD	1.7152	1.6193	1.9244	1.1487	1.1188	.8505	.5734	.6080	.6922	.0915	.1758
N	13	13	13	13	13	13	13	13	13	13	13
High											
Mean	7.6454	9.5746	10.2207	1.9250	3.8833	4.5538	.3981	.6229	.6933	.1659	.1312
SD	1.8260	1.4170	1.4228	.9220	1.2120	1.0028	.2507	.3779	.4389	.1880	.1433
N	12	12	12	12	12	12	12	12	12	12	12

Table 11 Mean Identification Rates for Total Special Education, Learning Disabled, Emotionally Disturbed and Multiply Handicapped for Poverty Quartiles.

	Total Special Education			Learning Disabled			Emotionally Disturbed			Multiply Handicapped	
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1980	1983
Low											
Mean	7.7315	9.1181	9.8387	2.6125	4.1628	4.6748	.7801	.9529	1.1990		
SD	1.6632	1.7133	1.5012	.895	.6500	.8044	.8613	.7698	.8531	.1011	.1177
N	12	12	12	1.	12	12	12	12	12	.1064	.1066
										12	12
Low Middle											
Mean	7.4840	9.8439	10.4992	2.1057	4.1298	4.8181	.4020	.564	.6722		
SD	1.8300	1.8462	2.2632	1.0216	1.4134	1.5104	.1432	.531	.5007	.1482	.1531
N	14	14	14	14	14	14	14	14	14	.1323	.1849
										14	14
High Middle											
Mean	7.9699	9.7903	10.6880	2.24	3.8414	4.7912	.6850	.8928	.5793		
SD	1.2572	1.4518	1.2941	.7944	1.0926	.7390	.5671	.6173	.5013	.1206	.1163
N	12	12	12	12	12	12	12	12	12	.0926	.1179
										12	12
High											
Mean	7.6611	9.6471	10.6473	1.5253	3.1564	4.1528	.2837	.4757	.5616		
SD	2.1676	1.0091	.9931	.924	.8313	.7799	.2463	.3905	.4286	.1692	.1376
N	12	12	12	12	12	12	12	12	12	.798	.1184
										12	12

Table 12

Pearson Correlations Between Special Education Integration Rates and Finance and Demographic Variables at Three Points in Time.

Cumulative Placement Rates	Finance				Demographic		
	PPEXP	PIPC	ADJFER	STPCT	RURAL	MIN	POVERTY
Regular Classes							
1976	.042	.074	-.107	-.011	-.280	-.008	-.115
1980	.081	.083	-.129	-.185	-.118	-.133	-.040
1983	.140	.134	-.144	-.163	-.057	-.187	.054
Special Classes							
1976	.225	.167	-.200	-.051	-.222	-.000	-.190
1980	.209	.288	-.344	-.238	-.368	.057	-.144
1983	.133	.283	-.146	.057	-.370	.204	.003
Separate Schools							
1976	.050	.029	-.190	-.169	-.208	-.078	-.054
1980	.114	.141	-.219	-.248	-.246	.002	.023
1983	.106	.241	-.199	-.093	-.298	.022	-.039
Other Environments							
1976	.069	.098	-.110	-.002	-.161	.088	-.006
1980	-.090	.033	-.152	-.190	.029	-.164	-.109
1983	-.261	-.172	-.074	-.143	.179	-.227	-.0 8

Note N=49

Table 13   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Total Special Education by Per Pupil Expenditure Quartiles.

		Regular Classes			Special Classes			Separate Schools			Other Environments		
		1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low	Mean	87075	106836	'08032	20515	24376	25867	5286	6447	6193	1377	1663	1498
	SD	23092	17157	12350	9833	6077	4896	265C	2876	2872	1386	1202	1288
	N	12	12	12	12	12	12	12	12	12	12	12	12
Low Middle	Mean	74302	103343	107578	20205	26716	28550	6190	6447	6528	2196	1622	1706
	SD	16507	16307	13208	7990	8548	9027	2781	2327	3489	1947	953	1310
	N	12	12	12	12	12	12	12	12	12	11	12	12
High Middle	Mean	81904	10692	106901	27885	33849	35853	5006	4098	7929	1215	888	1308
	SD	22123	16708	19241	17932	15755	19825	3876	3704	6341	1119	915	1641
	N	13	13	13	13	13	13	13	13	13	13	13	13
High	Mean	84354	113824	120648	32017	35317	37671	7536	9503	8856	2030	1352	713
	SD	17625	24773	19241	11454	12186	15660	5299	5840	6134	2816	2562	457
	N	12	12	12	12	12	12	12	12	12	12	12	12

Table 14 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Total Special Education by Per Capita Personal Income Quartiles.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	83217	107639	110582	20946	22710	26318	5822	6503	5972	1672	1572	1242
SD	27159	16742	11058	10053	5454	4681	2578	3032	2855	1931	1124	1069
N	11	11	11	11	11	11	11	11	11	11	11	11
Low Middle												
Mean	77448	109848	10937	19789	28448	27166	5116	5548	5798	1196	1367	2113
SD	17705	16011	11187	7199	5762	9344	3397	2239	2826	1251	1118	1673
N	13	13	13	13	13	13	13	13	13	12	13	13
High Middle												
Mean	83987	102562	105432	31237	35489	33533	552?	6485	6917	1717	1387	912
SD	18115	18101	15797	18549	15584	11497	336.	3012	3245	1466	995	853
N	13	13	13	13	13	13	13	13	13	12	13	13
High												
Mean	83790	109306	117601	28467	33000	41045	7574	8923	10917	2149	1775	918
SD	18635	27605	25370	11032	13939	21791	5356	6612	7780	2761	2612	918
N	12	12	12	12	12	12	12	12	12	12	12	12

Table 15 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Total Special Education by Adjusted Federal Revenue Quartiles.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	80003	112466	114657	28568	37616	33889	7272	8066	7761	2146	2074	1375
SD	19197	20494	20027	11759	15169	13999	4920	3856	4186	2839	2360	1729
N	12	12	12	12	12	12	12	12	12	12	12	12
Low Middle												
Mean	85848	104270	110029	27091	30286	32933	5390	7484	8275	1350	1208	1200
SD	19031	21174	16659	19076	12901	13625	3125	5838	5146	882	1193	970
N	13	13	13	13	13	13	13	13	13	13	13	13
High Middle												
Mean	91353	108258	109399	22810	29133	32259	5796	6087	7237	1833	1461	1460
SD	17889	18582	18278	9613	8226	18642	4274	2776	6663	2047	1295	1460
N	13	13	13	13	13	13	13	13	13	12	13	13
High												
Mean	80534	104052	108761	22165	23013	28816	5502	5620	6109	1416	1146	1175
SD	26792	19770	13173	9628	5277	10137	2628	3260	3214	1432	1092	969
N	11	11	11	11	11	11	11	11	11	11	11	11

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Table 16 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Total Special Education by State Share of Nonfederal Revenue Quartiles.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	78770	109081	111277	26406	31253	30134	6536	5926	6878	1454	1799	1279
SD	23979	24306	19308	19546	15365	11466	3971	3440	4271	1455	2498	1237
N	12	12	12	12	12	12	12	12	12	12	12	12
Low Middle												
Mean	83426	110228	116115	26656	38171	37234	6945	9366	9221	2177	1560	1694
SD	16815	19101	18873	11581	10456	14807	4523	5720	4799	2835	1205	1619
N	13	13	13	13	13	13	13	13	13	12	13	13
High Middle												
Mean	85115	107870	108368	22629	24638	26722	5012	6839	6961	1584	1798	1296
SD	21687	13766	8490	9379	7002	7514	2961	1633	3301	1665	1029	1063
N	13	13	13	13	13	13	12	13	13	13	13	13
High												
Mean	80296	101045	106474	25252	25948	34373	5340	4782	6281	1516	833	889
SD	18972	22084	19623	11330	9615	20423	3766	3525	7110	1437	1000	1172
N	11	11	11	11	11	11	11	11	11	11	11	11

Table 17   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes,
Separate Schools, and Other Environments for Total Special Education by Percent
of School Age Children in Rural Areas.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	84523	107609	110762	25868	30560	36387	6826	8357	8536	2291	1353	1121
SD	18148	22803	22803	11409	12357	14856	5135	4582	4642	2859	927	1104
N	12	12	12	12	12	12	12	12	12	12	12	12
Low Middle												
Mean	88995	110719	113202	29908	40388	40402	7389	7743	10361	1218	1396	1216
SD	16111	24315	21253	11787	14555	19257	3858	5256	7214	816	1303	1163
N	12	12	12	12	12	12	12	12	12	11	12	12
High Middle												
Mean	87007	109895	112334	27905	26768	26923	4944	5034	5011	1928	1740	1384
SD	20976	15450	10128	17952	6737	9516	2899	3178	2338	1709	2456	1548
N	13	13	13	13	13	13	13	13	13	13	13	13
High												
Mean	67185	100704	106409	16940	23135	24974	4863	6366	5841	1164	1566	1497
SD	18804	15900	11652	4950	5291	2656	2751	2696	2656	1556	1139	1394
N	12	12	12	12	12	12	12	12	12	12	12	12

Table 18   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Total Special Education by Percent of School Age Children who are Minority.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	81703	109453	112068	24489	25264	28764	5285	6431	6525	1370	2135	1732
SD	19948	18510	14629	18945	6465	8573	2404	2964	2814	1581	2521	1775
N	13	13	13	13	13	13	13	13	13	12	13	13
Low Middle												
Mean	79405	104187	111879	24272	31637	31050	6282	6349	7042	1187	1132	1199
SD	19391	21231	18584	11523	8223	11714	4557	3010	3401	933	770	1121
N	13	13	13	13	13	13	13	13	13	12	13	13
High Middle												
Mean	84161	110480	112683	27653	34385	36117	7984	7646	9288	2824	1321	1352
SD	23562	20790	19821	11457	18708	21644	4327	4615	7017	2851	1022	1343
N	13	13	13	13	13	13	13	13	13	13	13	13
High												
Mean	82976	104812	105516	24224	28685	32073	4031	6901	6492	1223	1535	914
SD	18868	19681	14640	10293	9049	11459	2465	5865	5419	1079	1392	635
N	11	11	11	11	11	11	11	11	11	11	11	11

Table 19 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Total Special Education by Percent of School Age Children in Poverty.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	86652	103827	105429	28119	31144	26170	5932	5863	6706	1534	1947	1509
SD	21656	21598	17171	18983	16777	11179	2961	3170	3507	997	2431	1791
N	12	12	12	12	12	12	12	12	12	12	12	12
Low Middle												
Mean	76606	108016	112359	25651	31663	36361	5613	7333	7312	1524	1301	940
SD	18586	20776	20576	13189	10841	11344	5032	5394	4528	2711	1335	925
N	14	14	14	14	14	14	14	14	14	14	14	14
High Middle												
Mean	82312	110538	114219	24916	32018	36986	6520	7177	9656	1707	1165	1897
SD	12730	20724	18155	8997	11856	21466	4326	4320	7180	1470	797	1393
N	12	12	12	12	12	12	12	12	12	11	12	12
High												
Mean	82607	106583	110546	21801	25068	27657	5928	6899	5753	2028	1712	907
SD	26740	16510	9219	9660	5671	6716	2497	3290	3334	1991	1266	584
N	11	11	11	11	11	11	11	11	11	11	11	11

Table 20

Pearson Correlations Between Learning Disabled Integration Rates and Finance and Demographic Variables at Three Points in Time.

| Cumulative Placement Rates | PPEXP | PIPC | Finance | | Demographic | | |
			ADJFER	S\`PCT	RURAL	MIN	POVERTY
Regular Classes							
1976	.274	.355	-.249	-.036	-.272	-.077	-.428
1980	.375	.446	-.291	-.132	-.309	-.099	-.437
1983	.470	.502	-.305	-.123	-.379	·.018	-.280
Special Classes							
1976	440	.458	-.212	.035	-.399	.140	-.339
1980	.262	.426	-.322	-.126	-.435	.075	-.304
1983	.250	.392	-.134	.158	-.504	.337	-.106
Separate Schools							
1976	.108	.028	-.288	-.199	-.137	-.176	-.150
1980	.301	.362	-.296	-.284	-.309	-.049	-.156
1983	.215	.333	-.154	-.026	-.282	.042	-.052
Other Environments							
1976	.025	-.021	-.132	.184	.024	-.131	-.080
1980	.132	.248	-.272	-.266	.004	-.247	-.265
1983	-.140	-.090	.034	.008	.166	-.108	.069

Table 21 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Learning Disabled by Per Pupil Expenditures Quartiles.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1930	1983
Low												
Mean	21053	31878	39227	1636	3169	3968	204	204	236	2	38	108
SD	13767	9328	9610	2374	2316	2149	201	184	260	4	87	247
N	12	12	12	12	12	12	12	12	12	9	12	12
Low Middle												
Mean	20340	41796	46377	2724	4807	7733	463	334	517	178	63	144
SD	10811	9336	3999	2192	2806	4402	684	488	539	269	81	295
N	12	12	12	12	12	12	12	12	12	11	12	13
High Middle												
Mean	26087	41805	45262	5514	8929	10425	317	253	731	29	18	40
SD	9241	6162	9786	4632	10868	13365	358	314	1748	53	26	57
N	13	13	13	12	13	13	11	13	13	11	13	13
High												
Mean	25976	51056	56754	6506	10544	14309	705	1298	1296	190	229	83
SD	11785	19839	14279	3589	5187	8269	903	981	1106	403	457	159
N	12	12	12	12	12	12	12	12	12	11	12	12

Table 22   Mear Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Learning Disabled by Per Capita Personal Income Quartiles.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	i7939	31921	39233	1663	2455	4096	230	220	264	83	47	116
SD	1431d	8411	9550	2480	1061	2208	259	185	256	243	90	257
N	11	11	11	11	11	11	10	11	11	9	11	11
Low Middle												
Mean	26337	44169	44305	3347	4919	5254	508	225	271	75	28	146
SD	7519	14026	7094	2231	3063	3917	666	355	347	178	43	146
N	13	13	13	13	13	13	12	13	13	10	13	13
High Middle												
Mean	22877	42232	47727	4542	10090	11672	425	587	667	157	49	34
SD	12781	12283	14653	5223	10782	8828	668	667	797	393	77	45
N	13	13	13	12	13	13	12	13	13	12	13	13
High												
Mean	25871	47156	55726	6688	9683	15214	521	1030	1585	92	222	76
SD	9859	15191	9937	3089	5034	12344	766	1048	1852	130	460	160
N	12	12	12	12	12	12	12	12	12	11	12	i2

Note: in the Low Middle row, the SD value under Other Environments 1983 reads 282.

Table 23   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Learning Disabled by Adjusted Federal Revenue Quartiles.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	19120	45200	51783	4061	10627	10307	685	936	680	167	248	27
SD	8693	11804	15652	3229	11015	7911	904	1055	868	407	454	26
N	12	12	12	11	12	12	11	12	12	11	12	12
Low Middle												
Mean	29468	41357	45579	5390	6806	8699	361	480	794	21	42	88
SD	10825	16920	9180	4939	5330	7877	484	673	1036	29	85	155
N	13	13	13	13	13	13	13	13	13	12	13	13
High Middle												
Mean	26916	45540	47809	4184	7070	9995	492	441	926	208	29	137
SD	10234	12706	10823	2970	4517	11342	644	516	1757	262	36	285
N	13	13	13	13	13	13	12	13	13	11	13	13
High												
Mean	16831	33470	41933	2494	2763	7357	162	194	325	2	26	118
SD	12025	9584	10743	3587	1253	8979	195	190	286	4	37	257
N	11	11	11	11	11	11	10	11	11	8	11	11

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Table 24 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Learning Disabled by State Share of Nonfederal Revenue Quartiles.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	24061	46398	47144	4838	9275	6768	610	777	582	100	217	85
SD	10929	16668	10920	5209	11186	4607	829	1039	672	162	459	194
N	12	12	12	11	12	12	11	12	12	11	12	12
Low Middle												
Mean	23725	40190	51420	3973	8015	12321	406	641	1064	8	57	89
SD	9160	12435	14025	3070	5299	9147	639	749	1128	18	88	153
N	13	13	13	13	13	13	13	13	13	11	13	13
High Middle												
Mean	25652	40355	42909	3102	4381	5743	466	310	319	186	38	91
SD	13824	10069	7062	2851	2494	3693	653	346	315	419	84	230
N	13	13	13	13	13	13	11	13	13	11	13	13
High												
Mean	19721	39670	45882	4670	5988	11964	240	331	831	128	32	107
SD	11098	15549	14496	4206	5726	14172	248	507	1896	244	32	107
N	11	11	11	11	11	11	11	11	11	9	11	11

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Table 25   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Learning Disabled by Percent of School-Aged Children Living in Rural Areas.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	26470	45146	51977	5281	7746	14526	571	823	958	124	84	71
SD	11107	14952	12543	3228	4278	9685	788	959	1031	199	139	161
N	12	12	12	12	12	12	11	12	12	10	12	12
Low Middle												
Mean	24972	45079	49392	5562	12645	12947	568	644	1219	52	34	102
SD	10690	14533	12828	3281	10621	12025	708	739	1856	83	49	191
N	12	12	12	12	12	12	12	12	12	11	12	12
High Middle												
Mean	24347	40388	44772	4079	4037	4934	278	337	329	150	55	29
SD	14123	13874	11245	5160	3145	3366	547	573	494	396	440	59
N	13	13	13	12	13	13	12	13	13	12	13	13
High												
Mean	17812	36040	41519	1459	3429	4485	302	279	308	86	64	174
SD	8193	10138	9574	1643	2607	2627	308	436	327	242	112	323
N	12	12	12	12	12	12	11	12	12	9	12	12

Table 26 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes. Separate Schools, and Other Environments for Learning Disabled by Percent of School-Aged Children who are Minority.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	27817	46262	49188	3568	4746	6966	467	501	504	194	207	105
SD	8963	14169	14637	5204	3768	6795	561	715	751	438	456	238
N	12	12	12	12	12	12	12	12	12	11	12	12
Low Middle												
Mean	18526	37417	42184	3952	6697	7162	678	549	604	71	62	126
SD	9965	11909	11405	3008	3762	4953	999	918	875	129	116	231
N	13	13	13	12	13	13	12	13	13	10	13	13
High Middle												
Mean	25310	42548	50370	4355	9746	11740	298	522	1105	65	53	95
SD	13165	13766	10400	3747	11356	12585	348	645	1768	139	93	233
N	13	13	13	13	13	13	2	13	13	12	13	13
High												
Mean	22173	40503	45748	4519	6146	10758	243	491	530	85	19	36
SD	12299	14872	10576	3305	4000	9588	192	617	734	187	22	65
N	11	11	11	11	11	11	10	11	11	9	11	11

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Table 27   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes,
Separate Schools, and Other Environments for Learning Disabled by Percent of
School-Aged Children Living in Poverty.

| | Regular Classes | | | Special Classes | | | Separate Schools | | | Other Environments | | |
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	30707	46384	4775	4712	8940	5637	457	450	339	161	185	31
SD	9623	9598	9813	5136	11297	3799	555	693	534	395	458	45
N	12	12	12	11	12	12	11	12	12	11	12	12
Low Middle												
Mean	21970	44975	49502	5367	8492	13136	498	760	860	34	69	72
SD	10565	16320	15545	3500	4688	9663	824	1048	1074	111	132	150
N	14	14	14	14	14	14	14	14	14	13	14	14
High Middle												
Mean	22597	40846	49177	3949	6462	11787	481	433	1238	147	64	225
SD	8288	13390	8813	3362	5491	12301	671	477	1790	221	88	353
N	12	12	12	12	12	12	11	12	12	9	12	12
High												
Mean	18212	33074	40021	2020	3145	4969	246	373	285	96	22	42
SD	14410	11049	10559	2444	1660	4036	250	363	258	241	22	61
N	11	11	11	11	11	11	10	11	11	9	11	11

Table 28

Pearson Correlations Between Emotionally Disturbed Integration Rates and Finance and Demographic Variables at Three Points in Time.

| Cumulative Placement Rates | PPEXP | PIPC | Finance | | Demographic | | |
			ADJFER	STPCT	RURAL	MIN	POVERTY
Regular Classes							
1976	.186	.168	-.298	-.133	-.344	-.158	-.292
1980	.097	.161	-.322	-.163	-.389	-.086	-.216
1983	.092	.247	-.383	-.189	-.340	-.140	-.260
Special Classes							
1976	.395	.332	-.417	-.178	-.418	-.032	-.315
1980	.359	.445	-.472	-.343	-.503	.037	-.277
1983	.243	.406	-.373	-.194	-.398	-.008	-.192
Separate Schools							
1976	.178	.181	-.307	-.186	-.342	-.009	-.238
1980	.250	.341	-.375	-.383	-.397	.023	-.147
1983	.218	.399	-.323	-.172	-.372	.013	-.151
Other Environments							
1976	.238	.376	-.111	.014	-.328	.170	-.157
1980	.088	.303	-.326	-.302	-.241	-.012	-.225
1983	-.069	.094	-.156	-.158	-.063	-.078	-.107

Table 29 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Emotionally Disturbed by Per Pupil Expenditure Quartiles.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	6069	8800	7673	1755	2278	2762	641	887	766	141	142	215
SD	6881	10795	8677	1514	1670	1860	616	749	728	198	131	307
N	12	12	12	12	12	12	12	12	12	11	12	12
Low Middle												
Mean	3451	5482	7522	1469	2870	3432	676	879	1084	394	210	274
SD	3401	3576	5080	863	1653	1682	592	699	715	482	253	324
N	12	12	12	12	12	12	12	12	12	11	12	12
High Middle												
Mean	7855	7608	10364	4287	5498	5615	1586	1193	1860	162	152	220
SD	5997	4316	7802	3396	3486	5182	2484	1248	2185	247	323	384
N	13	13	13	13	13	13	12	13	13	11	13	13
High												
Mean	7181	12307	11773	4335	6139	6543	1379	2109	2273	303	343	195
SD	5573	7971	7445	2584	3769	4448	1085	1527	2050	251	376	213
N	12	12	12	12	12	12	12	12	12	12	12	12

Table 30   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Emotionally Disturbed by Per Capita Personal Income Quartiles.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	4757	8285	6754	1395	2297	2592	473	886	777	118	161	180
SD	6980	10804	8594	1334	1680	1869	379	791	762	119	151	320
N	11	11	11	11	11	11	11	11	11	10	11	11
Low Middle												
Mean	5151	6372	8114	1751	3022	3389	856	777	760	268	68	245
SD	3932	4836	5456	1212	1673	2030	691	586	555	409	69	310
N	13	13	13	13	13	13	12	13	13	11	13	13
High Middle												
Mean	5783	9174	8682	4070	5438	4447	1556	1243	1530	231	290	266
SD	4600	5927	3656	3298	2989	1668	2491	586	853	323	356	380
N	13	13	13	13	13	13	13	13	13	12	13	13
High												
Mean	9004	10395	13809	4618	5972	7955	1306	2167	2944	366	326	205
SD	6734	7757	9607	2596	4378	6090	850	1884	2633	330	389	221
N	12	12	12	12	12	12	12	12	12	12	12	12

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Table 31 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Emotionally Disturbed by Adjusted Federal Revenue Quartiles.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	7503	11729	11908	4070	6773	6130	1382	1967	2087	162	38	184
SD	6513	6902	6642	2254	3840	4143	1212	1507	2093	185	437	228
N	12	12	12	12	12	12	12	12	12	11	12	12
Low Middle												
Mean	6232	10009	10537	3943	4675	5181	1657	1605	1763	385	221	284
SD	4709	9425	8349	3225	3162	3403	2316	1291	1461	369	217	367
N	13	13	13	13	13	13	13	13	13	13	13	13
High Middle												
Mean	7190	7195	9550	2351	3434	4640	682	781	1404	322	126	268
SD	7082	6298	8521	2292	2021	4911	612	551	1909	421	229	310
N	13	13	13	13	13	13	12	13	13	11	13	13
High												
Mean	3454	4869	4937	1435	1838	2237	483	671	676	97	108	153
SD	3296	5017	3246	1299	1131	1161	390	710	471	120	119	319
N	11	11	11	11	11	11	11	11	11	10	11	11

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Table 32   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes,
            Separate Schools, and Other Environments for Emotionally Disturbed by State Share
            of Nonfederal Revenue Quartiles.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	7029	10351	11009	3409	5506	5707	1118	1346	1849	308	352	294
SD	6884	7355	7060	2691	3864	4111	910	995	2019	379	455	324
N	12	12	12	12	12	12	12	12	12	11	12	12
Low Middle												
Mean	6579	7756	9803	4146	5438	5427	1676	2046	1875	282	210	269
SD	4416	4427	5195	3281	3746	3427	2351	1662	1481	259	216	361
N	13	13	13	13	13	13	13	13	13	12	13	13
High Middle												
Mean	6204	10047	9958	1890	3183	3460	949	1046	1084	191	187	184
SD	6610	9931	8585	1241	1745	2141	1017	625	1012	379	225	221
N	13	13	13	13	13	13	12	13	13	12	13	13
High												
Mean	4727	5665	6304	2460	2616	3803	435	514	1182	223	84	151
SD	4957	6768	8431	2633	3226	5434	324	665	2057	268	118	320
N	11	11	11	11	11	11	11	11	11	10	11	11

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Table 33 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Emotionally Disturbed by Percent of School-aged Children Living in Rural Areas.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	8171	12251	12078	3620	5780	5861	1375	1989	2060	400	224	211
SD	7146	9308	8388	2402	3776	4100	799	1615	1811	368	237	169
N	12	12	12	12	12	12	12	12	12	11	12	12
Low Middle												
Mean	8198	10675	11849	4361	5792	6791	1550	1425	2419	247	317	347
SD	6309	8212	9170	3364	3352	5388	2477	1208	2295	220	443	447
N	12	12	12	12	12	i2	12	12	12	11	12	12
High Middle												
Mean	4959	6854	8355	2940	3457	3606	981	818	830	237	173	160
SD	3665	4347	4622	2242	2424	1859	970	651	760	404	254	177
N	13	13	13	13	13	13	12	13	13	12	13	13
High												
Mean	3468	4480	5216	1037	1925	2260	409	855	759	121	131	191
SD	4204	4893	4976	1109	1160	1468	523	802	681	217	143	352
N	12	12	12	12	12	12	12	12	12	11	12	12

Table 34 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Emotionally Disturbed by Percent of School-aged Children who are Minority.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	7086	9221	10261	2562	3202	4281	934	1174	1251	124	222	194
SD	7168	9850	8148	2299	1650	2213	1067	770	935	200	259	240
N	12	12	12	12	12	12	12	12	12	12	12	12
Low Middle												
Mean	6274	8340	9430	2980	4598	4371	889	1198	1501	155	187	312
SD	6488	7328	7919	2418	3263	3746	970	1045	1691	180	315	445
N	13	13	13	13	13	13	13	13	13	10	13	13
High Middle												
Mean	6330	9056	10317	4047	5557	6420	1661	1541	2154	466	245	255
SD	5365	7456	8285	3653	4659	5810	2329	1737	2391	400	325	290
N	13	13	13	13	13	13	12	13	13	12	13	13
High												
Mean	4285	7379	7136	2213	3316	3107	702	1118	1012	220	185	125
SD	2976	4863	4766	1519	1751	1667	452	1038	1045	325	278	156
N	11	11	11	11	11	11	10	11	11	10	11	11

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Table 35 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Emotionally Disturbed by Percent of School-aged Children Living in Poverty.

	Regular Classes			Special Classes			Separate Schools			Other Environments		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean	9577	11968	13006	4618	5806	5206	1848	1289	1574	292	359	307
SD	7528	10254	8745	3279	3754	3705	2505	1075	1821	353	455	412
N	12	12	12	12	12	12	12	12	12	11	12	12
Low Middle												
Mean	4054	6300	7330	2339	3603	4284	863	1412	1368	213	164	129
SD	4690	4736	5116	2078	2090	2467	911	1192	1121	269	195	148
N	14	14	14	14	14	14	14	14	14	14	14	14
High Middle												
Mean	7909	10580	11546	3505	5298	6427	1003	1473	2399	335	172	371
SD	4465	7299	8480	2645	3930	5872	699	1612	2327	360	165	384
N	12	12	12	12	12	12	11	12	12	10	12	12
High												
Mean	3266	5381	5555	1475	2112	2389	554	827	620	175	150	103
SD	3157	4843	4513	1318	1236	1248	437	729	391	329	240	98
N	11	11	11	11	11	11	11	11	11	10	11	11

Table 36

Pearson Correlations Between Multiply Handicapped Integration Rates and Finance and Demographic Variables at Three Points in Time.

Cumulative Placement Rates		Finance				Demographic		
	PPEXP	PIPC	ADJFER	STPCT		RURAL	MIN	POVERTY
Regular Classes								
1976	–	–	–	–		–	–	–
1980	-.108	.020	-.167	-.108		-.140	.042	-.056
1983	.051	.121	-.041	-.163		-.106	-.084	-.126
Special Classes								
1976	.–	–	–	–		–	–	–
1980	-.120	.071	-.168	-.036		-.300	.104	-.131
1983	-.017	.080	-.051	-.146		-.150	-.014	-.130
Separate Schools								
1976	–	–	–	–		–	–	–
1980	-.095	.071	-.162	.029		-.297	-.024	-.195
1983	-.041	.076	-.077	-.040		-.260	.073	-.112
Other Environments								
1976	–	–	–	–		–	–	–
1980	.169	-.084	-.024	.079		.127	-.176	-.081
1983	-.288	-.223	.102	.076		.207	-.094	.047

Table 37 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Multiply Handicapped by per Pupil Expenditures.

	Regular Classes		Special Classes		Separate Schools		Other Environments	
	1980	1983	1980	1983	1980	1983	1980	1983
Low								
Mean	1618	1800	1281	1587	817	926	225	146
SD	1286	1238	1009	1087	1065	943	470	193
N	12	12	12	12	12	12	12	12
Low Middle								
Mean	1820	1520	1268	1155	489	500	57	84
SD	2614	928	1240	644	509	364	63	113
N	11	12	11	12	11	12	11	12
High Middle								
Mean	1688	1250	1118	1125	213	312	8	20
SD	1523	989	591	843	241	374	13	40
N	10	13	10	13	10	13	10	13
High								
Mean	1391	1924	1011	1467	635	777	83	27
SD	1369	1467	1125	1359	1004	1216	192	31
N	11	12	11	12	11	12	11	12

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Table 38   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Multiply Handicapped by per Capita Personal Income.

	Regular Classes		Special Classes		Separate Schools		Other Environments	
	1980	1983	1980	1983	1980	1983	1980	1983
Low								
Mean	1465	1823	1104	1567	627	838	80	138
SD	1369	1171	1025	1067	1015	890	71	196
N	11	11	11	11	11	11	11	11
Low Middle								
Mean	1568	1486	1061	1164	404	317	162	75
SD	1426	974	718	634	619	288	466	111
N	13	13	13	13	13	13	13	13
High Middle								
Mean	1844	1053	1274	923	378	385	46	26
SD	2758	963	1331	905	430	456	56	48
N	10	13	10	13	10	13	10	13
High								
Mean	1667	2175	1294	1729	836	1013	87	43
SD	1280	1361	1045	1253	1041	1217	202	75
N	10	12	10	12	10	12	10	12

Table 39 Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Multiply Handicapped by Adjusted Federal Education Revenue.

	Regular Classes		Special Classes		Separate Schools		Other Environments	
	1980	1983	1980	1983	1980	1983	1980	1983
Low								
Mean	1530	1106	1158	970	471	461	94	32
SD	1060	952	728	893	359	625	210	77
N	9	12	9	12	9	12	9	12
Low Middle								
Mean	1895	2365	1324	1996	800	1014	44	61
SD	1637	1296	1139	1240	1265	1333	68	78
N	13	13	13	13	13	13	13	13
High Middle								
Mean	1984	1343	1298	1008	534	412	186	106
SD	2756	1127	1380	811	714	434	505	197
N	11	13	11	13	11	13	11	13
High								
Mean	1035	1609	883	1313	343	583	78	72
SD	619	916	518	674	334	348	70	80
N	11	11	11	11	11	11	11	11

Table 40   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes,
Separate Schools, and Other Environments for Multiply Handicapped by State Share
of Nonfederal Education Revenue.

	Regular Classes		Special Classes		Separate Schools		Other Environments	
	1980	1983	1980	1983	1980	1983	1980	1983
Low								
Mean	1449	1636	843	1346	259	421	70	58
SD	1390	1106	561	886	281	426	194	81
N	11	12	11	12	11	12	11	12
Low Middle								
Mean	1626	1995	1332	1661	602	891	39	53
SD	1475	1365	1147	1244	972	1226	42	76
N	12	13	12	13	12	13	12	13
High Middle								
Mean	2551	1409	1726	1105	1037	611	239	66
SD	2549	1366	1277	1131	1063	848	492	107
N	11	13	11	13	11	13	11	13
High								
Mean	310	1389	739	1184	281	538	45	100
SD	531	627	500	589	335	428	56	202
N	10	11	10	11	10	11	10	11

Table 41   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Multiply Handicapped by Percent of School-Aged Children Living in Rural Areas.

	Regular Classes 1980	1983	Special Classes 1980	1983	Separate Schools 1980	1983	Other Environments 1980	1983
Low								
Mean	2588	1798	1688	1407	905	870	51	37
SD	2658	1368	1396	1250	1059	1060	83	77
N	10	12	10	12	10	12	10	12
Low Middle								
Mean	1108	1738	1007	1570	543	821	27	57
SD	1227	1301	1161	1169	1063	1087	35	83
N	10	12	10	12	10	12	10	12
High Middle								
Mean	1105	1171	1014	1007	330	261	109	60
SD	580	797	517	772	260	394	182	100
N	12	13	12	13	12	13	12	13
High								
Mean	1783	1793	1042	1359	488	567	186	119
SD	1675	1160	790	789	666	408	480	191
N	12	12	12	12	12	12	12	12

Table 42   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Multiply Handicapped by Percent of School-Aged Children who are Minority.

	Regular Classes		Special Classes		Separate Schools		Other Environments	
	1980	1983	1980	1983	1980	1983	1980	1983
Low								
Mean	1822	1410	1223	1129	724	489	252	86
SD	1688	1317	1067	1149	1150	930	518	198
N	11	12	11	12	11	12	11	12
Low Middle								
Mean	1190	1811	573	1404	268	533	27	58
SD	1241	1085	639	774	324	387	42	79
N	11	13	11	13	11	13	11	13
High Middle								
Mean	1444	1874	1251	1616	542	792	52	84
SD	880	944	729	861	403	713	57	103
N	13	13	13	13	13	13	13	13
High								
Mean	2190	1303	1514	1120	703	672	63	42
SD	2920	1353	1499	1250	1126	1178	75	74
N	9	11	9	11	9	11	9	11

Table 43   Mean Cumulative Placement Rates per Million in Regular Classes, Special Classes, Separate Schools, and Other Environments for Multiply Handicapped by Percent of School-Aged Children Living in Poverty.

	Regular Classes		Special Classes		Separate Schools		Other Environments	
	1980	1983	1980	1983	1980	1983	1980	1983
Low								
Mean	1478	1724	1365	1519	842	778	114	53
SD	1018	1161	1018	1127	1105	987	215	82
N	9	12	9	12	9	12	9	12
Low Middle								
Mean	1952	1827	1303	1471	660	655	141	65
SD	1574	1299	1018	1135	1030	1063	450	179
N	14	14	14	14	14	14	14	14
High Middle								
Mean	1215	1431	977	1125	272	563	46	96
SD	1264	1213	740	936	203	646	54	118
N	10	12	10	12	10	12	10	12
High								
Mean	171.	1430	1122	1165	432	476	79	60
SD	2624	1032	1215	804	446	377	73	67
N	11	11	11	11	11	11	11	11

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