#### REPORT RESUMES

ED 013 134

RC 000 834

SPECIALIST DEPLOYMENT IN CSS SCHOOLS. BY- BERNARDO, CHARLES M. MARLOW, FRANK M. NEW YORK STATE SCHOOL BOARDS ASSN., ALBANY

PUB DATE

65

EDRS PRICE MF-\$0.25 HC-\$0.60 15P.

DESCRIPTORS- \*COMPARATIVE ANALYSIS, \*MEASUREMENT,
QUESTIONNAIRES, \*STATISTICAL ANALYSIS, \*SPECIALISTS, \*SCHOOL
DISTRICTS, STATISTICAL DATA, STATISTICAL SURVEYS, SPECIAL
\*SERVICES, TABLES (DATA), NEW YORK STATE,

THE FIRST DOCUMENT IN A THREE PART STUDY INDICATES THAT THE PURPOSE OF THE STUDY WAS TO MEASURE, ANALYZE, AND COMPARE THE FUNCTIONAL DEPLOYMENT OF SPECIALISTS BY THE LOCAL SCHOOL DISTRICT. IT WAS NECESSARY TO EXAMINE THE FUNCTIONS PERFORMED IN ORDER TO DETERMINE THE RATIO AND ADEQUACY OF SCHOOL DISTRICT SPECIALISTS. DATA WAS COLLECTED AND TABULATED FROM 174 SCHOOL DISTRICTS WHICH REPRESENTED THIRTY-FIVE PERCENT OF THE CENTRAL SCHOOL DISTRICTS IN NEW YORK STATE. TWENTY-NINE SPECIALIST FUNCTIONS WERE IDENTIFIED AND DEFINED. SPECIFIC INSTRUCTIONS FOR READING AND INTERPRETING TABLES OF STATISTICAL DATA IN EACH OF THE THREE PARTS OF THE STUDY ARE INCLUDED. (JS)





# SPECIAL REPORT

CENTRAL SCHOOL BOARDS COMMITTEE FOR EDUCATIONAL RESEARCH 525 West 120th Street New York, New York 10027

Telephone: (Area Code 212) 870-4392

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

SPECIALIST DEPLOYMENT IN CSS SCHOOLS

Prepared by

Charles M. Bernardo Frank M. Marlow

Executive Secretary CSS Research Fellow

Note: Save this report. You will use it in later mailings.

#### FORWARD\*

This is the first of three installments of the CSS Specialist Deployment Study. A total of eighteen Tables containing data collected in this study will be sent to you in the following manner:

First Installment -- (Tables 1 through 4) -- Deployment of Specialist

Functions, Boces and Non-Boces, State and

Area-Wide

Second Installment -- (Tables 5 through 12) -- Recipients of Specialist

Functions -- Boces and Non-Boces

Third Installment -- (Tables 13 through 18) -- Levels on Which

Specialist Functions are Performed -- Boces
and Non-Boces.

This manual will assist you in interpreting data on the enclosed IBM print-out sheets. It is imperative that you retain the manual as it will enable you to interpret the data to be sent to you in subsequent installments.

F.M.M.

\*The descriptions given on this page are relevant only to participating districts in the study.



#### SECTION 1

#### INTRODUCTION

# 1. Background of the Study

A means employed by many school districts to determine school specialist adequacy is a ratio between the number of school specialists and students. However, this practice falls short in that the functions performed by individuals holding the same title are not always identical. For example, guidance worders in different school districts may perform their services in differing proportions of time. Also one counselor may spend more time working at the desk while another may spend more time working with students.

Therefore, if we are to be able to differentiate between the specialist staffing ratios of school districts, it is necessary not to look at the titles held by staff members but to identify the functions being performed by these professionals.

A characteristic which typifies central school districts in New York
State is the extent to which Boards of Cooperative Educational Services
(Boces) supply staff members to local school districts to perform
specialist services. In view of this, the purpose of the study is to:

- 1. Measure the deployment of specialists according to the services they performed, recipients of their services, and the grade level on which the services are rendered.
- Analyze and compare the functional deployment of specialists
   who are directly employed by the local school district with
   those whose services are contracted through Boards of Cooperative Educational Services.



The data included in this installment and in the following two installments are the results of this study.

### II. Definitions of Terms

- A. <u>Specialist</u> -- A professional staff member who performs any function other than teaching self-contained classes at the elementary level or academic classes at the secondary level. Academic subject areas are English, science, social studies, mathematics, and foreign language.
- B. <u>Specialist Time Equivalents Per 1,000 Pupils</u> -- The full time equivalent of a specialist performing a particual function. For example, if the full time equivalent in the guidance function is 1.50, this means that the school district has the equivalent of one and a half full time specialists, performing the guidance function per 1,000 pupils.
- c. Staffing Pupil Units -- The term, staffing pupil units, is used instead of raw pupil enrollments in order to make valid comparisons among school systems having different proportions of pupils in the elementary schools (K-6) as compared to secondary schools (7-12). In computing staffing pupils, one multiplies half-day kindergarten by one-half, full-day kindergarten through sixth grade by one, and grades seven through twelve by 1.1.

## III. The Norming Population

174 central school districts participated in the study. This represents approximately 35% of the central school districts of New York
State. Completed questionnaires were received from 6,952 school specialists, 774 of whom were Boces specialists.

The following indicates the number of specialists in the sample at each grade level and the number of Boces specialists at each grade level.

LEVEL	NON-BOCES	BOCES	TOTALS
Elementary	1881	302	2183
Secondary	3102	229	3331
System-Wide	1195	<u>243</u>	1438
Totals	6178	774	6952

i

The range in student enrollment in participating districts was a low of 157 pupils to a high of 8,603 pupils. The mean student enrollment in the sampling was 1,229.

#### SLCTION II

## SPECIALIST FUNCTIONS IDENTIFIED IN THIS STUDY

The following twenty-nine specialist functions were identified in the study. On all of the tables to be sent to you, each function will be identifiable by the number under the standard score cale.

- Reading Individual or group instruction aimed at correcting faulty reading disorders; includes remedial and developmental techniques.
- 2. Speech Therapy Identification and retraining of speech patterns; providing instruction designed to alleviate or eliminate speech defects.
- 3. Special Education
  The education of pupils who deviate so far physically, mentally, socially, and emotionally from the relatively homogenious groups of so-called "normal" pupils that the standard curriculum is not suitable for their educational needs, i.e., the blind, the deaf, trainable, educable, emotionally disturbed, and other atypical students.
- 4. <u>Guidance And Counseling</u>
  Assisting students individually or in groups to make adjustments and choices especially in regard to vocational, educational, and personal matters.



5. Testing

The administration of achievement, intelligence, aptitude, and a variety of diagnostic tests; helping others to interpret and use the results of testing to best advantage for individual students and the curriculum.

6. <u>Psychiatric and Psychological Services</u>
Conducting diagnostic case studies of pupils; interpreting behavior to other staff members; recommending referral to agencies outside the school system in cases requiring long-term therapy.

7. Pupil Personnel Services

The systematic collection and maintenance of data regarding each pupil; may deal with physical, mental, or social abilities, and with environment, whether home, out-of-home, or school.

8. Attendance

Collecting and maintaining attendance records; improving pupil attendance; and enforcing the attendance law.

9. Discipline

The maintenance of conditions conducive to the efficient achievement of the school's functions; administering discipline and enforcing order.

10. Health Services

Caring for the he 1th needs of pupils; providing periodic physical and dental examinations, etc.

11. Library Services

Providing students with books, pamphlets, graphics, and other educational materials for reading, listening, and viewing purposes; teaching library skills; serving as a resource person and enriching the curriculum with pertinent materials of communication.

12. Homebound Instruction

Instruction by a certified teacher of an incapacitated student in his home at a time when he is judged unable to attend school.

13. Assisting Classroom Teachers

Working with classroom teachers in the classroom in an effort to help them improve their teaching techniques; advising them on planning work and securing materials.

14. Instructional Material Services

Supervising and coordinating a program which provides sensory material of all kinds, (graphics, books, films, slides, tapes, etc.) and the equipment for aiding the learning process to staff members of pupils.

15. Curriculum Planning And Development

The systematic procedure of developing a suitable curriculum for the school or school system. Involved is the selection of appropriate curriculum materials, methods of instruction, and in-service education; supplying curricular materials and equipment to other staff members.



Activity that leads to the establishment of policies to serve as guides for action, or for attaining desired objectives within which all parties to the enterprise function.

17. Staff Personnel Administration
Staff recruitment, selection, and orientation; development of staff personnel policies; supervision of personnel records; non-professional personnel employment and orientation; recommendations for retention; termination and tenure appointments.

18. <u>School-Community Relations</u>
The maintenance of lines of communication with the public, or any group of part of it that may be influential upon school policy, finance, or program, or that may influence the public image of a school or the school system.

19. Observation and Evaluation of Staff
Observation of a staff member with the intent to appraise and evaluate the work of the individual; watching the staff member in action in order to formulate suggestions to help him in the improvement.

20. Coordination of Pupil Activities

Coordinating the in-school activities of pupils, i.e., assembly programs, student government, clubs, etc.

21. Financial Planning, Budgeting, and Management of Funds
Expressing the school program and its future needs, or any part of it, in
terms of financial resources and their availability; accounting for and
reporting on the expenditure of school district funds.

22/ Procurement of Material and Equipment
Selecting, ordering, and acquiring instructional and non-instructional materials and equipment; caring for their distribution and use; plant and facilities planning relation to estimated needs.

23. Coordination of Federal Programs

The development and submission of proposals to the federal government and the maintenance of contact with federal officials.

24. Transportation Planning and supervising school bus routes; selecting, training, and supervising personnel; handling complaints; overseeing maintenance of equipment; drawing up transportation contracts; maintaining transportation records and preparing necessary reports.

25. School Physical Plant Management
Responsibility for the proper maintenance, operation, and security of
the physical plant and grounds.

26. Plant Planning and Construction
Conducting surveys to determine physical plant requirements and to reduce maintenance and replacement costs; selecting and inspecting materials and equipment; supervising work of contractors and school district maintenance personnel.



27. Research

Inquiry or investigation, quantitative or otherwise, directed toward the clarification or resolution of problems germaine to school policy or practice.

28. Classroom Teaching

Teaching at the elementary level in "self-contained" classrooms, or at the secondary level in academic subject areas such as, English, social studies, mathematics, science, foreign language, and such subjects taught to groups of similar size. This DOES NOT INCLUDE the following subject areas: art, music, physical education, remedial or developmental reading, speech therapy, special education, home ecomomics, industrial-technical arts, agriculture, business and office education, distributive education, driver education, etc.

29. Special Teaching

All teaching other than the academic subjects or elementary classes as defined in Function 28. Special Teaching areas include the following: art, music, physical education, remedial or developmental reading, speech therapy, special education, home economics, industrial-technical arts, agriculture, business and office education, distributive education, driver education, etc.

#### SECTION III

#### READING AND INTERPRETING THE TABLES

#### Reading the Tables

A standard score scale appears at the left of each Table. This scale is used to make the different measures equivalent, and thus directly comparable. Beneath the table number is a description of the data contained in the Table. For example, under Table I is contained, "Time Equivalents in Functions, State-Wide sample of 174 Districts". The column of asterisks indicates the range of scores from high to low. Fifty on the standard score scale indicates the mean average score. Sixty represents one standard deviation above the mean, and forty one standard deviation below the mean.

The triple 'XXX' in each column represents your school district's standard score. For example, if the triple 'XXX' on the Table sent to you was next to



the fifty on the standard score scale, your school district would be operating at the mean with regard to the extent to which services are performed in that particular function.

Just below each function number is the high actual score attained by a school district. In the sample, the mean actual score is indicated just below the high actual score, and the low actual score is indicated below the mean. The standard deviation and the district's score follow in that order. Below that is the score representing the district's position above and below the mean.

At the bottom of the profile charts, a series of numbers appears under each column of asterisks. The numbers can be identified as follows:

XXX: Your district's score in specialists time equivalents; HIGH: The specialists time equivalent of the district scoring highest in the particular function; MEAN: The average specialist time equivalent in all of the school districts in the sampling; LOW: The specialist time equivalent of the district scoring lowest on the particular function; SD: The standard deviation in time equivalents; DIST.: The score in specialist time equivalent for your particular district; SCORE: This datum has no particular significance for a school district. It is to be used by CSS for research purposes.

# 11. Interpreting the Tables

A profile chart enables you to conduct at least two important analyses:

(1) An assessment of the status and adequacy of your district's scores on a series of specialist functions relative to the mean and range of CSS districts in the study; (2) An evaluat on of the scores for your school district as

\*The full time equivalent of a specialist performing a particular function See table !! "Counties according to area



they relate to other districts either on an area-wide or state-wide basis.

The first analysis is performed by examining the standard scores. The seandard score is a yard stick which tells how far above or below the average a district falls. A standard score of fifty represents the mean-average. A standard core of forty represents one standard deviation below the average. A standard score of sixty represents one standard deviation above the mean. In a normal distribution, two-thirds of all of the districts of the group will fall between standard scores of forty and sixty. One-sixth of the districts will fall above a standard score of sixty; one-sixth will fall below a standard score of forty.

The second analysis is performed by looking at your standard scores in relation to each other. A sharp deviation on your profile indicates a condition that might be worth investigating. In general, a horizontal profile indicates a normal situation. Peaks or dips indicate variations from the norm. For instance, if you are high on the reading function and low on the speech therapy function, you may want to reconsider your policy regarding these two function.

The following is a brief analysis of the deployment of specialist functions by a central school district in functions I (reading) and 2 (speech therapy). Districts not participating is this CSS study will be able to get an idea of the appearance of the report via Table I.

With regard to the reading function, this central school district (see Table I) is providing the full-time equivalent of .494 or almost one-half of a specialist performing the function of reading for 1,000 students. This is approximately at the mean level for central school districts in the State. The mean score for the State being .566 or a little more than one-half of a



full time specialist performing reading functions per 1,000 students.

The interesting factor in this function is the wide range among districts in the provision made for reading services. The high score for the state is the full time equivalent of approximately three and one-half specialists per 1,000 students (3.412). The low score is no reading function at all.

A perusal of the standard score scale reveals that this district provides virtually no speech services to ts students. The district score being 0.003. This compares with a mean score for the State of 0.218 or the equivalent of approximately one—fifth of a specialist performing speech therapy per 1,000 students. The high score for a school district in this function is 1.496 or approximately one and half full time specialists performing speech therapy for 1,000 students.

It is apparent that this district has made a greater commitment toward providing reading services to its students and not speech services. The decision in this matter is, of course, a local one to make and the assumption is that this decision is based on the felt need of students in this district.



TABLE I

TIME EQUIVALENTS IN FUNCTIONS, STATEWIDE SAMPLE OF 174 DISTRICTS

(1438.) STAFFING PUPILS, (27) SPECIALISTS.

1	0	0

90		
		H
		*
	H	*
	*	*
80	*	*
	*	*
	*	*
	*	*
	*	*
70	*	*
	*	*
	*	*
	*	*
	*	*
60	*	*
	*	*
	*	*
	*	*
	*	*
50	XXX	*
	*	*
	*	*
	L	XXX

Lu

FUNCTION	1	(Reading) 2	(Speech Therapy)
HIGH	3.412	1.496	
MEAN	0.566	0.218	
LOW	0.000	0.000	
S D	0.824	0.339	
DIST.	0.494	0.003	
SCORE	49.13	43.67	

# TABLE II

# Counties According to Area

Агеа	
A	Cattaraugus and Chautauqua
В	Erie, Genesee, Niagara, Orleans, and Wyoming
C	Livingston, Monroe, Ontario, Seneca, Wayne, and Yates
D	Cayuga, Madison, Onondaga, Oswego
E	Franklin, Jefferson, and St. Lawrence
F	Herkimer, Lewis, and Oneida
G	Allegany and Steuben
H	Cortland, Schuyler, and Tompkins
i	Broome, Chemung, and Tioga
J	Chenango, Delaware, and Otsego
K	Clinton, Essex, Hamilton, and Warren
L	Fulton, Montgomery, Saratoga, Schenectady, and Washington
М	Albany, Columbia, Greene, Rensselaer, and Schoharie
N	Orange, Rockland, Sullivan, and Ulster
0	Dutchess, Nassau, Putnam, Suffolk, and Westchester

STATE OF

