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Models for Determining Appropriate
Caseload Size for Speech-Language
Pathologists in Nebraska

A Field Project
Presented to the
Department of Educational Administration,
Supervision, and Foundations
and the
Faculty of the Graduate College
University of Nebraska

In Partial Fulfillment
of the Requirements for the Degree
Specialist in Education
University of Nebraska at Omaha

by
Mary M. Tompkins

April 1985

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Field Project Acceptance

Accepted for the faculty of the Graduate College,
University of Nebraska, in partial fulfillment of the
requirements for the degree Specialist in Education,
University of Nebraska at Omaha.

Committee

Name	Department
<i>Katherine Kaste</i>	<i>Educational Administration</i>
<i>James M. Wood</i>	<i>Counseling and Special Edu.</i>

Doreen Keenan
Chairman

Date 4/9/85

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To all school and ESU #2 friends who wanted to know how "the paper" was coming, thanks for your interest.

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CHAPTER I

Proposal

Introduction

Appropriate caseload size is a problem that has faced speech-language pathologists in the schools ("Recommended Service Delivery," 1983) since school speech services were initiated in 1910 (Weaver, 1956). Clinical programs in the schools are often mandated by state agencies to serve high numbers of communicatively impaired students. The quality of clinical programs may be questionable when speech-language pathologists attempt to serve such large numbers of students.

In Nebraska, the policy for determining caseload size is based on numbers. The State Department of Education mandates in Rule 51 - School Age Special Education Programs - that for planning and budgeting purposes, the total number of students served by one full time speech-language pathologist (SLP) shall be seventy. This applies to Level 1 programs - those in which students are seen less than three hours per week for clinical services. Most communicatively handicapped students in Nebraska public schools are served in Level 1 programs. Nebraska has the second highest state requirement for caseload size in the nation (ASHA, 1984).

When the number of students does not meet the specified clinician - pupil ratio as outlined, program deviations requests are required. A school district may request a reduction or addition to the base of seventy of up to seventeen students, making Nebraska's caseload size in a range of 53 to 87. Requests are accepted for caseload reductions below 53 for special circumstances such as extensive travel time or caseload severity. Requests for reduction are generally granted because funding has been available to accommodate a smaller clinician - pupil ratio. With the tightening of state spending for special education, however, future requests for reductions stand a chance of being denied (D. M. Anderson, personal communication, December 17, 1984).

Establishing an appropriate caseload size is too complex to be determined by simple numbers. Many factors are related to caseload, the most important of which is the degree of severity of the communication handicap. Another factor is the intensity of service provided as it relates to group size, amount of time seen each session, and number of sessions per week.

Guidelines are needed to provide a structure for planning and decision making in caseload size based on student's needs. The effectiveness of such

guidelines are directly related to their utility. If guidelines are useful, they are good. To be useful, guidelines should include all considerations important to the decisions necessary and exclude minor factors (Schultz, 1972).

One set of guidelines useful to caseload size decisions in the schools are those developed by the Committee on Language, Speech, and Hearing Services in the Schools for the American Speech-Language-Hearing Association (ASHA). These ASHA guidelines for caseload size describe four distinct service delivery models which provide service for consultation programs, itinerant programs, resource room programs and self-contained programs. For each model, a maximum caseload range is recommended based on cases served, services provided, group size, time per day, and times per week ("Recommended Service Delivery," 1983).

The guidelines are flexible and may be adapted to large, small, or medium sized school systems. They may be applied to students from pre-school through high school. One of the major advantages of service delivery models is that they establish a continuum of service for children based on their individual needs. A service program model based on a continuum of service is far superior to a service program model based on

unrealistic and outmoded caseload numbers or size of school population because subsequent intervention may include services from minimum to intensive to meet the appropriateness criteria for each child. A service delivery model provides a description of the clinician's program which is easily explained to administrators, teachers, and the public. The clinician can demonstrate why one student is being seen more or less often than another and how the students' skills differ.

These models of service delivery are not an attempt to impose another set of regulations on an already inundated field, nor are they intended to detract from the speech-language pathologist's discretion. The models are intended to give direction to the SLP and education administrators when considering what is the most appropriate service delivery system for communicatively handicapped children.

At Educational Service Unit #2 (ESU #2), caseload size and scheduling is a concern to the speech-language pathologists. The significant variety in size of caseloads and amount of time requested for therapy puzzles administrators in the Unit and in the school districts served. One SLP may request six hours per

week in one building to serve ten students while another may ask for four hours per week in one building to serve seventeen students. Both requests may be based on accurate assessments of student needs. A continuum of service concept based on service delivery models would assist the SLP in demonstrating the priorities of each program to Unit supervisors and school administrators. It would facilitate the process of justifying size of caseload and types of scheduling.

Statement of the Problem

Speech-language services to the communicatively handicapped are based on individual needs. Because of the content of the caseload, therapy time requirements vary among caseloads. In Nebraska, clinicians operate under a state system which mandates caseload size based on numbers. Too often, this means that service delivery to the student is based on a number quota and not on the student's needs.

The purpose of this study is to apply ASHA guidelines for appropriate caseload size from the itinerant service delivery model to the caseloads at ESU #2, already determined by Nebraska's mandate and determine differences in program characteristics and caseload sizes. The total number of caseloads resulting from the use of the guidelines as well as the

number of full time equivalency clinicians needed to serve the caseloads will be compared to the current number of caseloads and staff at ESU #2.

Delimitations

This study is concerned only with the caseloads of speech-language pathologists of Educational Service #2 during the 1984-85 school year. ESU #2 is an intermediate educational agency serving Class I, II, III, and VI school districts. ESU #2 serves 46 school buildings in 37 school districts. All speech-language pathologists serve a number of buildings in these small towns and rural areas which requires travel time.

Limitations

ESU #2 employs a relatively small number of speech-language pathologists from which to gather data - five full time and three part-time clinicians. All are state certified. Three of the eight hold certificates of clinical competence from ASHA. Five of the eight have graduate hours beyond a Bachelor's degree and three have graduate hours beyond a Master's degree.

Assumptions

Decisions regarding entrance into a clinical program and subsequent therapy scheduling and program

goals are made by an interdisciplinary team. This team usually consists of the SLP, the classroom teacher, parent(s), and perhaps a school psychologist and school administrator. It is assumed that placement and therapy decisions are accurate based on their professional expertise. Therefore, information reported by the SLP for this study is also assumed to be professionally sound.

Methodology

Information on the content or make-up of each clinician's caseload was needed to determine caseload size using ASHA's guidelines. A survey format was used to collect data on five factors influencing caseload size. For each student with an individual educational plan (IEP) for a communication handicap, the following was asked:

- 1) Cases served
 - a) type of communication disorder
 - b) degree of severity in a rated form, i.e., mild, moderate, severe
- 2) Services provided
 - a) evaluation
 - b) program development, and management
 - c) indirect services
 - d) direct service

- e) direct service/self-study/aide
 - f) direct service with academic instruction
 - g) coordination with educators
 - h) other responsibilities
- 3) Group size
- a) individual
 - b) group size
- 4) Time per day
- 5) Time(s) per week

Demographic data was gathered including caseload size and severity distribution, number of schools in each caseload, and daily travel time. Clinician's perceptions of pressure from the State mandate, paperwork, and travel time on caseload size completed this survey.

ASHA guidelines were applied to each caseload and differences in program characteristics were noted. Current caseload sizes were compared to ASHA's recommended range for an itinerant service delivery model. Further comparison of caseload size will deal with the current amount of therapy time provided in relation to severity of the caseload and travel time and that which would be provided using ASHA's guidelines. The current number of caseloads was compared to the number of caseloads resulting from the use of the guidelines.

Definition of Terms

1. Communication Disorder: Students who are handicapped academically, socially, personally or emotionally by deficits of articulation, language, voice, fluency, hearing impairments, or a combination of any of these to the degree that normal adjustment is affected.

2. Communication Deviation: Students displaying mild to moderate deficits in articulation, language, voice, fluency, hearing, or a combination of any of these which moderately impair academic, social, personal, or emotional adjustment.

3. Developmental Communication Delay: Students having mild maturational delays in the acquisition of articulation, language or both, or slight deviations in voice or fluency.

4. Consultation Program: A type of service delivery model in which the SLP is responsible for developing a clinical management program for the communicatively handicapped student and is responsible for training and instructing others to carry out the program. Students in this program are counted as part of the SLP's total caseload even though she/he is not working directly with the student.

5. Itinerant Program (Intermittant Direct Service): The second service delivery model in which the SLP is responsible for the total habilitation program for communication including evaluations, teacher/parent counseling, direct intervention, and ongoing monitoring of student progress. The SLP may or may not travel between schools.

6. Resource Room Program (Intensive Direct Service): The third service delivery program in which the SLP is responsible for the overall habilitation/rehabilitation program including diagnosis/evaluation, parent/teacher counseling, direct intervention, monitoring of student progress as well as providing self-paced modules for the students and incorporating communication skill building activities into the student's total curriculum.

7. Self-Contained Program (Academically Integrated Direct Service): The final service delivery model in which the SLP is responsible for evaluation, parent counseling, direct intervention, and continued monitoring of student progress. In addition to these more traditional duties, the SLP in this program also provides the academic instruction.

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CHAPTER II

Review of Literature

Historically, caseload size for the speech-language pathologist in a school setting has been excessive. Caseloads of well over 100 students were standard in the early years of the profession. In 1910, the Chicago school system began their speech services program with ten graduates of the Chicago Teacher's College to serve 1,267 children recognized as stammerers (Neidecker, 1980). In a 1930-31 White House Survey (Weaver, 1956), the recommendation was for a speech teacher to see a maximum of 100 students.

Caseload size was still averaging 100 students or more as recently as the early sixties (Irwin, 1965). Average size a decade later had been drastically reduced to 72.2 students (Van Hattum, 1982). By the late seventies 64.1 students were seen in an average caseload and by 1981 that size had been reduced to 43 students ("Guidelines for Caseload Size," 1984).

Factors Influencing Large Caseloads.

Many factors contribute to large caseload size. The first of these factors, common in thirty states ("Mandated Caseload Size," 1984) is a state mandate on minimum and/or maximum caseload size. Ten of these states, including Nebraska, have a minimum caseload size

requirement ("Mandated Caseload Size," 1984). Mandates for maximum size range from twenty to ninety. Seven states have a weighting system or other formula to take into account the degree of severity of the handicap. For the rest of the states, maximum caseload mandates were developed with no rationale, no attention to differences in disorder types/severity and no attention to innovative service delivery models ("Recommended Service Delivery," 1983).

Nebraska's mandated caseload size range is fifty-three to eighty-seven students. If a school district has a speech program that deviates more than 25% from the program staff allocation criterion (one clinician per 70 students) as stated in 92 NAC 51, (Rule 51), a letter requesting approval must be submitted to Nebraska Department of Education (NDE), Special Education Branch. NDE approval of a school district's program deviation is annual, conditional, and subject to review at any time. To this date, justified program deviations have been granted (Don Anderson, personal communication, January, 1985). Although deviations are granted for such conditions as travel time, or severity of caseload, the fact remains that the number of students to be seen is dictated by law and not by individual student needs.

Tied closely to state mandates is the second factor

influencing large caseloads which is state policies of reimbursement. One typical arrangement of reimbursement is excess per pupil cost ("Types of Special Education Funding," 1984). Allowable costs are defined for a regular student. Excess cost is the dollar difference between the cost of educating a special education student in a regular program and the actual cost of the special education program. The reimbursement funding formula for Nebraska is 90% of the excess cost paid one year in arrears for school age students (Rule 51). Pre-school handicapped funding is 100% reimbursement paid the same year to the school district. Reimbursement from the State of Nebraska is dependent on meeting the State mandate of an approved clinician-student ratio.

The third factor in increased caseload size deals with advances in knowledge of the communication process. Increasingly sophisticated testing techniques and instruments have increased the identification of the speech handicapped population (Neidecker, 1980). Particularly during the last decade, much research has been conducted in communication disorders which has provided speech-language pathologists with more advanced means to analyze and conceptualize communication disorders in children.

The fourth factor which has had an impact on large

caseloads deals with old stereotypes, both inside and outside the profession, about what speech-language pathologists do. Traditionally, caseloads were comprised largely of articulation deviation problems (Irwin, 1965).

Clinicians could group large numbers of students with articulation errors which provided enough flexibility to schedule 100 or more pupils per week. This accepted role of the clinician persisted through the early sixties with articulation still constituting 81% of the caseload (Neidecker, 1980). The old stereotyped role of the SLP and the context of the caseloads began to change in the late sixties and early seventies with what O'Toole and Zaslow (1971) refer to as the "quiet revolution" for school speech pathologists.

The emphasis began to shift from quantity to quality. School clinicians were more vocal about such issues as smaller caseloads. They advocated giving highest priority to the most severe, using different types of scheduling and being a member of diagnostic teams (Neidecker, 1980). Other basic changes included caseloads with fewer articulation problems and more language impairments, plus increased responsibilities for consultative services. The content or make-up of the clinician's caseload began to change. By the late seventies, articulation still comprised the largest

percentage of the nationwide caseloads - 48.9 percent. However, language problems now made up 25 percent of the caseload. In 1982, 54 percent of the caseload was comprised of language impaired students (Van Hattum, 1982).

A change in educational philosophy surrounding the American educational system is the fifth factor having an impact on the issue of caseload size (Neidecker, 1980). The focal point of this change in philosophy centered on the rights of handicapped children. Information provided by parents and educators at a Congressional hearing in 1975, indicated that over one million handicapped children in the United States were not receiving any education, and over half of the handicapped children being served did not receive an appropriate educational program (Dublinske and Healey, 1978). Legislation was passed following the hearing, frequently referred to as the "Bill of Rights for the Handicapped", but nationally known as Public Law 94-142 (PL 94-142). Pupils experiencing communication deficiencies are considered handicapped and must receive services specifically designed to meet their unique needs (Barker, Baldes, Jenkinson, Wilson, and Freilinger, 1982). The law mandates services not only to all school age children in public schools, but also

to pre-academic children, youth beyond school age, and children in non-public schools. No longer could students be put on a waiting list for services because of a filled therapy schedule. A student eligible for clinical services as deemed necessary by an interdisciplinary team must receive that service.

State education agencies have the primary responsibility of insuring that all handicapped children and youth within the state receive a free appropriate public education (Dublinske and Healey, 1978). To meet this requirement, local education agencies use child find procedures to locate possible handicapped children. These children are then referred for evaluation and subsequent therapy if necessary. Child find procedures have resulted in additional students being identified and added to speech-language caseloads - particularly in the pre-school age bracket.

Continuum of Service

To be in compliance with federal law, state education agencies began reviewing existing policies and regulations. Guidelines were developed to insure that all handicapped children and youth received an appropriate public education. The model prevalent in the literature for implementing speech-language programs in the schools is the continuum of services

model (Neidecker, 1980). It is comprised of three components which group communication problems by severity with concomitant intensity levels of therapy (Neidecker, 1980).

One component is communicative disorders which includes children with severe to moderately severe problems in language, voice, articulation, fluency or hearing (Neidecker, 1980). These children require intensive individual or small group intervention by the clinician, in addition to services by other specialists. Children in this group may not have acquired language, or may have serious language delay with other handicapping conditions such as profound hearing loss.

The second component (Neidecker, 1980) is communicative deviations - less severe but significant problems in communication. These children have misarticulations which maturation would not help, mild language delay and/or intellectual retardation. Intervention is less intense, with direct or indirect service by the clinician and others such as parents, teachers, aides, or counselors.

The third component is communicative development which aims at prevention of communication problems and enrichment of language (Neidecker, 1980). The primary

responsibility for these goals is the classroom teacher with consultative services from the SLP.

A number of state, county and local systems have published their methods of caseload selection and scheduling based on the continuum of service concept. One method developed in Iowa and known as the Iowa Severity Rating Scales (Barker, et al, 1982) is used for developing consistency in classifying students into one of three categories, disorders, deviations, or delays. Based on an evaluation, a rating is determined that identifies the degree of deficit based on specific parameters for each area of communication. A child can be rated no lower than the highest rating received in any one area and no higher than the combined ratings received for all areas. Other school systems using a rating scale can be found in Pennsylvania and Florida (Van Hattum, 1982) as well as the county and metro area schools in Georgia (Ed 208-633).

There are other types of continuum of service models. The Louisiana State Department of Education follows a weighted caseload procedure ("Speech-language Rating Scales," 1984). Each student's level of severity is multiplied by a factor to arrive at a clinician-student ratio. A mild handicap is multiplied by one to equal one student whereas a severe handicap

is multiplied by three to equal three students. The Los Angeles Unified School District provides a list of assessment instruments with scores divided into mild, moderate, and severe ranges ("Los Angeles Unified School District," 1984).

ASHA's recommendation for a continuum of service model includes four types of service delivery programs ("Guidelines for Caseload Size," 1984). These programs provide delivery of service from least restrictive environment to most restrictive. They can be described as follows: 1) consultation program (indirect service) 2) itinerant program (intermittent direct service) 3) resource room program (intensive direct service) and 4) self-contained program (academically integrated direct service).

Caseload size recommendations are suggested for each service delivery model. These recommendations are based on certain program characteristics which may influence caseload size. These program characteristics are specific and include the following: 1) types of communication disorders served 2) services provided 3) group size 4) time per day and 5) times per week. Taking into consideration these characteristics, each delivery service model was assigned an appropriate caseload range. Caseload size recommendations are as

follows: Consultation program, 15-40 students; itinerant program, 25-40 students; resource room program, 15-25 students; and a self-contained program, up to 15 students with an aide and up to ten students without an aide.

An itinerant program is a common service delivery model for providing clinical services in the schools (Van Hattum 1982). An itinerant model provides direct service on an intermittent basis, usually two to three times a week. The term 'itinerant' implies that the SLP travels from school to school. While this is generally true, the term 'itinerant' service is used even when the SLP serves only one building since the service is still generally on an intermittent basis.

Certain degrees of therapy are more appropriately served by one program than another. It is conceivable that the SLP will use more than one delivery program (e.g. servicing a group of severe students intensively in a resource room while working with the remainder of the caseload using an itinerant model). Caseload size, says ASHA, is not additive as more service delivery models are used. That is, using an itinerant and a consultative program does not mean a maximum of 80 students.

One factor not included within the guidelines of

service delivery models is the travel time needed by clinicians who provide service to a number of schools. Knight and Hahn, et. al. (Van Hattum, 1982) completed a study in 1961 showing the itinerant SLP spent two to three hours per week traveling or eight percent of the time available. Neal's survey in 1976 (Van Hattum, 1982) indicated the school clinician served an average of three schools. Travel time should include time in gathering materials, driving to the next school and setting up for the next session. According to ASHA guidelines, travel time between schools must be an individual consideration, but it is assumed that as travel time increases, the number of students served decreases.

Using a continuum of service concept in caseload selection and scheduling provides the SLP with a logical and objective manner in which to make decisions (Barker, et al., 1982). Each student's severity and therapy time needed to effect a change can be justified. Using this model, clinicians can monitor progress of a student over the continuum, and then adjust the service delivery program commensurate with the child's performance. If progress shows needs are being met, the student may be moved from his level of severity to the next less severe rating with

concomitant service delivery adjusted, thus being in compliance with "the least restrictive environment" component of PL 94-142 (Barker, et al., 1982).

A continuum of service model in the forms of a severity range and service delivery models, offers more sophisticated and efficient methods in determining the most appropriate caseload size for a particular setting. Analysis of these models lends assistance to administrators regarding services and staff deployment. Planning is based on severity and program delivery, not simply numbers (Barker, et al., 1982).

Nebraska Rules and Regulations

All special education programs in the state are designated at three levels. Level I programs, which include most speech services (Rule 51), provide not more than three hours per week of supportive services to students in a regular class program. Consultation, itinerant, and resource room delivery service models of speech services would serve this level. Level II programs are for students whose needs require a program outside of the regular classroom for a period of time exceeding three hours per week. The resource room or self-contained model of speech service delivery would serve this level. Level III programs offer residential care outside of a regular kindergarten through 12th

grade system. This level could be served by any of the service delivery models. These designated state program levels serve as a basis for state reimbursement to local school districts for special education.

Nebraska has entrance criteria guidelines for receiving speech-language services. These guidelines do not rate the severity of the communication handicap beyond the eligibility requirements, nor do they provide parameters for intensity of service for the severity of the handicap. Nebraska's mandate of a clinician-student ratio of one to seventy dictates the size of a clinician's caseload. Many times intensity of therapy is reduced simply because the schedule will not allow the clinician to serve a child at the level required.

Summary

The primary problem facing school based speech-language pathologists is the question of appropriate caseload size ("Recommended Service Delivery," 1983). While caseload averages have been reduced from a national average of 100 in the early sixties to an average of 43 in 1981, excessive caseload sizes continue to limit appropriate services to speech handicapped students.

Several factors contribute to large caseloads.

They include minimum/maximum caseload requirements by state departments of education, state policies of reimbursement, advances in assessment and knowledge of the communication process, stereotypes of the role of the SLP, and federal legislation requiring a free and appropriate education for all handicapped individuals.

The provision of services commensurate with pupil needs has become the primary concern in establishing school based speech-language intervention programs (Neidecker, 1980). Using a continuum of service model based on severity range and types of service delivery may provide focus for caseload selection, scheduling, and appropriate caseload size.

Nebraska's rules and regulations provide three levels of service to all handicapped children. These levels are based on the amount of time per week service is provided and exist primarily for funding purposes. There are no parameters for intensity of service for the severity of the communication handicap. Because of the mandate on caseload size, intensity of service may be reduced simply because the schedule of the clinician does not allow the clinical time to serve the child at the level required.

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CHAPTER III

Methodology

Population

This study was conducted using caseloads derived from the speech handicapped population in areas served by ESU #2. ESU #2, an intermediate education agency, serves school districts in four eastern Nebraska counties: Washington, Dodge, Burt, and Saunders. Class I, II, III, and VI school districts use the speech-language services of the Unit. Table I defines these classes of school districts based on population ("Fact Sheet 5," 1984). Speech-language services are provided to 39 Class I schools, 2 Class II schools, 10 Class III, and 2 Class VI schools.

Five full time and three part-time speech-language pathologists provided clinical services to the speech handicapped population in 1984-85. These eight clinicians provided service on a 6.0 full time equivalency basis. Full time equivalency (FTE) refers to the time spent by an SLP providing clinical services. A value of 1.0 was used as the base and was assigned to service provided on a full time basis. Any part-time service was assigned a percentage of the base. Thus, someone working three days a week, worked 3/5 time or expressed as a percentage, that clinician

was providing service on a .6 FTE basis.

Table I

Definition of School Classification in
the ESU #2 Service Area

Class I	any school district that maintains only elementary grades under the direction of a single school board
Class II	any school district embracing a territory having 1000 residents or less; and that maintains both elementary and high school grades under the direction of a single school board
Class III	any school district embracing a territory having 1,000-100,000 residents; and that maintains both elementary and high school grades under the direction of one school board
Class VI	any school district that maintains only a high school

Services were provided to 304 identified speech handicapped students in 1984-85. Range of severity was from mild to severe. Average percentages of mild, moderate, and severe per caseload were 27%, 44%, and 29% respectively.

Caseloads, on the average, were comprised of 45% language disordered students and 51% articulation disordered students. Other communication handicaps (1% each of the caseload) were hard-of-hearing, stuttering, voice, and cleft palate.

Travel time is an important issue when delivering services in rural areas. Services were provided in 46 elementary and high school buildings during this 1984-85 school year. Children were served in a number of buildings by each clinician ranging from four to eleven for 1.0 FTE clinicians and one to four for less than 1.0 FTE clinicians. Travel time ranged from slightly less than three hours per week to nine hours per week for full time clinicians and from none to slightly over three hours for part-time clinicians.

Instrument

Numerous variables may influence caseload sizes in a school setting (Neidecker, 1981; Van Hattum, 1982). These variables are fairly standard and familiar to school-based clinicians. They include, but may not

necessarily be limited to, severity of caseload, travel time, administrative paperwork, parent and/or teacher conferences, and administrative pressures to schedule a maximum number of students (Irwin, 1965). The degree to which they may influence each caseload may vary almost from clinician to clinician. Such is the case at ESU #2. A survey research design through which these factors could be assessed was chosen as most consistent and appropriate for the purpose of this study (Ventry, 1980).

This investigation used a survey of the speech-language pathologists at ESU #2 to examine their caseload sizes and to determine the degree of influence eleven factors had in determining their caseload sizes. Three steps were taken to ensure the adequacy of the survey instrument. First, the questions were previewed by the ESU #2 clinicians. Second, a detailed explanation of each section of the survey accompanied the survey form. Third, an interview with each clinician upon completion of the survey provided clarification on survey questions and the information provided.

All eight speech-language pathologists were given the survey and all subsequently returned completed surveys and participated in an interview. The Special

Education Director of ESU #2 was also interviewed for information on caseload size deviations. Specifically, the information requested included which caseloads deviated from the clinician-student ratio mandated by Nebraska; the rationale for the deviations; and whether the deviations received state approval or were denied.

The eleven factors on the survey form were examined after dividing them into two groups. The first group contained the five general factors which may influence caseload size as determined by ASHA, ("Guidelines for Caseload Size," 1984). The factors and their components were:

- 1) group size - individual, or if a group, how many in the group
- 2) cases served - type of disorder and degree of severity, rated as mild, moderate, severe
- 3) services provided - a check indicated services provided which included evaluation, program development/management, indirect service, direct service, direct service with an aide or self-study, direct service with academic instruction
- 4) time per day - length of therapy session
- 5) times(s) per week - number of times seen per week

Each of these factors was addressed for every child with an Individual Educational Program (IEP) for a speech handicap.

The second group of factors were pertinent to ESU #2. They pertain to actual size of each caseload, geographical area served, and related responsibilities and influences which may affect caseload size. These six factors and their components were:

- 1) total caseload size
- 2) the logistics of scheduling - travel time, and number of buildings in which students are served
- 3) severity of caseload - the percentage of total caseload of mild, moderate, and severe communication handicaps
- 4) professional opinion of the presence of any pressures to meet the state mandate rated as none, mild, moderate, severe and evaluation of the effect of these pressures on caseload size rated as no difference, reducing or increasing caseload size.
- 5) effect of pressure of paperwork on caseload size rated as no difference, reducing or increasing caseload size

- 6) effect of pressures of travel time on caseload size rated as no difference, reducing or increasing caseload size.

Thus, information was gathered on the content of each caseload as well as the factors which may have influenced each caseload size.

Procedure

ASHA's recommended caseload sizes are based on seven program characteristics. Within each characteristic, there exists a range, thereby allowing appropriate use of the speech-language pathologist's professional discretion. Table II outlines these seven characteristics for an itinerant service delivery model, the model which is used by ESU #2 for all clinicians.

Each of the seven program characteristics for ASHA's itinerant service delivery model was applied to the current caseloads at ESU #2. For two program characteristics, cases served and services provided, clinicians were asked to list the types of communication disorders served and complete a list of services provided.

Table II

Program Characteristics of ASHA's Itinerant
Service Delivery Model

1. Cases served	- all communication disorders - all severities (mild to severe)
2. Services provided	- program development, management, coordination, evaluation - direct services - coordination with educators
3. Group size	- individual or small group (up to 3 students per session)
4. Time per day	- 1/2 to 1 hour a day
5. Times per week	- 2 to 5 times per week
6. Rationale for caseload	- complex cases demand lower caseloads - approximates national average
7. Caseload-maximum	- up to 25-40 students students

Comparisons were then made between ESU #2's program characteristics and those recommended by ASHA. ESU #2 clinicians listed information for the remaining three program characteristics: group size, time per day, and times per week. Comparisons were made with ASHA's recommendations for these program characteristics.

The remaining six survey factors pertain to the actual caseload sizes at ESU #2 and those influences affecting size. Caseload size was compared three ways. First, the total size of each ESU #2 caseload was examined to see if it met State requirements and if it was within the recommended range for ASHA's itinerant service delivery model.

The second comparison dealt with the amount of therapy time provided in relation to the caseload size, severity of the caseload, and travel time. ASHA recommends the upper limit of 40 children be reduced depending on such factors ("Guidelines for Caseload Size," 1984).

Based on ASHA's recommendations, the high, low, and median points of ASHA's caseload range for an itinerant service delivery model were assigned percentages of mild, moderate, and severe cases. The upper limit of 40 was given a higher percentage (50%) of mild cases than the lower limit of 25. The reverse

was true for percentage of severe cases. The mid-point in ASHA's range, which is 32, was assigned 50% moderate cases (Table III).

Table III

Caseload Size/Assigned Percentage of Severity for
ASHA's Itinerant Service Delivery Model

<u>Degree of severity</u>	<u>Number of students</u>		
	<u>25</u>	<u>32</u>	<u>40</u>
mild	25%	25%	50%
moderate	25%	50%	25%
severe	50%	25%	25%

Of these three points on ASHA's caseload size range, the midpoint was chosen to serve as model caseload size from which to develop a formula for the determination of appropriate service time for a given caseload and its severity distribution. The average percentage of mild, moderate, and severe cases per caseload at ESU #2 closely resembles the assigned percentages at ASHA's mid-point. The midpoint on ASHA's caseload size range is 32. If 50% of the cases are moderate, 25% mild, and 25% severe, the corresponding numbers of students would be eight, sixteen, and eight.

The formula for estimated appropriate therapy time was based on ASHA's guidelines for appropriate caseload size and two assumptions. One assumption was that a severe case should receive twice as much therapy time as a mild case. References in the literature (Irwin, 1965; Neidecker, 1981; Van Hattum, 1982) address the notion that severe cases should receive more therapy time than mild. For this study, no degrees of severity were included in the formula. Giving severe cases twice as much therapy time as mild was an arbitrary decision for the purpose of this study.

A second assumption concerned total therapy hours per week. For this, ESU #2's average daily therapy time, 4.8 hours was used. Taking this times five school days yields a total weekly therapy time of 24 hours. Using these numbers and the assumptions of therapy time, the formula devised was as follows:

$$\begin{aligned}
 & (\# \text{ mild cases}) (x) \\
 + & (\# \text{ moderate cases}) (1.5x) \\
 + & \underline{(\# \text{ severe cases}) (2x)} = 24 \\
 \underline{8(x) + 16(1.5x) + 8(2x)} & = 24
 \end{aligned}$$

$$x = .5(\text{or } 1/2 \text{ hour}) \text{ of therapy per week}$$

The formula yielded a therapy time for mild cases

of 30 minutes per week. It is assumed this is a reasonable amount of clinical time for a mild case.

Using the estimate of 30 minutes per week for a mild case, the number of mild, moderate, and severe cases in an ESU #2 caseload, and a 24 hour therapy week, estimated appropriate therapy time could be determined. This estimated appropriate therapy time was compared to the actual therapy time the students in each caseload received. The need for additional caseloads based on additional therapy time needed was examined.

Finally the total number of current caseloads at ESU #2 was compared with the total number which would result from dividing the speech handicapped population in the ESU #2 area by the maximum number of students (40) on ASHA's recommended range for an itinerant service delivery model.

The final program characteristic suggested by ASHA is the rationale for caseload size. The rationale for ASHA's and ESU #2 caseload sizes was examined. Clinicians' perceptions of the influence on caseload size of travel time, perceived pressures to meet the State's mandate, and amount of paperwork were summarized.

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CHAPTER IV

Presentation of Data

The purpose of this study was to apply American Speech-Language-Hearing Association (ASHA) guidelines for appropriate caseload size to the caseloads at ESU #2 (1984-85), already determined by State mandate, and determine differences in program characteristics. Current caseload sizes were compared to ASHA's recommended range for an itinerant service delivery model. Further comparison of caseload size dealt with the current amount of therapy time provided in relation to severity of the caseload, and therapy time which may be provided using ASHA's guidelines. Finally, the current number of caseloads was compared to the number of caseloads resulting from the use of the guidelines.

Current Caseloads

ESU #2's caseloads were the objects of comparison using ASHA guidelines for an itinerant service delivery program. These eight caseloads are shown in Table IV with respect to program characteristics pertinent to ESU #2, including 1) FTE 2) number of schools served 3) travel time 4) total caseload size and 5) severity of the caseload.

Program Characteristics

ASHA's seven program characteristics for

Table IV

Description of 1984-85 caseloads at ESU #2

<u>Caseload</u>	<u>Number of Schools Served</u>	<u>FTE</u>	<u>Travel time</u>	<u>Caseload size</u>	<u>% Mild/ Moderate/ Severe</u>
A	10	1.0	9 hrs. 30 min.	32	34/53/13
B	4	1.0	5 hrs. 10 min.	59	15/50/33
C	6	1.0	2 hrs. 20 min.	34	50/38/12
D	6	1.0	4 hrs.	43	32/44/24
E	11	1.0	9 hrs. 17 min.	84	14/35/51
F	4	.4	3 hrs. 10 min.	16	37/37/25
G	4	.4	2 hrs. 20 min.	16	25/56/19
H	1	.2	0	20	14/37/49

recommended caseload size for an itinerant service delivery model include cases served, services provided, group size, time per day, times per week, caseload size maximum, and a rationale for caseload size. Each of these characteristics was used as a basis for examining caseloads at ESU #2 during the 1984-85 school year.

Cases Served

ESU #2's speech-language programs provided clinical services for all communication disorders. This meets ASHA's criterion that all disorders be served. Six disorders constituted ESU #2 caseloads. Articulation disorders as the primary handicap comprised the largest portion of speech handicaps with 51% followed closely by language disorders (primary handicap) making up 45% of the cases served. Combinations of disorders existed within the articulation and language categories. Students with a combination of language/articulation disorders with language as the primary handicap made up 9% of the category. Articulation/language disorders with articulation the primary handicap constituted 7% of the category. Disorders of hard-of-hearing, stuttering, voice, and cleft palate comprise small portions of the handicaps served, approximately one per cent each.

The severity of the handicaps served covered the continuum of mild to severe. Of the 45% with language disorders, 11% were mild, 47% moderate, and 42% severe. Severity for articulation handicaps were 32% mild, 37% moderate and 31% severe. Mild and moderate stuttering cases were served. Voice and hard-of-hearing disorders were in the moderate and severe range while the cleft palate disorder was in the severe range.

Services Provided

ASHA suggests that services provided for an itinerant service delivery model should include program development, management, coordination, and evaluation, direct services to students, and coordination with pertinent educators. Without exception all respondents provided this wide range of services in their program. Clinicians used both screening techniques and in-depth evaluations to identify students with speech-language disorders. The SLP as a member of an interdisciplinary team wrote an individual educational program for the student and provided direct service. Coordination with pertinent classroom teacher(s) and other school personnel was provided. In addition, ESU #2 clinicians provided extensive hearing screening and/or testing to the students in their buildings.

Group Size

Fifty percent of the speech handicap population of 304 students were seen in a group therapy situation. Of that 50% or 152 students, 45% were seen in groups of two, 40% in groups of three, 15% in groups of four, and 3% were seen both individually and in groups. The total number of groups was 63. Fifty-seven percent of those were groups of two, 33% were groups of three, and 10% were groups of four. Fifty-seven of the 63 groups or 90% met ASHA's criterion for group size of no more than three students.

Time Per Day

For contract purposes, total therapy time per day for ESU #2 clinicians is based on total time spent in daily therapy divided by the number of therapy days. The average amount of time spent in therapy on a daily basis for 1984-85 was 4.8 hours. That converts to a 24 hour therapy schedule per week. Currently, average therapy time per day ranges from 4.15 hours to 5.40 hours.

Session times ranged from fifteen to sixty minutes. The predominate time per day was twenty minutes which accounted for 74% of the sessions. Eleven percent of the sessions were 30 minutes long while 10% of the sessions were 15 minutes in length.

Three percent of the sessions were 25 minutes in length. Two percent were 40-60 minutes long.

ASHA recommends session lengths per day of one half to one hour. Thirteen percent of ESU #2 therapy sessions were 30 minutes in length or longer and, therefore, met the minimum criterion for session length as suggested by ASHA guidelines.

Times Per Week

ASHA guidelines suggest that students be seen two to five times per week. In the ESU #2 area, 85% of the speech handicapped students were seen individually or in groups twice a week. Ten percent were seen once a week while those being seen three or four times a week accounted for three percent of the students. Various schedules such as sessions once or twice a month comprised the remaining two percent. The combination of twenty minutes and twice a week for a therapy schedule accounted for 55% of the caseload schedules. Eighty-eight percent of ESU #2's number of sessions per week met the lower range of ASHA's recommendations.

Caseload Size

Caseload sizes were compared in three ways. The first comparison examined the total size of each ESU #2 caseload to see if it met State requirements and if it was within the recommended range for ASHA's itinerant

service delivery model.

The ranges of caseload size as determined by Nebraska's mandate and ASHA's guidelines are compared in Table V. A range is given for each interval on the FTE scale. An interval is one day. If a clinician works four days a week, he/she is providing service on a .8 FTE. Nebraska's mandate instructs educational agencies to provide speech services on a clinician to student ratio of 1:70 per school year. Nebraska school-based speech-language pathologists are allowed up to a 25% deviation from the 1:70 ratio. This is equal to seventeen students. Therefore, at any one time during the year, an SLP may have 53-87 (70 +/- 17) students enrolled in a 1.0 FTE program and meet the State's mandate.

Table V

Comparison of Caseload Size Ranges with
Full/Part Time Employment

<u>FTE</u>	<u>Nebraska Mandate</u>	<u>ASHA Guidelines</u>
1.0	70 (53-87)	40 (25-40)
.8	56 (42-70)	32 (20-32)
.6	42 (32-52)	24 (13-24)
.4	28 (21-35)	16 (10-16)
.2	14 (11-17)	8 (5-8)

These caseload ranges were used as comparisons for 1984-85. Table VI shows that two of the eight caseloads (B and E) met Nebraska's mandate while four of the eight (A, C, F, and G) met ASHA's recommendations. The remaining two caseloads (D and H) did not meet criteria for either the mandate or ASHA guidelines. Caseload D was too low for the mandate and too high for ASHA. Caseload H was too high for either. Of those caseloads which failed to meet the State's mandate, five were too low and one was too high. Of the four which failed to meet ASHA's guidelines, all were too high.

Table VI

Caseload size acceptability based on ranges.

<u>Caseload</u>	<u>FTE</u>	<u>Caseload Size</u>	<u>Nebraska Mandate</u>	<u>ASHA Guidelines</u>
A	1.0	32	53-87	25-40
B	1.0	59	53-87	25-40
C	1.0	34	53-87	25-40
D	1.0	43	53-87	25-40
E	1.0	84	53-87	25-40
F	.4	16	21-35	10-16
G	.4	16	21-35	10-16
H	.2	20	11-17	5-8

State approval for the five caseloads which had greater than a 25% deviation below the accepted number was based on two reasons. They were time required for travel and number of schools in which children were served. Travel time (Table VII) is a critical issue when attempting to provide adequate services in the ESU #2 area. A typical school day in the ESU #2 area is approximately seven hours and forty-five minutes for teachers, with six hours of that time spent in academic instruction with students. Travel time between schools cuts into that portion of the school day which is academic - when students could be seen by the clinician. Using 4.8 hours of a six hour academic day for therapy leaves an hour and twelve minutes (1.2 hours) for travel time between schools. Dividing total travel time by five therapy days per week showed that three clinicians used more than 1.2 hours for travel between schools in 1984-85, two used less and two used very nearly all of the 1.2 hours for between school traveling. Both the State mandate and ASHA guidelines recognize travel time as a factor which is significant in reducing caseload sizes.

The second comparison of caseload size dealt with ASHA's guidelines for appropriate caseload size, severity of ESU #2's caseloads, and an estimated

Table VII

Travel time averages for travel between schools.

<u>Case/Load</u>	<u>FTE</u>	<u>Travel Time/ Week</u>	<u>Average Travel Time/Day</u>	<u>Comparison to Allotted Travel Time</u>
A	1.0	7 hrs. 30 min.	1 hr. 30 min.	exceeds
B	1.0	5 hrs. 10 min.	1 hr. 2 min.	equals
C	1.0	2 hrs. 20 min.	28 min.	less
D	1.0	4 hrs.	48 min.	less
E	1.0	9 hrs. 17 min.	1 hr. 51 min.	exceeds
F	.4	3 hrs. 10 min.	1 hr. 34 min.	exceeds
G	.4	2 hrs. 20 min.	1 hr. 9 min.	equals
H	.2	0	0	----

appropriate therapy time. A formula was developed based on the mid-point in ASHA's caseload size range (32) and three assumptions. The first assumption was that of severity distribution for the mid-point of ASHA's caseload size range (mild-25%; moderate-50%; severe-25%). The second assumption was that severe cases should receive twice as much therapy time as mild cases. The resulting formula using ASHA's mid-point range and assumed therapy time for severe cases yielded a minimum therapy time for one mild case of 30 minutes per week. The third assumption, then, was that this estimated minimum is an appropriate amount of time for a mild case.

The minimum of 30 minutes can be used as a factor in determining estimated appropriate therapy time. For an example, ASHA's mid-point on the caseload size range of 32 will be used. Distribution of severity was 25%-50%-25% corresponding to eight, sixteen, and eight students. Assuming a minimum service time of .5 (1/2 hour) and giving severe cases twice as much therapy time as mild, estimated appropriate service time would be calculated as follows:

$$8x + 16(1.5x) + 8(2x) = 24$$

$$4 + 12 + 8 = 24$$

$$24 = 24$$

The eight mild cases would receive four hours of therapy, the sixteen moderate cases would receive 12 hours of therapy, and the eight severe cases, eight hours of therapy.

This severity/time allotment for ASHA's guideline was devised for this study only. Given the current total weekly therapy hours at ESU #2 and current practices in the field, this severity/time allotment seems reasonable. No recommendations for therapy time based on severity are given in the ASHA guidelines.

Actual time spent in therapy by ESU #2 clinicians was compared to the estimated appropriate therapy time as computed above (Table VIII).

The actual therapy time for five caseloads, (A, C, D, F, and G) was within four hours of estimated appropriate therapy time. Three caseloads, (B, E, H) would require considerable more time to meet the therapy time defined by the formula. All three of these caseloads might be considered excessive in size, even by the State's criteria. Their sizes were 59, 84, and 20 (for a .2 FTE) respectively.

Estimated appropriate therapy time for all ESU #2 caseloads was 235.65 hours. This can be compared to ESU #2's actual therapy time of 133 hours in 1984-85. The amount of clinical therapy time difference between

Table VIII

Comparison of actual and estimated approximate therapy times.

Caseload	FTE	Severity range	Number of students	Actual therapy time	Estimated appropriate therapy time	Differences in therapy time by severity	Differences in total therapy time
A	1.0	Mild	11	4.5	5.5	- 1.0	
		Moderate	17	11.83	12.75	- .92	- 3.59
		Severe	4	2.33	4.0	- 1.67	
B	1.0	Mild	4	1.33	2.0	- .67	
		Moderate	36	10.33	27.0	-16.67	-27.84
		Severe	19	8.5	19.0	-10.50	
C	1.0	Mild	17	7.08	8.5	- 1.42	
		Moderate	13	10.17	9.75	+ .42	- 1.19
		Severe	4	4.0	4.0	.00	
D	1.0	Mild	14	5.25	6.5	- 1.25	
		Moderate	19	11.25	15.0	- 3.75	- 3.88
		Severe	10	8.62	10.0	- 1.38	
E	1.0	Mild	12	2.58	6.0	- 3.42	
		Moderate	26	7.42	19.50	-12.08	-47.28
		Severe	46	14.22	46.0	-31.78	
F	.4	Mild	6	2.83	2.95	- .12	
		Moderate	6	2.92	4.43	- 1.51	- 2.15
		Severe	4	3.42	3.94	- .52	
G	.4	Mild	4	2.08	1.97	+ .11	
		Moderate	9	3.83	6.64	- 2.81	- 3.15
		Severe	3	2.50	2.95	- .45	
H	.2	Mild	2	.33	1.0	- .67	
		Moderate	7	2.00	5.25	- 3.25	-11.25
		Severe	11	3.67	11.00	- 7.33	

actual therapy time and estimated appropriate therapy time is 102.63 hours. ESU #2 provides service on an average of 24 hours per week per clinician. Dividing the therapy hours difference by 24 hours results in an additional 4.18 blocks of therapy time needed if one is to base therapy time on the assumptions developed above. This would result in an additional 4.18 caseloads to the current ESU #2 number of 6.0 for a total of 10.18 caseloads. An additional 4.18 FTE clinicians would be needed to provide service to those caseloads.

The third comparison of caseload size looked at the total number of current caseloads and clinicians at ESU #2 as opposed to the number of caseloads and clinicians resulting from using the maximum size per caseload recommended by ASHA. The total speech handicapped population of ESU #2 (304 students) was divided by the maximum number of students (40) which should be seen in an itinerant service delivery program as recommended by ASHA. The resulting number of caseloads was 7.6 as compared to the current 6.0 caseloads at ESU #2. This would mean that in 1984-85, ESU #2 would have needed 7.6 FTE clinicians if ASHA's recommended maximum caseload size were used - an addition of 1.6 FTE staff members. Table IX shows the number of current caseloads and clinicians at ESU #2

versus the number needed using ASHA's maximum caseload size and using the estimated appropriate therapy time formula.

Table IX

Comparison of number of caseloads.

Caseloads	A - H
Total number of students	304
Current caseloads at ESU #2 (State mandate)	6.0
Caseloads using ASHA's maximum	7.6
Caseloads using formula for estimated appropriate therapy	10.18

Rationale for Caseload Size

ASHA states its rationale for caseload size for an itinerant service delivery model is based on two factors. One is that complex cases demand lower caseloads and the second is that the upper limit of 40 is only slightly lower than the national average of 43. ASHA continues with the suggestion that the upper limit of 40 be reduced depending on such factors as amount of individual service required, severity of communication disorders, group sizes, travel time, and amount of administrative paperwork required.

ESU #2's rationale for its caseload sizes was based on two factors. One was a combination of travel time and number of buildings in which students were seen. The second was a combination of a high concentration of handicapped students and lack of personnel.

In 1984-85, there were seven caseloads out of eight for which it was necessary to seek State approval for deviations. For caseloads below the lowest deviation point of 53 (five of eight caseloads), travel time and the large number of schools served as the rationale. For the two caseloads which had larger numbers of students than the mandate requires, the rationale for the deviations were that a high concentration of handicapped students and lack of personnel in that particular geographical area existed. In one caseload, the use of an aide seemed to provide the rationale that the caseload size was additive; that is, a clinician providing direct service and supervisory service to an aide implied that the clinician could provide services to a larger caseload.

Five of the eight clinicians indicated that pressures from administrators to meet State mandates were mild to moderate, however, only one clinician indicated that the pressure had actually increased the

caseload size. Clinicians reported that paperwork and travel time made no difference in their caseload size.

Discussion

Review of available data on State Education Agency mandated caseload requirements reveals that in at least 30 states there is pressure from state education agencies to maintain large caseloads. Mandatory high caseloads reduce the quality and scope of services available to students with communication disorders. There is no provision for severity of the caseload or any other number of factors related to caseload size such as group size, services provided or intensity of therapy.

ASHA's guidelines on caseload size may be used to assist school-based clinicians and school administrators in devising their own rules and regulations for provision of speech-language services. These guidelines give attention to differences in disorder types and severity and to innovative service delivery models. Because of these attentions to severity and service delivery, and, therefore, student needs, ASHA's model may be regarded as a preferred method for determination of appropriate caseload size to Nebraska's mandate on caseload size. The State's mandate is a simple number ratio of one clinician per

70 students. This ratio determines caseload size as opposed to the needs of students as the basis for determining caseload size.

Although ASHA's statement on appropriate caseload size includes three other major service delivery models, this study has addressed the use of the itinerant service delivery model in providing effective speech-language services since it is the model currently being used by ESU #2 speech-language pathologists. In the itinerant service delivery model, the upper limit of 40 students may be reduced depending on such factors as severity of handicap, travel time, and individual versus group settings. This scheduling pattern is conducive to successful progress and higher dismissal rates. It allows for varying degrees of intensity of service required by the more complex communication problems than a scheduling pattern based entirely on meeting a mandated number of students.

Analysis of the data in this study revealed that cases being seen and services provided at ESU #2 were commensurate with ASHA's criteria for these program characteristics. Cases seen included all types of communications disorders, and all severities, mild to severe were being served. Services which were provided were those outlined by ASHA. In addition, ESU #2

personnel conducted hearing screening and audiological testing.

The intensity of services provided at ESU #2 does not meet one criterion for that program characteristic as suggested by ASHA, but does meet the minimum set for the second criterion. For the time per day criterion ASHA suggests a minimum of 30 minutes per session. Most students are being seen less than half an hour per session. Only eleven per cent of ESU #2 speech-language therapy sessions were 30 minutes or more. ASHA recommends sessions be held two to five times per week. With a small exception of five percent, ESU #2 contacts were on a twice a week basis. This met the minimum of times per week outlined by ASHA. The typical therapy schedule for ESU #2 clinicians was 20 minutes (75% of ESU #2's scheduling) twice a week (85% of the number of contacts per week).

The services provided dovetail with the current role of the SLP in a school based program. In the past, it is probably safe to say that clinicians were viewed as itinerant workers dealing mainly with articulation problems and working with students in groups because of high maximum caseload requirements set by state law. Speech-language pathologists in the schools are presently providing services to students

with more complex handicaps than in the past. An important aspect of the school clinician's duties is cooperation with other school and health specialists. Cooperative planning yields effective results for children in habilitative and educational programs. Speech-language pathologists no longer are segregated from the rest of the school but rather are an integral part of the school curriculum which requires more in-depth services - not twenty minutes of service twice a week.

In attempting to analyze the results of this study, the problem of providing appropriate intensity of services has to do with the utilization of time. Time is our most valuable commodity and it is apparent from this study that if the ASHA service delivery model is viable, the school clinician cannot function effectively under the artificial number constraints imposed by the State Department of Education and by school systems.

Decisions made regarding how the school clinician's time is to be utilized often are based on information about how most speech clinicians are currently scheduling therapy. More appropriate criteria would be the needs of students with speech handicapping conditions and how services could be

delivered to best effect remediation.

Perhaps one method of effective utilization of time would be to use a sliding therapy commitment scale. This scale could be based on the following assumptions which seem reasonable and logical: 1) the parameters for caseload size as outlined by ASHA are viable; 2) that a minimum of 30 minutes of therapy per week for a mild case is sufficient; and 3) that severe cases should receive more time than mild cases.

Clinicians and administrators would be able to use the base unit of one mild case, the formula for estimated appropriate therapy time, and ASHA guidelines to define appropriate caseload size and therapy time.

CHAPTER V

Summary, Conclusions, and Recommendations

Summary

A primary problem facing speech-language pathologists in school-based programs is the question of appropriate caseload size.

Excessive caseload sizes have been perpetuated. Factors which have contributed to this situation include state mandates on maximum caseload sizes, state reimbursement policies, a stereotyped image of the clinician's role, both within and outside the profession, increased sophistication and innovation in clinical assessment, and increased intervention as a result of PL94-142.

Nebraska is one of thirty states with a mandate on caseload size. Its mandate for maximum caseload is the second highest in the nation. A clinician-student ratio dictates a caseload size of 70 students. With acceptable deviations, the caseload range is 53-87.

The American Speech-Language-Hearing Association has issued a position paper on appropriate caseload size based on the use of service delivery models. These models include a consultation program, an itinerant program, a resource room program, and a self-contained program.

Clinicians and administrators at Educational Service Unit #2 are concerned about caseload size and scheduling. A continuum of service concept with service delivery models would assist the SLP in demonstrating the priorities of their program to Unit supervisors and school administrators.

Using survey information, each of the seven program characteristics of ASHA's itinerant service delivery program were applied to 1984-85 ESU #2 caseloads. The program characteristics included: cases served, services provided, group size, time per day, time per week, caseload size, and rationale.

Analysis of the data revealed that services in 1984-85 were commensurate with ASHA's criteria. Services dovetailed with current role expectations for an SLP in a school program.

The intensity of those services, however, did not meet ASHA guidelines for the itinerant program. Services were being provided on a schedule that did not allow for the more in-depth program of intensive service required by more complicated or severe problems. Caseload size comparisons revealed the following: 1) four of the eight current ESU #2 caseloads met ASHA's recommendation for caseload size; 2) using ASHA's guidelines, a devised formula to

develop a sliding therapy commitment scale, and the severity of caseloads at ESU #2, an additional 102.63 hours of therapy time would have been needed to serve students; this equals 4.18 caseloads; and finally, 3) dividing the maximum number of students on the itinerant service delivery model (40) into the speech handicapped population of ESU #2 identified 7.6 caseloads or 1.6 more than ESU #2 currently has.

Conclusions

1. A primary problem facing speech-language pathologists at ESU #2 is appropriate caseload size.
2. Nebraska's mandate makes the same requirements of caseload size across the state without regard to the nature of the handicap, number of students involved, or the role of the SLP in a particular area.
3. The role of the SLP is changing from a segregated provider of services for large numbers of students with articulation problems to that of a specialist in communication. The consultative role is becoming more important as part of this new role.
4. If it may be surmised that the ASHA model is a viable model for effective service delivery, services need to be provided on a sliding therapy commitment scale to meet individual needs. Those students with

more severe problems require more therapy time than mild or moderate problems. Service delivery programs should incorporate this concept, which, though hypothetical, is also logical.

5. Basing a caseload size on service delivery program(s) with maximum caseload ranges, rather than a simple ratio, would provide utilization of time that would provide effective remediation.

Recommendations

1. The rationale for appropriate caseload size in Nebraska should not be based on simple numbers but on service delivery models used. Speech-language pathologists in schools are presently serving students who have more complex problems and are required to spend numerous hours fulfilling other responsibilities commensurate with their current role in the schools. Therapy time based on severity and use of a service delivery model may provide more effective rehabilitation than a system which provides for therapy time simply divided among large numbers of students.

2. Using the parameters of ASHA's itinerant service delivery model and assumptions on therapy time allotment, a sliding therapy commitment scale may be appropriate for determining estimated appropriate therapy time.

3. A study of other ESU's may provide alternative service delivery models and therapy commitment data which are effective for providing appropriate services in rural areas. Included in this study would be the question of caseload size as it relates to factors pertinent to rural areas, namely, travel time and number of buildings in which children are served, as well as severity of the disorders and their concomitant therapy time.

4. Speech-language pathologists serving rural areas and, in particular, those at ESU #2, are encouraged to look at their caseloads with an eye to innovative ways to schedule. Answering the question of exactly what are the needs of the students with communication handicaps may aid in new decisions about utilization of time. The priorities of a program need to be determined before it can be ascertained whether or not more or less help is really needed, and if so, what level of help is required.

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