

DOCUMENT RESUME

ED 293 265

EC 202 464

AUTHOR Thurlow, Martha L.; And Others
TITLE State Guidelines for Student-Teacher Ratios for Mildly Handicapped Children. Research Report No. 6. Instructional Alternatives Project.
INSTITUTION Minnesota Univ., Minneapolis.
SPONS AGENCY Office of Special Education and Rehabilitative Services (ED), Washington, DC.
PUB DATE Jul 87
GRANT G008630121
NOTE 27p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Educational Policy; Elementary Secondary Education; Emotional Disturbances; Federal State Relationship; Learning Disabilities; Mainstreaming; *Mild Disabilities; Mild Mental Retardation; *Resource Room Programs; *Special Education Teachers; Speech Handicaps; State School District Relationship; *State Standards; *Teacher Student Ratio

ABSTRACT

Current state guidelines for student-teacher ratios and/or caseloads in special education programs serving mildly handicapped students (including learning disabled, mentally retarded, emotionally disturbed, and speech impaired) were examined and compared with pupil-teacher ratios reported by the U.S. Department of Education. The study defined "mildly handicapped students" as "students who receive educational services partially in regular education and partially in special education." Guidelines that could be reviewed were provided by 39 of the 50 states; others either did not respond (N=2) or did not have state-level written guidelines (N=9). Extreme variability was found in state recommended ratios, in how ratios are defined, and in how they are presented. Significant discrepancies were found between ratios presented by individual special education guidelines and those represented in the federal report. Implications of these results for current special education practice are discussed. Tables are used to present data on methods used by states to determine caseloads and student-teacher ratios and on the comparison between state and federally reported statistics. An appendix provides a state-by-state breakdown of the defining characteristics used to determine ratios. (Author/VW)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED293265

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

 **University of Minnesota**

RESEARCH REPORT NO. 6

**STATE GUIDELINES FOR
STUDENT-TEACHER RATIOS FOR
MILDLY HANDICAPPED
CHILDREN**

Martha L. Thurlow, James E. Ysseldyke, and
Joseph W. Wotruba

**INSTRUCTIONAL ALTERNATIVES
PROJECT**

July, 1987

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
James Ysseldyke

F C 203464

Abstract

Current state guidelines for student-teacher ratios in special education were examined and compared to pupil-teacher ratios reported by the U.S. Department of Education. Guidelines that could be reviewed were provided by 39 of the 50 states; others either did not respond (n = 2) or did not have state-level written guidelines (n = 9). Extreme variability was found in state recommended ratios, in how ratios are defined, and in how they are presented. Significant discrepancies were found between ratios presented by individual special education guidelines and those represented in the Federal report. Implications of these results for current special education practice are discussed.

This project was supported by Grant No. G008630121 from the U.S. Department of Education, Office of Special Education and Rehabilitative Services (OSERS). Points of view or opinions do not necessarily represent official position of OSERS.

State Guidelines for Student-Teacher Ratios for Mildly Handicapped Children

Research on the effects of class size began in the early 1950s, reached an apex in 1978-79 with Glass and Smith's (1979) meta-analysis, and has continued to be a topic of interest and controversy in several reviews (cf. Albritton, 1984; Glass, Cahen, Smith, & Filby, 1982; South Carolina State Department of Education, 1980). The debate on the effects of class size on student achievement continues.

Although numerous studies have been conducted to examine the effects of different class sizes or student-teacher ratios on student achievement (and other outcome variables) in regular education classrooms, relatively little attention has been given to the effects of varying student-teacher ratios in special education settings. At this point, little is even known about actual student-teacher ratios in special education settings across the 50 states.

Information on personnel currently serving handicapped children in each of the states is contained in the Seventh Annual Report to Congress on the Implementation of the Education of the Handicapped Act (U.S. Department of Education, 1985). The ratio of number of handicapped children served to special education teachers employed by handicapping condition is reported for each state in an Appendix table (Appendix 6, Table 6B3). From these figures, there appears to be tremendous variability in student-teacher ratios among the 50 states, and there are major differences in ratios for the different categories of handicap. Across all conditions of handicap, the pupil-staff ratio is reported to range from 8:1 (8 pupils per 1 teacher) in the District

of Columbia to 28:1 in Washington, with the ratio across all states being 18:1. For learning disabled pupils, ratios range from 6:1 (DC) to 53:1 (Oregon), with the overall ratio being 21:1. For mentally retarded pupils, the ratios range from 7:1 (Connecticut and DC) to 25:1 (California), with the overall ratio being 13:1.

There are several problems in using these data to get a good picture of current practice in special education student-teacher ratios. As acknowledged in the Report to Congress, the numbers must be viewed with caution. For example, there are "differences across states and across years in how full-time equivalents (FTEs) are counted and reported for various categories of personnel" (p. 52). Furthermore, "noncategorical" teachers are counted evenly across the handicapping conditions, a procedure that probably results in fewer LD personnel showing than is actually the case, and in more MR personnel showing than is actually the case. Even more critical for those interested in looking at current trends for mildly handicapped elementary students is that all students are lumped together, except in terms of handicapping condition. Thus, teachers and students are lumped across grades, even though it is likely that student-teacher ratios for elementary and secondary levels probably vary to a considerable extent.

The purpose of this study was to document current state guidelines for student-teacher ratios in special education, and to compare the numbers specified in these guidelines to the pupil-teacher ratios reported by the U.S. Department of Education. This undertaking

is more difficult than is apparent on the surface because of the definitional problems that surround terms such as "caseload," "student-teacher ratio," and "class size." This problem has been cited as one probable explanation for inconclusive results from studies of the effects of varying class sizes (cf. Albritton, 1984; Cacha, 1982; Cahen & Filby, 1979; South Carolina State Department of Education, 1980). For example, class size has been defined or operationalized in different ways in different studies (e.g., student-teacher ratios, student-staff ratios, class averages, teacher contact hours, teacher load). In addition, authors of reports sometimes use the term "student-teacher ratio" when they actually are referring to a "caseload," and vice versa.

In the current study, "student-teacher ratio" is defined as the number of students to the number of teachers in the classroom. "Caseload" is defined as the total number of students for whom a particular teacher is responsible; some of these students are served directly while others are served on a consultative basis. "Caseload" is a term used more often by special education personnel than by regular education personnel.

Method

Subjects

The potential subjects for this study were the 50 state departments of education in the United States. Of the 50 state special education directors' offices contacted, 43 indicated that they had written guidelines, either for caseload or student-teacher ratios,

or for both. Actual guidelines that could be reviewed were provided by 39 states.

Procedure

In Spring 1986, each of the 50 state offices of Special Education was contacted by telephone. A copy of the state's guidelines for student-teacher ratios for students with mild handicaps was requested for the purpose of review and inclusion in the present study. During this contact, "mildly handicapped students" were defined as "students who receive educational services partially in regular education and partially in special education."

The state guidelines that were received were reviewed and categorized according to the method by which caseload or student-teacher ratio was established for mildly handicapped students. Categories and definitions were established by two staff members working together.

In addition, whenever possible, state guidelines on caseloads and student-teacher ratios were compared to the estimated pupil-teacher ratios reported in the Seventh Annual Report to Congress on the Implementation of the Education of the Handicapped Act (U.S. Department of Education, 1985). Comparisons were performed for four categorical handicapping conditions: learning disabled (LD), mentally retarded (MR), emotionally disturbed (ED), and speech impaired (SP).

Results

Personnel in a total of 43 state departments of education (86%) indicated that they had some form of written guidelines for either caseload, student-teacher ratio, or both. Of these states, two reported that establishing caseload and student-teacher ratios was a responsibility delegated to the local school districts in the state. These two states were not included in this study. Another two states reported that they had written guidelines, but did not send them. Thus, the guidelines reviewed in this study were from 39 states.

The seven states that did not have state-level written guidelines for either caseload or student-teacher ratios for special education services were not concentrated in any single area of the U.S., although six of the states were from either the northeastern or southern region. These six states, however, were spread across the divisions within the northeastern and southern regions; they included the New England and Middle Atlantic divisions of the northeast region, and the South Atlantic, East South Central, and West South Central divisions of the south region. The other state that reported no guidelines was from the west region of the U.S. (Pacific division).

Summary of Guidelines

Variability in the written guidelines was tremendous. There was no consistency in the use of terms such as "caseload," "student-teacher ratio," "pupil-teacher ratio," etc. In some cases "caseload" was used instead of "student-teacher ratio," and vice versa. Similar variability was found in the way that guidelines were

presented and organized within the written statements. In some cases, a summary of student-teacher ratios and caseloads was provided on one page. In another case, guidelines on caseloads and/or student-teacher ratios were presented throughout a 500-page document. Often, it was extremely difficult to find the recommendations related to student-teacher ratios or caseloads within the written documents.

It is virtually impossible to characterize state guidelines related to caseload or student-teacher ratios in a systematic manner because of the extreme variability in how the information is organized and then presented. One state department may specify only caseloads for students served in different kinds of settings (e.g., resource room, special classroom), while another may specify both caseloads and student-teacher ratios for students at the elementary versus secondary level, and as a function of their categorical designation, as well as their placement setting. There is considerable variance in the range of methods used to obtain caseload and student-teacher ratios for special education students.

The state recommendations for special education caseload and/or student-teacher ratios are proposed in a variety of ways. These can be categorized into at least five methods. Within these there are several variations. The categories and definitions are as follows:

1. Single-Criterion Methods

Categorical. Student-teacher ratio and/or caseload is provided as a numerical standard, usually a range, for each special needs category.

Level of service. Student-teacher ratio and/or caseload is set by the state special education guidelines at the level of service provided (e.g., resource, itinerant, self-contained, etc.)

Grade level. Student-teacher ratio and/or caseload is set within the state special education guidelines by the student's chronological grade level. In some cases, a range of up to four years is permissible.

2. Multiple Criterion Methods: Two Criteria

Categorical and grade level. Student-teacher ratio and/or caseload is set within the state special education guidelines using a numerical standard that combined the student's categorical handicapping condition and the student's grade level. In some cases, the student's specific chronological grade level is used and in other cases the more global elementary or secondary grade level classification is applied.

Categorical and level of service. Student-teacher ratio and/or caseload is set within the state special education guidelines using a numerical standard that combines the student's categorical handicapping condition and level of service provided.

Grade level and age range. Student-teacher ratio and/or caseload is set within state special education guidelines as a numerical standard combining the student's present grade level and the student's age range.

3. Multiple-Criterion Methods: Three Criteria

Categorical, level of service, and grade level. Student-teacher ratio and/or caseload is set within the state special education guidelines by using a matrix where numerical standards are established in each cell or level of service, by matching the student's categorical handicapping condition and grade level with level of service provided.

Categorical, level of service, and age range. Student-teacher ratio and caseload are set within the state special education guidelines, again either as a matrix or as a written descriptive format, where the students' categorical handicapping condition and a permissible student age range of not more than four years is matched with level of service provided.

4. Formula Methods

Caseload formula. Caseload is obtained by using a weighted mathematical procedure. Calculations involve the possible weighting of the severity of the student's handicapping condition and the teacher's employment status (full time or with another adult or aide), to establish a permitted unit level of service.

Student-teacher ratio formula. Student-teacher ratio is obtained by using a weighted mathematical procedure. Similar to the caseload formula, severity of the student's handicapping condition and employment status of the teacher are combined to calculate a recommended student-teacher ratio. Teaching with or without the assistance of an aide also may be weighted and then included in the calculations.

5. Other Methods

Pupils' unique needs. Subjective decisions are made to establish student-teacher ratio and/or caseload. Such methods often indicate that a student's special needs (other than those suggested by categorical classification) set the number of students for a caseload and/or student-teacher ratio.

Table 1 is a summary of the major guidelines methods used by the 43 states, as well as the frequency of use of each method. It is obvious from this table that single criterion methods are used most frequently (44%), followed by two criteria methods (33%), and then three criteria methods (10%). Within the single criterion methods, level of service is the most often used single criterion (20%). This was followed closely by category as the criterion (18%).

It is interesting to note that while "pupil's unique needs" was given as the method for obtaining student-teacher ratio or caseload only by two states, several guidelines that were very specific about student-teacher ratios or caseloads provided their own hedges about actual ratios to be implemented. For example, the specific "level-of-service" criterion provided by Alaska was trailed by the following statement:

It is recognized that some unique situations will exist which will not fit within the formula and must be handled through separate appropriation. (one page dated 9/30/85)

In Arkansas, where there is a "categorical and level-of-service" criterion, it is noted in the guidelines that:

Table 1

Methods of Obtaining STR/CASELOAD Frequency of
Utilization of 39 State Special Education Guideline

Type of Method	Absolute Frequency	Relative Frequency Percent
A. Single Criterion Methods	17	43.5
1. Categorical Only	7	17.9
2. Level of Service Only	8	20.5
3. Grade Level Only	2	5.1
B. Multiple Criterion Methods (Two Criteria)	13	33.3
1. Categorical and Grade Level	1	2.5
2. Categorical and Level of Service	11	28.2
3. Grade Level and Age Range	1	2.5
C. Multiple Criterion Methods (Three Criteria)	4	10.2
1. Categorical, Level of Service, and Grade Level	3	7.6
2. Categorical, Age Range, and Level of Service	1	2.5
D. Formula Methods	3	7.6
1. Caseload Formula Only	1	2.5
2. Student-Teacher Ratio Formula Only	2	5.1
E. Other Method	2	5.1
Pupils' Unique Needs	2	5.1

In those cases where scheduling does not permit an even flow of five (5) students per period, the number served should be as near to five (5) as possible. Exceptions to this are....
(p. 4-1)

Comparison of State Guidelines and Federal Reported Pupil-Teacher Ratios

Table 2 is a summary of the written state guidelines for student-teacher ratios and caseloads for those states for which numbers were available to compare to the numbers reported in the Seventh Annual Report to Congress (U.S. Department of Education, 1985). Often, more than one number was reported in state guidelines, depending upon specific variables (such as type of service) that are not included in the federal numbers. Because of this, ranges are provided in Table 2. These ranges, however, reflect different characteristics. In some cases, the lower endpoint is for elementary MR students, while in others it is for secondary ED students. The defining characteristics of the endpoints of the ranges are described in Appendix A.

As is evident in Table 2, comparisons of the state guidelines and the federal numbers produce both agreements and disagreements. For many states, the state guideline numbers do not encompass the pupil-teacher ratio reported in the federal report. This occurred in 7 out of 16 states (43.8%) where comparisons could be made for the LD category, in 4 out of 17 states (23.5%) where comparisons could be made for the MR category, in 8 out of 18 states (44.4%) where comparisons could be made for the ED category, and in 12 out of 20 states (60.0%) where comparisons could be made for the speech impaired category. Over all categories, 11 of the 16 comparisons (68.8%)

Table 2

Student-Teacher Ratios and Caseloads Provided in State Guidelines Compared to Federal's Reported Pupils Per Teacher (P/T)^a

State ^b	Learning Disabled			Mentally Retarded			Emotionally Disturbed			Speech Impaired			All Conditions (L.D., MR., EO)		
	STR	Caseload	P/T	STR	Caseload	P/T	STR	Caseload	P/T	STR	Caseload	P/T	STR	Caseload	P/T
AL	10	8-50	22	15	8-50	16	8	4-50	20	---	8-60	43	---	---	X
AK	---	---	X	---	---	X	---	---	X	---	---	X	3-10	---	21
AR	5	10-30	21	5	10-30	15	5	8-25	14	---	50	318	---	12-35	22
CA	---	---	X	---	---	X	---	---	X	---	---	X	---	28-55	24
GA	---	10-24	21	---	---	X	---	8-24	13	---	20-60	35	---	22	17
HI	12-35	---	35	12-35	---	16	8-13	---	8	12-35	---	19	9.8	---	14
IL	10	---	19	10	---	12	8	---	14	8	80	39	---	---	X
IA	5-18	---	18	5-16	---	13	8-18	---	15	8-18	---	698	---	---	X
KS	---	10-18	19	---	10	12	---	12-15	11	---	10-55	36	---	---	X
KY	8+	6-20	20	10+	10-20	16	8+	5-15	11	---	35-75	49	---	---	X
LA	7-25	---	16	4-17	---	10	4-9	---	7	4-12	---	37	8-20	---	14
ME	8-10	35	17	12	35	12	8	35	14	10	50	55	6	15	16
MD	---	---	X	---	---	X	---	---	X	---	---	X	4-10	20-150	18
MA	---	---	X	---	---	X	---	---	X	---	---	X	8	8	22
MI	10	15-21	21	6-15	24-30	9	10	15-21	11	10	75	49	---	---	X
MS	---	---	X	---	---	X	---	---	X	---	25-60	42	5-14	5-18	16
MO	6-20	15-25	16	6-20	15-25	12	6-20	15-25	11	6-60	15-25	39	---	15-25	17
MT	---	---	X	---	---	X	---	---	X	---	15-60	X	4-12	---	21
NE	---	16-30	17	---	10-30	17	---	10-30	17	---	70	X	---	20	24
NH	---	---	X	---	---	X	---	---	X	---	---	X	8-12	---	27
NJ	8	---	27	9-15	---	9	8	---	11	8	---	378	5-8	20	19
NY	---	---	X	---	---	X	---	---	X	---	65	21	5-12	20	11
NV	12	28	15	6-12	12-24	10	10	20	17	6	60	52	---	---	18
NW	8-12	35-40	43	6-16	35	20	6-8	20	17	12	---	64	---	---	22
OK	10	25	19	10	25	12	10	25	9	---	75	50	10	25	20
WV	6	8-20	19	15	8-20	12	---	3-12	8	---	50	---	---	---	18

^aSTR = student-teacher ratio; P/T = pupil-teacher ratio^bSee Appendix A for details on ranges in this table

showed that the federally reported numbers did not fall within the state guidelines.

Discussion

If nothing else, the information found on student-teacher ratios and/or caseloads from state guidelines should lead to serious questions about how decisions are made about services for handicapped students. States vary significantly in their recommended ratios. They vary even more in terms of how they define these ratios and how they present them. And, the fact that there are no data on what ratios ought to be means we are proceeding quite blindly in this territory.

A review of data on pupil-teacher ratios reported by the federal government led to the observation that there is in fact great diversity in how states are recommending that services be provided to handicapped students. Federal personnel document this in terms of the ratio of the number of handicapped children served to the number of special education teachers. A review of data in the federal report suggests that there also may be trends in the way children are served as a function of their specific handicapping condition. For example, the overall ratios shown for students with the MR label are lower than those with the LD label. Is this trend verified by state guidelines? No. In general, those states that make recommendations by category have either the same ratios for LD and MR students, or higher ones for MR students. The probable under-estimation of pupil-teacher ratios for MR students and the over-estimation of pupil-teacher ratios for LD

students are recognized in the federal report; the discrepancies are attributed to the procedure of "spreading" noncategorical teachers across categories.

Pupil-teacher ratios are not broken down as a function of grade level in the federal report. Presumably, differences in ratios might be expected for elementary and secondary level students. In those states that gave guidelines broken down by level, most presented ratios that were lower than the Federal report ratios and/or varied significantly from what was reported. In the North Carolina special education guidelines, for example, ratios are presented for the EBD category of 6 - 8:1 for both the elementary and secondary levels, for LD of 8 - 12:1 for both elementary and secondary, and for MR 12:1 for the elementary and 16:1 for the secondary level. In the Federal report, the composite ratios for this state are: EBD - 13:1, LD -43:1, and MR - 20:1. This type of discrepancy is found throughout the examination of ratios presented by individual state special education guidelines and those represented in the Federal report. In several instances there are very major discrepancies.

A considerable body of literature points to the importance of student-teacher ratios or class size on student achievement in regular education classes. The effects of class size in regular education classes on student achievement (Educational Research Service, 1986) was reviewed through a cluster analysis of outcomes for disadvantaged or ethnic students. In 10 of the 15 (66.7%) grade level comparisons dealing directly with class size and student achievement, student

achievement was higher in smaller classes. Across grade levels, studies ranged in their definition of small class sizes from 15:1 in levels K-3, and 15:1 to less than 25 or 33:1 in grades 4-8. Some evidence for the importance of student-teacher ratios for students not in the mainstream of regular education also has been provided (see Alberto, Jobes, Sizemore, & Doren, 1980; Snart & Hillyard, 1985). Only a couple studies included mildly or moderately handicapped students in elementary settings (Forness & Kavale, 1985; Jenkins, Mayall, Peschka, & Jenkins, 1974).

It is somewhat surprising that so much attention has been given to student-teacher ratios and their possible effects on achievement, yet neither government reports nor state guidelines give us a good understanding of the current status of special education in this regard. Clearly, there is a need to document what is happening in special education classrooms across the nation, in terms of how many students are being served by a teacher and how many students are served at any one time. It is critical to do so before we begin to examine the potential effects of different student-teacher ratios on the achievement of handicapped students. And, it is critical that we do so as part of the process of writing state and federal policy on the delivery of special education services.

Our review of state guidelines demonstrates that some states do a much better job in distinguishing between ratio per class period and caseload per teacher. An example of concise guidelines comes from the state of Nevada. The following is an excerpt of its recommendations for just one categorical area (learning disabilities):

Caseload for this special education program unit shall not exceed twenty-eight (28) students.

Class size per instructional period shall not exceed twelve (12) students.

Caseload for preschool programs operating on a half-day schedule shall not exceed eight (8) students per half-day.

Guidelines that are as clear as these are the exception rather than rule.

References

- Alberto, P., Jobs, N., Sizemore, A., & Doran, P. (1980). A comparison of individual and group instruction across response tasks. Journal of the Association for the Severely Handicapped, 5, 285-293.
- Albritton, T. (1984). A review of recent literature on the effects of class size, with implications for english and language arts instruction. (ERIC Document Reproduction Service No. ED 248 517).
- Cacha, F. B. (1982). The class size and achievement controversy. Contemporary Education, 54, 13-16.
- Cahen, L. S., & Filby, N. N. (1979). The class size/achievement issue: New evidence and a research plan. Phi Delta Kappan, 60, 492-495, 538.
- Educational Research Service. (1978). Class size: A summary of research. Arlington, VA: ERS.
- Educational Research Service. (1986). Class size research: A related cluster analysis for decision making. Arlington, VA: ERS.
- Forness, S. R., & Kavale, K. A. (1985). Effects of class size on attention, communication, and disruption of mildly mentally retarded children. American Education Research Journal, 22(3), 403-412.
- Glass, G. V., & Smith, M. L. (1978). Meta analysis of research on class size and achievement. Educational Evaluation Policy Analysis, 1, 2-16.
- Glass, G. V., Cahen, L. S., Smith, M. L., & Filby, N. N. (1982). School class size, research and policy. Beverly Hills, CA: Sage Publications.
- Jenkins, J. R., Mayall, W. F., Peschka, C. M. & Jenkins, L. M. (1974). Comparing small group and tutorial instruction in resource rooms. Exceptional Children, 40, 245-250.
- Snart, F., & Hillyard, A. (1985). Staff ratios and allocated instructional time for multihandicapped students. Exceptional Children, 51(4), 289-296.
- South Carolina State Department of Education. (1980). The effects of class size on student achievement. A review of the literature. Columbia, South Dakota (ERIC Document Reproduction Service No. ED 202 136).

U.S. Department of Education. (1985). Seventh annual report to congress on the implementation of the Education of the Handicapped Act. Washington, DC: Division of Educational Services Special Education Programs.

Appendix A

Defining Characteristics of Ranges in Table 2

- AL Broken down by category, grade level, and type of service. For LD caseload, 8 = homebound, 50 = indirect service. LD STR was for resource class and special class. For MR caseload, 8 = homebound, 50 = indirect service. ED STR was for resource class. For SP caseload, 8 = homebound, 60 = all service, with count based on a weighted system.
- AK Broken down by program categories, with 3 = intensive services and 18 = resource services.
- AR Broken down by category and type of service. For LD and MR caseloads, 10 = special class for moderate to severe, 30 = resource room. For ED caseload, 8 = special class for moderate to severe, 25 = itinerant instruction. For SP, only itinerant instruction was available. The entry under All Conditions reflected the numbers provided for noncategorical services, ranging from 12 for special class for moderate to severe to 35 for itinerant instruction.
- CA Broken down by type of service. The caseload range reflects the value for the two types of service for individuals with mild handicaps, 28 = resource specialist, 55 = language, speech, and hearing specialists.
- HI A weighted means of obtaining STR is utilized taking into account the extent of the student's handicapping condition and educational arrangement. Overall caseload and STR are not globally defined but categorically presented in a matrix. The number of students assigned to a special education teacher (STR) is obtained by a matrix identifying Educational Arrangement and extent of student's special needs. For Ts (FSC = 12, ISC = 18, RS = 26, IS = 35); MMR (FSC = 12, ISC = 18, RS = 26, IS = 55); EH (FSC = 8, ISC = 12, RS = 13, IS = 13); SP (FSC = 12, ISC = 18, RS = 26, IS = 35).
- GA The caseload and STR guidelines are written in separate columns. A maximum caseload of 22:1 is used for funding purposes for children with specific learning disabilities. The SP caseload is provided for a continuum of services and extent of handicapping condition (i.e., direct service: mild = 60, moderate = 40, and severe = 20). A range for Specific Learning Disabilities over type of service is provided; Self-Contained = 10, Resource 24, Itinerant = 20. The Emotionally Disturbed Category is not used by Georgia State Guidelines, but rather Behavior Disorders is the preferred categorical classification. Enrollment recommendations are a range across type of service and grade level; Self-Contained: Primary = 8, Intermediate = 10, Secondary = 12; Resource: Primary = 24, Intermediate = 24, secondary = 24; Itinerant: Primary = 20, Intermediate = 20, Secondary = 20.

- IL The Illinois Special Education Guidelines provide enrollment guidelines. STs unclear if this reflects true STR or caseload. Figures provided appear to represent a class size or (STR). Students who have severe exceptional characteristics are served by a maximum enrollment of 5. Other ranges are grouped arbitrarily by extent of "handicapping characteristics." For instance "Severer visual, auditory, physical, speech or language impairments, or behavior disorders shall have a maximum enrollment of (8) students." Learning disabilities or severe mental impairment on enrollment of (10). Mild and moderate levels of impairment increase these enrollments from 2-5 students. Some consideration is also given to grade level (12) at primary and (15) at all other grade levels.
- IA The Iowa Special Education guidelines provide a matrix from which maximum class size (STR) is obtained. A cross between Type of service and grade levels by student's handicapping condition is considered in the matrix. For Learning Disability students can be served in maximum class sizes of: Resource Program = 18, Special Class with Integration/Elementary = 12, Special Class with Intermediate/Secondary = 15, Self-Contained Special Class with Little Integration Preschool = 8, Elementary = 8, Secondary = 10, and Self-Contained Special Class Severely Handicapped = 5. Each handicapping condition reflects similar classification of STR; Behaviorally Disordered, Mentally Disabled etc.
- KS Kansas provided a matrix from which maximum caseload by Delivery Model could be obtained. The matrix crossed student handicapping condition by instructional arrangement with some consideration for classroom staffing and grade level. Ranges reflect for Itinerant Without Praprofessional EMH Primary Level = 12, Intermediate/Secondary = 15, BD = 15, SLD = 18. S¼ = 25-55. For Resource Without Paraprofessional EMH Primary = 12, Intermediate/Secondary = 15, TMH = 10, BD = 12 (8 at one time), SLD = 18 (10 at one time); Speech 15-25 (based on severity rating). For Special Classroom Without Paraprofessional EMH Primary = 12, Intermediate/Secondary = 15, TMH = 10, BD = 8 (35 departmentalized), SLD = 10, Speech = 10.
- KY Kentucky Special Education guidelines present both caseload and STR enrollments. The ranges reflect for caseload a minimum-maximum figure. In the table provided for review, students handicapping conditions were listed with a breakdown by instructional arrangement. Learning disabilities also considered the student's grade level: LD/Special Class/Elementary (K-8) caseload = 6-10, Secondary (7-12) caseload = 6-15; no STRs were given for LD students. Age ranges were also provided as permissible ranges for a student's participation. For LD services Special Class four years at both the elementary and secondary level. LD Resource Classroom Elementary Caseload (8-15) and Secondary Caseload (8-20). An STR of eight per period with an age range of six years provided at both the elementary

and secondary levels. Emotionally Disturbed Special Classroom caseload (5-8) and STR N/A, Resource (6-15) and STR = 8, an age range of four to six years provided respectively. EMH Special Class caseload (10-20) and STR = N/A, Resource caseload = (10-20) and STR = 10, with age range four to six years, respectively. Speech (SL) disorders only provided by a resource room caseload (35-75) and STR N/A.

- LA Louisiana State Special Education guidelines provide student-teacher ratios with consideration of students' handicapping condition and grade level of instructional arrangement. For Learning Disabled students the STR for elementary level is = 7-13 and for secondary level = 8-15. For Educationally Handicapped or Slow Learners elementary = 12-25 and secondary = 12-25. Behavioral Disorders, elementary = 4-9, and secondary = 4-9. Mentally Retarded also provides consideration of severity of handicapping condition, elementary: Mild = 8-17, Moderate = 6-11, Severe = 4-9, Profound = 4-9; Secondary Mentally Retarded STR: Mild = 8-17, Moderate = 8-17, Severe = 4-9, Profound = 4-9; Speech Services Elementary = 4-9, and Secondary 4-9. It was clear only that the primary purpose of these guidelines was for funding the salary of a teacher providing these instructional services.
- ME Maine provides STR in their State Special Education guidelines. STR's are provided with consideration given to student's handicapping condition and grade level of student. Specific learning functions (LD) Primary = 8, Intermediate = 10, and Advanced = 10. Behavioral (ED) Primary = 8, Intermediate = 8, and Advanced = 8. Speech Primary = 5, Intermediate = 8, and Advanced = 8. Mentally Retarded (mildly - moderate) Primary = 12, Intermediate = 12, and Advanced = 12. Ranges presented in tables reflect self-contained program ratios for categories reviewed. The All Conditions ratio table figures reflect a composite classes of resource and self-contained combined.
- MD The Maryland Special Education guidelines reflect global levels of service Level I thru Level VI. Level I services provides assistance to the non-special education teacher in the development of a special education individualized educational program. Each level of service progressively increases the level of intervention to the student up to Level IV, self-contained classrooms within the regular education setting, Level V, an all-day special school outside the regular public school, and Level IV residential services. Level I services caseload 150:1, Level II caseload = 60, Level III caseload = 20, Level IV class size elementary = 10, secondary class size = 12. Level V class size = 6, and Level VI class size = 4. No comparisons were made across categorical conditions reviewed for this study.

- MA Massachusetts State Special Education guidelines provide a "number of students for a teacher per program." This appears to represent a composite caseload and STR. These composites are given by instructional arrangement not by student handicapping condition. In resource classes STR/caseload = 8 and in self-contained classes = 8. These numbers may be increased slightly if one or two aides assist the "qualified" professional.
- MI The Michigan State Special Education guidelines identify caseload and STR for students according to handicapping condition. Ranges and STR are taken directly from the state guidelines provided.
- MS Mississippi State Special Education guidelines provide global caseload. It is not clear when referring to resource classroom services whether the number provided is representing caseload or STR. In the resource program the minimum number of students served is 8 while the maximum is 18. In self-contained classes the minimum is 5 and the maximum served is 14.
- MO Missouri State Special Education guidelines provide a table of "Approvable Class Size and Caseloads" for students' handicapping conditions on various instructional arrangements. The STR and Caseload are a composite and are taken directly from the table. Educational Resource Teacher caseload = 15-25 regardless of student handicapping condition served. STR's for Behavior Disorders Itinerant Teacher = 10-20, Resource Teacher = 10-20, Self-Contained = 6-10; Mental Retarded, Itinerant = 10-20, Resource = 10-20, Self-Contained = 6-10; Specific Learning Disabilities, Itinerant = 10-20, Resource = 10-20, Self-Contained = 6-10; and Speech, Itinerant = 40-60, Resource = 8-15, Self-Contained = 6-10.
- MT The State Special Education guidelines establish a global caseload for all resource services regardless of student handicapping condition. It states that a minimum caseload of eight handicapped students per day should be provided before establishing the "first" full-time service and the maximum number of students assigned to each resource service should not exceed 25 students per week. Speech services are provided on an itinerant model and is dependent on severity of student's handicapping condition; suggested caseload range is 15-60. Self-contained classroom services will be provided when four or more students require 50% time away from regular education classes. Provisions for homebound and out-of-district services are also identified in the guidelines but actual STR and caseloads are not stipulated.
- NE The Nebraska Special Education guidelines provide for three levels of services and establish caseloads by "units" of service. Level I services are provided to students with handicaps who can profit from a regular class program through the provision of not more than three hours per week of supportive services. This type

of resource classroom services may have a caseload of 30 students per unit if the handicapping is EMH, BI, or LD and Speech is set at 70 students per unit of service. Level II services are provided to the student who requires more than three hours per week outside the regular class program. For the MR and BI 10 student per unit is the caseload guideline and EMH, Severe Speech handicapped and LD set at 16 students per unit. A combined Level I and Level II services provides for a caseload of 20 students per unit.

- NH New Hampshire Special Education guidelines provide global STR for both resource classroom and self-contained classroom services. No other categorical STR or caseloads were provided.
- NJ New Jersey provides Special Education guidelines identifying class sizes (STR) for students' handicapping conditions. Ranges represent the combination of resource room guidelines and those identified for self-contained classroom services. Resource room STR = 5, caseload = 20, and for Special Class Program STR ED = 8, EMR = 15, TMR = 10, Communication = 8, EH = 8.
- NY The Special Education guidelines for the state of New York provide maximum class size for instructional arrangement. Resource room class size (STR) 5:1 and caseload 20:1. The Special class (self-contained) has provision for students' handicapping condition in stipulations of STR. No caseload for self-contained teachers is specified.
- NV Nevada's State Special Education guidelines provide both STR and caseload for a number of student handicapping conditions. The descriptions, student handicapping conditions, guidelines for STR and caseload, are well organized, clear, and easily obtained from the materials.
- NC The North Carolina State Special Education guidelines identify class size provided by students' handicapping condition with consideration for grade level under some categories. EMH Students Resource Class: Primary (STR) = 12; Elementary (STR) = 12; Secondary (STR) = 16. Self-Contained EMH (STR): Primary Level = 12; Elementary (STR) = 12; Secondary (STR) = 16.
- OK The Oklahoma State Special Education guidelines provide a global caseload and STR for all conditions. Further breakdown by student handicapping condition for STR is also provided in a matrix.
- WV West Virginia's State Special Education guidelines define the specific considerations for establishing caseloads. STR is not set in the guidelines for student handicapping conditions.

IAP PUBLICATIONS

Instructional Alternatives Project
350 Elliott Hall
University of Minnesota
75 East River Road
Minneapolis, MN 55455

Research Reports

- No. 1 Time allocated to instruction of mentally retarded, learning disabled, emotionally disturbed, and nonhandicapped elementary students by J. E. Ysseldyke, M. L. Thurlow, S. L. Christenson, & J. Weiss (March, 1987).
- No. 2 Instructional tasks used by mentally retarded, learning disabled, emotionally disturbed, and nonhandicapped elementary students by J. E. Ysseldyke, S. L. Christenson, M. L. Thurlow, & D. Bakewell (March, 1987).
- No. 3 Instructional grouping arrangements used with mentally retarded, learning disabled, emotionally disturbed, and nonhandicapped elementary students by J. E. Ysseldyke, M. L. Thurlow, S. L. Christenson, & R. McVicar (April, 1987).
- No. 4 Academic engagement and active responding of mentally retarded, learning disabled, emotionally disturbed and nonhandicapped elementary students by J. E. Ysseldyke, S. L. Christenson, M. L. Thurlow, & R. Skiba (April, 1987).

Monographs

- No. 1 Instructional environment scale: Scale development and training procedures by J. E. Ysseldyke, S. L. Christenson, R. McVicar, D. Bakewell, & M. L. Thurlow (December, 1986).
- No. 2 Instructional psychology and models of school learning: Implications for effective instruction of handicapped students by S. L. Christenson, J. E. Ysseldyke, & M. L. Thurlow (April, 1987).
- No. 3 School effectiveness: Implications for effective instruction of handicapped students by M. L. Thurlow, S. L. Christenson, & J. E. Ysseldyke (May, 1987).
- No. 4 Instructional effectiveness: Implications for effective instruction of handicapped students by S. L. Christenson, M. L. Thurlow, & J. E. Ysseldyke (May, 1987).
- No. 5 Teacher effectiveness and teacher decision making: Implications for effective instruction of handicapped students by J. E. Ysseldyke, M. L. Thurlow, & S. L. Christenson (May, 1987).
- No. 6 Student cognitions: Implications for effective instruction of handicapped students by M. L. Thurlow, J. E. Ysseldyke, & S. L. Christenson (May, 1987).
- No. 7 Factors that influence student achievement: An integrative review by J. E. Ysseldyke, S. L. Christenson, & M. L. Thurlow (May, 1987).