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THE USE OF REGULAR CLASS STUDENTS AS  
TEACHING ASSISTANTS IN SPECIAL  
EDUCATION CLASSES IN MICHIGAN

By

Donald H. Doorlag

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## ABSTRACT

### THE USE OF REGULAR CLASS STUDENTS AS TEACHING ASSISTANTS IN SPECIAL EDUCATION CLASSES IN MICHIGAN

By

Donald H. Doorlag

The purpose of this exploratory study was to systematically examine programs in Michigan using regular class students as assistants in educational programs for educable mentally handicapped, emotionally disturbed, and physically handicapped children. Specifically, an attempt was made to; (a) examine the present status of student assistant programs serving handicapped children in Michigan, (b) determine the operational practices of teachers of the handicapped using regular class students as assistants, (c) examine the teachers' stated perceptions with regard to the effectiveness and feasibility of various aspects of the student assistant program, and (d) analyze the findings of the study to determine what implications they may have for the initiation and operation of student assistant programs in the future.

To provide a knowledgeable basis and gain greater insight into the various dimensions of student assistant

programs, an intensive review of the literature was pursued. The review revealed that; (a) students are considered to be fully capable of serving as assistants, (b) the assistant program is considered to provide a positive effect upon the educational program, (c) the program is viewed as providing benefits for both the student in the class and the assistant, and (d) there appears to be few administrative problems of great enough magnitude to deter the development of an assistant program.

In order to procure data for this study, all special education directors in Michigan were contacted to obtain the names of teachers of the handicapped (in the disability areas selected for this study) who were using, or had used, regular class students as assistants in their classrooms. An instrument developed especially for this study was sent to all teachers in Michigan who were reported to meet the criteria for inclusion in the study.

The information accumulated through the use of the questionnaire was summarized and the analysis of the data resulted in findings relating to the present status of assistant programs serving handicapped children in Michigan and to the operational practices of teachers using regular class students as assistants. The analysis of the data also resulted in findings relating to the teachers' stated perceptions regarding the ability of regular students to serve as assistants, the effect of the student assistant program upon the educational program, the effect of the

program upon the student serving as an assistant, the effect of the program upon the handicapped student in the class, and the teachers' perceptions of the various administrative aspects of the program.

The following conclusions were derived from the findings:

1. Teachers of the handicapped who have worked with regular students as classroom assistants were highly supportive of the student assistant program.

2. The student assistants were primarily utilized in the instructional aspect of the classroom program, as opposed to the clerical and supervisory aspects.

3. Student assistants were judged to be capable of performing instructional tasks in the classroom.

4. The teachers believed that the student assistant program improved the educational program for the handicapped.

5. The student assistant program was judged as having a positive effect upon the student assistant's personal and academic development.

6. Service as a student assistant was reported to have a positive effect upon the recruitment of potential teachers into the field of special education.

7. The student assistant program was judged to have a positive effect upon the attitude and performance of handicapped children.

8. The administrative problems encountered in conducting student assistant programs were not considered to be extensive enough to discourage the development of the assistant problems.

9. The student assistant program was judged to be effective regardless of the area of handicap with which the teacher worked, the academic level of the handicapped students in the class or the academic level from which the student assistants were obtained.

10. The longer the teachers had taught, the less they supported the student assistant program.

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## CHAPTER I

### THE PROBLEM

The use of students as assistants in the classroom is not a new practice in American education. In the one-room school house, older students were often used to assist the younger students with their lessons (Webb, 1961) or to help the teacher by performing practical tasks (e.g., clerical, janitorial) which would free the teacher to concentrate on his instructional duties.

A review of the literature pertaining to the use of students as aides or assistants in regular education programs has revealed a number of articles relating to this subject and a great deal of interest as to the possible educational implications of such programs. The majority of these articles are rather general in nature and often relate to an author's own experience with a particular program. Very little has been done in the way of a systematic examination of the effectiveness and feasibility of student assistant programs, nor has any attempt been made to examine the extent to which such programs are presently in operation. This lack of examination has been

especially true in special education, as there is very little information concerning the use of students as assistants in educational programs for handicapped students.

The authors who have written with regard to the use of student assistants in regular classes have generally directed their attention to several areas of interest. These areas include: (1) the effects of student assistant programs on both the student in the class and the assistant, (2) the possible recruitment value of creating an interest in education through the use of student assistant programs, (3) the effect the use of student assistants has upon the educational program, (4) the types of activities which the assistants are capable of performing, and (5) the administrative aspects involved in conducting such a program.

### Need for the Study

There appears to be a general agreement, among those who have written in the area, that the use of student assistants in regular education is a feasible and effective method of improving an educational program. Although the literature makes little specific mention of the effect of assistant programs upon educational programs for handicapped students, the implications appear to clearly apply to programs for the handicapped. One of the reasons for this applicability is that the majority of assistant programs

described in the literature are "geared" to serve those children in the class who are not achieving at "normal" levels.

There is presently a great need for additional personnel in the field of special education and it would seem appropriate that an examination be made of programs designed to alleviate this personnel shortage. The use of student assistant programs provides more available manpower in the classroom, which may allow for the provision of a more appropriate educational program for the handicapped children. It might also influence regular class students to become interested in choosing the field of special education as a vocation. The program could be found to provide additional personal and educational benefits for the special education teacher, the student assistant and the student in the class.

Although the use of students as assistants in regular educational programs appears to be considered an effective addition to the educational program, there has not been a careful examination of the use of similar programs with handicapped students. If the use of such programs is to be considered by special educators, there is a need to systematically examine student assistant programs which serve handicapped children to determine if they are perceived as being effective and feasible.

The findings of such an examination will provide the necessary information for arriving at a decision as to

whether a student assistant program should be considered for use in an educational program for the handicapped. If it is decided to use such a program, the information obtained from the study can be used in the development of guidelines for the assistant program. The study can also be considered as the basis, or stepping off point, for further research in this area.

### Purpose of the Study

The purpose of this exploratory study is to systematically examine programs in Michigan using regular class students as assistants in educational programs for handicapped children. In more definitive terms, the objectives of the study are:

1. To examine the present status of student assistant programs serving handicapped children in Michigan (e.g., the number of assistant programs serving handicapped children).
2. To determine the operational practices of teachers of the handicapped using regular class students as assistants (e.g., length of time the assistant serves each week, selection of assistants).
3. To examine the teacher's stated perceptions in regard to the following areas:

- a. ability of the assistants,
  - b. effect of the assistant upon the educational program for the handicapped,
  - c. effect of the program upon the assistant,
  - d. effect of the program upon the handicapped student,
  - e. administrative aspects of the program.
4. To analyze the findings of the study to determine what implications they may have for the initiation or operation of student assistant programs in the future.

#### Research Questions

To accomplish the general purposes of this study, the data obtained in the study is used to examine the following research questions.

Question 1.--What is the present status of programs using regular class students to serve as assistants in classes for handicapped children in Michigan?

- 1a. How many student assistant programs are operating in special education classes for the educable mentally handicapped, the emotionally disturbed, and the physically handicapped in Michigan?
- 1b. What is the extent of the teaching experience of the teachers who have operated these programs?

- 1c. How long have the teachers used student assistants?

Question 2.--What are the operational practices used by the special education teachers operating student assistant programs with handicapped children?

- 2a. With which general grade levels (e.g., preschool, early elementary) of handicapped children are the assistants used?
- 2b. From which academic level (e.g., junior high, high school) are the student assistants obtained?
- 2c. How many assistants do the teachers generally use each semester and how many days per week and weeks per year are the assistants used?
- 2d. Why did the teachers decide to use student assistants?
- 2e. From which type of group (e.g., Future Teachers, regular class volunteers) do the teachers obtain their assistants?
- 2f. What involvement do the special education teachers have in the selection of student assistants?
- 2g. How much time do the assistants spend in the classroom each week?
1. How much of this time is spent performing:

- a. Instructional tasks,
- b. Clerical tasks,
- c. Supervisory duties?

2h. What types of training experiences are provided for the assistants?

2i. How much time does the teacher spend consulting with the assistant each week?

Question 3.--What are the teachers' stated perceptions in regard to the various areas which relate to the feasibility and effectiveness of the assistant program?

3a. Are regular class students perceived as being able to serve effectively as teaching assistants in educational programs for handicapped children?

3b. What type of effect is the student assistant program perceived as having upon the educational program for the handicapped?

3c. What type of effect is the student assistant program perceived as having upon the student serving as an assistant?

3d. What type of effect is the student assistant program perceived as having upon the handicapped student in the class?

3e. Is the student assistant program perceived as being a feasible and effective program to be used with special education classes?

Question 4.--What are the teachers' stated perceptions in regard to various administrative aspects of the assistant program?

Question 5.--Is there a significant relationship between the type of handicapped student (EMH, ED, PH) in the special education classroom and the teacher's perception of the effectiveness and feasibility of the assistant program?

Question 6.--Is there a significant relationship between the academic level (e.g., preschool, early elementary) of the handicapped student in the special education class and the teacher's perception of the effectiveness and feasibility of the student assistant program?

Question 7.--Is there a significant relationship between the academic level (e.g., later elementary, junior high) from which the student assistants are obtained and the teacher's perception of the effectiveness and feasibility of the student assistant program?

Question 8.--Are there any significant relationships between the teacher's stated perception of the feasibility and effectiveness of the assistant program and:

- a. Number of years the teacher has taught,
- b. Number of years the teacher has taught handicapped children,

- c. Number of semesters the teachers have had assistants,
- d. Amount of time the teachers use the assistants in the class each week?

Question 9.--Are the teachers operating student assistant programs concerned about areas of interest relating to the program which were not examined by the instrument used in the study?

#### Definition of Terms

Handicapped students are those pupils certified to be educable mentally handicapped (EMH), emotionally disturbed (ED), or physically (visually, auditorily, orthopedically) handicapped (PH) and enrolled in regular daily attendance in the school district operating a special education program approved by the Michigan Superintendent of Public Instruction.

Perception is a mode of response in which the observer's set or purpose and background of experience becomes the major determiners of the stimuli to which he responds (Good, 1959).

Special education teachers are those persons who are employed to teach in special education programs as provided by law, in accordance with rules and regulations for the various programs, and are approved by the Michigan Superintendent of Public Instruction.

Student Assistant is that individual who is regularly a student in the general education program at the elementary, junior high, or senior high level and spends some time during the year serving under the direction of a regular class or special education teacher.

The terms "student assistants" and "teaching assistants" are used synonymously throughout the study.

#### Limitations of the Study

The data collected were limited to the respondents' answers to the items contained in the questionnaire. The names of the respondents contacted in this study were limited to those obtained from local and intermediate directors of special education. Geographically the study was conducted in school districts within the State of Michigan.

#### Overview of the Thesis

The introduction, need, purposes, research questions, definitions and limitations of the study are included in this chapter. In Chapter II, the pertinent literature is reviewed. The identification of the population, method of collecting data, development of the instrument, objectives of the instrument, and the analysis of the data are presented in Chapter III. Chapter IV contains the presentation and analysis of the data derived from the study, illustrating the significance of the data

by the use of textual materials and tables. Chapter V provides the presentation of the findings and conclusions drawn from the analysis of data. Practical and research implications are also included.

## CHAPTER II

### REVIEW OF THE LITERATURE

The review of the literature is organized to include several different areas relevant to the study; namely, the ability of students to serve as assistants, the effect the student assistant has upon the educational program, the effect of the program upon the assistants, the effect of the program upon the student in the class, and the administrative aspects of the assistant program.

#### Ability of the Assistants

The ability of regular class students to serve as assistants in educational programs has been mentioned frequently in the literature. The fact that they are able to provide some service in the classroom is not generally disputed, but there is some discrepancy between the various authors' perceptions of the degree to which the assistant should be involved in classroom activities. At one end of the continuum is Talley (1948) who advocates the use of students to serve as substitute teachers. Sokol (1952), while not advocating the use of students as substitute teachers, clarifies this general position somewhat by

pointing out that during World War II students were used successfully as substitute teachers because there was a shortage of qualified persons to serve in this capacity. On the other hand, Hipple (1969) noted that assistants are often used to perform tasks such as helping kindergarteners put on items of clothing (e.g., boots and mittens) rather than have a professionally trained teacher performing these tasks.

In an article concerning the use of non-professionals in the classroom, Pinkerton (1967) pointed out that the Bay City Study, which concerned the use of non-professionals in the regular classroom, determined that 12% to 18% of the teachers' time was spent performing clerical duties and 21% to 69% of their classroom activities didn't require professional competence. Although Pinkerton's article did not specifically mention the use of student assistants, the implication seems to be that many activities in the classroom could be performed by someone other than the professionally trained person.

Gibson (1961) lists three types of activities in which student assistants should be involved: (1) clerical and mechanical duties, (2) supervision, and (3) instruction. It is his belief that one must be very careful in the area of supervision because of the legal implications, and that instruction is the most important area of service which may be provided by the student assistant. He also believes

that instruction is the most satisfying part of the educational program and the assistant should be allowed to participate in this area. The author states in the text of the article that the student assistant "may be more effective than most teachers would believe" (p. 110). He continues by explaining that student assistants are capable of performing individualized instruction and that the schools should provide more experiences in which the assistants can experience the excitement and satisfaction of helping others learn, rather than just having them perform menial tasks.

The Institute for Social Research at the University of Michigan has explored the use of older students working with younger students in an instructional capacity, in a program which is described as developing cross-age relationships. In one of their earlier reports describing the program (Lippitt & Lohman, 1965), the directors of the project state that "it is an observed fact that children, with proper training and support from adults, are able to function effectively in the roles of helpers and teachers of younger children" (p. 113). A later article (Lippitt, 1969) states that "children in the same grade often help each other. Recent experimentation reveals even greater advantages when older students become helpers for children three years or more their juniors" (p. 41).

Lippitt and Lohman (1965) expressed the belief that one of the reasons for the effectiveness of a cross age instructional program is that an older child is able to communicate more effectively than adults at the younger child's level. They continue by stating "that a slightly older child provides a more realistic level of aspiration for the younger child than an adult would" (p. 114). Aslin (1969) also points out that he has learned from experience with student assistant programs that the success of the program can be explained by the fact that the older students are better able than adults to communicate with the younger students. Other authors (Kuppel, 1964; Russell, 1968) explain the success of the assistant program by emphasizing that another student understands and appreciates the problems of the younger child in a manner no adult can match.

In a number of other articles, the authors (Delaney, 1964; Loughlin, 1965; Mosel, 1962; Sokol, 1952; Weller, 1955) mention that the main area in which student assistants can provide help for the teachers is in performing clerical duties. They do not discuss the students' ability to serve in an instructional capacity, but restrict their comments to their use as clerical assistants.

Others (Bammann & French, 1958; Gross, 1968; Jenkins, 1962; Kohler, 1969; Vassilaros, 1969) have reported that student assistants were fully capable of performing many teaching activities in the classroom.

Gantent (1958) comments seem to summarize the beliefs of many authors in this area when he states that "they (the student assistants) are smarter than you think. There is no limit to the ability of youth when challenged to the fullest; they will really perform if the opportunity arises" (p. 144).

### Student Assistants' Effect Upon the Educational Program

A great deal of the literature relating to the use of student assistant programs points out the positive effects the assistant program has upon the educational program. In a recent article by an authority in the area (Lippitt, 1969), it is explained that there is a growing recognition among educators that "children helping other children learn may be a partial answer to four educational challenges: providing individualized instruction; increasing motivation; scheduling enrichment opportunities; and helping build self esteem" (p. 41). In the literature concerning the use of student assistants, one will seldom find the benefits of an assistant program listed in such a concise manner, but other articles do frequently mention these types of benefits to the educational program.

Hipple (1969) believes that the use of assistants can bring about significant improvements in the educational program. He discusses the fact that the dimensions of the improvements possible with the implementation of an

assistant program are limited only by a school's effort and imagination. Hipple feels that a school can achieve much more through the use of the assistant program than would be possible "under today's conditions of overworked teachers in overcrowded classrooms" (p. 85). He also finds that teachers are human and their energy is limited. When that energy is spent in the necessary but easily performed tasks, it cannot be brought back for the really crucial concerns of teaching. When the school makes use of the assistant program, the teacher "has more time for her central task; teaching" (p. 86).

Other authors (Aslin, 1969; Kleinert, 1949; Mosel, 1962; Pinkerton, 1967; Vassilaros, 1969; Youngpeter, 1962) agree that a benefit of the program is that the teachers are relieved of many time consuming tasks which allows them to spend a greater amount of time on their professional duties. Leep and Tracy (1967) concur in this area and in addition, state that "if traditional practices for utilizing the teacher's time are continued, the forecast for teachers in the foreseeable future having the time to teach is gloomy" (p. 29).

Although the teacher may receive many positive benefits from the student assistant program, it has been pointed out that many teachers are very apprehensive about using assistants in their classrooms. Howard (1965) noted that it takes some teachers a while to learn how to use an

assistant, but it is possible to do so and often quite profitable for the educational program. According to Hipple (1969), a difficult problem associated with the assistant program is the reluctance of some teachers to accept any help at all from outside the walls of their rooms. He attributes this problem to two types of teachers; the masochist who delights in relating how hard they must work, and the individual who is so insecure and threatened as to be rendered almost helpless if someone else (even if it's only a student just a few years older than those they teach) comes into their room. The author elaborates further on this area of concern by stating that:

The vast majority of teachers, however, will welcome help of any kind, just as those teachers already using students assistance have welcomed it. They recognize that it is more important that their students learn than that they teach; anything, or anyone, which helps them effect that learning, deserves and receives their earnest consideration (p. 84).

The use of student assistants is seen by many writers as providing the teacher with the opportunity to consider a greater range of instructional methods to be used with students in the classroom. Lippitt and Lohman (1965) suggest that both younger learners and their adult teachers will be significantly helped in "academic" learning activities through the utilization of trained older children available for tutoring, drilling, listening and correcting, and other teaching functions.

Fleming (1969) feels that the use of an assistant program can help to solve two crucial problems--how to make education relevant and how to individualize instruction. Watts (1968) believes that the use of student assistants has filled an instructional gap in the class.

The assistant program's provision of increased individualized instruction in the classroom is mentioned by a number of other authors. Ostrowiak (1968) feels that as class enrollments grow, the individualization of instruction decreases and implementing a program such as the student assistant program can help to improve this situation. Klee (1964) found that student assistants were able to devote an enormous amount of time in giving specialized aid to students when necessary. This gave needy children rare opportunities for advancement which would otherwise be impossible. The provision of an increased amount of individualized instruction in the classroom is noted by a number of others (Gibson, 1961; Gross, 1968; Hipple, 1969; Russell, 1968; Walters, 1965).

A number of articles cite other benefits to the educational program through the use of student assistant programs. Driscoll (1969) advocates the use of student assistants to tutor students in the summer with the intention of helping younger children maintain and/or improve reading skills over the summer. Sokol (1952) believes that the assistant can provide invaluable

assistance for substitute teachers and Denny (1968) uses assistants to aid young elementary pupils in orienting themselves during their first week of school.

Another advantage which has been mentioned (Delaney, 1964; Fleming, 1969; Gross, 1968) is the fact that there is little or no expense involved in a student assistant program.

In an article concerning the use of student assistants (which he refers to as participatory education) Hipple (1969) has reflected upon some of the effects which student assistant programs have upon the educational program. He believes that few innovations in education which involve as many students as participatory education can be put into practice with so little administrative effort and expense. He continues by stating that even though there may be a few minor problems to overcome in these programs "the goals that can be achieved far outweigh these concerns" (p. 89). In addition, he also explains that "it will not solve overnight all of the shortcomings of American education, but it will ease many of the problems and over the long haul, may entirely remove some of them" (p. 89).

#### Effect of the Program Upon the Assistant

A frequently mentioned area of interest is the effect that service in the program has upon the assistant.

It is generally noted that this service has a positive effect upon the assistant and it is believed to "contribute significantly to the personal growth of the assistants" (Leep & Tracy, 1967, p. 29).

A large number of authors view the student's service as an assistant as having a positive effect upon his own academic achievement. As Lippitt (1969) points out, service as a student assistant can provide enrichment for brighter students as well as remedial work for slower ones. In an earlier article, Lippitt and Lohman (1965) noted that serving as an assistant will help the students to test and develop their own knowledge, and also help them discover the significance of that knowledge. Trasin (1960) relates that the student will benefit academically from his service as an assistant because he must thoroughly understand what he is teaching in order to be able to teach it to others. Lippitt and Lohman (1968) attempt to explain the reason for this phenomenon by stating that "children who might have had no interest in reviewing subject matter when they were in the lower grades make a tremendous effort to fill the gaps when they are responsible for helping someone else understand" (p. 26).

The use of older students with poor reading skills to read to younger students is seen by some authors (Schwartz, 1968; Shapiro & Hopkins, 1967) as a method which can be used to build skill and confidence in

the assistant. Driscoll (1969), McCracken (1965), and Rime and Ham (1968) describe programs in which the assistants provide individualized instruction in reading. The authors state that the assistants benefit academically from service in these programs.

Hassinger and Via (1969) examined the use of 100 reading-retarded high school age student assistants who were used to teach reading to 4th, 5th, and 6th grade students in a six week summer school program. It was reported that the assistants achieved a mean age gain of eight months in their own reading level during the six week period, which the authors described as significant.

Bender (1967), Fleming (1969), Kleinert (1949), Le Boeuf (1968), Lippitt (1969), Liu (1964) and Wright (1965) are among those authors who believe the student assistant will benefit academically from service as an assistant. These authors have concluded that the program is beneficial to the assistants obtained from the elementary, junior high and high school levels.

Bringing about a change in the attitudes of the assistant is a major area often discussed in the literature which relates to the effect that the assistant program has upon the assistant. Generally, these discussions revolve around the improvement of the assistant's attitudes in a variety of individual areas.

An area which is frequently mentioned in this regard is the improvement often seen in the self-concept of the student assistant. Lippitt and Lippitt (1968) believe that service in the program will increase the assistants' self-respect and their belief in their own abilities. Fleming (1969) notes that there is an improvement in the attitude of the student after serving as an assistant, while Leep and Tracy (1967) found that service as an assistant increased the assistant's self-confidence. Rime and Ham (1968) found that the assistants' new self-confidence is reflected in the quality of their work. Russell (1968) and Zsenyuk (1968) believe that the increase in self-confidence is generated by the respect and appreciation shown by the students in the class, and by the fact that the assistant finds that he is able to perform tasks which he did not previously know he could perform. Hipple (1969) finds that "there are benefits to the individual as he comes to understand and to accept himself more fully" (p. 88).

Another benefit which the assistants receive from serving in a program is the improvement in understanding, knowledge, and acceptance of other children (Leep & Tracy, 1967). A number of authors (Fredrick, 1959; Howse, 1967; Liu, 1964) agree with that premise, and one study (Jones, Marcotte & Markham, 1968) found that assistants serving with the trainable mentally handicapped tended to improve

in their general understanding and acceptance of handicapped students. This study found, however, that these older elementary students remained deficient in their understanding of the vocational and educational limitations of the handicapping condition.

Service as an assistant is often considered as an effective method of developing a positive attitude within the student toward choosing the profession of teaching as a vocation. A number of writers (Howard, 1965; Kleinert, 1949; Ostrowiak, 1968) feel that service as an assistant provides the student with a more realistic look at the duties of the teacher and the school. Youngpeter (1962) believes that through service in the program the assistant may be aided greatly in his outlook on teaching. Leep and Tracy (1967) found that many assistants felt their experience had influenced their future vocational aims and Nelson (1968) determined that the assistants felt that service in the classroom did a much better job of giving them a realistic view of teaching than that which was provided by only observing in the classroom. Achtenhagen (1952) believes that service in the classroom can do a great deal to allow the students to determine what kind of attitudes they actually have toward teaching. She feels that it is much more realistic for the high school student, who believes he is interested in becoming a teacher, to determine if he is interested in working with children

during his high school years, rather than waiting to examine this question during his final year of college.

In a study related to identifying the factors which influenced a person to select special education as a vocational area, Gottfried and Jones (1964) found that direct work experience with exceptional children and contact with professional workers were the most important antecedents to the selection of a career in special education. Their study suggests that the active participation of high school students should be an integral part of every program in each community. Another article by these authors (Jones & Gottfried, 1966) and an article by O'Neil (1969) suggest that the students' background of experiences may be a determining factor in the selection of the disability area in which they wish to teach.

Hipple (1969) provides a statement which seems to summarize several of the benefits of the program in creating within the assistant a realistic attitude toward the field of teaching.

Students in these and other programs who have seen both the problems and the promises of teaching from the teacher's side of the desk before they have completed their career plans may choose education with a zeal and commitment not always found among those who become teachers because they think they will "like it." These student assistants who become teachers will do so with an awareness of what they can expect, of likely achievements and probably failures. They will become, I submit, good teachers (p. 87).

The effect of service in the assistant program upon the assistant has been carefully reviewed in the

preceding paragraphs. In conclusion, Lippitt and Lohman (1965) have provided an appropriate statement which illustrates the needs and the challenges in this area.

In a society in which motivation to learn is an increasingly critical issue, and in which service roles are the most rapidly expanding occupational areas, there is an urgent need to provide youngsters with opportunities to engage in relevant and meaningful service activities during their school years.

This places an obligation on those working with children to find new ways of providing them with opportunities to take initiative and responsibility, to test out newly developing skills, to learn about the gratifications of achievement and of helping others to achieve, to develop skills of relating more effectively to others, and to develop an appreciation of the value of understanding themselves and others (p. 117).

#### Effect of the Program Upon the Student in the Class

An examination of the literature reveals a general consensus among the authors that the assistant program has a positive and beneficial effect upon the student in the class. A number of articles contain comments relating to specific areas of concern, while other articles apply their comments to the general benefits of the program. Bender (1967), Driscoll (1969), Kohler (1969), Kuppel (1964), Liu (1964), Trasin (1960), and Wright (1965) concur in the opinion that the use of the student assistant program is beneficial to the students in the class. Hipple (1969) found that "students in a class where the assistants work will gain much from participatory education. They will be the beneficiaries of the efforts of an entire instructional

team, one composed not only of their regular teachers, but also of older students" (p. 86).

The program's effect upon increasing the academic achievement of the student in the class is a topic frequently mentioned in the literature. Watts (1968) found that the program helped to increase the students' interest in the class and Gross (1968) noted an increase in the students' motivation to achieve academically.

A recent study reported by Hassinger and Via (1969), involved the use of 100 reading-retarded high school students to tutor 4th, 5th and 6th grade students in reading during a six week period in the summer. It was determined that the mean gain in the reading level of the tutees in this program was 4.6 months, but "perhaps more important than the measured reading growth was the positive attitude observed in the tutees, not only toward reading, but in relation to their own self esteem as well" (p. 44).

In a study which involved high school students tutoring other high school students, Lundberg (1968) found that the tutored students had better grades than a control group which received no tutoring. Another study, which was reported by Palmer (1969), examined the use of high school tutors to work with 3rd through 6th grade elementary students in an inner-city area of New York City. One group received tutoring two hours a week and another group received four hours of tutoring a week. The pupils who had

received four hours of tutoring per week were shown to have made significant gains in reading age compared with controls, but this did not hold true with experimental pupils who had received only two hours of tutoring per week.

A reading program, which used junior high students as assistants to work with primary educable mentally handicapped students, was reported by Howse (1967). The program was viewed as being an enriching experience for the handicapped children and it was found to provide an improvement in the academic skills of the children.

In addition to the above mentioned writers, numerous other authors (Aslin, 1969; Fleming, 1969; Hipple, 1969; Klee, 1964; Lippitt, 1969; Lippitt & Lohman, 1965; Lippitt & Lippitt, 1968; Russell, 1968; Walters, 1965) also report that the student assistant program contributes to the academic development of the student in the class.

Teachers in classes which are using student assistant programs find that the students in the class "show increased self respect, self-confidence, and pride in their progress" (Lippitt & Lippitt, 1968, p. 26). An important factor contributing to this improvement is that "children receiving help from olders (older students) do not compare their skills unfavorably with those of their tutor" (Lippitt, 1969, p. 41).

The effect of the assistant program upon the behavior of the child in the classroom is an area of particular interest to many special educators, although it is one which is not frequently mentioned in the literature. Lippitt (1969) has found that assistants provide more realistic models of behavior for the students in the class, than that which is provided by an adult. Another article describing the benefits of the student assistant program (Briggs, 1967) states that "one of the most powerful features of cross-age relationships is the potential modification of overly aggressive and hostile behavior in children" (p. 26).

#### Administrative Aspects of the Assistant Program

A review of the literature finds numerous reports of many different variations in student assistant programs. A number of authors (e.g., Lippitt, 1969; Lippitt & Lippitt, 1968; Wright, 1965) advocate the use of older elementary students to serve as assistants with younger elementary students. Others (e.g., Fleming, 1969; Howse, 1967) describe programs using junior high students to assist in the elementary classes. Programs which use high school students to work in elementary schools (e.g., Gross, 1968; Guild, 1954; Kleinert, 1949; Nelson, 1968) are cited, while other programs use high school students to assist at the high school level (e.g., Bammamn & French, 1958; Delaney,

1963; Frantz, 1954; Goeden, 1956). From the information presented by these authors, it appears that it is considered feasible to use student assistants in a variety of ways.

The majority of the student assistant programs are reported to be operating during the regular school year, but occasionally a program is described which uses assistants during the summer months. The summer program may be an appropriate area to increase the use of student assistants in both regular and special education programs, because of the increased availability of regular students during the summer.

The amount of time the assistant spends working in the program is not frequently discussed. In 1959 Simmons (1959) reported a survey which examined the use of cadet teachers (high school students assisting in the classroom) in Michigan. He reported that the average cadet teacher spent five hours a week on the program, with the cadets' period of service ranging from one hour per semester to ten hours per week. It has been suggested (Lippitt, 1969; Lippitt & Lohman, 1965; Lippitt & Lippitt, 1968) that the assistant help those in the lower grades in a regular work period of twenty to fifty minutes, depending on the age and interest of the younger ones. While this provides a guideline at the elementary level, nothing specific can be found in the literature concerning the length of service

which is considered appropriate at the junior or senior high levels. The length of time the assistant spends in the classroom will probably be much more closely governed by the availability of the assistants, rather than the desires or needs of the teacher and his students.

The criteria used for the selection of student assistants is often a topic of discussion in the literature. One program which used upper elementary students to help in the lower elementary classes reported that the assistants were selected by their classmates on the basis of achievement and personality (Wright, 1965). Liu (1964) described a program in which the assistants were selected by the teachers on the basis of their "good scholarship, adequate personalities, and generally wholesome attitudes toward other people and the world about them" (p. 24). A program reported by Young (1954) selected only those students who were "at least average or above in intelligence, scholarship, citizenship and in health and who were interested in working with children" (p. 62).

Although these sets of criteria for the selection of student assistants may be used in a number of programs, they exclude students who are often viewed as being able to benefit from service as an assistant. A number of authors (Hipple, 1969; Lippitt, 1969; Lippitt & Lohman, 1965; Lippitt & Lippitt, 1968) believe that service as an assistant can be a remedial experience for slower students

as well as an enrichment experience for the brighter ones. This benefit of the program would be eliminated if only the "better" students were chosen to serve.

Student assistants are usually obtained from one of four basic sources; regular class volunteers, students serving as part of a course or class requirement (e.g., psychology class, child development class, assigned to serve for remedial or enrichment purposes), students receiving vocational training (e.g., teacher aide trainees), and members of clubs. There are usually two types of clubs which provide assistants, the Future Teachers Clubs and the school service clubs. Gibson (1961) believes that much too frequently the student assistants are selected predominantly from Future Teacher clubs and therefore, many students who are not definitely committed to the field of education are denied the opportunity to serve in the classroom. He believes that this eliminates a potentially important source of student assistants and there is always the possibility that a number of potential teachers may be recruited from the uncommitted group.

Preservice and inservice training of the student assistants is an area of concern which is frequently noted in the literature. Guild (1953) is very careful to point out that there are two parts to an assistant program; (1) readiness activities, and (2) participation activities. She believes that the assistants must complete the

readiness activities before they participate in actual work in the class. McAllister (1954) feels that service in the classroom should be preceded by nine weeks of orientation and ten weeks of visitation and exploratory observation at different grade levels. Other authors (Edwards, 1966; Goeden, 1956; Howse, 1967; Nelson, 1966; Wright, 1965) cite the need for preservice training and mention that it was included as part of the programs which they described.

Lippitt (1969) points out that the student assistant needs training in order to be successful. An excellent program of training for assistants is described by Lippitt and Lippitt (1965) as the type of program which they believe to be effective in providing appropriate training for students who will be helping in the classroom. These students are carefully trained in how to relate to younger children, and they are briefed in their specific jobs. This was accomplished through:

Seminars. Here the older students learned, through discussion and role-played episodes, how to approach younger students constructively, and how to help younger students to accept instruction. They learned what levels of expectation were realistic for children of a particular age, and for the individuals they were to help. They learned the techniques of correcting errors in encouraging, rather than discouraging ways. They practiced giving praise without lowering performance standards. They practiced methods for taking younger students from the levels at which they were successful to higher levels.

Training in academic procedures. After the older children had had some orientation to younger children, they had a training session with the teacher whom they were helping. The teacher explained how the drill--or whatever she had planned for the older students to give--would help the younger children learn. She explained

to the olders how they were to carry out the assignment; and, to see if they understood the method and procedure before teaching a younger child, gave them practice in working with each other.

Feedback sessions. The older helpers worked two and sometimes three days a week with the same child for two consecutive weeks--each session lasting from twenty to thirty minutes, depending on the age and attention span of the child being tutored. Before beginning the second week, each helper had a feedback session with the teacher of his child to report what progress had been made, and to get an assignment for the next week's sessions (p. 116).

In addition to these aspects of the program, the teacher is always ready to provide "at the elbow" help if it is needed by the assistant when he is working with the student.

Evaluation of the assistants is seen as an important aspect of the assistant program by a number of authors (Crum, 1954; Guild, 1953; Guild, 1954; Leep & Tracy, 1967; McAllister, 1954). They believe that during the evaluation process, the teacher is provided with an opportunity to examine and evaluate both the assistant and the effectiveness of the program. This should lead to an improvement in the individual assistant's performance and the operation of the entire program. It would appear that although specific mention was not made of evaluation in many of the articles describing assistant programs, it is more than likely an integral part of the on-going assistant programs.

Hipple (1969) notes that the problems of transporting the assistant to the school in which he will work is often considered a barrier to establishing a student assistant program. He believes that the schools are often

within walking distance of each other and that it may be possible that no difficulties will arise in this area. If transportation problems do develop, he feels that school administrators who are able to get students to athletic contests and musical events, should be able to arrange transportation for a program which has as much educational value as the assistant program.

The fact that the students serving as assistants may miss some time from their regular schedule of classes is often a concern of some educators. In discussing this situation, Hipple (1969) states that "the time the student helpers lose from high school will be more than compensated for by the enrichment derived from the experiences at the lower grades" (p. 84). Referring to this same area of concern, Stocks (1965) has stated that "the fear of missing content in specified classes weighs heavily upon this program; some teachers will have to accept the idea that freeing a pupil to work with other students who have learning needs is more important, for instance, than diagramming sentences" (p. 87).

Warnings are found in the literature that the school must guard against the abuse of the student assistant program. The student assistants should not be considered the answer to the teacher shortage and used in the place of hiring additional teachers to reduce teacher-pupil ratios (Delaney, 1964). Mosel (1962) states that the

teacher "must forego the temptation of assigning the assistants only the monotonous tasks; they must try to vary the jobs" (p. 432) they relegate to the assistants.

Fredrick (1959) found that two special dangers must be guarded against in operating student assistant programs; the danger of the student being exploited, and the danger of placing too much responsibility on the student.

While there may be a number of administrative problems which can arise when a student assistant program is in operation, the gains from such a program are seen by authors in the field as being greater than the problems which are caused. As Fleming (1969) points out, the program takes planning time but it is worth the effort. He finds that the program is appreciated by the teachers, students, assistants and parents in the community.

### Summary

A review of the literature establishes that the use of student assistant programs is considered a feasible and effective method of improving an educational program.

Many authors have stated that students serving as assistants in the classroom are fully capable of performing effectively in this capacity, especially with children younger than themselves. The assistants are viewed as being able to perform clerical, instructional and supervisory tasks. Two reasons are cited to explain the student assistants' ability to work effectively with other

students; (1) the assistants' ability to communicate effectively with children is greater than that of the adults, and (2) the assistants' ability to understand the problems of younger students is greater than that of adults.

A number of authors have reported that the use of student assistants provides a positive effect upon the educational program. The program is also viewed as being beneficial to both the student in the class and the student serving as an assistant.

## CHAPTER III

### PROCEDURE AND METHODOLOGY OF THE STUDY

#### Identification of the Population

The population for this study consisted of teachers of educable mentally handicapped (EMH), emotionally disturbed (ED), and physically handicapped (PH) students in Michigan who were using, or had recently used, regular class students as assistants in their classrooms. All teachers who were reported to meet these criteria were included as participants in the study. The programs serving these areas of the handicapped were selected because of the basically educational orientation of the programs and because they are classroom programs found in public schools in Michigan.

In attempting to determine the location of student assistant programs, it was found that there was no central depository of this information in Michigan. Consequently, it was decided to contact each of the special education directors in the state to determine if such programs existed in their district.

A letter was sent to each of the local directors of special education in Michigan, explaining the purpose of the study, and asking them to complete and return a form regarding student assistant programs in their district (Appendix A). A similar request was sent to each of the intermediate directors of special education (Appendix B). A letter was prepared by the writer's advisor to accompany the request for information from the special education directors (Appendix C).

Approximately two weeks after the initial request, a follow-up letter was mailed to each of the special education directors who had not responded, in an attempt to stimulate the return of the information forms (Appendix D).

The results of this survey of the special education directors is reported in Table 1. A high percentage of the forms were returned (90%) and a total of 103 student assistant programs were reported to be operating. Twelve of these 103 programs were assistant programs serving the trainable mentally handicapped. This group of programs was not included in the study, but was used as a pretest group in the refinement of the questionnaire.

#### Method of Collecting Data

The data for the study were collected by the use of a mailed instrument (Appendix E) which was distributed, along with stamped self-addressed envelopes, to each of the teachers who met the criteria for inclusion in the study.

Table 1  
Results of Survey to Identify Student  
Assistant Programs

| Type of District | Number of Forms Sent | Number Returned | Percent Returned | No. Programs Reported |
|------------------|----------------------|-----------------|------------------|-----------------------|
| Intermediate     | 38                   | 35              | 92               | 54                    |
| Local            | 81                   | 72              | 89               | 49                    |
| Total            | 119                  | 107             | 90               | 103                   |

A cover letter (Appendix F), included with the instrument, requested the cooperation of the teachers and contained an explanation of the purpose of the study and of the instrument.

At the time of the original mailing of the instrument, a letter was sent to all directors of special education who had furnished names of special education teachers who were using, or had recently used, regular class students as assistants in educational programs for the handicapped (Appendix G). This letter provided information to the directors concerning data as compiled from the original survey of the directors and requested that the directors provide assistance in facilitating the return of the teacher questionnaire.

Approximately three weeks after the original mailing of the questionnaires, a follow-up letter (Appendix H) was

sent to each of the teachers who had not responded to the request for cooperation in the study. A second follow-up letter (Appendix I) and another copy of the questionnaire were sent to each of the nonrespondents two weeks later. Finally, phone calls to each of the nonrespondent directors of special education were made, asking for any further assistance they might provide in facilitating the return of all questionnaires.

Table 2 presents information concerning the return of the mailed questionnaire. It will be noted that a number of the individuals (13%), to whom questionnaires were sent, did not fit the criteria for inclusion in the study. A smaller group (4%) was not included because they were no longer with the district.

Table 2  
Return of Mailed Instruments

|                                                                        | Number | Percent |
|------------------------------------------------------------------------|--------|---------|
| Instruments sent                                                       | 91     | . .     |
| Instruments returned                                                   | 88     | 97      |
| Returned instruments included in the study                             | 72     | 79      |
| Teacher's program did not meet the criteria for inclusion in the study | 12     | 13      |
| Teacher not able to respond (illness or had left teaching)             | 4      | 4       |

### Development of the Instrument

No instrument appropriate for the purposes of this study was found in the literature, thereby requiring the development of something new. An instrument which is primarily a fixed-response questionnaire was decided upon because of the ease of administration, the comparability of the data received, and the more precise analysis of information which it allows. To accomplish the task of developing a new instrument, several resources were called upon, including research and other literature related to the use of student assistants, literature on questionnaire construction, suggestions from members of the writer's committee, suggestions from the Educational Research Department and from other appropriate members of the university community.

The initial instrument was pretested by administering it to twelve teachers of the trainable mentally handicapped who had used regular class students as assistants in educational programs for handicapped children, but who were not to be included in the final study population. The results of this pretest were compiled and presented to the Educational Research Department. After careful examination of these results, it was determined that the pretest indicated the questionnaire was obtaining a distribution of responses which would lend themselves to analysis. Therefore, no further revisions were made in the instrument.

Following the return of the questionnaires, the portion of the instrument designed to examine the teachers' stated perceptions of the feasibility and effectiveness of the student assistant program (Section II, Parts A, B, C and D) was examined to determine the internal consistency of this part of the instrument. The internal consistency reliability for the first four parts of Section II was found to be .89 as determined by the use of Hoyt's analysis of variance method (Hoyt, 1941; Thorndike, 1951). A summary of this analysis is presented in Table 3. The computer program which examined this aspect of the questionnaire was provided by the Educational Research Department.

Table 3

Reliability Analysis for Parts A, B, C & D  
of Section II of the Instrument

| Source of Variance | Sum of Squares | df   | Mean Square | F     | r   |
|--------------------|----------------|------|-------------|-------|-----|
| Individuals        | 315.3455       | 71   | 4.9485      | 9.003 | .89 |
| Items              | 77.1185        | 26   | 2.9661      | 5.396 |     |
| Error              | 1014.6354      | 1846 | .5497       |       |     |
| Total              | 1443.0994      | 1943 |             |       |     |

## Objectives of the Instrument

### Section I--General Information

The purpose of this section of the questionnaire was to obtain general information regarding assistant programs utilizing regular class students in special education classes in Michigan. Information was also obtained regarding operational practices of the teachers using student assistants with handicapped children.

### Section II--The Use of Student Assistants (Attitude Scale)

Each of the parts of this section of the instrument examines the teacher's perceptions of a different aspect of the student assistant program.

Each item in this section of the instrument is followed by the numbers 1, 2, 3 and 4. These numbers were marked by the teachers to identify their degree of agreement or disagreement with the item.

The teachers' responses to the items in this section were examined by using the following two scoring methods:

1. Approximately two-thirds of the items in the first four parts of this section are stated in a positive form. These items were therefore scored as follows; Agree strongly = 4, Agree = 3, Disagree = 2, Disagree strongly = 1.

These items are scored in this manner because agreeing strongly on these items is the response which would most support a student assistant program.

Approximately one-third of the items in the first four parts of this section (Items 2, 6, 8, 12, 15, 21, 25) are stated in a negative form. These items were therefore scored as follows; Agree strongly = 1, Agree = 2, Disagree = 3, Disagree strongly = 4. These items are scored in this manner because disagreeing strongly on these items is the response which would most support a student assistant program.

Each respondent in the study received a total score for the first four parts (Total ABCD) of Section II. These scores were used as the dependent variable in computing the one way analysis of variance and the correlation coefficients.

2. The four point scale had been used in this section to provide the teacher with a greater range of choices with which to identify their degree of agreement or disagreement with each of the items in this section. In order to facilitate the reporting and interpretation of

the data relating to the different parts of this section, the responses on the original four point scale were dichotomized by collapsing the agree strongly and agree responses into one agree category and by collapsing the disagree strongly and disagree responses into one disagree category. The results of this section are reported by presenting the frequency and percentage distributions of agree and disagree responses for each item. The original distribution of the responses for each item on the four point scale is presented in Appendix J.

The following paragraphs describe the general question which is examined by each of the parts of this section.

Part II A.--General question--Are regular class students perceived as being able to serve effectively as teaching assistants in educational programs for handicapped children?

Part II B.--General question--Is the student assistant program perceived as having a beneficial effect upon the educational program for the handicapped?

Part II C.--General question--Does the teacher perceive the student's service as an assistant as having a positive effect upon the assistant?

Part II D.--General question--Is the student assistant program perceived as having a beneficial effect upon the handicapped child?

Parts II A, B, C and D Combined.--General question--Is the student assistant program perceived as being a feasible and effective program to be used with handicapped children?

Part II E.--The teachers' perceptions of each of these items was considered individually. The items basically pertain to specific operational aspects of the program and gave some insight into the initiation and operation of a student assistant program.

### Section III--General Program Evaluation

This open-ended section was included in the instrument to provide the respondents with an opportunity to furnish additional information concerning the assistant program. This section was intended to elicit information relating to areas of interest which had not been examined earlier in the instrument, but which were felt to be of importance to the respondents.

### Analysis of the Data

The data obtained in the study were placed on computer cards to facilitate the analysis of the data. The major portion of the analysis was performed on the CDC 3600 computer at the Michigan State University Computer Center.

Because of the exploratory nature of this study, a large part of the evaluation of the data is descriptive in nature. Means, standard deviations, percentage distributions and frequency counts are presented in the text and in tabular form.

The one way analysis of variance and the product moment correlation coefficient were also used in the examination of several of the research questions.

### Summary

All special education directors in the State of Michigan were contacted to obtain the names of special education teachers who were using, or had recently used, regular class students as assistants in their classrooms.

An instrument developed especially for this study was pretested and then sent to 91 teachers who met the criteria for inclusion in the study. The basic objectives of the instrument were to obtain information concerning the present operation of the assistant programs and the teachers' stated perceptions concerning the effectiveness and feasibility of the assistant program.

The information obtained by the questionnaire was placed on data processing cards and analyzed using descriptive and inferential techniques of analysis.

## CHAPTER IV

### PRESENTATION AND ANALYSIS OF THE DATA

In this chapter the data gathered by the procedures described in Chapter III is presented and analyzed. The basic source of data for the study was the teacher's responses to the questionnaire developed to obtain information concerning the use of student assistants with handicapped children in Michigan.

#### Results

Nine major research questions, with subquestions, are examined in this study. The data pertaining to these questions are presented in the form of discussion and tables.

Question 1.--What is the present status of programs using regular class students to serve as assistants in classes for handicapped children in Michigan?

1a. How many student assistant programs are operating in special education classes for the educable mentally handicapped, the emotionally disturbed and the physically handicapped in Michigan?

Information relating to the number of student assistant programs serving each disability area is presented in Table 4. A total of 72 student assistant programs were reported to be serving the educational programs for the handicapped in Michigan in the areas selected for this study. Forty-nine of these programs (68%) served the educable mentally handicapped, 4 programs (6%) served the emotionally disturbed and 19 student assistant programs (26%) serve the physically handicapped. Although there were a small number of assistant programs found to be serving the emotionally disturbed (n=4), it was decided to include this group, due to the relatively recent development of these programs in Michigan and the current interest in developing and expanding programs for the disturbed.

Table 4

Number of Student Assistant Programs Serving  
Handicapped Children in Michigan

| Area of<br>Handicapped | No. Programs | % of Programs<br>in This Area |
|------------------------|--------------|-------------------------------|
| EMH                    | 49           | 68                            |
| ED                     | 4            | 6                             |
| PH                     | 19           | 26                            |
| All Groups             | 72           | 100                           |

1b. What is the extent of the teaching experience of the teachers who have operated these programs?

It is reported in Table 5 that the teachers who have operated the assistant programs have taught for an average of 10.7 years and their mean teaching experience with the handicapped was 5.6 years. The teacher experience of the respondents was found to range from one to 32 years and their experience with the handicapped ranged from one to 22 years.

Table 5

Extent of the Respondents' Teaching Experience and Their Experience with Student Assistant Programs

|                                            | Area          |             |              | All Groups<br>(n=72) |
|--------------------------------------------|---------------|-------------|--------------|----------------------|
|                                            | EMH<br>(n=49) | ED<br>(n=4) | PH<br>(n=19) |                      |
| Mean No. years taught                      | 11.0          | 11.0        | 9.8          | 10.7                 |
| Range                                      | 1-32          | 5-26        | 1-28         | 1-32                 |
| Mean No. years taught<br>handiciapped      | 4.8           | 6.5         | 7.7          | 5.6                  |
| Range                                      | 1-15          | 4-12        | 1-22         | 1-22                 |
| Mean No. semesters<br>assistants were used | 3.8           | 3.3         | 5.2          | 4.1                  |
| Range                                      | 1-10          | 1-5         | 2-12         | 1-12                 |

1c. How long have the teachers used student assistants?

The respondents' experience using assistants with the handicapped ranged from one to twelve semesters

(Table 5). The special education teachers have used assistants for an average of 4.1 semesters.

Question 2.--What are the operational practices used by the special education teachers operating student assistant programs with handicapped children?

2a. With which general grade level (e.g., pre-school, early elementary) of handicapped children are the assistants used?

Table 6 reports information which indicates that the academic level most frequently served by assistant programs is the early elementary level (43%). The early and later elementary and preschool levels combined comprise 71% of all assistant programs serving the handicapped in Michigan.

2b. From which academic level (e.g., junior high, high school) are the student assistants obtained?

It is reported in Table 7 that the greatest portion of student assistants are obtained from the senior high school level (72%), with the junior high (13%) and later elementary (11%) levels providing most of the other assistants.

2c. How many assistants do the teachers generally use each semester and how many days per week and weeks per year are the assistants used?

Information concerning this question is presented in Table 8. The teachers reported using an average of 2.7

Table 6

Number of Programs with which Assistants  
are used at each Academic Level of  
Special Education Classes

| Level of Special<br>Education Classes | Area |    |    | All Groups |     |
|---------------------------------------|------|----|----|------------|-----|
|                                       | EMH  | ED | PH | N          | %   |
| Preschool                             | 1    | 1  | 5  | 7          | 10  |
| Early Elementary                      | 18   | 3  | 10 | 31         | 43  |
| Later Elementary                      | 11   | 0  | 2  | 13         | 18  |
| Junior High                           | 10   | 0  | 2  | 12         | 17  |
| Senior High                           | 9    | 0  | 0  | 9          | 12  |
| Total                                 | 49   | 4  | 19 | 72         | 100 |

Table 7

Number of Programs which obtain Assistants  
from each Academic Level

| Academic Level<br>of Assistants | Area |    |    | All Groups |     |
|---------------------------------|------|----|----|------------|-----|
|                                 | EMH  | ED | PH | N          | %   |
| Early Elementary                | 2    | 0  | 1  | 3          | 4   |
| Later Elementary                | 5    | 0  | 3  | 8          | 11  |
| Junior High                     | 5    | 1  | 3  | 9          | 13  |
| Senior High                     | 37   | 3  | 12 | 52         | 72  |
| Total                           | 49   | 4  | 19 | 72         | 100 |

assistants per semester, with the average number of assistants used per semester ranging from one to 12. assistants are used for an average of 4.4 days per week, for 30.6 weeks during the year. The number of weeks the assistants were used by the teachers during the year range from four to 46 weeks.

Table 8

Number of Assistants Used Each Semester,  
Number of Weeks Teacher Uses Assistants  
and Number of Days Per Week  
Assistants are Used

|                                               | Area          |             |              | All Groups<br>(n=72) |
|-----------------------------------------------|---------------|-------------|--------------|----------------------|
|                                               | EMH<br>(n=49) | ED<br>(n=4) | PH<br>(n=19) |                      |
| Mean No. of assistants<br>used each semester  | 2.5           | 1.3         | 3.4          | 2.7                  |
| Range                                         | 1-12          | 1-2         | 1-10         | 1-12                 |
| Mean No. weeks teacher<br>uses assistants     | 30.2          | 32.0        | 31.4         | 30.6                 |
| Range                                         | 4-40          | 20-46       | 6-42         | 4-46                 |
| Mean No. days per week<br>assistants are used | 4.5           | 4.0         | 4.2          | 4.4                  |
| Range                                         | 2-5           | 3-5         | 2-5          | 2-5                  |

2d. Why did the teachers decide to use student assistants?

Table 9 presents information concerning the most important factors influencing the teacher's decision to use regular class students as assistants in their classrooms. Student assistant programs were most frequently initiated

as a result of a group (e.g., Future Teachers Club) requesting teachers to accept an assistant (43%). A large number of teachers (25%) initiated assistant programs as a result of learning of the value of such a program from other teachers.

Table 9

Distribution of the Programs by the Most  
Important Factor in the Teachers'  
Decision to Use Student  
Assistant Programs

| Influencing Factors                                     | Area |    |    | All Groups |     |
|---------------------------------------------------------|------|----|----|------------|-----|
|                                                         | EMH  | ED | PH | N          | %   |
| Learned of program from literature or convention        | 7    | 0  | 3  | 10         | 14  |
| Learned of program from other teachers                  | 12   | 0  | 6  | 18         | 25  |
| Group placing assistants asked teacher to use assistant | 22   | 1  | 8  | 31         | 43  |
| Encouraged by supervisor to try assistants              | 3    | 3  | 2  | 8          | 11  |
| Learned of program in course at college                 | 5    | 0  | 0  | 5          | 7   |
| Total                                                   | 49   | 4  | 19 | 72         | 100 |

2e. From which type of group (e.g., Future Teachers, regular class volunteers) do the teachers obtain their assistants?

Information presented in Table 10 indicates that student assistants are most frequently regular class

volunteers (42%). A number of the assistants (26%) are obtained from the Future Teachers Club, a group composed of students with a definite interest in a career in the field of education.

Table 10  
Major Group from which Teachers Obtained  
Student Assistants

| Group                                                                    | Area |    |    | All Groups |     |
|--------------------------------------------------------------------------|------|----|----|------------|-----|
|                                                                          | EMH  | ED | PH | N          | %   |
| Future Teachers Club                                                     | 15   | 0  | 4  | 19         | 26  |
| School Service Club<br>(Students doing volunteer work<br>as club member) | 5    | 0  | 1  | 6          | 8   |
| Serving as part of course<br>requirement (e.g., Psych.<br>Class)         | 5    | 0  | 4  | 9          | 12  |
| Regular class volunteers                                                 | 19   | 2  | 9  | 30         | 42  |
| Students receiving vocational<br>training (e.g., teacher aides)          | 2    | 1  | 1  | 4          | 6   |
| Regular class student assigned<br>to class (remedial or<br>enrichment)   | 3    | 1  | 0  | 4          | 6   |
| Total                                                                    | 49   | 4  | 19 | 72         | 100 |

2f. What involvement do the special education teachers have in the selection of student assistants?

Table 11 presents data which indicates that approximately 43% of the respondents in the study had no

involvement in the selection of the student assistants who served in their program. Of those reporting involvement, the most frequently mentioned activities were those of interviewing potential assistants (39%) and having the assistants serve a short trial period in the class (28%). A lesser number of the teachers reported being involved in the establishment of selection criteria for the assistants (17%).

Table 11

Number of Teachers Indicating Involvement in  
each Type of Activity Relating to the  
Selection of Student Assistants

| Teacher's<br>Involvement                                          | Area          |             |              | All Groups |                                           |
|-------------------------------------------------------------------|---------------|-------------|--------------|------------|-------------------------------------------|
|                                                                   | EMH<br>(n=49) | ED<br>(n=4) | PH<br>(n=19) | N          | % of Total<br>Group (n=72)<br>Represented |
| Involved in estab-<br>lishing selection<br>criteria               | 8             | 0           | 4            | 12         | 17                                        |
| Interview potential<br>assistants                                 | 20            | 1           | 7            | 28         | 39                                        |
| Assistants serve<br>short trial period<br>in class                | 13            | 1           | 6            | 20         | 28                                        |
| Serve on selection<br>committee for<br>assistants                 | 2             | 0           | 0            | 2          | 3                                         |
| Selection of assistant<br>is made without<br>teachers involvement | 21            | 2           | 8            | 31         | 43                                        |

2g. How much time do the assistants spend in the classroom each week?

(1) How much of this time is spent performing;

(a) Instructional tasks,

(b) Clerical tasks,

(c) Supervisory duties?

A report of the data relating to the use of the assistants' time in the class is presented in Table 12. The average student assistant program uses assistants for a total of 5.35 hours during the week. The amount of time the programs used assistants each week ranged from .9 to 16.5 hours during the week.

The assistants in the programs spent an average of 62% of their time, or 3.34 hours per week, performing instructional tasks. They spent 17% of their time, or .92 hours per week, performing clerical tasks and 21% of their time, or 1.09 hours per week, performing supervisory duties. It will be noted that there is a large range between the disability areas in the average amount of time assistants are used in performing supervisory duties (.72 hours to 2.27 hours).

The high percentage of the assistants' time spent performing instructional tasks indicates the instructional orientation of the majority of the assistant programs.

2h. What types of training experiences are provided for the assistants?

Table 12

Use of the Assistants Time in the  
Special Education Classroom

|                                                          | Area          |             |              | All Groups<br>(n=72) |
|----------------------------------------------------------|---------------|-------------|--------------|----------------------|
|                                                          | EMH<br>(n=49) | ED<br>(n=4) | PH<br>(n=19) |                      |
| <hr/>                                                    |               |             |              |                      |
| Instructional tasks                                      |               |             |              |                      |
| Mean No. hours<br>per week                               | 3.23          | 3.28        | 3.72         | 3.34                 |
| Range                                                    | 0-9           | 1-5         | 0-13         | 0-13                 |
| % of area total                                          | 66%           | 53%         | 59%          | 62%                  |
| Clerical tasks                                           |               |             |              |                      |
| Mean No. hours<br>per week                               | .95           | .78         | .89          | .92                  |
| Range                                                    | 0-4           | 0-1.5       | 0-6.5        | 0-6.5                |
| % of area total                                          | 19%           | 17%         | 14%          | 17%                  |
| Supervisory duties                                       |               |             |              |                      |
| Mean No. hours<br>per week                               | .72           | 2.27        | 1.70         | 1.09                 |
| Range                                                    | 0-5           | 0-7.5       | 0-7.5        | 0-7.5                |
| % of area total                                          | 15%           | 35%         | 27%          | 21%                  |
| Mean No. hours assistants<br>for area serve each<br>week |               |             |              |                      |
|                                                          | 4.89          | 6.50        | 6.31         | 5.35                 |
| Range                                                    | .9-10         | 3-10        | 2.5-16.5     | .9-16.5              |

It will be noted in Table 13 that the majority of the participants in the study (82%) reported that the assistants are learning in the classroom while they are serving as an assistant. Many of the respondents in the study (61%) also report that they provide classroom observation for the assistant prior to the assistant's service in the classroom. Relatively few respondents reported the use of the more formal types of training

Table 13

Number of Respondents Indicating the use of  
each Type of Training Experience for  
the Assistants in their Program

| Training<br>Experience                                              | Area          |             |              | All Groups |                                           |
|---------------------------------------------------------------------|---------------|-------------|--------------|------------|-------------------------------------------|
|                                                                     | EMH<br>(n=49) | ED<br>(n=4) | PH<br>(n=19) | N          | % of Total<br>Group (n=72)<br>Represented |
| Formal lecture type<br>preservice training                          | 2             | 1           | 4            | 7          | 10                                        |
| Classroom observation<br>prior to partici-<br>pation in the program | 26            | 3           | 15           | 44         | 61                                        |
| Learning in the class-<br>room while serving as<br>an assistant     | 39            | 3           | 18           | 60         | 82                                        |
| Assistants take pre-<br>requisite class                             | 3             | 1           | 2            | 6          | 8                                         |
| Organization to which<br>assistant belongs<br>provides training     | 6             | 0           | 2            | 8          | 11                                        |
| Assistants attend<br>regular seminar                                | 9             | 1           | 4            | 14         | 19                                        |

experiences such as prerequisite classes (8%), lectures (10%) and seminars (19%).

2i. How much time does the teacher spend consulting with the assistant each week?

Information relating to this question is presented in Table 14. On an average, teachers using the assistant programs consult with the student, outside of class, for 31.7 minutes per week. The range of time spent in such consultation is from zero to 100 minutes per week.

Table 14  
Time Spent by Teachers Consulting  
with Assistants

| Area of Handicapped | Mean No. minutes per week | Range |
|---------------------|---------------------------|-------|
| EMH (n=49)          | 30.1                      | 0-95  |
| ED (n=4)            | 35.0                      | 0-90  |
| PH (n=19)           | 35.4                      | 0-100 |
| All Groups (n=72)   | 31.7                      | 0-100 |

Question 3.--What are the teachers' stated perceptions in regard to the various areas which relate to the feasibility and effectiveness of the assistant program?

3a. Are regular class students perceived as being able to serve effectively as teaching assistants in educational programs for handicapped children?

The teachers' perceptions of the ability of the assistants are examined by Part A of Section II of the instrument. The number and percentage of respondents indicating agreement or disagreement with each item in this section are presented in Table 15. It will be noted in the tables which relate to this subquestion and the other subquestions under Question 3, that the data is presented for the combined groups. No breakdown by disability areas is presented due to the fact that the analysis of variance used to examine Research Question 5 indicated no significant relationship existed between the teachers' perceptions of the feasibility and effectiveness of the assistant program and the area of handicap with which they work.

An examination of the responses to the individual items in this part of the instrument indicates that 83% of the respondents agree that student assistants are capable of performing instructional tasks in the special education class and 64% disagree with the statement that the assistants' abilities limit them to the performance of clerical tasks. It is reported that a large majority of the teachers (93%) agree that the assistants are able to work in one-to-one instructional situations, while 76% of the teachers included in the study believe that the assistants are able to work with small groups of handicapped students. A number of the respondents (85%) feel that the assistants have no difficulty relating to handicapped

Table 15

Responses<sup>a</sup> to Items Relating to the Ability of the Assistants

| Items                                                                                                                                                                              | Agree |           | Disagree |           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------|----------|-----------|
|                                                                                                                                                                                    | N     | %         | N        | %         |
| <b>PART A. ABILITY OF ASSISTANTS</b>                                                                                                                                               |       |           |          |           |
| 1. Most student assistants are capable of performing instructional tasks in classes for handicapped children.                                                                      | 60    | <u>83</u> | 12       | 17        |
| 2. The abilities of most student assistants limits the type of duties they can perform to clerical tasks.                                                                          | 26    | 36        | 46       | <u>64</u> |
| 3. Student assistants are generally able to work with handicapped students in a one-to-one instructional situation.                                                                | 67    | <u>93</u> | 5        | 7         |
| 4. After serving in the classroom for a period of time, most student assistants are able to develop or choose instructional materials and activities for the handicapped students. | 38    | <u>53</u> | 34       | 47        |
| 5. Student assistants are generally capable of serving in an instructional capacity with small groups of handicapped students.                                                     | 55    | <u>76</u> | 17       | 24        |
| 6. Regular class students serving as assistants generally have difficulty relating to handicapped students.                                                                        | 11    | 15        | 61       | <u>85</u> |

<sup>a</sup>Percentages which are underlined indicate the response which would most support a student assistant program.

children and 53% of the teachers felt that the assistants were able to choose instructional materials and activities for the handicapped students after serving in the classroom for a period of time. While this is not a large percentage, it indicates that many teachers feel that assistants are able to function in an area normally reserved for teachers.

A review of the responses to the items in Part A indicates that the respondents in the study feel that regular class students are able to serve effectively as assistants in special education classrooms.

3b. What type of effect is the student assistant program perceived as having upon the educational program for the handicapped?

This question is examined by Part B of Section II and the responses to the items in this section are reported in Table 16. The report of the responses to the items in this part of Section II indicates that the teachers perceive the assistants as having a positive effect upon the educational program for the handicapped.

A majority of the respondents in the study (86%) indicated that the use of assistants provides the teachers with the opportunity to more fully utilize their professional skills and 85% of the teachers disagree that the assistants' contribution to the program is limited to reducing the teacher's clerical duties. A number of the teachers agreed that using student assistants would be an acceptable alternative to employing teacher aides if funds

Table 16

Responses<sup>a</sup> to Items Relating to Effect of Student Assistants  
upon the Educational Program

| Items                                                                                                                                                                                                                                                   | Agree |           | Disagree |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------|----------|-----------|
|                                                                                                                                                                                                                                                         | N     | %         | N        | %         |
| <b>PART B. EFFECT OF STUDENT ASSISTANTS UPON THE EDUCATIONAL PROGRAM</b>                                                                                                                                                                                |       |           |          |           |
| 7. The teacher's opportunity to fully utilize his professional skills tends to increase with the use of student assistants.                                                                                                                             | 62    | <u>86</u> | 10       | 14        |
| 8. The contribution the assistant program can make to the educational program for the handicapped is limited to reducing the teacher's clerical duties.                                                                                                 | 11    | 15        | 61       | <u>85</u> |
| 9. The use of student assistants is an acceptable alternative to employing teacher aides if funds are not available to employ aides.                                                                                                                    | 44    | <u>61</u> | 28       | 39        |
| 10. The use of student assistants is a practical approach to improving educational programs for handicapped students.                                                                                                                                   | 61    | <u>85</u> | 11       | 15        |
| 11. The use of student assistants allows the teacher to consider a greater range of instructional methods to be used with the handicapped students (e.g., more individualized instruction, more small group work, greater use of word or number games). | 66    | <u>92</u> | 6        | 8         |
| 12. The benefits of having a student assistant program are nullified by the amount of time the teacher must spend planning for, and supervising, the program.                                                                                           | 4     | 6         | 68       | <u>94</u> |

<sup>a</sup>Percentages which are underlined indicate the response which would most support a student assistant program.

were not available to employ the aides. Using student assistants is seen by many of the teachers (85%) as being a practical approach to improving the educational program for the handicapped. Many teachers (92%) agree that using assistants allows them to consider a greater range of instructional methods and the majority of the respondents (94%) feel that the benefits of the program are not nullified by the time it takes the teacher to plan for and supervise, the program.

3c. What type of effect is the student assistant program perceived as having upon the student serving as an assistant?

The teachers' perceptions regarding the effect of the assistant program upon the assistant is examined by Part C of Section II and reported in Table 17.

The majority of the teachers (90%) agreed that service as an assistant tends to improve the self-concept of the assistant, and 64% felt that this service helped to improve the assistant's academic achievement and understanding of subject matter. An extremely large number (99%) agreed that the students service as an assistant could provide an enrichment experience for the assistant, and 76% agreed that the service as an assistant could serve as a remedial experience.

Many of the respondents (85%) did not agree with the statement that the experience as an assistant does

Table 17

Responses<sup>a</sup> to Items Relating to the Effect of the Assistant  
Program upon the Assistant

| Items                                                                                                                                                                       | Agree |           | Disagree |           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------|----------|-----------|
|                                                                                                                                                                             | N     | %         | N        | %         |
| <b>PART C. EFFECT OF PROGRAM UPON THE ASSISTANT</b>                                                                                                                         |       |           |          |           |
| 13. The student assistant program provides the assistants with an opportunity to determine whether they would be capable of working with handicapped children.              | 69    | <u>96</u> | 3        | 4         |
| 14. The self-concept of the student assistant tends to improve after a period of service with handicapped students.                                                         | 65    | <u>90</u> | 7        | 10        |
| 15. Experience as a student assistant does little to improve the assistant's attitude toward school.                                                                        | 11    | 15        | 61       | <u>85</u> |
| 16. Service as a student assistant tends to improve the assistants academic achievement and understanding of subject matter.                                                | 46    | <u>64</u> | 26       | 36        |
| 17. The student assistant's attitude toward the handicapped tends to improve after working with handicapped students.                                                       | 70    | <u>97</u> | 2        | 3         |
| 18. Work as a student assistant provides an enrichment experience for many regular class students.                                                                          | 71    | <u>99</u> | 1        | 1         |
| 19. Service as a student assistant provides a significant remedial experience for some students.                                                                            | 55    | <u>76</u> | 17       | 24        |
| 20. The use of a student assistant program with handicapped students is an effective method of creating within the assistant, an interest in the area of special education. | 69    | <u>96</u> | 3        | 4         |
| 21. The immaturity of most student assistants creates problems which often discourage the assistants from considering special education as a profession at a later date.    | 8     | 11        | 64       | <u>89</u> |

<sup>a</sup>Percentages which are underlined indicate the response which would most support a student assistant program.

little to improve the assistant's attitude toward school and a very large number (97%) agreed that the assistants attitude toward the handicapped tends to improve after working with the handicapped.

On items which related to the recruitment aspects of the program, the responses indicated extensive agreement with the recruitment possibilities of the assistant program. A vast majority of the teachers (96%) agreed that service as an assistant is an effective method of creating within the assistant, an interest in the area of special education and an equally large number of respondents (96%) agree that service as an assistant provides an opportunity for the student to determine whether he would be capable of working with handicapped children. The majority of the teachers (89%) did not feel that the immaturity of most assistants created problems which often discourage the assistants from the consideration of special education as a profession at a later date.

The responses to the items in this part of Section II indicate that the teachers included in the study perceive the assistant program as having a highly positive effect upon the student serving as an assistant. The teachers agreed that service in the program provides both personal and vocational benefits for the assistant.

3d. What type of effect is the student assistant program perceived as having upon the handicapped student in the class?

Table 18 presents information relating to the effect of the assistant program upon the student in the class. The responses to the items in this section indicate that the teachers agree that the assistant program has a positive effect upon the handicapped child in the class.

The majority of the teachers (86%) agree that working with student assistants tends to improve the self-concept of the handicapped student and a number of the teachers (78%) felt that student assistants provide the handicapped student with a behavior model with which he can positively identify. A relatively large number of respondents (86%) believe that handicapped children receiving help from student assistants do not compare their own skills unfavorably with those of the assistants.

It will be noted that 79% of the teachers responding in the study agree that the handicapped student's academic motivation tends to increase when working with a student assistant and 81% agreed that when a handicapped student is integrated into a regular class, a student assistant can help him function more effectively in that class.

3e. Is the student assistant program perceived as being a feasible and effective program to be used with special education classes?

An examination of the data which were presented in Tables 15, 16, 17, and 18 indicates that the teachers

Table 18

Responses<sup>a</sup> to Items Relating to the Effect of the Program  
upon the Handicapped Child

| Items                                                                                                                                                                                    | Agree |           | Disagree |           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------|----------|-----------|
|                                                                                                                                                                                          | N     | %         | N        | %         |
| <b>PART D. EFFECT OF PROGRAM UPON THE HANDICAPPED CHILD</b>                                                                                                                              |       |           |          |           |
| 22. The use of student assistants provides additional directed instructional time for the handicapped student.                                                                           | 66    | <u>92</u> | 6        | 8         |
| 23. Student assistants provide the handicapped student with a behavior model with which they can positively identify.                                                                    | 56    | <u>78</u> | 16       | 22        |
| 24. Working with student assistants tends to improve the self-concept of the handicapped student.                                                                                        | 62    | <u>86</u> | 10       | 14        |
| 25. Handicapped children receiving help from student assistants compare their own skills unfavorably with those of their assistants.                                                     | 10    | 14        | 62       | <u>86</u> |
| 26. The handicapped student's academic motivation tends to increase when working with a student assistant.                                                                               | 57    | <u>79</u> | 15       | 21        |
| 27. When a handicapped student is integrated into a regular class, the use of a student assistant program with this student helps him to function more effectively in the regular class. | 58    | <u>81</u> | 14       | 19        |

<sup>a</sup>Percentages which are underlined indicate the response which would most support student assistant program.

generally perceive the student assistant program as being a feasible and effective program for use in special education classrooms.

Each of the first four parts of Section II, which examine the various areas relating to the effectiveness and feasibility of the student assistant program, has provided information relating to the teachers' stated perceptions regarding the assistant program. It has been determined that the teachers generally agree that the assistants are able to serve effectively as student assistants. The majority of the respondents in the study also agree that the assistant program has a positive effect upon the educational program for the handicapped, the handicapped student in the class and the student serving as an assistant.

Question 4.--What are the teachers' stated perceptions in regard to various administrative aspects of the assistant program?

Each of the items in Part E of Section II of the instrument is used to examine the different aspects of this question. The teachers' responses to each of these items are reported in Table 19.

Many of the items in this section provide information which relates to the initiation and development of student assistant programs. A majority of the teachers (90%) agreed that the development of selection criteria for

Table 19

Responses to Items Relating to Administrative  
Aspects of the Program

| Items                                                                                                                                                                                              | Agree |    | Disagree |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----|----------|----|
|                                                                                                                                                                                                    | N     | %  | N        | %  |
| <u>PART E. ADMINISTRATIVE ASPECTS OF THE PROGRAM</u>                                                                                                                                               |       |    |          |    |
| 28. The development of selection criteria for student assistants should be considered as an important factor in developing an effective student assistant program.                                 | 65    | 90 | 7        | 10 |
| 29. Recruitment of personnel into the field of special education should be the primary goal of a student assistant program.                                                                        | 15    | 21 | 57       | 79 |
| 30. Professional training of special education teachers should provide instruction in the use of student assistants.                                                                               | 58    | 81 | 14       | 19 |
| 31. A periodic evaluation of the assistant's progress is an essential ingredient for a good student assistant program.                                                                             | 67    | 93 | 5        | 7  |
| 32. The ability of regular class students to work in an instructional capacity with handicapped students tends to be underestimated by many other professionals in the field of special education. | 55    | 76 | 17       | 24 |
| 33. The regular class teachers of student assistants often feel that the time the assistant spends working with the handicapped is detrimental to the assistant's own educational progress.        | 10    | 14 | 62       | 86 |

|                                                                                                                                                                                                           |    |    |    |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|
| 34. Periodic released time for the teacher to consult with his student assistants contributes a great deal to the effectiveness of the program.                                                           | 58 | 81 | 14 | 19 |
| 35. Parents often express resistance to their child's service as a student assistant with handicapped children.                                                                                           | 6  | 8  | 66 | 92 |
| 36. Parents of handicapped students often express dissatisfaction with the effect the student assistant program has had upon their child.                                                                 | 3  | 4  | 69 | 96 |
| 37. A student assistant program would tend to be more effective for handicapped students in a special class than those in the regular class placement.                                                    | 25 | 35 | 47 | 65 |
| 38. The assistants should begin their service by performing routine functions, such as clerical duties and gradually become involved with the students, classroom routine, and the instructional program. | 44 | 61 | 28 | 39 |
| 39. Preservice or inservice training, other than that which is provided by the individual teachers, is not needed for an effective program.                                                               | 31 | 43 | 41 | 57 |
| 40. A prior commitment to entering the field of education should be required of all potential assistants.                                                                                                 | 9  | 13 | 63 | 87 |
| 41. The administrative problems encountered in obtaining (and retaining) student assistants discourage teachers from using, or continuing to use, the assistant program.                                  | 18 | 25 | 54 | 75 |

the assistants is important in developing an effective assistant program and 93% of the respondents agreed that a periodic evaluation of the assistant's progress is an essential ingredient for a good student assistant program. Most teachers (87%) did not feel that a prior commitment to entering the field of education should be required of all potential assistants and 79% of the teachers disagreed with the proposition that recruitment of personnel into the field of special education should be the primary goal of the assistant program. Eighty-one % agreed that released time should be provided for teachers to consult with the assistants and 75% felt that administrative problems did not discourage teachers from using, or continuing to use, assistant programs. A number of the teachers (76%) who have used assistant programs with the handicapped felt that many professionals in the field of special education underestimate the ability of regular class students to work in an instructional capacity with handicapped children. A much smaller number of teachers (57%) agreed that the assistants should receive preservice or inservice training other than that provided by the individual teacher and 61% of the respondents agreed that the assistant should begin involvement in the class by performing routine tasks and gradually become more actively involved with other aspects of the class.

Parental support for the program is demonstrated by the fact that 92% of the teachers agreed that parents

would not express resistance to their child serving as an assistant with handicapped children and 96% of the teachers felt that parents of handicapped students would not be dissatisfied by the effect of the assistant program upon their child.

When asked if service as an assistant would be detrimental to the assistant's own educational progress, 86% of the respondents felt that it would not. A number of the teachers (81%) agreed that the professional training of the teacher should provide instruction in the use of student assistants. Only 65% of the teachers agreed that a student assistant program would tend to be more effective for handicapped students in a special class than those in the regular class placement.

Question 5.--Is there a significant relationship between the type of handicapped student (EMH, ED, PH) in the special education classroom and the teacher's perception of the effectiveness and feasibility of the assistant program?

The analysis of the data by the one way analysis of variance presented in Table 20 indicates that no significant relationship exists between the area of special education served and the teachers' perception of the effectiveness and feasibility of the student assistant program with handicapped children. The teacher's total aggregate score for

Parts A, B, C & D of Section II of the instrument was the dependent variable used in the analysis of variance.

Table 20

Comparison of Attitude Toward the Effectiveness  
and Feasibility of the Assistant Program  
Among the Three Areas of Handicap

| Source of<br>Variance | Sum of<br>Squares | df | Mean<br>Square | F <sup>a</sup> |
|-----------------------|-------------------|----|----------------|----------------|
| Between Groups        | 298.832           | 2  | 149.416        | 2.18334        |
| Within Groups         | 4721.715          | 69 | 68.435         |                |
| Total                 | 5020.547          | 71 |                |                |

<sup>a</sup>F .05 = 3.14

Question 6.--Is there a significant relationship between the academic level (e.g., preschool, early elementary) of the handicapped student in the special education class and the teacher's perception of the effectiveness and feasibility of the student assistant program?

The analysis of the data by the one way analysis of variance presented in Table 21 indicates that there is not a significant relationship between the academic level (e.g., preschool, early elementary) of the handicapped student in the class and the teacher's perception of the effectiveness and feasibility of the student assistant program. The teacher's total aggregate score for Parts

A, B, C & D of Section II of the instrument was the dependent variable used in the analysis of variance.

Table 21

Comparison of Attitude Toward the Effectiveness  
and Feasibility of the Assistant Program  
Among the Five Academic Levels of  
Classes for the Handicapped

| Source of<br>Variance | Sum of<br>Squares | df | Mean<br>Square | F <sup>a</sup> |
|-----------------------|-------------------|----|----------------|----------------|
| Between Groups        | 608.951           | 4  | 152.238        | 2.31473        |
| Within Groups         | 4406.523          | 67 | 65.769         |                |
| Total                 | 5015.474          | 71 |                |                |

$$^aF .05 = 2.51$$

Question 7.--Is there a significant relationship between the academic level (e.g., later elementary, junior high) from which the student assistants are obtained and the teacher's perception of the effectiveness and feasibility of the student assistant program?

The analysis of the data by the one way analysis of variance is presented in Table 22 indicates that no significant relationship exists between the academic level (e.g., later elementary, junior high) from which the student assistants are obtained and the teacher's perception of the effectiveness and feasibility of the student assistant program. The teacher's total aggregate score for

Parts A, B, C & D of Section II of the instrument was the dependent variable used in the analysis of variance.

Table 22

Comparison of Attitude Toward the Effectiveness  
and Feasibility of the Assistant Program  
Among the Four Academic Levels from  
Which Student Assistants  
are Obtained

| Source of<br>Variance | Sum of<br>Squares | df | Mean<br>Squares | F <sup>a</sup> |
|-----------------------|-------------------|----|-----------------|----------------|
| Between Groups        | 453.256           | 3  | 151.085         | 2.25058        |
| Within Groups         | 4664.976          | 68 | 67.132          |                |
| Total                 | 5118.232          | 71 |                 |                |

<sup>a</sup>F .05 = 2.75

Question 8.--Are there any significant relationships between the teacher's stated perception of the feasibility and effectiveness of the assistant program and;

- a. Number of years the teacher has taught,
- b. Number of years the teacher has taught handicapped children,
- c. Number of semesters the teachers have had assistants,
- d. Amount of time the teachers use the assistants in the class each week?

Table 23 presents the product moment correlation coefficients which were used to examine this question. It will be noted that there is a significant negative correlation (.05 level) between the number of years taught and the teacher's perception of the effectiveness and feasibility of the assistant program. There is also a significant negative correlation (.001 level) between the number of years the teacher has taught the handicapped and the teacher's perception of the effectiveness and feasibility of the assistant program. This significant relationship indicates that the longer the teacher has taught or has taught the handicapped, the lower the teacher's perception of the assistant program.

No significant correlations were found between the teacher's perception of the effectiveness and feasibility of the assistant program and the number of semesters the teacher has used assistants or the amount of time the teacher uses the assistants in the class each week.

Question 9.--Are the teachers operating student assistant programs concerned about areas of interest relating to the program which were not examined by the instrument used in the study?

A number of the respondents (58%) in the study included comments in Section III of the instrument. This section was included to elicit comments which concerned topics relating to the student assistant program which had

Table 23

Correlation Between Teaching Experience, Length of  
Time Assistants have been Used, Amount of Time  
the Teacher Uses the Assistants Each Week  
and the Teacher's Perception of the  
Effectiveness and Feasibility of  
the Assistant Program

| Variable                                                                | Correlation with<br>Total ABCD Score |
|-------------------------------------------------------------------------|--------------------------------------|
| Number of years the teacher has<br>taught                               | -.27*                                |
| Number of years the teacher has<br>taught the handicapped               | -.40**                               |
| Number of semesters the teacher has<br>used assistants                  | -.13                                 |
| Amount of time the teacher uses the<br>assistant in the class each week | -.02                                 |

\*Significant at .05 level.

\*\*Significant at .001 level.

not been covered in the instrument. A majority of the comments, however, did not supplement the topics which had been covered in the instrument, but elaborated on the teacher's positive attitude toward the assistant program. The comments generally agreed further with items which had been included earlier in the instrument.

The only supplemental area of interest mentioned by several respondents was that they believed that the assistants should receive a form of pay for their efforts in the special education classrooms. They concurred that this pay should be in the form of academic credit for the

assistant, because financial funds for such a purpose would be difficult to obtain.

### Summary

Information obtained from 72 student assistant programs serving educational programs for handicapped children in Michigan is reported in this chapter.

The data were obtained through the use of mailed questionnaires and were presented, in written and tabular forms, and analyzed as they pertained to each of the research questions examined in the study.

## CHAPTER V

### SUMMARY, CONCLUSIONS AND IMPLICATIONS

#### Summary

The purpose of this exploratory study was to systematically examine programs in Michigan using regular class students as assistants in educational programs for educable mentally handicapped (EMH), emotionally disturbed (ED) and physically handicapped (PH), children. Specifically, an attempt was made to; (a) examine the present status of student assistant programs serving handicapped children in Michigan, (b) determine the operational practices of teachers of the handicapped using regular class students as assistants, (c) examine the teachers' stated perceptions in regard to the effectiveness and feasibility of various aspects of the student assistant program, and (d) analyze the findings of the study to determine what implications they may have for the initiation or operation of student assistant programs in the future.

To provide a knowledgeable basis and gain greater insight into the various dimensions of student assistant programs, an intensive review of the literature

was pursued. The review revealed that; (a) students are considered to be fully capable of serving as assistants, (b) the assistant program is considered to provide a positive effect upon the educational program, (c) the program is viewed as providing benefits for both the student in the class and the assistant, and (d) there appears to be few administrative problems of great enough magnitude to deter the development of an assistant program.

In order to procure data for this study, all special education directors in Michigan were contacted to obtain the names of teachers of the handicapped (in the disability areas selected for this study) who were using, or had used, regular class students as assistants in their classrooms. An instrument developed especially for this study was sent to all teachers in Michigan who were reported to meet the criteria for inclusion in the study.

The information accumulated through the use of the questionnaire was summarized, and the analysis of the data resulted in the following findings.

### Findings

1. Programs using regular class students to serve as student assistants in classrooms for the educable mentally handicapped (EMH), the emotionally disturbed (ED) and the physically handicapped (PH) are being operated by 72 special education teachers in Michigan. The majority

of these programs (68%) are serving classrooms for the EMH students, with a smaller percentage of the programs serving the PH (26%) and ED (6%) students.

2. The average special education teacher operating assistant programs has taught for 10.7 years, has taught the handicapped for 5.6 years and has used student assistants in the special education class for 4.1 semesters.

3. The greatest portion of the student assistant programs (71%) are used with the younger children (pre-school, early and later elementary) in the special education classes, while only 29% of the programs serve handicapped students at the junior and senior high levels.

4. The greatest portion of the student assistants (72%) are obtained from the senior high school level, with the junior high (13%) and later elementary (11%) levels providing most of the remaining portion of the assistants.

5. The average assistant program; (a) uses 2.7 assistants per semester, (b) uses assistants for 4.4 days a week, and (c) uses the assistants for 30.6 weeks per year.

6. Student assistant programs were most frequently initiated as a result of a group (e.g., Future Teachers Club) requesting teachers to accept an assistant (43%). A number of the teachers (25%) initiated assistant programs as a result of learning of the value of the program from other teachers.

7. Student assistants are most frequently regular class volunteers (42%) or members of the Future Teachers Club (26%).

8. A large number of the special education teachers (43%) had no involvement in the selection of the student assistants. Of those reporting involvement, the most frequently mentioned activities were those of interviewing potential assistants (39%), and having the potential assistants serve a short trial period in the classroom (28%).

9. The average student assistant program uses assistants in the special education classroom for 5.35 hours per week or 64 minutes each day. The majority of the assistants' time (62%) is spent performing instructional tasks, while the balance of the time is somewhat evenly distributed between the performance of supervisory duties (21%) and clerical tasks (17%).

10. Learning in the classroom while serving as an assistant was the type of training experience for the assistant which was used most frequently by the teachers included in the study (82%). The use of classroom observation prior to participation in the program was reported by 61% of the special education teachers operating assistant programs.

11. Special education teachers operating student assistant programs devote an average of 31.7 minutes per

week, outside of class time, to consultation with the assistant concerning his service in the special education classroom.

12. Regarding the ability of the assistants, teachers using student assistant programs agree that student assistants;

- (a) are able to work in one-to-one instructional situations (93%),
- (b) have no difficulty relating to handicapped students (85%),
- (c) are capable of performing instructional tasks (83%),
- (d) are capable of working with small groups (76%),
- (e) are not limited by their abilities to performing clerical tasks (64%),
- (f) are able to choose instructional materials and activities (53%).

13. The teachers believe that the effect of the use of assistants upon the educational program is that the assistant program;

- (a) does not take such an undue amount of the teacher's time to plan for, and supervise, that it nullifies the benefits of the program (94%),
- (b) allows the teacher to consider a greater range of instructional methods and activities (92%),
- (c) permits the teachers to more fully utilize their professional skills (86%),

- (d) is a practical approach to improving the educational program for the handicapped (85%),
- (e) would be an acceptable alternative to employing teacher aides if funds were not available to employ the aides (61%).

14. The effect of the program upon the assistant, as examined by the study, shows that the teachers agree that service as an assistant;

- (a) serves as an enrichment experience (99%),
- (b) improves the assistant's attitude toward the handicapped (97%),
- (c) is an effective method of creating an interest in the area of special education (96%),
- (d) provides the opportunity to determine whether he is capable of working with handicapped children (96%),
- (e) improves the self-concept of the assistant (90%),
- (f) improves the assistant's attitude toward school (85%),
- (g) provides a remedial experience (76%),
- (h) improves the assistants' academic achievement and understanding of subject matter (64%).

15. Regarding the effect of the assistant program upon the handicapped student in the class, the teachers indicate agreement that;

- (a) additional directed instructional time is provided for the handicapped student (92%),
- (b) working with assistants tends to improve the self-concept of the handicapped student (86%),
- (c) handicapped children receiving help from student assistants do not compare their own skills unfavorably with those of the assistants (86%),
- (d) working with an assistant tends to increase the handicapped students academic motivation (79%),
- (e) assistants provide a behavior model with which the handicapped student can positively identify (78%),
- (f) when a handicapped student is integrated into a regular class, the assistants can help him function more effectively in that class (81%).

16. Special education teachers who have used regular class students as assistants in special education classrooms generally agree that the student assistant program is a feasible and effective program for use in educational programs for handicapped children.

17. An examination of the administrative aspects of the assistant program reveals that teachers (75%) do not feel that the assistant program creates unusual administrative problems. They also felt that recruitment should not be the main goal of the assistant program (79%) and

that prior commitment to the field of education should not be required of the assistants (89%). The teachers believe that an effective assistant program should provide selection criteria for the assistants (90%), provision for the evaluation of the assistants (93%), released time for the teachers to consult with the assistants (81%), and preservice and inservice training for the assistants, other than that provided by the teacher (57%). Many teachers (92%) felt parents would not express resistance to their child serving as an assistant and 96% agreed that parents of the handicapped would not be dissatisfied by the effects of the program.

18. The teacher's perception of the effectiveness and feasibility of the assistant program is not significantly related to the area of handicap with which the teacher works.

19. No significant relationship exists between the academic level (e.g., preschool, early elementary) of the handicapped students in the class and the teacher's perception of the effectiveness and feasibility of the student assistant program.

20. No significant relationship exists between the academic level (e.g., later elementary, junior high) from which the student assistants are obtained and the teacher's perception of the effectiveness and feasibility of the student assistant program.

21. There is a significant negative correlation (.05 level) between the number of years taught and the teacher's perception of the effectiveness and feasibility of the assistant program. There is also a significant negative correlation (.001 level) between the number of years the teacher has taught the handicapped and the teacher's perception of the effectiveness and feasibility of the assistant program.

22. There is no significant correlation existing between the teacher's perception of the effectiveness and feasibility of the assistant program and the number of semesters the teacher has used assistants or the amount of time the teacher uses the assistants in the class each week.

23. A number of the respondents in the study (16%) believed that the assistant program would be improved if the assistant would receive credit for his service as an assistant.

### Conclusions

The analysis of the data led to the following conclusions based on the results of the study:

1. Teachers of the handicapped who have worked with regular students as classroom assistants were highly supportive of the student assistant program.

2. The student assistants were primarily utilized in the instructional aspect of the classroom program, as opposed to the clerical and supervisory aspects.

3. Student assistants were judged to be capable of performing instructional tasks in the classroom.

4. The teachers believed that the student assistant program improved the educational program for the handicapped.

5. The student assistant program was judged as having a positive effect upon the student assistant's personal and academic development.

6. Service as a student assistant was reported to have a positive effect upon the recruitment of potential teachers into the field of special education.

7. The student assistant program was judged to have a positive effect upon the attitude and performance of handicapped children.

8. The administrative problems encountered in conducting student assistant programs were not considered to be extensive enough to discourage the development of the assistant programs.

9. The student assistant program was judged to be effective regardless of the area of handicap with which the teacher worked, the academic level of the handicapped students in the class or the academic level from which the student assistants were obtained.

10. The longer the teachers had taught, the less they supported the student assistant program.

## Implications

### Practical Implications

The practical or applied implications which the results of this investigation hold for special education programs are potentially significant.

1. A goal of special educators should be to increase the use of the student assistant programs with educational programs for the handicapped. Teachers who have operated assistant programs with the handicapped view the program very positively and an examination of the information which was obtained in this study revealed a number of implications for the implementation of assistant programs.

2. Special education administrators should be aware that teachers of the handicapped have been reluctant to initiate assistant programs on their own. Encouragement and assistance provided by administrative or supervisory personnel could do a great deal to increase the number of assistant programs which are serving educational programs for the handicapped.

3. The administrators of educational programs for the handicapped should consider the use of inservice training sessions to provide the special education teachers with the opportunity to obtain information concerning the benefits of the assistant program and information regarding the initiation and operation of assistant programs.

4. It would appear that the student assistant program is an excellent method of recruiting personnel into the field of special education. The program provides the assistants with an opportunity to work with handicapped children and enables them to consider the intensity of their interest in special education before they commit themselves to a university teacher training program. Although recruitment is an important aspect of the assistant program, it should not be the primary goal of the program.

5. The initiation of new student assistant programs should include the establishment of criteria for the selection of the assistants. Provisions should be made to provide training experiences for the assistant, other than the training which is provided by the classroom teachers. These experiences should provide the assistants with help in developing more effective instructional skills and they should help to develop within the assistants, greater insight into, and understanding of, the students with which they are working. Providing periodic released time for the teachers would permit them to work more closely and effectively with the assistants.

6. University preparation programs for special education teachers should consider the presentation of information relating to the use of regular class students as assistants in special education classrooms.

7. State departments of education should disseminate information, regarding the student assistant program, through the use of conferences and the development and distribution of pertinent printed materials.

While it is conceivable that a student assistant program may not be practical in every situation, the programs were generally found to be feasible and effective when used with educational programs for the handicapped. This feasibility and effectiveness was reported regardless of the area of handicap with which the assistants were used, the academic level of the handicapped students in the class or the academic level from which the student assistants were obtained. In addition, the program was viewed as having a positive effect upon the educational program, the student serving as an assistant and the handicapped student in the class. This information, along with information concerning the initiation and operation of assistant programs, should be conveyed to the special education teacher in the classroom. Possession of this knowledge would allow the teachers to examine the various aspects of the program in order to determine whether the program would be appropriate for their teaching situation.

#### Research Implications

Specifically, recommendations for further research would include the consideration of the following areas:

1. Controlled studies should be conducted to examine the perceptions of the teachers, student assistants, and handicapped students before and after the operation of a student assistant program.

2. Measures should be developed to examine the effect of the program upon the student in the class and the student serving as an assistant (both academically and behaviorally) and its effect upon the teacher's operation of the educational program for the handicapped.

Hopefully, these studies would use a number of randomly selected experimental and control groups. They would examine the effectiveness of the program and how it would be influenced by controlling variables such as the type of preservice and inservice training for the assistants, the level from which assistants were obtained, the academic level of the students in the class, the use of different selection criteria for the assistants or the amount of time the teachers consult with the assistants each week.

Although the use of student assistant programs using regular class students to serve as assistants in special education classrooms would appear to be a feasible and effective program, research such as the type described in the preceding paragraphs of this section could do a great deal to improve the understanding of the operation of assistant programs.

## **LIST OF REFERENCES**

## LIST OF REFERENCES

- Achtenhagen, Olga. Senior teachers: the time to find out. Clearing House, 1952, 26, 488-490.
- Aslin, Mary L. How we love our lunch break tutors. Grade Teacher, 1969, 87 (1), 94-95.
- Bammann, Bernice, & Franch, J. Variety of improvements in staff utilization are tried in a small high school at Beecher, Illinois. Bulletin of the National Association of Secondary School Principals, 1958, 42 (234), 115-125.
- Bender, K. R. Using brighter students in a tutorial approach to individualization. Peabody Journal of Education, 1967, 45, 156-157.
- Briggs, D. L. Older children teaching younger. California Teachers Association Journal, 1967, 63 (1), 24-26.
- Crum, C. E. A study of teacher recruitment practices in Indiana high schools. Teachers College Journal, 1954, 25 (5), 71-76.
- Delaney, A. A. Good students help deficient pupils. School Activities, 1963, 35, 36.
- Delaney, A. A. Why not use student aides? School Activities, 1964, 35, 217-218.
- Denny, Alice C. Greenie girls. Instructor, 1968, 78 (10), 47.
- Driscoll, P. A. Summer remedial program for primary children. National Elementary Principal, 1969, 48 (3), 43-44.
- Edwards, M. Lay tutors. Times Education Supplement, 1966, 2645, 232-233.

- Fleming, J. C. Pupil tutors and tutees learn together. Today's Education, 1969, 58 (7), 22-24.
- Frantz, K. D. The role of the high school in the selective recruitment of teachers. Bulletin of the National Association of Secondary School Principals, 1954, 38 (21), 139-153.
- Fredrick, R. W. The third curriculum: student activities in American education. New York: Appleton-Century-Crofts, Inc., 1959.
- Gantent, R. L. Recruiting teacher aides. School Activities, 1958, 29, 143-144.
- Gibson, Lorna J. Student aide club. School Activities, 1961, 33, 109-110.
- Goeden, Louise E. Operation salvage; FTA tutors. Clearing House, 1956, 31, 171-173.
- Good, C. V. Dictionary of Education. New York: McGraw-Hill, 1959.
- Gottfried, N. W., & Jones, R. L. Career choice factors in special education. Exceptional Children, 1964, 30, 218-223.
- Gross, M. Teacher's big helper. School Activities, 1968, 39, 20-21.
- Guild, Florence C. Cadet teaching--a step toward solving the teacher shortage. Nations Schools, 1953, 51 (5), 79-80.
- Guild, Florence C. Cadet teaching in the Indianapolis public schools. Teachers College Journal, 1954, 25 (5), 66-67.
- Hassinger, J., & Via, M. How much does a tutor learn through teaching reading. Journal of Secondary Education, 1969, 44, 42-44.
- Hipple, T. W. Participatory education: students assist teachers. Bulletin of the National Association of Secondary School Principals, 1969, 53 (338), 80-89.
- Howard, Elizabeth Z. To feel like a teacher. Journal of Teacher Education, 1965, 16, 453-455.
- Howse, Greta. Primary educable mentally handicapped reading program. Illinois Education, 1967, 55, 350-351.

- Hoyt, C. Test reliability estimated by analysis of variance. Psychometrika, 1941, 6, 153-160.
- Jenkins, Lucile H. When students conduct the class. Art Activities, 1962, 52 (2), 6-12.
- Jones, R. L., & Gottfried, N. W. Psychological needs and preferences for teaching exceptional children. Exceptional Children, 1966, 32, 313-321.
- Jones, R. L., Marcotte, Marcia, & Markham, Karen. Modifying perceptions of trainable mental retardates. Exceptional Children, 1968, 34, 309-315.
- Klee, Geraldine. Teacher apprenticeship; seniors interested in a possible teaching career. High Points, 1964, 46 (9), 60-65.
- Kleinert, E. J. Youth is interested in teaching. Michigan Education Journal, 1949, 26, 412-413.
- Kohler, Mary. Youth tutoring youth. Bulletin of the National Association of Secondary School Principals, 1969, 53 (332), 117-123.
- Kuppel, H. Student tutors for floundering classmates. School Activities, 1964, 35, 255-256.
- Le Boeuf, F. Qui docet discit: he who teaches learns. Science Teacher, 1968, 35 (1), 53-56.
- Leep, A. G., & Tracy, D. B. Teacher aides (teenagers used successfully as teacher aides). Ohio Schools, 1967, 45 (7), 26-27.
- Lippitt, Peggy. Children can teach other children. Instructor, 1969, 78 (9), 41.
- Lippitt, Peggy, & Lohman, J. E. Cross age relationships; an educational resource. Children, 1965, 12, 113-117.
- Lippitt, R., & Lippitt, Peggy. Cross age helpers. National Educational Association Journal, 1968, 57 (3), 24-26.
- Liu, Eleanor. Kindergarten kadets. Instructor, 1964, 73 (7), 24.
- Loughlin, R. L. Using moniters to increase teaching efficiency. High Points, 1965, 47 (4), 50-51.

- Lundberg, D. L. Some evaluation of tutoring by peers. Journal of Secondary Education, 1968, 43, 99-103.
- McAllister, Anne. Cadet teaching in the Elkhart Public Schools. Teachers College Journal, 1954, 25 (5), 62-66.
- McCracken, R. A. Individualizing reading with pupil-teachers. Education, 1965, 86, 174-176.
- Mosel, Edith T. Job development program. Balance Sheet, 1962, 43, 432.
- Nelson, N. B. Exploring teaching. National Education Association Journal, 1968, 47 (2), 139.
- Nelson, W. E. Take time to teach student leaders. Journal of Health, Physical Education and Recreation, 1966, 37 (4), 22.
- O'Neil, Audrey M. Childhood memories and grad level selected for teaching. Journal of Counseling Psychology, 1969, 16, 177-178.
- Ostrowiak, Laurie N. Teacher aide trainees. Illinois Education, 1968, 57, 146-148.
- Palmer, C. School skills aided for poor. Denver Post, 1969, 5 (May 11), 13.
- Pinkerton, W. S. The nonprofessionals; classroom aides handle routine chores for teachers. Wall Street Journal, 1967, 170 (August 24), 8.
- Rime, Laura, & Ham, Jane. Sixth grade tutors. Instructor, 1968, 77 (7), 104-105.
- Russell, Vivian. High schoolers help our children. Instructor, 1968, 78 (10), 61.
- Schwartz, Elizabeth. Slow readers can enjoy oral reading. Journal of Reading, 1968, 12, 139-141.
- Shapiro, A. F., & Hopkins, L. B. Pupil-teachers. Reading Teacher, 1967, 21, 128-129.
- Simmons, G. Cadet teaching. Michigan Education Journal, 1959, 27, 187.
- Sokol, I. Student assistants for the substitutes. Clearing House, 1952, 26, 328-330.

- Stocks, W. D. Searching for teachers within subcultures. Childhood Education, 1965, 42, 86-88.
- Talley, J. W. Club supplies substitute teachers. Nations Schools, 1948, 41 (5), 53.
- Thorndike, R. L. Reliability. In E. F. Lindquist (Ed.) Educational Measurement. Washington D.C.: American Council on Education, 1951.
- Trasin, W. Can learners teach. Clearing House, 1960, 34, 263-265.
- Vassilaros, C. G. Non professional aides in science; student aides from the biology club. Science Teacher, 1969, 36 (1), 59-60.
- Walters, Helen. Let students lighten your load. Grade Teacher, 1965, 83 (1), 46.
- Watts, Josephine J. Upper graders teach dental health. Instructor, 1968, 77 (6), 49.
- Webb, L. N. Nongrading: a modern practice in elementary school education. National Education Association Research Memo, 1961, October, 3.
- Weller, Louise. Student assistants. National Elementary Principal, 1955, 34 (5), 37-38.
- Wright, Elizabeth J. Upper-graders learn by teaching. Instructor, 1965, 75 (2), 102-103.
- Youngpeter, J. M. Use of student assistants in high school science. American Biology Teacher, 1962, 24, 194-195.
- Young, W. Cadet teaching in Indiana. Teachers College Journal, 1954, 25 (5), 62.
- Zsenyuls, A. J. Greusel students in tutorial program. Detroit Schools, 1968, 28, 63.

## **APPENDICES**

**APPENDIX A**

**REQUEST FOR INFORMATION WHICH WAS SENT TO  
LOCAL SPECIAL EDUCATION DIRECTORS**

1536 J Spartan Village  
East Lansing, Michigan  
October 9, 1969

Dear

In an attempt to locate programs for the handicapped which are presently using students from the regular education program as assistants in special education classes, I would like to solicit your assistance.

As there is no central depository of this information in Michigan, it is necessary to contact each of the special education directors to determine if such a program is presently operating in their district. This preliminary search is essential in determining the feasibility of a study of the use of student assistants with handicapped children in Michigan.

I am especially interested in locating programs which are using "regular" students as assistants in classes for the educable mentally handicapped, the emotionally disturbed, and the physically handicapped (visually, auditorily, orthopedic).

After determining specifically where these programs are operating, I then plan to ask each teacher to complete a questionnaire. This questionnaire will consist of some objective questions concerning their present student assistant program and also questions relating to their perceptions of the effectiveness and feasibility of the student assistant program.

Because of the limited number of student assistant programs operating in Michigan, I would appreciate any pertinent information you or a member of your staff can provide by completing the attached questionnaire and returning it in the enclosed, stamped, self-addressed envelope.

If further clearance is needed to contact the teachers you list on the attached form, would you please provide the name of the appropriate person to contact to obtain this approval.

I realize this is a busy time of the year in your office and I greatly appreciate your assistance and consideration of this matter. If any questions arise, please feel free to contact me.

Sincerely,

Donald Doorlag  
Doctoral Candidate  
Michigan State University

DISTRICT \_\_\_\_\_

Please complete the following questions and return in the stamped, self-addressed envelope.

1. Are there presently, or have there been, classrooms for the handicapped in your district in which the teacher uses upper elementary, junior high, or senior high school students as assistants in the classroom for the handicapped?

Yes \_\_\_\_\_ No \_\_\_\_\_

(Complete the remainder of the questionnaire only if answer to #1 is Yes.)

2. In how many classrooms is such a student assistant program presently operating? \_\_\_\_\_

3. Would you please list below the names of teachers who are still teaching in your district and are using, or have used, student assistants in their classroom for the educable mentally handicapped, physically handicapped (visually, auditorily, orthopedic) or emotionally disturbed. Would you please include; a) the name of the teacher, b) the school in which he works, and c) the area of handicap with which he works.

TeacherSchoolArea

|       |       |       |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

(Please include any additional names on reverse side of the page.)

If student assistant programs have been in operation and you are unable to provide the specific information requested in the previous questions, would you please forward this form to the appropriate supervisory person for completion.

Person completing this questionnaire.

Name \_\_\_\_\_

Title \_\_\_\_\_

Please return to:

Donald Doorlag  
1536 J Spartan Village  
East Lansing, Mich. 48823

**APPENDIX B**

**REQUEST FOR INFORMATION WHICH WAS SENT TO  
INTERMEDIATE DISTRICT SPECIAL  
EDUCATION DIRECTORS**

1536 J Spartan Village  
East Lansing, Michigan  
October 9, 1969

Dear

In an attempt to locate programs for the handicapped which are presently using students from the regular education program as assistants in special education classes, I would like to solicit your assistance.

As there is no central depository of this information in Michigan, it is necessary to contact each of the special education directors to determine if such a program is presently operating in their district. This preliminary search is essential in determining the feasibility of a study of the use of student assistants with handicapped children in Michigan. A separate request has been sent to local directors and I would appreciate obtaining from your office any information concerning the use of student assistants in programs operating in constituent districts which do not have local directors of special education.

I am especially interested in locating programs which are using "regular" students as assistants in classes for the educable mentally handicapped, the emotionally disturbed, and the physically handicapped (visually, auditorily, orthopedic).

After determining specifically where these programs are operating, I then plan to ask each teacher to complete a questionnaire. This questionnaire will consist of some objective questions concerning their present student assistant program and also questions relating to their perceptions of the effectiveness and feasibility of the student assistant program.

Because of the limited number of student assistant programs operating in Michigan, I would appreciate any pertinent information you or a member of your staff can provide by completing the attached questionnaire and returning it in the enclosed, stamped, self-addressed envelope.

If further clearance is needed to contact the teachers you list on the attached form, would you please provide the name of the appropriate person to contact to obtain this approval.

I realize this is a busy time of the year in your office and I greatly appreciate your assistance and consideration of this matter. If any questions arise, please feel free to contact me.

Sincerely,

Donald Doorlag  
 Doctoral Candidate  
 Michigan State University

DISTRICT \_\_\_\_\_

Please complete the following questions as they relate to constituent districts without local directors of special education and return in the stamped, self-addressed envelope.

1. Are there presently, or have there been, classrooms for the handicapped in your constituent districts in which the teacher uses upper elementary, junior high, or senior high school students as assistants in the classroom?

Yes \_\_\_\_\_ No \_\_\_\_\_

(Complete the remainder of the questionnaire only if the answer to #1 is Yes.)

2. Would you please list below the names of teachers who are still teaching in your constituent districts and are using, or have used, student assistants in their classrooms for the educable mentally handicapped, physically handicapped (visually, auditorily, orthopedic) or emotionally disturbed. Would you please include; a) the name of the teacher, b) the school and district in which he works, and c) the area of handicap with which he works.

| <u>Teacher</u> | <u>School and District</u> | <u>Area</u> |
|----------------|----------------------------|-------------|
| _____          | _____                      | _____       |
| _____          | _____                      | _____       |
| _____          | _____                      | _____       |
| _____          | _____                      | _____       |
| _____          | _____                      | _____       |
| _____          | _____                      | _____       |
| _____          | _____                      | _____       |
| _____          | _____                      | _____       |

(Please include any additional names on reverse side of the page.)

If student assistant programs have been in operation and you are unable to provide the specific information requested in the previous questions, would you please forward this form to the appropriate supervisory person for completion?

Person completing this questionnaire.

Name \_\_\_\_\_

Title \_\_\_\_\_

Please return to:

Donald Doorlag  
1536 J Spartan Village  
East Lansing, Mich. 48823

**APPENDIX C**

**ADVISOR'S LETTER REQUESTING THE COOPERATION  
OF THE SPECIAL EDUCATION DIRECTORS**

Dear

Mr. Donald Doorlag, a doctoral student in special education administration, is in the process of developing a study of "The Utilization of Regular Class Students as Teaching Assistants in Special Education Classrooms." It is my feeling that this is a topic which will have important implications for special education programs and which will be of particular interest and value to Michigan special educators.

As in any study of this type, success will depend in a large measure upon the interest and help of those persons in leadership positions in the public schools. Your support of this study, is, therefore, earnestly requested.

It is our conviction that public school personnel who assist in research efforts should have feedback as to the outcome of the study. A summary of the information obtained from this investigation will, therefore, be supplied to all Michigan Directors of Special Education.

We will greatly appreciate your assistance.

Sincerely,

Charles E. Henley  
Associate Professor

CEH/psm

**APPENDIX D**

**FOLLOW-UP LETTER FOR INFORMATION FORMS**

1536 J Spartan Village  
East Lansing, Michigan  
October 31, 1969

Approximately two weeks ago a request was sent to your office regarding information concerning the use of regular class students as assistants in educational programs for the handicapped.

To determine the feasibility of a study into this area, it is essential that I obtain as much information as possible about the use of student assistant programs in Michigan.

I would appreciate it greatly if you would check on my original request and determine if the form which was enclosed has been returned.

Please disregard this letter if the above mentioned form has been returned.

Thank you for your assistance and consideration regarding this matter.

Sincerely,

Donald Doorlag  
Doctoral Candidate  
Michigan State University

## **APPENDIX E**

### **INSTRUMENT USED IN THE STUDY**

Name \_\_\_\_\_

- I. GENERAL INFORMATION. The following section is composed of questions to be answered by the teacher of the handicapped who has used student assistants in assisting or helping capacity in the classroom for the physically, mentally, or emotionally handicapped student. For the purposes of this study, the student assistant is that person who is regularly a student in the general education program at the elementary, junior high, or senior high level and spends some time during the year serving under the direction of a special education teacher in the classroom for the handicapped. The purpose of this section is to obtain information concerning the teacher and the operation of the student assistant program. (Please respond to all items in this section.)
1. How many years have you taught? \_\_\_\_\_
  2. How many years have you taught handicapped students? \_\_\_\_\_
  3. With which type of handicapped students have you used student assistants?
    1. ( ) Educable mentally handicapped.
    2. ( ) Emotionally handicapped.
    3. ( ) Physically handicapped (Visually ( ), Auditorily ( ), Orthopedic ( ) ).
    4. ( ) Other (Please specify) \_\_\_\_\_
  4. Which of the following categories best describes the group of handicapped students with which you have used student assistants? (Check only one.)
    1. ( ) Preschool.
    2. ( ) Early elementary.
    3. ( ) Later elementary.
    4. ( ) Junior high.
    5. ( ) Senior high.
  5. During how many semesters have you utilized student assistants in working with the handicapped? \_\_\_\_\_
  6. Of the total number of student assistants you have used, how many have been drawn from each of the following groups?
    1. \_\_\_\_ Early elementary.
    2. \_\_\_\_ Later elementary.
    3. \_\_\_\_ Junior high.
    4. \_\_\_\_ Senior high.
  7. What was the most important factor in your decision to use regular class students as assistants in your classroom? (Check the most appropriate response.)
    1. ( ) Became interested after learning of the program from the literature or from attending a conference.
    2. ( ) Became aware of the value of assistants after seeing this type of program work for other teachers.
    3. ( ) Group placing students asked you to use an assistant in your class.
    4. ( ) Supervisor encouraged you to try an assistant.
    5. ( ) Learned of possibilities of program in course at college.
    6. ( ) Other (Please specify) \_\_\_\_\_
  8. On the average, how many student assistants do you use during a semester? \_\_\_\_\_

9. How many weeks during the year do you have the use of student assistants?  
\_\_\_\_\_.
10. From which of the following groups do you acquire the majority of your assistants?
1. ( ) Future Teachers Club. (Students with a definite interest in the field of education)
  2. ( ) School Service Club. (Students doing volunteer work as a member of the club.)
  3. ( ) Student serving as part of a course requirement. (Psychology class, Child development, etc.)
  4. ( ) Regular class volunteers. (Students wishing to assist or interested in education.)
  5. ( ) Students receiving vocational training. (e.g. Teacher aides, etc.)
  6. ( ) Regular class students assigned to work in class. (For remedial or enrichment purposes.)
  7. ( ) Other (Please specify)\_\_\_\_\_
11. Which of the following best describes your involvement in selecting student assistants? (Check all appropriate items)
1. ( ) Involved in establishing selection criteria.
  2. ( ) Interview potential assistants.
  3. ( ) Potential assistants serve short trial period in you class.
  4. ( ) Serve on selection committee for student assistants.
  5. ( ) Selection of the assistant is made without your involvement.
  6. ( ) Other (Please specify)\_\_\_\_\_
12. Generally, how much time do (did) the student assistants spend in your classroom each week? \_\_\_\_\_ hours \_\_\_\_\_ minutes.
13. Generally, how many days per week does (did) the assistant report to your classroom? \_\_\_\_\_ total days per week.
14. Considering the total amount of time the assistant spends in your class, please estimate the approximate percentage of the time your assistants spend in each of the following areas.
1. \_\_\_\_\_% Instructional tasks. (Individualized instruction, work with small groups, demonstrating and explaining instructional materials, planning bulletin boards, etc.)
  2. \_\_\_\_\_% Clerical tasks. (Correcting papers, recording grades, duplicating materials, setting up teacher planned bulletin boards, etc.)
  3. \_\_\_\_\_% Supervisory duties. (Assisting with supervision of the class on the playground, on fields trips, in the gym, in the lunchroom, etc.)
15. What type of training experiences do your assistants usually receive? (Check all appropriate items)
1. ( ) Training in formal, lecture type, preservice training program.
  2. ( ) Classroom observation prior to participating in activities with the students.
  3. ( ) Learning in the classroom while working with the students.
  4. ( ) Assistants take prerequisite class, such as psychology class, before serving as an assistant.
  5. ( ) Organization to which the assistants belong provides training for all potential assistants.
  6. ( ) Assistants attend regular seminar to discuss their experiences in the classroom.
  7. ( ) Other (Please specify)\_\_\_\_\_

16. How much time, outside of class, are you generally able to spend with the assistant each week discussing classroom activities and procedures and the assistant's questions and problems? \_\_\_\_\_ minutes per week.

II. **USE OF STUDENT ASSISTANTS.** Below are several categories, each containing statements regarding the use of student assistants. Beside each item circle the number which best describes your degree of agreement or disagreement with that item. There are no "correct" or "incorrect" answers--the choice of response is your decision to make. The choices you have are; 1. Agree Strongly, 2. Agree, 3. Disagree, 4. Disagree Strongly. (Please respond to all items in each category, do not leave any blank. Please select only one response for each item.)

| CHOICES:                                                                                                                                                                           | 1<br>Agree<br>Strongly | 2<br>Agree | 3<br>Disagree | 4<br>Disagree<br>Strongly |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|---------------|---------------------------|
| <b>A. <u>ABILITY OF ASSISTANTS</u></b>                                                                                                                                             |                        |            |               |                           |
| 1. Most student assistants are capable of performing instructional tasks in classes for handicapped children.                                                                      | 1                      | 2          | 3             | 4                         |
| 2. The abilities of most student assistants limits the type of duties they can perform to clerical tasks.                                                                          | 1                      | 2          | 3             | 4                         |
| 3. Student assistants are generally able to work with handicapped students in a one-to-one instructional situation.                                                                | 1                      | 2          | 3             | 4                         |
| 4. After serving in the classroom for a period of time, most student assistants are able to develop or choose instructional materials and activities for the handicapped students. | 1                      | 2          | 3             | 4                         |
| 5. Student assistants are generally capable of serving in an instructional capacity with small groups of handicapped students.                                                     | 1                      | 2          | 3             | 4                         |
| 6. Regular class students serving as assistants generally have difficulty relating to handicapped students.                                                                        | 1                      | 2          | 3             | 4                         |
| <b>B. <u>EFFECT OF STUDENT ASSISTANTS UPON THE EDUCATIONAL PROGRAM</u></b>                                                                                                         |                        |            |               |                           |
| 7. The teacher's opportunity to fully utilize his professional skills tends to increase with the use of student assistants.                                                        | 1                      | 2          | 3             | 4                         |
| 8. The contribution the assistant program can make to the educational program for the handicapped is limited to reducing the teacher's clerical duties.                            | 1                      | 2          | 3             | 4                         |
| 9. The use of student assistants is an acceptable alternative to employing teacher aides if funds are not available to employ aides.                                               | 1                      | 2          | 3             | 4                         |
| 10. The use of student assistants is a practical approach to improving educational programs for handicapped students.                                                              | 1                      | 2          | 3             | 4                         |

| CHOICES:                                                                                                                                                                                                                                                    | 1<br>Agree<br>Strongly | 2<br>Agree | 3<br>Disagree | 4<br>Disagree<br>Strongly |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|---------------|---------------------------|
| 11. The use of student assistants allows the teacher to consider a greater range of instructional methods to be used with the handicapped students (e.g. more individualized instruction, more small group work, greater use of word or number games, etc.) | 1                      | 2          | 3             | 4                         |
| 12. The benefits of having a student assistant program are nullified by the amount of time the teacher must spend planning for, and supervising, the program.                                                                                               | 1                      | 2          | 3             | 4                         |
| <b>C. <u>EFFECT OF PROGRAM UPON THE ASSISTANT</u></b>                                                                                                                                                                                                       |                        |            |               |                           |
| 13. The student assistant program provides the assistants with an opportunity to determine whether they would be capable of working with handicapped children.                                                                                              | 1                      | 2          | 3             | 4                         |
| 14. The self-concept of the student assistant tends to improve after a period of service with handicapped students.                                                                                                                                         | 1                      | 2          | 3             | 4                         |
| 15. Experience as a student assistant does little to improve the assistant's attitude toward school.                                                                                                                                                        | 1                      | 2          | 3             | 4                         |
| 16. Service as a student assistant tends to improve the assistants academic achievement and understanding of subject matter.                                                                                                                                | 1                      | 2          | 3             | 4                         |
| 17. The student assistant's attitude toward the handicapped tends to improve after working with handicapped students.                                                                                                                                       | 1                      | 2          | 3             | 4                         |
| 18. Work as a student assistant provides an enrichment experience for many regular class students.                                                                                                                                                          | 1                      | 2          | 3             | 4                         |
| 19. Service as a student assistant provides a significant remedial experience for some students.                                                                                                                                                            | 1                      | 2          | 3             | 4                         |
| 20. The use of a student assistant program with handicapped students is an effective method of creating within the assistant, an interest in the area of special education.                                                                                 | 1                      | 2          | 3             | 4                         |
| 21. The immaturity of most student assistants creates problems which often discourage the assistants from considering special education as a profession at a later date.                                                                                    | 1                      | 2          | 3             | 4                         |

| CHOICES: | 1                 | 2     | 3        | 4                    |
|----------|-------------------|-------|----------|----------------------|
|          | Agree<br>Strongly | Agree | Disagree | Disagree<br>Strongly |

**D. EFFECT OF PROGRAM UPON THE HANDICAPPED CHILD**

- |                                                                                                                                                                                          |   |   |   |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| 22. The use of student assistants provides additional directed instructional time for the handicapped student.                                                                           | 1 | 2 | 3 | 4 |
| 23. Student assistants provide the handicapped student with a behavior model with which they can positively identify.                                                                    | 1 | 2 | 3 | 4 |
| 24. Working with student assistants tends to improve the self-concept of the handicapped student.                                                                                        | 1 | 2 | 3 | 4 |
| 25. Handicapped children receiving help from student assistants compare their own skills unfavorably with those of their assistant.                                                      | 1 | 2 | 3 | 4 |
| 26. The handicapped student's academic motivation tends to increase when working with a student assistant.                                                                               | 1 | 2 | 3 | 4 |
| 27. When a handicapped student is integrated into a regular class, the use of a student assistant program with this student helps him to function more effectively in the regular class. | 1 | 2 | 3 | 4 |

**E. ADMINISTRATIVE ASPECTS OF THE PROGRAM**

- |                                                                                                                                                                                                    |   |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| 28. The development of selection criteria for student assistants should be considered as an important factor in developing an effective student assistant program.                                 | 1 | 2 | 3 | 4 |
| 29. Recruitment of personnel into the field of special education should be the primary goal of a student assistant program.                                                                        | 1 | 2 | 3 | 4 |
| 30. Professional training of special education teachers should provide instruction in the use of student assistants.                                                                               | 1 | 2 | 3 | 4 |
| 31. A periodic evaluation of the assistant's progress is an essential ingredient for a good student assistant program.                                                                             | 1 | 2 | 3 | 4 |
| 32. The ability of regular class students to work in an instructional capacity with handicapped students tends to be underestimated by many other professionals in the field of special education. | 1 | 2 | 3 | 4 |
| 33. The regular class teachers of student assistants often feel that the time the assistant spends working with the handicapped is detrimental to the assistant's own educational progress.        | 1 | 2 | 3 | 4 |

| CHOICES:                                                                                                                                                                                                  | 1<br>Agree<br>Stongly | 2<br>Agree | 3<br>Disagree | 4<br>Disagree<br>Strongly |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|---------------|---------------------------|
| 34. Periodic released time for the teacher to consult with his student assistants contributes a great deal to the effectiveness of the program.                                                           | 1                     | 2          | 3             | 4                         |
| 35. Parents often express resistance to their child's service as a student assistant with handicapped children.                                                                                           | 1                     | 2          | 3             | 4                         |
| 36. Parents of handicapped students often express dissatisfaction with the effect the student assistant program has had upon their child.                                                                 | 1                     | 2          | 3             | 4                         |
| 37. A student assistant program would tend to be more effective for handicapped students in a special class than those in the regular class placement.                                                    | 1                     | 2          | 3             | 4                         |
| 38. The assistants should begin their service by performing routine functions, such as clerical duties and gradually become involved with the students, classroom routine, and the instructional program. | 1                     | 2          | 3             | 4                         |
| 39. Preservice or inservice training, other than that which is provided by the individual teachers, is not needed for an effective program.                                                               | 1                     | 2          | 3             | 4                         |
| 40. A prior committment to entering the field of education should be required of all potential assistants.                                                                                                | 1                     | 2          | 3             | 4                         |
| 41. The administrative problems encountered in obtaining (and retaining) student assistants discourage teachers from using, or continuing to use, the assistant program.                                  | 1                     | 2          | 3             | 4                         |

- III. GENERAL PROGRAM EVALUATION. The items in the preceding sections have attempted to examine various aspects of student assistant programs which may, or may not, pertain to all such programs. The purpose of this section is to provide an opportunity for the respondent to express concerns which have not been examined, to relate information about activities or procedures which are utilized in your program and may be beneficial to others who are considering such a program, or to respond further on your perceptions concerning the use of regular students as assistants in special education programs. This is an optional item, but it would be greatly appreciated if you could furnish any additional information or reactions which may add to the limited information which presently exists concerning the use of regular students as assistants in programs for the handicapped.

This is coding space for data processing. Please do not write in it.

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**APPENDIX F**

**COVER LETTER FOR INSTRUMENT**

In attempting to determine which of Michigan's approximately 3100 special education classroom teachers are using, or have used, regular class students as assistants in their programs, each local and intermediate special education director has been contacted. As a result of this contact, I have been informed that you are one of the 91 innovative teachers in Michigan who has been involved in such a program.

While there are many references in the literature relating to the use of students as assistants in regular education, very few of these programs have been reported in the field of special education. I am presently conducting a study which attempts to examine the use of regular class students in special education programs in Michigan and I would like to solicit your assistance in this endeavor. As a teacher who is using, or has used, student assistants with handicapped children, you are one of a small number of teachers who is able to respond knowledgeably to questions concerning such a program.

It would be appreciated if you would take a few minutes of your time to lend your expertise to the study by completing the enclosed questionnaire and returning it in the envelope which is provided. It is not the purpose of this questionnaire to evaluate your program, but rather to combine your data with that obtained from other teachers in the state to examine; a) what kinds of assistant programs have operated in Michigan and b) the teachers' perceptions of various aspects of the assistant programs. All responses will remain anonymous and your name is requested only for accounting purposes.

A summary of the results of this study will be provided for each district cooperating in the study. Hopefully, the results will add to the existing information in this area of study and will also be helpful to those who are presently operating assistant programs or to those who are considering the initiation of such a program.

Thank you for your assistance and cooperation in this study.

Sincerely,



Donald Doorlag  
Doctoral Candidate  
Special Education Administration

**APPENDIX G**

**INFORMATION LETTER SENT TO COOPERATING  
SPECIAL EDUCATION DIRECTORS**

Initially, I would like to express my appreciation for your assistance in obtaining the names of teachers who are using, or have used, regular class students as assistants in special education classrooms.

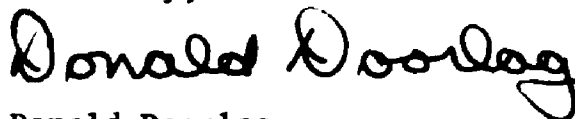
Information obtained from the returned forms has been compiled and the findings can be summarized as follows; 1) Programs utilizing regular class students as assistants in special education classrooms have been identified in 47 local school districts in Michigan, 2) These programs are located in 78 schools within these districts, 3) The programs are operated by a total of 91 special education teachers, and 4) Geographically, all the identified programs are located below the Bay City to Muskegon line.

As I stated in my initial letter, the second part of this study will involve asking each of the identified teachers to complete a questionnaire. This questionnaire will consist of some objective questions concerning their present student assistant program and also questions relating to their perceptions of the effectiveness and feasibility of the student assistant program.

A copy of the questionnaire has been sent to each of the teachers whose names were included on the forms which you returned. Because of the small number of student assistant programs found in the state, it is important that I obtain a 100% return of the questionnaires. This will allow me to examine thoroughly the total picture of student assistant programs in Michigan. Therefore, I would appreciate any assistance you might provide in facilitating the return of the questionnaires.

Thank you again for your assistance and I hope to provide you with a complete summary of the findings of the student assistant study very soon.

Sincerely,



Donald Doorlag  
Doctoral Candidate  
Special Education Administration

**APPENDIX H**

**FIRST FOLLOW-UP LETTER REQUESTING TEACHERS  
TO RETURN INSTRUMENT**

1536 J Spartan Village  
East Lansing, Michigan 48823  
March 3, 1970

Approximately three weeks ago you received a copy of a questionnaire which pertained to the use of student assistants in educational programs for handicapped children. The questionnaire is an integral part of a study which examines the use of these programs in Michigan.

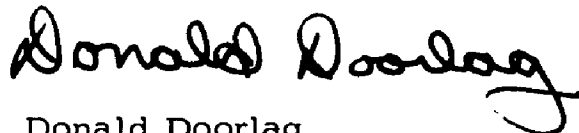
Because of the small number of student assistant programs found in the state, it is important that I obtain a 100% return of the questionnaires. This will allow me to examine thoroughly the total picture of student assistant programs in Michigan.

I would appreciate it greatly if you would check on my original request and determine if the questionnaire has been returned.

Please disregard this letter if the above mentioned questionnaire has been returned.

Thank you for your assistance and consideration regarding this matter.

Sincerely,

A handwritten signature in dark ink, reading "Donald Doorlag". The signature is written in a cursive style with a large, looping "D" and a trailing flourish.

Donald Doorlag  
Doctoral Candidate  
Michigan State University

**APPENDIX I**

**SECOND FOLLOW-UP LETTER REQUESTING TEACHERS  
TO RETURN INSTRUMENT**

1536 J Spartan Village  
East Lansing, Michigan 48823  
March 13, 1970

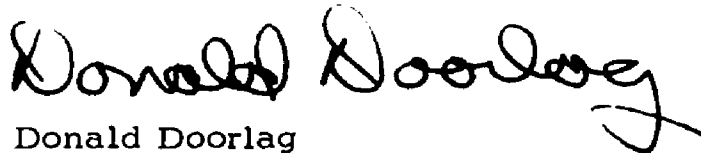
In the past several weeks you have received requests from me to return a questionnaire relating to the use of regular class students as assistants in your special education classroom. I am providing another copy of this questionnaire and hopefully you will be able to return it in the enclosed envelope.

As a former teacher of the emotionally disturbed, I realize how busy a special education teacher can be at this time of the year. I do feel that this questionnaire is one of the few opportunities the classroom teacher has to react to innovative programs they have instituted in their classrooms.

It would be extremely helpful if you could return the questionnaire this week. The deadline for the completion of this research project is drawing near and I would hope that your valuable opinions will be included in the study. If the questionnaire does not apply to your situation, please state this on the first page of the questionnaire when it is returned.

I look forward to hearing from you this week.

Yours truly,

A handwritten signature in dark ink, reading "Donald Doorlag". The signature is fluid and cursive, with the first name "Donald" and last name "Doorlag" clearly distinguishable.

Donald Doorlag  
Special Education Administration  
Michigan State University

**APPENDIX J**

**DISTRIBUTION OF RESPONSES TO ITEMS IN  
SECTION II OF THE INSTRUMENT**

| Score <sup>a,b</sup> |           |           |           |           | Score <sup>a,b</sup> |           |           |           |           |
|----------------------|-----------|-----------|-----------|-----------|----------------------|-----------|-----------|-----------|-----------|
| Item No.             | 1         | 2         | 3         | 4         | Item No.             | 1         | 2         | 3         | 4         |
| <b>Part A.</b>       |           |           |           |           | <b>Part D.</b>       |           |           |           |           |
| 1.                   | <u>12</u> | <u>48</u> | 7         | 5         | 22.                  | 20        | <u>46</u> | 6         | 0         |
| 2.                   | <u>5</u>  | <u>21</u> | <u>28</u> | <u>18</u> | 23.                  | <u>15</u> | <u>41</u> | 15        | 1         |
| 3.                   | <u>29</u> | <u>38</u> | <u>5</u>  | <u>0</u>  | 24.                  | <u>11</u> | <u>51</u> | 9         | 1         |
| 4.                   | <u>7</u>  | <u>31</u> | 29        | 5         | 25.                  | <u>0</u>  | <u>10</u> | <u>44</u> | <u>18</u> |
| 5.                   | <u>9</u>  | <u>46</u> | 14        | 3         | 26.                  | <u>9</u>  | <u>48</u> | <u>15</u> | <u>0</u>  |
| 6.                   | <u>2</u>  | <u>9</u>  | <u>37</u> | <u>24</u> | 27.                  | <u>9</u>  | <u>49</u> | 13        | 1         |
| <b>Part B.</b>       |           |           |           |           | <b>Part E.</b>       |           |           |           |           |
| 7.                   | <u>26</u> | <u>36</u> | 8         | 2         | 28.                  | 27        | 38        | 7         | 0         |
| 8.                   | <u>2</u>  | <u>9</u>  | 38        | <u>23</u> | 29.                  | 2         | 13        | 43        | 14        |
| 9.                   | <u>9</u>  | <u>35</u> | <u>21</u> | <u>7</u>  | 30.                  | 7         | 51        | 14        | 0         |
| 10.                  | <u>25</u> | <u>36</u> | 9         | 2         | 31.                  | 15        | 52        | 3         | 2         |
| 11.                  | <u>35</u> | <u>31</u> | 6         | 0         | 32.                  | 10        | 45        | 17        | 0         |
| 12.                  | <u>2</u>  | <u>2</u>  | <u>38</u> | <u>30</u> | 33.                  | 1         | 9         | 52        | 10        |
| <b>Part C.</b>       |           |           |           |           | 34.                  | 16        | 42        | 12        | 2         |
| 13.                  | <u>27</u> | <u>42</u> | 3         | 0         | 35.                  | 1         | 5         | 48        | 18        |
| 14.                  | <u>17</u> | <u>48</u> | 7         | 0         | 36.                  | 0         | 3         | 46        | 23        |
| 15.                  | <u>0</u>  | <u>11</u> | <u>46</u> | <u>15</u> | 37.                  | 2         | 23        | 41        | 6         |
| 16.                  | <u>6</u>  | <u>40</u> | <u>24</u> | <u>2</u>  | 38.                  | 9         | 35        | 25        | 3         |
| 17.                  | <u>28</u> | <u>42</u> | 2         | 0         | 39.                  | 2         | 29        | 33        | 8         |
| 18.                  | <u>24</u> | <u>47</u> | 1         | 0         | 40.                  | 0         | 9         | 30        | 33        |
| 19.                  | <u>11</u> | <u>44</u> | 16        | 1         | 41.                  | 2         | 16        | 41        | 13        |
| 20.                  | <u>26</u> | <u>43</u> | 3         | 0         |                      |           |           |           |           |
| 21.                  | <u>0</u>  | <u>8</u>  | <u>45</u> | <u>19</u> |                      |           |           |           |           |

<sup>a</sup>Scoring System: 1=Agree Strongly, 2=Agree, 3=Disagree, 4=Disagree Strongly.

<sup>b</sup>Underlined numbers indicates responses which most support a student assistant program. Other items non-directional.