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AUTHOR McLaughlin, Margaret J.; Owings, Maria F.

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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, riscal, 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 94-1,2; 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)



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

Margaret J. McLaughlin

and

Maria F. Owings

Paper

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Institute for the Study of Exceptional Children and Youth
Department of Special Education, University of Maryland
College Park, Maryland

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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 decisionmaking. 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, surve; 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 in 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 rational 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 education 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 arty. 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, ille 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 g ven 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 states. 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 this 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 overal! 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% car. 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 were 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 chiloren 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 independent 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 tenued 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 revenue 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 income (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 personal 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 Excenditures

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 ruirly 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 (+) 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 gar 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 .52° to .721 %. Petween 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 rescurces (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 indeperdent 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.

frends 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 PPEMP 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 increase



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 the 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), FIPC (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 F.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 statelevel 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 mincrities 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 rederal education programs. This is just a preliminary step in understanding the influence of statelevel 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



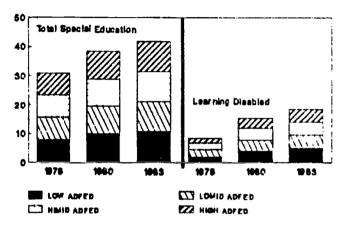
other environment placements appear together but on a separate graph. It is important to note here as well the differences in scaling on the Y-axis for each of these graphs. Care should be taken not to make comparisons across graphs, based on the height or size of the bars, although such comparisons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

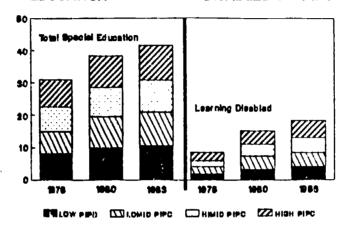


Figure 1 Comparisons Among Quartile Mean Identification Rates for Total Special Education and Learning Disabled.

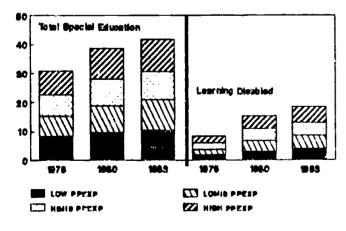
IDENTIFICATION RATES FOR TOTAL SPECIAL EDUCATION & LEARNING DISABLED BY ADFED



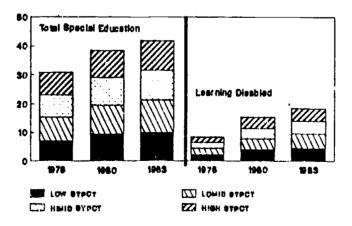
IDENTIFICATION RATES FOR TOTAL SPECIAL EDUCATION & LEARNING DISABLED BY PIPC



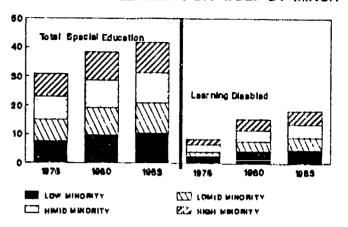
IDENTIFICATION RATES FOR TOTAL SPECIAL EDUCATION & LEARNING DISABLED BY PPEXP



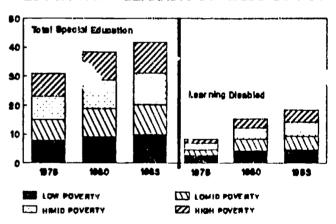
IDENTIFICATION RATES FOR TOTAL SPECIAL EDUCATION & LEARNING DISABLED BY STPCT



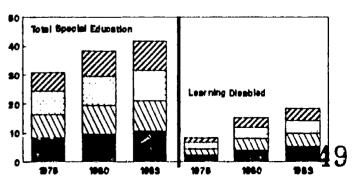
IDENTIFICATION RATES FOR TOTAL SPECIAL EDUCATION & LEARNING DISABLED BY MINOR



IDENTIFICATION RATES FOR TOTAL SPECIAL EDUCATION & LEARNING DISABLED BY POV



IDENTIFICATION RATES FOR TOTAL SPECIAL EDUCATION & LEARNING DISABLED BY RURAL

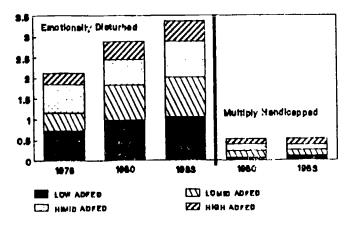


LOW HURAL

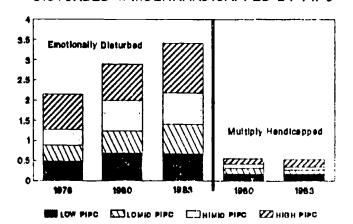
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Figure 2 Comparisons Among Quartile Mean Identification Rates for Emotionally Disturbed and Multiply Handicapped.

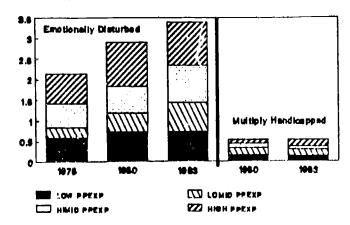
IDENTIFICATION RATES FOR EMOTIONALLY DISTURBED & MULTIHANDICAPPED BY ADFED



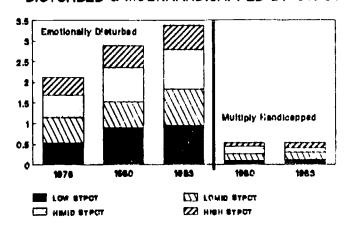
IDENTIFICATION RATES FOR EMOTIONALLY DISTURBED & MULTIHANDICAPPED BY PIPC



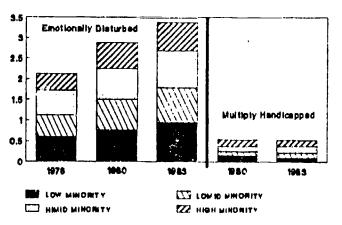
IDENTIFICATION RATES FOR EMOTIONALLY DISTURBED & MULTIHANDICAPPED BY PPEXP



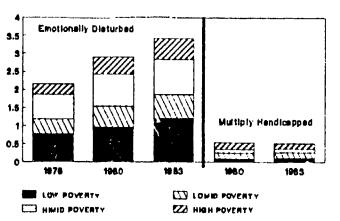
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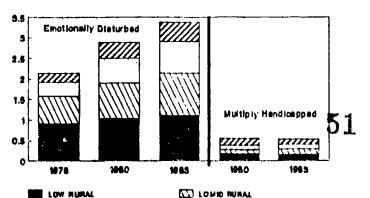
IDENTIFICATION RATES FOR EMOTIONALLY DISTURBED & MULTIHANDICAPPED BY MINOR



IDENTIFICATION RATES FOR EMOTIONALLY DISTURBED & MULTIHANDICAPPED BY POV



IDENTIFICATION RATES FOR EMOTIONALLY DISTURBED A MULTIHANDICAPPED BY RURAL

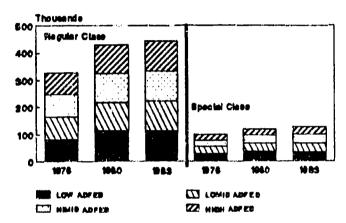


WAL HIGH RURAL

HIMID RUNAL

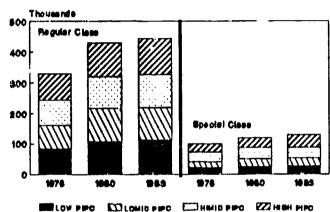
Figure 3 Comparisons Among Quartile Mean Cumulative Placement Rates in Regular Classes and Special Classes for Total Special Education

INTEGRATION RATES FOR TOTAL SPECIAL EDUCATION BY ADFED QUARTILES

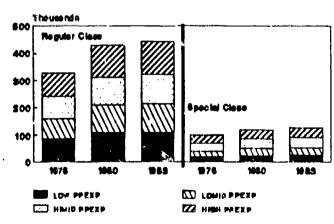


SPECIAL EDUCATION BY PIPC QUARTILES Thousands

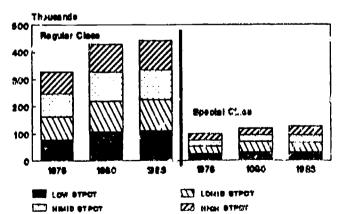
INTEGRATION RATES FOR TOTAL



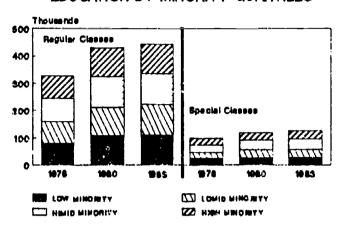
INTEGRATION RATES FOR TOTAL SPECIAL EDUCATION BY PPEXP QUARTILES



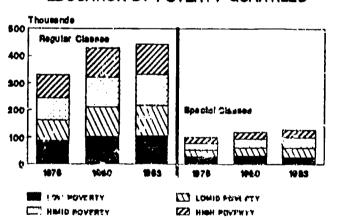
INTEGRATION RATES FOR TOTAL SPECIAL EDUCATION BY STPCT QUARTILES



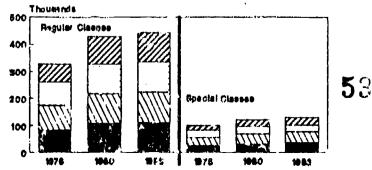
INTEGRATION RATES FOR TOTAL SPECIAL **EDUCATION BY MINORITY QUARTILES**



INTEGRATION RATES FOR TOTAL SPECIAL **EDUCATION BY POVERTY QUARTILES**



INTEGRATION RATES FOR YOTAL SPECIAL **EDUCATION BY RURAL QUARTILES**

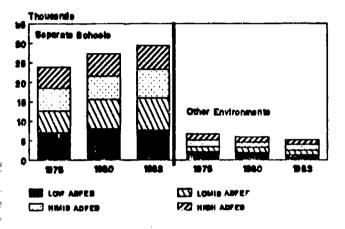


LEW BURAL

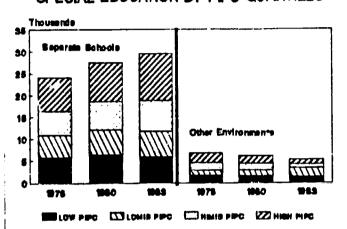
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Figure 4 Comparisons Among Quartile Mean Cumulative Placement Rates in Separate Schools and Other Environments for Total Special Education.

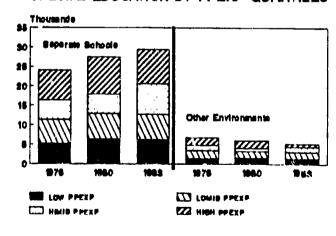
SEPARATE FACILITY PLACEMENTS FOR TOTAL SPECIAL EDUCATION BY ADFED QUARTILES



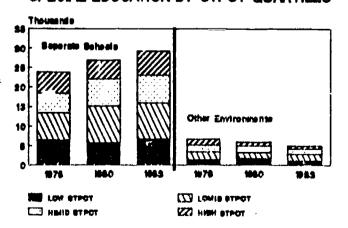
SEPARATE FACILITY PLACEMENTS FOR TOTAL SPECIAL EDUCATION BY PIPC QUARTILES



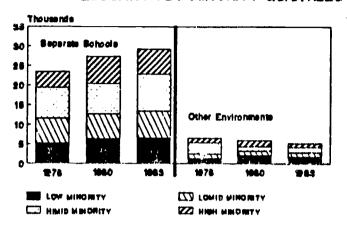
SEPARATE FACILITY PLACEMENTS FOR TOTAL SPECIAL EDUCATION BY PPEXP QUARTILES



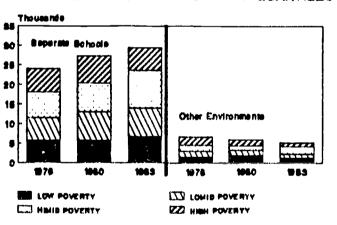
SEPARATE FACILITY PLACEMENTS FOR TOTAL SPECIAL EDUCATION BY STPCT QUARTILES



SEPARATE FACILITY PLACEMENTS FOR TOTAL SPECIAL EDUCATION BY MINORITY QUARTILES



SEPARATE FACILITY PLACEMENTS FOR TOTAL SPECIAL EDUCATION BY POVERTY QUARTILES



SEPARATE FACILITY PLACEMENTS FOR TOTAL SPECIAL EDUCATION BY RURAL QUARTILES

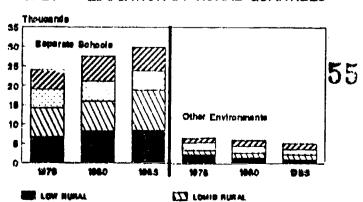
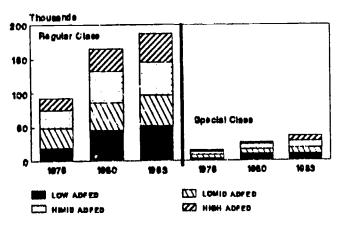


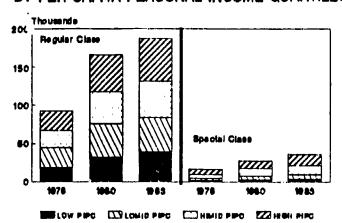


Figure 5 Comparisons Among Quartile Mean Cumulative Placement Rates in Regular Classes and Special Classes for Learning Disabled.

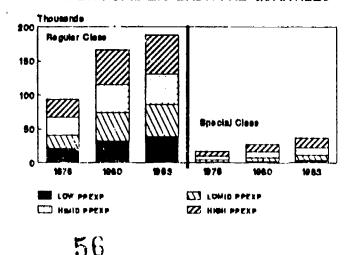
INTEGRATION RATES FOR LEARNING DISABLED BY ADJUSTED FEDERAL REVENUE QUARTILES



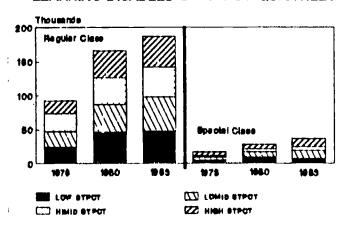
INTEGRATION RATES FOR LEARNING DISABLED BY PER CAPITA PERSONAL INCOME QUARTILES



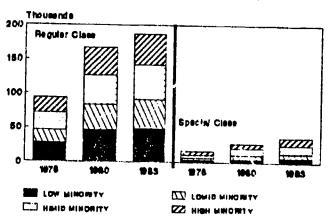
INTEGRATION RATES FOR LEARNING DISABLED BY PER PUPIL EXPENDITURE QUARTILES



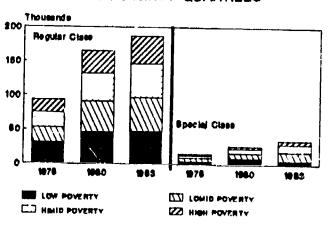
INTEGRATION RATES FOR LEARNING DISABLED BY STPCT QUARTILES



INTEGRATION RATES FOR LEARNING DISABLED BY MINORITY QUARTILES



INTEGRATION RATES FOR LEARNING DISABLED BY POVERTY QUARTILES



INTEGRATION RATES FOR LEARNING DISABLED BY RURAL QUARTILES

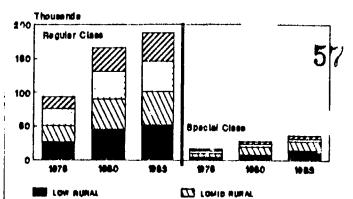
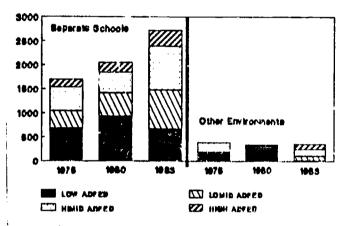


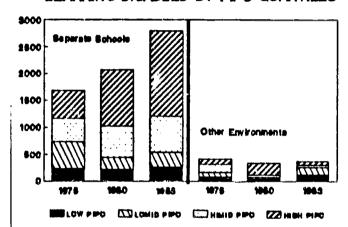


Figure 6 Comparisons Among Quartile Mean Cumulative Placement Rates in Separate Schools and Othor Environments for Learning Disabled.

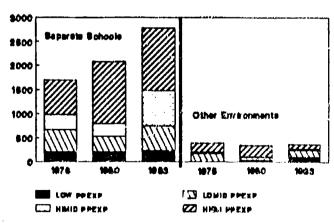
SEPARATE FACILITY PLACEMENTS FOR LEARNING DISABLED BY ADFED QUARTILES



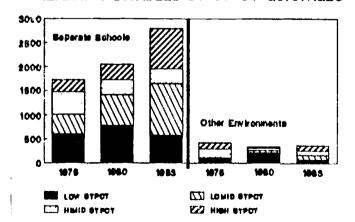
SEPARATE FACILITY PLACEMENTS FOR LEARNING DISABLED BY PIPC QUARTILES



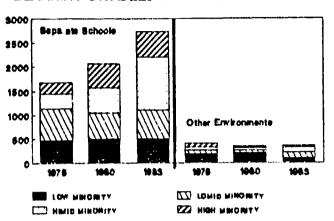
SEPARATE FACILITY PLACEMENT'S FOR LEARNING DISABLED BY PPEXP QUARTILES



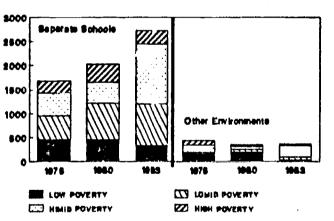
SEPARATE FACILITY PLACEMENTS FOR LEARNING DISABLED BY STPCT QUARTILES



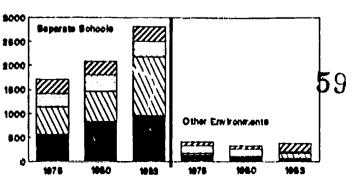
SEPARATE FACILITY PLACEMENTS FOR LEARNING DISABLED BY MINORITY QUARTILES



SEPARATE FACILITY PLACEMENTS FOR LEARNING DISABLED BY POVERTY QUARTILES



SEPARATE FACILITY PLACEMENTS FOR LEARNING DISABLED BY RURAL QUARTILES



CZZ LOWIB RURAL

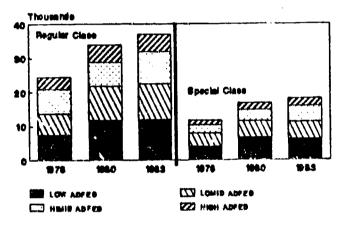
EZZI HIGH RURAL

LOW RUPAL

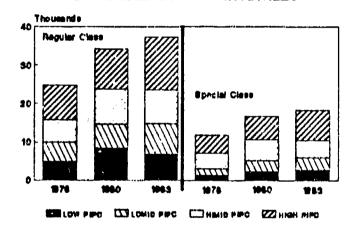
HIMID WURA

Figure 7 Comparisons Among Quartile Mean Cumulative Placement Rates in Regular Classes and Special Classes for Emotionally Disturbed.

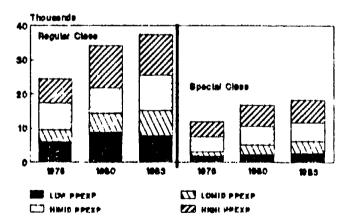
INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY ADFED QUARTILES



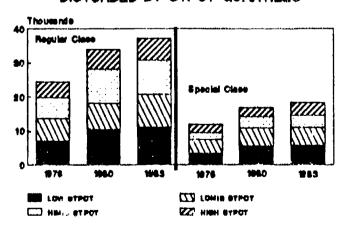
INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY PIPC QUARTILES



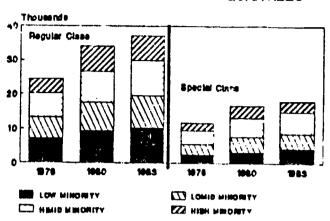
INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY PPEXP QUARTILES



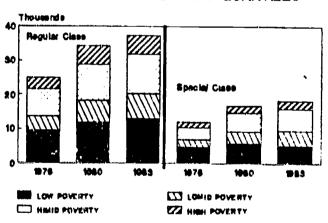
INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY STPCT QUARTILES



INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY MINORITY QUARTILES



INTEGRATION HATES FOR EMOTIONALLY DISTURBED BY POVERTY QUARTILES



INTEGRATION RATES FOR EMOTIONALLY DISTURBED BY RURAL QUARTILES

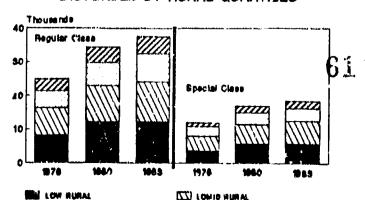
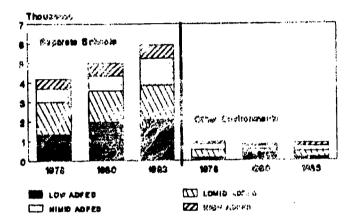




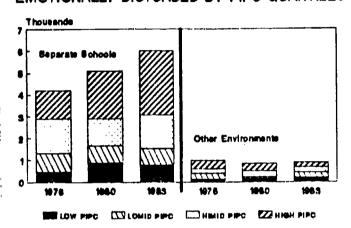


Figure 8 Comparisons Among Quartile Mean Cumulative Placement Rates in Separate Schools and Other Environments for Emotionally Disturbed.

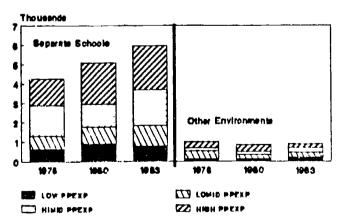
SPECIAL FACILITY PLACEMENTS FOR EMOTICNALLY DISTURBED BY ADFED Q



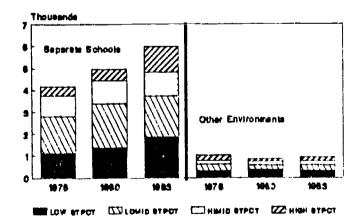
SEPARATE FACILITY PLACEMENT RATES FOR EMOTIONALLY DISTURBED BY PIPC QUARTILES



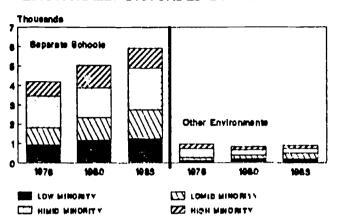
SEPARATE FACILITY PLACEMENT RATES FOR EMOTIONALLY DISTURBED BY PPEXP QUARTILES



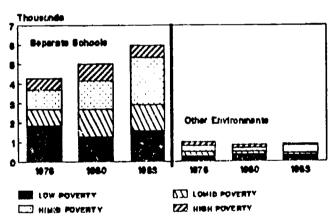
SPECIAL FACILITY PLACEMENTS FOR EMOTIONALLY DISTURBED BY STPCT Q



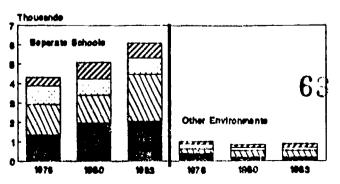
SEPARATE FACILITY PLACEMENTS FOR EMCTIONALLY DISTURBED BY MINORITY Q



SEPARATE FACILITY PLACEMENTS FOR EMOTIONALLY DISTURBED BY POVERTY Q



SEPARATE FACILITY PLACEMENTS FOR EMOTIONALLY DISTURBED BY RURAL Q

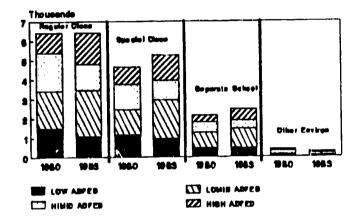


LOW RUNAL CCC HIMM MUNAL

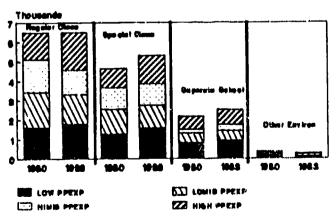
LOMIN GIMOJ [[]] [22] HIGH BUSIAL

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

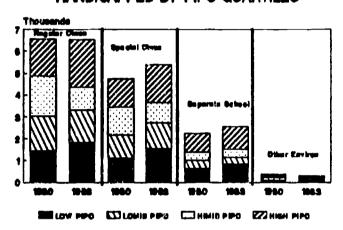
INTEGRATION RATES FOR MULTIPLY HANDICAPPED BY ADFED QUARTILES



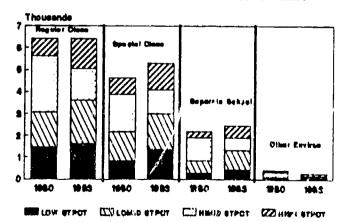
INTEGRATION RATES FOR MULTIPLY HANDICAPPED BY PPEXP QUARTILES



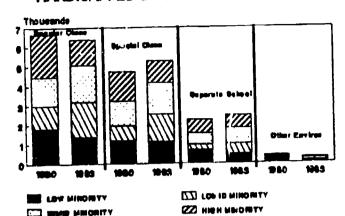
INTEGRATION RATES FOR MULTIPLY HANDICAPPED BY PIPC QUARTILES



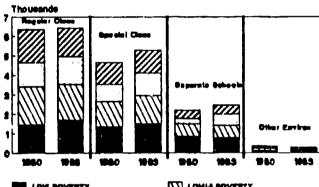
INTEGRATION RATES FOR MULTIPLY HANDICAPPED BY STPCT QUARTILES



INTEGRATION RATES FOR MULTIPLY HANDICAPPED BY MINORITY QUARTILES

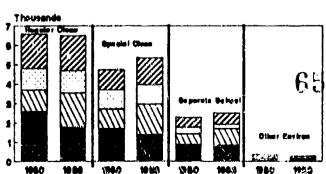


INTEGRATION RATES FOR MULTIPLY HANDICAPPED BY POVERTY QUARTILES



LOW POVERTY HIME POVERTY LOMIS POVERTY (ZZ) HIBH POVERTY

INTEGRATION RATES FOR MULTIPLY HANDICAPPED BY RURAL QUARTILES



LZZ COMIS SIMAL

Table 1 Intercorrelations Among Finance and Demographic Variables

	PPEXP 1976	PPEXP 1980	PPEXP .1983	PIPC 1976	PIPC 1980	PIPC 1983	ADJFER	ADJFER	ADJFER	STFCT 1976	STPCT 1980	STPCT 1983	RURAL	MINORIT	Y POVERTY
PPEXP76	1.00	.974	.950	.879	. 792	.8i3	499	431	411	047	072	056	-,371	010	446
PPEX280		1.00	.969	.869	.777	.732	450	424	404	048	082	-,061	310	043	422
PPEXP83			1.00	.864	.769	.788	434	398	385	. ೧६९	088	058	~.229	079	406
PIPC76				1.00	.937	.927	554	481	465	073	012	~·. U16	~,481	.035	~.562
PIPC80					1.00	. 957	84',	-,599	502	234	112	153	604	.024	646
PIPC83						1.00	602	544	532	~.221	135	157	-,587	.063	~.551
ADJFER16							1.00	.919	.882	.615	.569	.565	.302	. 545	.838
ADJFER80								1.00	.932	.629	.602	.586	.280	.573	.843
ADJFERES									1.00	. 566	.555	.543	.337	.516	. 848
STPCT76										1.00	.925	,920	.032	.567	. 447
STPCT80											1.00	.972	051	.565	. 388
STPCT83												1.00	.004	.516	75
RURAL													1.00	418	.293
MINORITY			·											1.00	.483
POVERTY															1.00
ENROLLMENT	* .137	.054	011	. 190	.240	.224	199	098	084	080	.025	020	-,445	, 309	.110

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



Taule 2
Means and Standard Deviations for Independent Variables, 1976-77, 1980-81, 1983-84

û

		1976-77	1980-81	1983-84
PPEXP	Mean	1589	2458	3197
	SD	395	661	
	N	50	50	1031 50
PIPC	Mean	6423	9540	
	SD	1088		11590
	N		1379	1852
	IN	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	r o
	SD	17.75	17.39	53.15
	N	50		17.44
	''	30	50	50
RURAL	Mean	ter	36.0 0	_
	SD	-	15.25	
	N	044	50	•••
IINORITY	Mean	-	19.44	***
	SD	***	15.35	
	N	***	.50	-
POVERTY	Mean		4 2 P	
- · -····	SD	_	14.35	~
	N N	~	4.55	•
	N		50	



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			Demograph	ic
	PPEXP	PIPC	ADJFER	STPC1	RURAL	MIN	POVERTY
PCTSETO-1976	.072	, 122	125	.029	358	031	- 062
PCTSETO-1980	.004	013	033	075	~,110	~,031	~.062 .074
PCTSETO-1983	072	.009	057	126	105	122	.144
PCTLDTO-1976	.309	.406	-,258	.025	315	~,080	- 420
PCTLDTO-1980	.342	.398	237	045	321	013	432 401
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

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	
	N	-	50	.135 50

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

	Tctal 1976	Special 1980	Education 1983	Lear 1976	ning Disa 1980	abled 1983	Emotic 1976	onally D 1980	isturbed 1983	Multiply 1980	Handicapped 1983
Low			•			•					1003
Mean SD N Low Middle	8.4028 2.1916 12	9.7310 1.1507 12	10.4788 1.2182 12	1.9699 1.2894 12	2.9601 .7025 12	4.0172 .7094 12	.5926 .8945 12	.8518	.7299 .8589 12	.1556 .1057 12	.1423 .1139 12
Mean SD N High middle	6.8818 1.1343 13	9.1004 1.4927 13	10.2136 1.1159 13	1.8176 .7513 13	3.8410 .6210 13	4.5676 .6343 13	.2401 .1609 13	.4552 .2762 13	.7010 .4329	.1742	.1522 .1237
Mean SD N High	7.3517 1.6363 13	9.2974 1.3660 12	9.9679 1.6644 ' 13	2.3017 .7489 13	4.0752 •5373 13	4.4635 .8429 13	.5810 .4272 13	.6450 .2827	.9158 .6451 13	.1146 .1163 .13	13 .0825 .0740 13
Mean SD N	8.2714 1.4790 12	10.3781 1.9394 12	11.0823 2.2003 12	2.4040 1.0519 12	4.4427 1.6963 12	5.4389 1.3940 12	.7356 .5981 12	1.0773 .7183 12	1.0427 .6963 12	.0952 .1170 12	.1531 .2028 12

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

	Total 1976	Special 1980	Education 1983	Learr 1976	ing Disa 1980	bled 1983	Emotior 1976	nally D 1980	istu į d	Multiply 1980	Handicapped 1983
Low Mean SD N	7.9846 2.4316 12		10.6707 1.0912 12	1.7396 1.2596 12	3.1156 .7341 12	4.0660 .6543 12	.4729 .8940 12	.6845 .8117 12	.6668 .8170 12	.1609 .1098 12	.1672 .1269 12
Low Middle Mean SD N High Middle	7.1079 1.6912 13	9.8764 1.3048 13	10.3224 1.1301 13	2.2600 .5838 13	4.1419 1.1528 13	4.3993 .7238 13	.4114 .3017 13	.5523 .3851 13	.7456 .5086 13	.1469 .1029 13	.1020 .0923 13
Mean SL N	7.4638 .8355 13	9.0093 1.4848 13	9.9111 1.4052 13	1.9193 .8566 13	3.8317 .9729 13	4.6594 1.3647 13	.3860 .1969 13	.7554 .5046 13	.7772 .3141 13	.1129 .1878 13	.0824 .1072 13
High Mean SD N	8.3232 1.5356 12	9.7602 2.1701 12	10.8341 2.4838 12	2.5693 1.0240 12	4.2250 1.2449 12	5.3603 .8929 12	.8810 .6465 12	.9017 .6858 12	1.2077 .8462 12	.1214 .1102 12	.1834 .1360 12

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

	Total 1976	Special 1980	Education 1983	Learr 1976	iing Disa 1980	bled 1983	Emotior 1976	nally Di 1990	sturbed 1983	Multiply 1980	Handicapped 1983
Low Mean SD N	7.7403 1.6510 12	9.3312 2.0054 12	10.7745 1.9646 12	1.8591 .7729 12	3.9526 .8951 12	5.0445 1.4813 12	.7312 .5756 12	.97 .6238 12	1.0572 .5969 12	.0851 .0964 12	.1100 .1812 12
Low Middle Mean SD N High Middle	7.7687 1.3487 13	9.5790 1.6571 13	10.2698 1.8072 13	2.5865 .9330 13	4.0045 1.5010 13	4.5270 .9416 13	.4308 .2522 13	.8507 .7411 13	.9650 .8214 13	.1537 .1349 13	.15 .1324 13
Mean SD N , High	7.7652 1.7505 13	9.3429 1.2164 13	10.2224 1.3985 13	2.3641 .9405 13	4.0561 .8866 13	4.5949 .8410 13	.6984 .9110 13	.6223 .5179 13	.8553 .7212 13	.1718 .1853 13	.1209 .1163 13
Mean SD N	7.5251 2.2763 12	9.6099 1.3433 12	10.4501 1.3088 12	1.6141 1.0312 12	3.2936 .9325 12	4.3133 .7599 12	.2632 .2548 12	.4300 .4058 12	.4949 .3298 12	.1261 .0671 12	.1446 .1127 . 12

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

	Total 1976		Education 1983	Learr 1976	ning Disa 1980	bled 1983	Emotion 1976	ally Di 1980	sturbed 1983	Multiply 1980	Handicapped 1983
Low											
Mean	7.1225		10.0314	2.1437	4.0698	4.5423	.5363	.8950	.9487	.0919	.1119
SD	1.7866		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	1600	4700
SD	1.1216		1.9546	.7238	1.1927	1.3984	.3649	.3657	.4767	.1662	.1792
N	13	13	13	13	13	13	13	13	13	.1110	·1792 13
						, 0		13	13	د ا	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
						, -		, 0	10	13	1.3
High											
Mean	7.6778		9.9738	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, Emotionally Disturbed and Multiply Handicapped for Rural Quartiles.

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

79

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

	Total	Special	Education	Learr	ning Disa	bied	Emotior	nally Di	sturbed	Multiply	Handicapped
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1980	1983
Low Mean SD N	7.5592 1.9306 12	9.6489 1.7054 12	10.4650 1.5357 12	2.5272 .8315 12	4.2652 1.0770 12	4.7848 1.3698 12	.5982 .8731 12	.7719 .7674 12	.9480 .7951 12	.1543 .1302 12	.1014 .1194 12
Low Middle Mean SD N High Middle	7.5775 1.5779 13	9.5486 1.6151 13	10.5347 1.6569 13	1.5771 .7165 13	3.3307 .9127 13	4.2889 .9198 13	.5299 .5455 13	.7369 .6712 13	.8545 .7307 13	.0993 .1022	.1194 .0907
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
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 Islal Special Education, Learning Disabled, Emotionally Disturbed and Multiply Handicapped for Poverty Quartiles.

	Total	Speci (1	Fducat.1on	Loann	ning Disa	bled	Emotion	nally Di	sturbed	Multiply	Handicapped
	1976	0801	1983	1976	1980	1983	1976	1980	1983	1980	1983
Low Mean SD N	7.7315 1.6632 12	9.1181 1.7/33 12	9.8387 1.5012 12	2 6 25 85 1	4.1628 .6500 12	4.6748 .8044 12	.7801 .8 61 3 12	.9529 .7698 12	1.1990 .8531 12	.1011 .1064 12	.1177 .1066 12
Low Middle Mean SD N	7,4840 1,8000 14	9,8439 1,8462 14	10,4992 2,2632 14	2.1057 1.0216 14	4.1298 1.4134 14	4.8181 1.5104 14	.4020 .1432 14	784 .5919	. 6722 5007 14	.1482 .1323	.1531 .1849
High Middle Mean N	7.9699	9.7903	10.6889	2.24	3.8414	4.7912	.6850	8928	.9793	.1206	.1163
	1.2572	1.4518	1 2941	.7944	1.0076	.7390	.5671	-6172	6013	.0926	.1178
	12	12	12	12	12	12	12	12	12	12	12
Me in	7.6611	9.6471	10.6478	1,5059	3.1564	4.1528	2837	.475°	.5616	. 1692	.1376
SD	2.1676	1.0091	.9901	904	.8313	.7799	.7 4 63	.3905	.9786	798	.1184
N	12	12	12	12	1'	12	17	12	.19	7	12

Table 12

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

			Finance			Demograph	ic
Cumulative Placement Rates	PPEXP	PIPC	ADJFER	STPCT	RURAL	MIN	POVERTY
Regular Classus							****
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	i						
1976	.069	.098	110	002	161	.088	006
1980	090	.033	152	190	,029	164	109
1983	261	172	074	143	.179	227	08

Note Nº49



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			a2	Special Classes			arate Sch	1 -				
	1976	1980	1983	1976	1980	1983	1976	1980	1983	Other 1976	' Enviror 1980	nments 1983	
Low													
Mean SD N	87075 23092 12	106836 17167 12	12350	20515 9833 12	24376 6077 12	25867 4896 12	5286 265C 12	6447 2876 12	6193 2872 12	1377 1386 12	1663 1202 12	1498 1288 12	
Low Middle													
Mean SD N	74302 16507 12	103343 16307 12	13208	20205 7990 12	26718 8548 12	28550 9027 12	6190 2781 12	6447 2327 12	. 6528 3489 12	2196 1947 11	1622 953 12	1706 1310 12	
High Middle													
Mean SD N	81904 22123 13	10692 16708 13	106901 19241 13	27885 17932 13	33849 15755 13	35853 19825 13	5006 38 7 6 13	4098 3704 13	7929 6341 13	1215 1119 13	888 915 13	1308 1641 13	
High													
Mean SD N	84354 17625 12	113824 24773 1,2	120648 19241 12	32017 11454 12	35317 12186 12	37671 15660 12	7536 5299 12	9503 5840 12	8856 6134 12	2030 2816 12	1952 2562 12	713 57 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.

	Re 1976	gular Ci 1980	asses 1983		Special Classes 1976 1980 1983			irate Sc	hools	Otner Environments		
			.500	1370	1980	1983	1976	1980	1983	1976	1980	1983
l.ow Mean SD N	83217 27159 11	107639 16742 11	110582 11058 11	20946 10053 11	22710 5454 11	26318 4681 11	5822 2578 11	6503 3032 11	5972 2855 11	1672 1931 11	1572 1124 11	1242 1069 11
Low Middle Mean SD N	77448 17705 13		10937 11187 13	19789 7199 13	28448 5762 13	27166 9344 13	5116 3397 13	5548 2239 13	5798 2826 13	1196 1251 12	1367 1118 13	2113 1673 13
High Middle Mean SD N	83987 18115 13	10256 <i>2</i> 18101 13	105432 15797 13	31237 18549 13	35489 15584 13	33533 11497 13	5524 336 . 13	6485 3012 13	6917 3245 13	1717 1466 12	1387 995 13	912 853 13
High Mean SD N	83790 18635 12	109306 27605 12	117601 25376 12	28467 11032 12	33000 13939 12	41045 21791 12	757.4 5356 12	8923 6612 12	10917 7780 12	2149 2761 12	1775 2612 12	918 1102 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 1976 1980 1983			Special Classes 1976 1980 1983			Separate Schools 1976 1980 1983			Other Environments 1976 1980 1983		
Low Mean SD N	80003 13197 12	112466 20494 12	114657 20027 12	28568 11759 12	37616 15169 12	33889 13999 12	7272 4920 12	8066 3856 12	7761 4186 12	2146 2839 12	2074 2360 12	1983 1375 1729 12
Low Middle Mean SD N	85848 19031 13	104270 21174 13	110029 16659 13	27091 19076 13	30286 12901 13	32933 13625 13	5390 3125 13	7484 5838 13	8275 5146 13	1350 882 13	1208 1199 13	1200 970 13
High Middle Mean SD N	81353 17889 13	108258 18582 13	109399 18278 13	22810 9613 13	29133 8226 13	32259 18642 13	. 5796 4274 13	6087 2776 13	7237 6663 13	1830 2047 12	1461 1295 13	1460 1449 13
High Mean SD N	80534 26792 11	104052 19770 1:1	108761 13173 11	22165 9628 11	23013 5277 11	28810 10137 11	5502 2628 11	5620 3260 11	6109 ' 3214 11	1416 1432 11	1/46 1092 11	1175 969 11

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			gg	Special Classes Separate Schools						OAL COLOR			
	1976	1980	1983	1976	1980	1983		1976	1980	1983	Other 1976	Enviror 1980	nments 1983	
Low														
Mean SD M	78770 23979 12	109081 24306 12	111277 19308 12	26406 19546 12	31253 15365 12	20134 11466 12		6536 3971 12	5926 3440 12	6878 4271 12	1454 1455 12	1799 2498 12	1279 1237 12	
Low Middle													,	
Mean SD · N ·	83426 16815 13	110228 19101 13	116115 18873 13	26656 11581 13	38171 10456 13	37234 14807 13		6945 4523 13	9366 5720 13	9221 4799 13	2177 2835 12	1560 1205 13	1694 1619 13	
High Midale														
Mean SD N	85115 21687 13	107870 13766 13	108368 8 4 90 13	22629 9379 13	24638 7002 13	26722 7514 i3		5012 2961 12	6839 1633 13	6961 3301 13	1584 1665 13	1 7 9,8 1029 13	1296 1063 13	
Нıgh														
Mean SD N	8029 6 18 97 2 11	101045 22084 11	106474 19623 11	25252 11330 11	25948 9615 11	34373 20423 11		5340 3766 11	4782 3525 11	6281 7116 11	1516 1437 11	833 1 0 00 11	889 1172 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.

	Re	egular Cl	asses	Spe	ecial Cl	asses	Sepa	rate Sci	hools	Other	· Enviror	nmants
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low Mean SD N	84523 18148 12	107609 22803 12	110762 22803 12	25868 11409 12	30560 12357 12	36387 14856 12	6826 5135 12	8357 4582 12	8536 4642 12	2291 2859 12	1353 927 12	1121 1104 12
Low Middle Mean SD N	88995 16111 12	110719 24315 12	113202 21253 12	29908 11787 12	40388 14555 12	40402 19257 12	7389 3858 12	7743 5256 12	10361 7214 12	1218 816 11	1396 1303 12	1216 1163 12
High Middle Mean SD N	87067 20976 13	109895 15450 13	112334 10128 13	27905 17952 13	26768 6737 13	26923 9516 13	4944 2899 13	5034 3178 13	5011 2338 13	1928 1709 13	1740 2456 13	1384 1548 13
High Mean SD N	67185 18804 12	100704 15900 12	106409 11652 12	16940 4950 12	23135 5291 12	24974 2656 12	4863 2751 12	6366 2696 12	5841 2656 12	1164 1556 12	1566 1139 12	1497 1394 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.

	Re 1976	egular C	lasses 1983	Sp 1976	ecial C1 1980		Sepa	irate Scl	nools	Other	Enviro	nments
		, , , ,	1000	1970	1000	1983	1976	1980	1983	1976	1980	1983
Low Mean SD N	81703 19948 13	109453 18510 13	112068 14629 13	24489 18945 13	25264 6465 13	28764 8573 13	5285 2404 13	6431 2964 13	6525 2814 13	1370 1581 12	2135 2521 13	1732 1775 13
Low Middle Mean SD N	79405 19391 13	104187 21231 13	111879 18584 13	24272 11523 13	31637 8223 13	31050 11714 13	6282 4557 13	6349 3010 13	7042 3401 13	1187 933 12	1132 770 13	1199 1121 13
High Middle Mean SD N	84161 23562 13	110480 20790 13	112683 19821 13	27653 11457 13	34385 18708 13	36117 21644 13	7984 4327 13	7646 4615 13	9288 7017 13	2824 2851 13	1321 1022 13	1352 1343 13
High Mean SD N	82976 18868 11	104812 19681 1,1	105516 14640 11	24224 10293 11	28685 9049 11	32073 11459 11	4031 2465 11	6901 5865 11	649 <i>2</i> 5419 11	1223 1079 11	1535 1392 11	914 635 11

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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.

	Re 1976	egular C 1980	lasses 1983	Sp 1976	ecial C1 1980	asses 1983	Sepa 1976	ırate Sch 1980	1001s 1983	Other 1976	Enviror	
									1000	1970	1980	1983
Low Mean SD N	86652 21656 12	103827 21898 12	105429 17171 12	28119 18983 12	31144 16777 12	26170 11179 12	5932 2961 12	5863 3170 12	6706 3507 12	1534 997 12	1947 2431 12	1509 1791 12
Last Madel											12	14
Low Middle Mean SD N	76606 18586 14	1080i6 20776 14	112359 20576 14	25651 13189 14	31663 10841 14	36361 11344 14	5613 5032 14	7333 5394 14	7312 4528 14	1524 2711 14	1301 1335 14	940 925 14
High Middle Mean SD N	82312 12730 12	110538 20724 12	114219 18155 12	24916 8997 12	32018 11856 12	36986 21466 12	6520 4326 12	7177 4320 12	9656 7180 12	1707 1470 11	1165 797 12	1897 1393 12
High Mean SD N	82607 26740 11	106583 16510 1,1	110546 9219 11	21801 9660 11	25068 5671 11	27657 6716 11	5928 2497 11	6899 3290 11	5753 3334 11	2028 1991 11	1712 1266 11	907 584 11

Table 20

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

			Finance			Demograph	ic
Cumulative Placement Rates	PPEXP	PIPC	ADJFER	€"PCT	RURAL	MIN	POVERTY
Regular Classes							<u>-</u>
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	.103	.028	288	199	137	176	150
1980	. 301	.362	-,296	284	309	···.049	156
1983	.215	.233	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.

	Re	gular Cl	asses	Sp	ecial Cl	asses	Sons	arate Sch	20010	211		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	Other 1976	Environ 1980	ments 1983
Low												
Mean SD N	21053 13767 12	31878 9328 12	39227 9610 12	1636 2374 12	3169 2316 12	3968 2149 12	204 201 12	204 184 12	236 260 12	2 4 9	38 87 12	108 247 12
Low Middle												
Mean SD N	20340 10811 12	41796 9336 12	46377 3999 12	2724 2192 12	4807 2806 12	7733 4402 12	463 684 12	334 488 12	517 539 12	178 269 11	63 81 12	144 295 13
High Middle												
Mean SD N	26087 9241 13	41805 6162 13	45262 9786 13	5514 4632 12	8929 10868 13	10425 13365 13	317 358 11	253 314 13	731 1748 13	29 53 11	18 26 13	40 5 <i>1</i> 13
Hign												
Mean SD N	25976 11785 12	51056 19839 12	56754 14279 12	6506 3589 12	10544 5187 12	14309 8269 12	705 903 12	1298 981 12	1296 1106 12	190 403 11	229 457 12	83 159 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.

	Re 1976	gular Cl 1980	asses 1983	Sp 1976	ecial C1 1980	asses 1983	Sepa 1976	arate Sch 1980	100 1 s 1983	Other 1976	Enviror	nments 1983
Low Mean SD N	i 7939 14318 11	31921 8411 11	39233 9550 11	1663 2480 11	2455 1061 11	4096 2208 11	230 259 10	220 185 11	264 · 256 11	83 243 9	47 90 11	116 257 11
Low Middle Mean SD N	26337 7519 13	44169 14026 13	44305 7094 13	3347 2231 13	4919 3063 13	5254 3917 13	508 666 12	225 355 13	271 347 13	75 178 10	28 43 13	146 282 13
High Middle Mean SD N	22877 12781 13	42232 12283 13	47727 14653 13	4542 5223 12	10090 10782 13	11672 8828 13	425 668 12	587 667 13	667 797 13	157 393 12	48 77 13	34 45 13
High Mean SD N	25871 9859 12	47156 15191 12	55726 9937 12	6688 3089 12	9683 5034 12	15214 12344 12	521 766 12	1030 1048 12	1585 1852 12	92 130 11	222 460 12	76 160 i 2

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.

	Re	gular Cla	asses	Spe	ecial Ci	asses	Sona	rate Sch	20010			
	1976	1980	1983	1976	1980	1983	1976	1980	1983	Other 1976	Environ 1980	ments 1983
Low												
Mean SD N	19120 8693 12	45200 ¹ 11804 12	51783 15652 12	4061 3229 11	10627 11015 12	10307 7911 12	685 904 11	936 1055 12	680 868 12	167 407 11	248 454 12	27 26 12
Low Middle												
Mean SD N	29468 10825 13	41357 16920 13	45579 9180 13	5390 4939 13	6806 5330 13	8699 7877 13	361 484 13	480 673 13	794 1036 13	21 29 12	42 85 13	88 155 13
High Middle												
Mean SD N	26916 10234 13	45540 12706 13	47809 10823 13	4184 2970 13	7070 4517 13	9995 11342 13	492 644 12	441 516 13	926 1757 13	208 262 11	29 36 13	137 285 13
High												
Mean SD N	16831 12025 11	33470 9584 11	41933 10743 11	2494 3587 11	2763 1253 11	7357 8979 11	162 195 10	194 190 11	325 286 11	2 4 8	26 37 11	118 257 11

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.

	Re	gular Cl	asses	Spe	ecial Cl	asses	9003	rate Col			-	
	1976	1980	1983	1976	1980	1983	1976	rate Sch 1980	1983	Other 1976	Environ 1980	ments 1983
Low												
Mean SD N	24061 10929 12	46398 16668 12	47144 10920 12	4838 5209 11	9275 11186 12	6768 4607 12	610 829 11	777 1039 12	582 672 12	100 162 11	217 459 12	85 194 12
Low Middle												
Mean SD N	23725 9160 13	40190 12435 13	51420 14025 13	3973 3070 13	8015 5299 13	12321 9147 13	406 639 13	641 749 13	1064 1128 13	8 18 11	57 88 13	89 153 13
High Middle												
Mean SD N	25652 13824 13	40355 10069 13	42909 7062 13	3102 2851 13	4381 2494 13	5743 3693 13	466 653 11	310 346 13	319 315 13	186 419 11	38 84 13	91 230 13
High												
Mean SD N	19721 11998 11	39670 15549 1:1	45882 14496 11	4670 4206 11	5988 5726 11	11964 14172 11	240 248 11	331 507 11	831 1896 11	128 244 9	32 42 11	107 261 11

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.

	Re	gular Cl	asses	Spe	ecial Cla	asses	Sona	rate Sch	0010	0 to 1 to 1 to 1		
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	Environ 1980	ments 1983
Low												
Mean SD N	26470 11107 12	45146 14952 12	51977 12543 12	5281 3228 12	7746 4278 12	14526 9685 12	571 788 11	823 959 12	958 1031 12	124 199 10	84 139 12	71 161 12
Low Middle												
Mean SD N	24972 10690 12	45079 14533 12	49392 12828 12	5562 3281 12	12645 10621 12	12947 12025 12	568 708 12	644 739 14	1219 1856 12	52 83 11	34 49 12	102 191 12
High Middle												
Mean SD N	24347 14123 13	40388 13874 13	44772 11245 13	4079 5160 12	4037 3145 13	4934 3366 13	278 547 · 12	337 573 13	329 494 13	150 396 12	35 440 13	29 59 13
High												
Mean SD N	17812 8193 12	36040 10138 1/2	41519 9574 12	1459 1643 12	3429 2607 12	4485 2627 12	302 388 11	279 436 12	308 327 12	86 242 9	64 112 12	174 323 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.

	Re	gular Cl	asses	Sp	ecial Cl	asses	Sana	mata O-k				
	1976	1980	1983	1976	1980	1983	1976	rate Sch 1980	1983	Other 1976	Environ 1980	nments 1983
Low												
Mean SD N	27817 8963 12	46262 14169 12	49188 14637 12	3568 5204 12	4746 3768 12	6966 6795 12	467 561 12	501 715 12	504 751 12	194 438 11	207 456 12	105 238 12
Low Middle												
Mean SD N	18526 9965 13	37417 11909 13	42184 11405 13	3952 3008 12	6697 3762 13	7162 4953 13	678 999 12	549 918 13	604 875 13	71 129 10	62 116 13	126 231 13
High Middle												
Mean SD N	25310 13165 13	42548 13766 13	50370 10400 13	4355 3747 13	9746 11356 13	11740 12585 13	298 348 · 2	522 645 13	1105 1768 13	65 139 12	53 93 13	95 233 13
High												
Mean SD N	22173 12299 11	40503 14872 1,1	45748 10576 11	4519 3305 11	6146 4000 11	10758 9588 11	243 192 10	491 617 11	530 734 11	85 1 8 7 9	19 22 11	36 65 11

11%

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.

	Re	gular Cl			ecial Cl		Sepa	rate Sch	100 ls	Other	Enviror	nments
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean SD	30707 9623	46384 9598	4775	4712	8340	5637	457	450	339	161	185	31
N	12	12	9813 12	5136 11	11297 12	3799 12	555 11	693 12	534	395	458	45
				• •	'-	12	11	12	12	11	12	12
Low Middle												
Mean	21970	44975	49502	5367	8492	13136	498	760	860	34	69	72
SD N	10565	16320	15545	3500	4688	9663	824	1048	1074	111	132	150
14	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	6.4	2.25
SD	8288	13390	8813	3362	5491	12301	671	477	1790	221	64 88	225 353
N	12	12	12	12	12	12	11	12	12	9	12	12
High												
Mean	18212	33074	40021	2020	3145	4969	946	070				
SD	14410	11049	10559	2444	1660	4036	246 250	373 363	285	96	22	42
N	1.1	11	11	11	11	11	10	11	258 11	241 9	22 11	61
							. •	• •	, ,	ລ	1.1	11

Table 28

Paarson Correlations Between Emotionally Disturbed Integration Rates and Finance and Damographic Variables at Three Points in Time.

			Finance			Demograph	ic
Cumulative Placement Rates	PPEXP	PIPC	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	ľ						
1976	.238	.376	111	.014	328	.170	157
19 30	.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.

	Re	gular Cl	asses	Spe	ecial Cla	2022	C.a.m.					
	1976	1980	1983	1976	1980	1983	1976	arate Scl 1980	noo⊺s 1983	Other 1976	Environ 1980	ments 1983
Low Mean	6069	8800	7673	4755								
SD N	6881 12	10795	8677 12	1755 1514 12	2278 1670 12	2762 1860 12	641 616 12	887 749 12	766 728 12	141 198 11	142 131 12	215 307 12
Low Middle												. –
Mean SD N	3451 3401 12	5482 3576 12	7522 5080 12	1469 863 12	2870 1653 12	3432 1682 12	676 592 12	879 699 12	1084 715 12	394 482 11	210 253 12	274 324 12
High Middle												
Mean SD N	7855 5997 13	7608 4316 13	10364 7802 13	4287 3396 13	5498 3486 !3	5615 5182 13	1586 2484 12	1193 1248 13	1860 2185 13	162 247 11	152 323 13	220 384 13
High												
Mean SD N	7181 5573 12	12307 7971 1;2	11773 7445 12	4335 2584 12	6139 3769 12	6543 4448 12	1379 1085 12	2109 1527 12	2273 2050 12	303 251 12	343 376 12	195 213 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.

	Re	gular Cl	asses	Spe	cial Cla	asses	Sepa	rate Sch	1001s	0+har	Environ	monts
	1976	1980	1983	1976	1980	1983	1976	1980	1983	1976	1980	1983
Low												
Mean SD N	4757 6980 11	8285 10804 11	6754 8594 11	1395 1334 11	2297 1680 11	2592 1869 11	473 379 11	886 791 11	777 762 11	118 119 10	161 151 11	180 320 11
Low Middle										, -		• •
Mean SD N	5151 3932 13	6372 4836 13	8114 5456 13	1751 1212 13	3022 1673 13	3389 2030 13	856 691 12	777 586 13	760 555 13	268 409 11	68 69 13	245 310 13
High Middle												
Mean SD N	5783 4600 13	9174 5927 13	8682 3656 13	4070 3298 13	5438 2989 13	4 44 7 1668 13	1556 2491 13	1243 586 13	1530 853 13	231 323 12	290 356 13	266 380 13
High												
Mean SD N	9004 6734 12	103 9 5 7757 1:2	13809 9607 12	4618 2596 12	5972 4378 12	7955 6090 12	1306 850 12	2167 1884 12	2944 2633 12	366 330 12	326 389 12	205 221 12

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.

	Re	gular Cl	asses	Spe	cial Cla	isses	Sona	unata Cal				
	1976	1980	1983	1976	1980	1983	1976	rate Sch 1980	1983	Other 1976	Environ 1980	ments 1983
Low												
Mean SD N	7503 6513 12	11729 6902 12	11908 6642 12	4070 2254 12	6773 3840 12	6130 4143 12	1362 1212 12	1967 1507 12	2087 2093 12	162 185 11	385 437 12	184 228 12
Low Middle												
Mean SD N	6232 4709 13	10009 9425 13	10537 8349 13	3943 3225 13	4675 3162 13	5181 3403 13	1657 2316 13	1605 1291 13	1763 1461 13	385 369 13	221 217 13	284 367 13
High Middle												
Mean SD N	7190 7082 13	7195 6298 13	9550 8521 13	2351 2292 13	3434 2021 13	4640 4911 13	682 612 12	781 551 13	1404 1909 13	322 421 11	126 229 13	268 310 13
High					,							
Mean SD N	3454 3296 11	4869 5017 1:1	4937 3246 11	1435 1299 11	1838 1131 11	2237 1161 11	483 390 11	671 710 11	676 471 11	97 120 10	108 119 11	153 319 11

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.

	Re	gular Cľ	asses	Spe	ecial Cl	2022	Cons					
	1976	1980	1983	1976	1980	1983	1976	rate Sch 1980	1983	Other 1976	Environ 1980	ments 1983
Low												
Mean SD N	7029 6884 12	10351 7355 12	11009 7060 12	3409 2691 12	5506 3864 12	5707 4111 12	1118 910 12	1346 995 12	1849 2019 12	308 379 11	352 455 12	294 324 12
Low Middle												
Mean SD N	6579 4416 13	7756 4427 13	9803 5195 13	4146 3281 13	5438 3746 13	5427 3427 13	1676 2351 13	2046 1662 13	1875 1481 13	282 259 12	210 216 13	269 361 13
High Middle												
Mean SD N	6204 6610 13	10047 9931 13	99 5 8 8585 13	1890 1241 13	3183 1745 13	3460 2141 13	949 1017 12	1046 625 13	1084 1012 13	191 379 12	187 225 13	184 221 13
High												
Mean SD N	4727 4957 11	5665 6768 1,1	6304 8431 11	2460 2633 11	2616 3226 11	3803 5434 11	435 324 11	514 665 11	1182 2057 11	223 268 10	84 118 11	151 320 11



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.

	Re	gular Cl	asses	Spe	ecial Cla	asses	Sana	rata Cak	20010			
	1976	980	1983	1976	1980	1983	1976	rate Sch 1980	1983	Other 1976	Environ 1980	ments 1983
Low												
Mean SD N	8171 7146 12	12251 9308 12	12078 8388 12	3620 2 4 02 12	5780 3776 12	5861 4100 12	1375 799 12	1989 1615 12	2060 1811 12	400 368 11	22 4 237 12	211 169 12
Low Middle												
Mean SD N	8198 6309 12	10675 8212 12	11849 9170 12	4361 3364 12	5792 33 5 2 12	6791 5388 12	1550 2477 12	1425 1208 12	2419 2295 12	247 220 11	317 443 12	347 447 12
High Middle												
Mean SD N	4959 3665 13	6854 4347 13	8355 4622 13	29 4 0 2242 13	3457 2424 13	3606 1859 13	981 970 12	818 651 13	830 760 13	237 4 04 12	173 254 13	160 177 13
High												
Mean SD N .	3468 4204 12	4480 4893 12	5216 4976 12	1037 1109 12	1925 1160 12	2260 1468 12	409 523 12	855 802 12	759 681 12	121 217 11	131 143 12	191 352 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.

	Red	gular Cl	2000	Sno	ecial Cla		0		-			
1	1976	1980	1983	1976	1980	1983	Зера 1976	rate Sch 1980	1983		Environ	
•					. 000	1300	1970	1360	1303	1976	1980	1983
Low												
Mean	7086	9221	10261	2562	2202	4004	204	4454				
SD	7168	9850	8148	2299	3202	4281	934	1174	1251	124	222	194
N	12	12			1650	2213	1067	770	935	200	259	240
14	12	12	12	12	12	12	12	12	12	12	12	12
Low Middle										,		
Mean	6274	8340	9430	2980	4500	4074	222	4400				
SD	6488	7328	7919		4598	4371	889	1198	1501	155	187	312
N	13	1328		2418	3263	3746	970	1045	1691	180	315	445
14	13	13	13	13	13	13	. 13	13	13	10	13	13
High Middle												
Mean	6330	9056	10317	4047	5557	6420	1001	4-4.	045.			
SD	5365	7456	8285		5557	6420	1661	1541	2154	466	245	255
N	13	13		3653	4659	5810	2329	1737	2391	400	3 25	290
14	13	13	13	13	13	13	12	13	13	12	13	13
High												
Mean	4285	7379	7136	2212	2016	0407	700	4446	4044			
SD	2976	4863		2213	3316	3107	702	1118	1012	220	185	125
N N	11	4863 11	4766	1519	1751	1667	452	1038	1045	325	278	156
I¥	11	11	11	11	11	11	10	11	11	10	11	11

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.

	Re	gular Cl	asses	Spe	cial Cla	isses	Sepa	rate Sch	ools	Other	Enviror	monts
	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	141?	1368	213	101	4.00
SD	4690	4736	5116	2078	2090	2467	911	1192	1121	213 269	164	129
И	14	14	14	14	14	14	14	14	14	14	195 14	148 14
High Middle												
Mean	7909	10580	11546	3505	5298	6427	1003	1473	2200	225	470	0.74
SD	4465	7299	8480	2645	3930	5872	699	1612	2399 2327	335 3 60	172	371
N	12	12	12	12	12	12	11	12	12	10	165 12	384 12
High												
Mean	3266	5381	5555	1475	2112	2389	554	82 7	62 0	475	150	400
SD	3157	4843	4513	1318	1236	1248	437	728	391	175	150	103
N	1 1	111	11	11	11	11	11	11	11	329 10	240 11	98 11

Table 36

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

			Finance			Demograph	ic
Cumulative Placement Rates	PPEXP	PIPC	ADJFER	STPCT	RURAL	MIN	POVERTY
Regular Classes							
1976		_	-	_	_		
1980	108	.020	167	108	-,140	042	
1983	. 051	.121	041	163	~.106	.042 084	056 126
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	105
1983	041	.076	077	040	260	.073	195 112
Other Environments	1						
1976	_	-		_	_	_	
1980	.169	084	024	.079	.127	176	- 001
1983	288	223	.102	.076	.207	094	081 .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 1980	Classes 1983	Special 1980	Classes 1983	Separate 1980	Schools 1983	Other Env 1980	ronments 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
\$D	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	10 11	1467	635	77 7	83	27
SD	1369	1467	1125	1359	1004	1216	192	31
N	11	12	11	12	11	12	11	12





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 1980	Classes 1983	Special 1980	Classes 1983	Separate 1980	Schools 1983	Other E 1980	nvironments 1983
Low Mean SD N	1465 1369 11	1823 1171 11	1104 1025 11	1567 1067 11	627 1015 11	838 890 11	80 71 11	138 196 11
Low Middle Mean SD N	1568 1426 13	1486 974 13	1061 718 13	1164 634 !3	404 619 13	317 288 13	162 466 13	75 111 13
High Middle Mean SD N	1844 2758 10	1053 963 13	1274 1331 10	923 905 13	378 430 10	385 456 13	46 56 10	26 48 13
High Mean SD N	1667 1280 10	2175 1361 12	1294 1045 10	1729 1253 12	836 1041 10	1013 1217 12	87 202 10	43 75 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 1980	Classes 1983	Special 1980	Classes 1983	Separate 1980	Schools 1983	Other (1980	Environments D 1983
Low								
Mean	1530	1106	1158	970	471	461	94	4 32
SD	1060	952	728	893	359	625	210	
N	9	12	9	12	9	12	9	9 12
								•
Low Middle								
Mean	1895	2365	1324	1996	800	1014	44	61
SD	1637	1296	1139	1240	1265	1333	68	
N	13	13	13	13	13	13	13	
High Middle								
Mean	1984	1343	1298	1008	534	412	186	100
SD	. 2756	1127	1380	811	714	434		
N	11	13	11	13	11	13	505 11	
				, -		10	1	13
High								
Mean	1035	1609	883	1313	343	583	7.8	72
SD	619	916	518	674	334	348	70	
N	11	11	i 1	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 1980	Classes 1983	Special 1980	Classes 1983	Separate 1980	Schools 1983	Other Env 1980	rironments 1983
Low Mean	1449	1636	843	1346	259	404		
SD	1390	1106	561	886	281	421 426	70 194	58 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	1 3	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 1980	Classes 1983	Special 1980	Classes 1983	Separate 1980	Schools 1983	Other Env 1980	ironments 1983
Low Mean	2588	1798	1688	1407				
SD	2658	1368	1396	1407 1250	905	870	51	37
N	10	12	10	1250	1059	1060	83	77
	. •	, _	10	12	10	12	10	12
Low Middle								
Mean	1108	1738	1007	1570	543	821	0.7	
SD	1227	1301	1161	1169	1063	1087	27	57
N	10	12	10	12	1003	12	35	83
			10	12	10	12	10	12
High Middle								
Mean	1105	1171	1014	1007	330	261	100	
SD	580	797	517	772	260	394	109	60
N	12	13	12	13	12	13	182	100
			12	13	12	13	12	13
High								
Mean	1783	1793	1042	1359	488	567	100	440
SD	1675	1160	790	789	666	408	186 -	119
N	12	12	12	12	12	12	480	191
				· <u>-</u>	1.5	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 1980	Classes 1983	Specia ¹ 1980	01asses 1983	Separate 1980	Schools 1983	Other Envi 1980	ronments 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
Ñ.	13	13	13	13	13	13	13	13
High								
Mean	2190	130 3	1514	1120	703	672	63	42
SD	2920	1353	1499	1250	1126	1178	7 5	74
N	9	1 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 1980	Classes 1983	Special 1980	Classes 1983	Separate 1980	Schools 1983	Other Envi 1980	ronments 1983
Low Mean SD	1478 1018	172 4	1365	1519	842	778	114	5 0
N .	9	1161 12	1018 9	1127 12	1105 9	987 12	215 9	53 82 12
Low Middle								
Mean SD N	1952 1574 14	1827 1299 14	1303 1018 14	1471 1135 14	660 1030 14	655 1063 14	141 4 50 14	65 179 14
High Middle								
Mean SD N	1215 1264 10	1431 1213 12	977 740 10	1125 936 12	272 203 10	5 6 3 646 12	4 6 54 10	96 118 12
High								
Mean SD N	171. 2624 11	1430 1032 11	1122 1215 11	1165 804 11	432 446 11	476 377 11	79 73 11	60 67 11