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ABSTRACT

The national survey of 141 elementary and 79 secondary special education teachers documents current student-teacher ratios and instructional arrangements for students with mild handicaps receiving at least some instruction in the mainstream classroom. Overall the average student-teacher ratio was 4.7:1 with a range of 1:1 to 15:1. Minor differences were found as a result of the students' categorical designations (learning disabled, emotionally/behaviorally disordered, mentally retarded, and speech impaired) and the elementary vs secondary distinction. The most frequently identified basis for selecting students for instructional groupings, regardless of category, was the student's level of academic performance, followed by standardized psychological test scores, and student learning styles matched with teaching methods. The survey also found that teachers were generally unfamiliar with their local district guidelines for student-teacher ratios and caseloads. The survey form, list of criteria for selection of teachers for the survey, and criteria for responses on methods of grouping are appended. (Author/DB)

University of Minnesota

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Abstract

This national survey of special education teachers documents current student-teacher ratios and instructional arrangements used for students with mild handicaps. For this study, students with "mild handicaps" were those who received some instruction in the mainstream classroom. The 54.3% response rate included 141 elementary and 79 secondary special education teachers. Overall, the average (STR) was 4.7:1, with a range of 1:1 to 15:1. Minor differences were found as a function of the students' categorical designations and the elementary vs secondary distinction. The most frequently identified basis for selecting students for instructional groupings, regardless of category, was the student's level of academic performance, followed by standardized psychological test scores, and student learning styles matched with teaching methods. Survey results also indicated that teachers generally were unfamiliar with their local district guidelines for STRs and caseloads. Forty-two percent either stated that they did not know or left the item blank. Those who did respond indicated that guidelines for STRs and caseloads are ambiguous, not used, and/or difficult to apply. Implications of the findings and the need for additional research are discussed.

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Student-Teacher Ratios for Mildly Handicapped Children in Special Education Settings

Increasing numbers of students are being identified as mildly handicapped and are declared eligible for special education services at a time when state and federal resources for serving handicapped students are diminishing. Administrators, faced with the difficult task of serving larger numbers of students with fewer resources, frequently look at adjusting student-teacher ratios as a solution. Yet, we currently know little about actual student-teacher ratios in classrooms, much less what their effects are on special education services and student achievement.

Government reported figures, based on the ratio of the "number-of handicapped-children-served" to the "number-of-special-education-teachers--employed," indicate that there is tremendous variability in student-teacher ratios among the 50 states (U S. Department of Education, 1985). This conclusion was supported by a recent analysis of state guidelines for student-teacher ratios for mildly handicapped students (Thurlow, Ysseldyke, & Wotruba, 1987), although variability was not as great as it is in government figures. More interesting from an analysis of the guidelines, however, was the finding that state guidelines vary, greatly, as to how ratios are defined and how they are presented. Thurlow et al. (1987) argue that their findings from the state guidelines analysis support the raising of serious questions about how decisions are made for mildly handicapped students' service delivery patterns.

The purpose of this study was to document current student-teacher ratios used in special education settings across the U.S. This information was sought from teachers currently serving mildly handicapped students in special education settings. For purposes of this study, "mildly handicapped students" were

defined as "those students receiving some instruction in the mainstream classroom." The term "student-teacher ratio" is used to refer to the ratio of numbers of students and teachers within the classroom at a particular time. This is different from "caseload," which is the term used for the number of students for whom a given teacher is responsible; some of these students are served directly, while others are served on a consultative basis.

Method

Subjects

The subjects for this survey were 220 special education teachers in 35 states. The survey originally was sent to 426 special education teachers identified through their respective state and district offices of special education. Questionnaires were returned by 238 teachers; of these, 220 were included in this study because the respondents could be identified, definitely, as either elementary or secondary special education teachers. Of the 220 teachers, 64% (141) served elementary level students and 36% (79) served secondary level students. The 35 states in which the respondents were located represent all nine geographic division classifications identified by the U. S. Bureau of Census (see Table 1). Both elementary and secondary teachers were most heavily represented in the West North Central and Mountain divisions of the U.S. Ninety-nine percent of the subjects were full-time special education teachers. The majority of these teachers indicated that they taught a "low to moderate" (60.5%) or "moderate" (22.7%) socioeconomic-level student population (see Table 2). The percentages of teachers serving various special education student categories were: 79.5% learning disabled; 46.8% mentally retarded; 44.5% emotionally disturbed or behaviorally disordered; and 20.9% "other"

Table 1

Regional Distribution of Elementary and Secondary Special Education Teachers

Area	Elementary[a]		Secondary[b]	
	Number	Percentage	Number	Percentage
New England	18	12.9	6	7.7
Mid-Atlantic	8	5.7	11	14.1
East North Central	19	13.6	7	9.0
West North Central	24	17.1	20	25.6
South Atlantic	14	10.0	10	12.8
East South Central	11	7.9	1	1.3
West South Central	11	7.9	2	2.6
Mountain	25	17.9	18	23.1
Pacific	10	7.1	3	3.8

[a]Based on 140 cases; 1 respondent not identifiable by state.
[b]Based on 78 cases; 1 respondent not identifiable by state.

Table 2

Socioeconomic Level of Students Served by Respondents

SES Level	Number of Respondents	Percentage of Respondents[a]
Low	11	5.0
Low-to-moderate	133	60.5
Moderate	50	22.7
Moderate-to-high	20	9.1
High	2	.9
No response	4	1.8

[a]Based on 220 cases.

categories, including such conditions as developmentally delayed, sensory impaired, or physically handicapped. (Percentages total more than 100% because teachers often reported teaching students from more than one category; see Table 3.)

Materials

A two-page survey form (see Appendix A) was constructed to obtain information on actual numbers of students and teachers in the classroom at any one time, and how special education teachers instructionally group students. Special education teachers also were queried about the specific criteria they used for selecting and instructionally grouping students with mild handicaps. Further, the teachers' interpretations of their state or local school district's guidelines for student-teacher ratios and maximum caseloads for students with handicaps were surveyed. In addition, the survey was used to obtain general demographic information about the respondents' student populations.

Procedure

As part of a previous study, each of the 50 state offices of special education was contacted by telephone in Spring, 1986, with a request for a copy of their state guidelines for student-teacher ratios for students with mild handicaps (Thurlow et al., 1987). At this time, each state office was asked to provide the names of up to 10 special education teachers for inclusion in the present study. All 50 state offices of special education were not able to provide the names of 10 special education teachers. Some state offices of special education did not have lists of their special education teachers. In such cases, state office personnel indicated that names would have to be

Table 3

Categories of Handicapped Students Served by Respondents

Category	Percentage of Respondents[d]	Students Served[b]	
		Mean	Mode
Learning Disabled	79.5	15.6	15.0
Mildly Mentally Retarded	46.8	5.9	1.0
Emotionally/ Behaviorally Disordered	44.5	3.5	1.0
Speech Impaired	15.9	3.8	1.0
Other[c]	20.9	2.7	1.0

[d]Percentages total more than 100 percent because many teachers served students in more than one category.

[b]The figures in these columns reflect only the responses of those teachers who indicated that they served students in the disability category.

[c]Other included 5.5% serving sensory impaired, 2.7% serving physically handicapped, and 12.7% not specified.

obtained through local school district offices. In cases where the local districts needed to be contacted (n = 23), the state special education offices provided a list of district-level special education directors. Then, from these state-wide district directories of special education directors, five districts were randomly selected from each state, and letters were sent to the special education directors requesting the names of two special education teachers to be included as part of the present survey population.

The final mailing for this survey study went out to 438 special education teachers in 49 states. Alabama was not surveyed because state research policies required prior review by a committee. A total of 238 questionaires were returned (response rate = 54.3%). Of these, 18 could not be identified as coming from a respondent at either the elementary or secondary school level. Some represented both elementary and secondary school levels and some were preschool level. These 18 were not included in this study.

Data were analyzed both as a function of school level (elementary vs secondary) and as a function of category of handicap served (limited to learning disabled, mentally retarded emotionally and/or behaviorally disturbed, and speech impaired).

Results

The types of service in which mildly handicapped students on the teachers' caseloads were served were as follows: 35% reported that they served students in resource classrooms; 30% served students through monitoring; 21% served students in self-contained settings; 39% served students by using the combination of a part-time special education resource room and a regular education classroom; and 7% served students in itinerant settings. In each of

these settings the greatest percentage of students served was 1-5 students (see Table 4).

Instructional Grouping

Teachers' responses to the item asking about their methods of grouping students for instruction were rated by using a 26-item set of criteria (see Appendix B). The 26 criteria represented those methods typically employed by special educators in individualized educational planning for students who have handicaps. Not all of the 26 selection or screening methods were used by all of the elementary or secondary level special education teachers.

Elementary vs. secondary. The most frequent means of selecting mildly handicapped students for instructional groups varied only slightly as a function of educational level (elementary vs secondary) (see Table 5). Three of the five most frequently reported criteria were the same for both groups of teachers: (1) level of academic performance (grade equivalency in some subject area); (2) standardized psychological testing; and (3) student learning styles matched to teaching methods. Elementary teachers also mentioned "informal skills assessment" and "teacher's convenience," while secondary teachers also mentioned "classwork assignments" and "social-emotional competencies."

Comparisons for students' categorical labels. The criteria employed by special education teachers for grouping students with four categorical labels (learning disabled, emotionally/behaviorally disordered, mentally retarded, and speech impaired) displayed some interesting variability and clustering. However, regardless of category, the primary basis mentioned for grouping a student was the student's level of academic performance.

Teachers who served students having a learning disability most frequently reported the following means of selecting students for instructional groupings

Table 4

Type of Service Provided and Percentage of Respondents Serving Various Numbers of Students[d]

Number Served	Resource Class	Self-Contained Class	Monitor	Spec Ed/ Reg Ed	Itinerant Setting	Other
1-5	11.4	27.7	84.6	10.6	26.7	54.5
6-10	5.1	6.9	4.1	5.6	1.4	2.4
11-15	9.6	6.0	0.0	10.4	0.9	1.0
16-20	8.3	1.5	0.0	8.2	1.4	0.9
21-25	4.1	1.0	0.5	4.2	1.0	0.5
26-30	4.2	0.0	0.0	2.8	0.5	0.0
Over 30	1.0	0.5	0.0	3.9	0.0	0.0

[d]Percentages based on 220 respondents. They do not total 100% since teachers were not limited to reporting the number of students in a caseload for any one level of service provided.

Table 5

Elementary and Secondary Special Education Teachers' Preferred Means of Selecting Mildly Handicapped Students for Instructional Groupings

Selection Priority	Elementary[d]	Secondary[b]
1st	Level of Academic Performance	Level of Academic Performance
2nd	Informal Skills Assessment	Standardized Psychological Tests
3rd	Standardized Psychological Tests	Student's Learning Style
4th	Student's Learning Style	Classwork Assignments
5th	Teacher Convenience	Social-Emotional Competencies

[d]Based on 141 cases.
[b]based on 79 cases.

(after the "academic performance" criterion): (a) student's learning style matched to teaching method; (b) teacher's convenience; (c) teacher observation of the student; and (d) social-emotional competencies of the student. Following academic performance, students identified by the categorical label of mental retardation were most frequently grouped on the basis of: (a) social-emotional competencies; (b) classwork assignment; (c) teacher observation; and (d) severity of special needs of the student. Those students categorically labeled as emotionally/behaviorally disordered were grouped by: (a) student's learning style matched to teaching methods; (b) social-emotional competencies; (c) teacher convenience; and (d) teacher observation. Students categorically labeled as requiring speech services most frequently were selected for instructional groupings based, first, on academic performance, and then on: (a) social-emotional competencies; (b) student learning style; (c) teacher convenience; and (d) educational tract (general academic tract or vocational tract) or teacher observation (teacher impressions).

Student-Teacher Ratios

Teachers were asked to list the number of students and the number of additional adults, per academic period, in each classroom each day of the week. These data were compiled to obtain student-teacher ratios per period for each day of a five-day academic week. Using an eight-period day, the computation of 40 student-teacher ratios (STR) was possible. A mean STR, a modal STR, and a STR range were calculated from these. A student-teacher ratio was computed for each teacher by determining an average across all daily teaching periods. The mean composite STR was 4.7:1. A modal STR of 3.5:1, and a STR range from 1:1 to 15:1 also were obtained (see Table 6).

Table 6

Mean and Modal Student-Teacher Ratios For Students With Different Categorical Labels

Category	Mean	Mode	Range	Number of Cases[a]
Learning Disabled	4.5:1	3.5:1	1-15:1	174
Emotionally/ Behaviorally Disordered	4.4:1	3.5:1	1-15:1	97
Mildly Mentally Retarded	5.2:1	5.5:1	1-14:1	103
Speech Impaired	4.1:1	1:1	1-9.8:1	35
Other[b]	4.6:1	3.5:1	1-13.3:1	46
Overall[c]	4.7:1	3.5:1	1-15:1	219

[a]Total number of cases in this column is greater than 220 because teachers could identify more than one handicapping condition.

[b]Other handicapping conditions were identified as sensory disabled (hearing, sight, etc.), or physically handicapped.

[c]Based on 219 cases; one respondent did not report any data for this item.

Category STRs. Respondents who served learning disabled students had a mean STR of 4.5:1, a modal STR of 3.5:1, and a STR range of 1:1 to 15:1. Those serving emotionally/behaviorally disordered students had a mean STR of 4.4:1, a modal STR 3.5:1, and a STR range of 1:1 to 15:1. Those serving students with a categorical label of mental retardation had a mean STR of 5.2:1, a modal STR of 5.5:1, and a STR range of 1:1 to 14:1. Respondents serving students with a categorical label requiring speech services obtained a mean STR of 4.1:1, a modal STR of 1:1, and a STR range of 1:1 to 9.8:1.

Elementary level STRs. For elementary level special education teachers (n = 141), the overall mean STR was 4.5:1; the modal STR was 2.6:1, and the STR range was 1:1 to 15:1 (see Table 7). The student-teacher ratios for elementary level students with categorical labels of learning disabled, mildly mentally retarded emotionally/behaviorally disordered, and speech impaired also were calculated (see Table 7). The lowest mean STRs were reported for students receiving services for emotional/behavioral disorders and speech impairments. Students with the learning-disabled label had a mean STR of 4.5:1, while students with the mild retardation label had a mean STR of 5.1:1. All STRs ranged up to 14 to 15 students per teacher, except for the speech category where the range was from 1:1 to 9.8:1.

Secondary level STRs. Secondary level special education teachers (n = 78) reported student-teacher ratios that had an overall mean of 5.1:1, with a modal STR of 3.5:1, and a STR range of 1.6:1 to 12:1 (see Table 8). Student-teacher ratios for each of the four student categorical labels also were calculated for secondary students. Trends in these data are similar to those found in the data for elementary level STRs. The lowest mean STR (4.3:1) was found for students

Table 7

Elementary Level Special Education Teachers' Mean and Modal Student-Teacher Ratios For Students With Different Categorical Labels

	Mean	Mode	Range	Number of Cases[a]
Learning Disabled	4.3:1	2.6.1	1-15:1	118
Emotionally/Behaviorally Disordered	4.1:1	1:1	1-15:1	57
Mildly Mentally Retarded	5.1:1	2.5:1	1-14:1	64
Speech Impaired	4.1:1	1:1	1-9.8:1	27
Other[b]	4.7:1	3.5:1	1-13.3:1	32
Elementary Overall	4.5:1	2.6:1	1-15:1	141

[a]Reported on a total of 141 cases.
[b]Other student handicapping conditions were reported as sensory disabled (i.e. sight, hearing) or physically disabled.

Table 8

Secondary Level Special Education Teachers' Mean and Modal Student-Teacher Ratios For Students With Different Categorical Labels

	Mean	Mode	Range	Number of Cases[a]
Learning Disabled	4.3:1	3.5:1	1.6-10:1	56
Emotionally/Behaviorally Disordered	4.4:1	4.4:1	1.6-10.7:1	40
Mildly Mentally Retarded	5.3:1	5.5:1	1.7-9.5:1	39
Speech Impaired	4.3:1	1.9:1	1.9-8.6:1	8
Other[b]	3.9:1	1.7:1	1.7-8.6:1	14
Secondary Overall	5.1:1	3.5:1	1.6-12:1	78

[a]Reported on a total of 78 cases; one respondent did not offer any response to this item.
[b]Other student handicapping conditions were reported as sensory disabled (i.e., sight, hearing) or physically disabled.

receiving speech services. This was followed by the STR for students receiving services for emotional/behavioral disturbances (4.7:1), and, then, for learning disabilities (4.8:1). The highest mean STR was for students with the mild retardation label (5.3:1). The upper end of the ranges of STRs was lower for secondary students (around 10:1) than it was for elementary students (around 14:1).

Teacher Reports of District Level Guidelines for Caseload and Student-Teacher Ratios

Teachers were asked to report their interpretations of their local school districts' guidelines for caseload and student-teacher ratios. Only 93 out of 220 (42%) possible respondents attempted to respond to this item. For those responding, the following ranges of caseloads were identified as being within state guidelines: 5.9% reported a caseload range of 16 to 20 students; 10.5% reported a caseload range of 11 to 15 students; 5.5% reported a caseload range of 21 to 25 students. No special education teacher reported a student-caseload guideline of less than six handicapped children.

Reported caseloads for different student categorical labels are shown in Table 9. For all categories, the most frequently reported caseloads were 16-20 students and 11-15 students. A 16-20 student caseload was reported most often for all categories except speech impaired, for which a caseload of 11-15 was reported by most. No teachers reported a caseload of 1-5 for any of the categories. Caseloads of 6-10 were reported, only infrequently, for the categories of learning disability (1.7%); mild retardation (1.0%); and emotional/behavioral disorder (1.0%). This range was never reported for students receiving services for speech impairment. All mean caseloads reported for district guidelines were around 20 students.

Table 9

Respondents' District Guidelines for Caseloads for Students with Mild Handicaps

Caseload Range	Learning Disabled[a]		Mildly Mentally Retarded[b]		Emotionally/ Behaviorially Disordered[c]		Speech[d]	
	N	%	N	%	N	%	N	%
1-5	0	0.0	0	0.0	0	0.0	0	0.0
6-10	3	1.7	1	1.0	1	1.0	0	0.0
11-15	19	10.8	14	13.6	10	10.1	5	14.4
16-20	26	14.8	14	13.6	13	13.2	3	8.6
21-25	9	5.2	4	3.9	3	3.0	2	5.8
26-30	5	2.9	0	0.0	2	2.0	0	0.0
31-35	9	5.2	4	3.8	8	8.2	2	5.7
36-40	0	0.0	0	0.0	0	0.0	0	0.0
41-45	0	0.0	0	0.0	0	0.0	0	0.0
46-50	2	1.2	1	1.0	1	1.0	0	0.0
Mean	21.4		19.6		22.3		20.3	
Mode	20		15		20		15	

[a]Percentages for LD guidelines are based on 73 respondents.

[b]Percentages for MMR guidelines are based on 38 respondents.

[c]Percentages for E/BD guidelines are based on 38 respondents.

[d]Percentages for Speech guidelines are based on 12 respondents.

Reported district guidelines for student-teacher ratios for different student categorical labels are shown in Table 10. For all categories, the most frequently reported student-teacher ratio guidelines were either 6-10 students or 11-15 students per teacher. The 6-10 ratio was reported most often for all categories except speech impaired, for which the 11-15 student ratio was reported by most. Few teachers reported guidelines that called for over 25 students to one teacher; less than 1.0% did so for the learning disabilities and mild retardation categories, and less than 3.0% did so for the emotional/behavioral disordered and the speech-impaired categories. Approximately 5% of the teachers reported student-teacher ratios at the low end (1-5). All mean student-teacher ratios reported for district guidelines were around 12 students, or more.

Qualitative information. In addition to the empirical results obtained in this study, there were numerous written anecdotal comments made by the special education teachers responding to the item concerning district level guidelines for caseload and student-teacher ratios. Some of the more explicit comments have been selected for inclusion here.

> Usually I have never had more than nine students, always with an aide. However this year (last year the budget didn't pass) we have been told we may have to share our aide for other purposes. (Secondary teacher, self-contained classroom, EBD)

> Caseloads have changed according to the demand. When we had 45 students three years ago, two teachers taught them. At the present time we have 25 students and 2 of us are teaching them. (Secondary teacher, Spec Ed/Reg Ed, LD)

> None exist in my school district. There have been instances when caseloads in a resource room at the middle school level have numbered as high as 17-20 at one time. We have a great deal of fluctuation in our caseloads since there are no district guidelines. We imposed restrictions at the elementary level when numbers reached 12. The restrictions were only in place as long as the crisis existed! (Secondary teacher, resource class, LD, EBD)

None at the local level. In the past, caseloads have varied from 30 to 60 per teacher. Next year, state regulations have put a cap on caseloads at 30. (Secondary teacher, Spec Ed/Reg Ed, LD)

Our local school district uses state and federal guidelines for special education. I consider most of these guidelines very ambiguous as they make such statements as it is recomended that there not be more than a six-year age span. One year I had eleven (MR) students, ranging in age from 5-6, with profound to normal (ED). In my opinion, the law allowed a bad situation to exist. (Elementary teacher, self-contained classroom, MMR.)

I don't know what the policy is. Last year I had 20 special education students with a half-time aide. This year a regular education 6th grade class has only 19 students. It's very difficult to individualize and spend the time needed with each student when the student-teacher ratio is 20:1. (Secondary teacher, self-contained classroom, MMR)

No specific guidelines. I have had caseloads as high as 35 with 50-plus student-contact hours; meaning 35 students were my IEP responsibility, and I worked with 50 different students each day. This year my IEP caseload is 20 and I am seeing 24 different students each day. (Secondary teacher, Spec Ed/Reg Ed, LD, EBD, MMR)

Our school district doesn't have any guidelines for caseloads or student-teacher ratios. I currently have 20 level III students. Earlier this fall I had 23 level III, and 3 level II students! We used to have a 15 student limit. Then it went to a 18 student limit. Then last year the limit was taken off completely. (Secondary teacher, Spec Ed/Reg Ed, LD)

One teacher per 16 students, with a maximum of 12 students in each class. Would like to see this lowered to a maximum of 12 students per teacher, and a maximum of 10 students in each class. Occasionally we acquire a new student and therefore "must" mainstream one student or be in violation of state codes. This is not fair!!! (Secondary teacher, resource classroom, LD)

We have no written guidelines since the state removed caseload caps. When the guidelines were in place, caseloads remained within these guidelines. Now we admit students even though we are already full. There is little pressure on the administration to increase personnel. (Secondary teacher, resource classroom, LD, EBD)

17:1 is the maximum. Ha,Ha! We never use it. (Elementary teacher, resource classroom, LD, EBD)

Table 10

Respondents' Reported District Guidelines for Student-Teacher Ratios for Students with Mild Handicaps

Caseload Range	Learning Disabled[a]		Mildly Mentally Retarded[b]		Emotionally/ Behaviorially Disordered[c]		Speech[d]	
	N	%	N	%	N	%	N	%
1-5	11	5.7	5	4.9	7	7.1	2	5.8
6-10	25	14.3	14	13.7	15	15.3	6	17.2
11-15	20	11.4	14	13.6	9	9.2	7	20.1
16-20	11	6.3	6	5.8	3	3.0	2	5.8
21-25	5	2.9	3	2.9	0	0.0	0	0.0
26-30	1	.6	1	1.0	2	2.0	1	2.9
Mean	12.1		12.5		11.1		12.4	
Mode	10		15		10		10	

[a]Percentages for LD guidelines are based on 73 respondents.

[b]Percentages for MMR guidelines are based on 42 respondents.

[c]Percentages for E/BD guidelines are based on 36 respondents.

[d]Percentages for Speech guidelines are based on 18 respondents.

Discussion

The results of this study point to the diversity of practices and the ambiguities that currently exist in special education regarding student-teacher ratios for students with mild handicaps. In a recent analysis of published state guidelines for student-teacher ratios (Thurlow et al., 1987), it was found that there was minimal correspondence between these and the ratios presented in the Seventh Annual Report to Congress on the Implementation of the Education of the Handicapped Act (U.S. Department of Education, 1985). The figures in that report, however, did display the considerable variability found in actual ratios. The governmental figures did not appear to accurately represent practices in special education related to student-teacher ratios. In brief, the governmental figures displayed student-teacher ratios across all handicapping conditions, ranging from:

> 8:1 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 an overall ratio of 13:1. (Thurlow et al., 1987).

These governmental figures must be interpreted cautiously, as noted in the annual report itself.

In the present study we found that actual practices in the implementation of student-teacher ratios in special education classrooms is much more conservative in many cases. Only a few extreme cases were reported by teachers, where student-teacher ratios were over 30:1. The typical student-teacher ratios across all handicapping conditions ranged from 1:1 to 15:1, with an average weekly STR of 3.5:1. It is apparent from the results of the current study that

the variability in what is reported about student-teacher ratios by both federal and state special education departments does not reflect the situation as it actually exists for special education teachers serving students with handicaps. The finding that actual student-teacher ratios are relatively low, on the average, does not necessarily indicate that service delivery patterns have remained the same over time. It may be that low student-teacher ratios are being maintained simply by reducing the number of contact hours with specific students during a week. In other words, teacher "X" may never have a student-teacher ratio above 3:1 because the nine students he or she is responsible for only report to the special education teacher every third day.

As the present trend toward an ever increasing number of students with mild handicaps continues, administrative fiscal planning decisions can have a heavy impact on the student-teacher ratios for various special needs populations. The results of this study suggest, however, that regardless of what is reported or offered in the way of guidelines determined by various federal and state educational regulatory standards, special education teachers and their school administrators are making their <u>own</u> decisions regarding student-teacher ratios. Not much is known about the impact of student-teacher ratios on the quality of education for the student with mild handicaps. The persistence of low ratios, however, implies that educators believe that student-teacher ratios <u>do</u> make a difference in instruction. Further research is needed to assess the impact of different student-teacher ratios on instruction for students with various categorical labels of handicap.

The special education teachers surveyed at the elementary and secondary levels varied only slightly in the bases given for their selection and screening

of students with mild handicaps for placement in instructional groupings. A student's level of academic performance, standardized psychological test scores, and a student's individual learning style matched to specific teaching methods represent the top three bases, for both elementary and secondary teachers, across all handicapping conditions, for grouping students considered to be mildly handicapped.

Little variability was found to exist as a function of the student's label in the bases of selection used for determining instructional groupings. However, the overall impression is that a standardized basis for selecting students who qualify as mildly handicapped begins with the student's level of academic performance. Furthermore, it often appeared that what one would expect to be the basis, thereafter, for the selection of a categorical label was not considered to be a "priority basis" of selection. For example, "mental retardation," "emotionally/behaviorally disordered," and "speech impaired" all had social-emotional competencies as the second basis for their selection. The variability becomes most evident in the third basis for selection for each of the categorial labels. More research in this area might provide guidelines for helping teachers group students. We believe it is unlikely that any documented bases will be differentiated by categorical label (cf. Reynolds, Wang, & Walberg, 1987; Ysseldyke, in press).

In reviewing teachers' self-reports of their district or state practices related to student-teacher ratios and caseloads, it is apparent that many of the teachers surveyed expressed frustration with the ambiguity and lack of dependable standards. These responses reflect the autonomy of programming at the district level. In some areas, standards develop out of administrative

budgetary needs. Yet, teachers tend to view the standards as a helter-skelter, trial-and-error approach to providing services; a perspective which, in turn, changes the structure, from year to year, of their own instructional approach to teaching handicapped students. More often than not, the special education teachers did not attempt to respond to the item asking them to specify their understanding of their district guidelines for STRs and caseloads. Many of those who did respond did not know of the guidelines or reported that guidelines did not exist. Further research on student-teacher ratios and instructional arrangements would contribute to the overall quality and standardization of services for the student with handicaps.

References

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Appendix A

Survey Form
Cover Letter
Criteria for Selection of Teachers

University of Minnesota
Teacher Questionnaire
Student-Teacher Ratio Study

Name _____ _____

School Address _____

_____ Telephone # ( ) _____

_____ Elementary _____ Secondary/Middle _____ Both Elementary/Secondary

1. Please indicate your teaching employment status.

_____ Full-time _____ Part-time _____ Other, specify _____ _____

2. Please indicate the number of "mildly handicapped" students on your caseload for each type of service that you provide.

Caseload #

_____ Resource Classroom (full-time)
_____ Self-Contained Classroom
_____ Itinerant Services
_____ Monitoring (indirect)
_____ Part-time Special Education/ Part-time Regular Classroom
_____ Other, specify _____

3. How would you best estimate the socioeconomic level of the majority of students served in your school? (Mark only one response.)

_____ Low (below poverty levels)
_____ Low to Moderate
_____ Moderate
_____ Moderate to High
_____ High

4. What is the number of students classified in the following categories on your present caseload? (Count students primary classification.)

_____ Learning Disabled
_____ Emotionally Disturbed/ Emotional/Behavior Disorders
_____ Mentally Retarded
_____ Speech
_____ Other, Specify _____

5. In your weekly schedule, indicate below for each class period the number of students in your classroom during each hour, the number of instructional groups used each hour, and the number of other adults besides the teacher in the classroom each hour. Indicate the additional adults in the classroom in the parenthesis, i.e., there may be an aide in the classroom besides the teacher, so you would put a "1" in the ( ).

Example: If on Monday during the first hour you had 6 students in your classroom, broke them out into 2 instructional groups and had 1 aide in the classroom to assist you, then you would respond as follows:

	#St #Grp #A
Monday	6 2 (1)

Key: #St = Number of students
#Grp = Number of groups
#A = Number of additional adults

Days of the Week	Hours of the Day						
	1 #St #Grp #A	2 #St #Grp #A	3 #St #Grp #A	4 #St #Grp #A	5 #St #Grp #A	6 #St #Grp #A	7 #St #Grp #A
Monday	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )
Tuesday	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )
Wednesday	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )
Thursday	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )
Friday	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )	__ __ ( )

This space is provided for an additional hour.

*PLEASE CONTINUE ON OTHER SIDE

6. Briefly explain how you select these students for the different instructional grou s (i.e., often teachers may use the stated guidelines establishing groupings but may also utilize their own impressions of the student's learning style as a means of matching them with other students who have similar levels of performance). Please explain briefly all means you use to instructionally group students.

7. Please briefly explain your local school district's guidelines for caseloads and for student- acher ratios.

8. In the past two years have these policies changed?

This fall 86	___ Changed	___ No Change
1985-86	___ Changed	___ No Change
1984-85	___ Changed	___ No Change

Please briefly explain how the policy has changed.

Thank you for your cooperation. Please indicate whether you would be interested in receiving a brief summary of the results o' this survey. ___ Yes ___ No

July 14, 1986

Dear

Recently I contacted you or a representative of your office about a study in Special Education on how teachers group students who have been identified as "mildly handicapped" in the classroom. At that time it was indicated that you could help us with this study, which is being completed through the Department of Educational Psychology, University of Minnesota, under the direction of Dr. Jim Ysseldyke. I would like to survey 10 of your currently employed special education teachers for the 1986-87 academic year in September, 1986. The survey will be one page in length. I need your assistance in the selection of these teachers.

Using the criteria for selection identified on the attached form please identify the teachers by name and mailing address where they can be reached this fall, 1986. Please read the identified selection criteria at the top of the form, list the teachers and return the form using the enclosed envelope.

If I can be of any assistance in your selection please call myself, Joe Wotruba or Martha Thurlow, (612) 624-8561 and (612) 624-4826. Thank you again for your cooperation.

Sincerely,

Joe Wotruba
Research Assistant

JW:rjj

Enclosure

SELECTION FORM

CRITERIA FOR SELECTION OF TEACHERS FOR SURVEY

Select teachers randomly while keeping the following criteria in mind.

1. Currently employed (under contract) special education teachers for the 1986-87 academic year for the "mildly handicapped" student.

2. These special education teachers should be working at the elementary level.

3. No two teachers should be from any one school district. It does not matter if the teacher is from a rural, suburban, urban or inner-city district.

4. The type of exceptional student taught does not matter.

TEACHER'S NAME	SCHOOL ADDRESS	TELEPHONE NUMBER
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

THANK YOU VERY MUCH FOR YOUR COOPERATION!!!

RETURN THIS FORM IN THE ENCLOSED ENVELOPE.

If you need any assistance in your selection, please call either myself, Joe Wotruba or Martha Thurlow at: (612) 624-8561 or (612) 624-4826.

Appendix B

Criteria for Responses on Methods of Grouping

Possible responses to Question #6 are to be selected from the following numbered categories.

Code Response

1. Level of academic performance - level of academic functioning (ability) (Grade Equivalency in English, Math, Reading, etc.).
2. Age level - student's age.
3. Grade level - student's chronological grade level.
4. Special needs classification - severity of primary handicap.
5. Social-emotional competencies - (classroom behaviors) secondary handicapping features (i.e., depression, avoidant/resistive behaviors, aggressiveness, etc.) or group guidance experiences.
6. State special education guidelines
7. Local school district special education guidelines
8. School administrative policy
9. Teacher discretion - scheduling conflicts, teacher willingness and other time constraints.
10. Physical handicapping features - sensory impairments and other physical impairments.
11. Cognitive function - comprehension, reasoning, sequencing, etc.
12. Educational tract - I. E. P., general academics or vocational tract.
13. Student learning styles matched to teaching methods
14. Standardized psychological testing - formal assessments by a psychologist, school psychologist, or diagnostic teacher.
15. Informal skills assessment - teacher administered skills testing and checklists.
16. Physical size constraints - class size, size of the classroom, etc.
17. Utilization of an adaptive educational program
18. Classwork assignment - students grouped by matching assignments (all Math, English, Reading, units of study).
19. Ethnic or socioeconomic factors
20. Gender
21. Availability of other adult aide
22. Parents discretion
23. Random
24. No instructional grouping
25. Other
26. Teacher observation - Teacher impressions.

IAP PUBLICATIONS

Instructional Alternatives Project
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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 Instructional factors that influence student achievement: An integrative review by J. E. Ysseldyke, S. L. Christenson, & M. L. Thurlow (September, 1987).