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A Study on the Inter-communication System as Used in South Dakota Schools for the Instruction of Non-ambulatory Students from 1951-1956

Samuel Edwin Stein

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A STUDY ON THE INTER-COMMUNICATION SYSTEM AS USED
IN SOUTH DAKOTA SCHOOLS FOR THE INSTRUCTION OF
NON-AMBULATORY STUDENTS FROM 1951-1956

By

Samuel Edwin Stein

A Research Problem submitted
in partial fulfillment of the requirements for the
degree Master of Science at South Dakota
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E. E. S.

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CHAPTER I

INTRODUCTION

Importance of Education

The importance of education in American Society is regarded by many as a concern for a child's total personality and not just with his absorption of specific information. Our public schools are the basic institutions through which democratic principles are maintained and improved among our people. In the typical state, county, parish, city, town, village, township or rural community, nearly one-half of all tax money is now expended for schools, and in the whole nation approximately five billion dollars is now annually used for this purpose.¹ The present trend in public school enrollments shows that the total will be more than 45,000,000 by 1970.²

An institution which deals with such important principles, with so much money and so many people is bound to be faced with many problems. It is hoped that the American people will be able to solve most, if not all these problems. However, one of the problems most difficult to solve has been the education of the exceptional child. Among those included as exceptional children are the blind, partially sighted, deaf, hard-of-hearing, mentally retarded, gifted, speech handicapped, orthopedically

¹ Ward G. Reeder, The Fundamentals of Public School Administration, Macmillan, 3rd Edition, p.3

² Teachers for Tomorrow, The Fund for the Advancement of Education, New York 21, New York, 1955 pp. 12-13

handicapped, and those with special health problems. For them some form of special educational service is required. The U.S. Office of Education estimates that approximately one out of every eight children is exceptional and needs specialized attention of some type. A classification of types of exceptionality, according to the U.S. Office of Education, is given in the following table.³

TABLE I
NUMBER AND PER CENT OF EXCEPTIONAL SCHOOL-AGED CHILDREN
IN U.S. POPULATION: 1954

Type of Exceptionality	Per cent of Incidence	Estimated Number of School-Age Children
Visually handicapped	0.2	68,000
Crippled	1.5	510,000
Special health problems	1.5	510,000
Deaf and hard-of-hearing	1.5	510,000
Speechhandicapped	2.0	680,000
Socially maladjusted	2.0	680,000
Mentally retarded	2.0	680,000
Gifted	2.0	680,000
Total	12.7%	4,318,000

The Problem

This problem becomes even greater when it is narrowed down to the field of exceptional children who are ~~accumulatory~~. A ~~non-accumulatory~~ child may be defined as one who can be educated or can continue his education but due to illness or accident is, upon the advice of his

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Willis E. Degan, "Survey Report of Pupil Personnel and Psychological Services in Minnesota Public School Systems Maintaining Secondary Schools", Bureau of Educational Research, College of Education, University of Minnesota, 1954-1955, p.3

physician not permitted to leave his sick bed or his home. The period of confinement will vary according to the nature of his illness. Only children who were non-ambulatory for a minimum period of three months are considered in this study.

Education of the non-ambulatory child calls for different teaching methods, materials and equipment.

This particular study will deal with non-ambulatory students and one method of their education in the South Dakota Public schools between the years 1952-1956.

Despite the wide use of the Inter-Communication System in other states, its use in South Dakota Schools has been limited. This technique was developed in 1939 in Iowa, where more than a thousand children have received part or all of their education via telephone. The equipment is provided by the Bell System and independent telephone companies nationally. It has been approved by twenty-nine states which have special education for handicapped children and has been in use in about forty states.

Its use is very simple. There is a home station with talk-switch and volume control for the shut-in. This unit is connected by private telephone lines to an amplifier and a stationary or portable classroom station with volume control, located in the school in which the home-bound student is enrolled. Extra plug-in outlets may be provided for departmentalized classes.

4. J.A. Richards, "Teaching Homebound Children", reprinted from Exceptional Children, Vol. 20, No. 3 (December 1953) p. 1

5. Ibid, p. 2

4

With this facility the home-bound or hospitalized child hears discussion in the classroom by the teacher and students. When called upon to recite or participate in group or class discussion, the shut-in can snap a switch and talk to the class. Here is a way by which a student may continue his education at least in an audio sense. An afflicted child may have the advantages of daily educational contact; may have the sense of belonging to a group and participate with other children in his group.

The researcher had a personal interest in and experience with this method of teaching ~~ambulatory~~ students. In 1952 his ~~nine-year-old~~ son was stricken with rheumatic fever. His condition was such that upon the advice of the family physician he was immediately placed in bed and remained there for 360 days. During that period, he was able to continue his education and remain with his class by the use of the Inter-Communi-
cation system. This was the first case in South Dakota where such education was financed by the State Department of Public Instruction. Because of the favorable publicity received and the success of this first venture, similar non-ambulatory students throughout the state have been aided in continuing their education by the use of this method.

Related Research

The following information has been compiled by the manufacturers, Sencutone, Inc., New York, N.Y. It was carried on by their Special Education Division. A survey was made of one hundred different

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J.A. Richards., "Teaching Homebound Children", reprinted from Exceptional Children, Vol. 20, No. 3 (December 1953)

installations in different parts of the country. It was based on interviews and correspondence with school superintendents, principals, special educators, class teachers, home tutors, the homebound children, their parents and the physicians who worked with the children. The conclusions reached which reflected the opinions of qualified persons were:

- (1) the indicated minimum is a functional mental ability level of nine years, and a fourth-grade achievement level.
- (2) maximum effectiveness of this system is achieved with a conference arranged with the parents, family physician, the principal, the class, home teachers and the guidance or special education supervisors.
- (3) the recommended minimum I.Q. is 85. High average and superior children have progressed to superior scholastic achievement through the use of this system. Many children of low average intelligence also benefited - frequently achieved better grades than when they attended school or were confined to home tutoring. This may have been the result of effective use of the method by the teacher involved, who successfully overcame the visual limitations. Another factor may be that the shut-in is exposed to less diversion and distraction, has more time to reflect and retain the things he hears and learns during daily class participation.
- (4) teaching by telephone is recommended as a supplement and not as a substitute for the home teacher; the shut-in requires a periodical check on progress.
- (5) the two-way conversation made possible by telephone provides near to normal participation in a classroom situation with the benefits of complete curriculum, daily instruction on the same basis as other

students, and the satisfaction of being a participating member of the classroom.

(6) each disabled child must be regarded as an individual case. It can be very successfully used with cardiac, orthopedic, muscular, fractures or contagious conditions. The child should be of average intelligence, one who can hear, see, articulate, manipulate the switch, and hold a pencil.

(7) very little change in teaching technique was needed. It was noted that the teacher had to bear in mind that the exceptional child was in the classroom in mind but could not see. The teacher had to overcome this obstacle through classroom photographs, extra copies of visual and written materials.⁷

In Iowa, where 1500 youngsters have received all or part of their education by means of it, a survey was recently conducted by the Department of Public Instruction. Reporting on this survey in the Journal of American Medical Association, George R. Lubrig, of the Division of Special Education, State of Iowa writes, "One hundred per cent of the physicians who completed the questionnaires expressed satisfaction with this method of instruction."⁸

This method has been found very successful in teaching those youngsters with so-called contagious diseases. Tuberculosis cases are of particular interest in relation to the method because the disease is one which sometimes makes home instruction hard to come by.⁹

⁷ "Questions and Answers on Teaching by Telephone", Pamphlet published by the Special Education Division, Executone, Inc. New York, N.Y.

⁸ Richards, J.A., "Teaching Shut-in Children by Telephone", reprinted from The American School Board Journal, (October 1954)

⁹ "Telephone Brings School to Hospital", reprinted from The Modern Hospital, (August 1955)

Thomas J. Finn, superintendent of the Pollak Hospital, where there are several such installations, said in a press interview:

The program is particularly welcome in our field because it has been almost impossible to find teachers who will come into the hospital. Doctors continually reassure them, but many people fear that they may contract disease if they spend a lot of time in our rooms.¹⁰

Medical institutions have given great praise to this technique.

Installations are found in such institutions as the Heger Memorial Hospital, Buffalo, New York; Silvercrest Tuberculosis Sanatorium Hospital, New Albany, Indiana; three Atlantic hospitals in Atlantic, Georgia; Waukegan Lake County Tuberculosis Sanatorium, Waukegan, Illinois; Sheltering Arms Hospital, Minneapolis, Minnesota and Horwood Sanatorium, Chestnut Hill, Pennsylvania.

Research into the educational advantages afforded to nonambulatory students has attested to the value of the Inter-Communication System. No method of teaching, in the writer's opinion, can substitute for the personal relationship between teacher and student in the classroom. Neither can this method serve as a replacement for the visiting teacher. It is meant only to be a link between the home and the school in order that the seriously handicapped child will feel identification with the class group, to be aided in keeping his school work up to the level of his classmates and in the concomitant social growth.¹¹

¹⁰
"Telephone Brings School to Hospital", reprinted from The Modern Hospital, Vol. 65, No. 2 (August 1955) p. 120

¹¹
J.A. Richards, "Teaching Shut-in Children by Telephone", from The American School Board Journal, Vol. 129, No. 4 (October 1954) p. 25

There are approximately 20,000 home visiting teachers in our country. The need for such services is many times greater. Such teachers can give only a few hours a week to these students. In New York State the maximums are considerably higher; one hour a day, five days a week for the child at the elementary level; one and one-half hours per day, five days a week for the child at the junior high level; and two hours per day, five days a week for the child at the high school level.

In 1952, a survey conducted by Donald H. Pechenpaugh of Gary, Indiana, covering more than 87 per cent of the public school systems of cities of more than 50,000 population, revealed that teaching home-bound students by telephone is the most popular technique.¹²

Writing of an installation linking Emerson High School, Union City, New Jersey, with the Pollak Hospital for Chest Diseases in Jersey City, Albert C. Parker, superintendent of schools says:

It has proved very successful in that it has brought the girl directly into the classroom situation and not only has kept her up to grade but has done much to build up her morals....There is no indication of any disruption of classroom work; rather it has given the students the idea that they were all contributing to the improvement of the girl in the hospital.¹³

Hazel Holboke, director of special education for the Hillsboro (Oregon) Elementary Schools said:

The improved human relationships between the children and at school between teachers, the teachers and the children, and between the teachers and the parents are one of the most important results of the program.¹⁴

R. Edwin Klock, Special Education's "Forgotten Child", reprinted from The Nation's Schools, Vol. 54, No. 4 (October 1954) pp. 52-54

"Telephone Brings School to Hospital", reprinted from The Modern Hospital, Vol. 85, No. 2 (August 1955) p. 120

J.A. Richards, "Teaching Shut-in Children by Telephone", reprinted from The American School Board Journal, Vol. 129, No. 4 (October 1954) p. 25

Purpose of Study

It is the purpose of this study to evaluate, by means of a questionnaire, the use of the Inter-Communication System in South Dakota for the education of such students. The researcher sought to determine:

1. The effect of the Inter-Communication System upon our schools in general.
2. The effect of the Inter-Communication System upon the student involved.
3. The effect of the Inter-Communication System upon the teacher involved.
4. An over-all evaluation of the Inter-Communication System of teaching in our schools and its comparison to other methods of teaching non-ambulatory students.
5. The installation and operating cost of the Inter-Communication System of teaching and who financed this method.

Procedure

The questionnaire which was used included five major areas. It was felt that the school's opinion on the use of the system should be evaluated on the assumption that any method of teaching will reflect the school's philosophy of education. The interest of the school in educating non-ambulatory students adheres to the principle of recognizing individual student needs.

The student was evaluated on the basis of his probable achievement, his acceptance of this method of instruction and whether this type of instruction was able to keep the non-ambulatory space with his class.

The teacher who was involved in this project was evaluated on the

basis of needed change in teaching technique, method, added work, classroom disruption, and whether she was prone to be more lenient with the non-ambulatory student than with others.

An over-all evaluation was desired by the schools to determine whether the use of this method was successful for the school and what the general effects were upon the child, the class, the teacher and the school.

The cost of this method of teaching was sought from each school which had used it. Thus it could be determined whether the cost of the Inter-Communication System for educating non-ambulatory students was prohibitive for the average school in our state. Another important question asked dealt with opinions as to whom should bear the cost of this type of education.

The questionnaire was sent to twenty-three public schools which had made use of, or were at the present time using this system of education for the non-ambulatory child. This list of schools was received from the Department of Public Instruction, Exceptional Children's Education, Pierre, South Dakota, and included all of the schools which have made use of this method of teaching.

Questionnaires were sent to twenty-two public schools which include all that have used this system. Nineteen, which is eighty-six per cent, returned completed questionnaires.

Avon Public School, Avon, South Dakota
 Arlington Public School, Arlington, South Dakota
 Beresford Public School, Beresford, South Dakota
 Bonsteel Public School, Bonsteel, South Dakota
 Gettysburg Public School, Gettysburg, South Dakota
 Howard Public School, Howard, South Dakota
 Lemmon Public School, Lemmon, South Dakota
 Lincoln Public School, Matbridge, South Dakota
 Leola Public School, Leola, South Dakota
 Leola County School, Leola, South Dakota

Milbank Public School, Milbank, South Dakota
Mitchell Public School, Mitchell, South Dakota
Pierre Public School, Pierre, South Dakota
Parkston Public School, Parkston, South Dakota
Putney Public School, Putney, South Dakota
Redfield Public School, Redfield, South Dakota
Rapid City Public School, Rapid City, South Dakota
Salem Public School, Salem, South Dakota
Watertown Public School, Watertown, South Dakota

CHAPTER II

STUDY RESULTS

Factors and Opinions

The data as received from nineteen schools which since 1951 have made use of the Inter-Communication System is found in Table II. Thirty-nine non-ambulatory students were reported as benefited. In each of the communities in which the cases developed, a telephone office was available. Each school reported that previous knowledge of this teaching method was had before the non-ambulatory case appeared. General enthusiasm was noted that such exceptional students could carry on their work outside of the classroom. Not only was the system in accord with the respective school's philosophy of education, but it was supported by all the members of the respective school boards with the exception of one case. Fifteen out of the nineteen schools reporting its use felt that the system should be included in the plans of new school buildings.

The recognition of individual student needs was a factor which was met by the school administrators is shown in Table II. Sixty per cent of the administrators contacted were the first ones to suggest that the non-ambulatory student may continue his education. Parents and State Department of Education officials together with certain local telephone officers also were aware of the problem and this method of teaching.

There was quite a variation in opinion as to who should pay the cost of such Inter-Communication systems. Thirty-five per cent of the schools contacted were of the opinion that the school district in which the non-ambulatory student appeared should pay the entire cost.

TABLE II

FACTORS AND OPINIONS RELATED TO SCHOOL USE OF THE INTER-COMMUNICATION SYSTEMS

Question	Response					
	Yes	No				
1. Is there a telephone office in the community?	19					
2. Were you aware that such a system existed before a case actually appeared?	18					
3. Was the project enthusiastically supported by the school board?	13	1				
4. Should such a system be included in new buildings?	15	4				
5. Does the use of such a system accord with your philosophy of education?	17					
6. Was the publicity received from this project beneficial?	11	1				
7. Number of non-ambulatory students for a 3-month or longer period.	1951-52 1	1952-53 3	1953-54 10	1954-55 12	1955-56 13	
8. Who suggested this project in your first case?	parents 2	board member 0	school admin. 15	child's teacher 0	state dept. 2	tel. office 2
9. Who should pay the cost?	State 9	school 7	State and school	parents 4	local organ. 0	All together 1
10. At what grade levels do you think this system most effective?	1-4 3	3-9 1	4-12 3	7-8 3	8-12 3	9-12 5

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Table II also shows that forty per cent contended that such expenses should be borne by the State Department of Public Instruction. A small per cent of the schools surveyed were of the opinion that the parents of the exceptional child should pay the cost. This is of major importance since Table II shows a steady increase in the number of exceptional cases each year.

Of equal interest is the fact that seventy per cent of the schools reporting, felt that the system would benefit students most in grades nine to twelve. Thirty-five per cent reported that benefits would be received by students in grades four to twelve. Ten per cent reported that children in the first two grades would receive some benefit from this teaching method.

Effects on the Child

Table III indicated that the Inter-Communication System of teaching non-ambulatory students in South Dakota is beneficial as far as its effects upon the students involved. Fifty per cent of the schools cooperating in this study were of the opinion that the achievement of the child who was under this method of teaching was comparable to the achievement he would have attained had he been in regular attendance in the classroom. This is of special interest, inasmuch as the system was used at a variety of grade levels.

It is generally agreed that visual aids are an important part of education. But, of course, in the use of this system, the student is handicapped since he cannot see what is shown in the classroom. Thus the

TABLE III

EFFECTS OF THE INTER-COMMUNICATION
SYSTEM ON THE CHILD

Question	Yes	No
1. Was the achievement of the child comparable to those in regular attendance?	7	7
2. Was the method of instruction accepted by the student?	15	
3. Upon returning to the classroom was the child accepted by the group?	12	2
4. Was the mechanical system easy for the child to operate?	14	

teacher must make special effort in explanations and descriptions in order to compensate for the lack of eye contact of the ~~ambulatory~~ student.

It was the opinion of the schools using this method, that the ~~Inter-Communication~~ System was accepted by the exceptional children. Two schools reported, however, that this acceptance varied to a certain degree. Further explanation was not given.

This method of teaching kept all the ~~ambulatory~~ students, with the exception of two cases, at the same level of social and personality growth as that of the groups to which they belonged. Upon their return to the classroom they were readily accepted by the other students as ones who had not left the group.

This study furthermore shows that this mechanical method of teaching is easy for the exceptional students to operate.

Effects on the Teacher

Teaching a variety of students in a class room calls for a diversity of techniques and methods. It would seem that a special technique and method would be called upon in teaching exceptional children who are not in the classroom bodily, but who are present through the means of the ~~Inter-Communication~~ System. However, there is no demand for any noticeable change in the teaching technique and method when this system is in use.

TABLE IV

EFFECTS OF THE INTER-COMMUNICATION SYSTEM ON THE TEACHER

Question	Yes	No
1. Was there a change in teaching techniques and methods?	1	14
2. Did the teacher hesitate to use the system?	5	10
3. Was there any disruption of the regular order and decorum of the class room?		14
4. Was the system a definite drawback to classroom teaching?	1	12
5. Was extra work caused for the teacher?	0	6
6. Could the teacher easily operate the system?	15	
7. Was student evaluation more lenient than with others in achievement?	6	7
8. Was the teacher's experience beneficial?	13	2

At the beginning fifty per cent of the teachers hesitated to use the system. In an interview with one teacher the following reasons were given for hesitancy:

1. Criticism on the part of parents in teaching methods and discipline.
2. Lack of cooperation from parents.
3. The involvement of extra work after school hours.
4. A disruption of the classroom order and decorum.

However, when the system was once used, not a single case of disruption in the regular order and decorum of the classroom was noted. Only one school reported that this system was a definite drawback to classroom teaching.

Fifty-seven per cent of the schools agreed that extra work was necessary for the teacher. This extra work was recorded as time necessary for weekly and periodical visits to the exceptional child's home or sick room.

All of the schools agreed that the mechanical features of the equipment were easy to operate.

In the area of pupil evaluation by the teacher with regard to the other members of the class, forty-six per cent of the schools emphasized that the teacher was more lenient in evaluating the achievement of the exceptional child taught by the Inter-Communication System.

Eighty-six per cent of the schools reported that the teacher involved in the Inter-Communication System of teaching gained beneficial experience.

Overall Evaluation

Overall evaluation shows that fifty-seven per cent of the schools in our state which have used this Inter-Communication System for teaching non-ambulatory students felt that it was good, while the remaining schools believed it to be excellent method of solving the problem of teaching such exceptional children. When compared with other methods of teaching exceptional students, such as home-visiting teachers and parental instruction, fifty-three per cent believed that the system was good while the remainder affirmed the system as excellent.

While a number of negatives are noted as to the general effect upon the child, classroom teacher and school, it is interesting to observe in Table V, that all schools rated the system as good and excellent when compared to home instruction methods.

TABLE V

EFFECTS OF THE INTER-COMMUNICATION SYSTEM THROUGH OVER-ALL EVALUATION

Question	Poor	Good	Excellent
1. How did this system work out in your school?		8	6
2. How was this system rated when compared to other methods, such as home visits, parental instruction?		9	6
3. What was the general effect, of this system upon.....			
the child?	1	7	8
the class?	3	7	3
the teacher?	3	6	6
the school?	2	7	6

Seven of the schools stated that at the present time this system was now in use. Only one school stated that the home visiting teacher was used.

In terms of problems expressed in the use of this system, the following were recorded:

1. The movement of equipment from classroom to classroom.
2. Visiting the exceptional child after school hours by the teacher.
3. The lack of speedy installation of equipment.
4. The lack of sociability on the part of certain exceptional children.
5. The lack of cooperation on the part of parents in the home.

The Cost of the Inter-Communication System

The cost of installing the Inter-Communication System in the schools ranged from \$20.00 to \$60.00 per unit. Table VI shows that sixty per cent of the installations charges since 1951 were below \$40.00

The monthly operation cost per child ranged from \$6.00 to \$15.50. Thirty-four per cent of the operating costs recorded ranged from \$10.00 to \$12.00

Since 1952 the various schools reporting gave the following opinions as to who should pay the installation costs. Fifteen per cent were of the opinion that the parents of the exceptional child so taught should pay the cost. Twenty-two per cent reported, that in their opinion, the school itself should assume this responsibility. Fifty per cent were of the opinion that the State Department of Public Instruction should assume

this cost, while ten per cent were of the opinion that other agencies in the communities should bear the burden.

TABLE VI

THE COST OF THE INTER-COMMUNICATION SYSTEM
AS USED IN OUR SCHOOLS.

Question	Replies			
1. What was the installation cost per child?	2 \$20-\$30	2 \$31-\$40	1 \$41-\$50	1 \$51-\$60
2. What was the monthly cost of operation per child?	1 \$6-\$8	2 \$9-\$10	4 \$11-\$14	1 \$15-\$16
3. Who paid the installation cost per child?	Parent	School	State	Other Agencies
	4.5	6.5	14.5	3
4. Who paid the operation cost per child?	Parent	School	State	Other Agencies
	1	5.5	14.5	3.5

The operating expenses of this system followed a similar pattern. Fewer than one per cent of the respondents believed that the parents should pay the expenses involved in operating this system. Nineteen per cent of those returning questionnaires were of the opinion that the local school should assume the cost of the Inter-Communication System. Fifty-nine per cent of the schools believed that the State Department of Public Instruction should furnish the necessary funds. Fourteen per cent of the schools reported that they were in favor of having this financial burden assumed by some other community agency.

CHAPTER III

General Summary

This study was made of nineteen operating schools in South Dakota which from the years of 1952-1956 have had the occasion to make use of the Inter-Communication System for teaching non-ambulatory students. The object of this research was to determine the effect of this system upon our schools in general; to determine its effect upon the student involved; to determine its effect upon the teacher involved; to determine an overall evaluation in our schools using the system and its comparison to other methods of teaching non-ambulatory students; and to determine the necessary installation and operating costs and who paid them.

These five areas were evaluated by a questionnaire which was sent to each of the schools. Nineteen schools answered the evaluation sheets. Three failed to return the questionnaires sent them.

Conclusions

This method of teaching non-ambulatory students through the use of the Inter-Communication System in South Dakota is successful when school administrators, teachers, physicians, school boards, parents and students understand its limitations and mutually cooperate.

There is no need for hesitancy on the part of the teachers to use it for it does not disrupt the regular decorum and order of the classroom. It does not call for any drastic change in teaching methods and techniques.

Each specific case must be regarded individually and many factors must be considered. The physical, mental and social problems of the student, the desire and cooperation of the home and parents and the interest of the teacher are some of these factors.

This system of education is most useful in the high-school grades, but can be very successfully used in the elementary grades. It is evident that the use of this system will increase as each year a larger number of students become non-ambulatory.

The installation and operating costs of this system are reasonable and financed in the majority of cases by the local school and the State Department of Public Instruction.

It is evident that the Inter-Communication System of teaching does not result in all the learning derived from direct classroom attendance and participation, but when this is not possible, due to certain physical handicaps, it is the most widely used and successful method in South Dakota for continuing the education of such exceptional children.

Recommendations

1. Weekly visits to the exceptional child's home or sick room are a necessary part of the Inter-Communication System. Provision by the local school for additional remuneration to the teacher should be considered.
2. A preliminary conference should be held with the teacher, exceptional child, school administrator, family physician and the parents before the system is used.
3. A pamphlet containing all research of this method of teaching in our state should be placed in the hands of all school administrators.

4. Each specific case should be carefully examined before this method of instruction is utilized.
5. This system of instruction is not a substitute for the home visiting teacher, but an aid. Therefore, every school system should provide a specialized and trained teacher to coordinate the efforts of the school, teacher, child and parent. This teacher should be trained for the problems occurring to exceptional children and should contact such children each day to ascertain their progress.
6. Each home using the system should be carefully examined as to the cooperation which must be expected.
7. The State Department of Public Instruction should reimburse the local school for all installation and operating costs of the system.
8. Every future new school room from the grades of three through twelve should be equipped with the necessary wiring for use of this system.
9. Further research and the gathering of pertinent data in this area should be continued in our schools.
10. Because of the possibility of dealing with the problems of exceptional children all teachers should be required to receive the necessary training which will make them aware of such problems.

Related Literature and Research

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APPENDIX

Name of School.....Address.....City.....
 Name of Superintendent.....

Will you please give the information asked for below? A stamped envelope is enclosed for your use. I desire this information to make a study of the use of the "Inter-Communication System" for the instruction of non-ambulatory students in the schools of South Dakota for the years 1952-1956. By non-ambulatory students, I refer to those children in the elementary and secondary grades who by reason of illness, such as rheumatic fever, polio, fractures, etc. have, upon their doctor's advice, been confined to their beds or homes and yet are able to continue their education through the use of an "Inter-Communication System" between the classroom and their homes. The confinement must be for more than three months.

Sincerely yours,
 S.E. Stein

SCHOOL IN GENERAL

1. Is there a telephone office in your community?.....Yes.....No.....
2. Were you aware that non-ambulatory students may continue their education through the use of an Inter-Communication System between their classroom and home or bedroom before the case actually appeared?.....Yes.....No.....
3. How many non-ambulatory students for 3 months or more have you had in.....1952.....
1953.....
1954.....
1955.....
1956.....
4. Did the local school board wholeheartedly support this project?.....Yes.....No.....
5. Who first conceived this project in your first case? (Check one or more)
 The child's parents.....
 School Board member.....
 School Administration.....
 The Child's teacher.....
6. Would you recommend that such an Inter-Communication System, or a similar one be included in the building of all future new schools?.....Yes.....No.....
7. Who do you feel should pay the cost for the use of such an Inter-Communication System?.....

8. Do you think that the use of this system was in accord with your philosophy of education?.....Yes.....No.....
9. Was the publicity which you received in the use of this project beneficial to your school?.....Yes.....No.....
10. At which grade levels do you think such a method of instruction is the most effective?.....

THE STUDENT INVOLVED

1. Was the achievement of the child involved comparable to that which you judge he would have made had he been in regular attendance?.....Yes.....No.....
2. Did the afflicted child readily accept this method of instruction?.....Yes.....No.....
3. After the student returned to the classroom was he accepted by the other students as one who had never left the group?.....Yes.....No.....
4. Was the mechanical system utilized easy for the sick child to operate?.....Yes.....No.....

THE TEACHER INVOLVED

1. Did the use of the "Inter-Communication System" make any great change in the teaching technique and method of the teacher involved?.....Yes.....No.....
2. Was there any hesitation on the part of the teacher involved to use this method?.....Yes.....No.....
3. Did the use of this System disrupt the regular order and decorum of the classroom?.....Yes.....No.....
4. Was the use of this System a definite drawback to classroom teaching?.....Yes.....No.....
5. Did the teacher feel using the system made extra work for her?.....Yes.....No.....
6. Was the mechanical system used easy for the teacher to operate?.....Yes.....No.....
7. Was the teacher more lenient in evaluating the ill child regarding his achievement than with the others in the classroom?.....Yes.....No.....

8. Was the teacher benefited by this experience?.....Yes.....No.....

OVER-ALL EVALUATION

1. How did the use of the "Inter-Communication System" work out in your school?.....Poor.....Good.....Excellent.....

2. How would you rate the use of the "Inter-Communication System" as compared to other methods of teaching the non-ambulatory child, such as home visits of the teacher, parental instruction or some other method?.....Poor.....Good.....Excellent.....

3. What were the general effects of the use of the system on -
a. The child Poor.....Good.....Excellent.....
b. The class Poor.....Good.....Excellent.....
c. The teacher Poor.....Good.....Excellent.....
d. The school Poor.....Good.....Excellent.....

4. If you are not using it, please give your reason for not using it.

5. What is the biggest problem in using an "Inter-Communication System" to teach non-ambulatory pupils? _____

COST

1. What was the cost per child for the installation of the system _____

2. What was the monthly cost per child for the operation of the system _____

3. How much of the installation cost per child was paid by:
(a) the parents _____
(b) the school _____
(c) the State _____
(d) other agency _____

4. How much of the operation was paid by:
(a) the parents _____
(b) the school _____
(c) the State _____
(d) other agency _____

5. Note here any other costs not included in the installation or operation and indicate who paid them. _____



If you desire a copy of this study kindly make an X in this _____
