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## A Comparison of a Block Program with the More Traditional System of Scheduling Speech Therapy in the Public Schools

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A COMPARISON OF A BLOCK PROGRAM WITH THE MORE  
TRADITIONAL SYSTEM OF SCHEDULING SPEECH  
THERAPY IN THE PUBLIC SCHOOLS



A Thesis  
Presented to  
the Graduate Faculty  
Central Washington State College



In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science  
in  
Speech Pathology



by  
Jean Cutlip  
July 1970

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## CHAPTER I

### INTRODUCTION

One of the tasks facing a public school speech correctionist each fall is the setting up of a therapy schedule. Many factors must be taken into consideration. Any state or local requirements regarding the number of meetings must be met. The correctionist must, of course, keep in mind the recommendations of each classroom teacher who will have students involved in the speech program. In addition, the number and location of schools to which she is assigned will affect her planning. Certainly, the number of children to be seen in each school will be included in the factors analyzed.

Most important, however, is the consideration given each individual child and the nature of his speech problem. The correctionist must make a decision about whether or not a child can benefit from group or individual therapy in terms of his emotional as well as his speech needs. All of these factors and others, in some cases, confront the correctionist as she attempts to schedule speech classes.

Until very recently, the majority of correctionists planned to meet most of the children needing speech therapy twice weekly. However, those involved in the public school

speech correction program, as well as others interested in its quality, began to sense the need for evaluating this traditional method of scheduling. They felt that other types of programming should be tried and tested so that the child with a speech problem could be helped most effectively and expediently. Furthermore, another method of planning therapy sessions might encourage better cooperation and support from the classroom teacher.

In 1961, a work group assigned to study research needs in public school speech and hearing services recognized this program when they stated:

High priority should be given to comparative studies of program organization, including evaluation of the number of times sessions are held weekly, combinations of intensive and less intensive therapy, and the block system of scheduling (Pronovost, 1961, p. 122).

A Conference on Research for Public School Speech and Hearing Personnel was held in January, 1966. This conference also recommended that the programming of therapy be considered an important area to be studied.

One of the innovations being investigated in various parts of the country is the block system whereby children receive intensive speech therapy for a certain number of weeks at regularly spaced intervals during the year. Many correctionists hypothesize that the child will be able to make more rapid progress in this kind of program than if he is seen during two periods a week. There is a

need for more studies comparing the two plans so that it can be assured that implementation of the block plan is a sound one.

### Statement of the Problem

The study was initiated to compare the block system of scheduling speech correction services in the public schools with the traditional intermittent system of scheduling. The question this study sought to answer was: Does the type of scheduling have an effect on the progress made by children? Opinions, regarding the two methods of scheduling, were sought from the classroom teachers whose students were involved in the study.

### Definition of Terms

Block program. While there are many ways of structuring a block, the term generally refers to "a concentrated or intensive program varying in length from two weeks to a full semester" (Bingham, 1961, p. 41). In this study, it refers to a concentrated program of therapy conducted for eight weeks and including four one-half hour sessions a week.

### Traditional system. Black notes:

Someone whose identity has since been lost decided once that the school children needing speech correction would be served best by having two periods of therapy each week (Black, 1964, p. 3).

A 1961 survey pointed out that most (53 percent) of the 705 correctionists participating did see their cases twice a week (Bingham, 1961, p. 39). In this study, the "traditional" group met for two half-hour sessions a week for sixteen weeks.

Method of speech therapy. The correctionist used a plan of articulation therapy progressing from ear training to work on the sound in isolation, in nonsense syllables, and finally on incorporation of the sound into conversational speech with each child involved in the study, depending on the status of his problem when he began therapy. Further discussion of therapy will be found on pages twenty and twenty-one. Only children with functional articulation problems were included in this study.

## CHAPTER II

### REVIEW OF THE LITERATURE

Information concerning the scheduling of speech classes seems to be rather scant in basic texts of speech correction. A survey of many of these resulted in few, if any, suggestions related to frequency of therapy sessions. Irwin (1953) suggests that seeing children twice weekly should be considered a minimum requirement. Edney points out that the itinerant nature of the speech correctionist's work affects the spacing of therapy sessions. He seems to indicate, however, that ideally sessions would be held daily.

In a revision (Johnson, 1967, p. 466), the same author writes:

At the present time, we have little in the way of experimental evidence to support reasonably positive statements concerning the frequency with which remedial sessions in speech and hearing should occur.

Ainsworth (1948) recommends that speech groups meet twice a week; Eisenson and Ogilvie (1963) agree.

Powers (1957) writes that, for most articulation cases, daily therapy would be ideal if such a schedule would not interrupt the child's activity in the classroom too much. She notes, however, that since daily meetings are seldom possible, satisfactory progress can be made with

two or three meetings a week. Powers also observes that skillful therapists can obtain good results on a once-a-week basis.

Two recent texts have devoted more attention to the subject of scheduling. Black (1964) makes several helpful suggestions and includes summaries of several innovative methods of setting up schedules, including one block plan. Van Hattum (1969) also gives very practical advice to public school correctionists and describes several different ways of scheduling. His conclusion, however, is that there is a need for more research in the area of scheduling before definitive conclusions can be drawn regarding the merits of different plans.

At best, then, the correctionist is confronted with a choice of several possible scheduling procedures, none of which has been adequately proven to be more effective than the others. Which procedure she will choose will, to some degree, be affected by local traditions. The speech correctionist coming into a school system for the first time usually finds that administrators and classroom teachers are accustomed to a certain kind of speech program. They have grown to accept those procedures which have been carried out year after year. In the light of this fact, it is somewhat understandable that, generally, there have been few diversions from the traditional methods of scheduling.

Yet, there may be little evidence to support these traditions. Black (1964, p. 3) points out that:

Someone whose identity has since been lost decided once that the school children needing speech correction would be served best by having two periods of therapy each week.

She adds that this policy has had widespread acceptance, even though it was not the result of study and research.

Tradition may have played a part in establishing state regulations, too. At any rate, these often are very restrictive, as many times they determine the case load which a correctionist must carry and, in some states, even set requirements for the length and number of sessions per week. In a survey of state requirements made in 1956, Irwin (1956) found that of the thirty-nine states responding, thirteen required that children be seen two times a week.

It is, of course, difficult to know how the correctionists across the country are actually planning their schedules. Apparently, the most recent study of public school speech and hearing services was completed in 1961. Seven hundred and five speech clinicians responded to questions. Of this group, 43 percent met individual cases twice a week and 53 percent met groups twice a week. Only 6 percent met individuals and groups three, four, or five times a week, while "a sizeable number" met with individuals or groups only once a week. The survey reports that

"approximately one out of two clinicians feels that the number of therapy meetings scheduled weekly is not satisfactory" (Bingham, p. 39).

The minds of administrators, classroom teachers, and state department officials can, of course, be changed. Policies and rules can be changed. Discontented speech correctionists may notice more effectiveness as a result of different scheduling practices. What is needed is research data showing clearly the effects of different programs and/or combinations. According to Van Hattum:

. . . the lack of solid evidence to support any system conclusively is an indictment of the entire profession for not fulfilling its responsibility for research in the schools (Van Hattum, 1969, pp. 171-172).

An alternative method of scheduling creating the most interest is the block or intensive cycle scheduling. Several studies have been conducted in the public schools throughout the country. How widespread its use may be is not known. In the 1961 survey, 81 percent of the seven hundred and five respondents had never used any kind of block system (Bingham, 1961, p. 40). Since then, the number using it has no doubt increased.

Two difficulties present themselves when one attempts a search for literature concerning the block system. The first is that, as Van Hattum points out, there is no such thing as "a block system" (Van Hattum, 1969, p. 165). There are many varieties of a block system, all



of which are still more intensive in nature than the twice a week method of scheduling. The Bingham study realized this and conducted a follow-up study regarding block scheduling. Seventy-five correctionists responded. Ten reported that they didn't know what a block program was. The other sixty-five gave twenty-six different definitions of the block procedure (Bingham, 1961, p. 41).

The other problem is that most of the studies concerning the frequency of therapy have not been published in journals distributed nation-wide. Most are in mimeographed form and can be obtained, but few correctionists in other parts of the country are aware of their existence. No doubt many groups of correctionists throughout the country are experimenting with types of block programs. The sharing of their data and conclusions is needed.

Studies which have been printed have sought answers to many questions. Despite the differences in structure, in each there is a comparison between the traditional, twice-a-week plan with some kind of concentrated program. Some have investigated the difference in dismissal rates. In 1952, Van Riper, along with sixteen public school speech correctionists, met to discuss some of the problems related to heavy case loads, low dismissal rates, and utilization of therapists' time. As a result of their meetings, a pilot project in Niles, Michigan, was set up. The superintendent of schools agreed to forego state reimbursement,

as the new program did not meet state requirements regarding program format.

Each public school therapist worked in five schools and spent every morning for a month in one school. She made the decisions regarding group or individual placement for each child, as well as the number of times each child was seen each week. The next month she went to another school in the morning. The afternoons were spent in the other four schools where the correctionist conducted speech improvement classes in all first grades and worked with all the defective children in the schools. By the end of the school year, then, each of the five schools had received approximately two full months of intensive therapy, in addition to speech improvement classes and weekly therapy sessions.

Van Riper reports that, previous to this pilot project, the dismissal rate in the Niles school system had ranged from 11 percent to 21 percent. By February, under the new program, 38 percent of the cases had been dismissed; by May, this total had risen to 51 percent. He further reports that the classroom teachers involved reported favoring the new intensive program (Van Riper, 1969a). Follow-up studies were conducted, but not published (Van Riper, 1969b).

In a paper presented to the American Speech and Hearing Association, Van Hattum (1959) told of similar

results in the Rochester, New York, schools. The Rochester therapists set up three blocks a year, spending each morning in one school and the afternoons in another. The results, although not statistically validated, showed that dismissal rates were much higher under the block system than they had been when the therapists had worked under a regular program. The children in the regular program, however, had shown greater "improvement."

In Brecksville, Ohio, an "intensive cycle plan," consisting of a six week block (with four meetings per week) repeated once, was compared with the traditional method. Dismissal rates were higher in the intensive plan, although the percentage was only "slightly higher." "It appeared that there was less remission of improvement among the cycle group when examined again in September following the June dismissal" (Van Hattum, 1969, p. 168).

Another method of comparing the two types of scheduling is to measure the degree of speech progress. Weaver and Wollersheim presented a paper to the American Speech and Hearing Association in October, 1964 (Weaver and Wollersheim, 1963). This paper was based on a study conducted in the Champaign, Illinois, public schools in 1963. The authors hypothesized that children receiving speech therapy in a block plan would show greater improvement.

Six public school correctionists and 396 children were involved in the project. Two of the correctionists

and 153 children were in the block. Each block of time extended for five weeks, and there were three blocks in the school year. There were four sessions a week. The rest of the children were seen twice a week during the entire year. A full scale Templin-Darley Articulation Test was given each child. Using a typological rating scale developed by the University of Illinois, the children were rated from 1 to 4, depending on the severity of the articulation problem (1 = least severe; 4 = most severe). The Templin-Darley was administered again at the end of the year or when a child was dismissed.

The authors point out that regardless of the scheduling system, each correctionist determined the structure of the speech groups, the length of speech lessons, and placement of a child in group or individual therapy.

The only experimentally controlled difference between the two systems was that of a concentration of therapy under the block system and a more distributive approach to therapy under the intermittent system (Weaver and Wollersheim, 1963, p. 21).

Statistics showed that the children in the block program showed significantly greater improvement than those on the intermittent system. When the children were compared according to their typological groupings, statistical evidence was only available for type 3. However, in each of the four groups, the block group showed greater gain. Of the forty classroom teachers surveyed, thirty-four

preferred the block system, two had no preference, and four preferred the intermittent system.

Irwin (Van Hattum, 1969) reports that a Crawford County, Ohio, study sought to determine which program yielded greatest progress: I, two half-hour sessions per week for sixteen weeks; II, three half-hour sessions per week for sixteen weeks; or III, four half-hour sessions a week for an eight week period, followed by once a week therapy for the second eight weeks. The researchers concluded: "Gains shown by the group scheduled four times per week were only slightly greater than the gains of the other two groups, but not significantly so" (Van Hattum, 1969, p. 169). Groups I and II were continued throughout the year and compared, and no significant differences were noted.

Still other studies have been interested in answering other questions regarding scheduling practices. In Dayton and Cleveland, Ohio (Van Hattum, 1969), conclusions were drawn as to the age at which children might respond best to intensive cycle scheduling, the type of problem for which this method is most effective, and possible combinations of traditional and intensive scheduling. It was found that children in grades four, five, and six showed the best results. The intensive plan was less effective with organic problems. In Cleveland, researchers noted that "the optimum program may be intensive therapy followed

by traditional therapy" (Van Hattum, 1969, p. 168). Dickey (1956) supports this by noting that the children in his block program responded quickly and made rapid progress in the ear training phase of therapy. He adds, however, that the same children needed a once-a-week program to develop carry-over.

Some of the research concerns itself with a comparison of the case loads handled under the two systems. As has been noted, several studies have shown a higher dismissal rate with the block or intensive program, thereby increasing the number of children seen each year. Fichter, an Educational Consultant, Speech and Hearing Therapy, in Ohio's State Department of Education, points out that in 1968-9, there were 518 full-time speech therapists in Ohio. Eighty-six were using the intensive cycle scheduling. On the average, each of these therapists saw eight more children each year than those using the traditional program. If the remaining four hundred thirty-two therapists had been using the intensive schedule, conceivably an additional 3,456 children could have been seen.

In his report, Fichter states that the therapists using intensive cycle scheduling definitely feel that it is an efficient method of scheduling. It is now an "alternative to the traditional scheduling method," according to the Program Standards for Special Educational Units for Speech and Hearing Therapy as approved by the

Ohio State Board of Education in 1966 (Fichter, 1969, p. 1). This addition was prompted by several pilot studies using blocks of intensive therapy lasting for varying lengths of time and repeated varying numbers of times in the school year, and by a Special Study Institute which studied scheduling in detail. In his report, Fichter concludes that eight to ten week cycles or blocks are better than those which are shorter (Fichter, 1969, p. 1).

All of the studies cited so far were conducted in the public schools and involved many therapists. Some studies specifically note that each therapist determined the structure of the group and the length of the session. Apparently, in all of the studies cited one group of therapists worked with the children in the regular program, while another group worked with the block program. It could be observed, then, that the therapist and her methods of speech correction might be variables which could affect the results of the comparison.

In her master's thesis, "A Study of the Effectiveness of a Concentrated Program of Speech Therapy in the Public Schools," Overall notes that she was the only therapist involved (Overall, 1964). She conducted her study in the Wichita, Kansas, schools and included thirty children. Fourteen were in an experimental group and received four twenty-five minute periods of therapy a week for "approximately the first semester." A control group

composed of sixteen children were seen twice weekly for "approximately the school year." All children were given the Templin-Darley Articulation Test in October, January, and April. Tests were compared in percentage of accuracy scores. Overall reports that "the percentage of improvement in the block group was higher" (Overall, 1964, p. 2). In a personal communication, she states that neither she nor anyone else in the Wichita system is using the block program at the present time (Overall, 1969).

It is possible, however, for a study to involve a larger number of children and many therapists and still be carefully controlled. This is indicated by an experimental study conducted in the Arlington, Virginia, schools in 1958-59 (Ervin, 1965). Thirty-eight pairs of children were matched "as closely as possible" as far as sex, grade, number of articulation errors, and amount of previous therapy were concerned. All children were in the second or third grade and had only functional articulation problems. Group size was kept constant. "In all cases the matching groups retained the same therapist" (Ervin, 1965, p. 9).

One group of each matched pair was seen for two thirty-minute periods a week for twenty weeks. The other group received therapy during four thirty-minute periods a week for five weeks in the fall and again in the spring. All children were seen for forty half-hour periods. The Arlington study even planned that the matched pair meet at



the same time of day to control variations in alertness level related to time of day.

The ten therapists involved had had at least five years of experience; five had had previous experience with the block method. The reliability of the therapists' articulation testing was checked statistically and agreement was found. Each child was given the Arlington Picture Articulation Test and a nonsense syllable test at the beginning and end of therapy. The two total error scores were used to determine an "improvement score." Ervin concludes that the data shows that "the block method of scheduling renders the greater degree of improvement for functional disorders of articulation in the primary grades" (Ervin, 1965, p. 11).

One study in the literature notes that the block system was felt to be impractical. Fein (1956) writes that Chicago therapists felt it was too unwieldy for such a large school system. Therapists compared speech improvement of children seen once a week all year with those seen twice a week for one semester. Statistics showed that either plan was as effective as the other.

McDonald and Frick (1957) decry the lack of consideration given to the frequency of therapy sessions, both in basic texts of speech correction and in the actual practice of therapists. They point out that a "schedule-oriented therapy program" does not permit adequate

consideration of the child's problems (McDonald and Frick, 1957, p. 725). In their opinion, scheduling should be flexible enough so that a child could be seen more or less frequently depending upon his speech problem and the stage of therapy he is in. Intensive therapy would be most useful when the child's problem is being evaluated and when new skills or attitudes are being learned. He could be seen less frequently as he develops the ability to be responsible for his own treatment. The authors encourage continued experimentation with the block system and other innovative methods of scheduling.

## CHAPTER III

### METHOD

#### Subjects

Ten second and third grade children were chosen by the Ellensburg public school speech correctionists for inclusion in this project, at the request of the writer. All of the children had functional articulation problems, and all had had previous speech therapy. Five of the children attended Lincoln School; five were enrolled in Mt. Stuart School. Two different schools were involved because of the limited number of subjects available in one school. The mean age of the group at Lincoln School was eight years, three months; mean age of the Mt. Stuart group was eight years, one month. Table 1 shows the grade level and sex of subjects.

Table 1. Grade Level and Sex of Subjects

School	Grade Level	Boys	Girls	Total
Lincoln	Second	3	1	4
	Third		1	<u>1</u>
				5
Mt. Stuart	Second	2	2	4
	Third		1	<u>1</u>
				5

It was felt that these children were representative of the kinds of cases making up a large part of the typical public school correctionist's case load (Bingham, 1961).

Two adjustments had to be made before the study was completed. A second grade girl in the Mt. Stuart group withdrew unexpectedly at the conclusion of the third week of therapy when her family moved from Ellensburg. She was not replaced. A second grade girl in the Lincoln group was excluded from the study to keep the number the same in both groups.

### Procedures

Scheduling. The four children in Lincoln School received therapy during four thirty-minute periods a week for eight weeks, Monday through Thursday. The other group met during two thirty-minute periods a week for sixteen weeks, Tuesday and Thursday. Thus, both groups received thirty-two half-hour periods of therapy. Both groups met in the afternoon. Records of attendance were kept.

Testing. A third-quarter senior in speech pathology at Central Washington State College administered the full scale Templin-Darley Articulation Test (1960) to all subjects before and after therapy. This examiner was not aware of the experimental design of the study, so her evaluations of the children were made without any knowledge

of which group they had been in. Since one of the children in the traditional group was to be out of town when the re-testing was done, his responses to the test were video-taped. The examiner observed the video-tape and evaluated the child's speech.

Method of speech therapy. The writer worked with both groups of children and used the same general methods of therapy with all the children. Only one defective sound was worked on at a time. A step-by-step program, developing from auditory discrimination to ear-training and work on production of the sound itself, was used. The stimulation method was stressed. As the child became ready, he progressed to use of the sound in nonsense syllables, words, and then sentences. The final phase was carry-over of the correct sound into conversational speech (Van Riper, 1963). Both tape recorder and mirror work were used in both the block and traditional groups. In addition, the same types of motivational devices were used with all the children. A record of plans and activities carried out was kept so that therapy methods could be controlled.

Involvement of classroom teachers. At the conclusion of the study, those classroom teachers whose students had been receiving therapy were asked to fill out a questionnaire concerning block and intermittent speech therapy.

(See appendix, page 35.) In addition, personal interviews were held with these teachers.

## CHAPTER IV

### RESULTS

This study sought to determine if there is any difference in the progress made by children receiving concentrated speech therapy and those in an intermittent therapy program. One group of children met four times a week for eight weeks; the other group met twice a week for sixteen weeks. The same therapist worked with all subjects. The full scale Templin-Darley Articulation Test was administered before and after therapy. In addition, classroom teachers whose students were involved in the study were asked to express opinions regarding the two methods of scheduling. (See appendix, page 35.)

#### Comparison of Progress Made by Subjects

The pre-therapy and post-therapy articulation scores are recorded in Table 2. The difference between the two scores is represented by a percentage-of-improvement index for each subject.

Table 2. Comparison of Pre-therapy and Post-therapy Raw Scores on the Templin-Darley Articulation Test and Percentage of Improvement

Subjects	Pre Scores	Post Scores	Numerical Difference	Percentage of Improvement
B1	142	168	26	18.30
B2	145	169	24	16.55
B3	142	156	14	9.86
B4	141	162	21	14.89
T1	162	175	13	8.02
T2	146	158	12	8.22
T3	149	170	21	14.09
T4	155	174	19	12.26

Note: B = Children in Block Group.

T = Children in Traditional Group.

Table 3 shows the mean scores for both groups, as well as the mean percentages of improvement.

Table 3. Mean Scores and Mean Percentages of Improvement

Group	Before Therapy	After Therapy	Percentage of Improvement
Block	142.5	163.75	14.90
Traditional	153.0	169.25	10.65

To determine whether there is a significant difference between the block and traditional groups, the data



was analyzed by using the Wilcoxon-Mann-Whitney U Test which

consists of calculating:  $U_T = n_1 n_2 + \frac{n_1(n_1 + 1)}{2} - G_T$  and

$U_B = n_1 n_2 + \frac{n_2(n_2 + 1)}{2} - G_B$  and using the smaller U as a

statistic (Mendenhall, 1969). To be significant at approximately the 5 percent level, U would have to be 1 or smaller. In this study,  $U_B = 14$ ;  $U_T = 2$ . From Table 8 (Mendenhall, 1969, p. 353), a value of  $U \leq 2$  would occur by chance only 11.42 percent of the time if the B and T groups were the same. Therefore, the difference between the two groups is not significant at the 5 percent level.

The conclusion is that these data do not support a hypothesis that one system of scheduling is more effective than the other.

### Improvement

An analysis of progress made for each subject, regardless of group, revealed that all subjects improved.

### Classroom Teacher Opinions

The teachers whose students received therapy twice a week had no experience with a block program and had no

basis for comparison. The other teachers had all had prior experience with intermittent speech therapy. Their opinions are shown in Table 4.

Table 4. Results of Teacher Questionnaire

Grade	Number	Previous Experience with Block	Prefer Block	Prefer Intermittent	No preference
2	3	1	0	1	2
3	1	0	0	0	1
TOTALS	<u>4</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>3</u>

## CHAPTER V

### SUMMARY AND CONCLUSIONS

#### Summary

In this study, eight second and third grade children with functional articulation problems received speech therapy for thirty-two half-hour sessions. Four of the children met four times a week for eight weeks in a block or concentrated program. The rest of the children received therapy on an intermittent basis, meeting twice a week for sixteen weeks. The same therapist worked with all of the children and the same therapy methods were used with both groups.

The full scale Templin-Darley Articulation Test was administered before and after therapy. A percentage of improvement was derived for each child. The degree of improvement made by the children in the block group was compared with that made by children in the more traditional twice-a-week group. Classroom teachers whose students participated in the two groups were asked to express their opinions regarding block and traditional speech therapy.

#### Conclusions

All of the subjects showed improvement. When the

percentages of improvement made in both groups were compared, there was no statistically significant difference. Therefore, it cannot be concluded that one method of scheduling is more effective than the other. According to this conclusion, a speech correctionist could choose either method, deciding on the basis of which would be more beneficial for the particular children on her caseload and be more acceptable to administrators and classroom teachers.

This finding does not support those studies which concluded that an intensive program brings about a greater degree of improvement (Weaver and Wollersheim, 1963; Overall, 1964; Ervin, 1965). A limitation of this study must be taken into consideration, however. The number of subjects was extremely small. The conclusion drawn must be further tested using larger groups of children.

Because of the population limitation, perhaps the greatest value of this study lies in its effectiveness as a pilot study. The same design, with one alteration, could be repeated with a larger number of subjects. In this study, only one individual evaluated the children's articulation; the design would be improved if there were more evaluations.

Even though the improvement made by the block group was not statistically better, the mean percentage of improvement was greater. (See Table 3, page 24.) This may indicate a trend favoring block therapy. On the other

hand, the pre-therapy scores of the traditional group were all higher than those of the block group. (See Table 2, page 24.) They therefore had less room for improvement.

Classroom teachers whose children were in the block group did not feel adequately experienced to comment on which type of scheduling they preferred. Several did comment on their reactions to the block program, however. One teacher remarked, "The idea seems to have some excellent merit, such as fixing firmly in the child's mind what he needs to correct." Another teacher agreed: "I feel that with the block scheduling that has been given to \_\_\_\_\_ that he has greatly improved and has become more conscious of his speech pattern." None of the four teachers in this group expressed negative feelings regarding the block program in which their students participated.

### Recommendations

Undoubtedly, many speech therapists are experimenting with different types of scheduling procedures. It is necessary that this experimentation be carried out under careful controls and the results analyzed statistically. There is no reason why active correctionists in the public schools cannot carry out such research. Their situation is, in fact, ideal; they are already providing speech therapy for large numbers of children and often work with other correctionists.

A design such as the one implemented in this study could be used, making sure that the number and type of subjects, evaluation of articulation, type of therapy methods, and number of therapy sessions are controlled. A summary of the study and analysis of results should be published so that other therapists can familiarize themselves with the implications of the study. When large numbers are involved, more information can be gained, such as the advantages and/or disadvantages of a combination of block and intermittent therapy and the advantages of using one or the other method with particular grade levels.

When speech therapy was first provided in public schools, there were few therapists and many, many speech-handicapped children. Therapists usually tried to see as many children as possible and often could work with each child for only a very short time. Now that there are many more therapists available, it behooves the profession to make sure that the best possible speech correction services are being made available.

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## APPENDIX

## APPENDIX

## QUESTIONNAIRE GIVEN TO CLASSROOM TEACHERS

Teacher \_\_\_\_\_ Date \_\_\_\_\_

Grade \_\_\_\_\_

I. Before this study, had you experienced:

A. Intermittent speech scheduling. Yes \_\_\_\_\_ No \_\_\_\_\_

If "yes," how often?

Once a week \_\_\_\_\_

Twice a week \_\_\_\_\_

Three times a week \_\_\_\_\_

Other \_\_\_\_\_

B. Block speech scheduling Yes \_\_\_\_\_ No \_\_\_\_\_

If "yes," how long were the blocks? \_\_\_\_\_

At what intervals? \_\_\_\_\_

II. Which method did you prefer? Intermittent \_\_\_\_\_

Block \_\_\_\_\_

No preference \_\_\_\_\_

III. Please list any particular advantages of the system you prefer.

IV. Please list any particular disadvantages of the system you do not prefer.

V. Please add any additional comments you would like to make.