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THE ROLE OF THE KINDERGARTEN TEACHER
IN THE ORTHOPEDIC SCHOOL IN THE TEACHING
OF SPEECH TO CEREBRAL PALSIED CHILDREN

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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

In every community there are children who differ widely from those we consider normal or average. Those children who differ too widely from the average, we refer to as exceptional children. One group of these exceptional children is the cerebral palsied. For many years children handicapped because of cerebral palsy were considered to be feebleminded and were placed in mental institutions or hidden in the home of their parents and considered a disgrace to the entire family. In recent years, it has been discovered that although they have many extraneous movements of the body, facial grimaces and drooling, many of these children have average and some of them have superior intelligence. When this fact was discovered, it became necessary to provide some type of education for these children.

The public schools of America have the responsibility for providing education for all children who can profit from it. This education must recognize the differences in children and assure each of them maximum development. Since every community has exceptional children, the public schools must provide the amount and type of program from which each child can profit most. The final aim of training and educating a cerebral palsied child is to help him to do the best he can

with the limitations resulting from his handicap:

I. THE PROBLEM

Statement of the problem. The need for the education of the cerebral palsied child has presented itself so recently, there are only a few specially trained workers in the field of cerebral palsy. Since specially trained personnel is not readily available, the kindergarten teacher is being called upon to help these children develop an acceptable means of communication. It is the purpose of this study to describe and explain materials and techniques which the kindergarten teacher in the orthopedic school can use to promote speech development or improvement in the cerebral palsied child. Although this paper is written with the kindergarten teacher in the orthopedic school in mind, the author is of the opinion that many ideas can be used with any primary group where there are children who have speech problems.

Importance of the study. Although some cerebral palsied children have no speech defect, many of them have from mild to serious speech problems. "Speech disorders are the most common associated defect in cerebral palsy, occurring in over 70% of all cases."¹

¹ Meyer A. Perlstein, "What Teachers Should Know About the Child With Cerebral Palsy," National Education Association Journal, April, 1952, offprint, non-paginated.

Speech has a close relationship to almost every other aspect of development, especially mental and social maturation; therefore, a speech defect is considered a serious handicap in any adjustment in life.

More schools are being established to aid in the education of these children and the schools already in existence are extending their services. At the present time, more and more cerebral palsied children are appearing in the orthopedic schools or classes, especially at the kindergarten level. In the orthopedic school at Dayton, Ohio, for example, the number of cerebral palsied children has risen from 27% of the school population in 1944 to 43% in 1954.

Cerebral palsied children have certain differences created by their physical condition, but they are much like regular children and have the same general needs. It is necessary to take into consideration their limitations for achievement. Each individual's physical limitation resulting from brain damage must be recognized, evaluated and provided for. An effort is made to minimize every handicap to the greatest extent possible. Medical care, education, and training appropriate for each child's specific needs must begin as early as possible. Many handicaps can not be removed; therefore, ways of working through them, around them, and compensating for them must be found.

Persons treating the cerebral palsied must work as a

team. A review of the literature will reveal that interest has been centered on diagnosis, medical treatment, equipment, physical therapy, occupational therapy, mental hygiene, rehabilitation and employment. Until recently, little has appeared in print concerning the overall development of the child and the role of the classroom teacher in furthering this growth. Within the last four or five years the focus has shifted from the isolated physical diagnosis to the classroom where the child is one of a group. The classroom teacher spends more time with the child than any other member of the team, except the family. When each individual with his problems becomes a member of a school group, the classroom teacher can emerge into the important position of coordinating all of the services in the classroom setting.

The classroom teacher can (1) promote general development: physical, mental, social and emotional, (2) coordinate the services of the personnel who are working with the child, (3) give specific training for speech improvement as directed by the speech therapist, and (4) provide opportunities for practice of skills taught in the therapies.

As stated above, there are very few trained workers in the field of cerebral palsy. The question that arises is: Can these children wait until a sufficient number of workers are trained or is there some other way in which these children can be helped?

The people working with the cerebral palsied appear to be in agreement that these children can not wait until workers are trained, but that therapies should be started as early as possible. Since there is a shortage of trained therapists and they seldom work with the very young child, the teachers already in the field are being asked to take the mildly involved cerebral palsied children in the public schools and the more severely handicapped are being enrolled in the orthopedic schools, especially at the kindergarten level.

The cerebral palsied child has many problems that must be considered. He often needs special equipment to aid him in doing his work. Special planning may be necessary so that he can participate in activities in the classroom. Since speech has such a close relationship to every aspect of development, it is very important that he be able to communicate to the best of his ability. The author of this paper hopes that the ideas presented here will be of value to teachers working with the cerebral palsied children and will aid her in helping these children to develop a more adequate means of communication.

II. DEFINITIONS OF TERMS USED

In order to give clarity to the paper several terms that will be used are defined.

Kindergarten. The American Kindergarten is a private school or a class in the public school where an attempt is made to give the child of five an education which is appropriate to his stage of development, which will be satisfying to him in the present and which will prepare him for the years immediately following.²

Cerebral palsy. A condition characterized by paralysis, weakness, incoordination, or any other aberration of motor function due to pathology in the motor control centers of the brain.³

Orthopedic school. A special school that should be equipped to function in a genuinely special way. Its existence can be justified only if it is constructed to accommodate the severely handicapped who can not get the services they need in a regular class. It should include space for instruction, medical, and health services, including therapy, rest facilities, and equipment for noonday lunches. It should have easily accessible lavatory and toilet facilities, ramps, handrails, wide hallways, and functional entrances.⁴

Defective speech. Speech is defective when it deviates so far from the speech of other people that it calls attention to itself, interferes with communication or causes its possessor to be maladjusted.⁵

Exceptional children. The term exceptional children includes both the handicapped and the gifted, or children

² Josephine C. Foster and Neith E. Headley, Education in the Kindergarten (New York: American Book Company, 1948), p. 18.

³ Meyer A. Perlstein, "Medical Aspects of Cerebral Palsy," American Journal of Occupational Therapy, April, 1950, offprint, non-paginated.

⁴ Romaine P. Mackie, "School Housing for the Crippled Child," The Crippled Child, 29:22, February, 1952.

⁵ C. Van Riper, Speech Correction, Principles and Methods (New York: Prentice Hall, Inc., 1947), p. 15.

who deviates from the average child to such an extent as to require special treatment or training in order to make the most of their possibilities.⁶

Other terms defined. These terms are included for the convenience of the reader.

- anoxia:** inadequate supply of oxygen, or the disturbance of bodily functions resulting from a deficiency of oxygen.
- ataxia:** caused by any disturbance of the automatic balance control, usually of cerebellar origin.
- athetosis:** caused by an anomaly, injury or disease of the basal ganglia, allowing involuntary motions to interfere with normal movements.
- echolalia:** parrot-like echoing of words heard.
- hemiplegia:** a paralysis of one side of the body.
- jargon:** unintelligible jabber.
- monoplegia:** paralysis affecting only one part of the body.
- neoplasm:** a new and abnormal growth in the body, as a tumor.
- occupational therapy:** any activity, mental or physical, medically prescribed and professionally guided to aid a patient in recovery from disease or injury.
- paraplegia:** paralysis or loss of power or sensation and motion in the lower portion of the body.
- peristaltic:** a wavelike, muscular contraction occurring in some tubular structures, especially the alimentary canal, and serving to propel the contents forward.

⁶ Harry J. Baker, Introduction to Exceptional Children (New York: The Macmillan Company, 1949), p. 12, reporting the definition by the White House Conference on Child Health and Protection, p. 4.

physical therapy: the treatment of disease by physical means by massage and exercise, including various modalities using water or infra-red heat.

quadriplegia: paralysis or loss of power or sensation and motion in both arms and legs.

rigidity: may be caused by a diffuse rather than localized hemorrhage within the brain. They are similar to spastics, but the muscles though stiff and rigid are not tense and hyperactive like spastic muscles and the stretch reflex is absent.

spasticity: caused by an anomaly, injury or disease of the motor areas of the cortex of the brain causing hyperirritability of the muscles to all stimuli.

stretch reflex: the uncontrolled contraction of a spastic muscle when its antagonist is contracted.

trauma: a bodily injury.

tremor: caused by an anomaly, injury or disease of the basal ganglia, causing involuntary contractions which are reciprocal in nature and regular in rhythm.

vascular conditions: the state of the vessels or ducts that carry fluid as blood or lymph.

Chapter two will be divided into two parts, in the first part, normal development will be discussed, and in the second part, the discussion will be on cerebral palsy and the problems resulting from it. Chapter three will present materials and techniques that the kindergarten teacher in the orthopedic school can use in her classroom to help the cerebral palsied child to develop a better means of communication. Chapter four will contain a summary with suggestions and recommendations which may be useful to the kindergarten

teacher as she works to improve the communicative abilities of the cerebral palsied children.

CHAPTER II

REVIEW OF THE LITERATURE

PART I

Much has been written on the development, speech and education of the so-called normal and cerebral palsied child, but as far as the author of this paper could determine no materials have been compiled to aid the kindergarten teacher in the developing of speech in the cerebral palsied child.

Every child is different from every other child. He is the product of his inherited characteristics and his background of experiences.

One must keep in mind the growth patterns of a normal child in order to do justice to the handicapped child.

Child Development. Gessell and Ilg⁷ outlined maturity traits that are not rigid norms or models, but illustrate the kinds of behavior which tend to occur at the age of five.

The child, growing rapidly since birth, has at the age of five, come to the end of this period of rapid physical growth. He is becoming more of a person and is impressed with his own ability to take responsibility. He adjusts

⁷ Arnold Gessell and Frances L. Ilg, The Child From Five to Ten (New York: Harper and Brothers, 1946), pp. 60-88.

well to an activity program which allows freedom of movement, yet maintains control of the sequence of separate activities. In simple motor performances his approach, grasp and release are direct, precise and accurate. His handedness is usually well established by this time. The transition from one activity to another is made easily. Although he may be interested in the calendar or clock, time is largely his own personal time. He has identified himself with his immediate environment.

The five year old is relatively healthy, although he may have communicable diseases as whooping cough, mumps, measles or chicken pox.

Although he may be slow, he will be expected to feed himself independently. He handles his fork and spoon well, and is beginning to use his knife for spreading.

He is able to dress and undress himself unless there are buttons or ties in the back, and then he must ask for help.

He takes care of his toilet needs adequately. He is able to wash his hands and face in a satisfactory manner, but will need assistance in taking a bath.

He may take a toy, blanket or pillow to bed with him, and there may still be some thumb sucking.

Although he likes to be in a group, he plays predominantly on his own. He prefers his own sex and a group of two

is most satisfactory. He is beginning to show greater ability in playing with others. For about fifteen minutes, he may enjoy group directed activities.

The five year old likes to be near home and his mother. Mother finds him a pleasure to have around the house because he is helpful, usually asks permission, uses endearments and tries to be obedient.

Five is not a fearsome age, and there is a tendency for him to bring God into the scope of his everyday world.⁸

According to Gabbard,⁹ it is expecting too much of a child for him to change his manner of behavior overnight. Growing up is a two way process and adjustments must be made by both the child and his parents. Parents should be watching at all times for things that will give their child an opportunity to develop into a person. Long before it is time for him to enter school he should have experiences where he will need to guide his own actions. The school does not expect all children to have the same pattern of development. Individual differences and rate of growth are taken into consideration when a program is planned to meet the children's

⁸ Arnold Gessell and Frances L. Ilg, The Child From Five to Ten, pp. 69-88.

⁹ Hazel F. Gabbard, Preparing Your Child For School, United States Department of Health, Education, and Welfare, Pamphlet No. 108 (1953), 23 pp.

needs.

By the time he enters school he will be expected to be able to get along fairly well with others in his group. He will be expected to respect the rights and property of others. He should be able to take care of his personal clothing, toilet needs, wash his face and hands, and put toys away.

A child entering school usually has sufficient language to express himself in sentences, ask for things and make himself understood. He is very much interested in words, enjoys trying new ones and may try to invent some of his own. Parents need to give their child an opportunity to practice speech so he will have ease in his expression of ideas.

Now that the child has entered into a group he will be expected to share toys and the teacher's time with others. He should be able to play alone part of the time, follow simple directions and listen attentively to stories and music. He needs to make first hand contact with many objects and to have many first hand experiences so that when he reads or hears stories they will be meaningful to him.

The child who is able to take an active part in family life will be more capable of participating in situations outside of the family than a child who has never been helpful. By being able to carry out simple tasks to a successful completion, he is growing in independence and is acquiring skills

that will be helpful in school life.

One sure way for a child to be happy in school is for him to learn to make friends. Getting along with others is expected as a child becomes a member of a group. By playing with others he learns the rules of give and take.

Trips provide important experiences to help him to stretch his sights into the unknown. Books help relive experiences he has had.

The child who responds to sounds and movements finds a natural outlet in rhythms and songs.

The child needs a happy home where mutual life and respect abound and where he feels he has a place in his parents' affections.

Regular attendance at school is important if the child is to make progress. Parents who take time to listen to spontaneous reports the child gives of happenings in school will find the way open for confidences to continue when he finds it necessary to talk over any problems he may have.

Some children go to school willingly, eager for a new experience, some find it difficult to take their place in this strange new world and some would like to return to their homes because they are afraid of the unfamiliar. A child's readiness to do a job successfully depends upon

his own ability and his past experiences.¹⁰

Function of the Kindergarten. Foster and Headley¹¹ state that the American Kindergarten of today is a direct descendant of the German Kindergarten of Froebel, but it has made many changes in the last hundred years.

Kindergarten is not a substitute for the home, but serves as an educational experience supplementing home training.

Kindergarten should be a basic phase of a child's education, for it can offer many opportunities that help develop good attitudes, understanding habits and skills that will help him to live happily and successfully. A child enters kindergarten to learn how to live happily and constructively within a group. No attempt is made to give him all the information he will need now or in the future. It is hoped that the kindergarten experience will help him to develop the ability to meet new situations and to learn how to gain the information he may need.

He is developing a more adequate language to express

¹⁰ Hazel F. Gabbard, Preparing Your Child For School, 23 pp.

¹¹ Josephine C. Foster and Neith E. Headley, Education in the Kindergarten (New York: American Book Company, 1948), pp. 16-23.

his ideas. The kindergarten stresses the child's responsibility for himself. He soon learns that he is expected to look out for himself without infringing on the rights of others. He must learn to share materials, take turns or divide, give help where needed and not to give help where it is not wanted.

The environment should be adapted to the level of maturity of the group, so there must be a wide variety of challenges to meet the range of developmental levels represented in the group, because it must present a challenge to all.

Although the kindergarten programs will vary, they must be adjusted to the environment and needs of the children in the group.

The kindergarten is a miniature democratic society functioning to aid the individual and the group to have happy and profitable experiences.

Getting ready for school is a gradual process. It is not possible for parents to cram into a few weeks all the learning a child needs to get ready for school. Learning is a step by step process according to the child's readiness to mature and organize his impressions of the world.¹²

¹² Josephine C. Foster and Neith E. Headley, Education in the Kindergarten, pp. 16-23.

Speech Development. Van Riper¹³ states that the child begins to learn to talk as soon as he draws his first breath and cries his first cry. The coordinations used in sucking, swallowing, belching, and smiling are also used in speech. In the second and third months the baby begins to respond to human speech by vocalizing and smiling. About the fifth month the child begins to use his vocalizations to get attention, support rejection, and express demands. During the seventh to ninth months, there is the appearance of tone variations and inflections in the vocal play. Between the tenth and eighteenth months, the normal child learns to say his first word. His comprehension greatly increases at this time. He is no longer a baby, but is a human being. By eighteen months the child should have a few meaningful words, a little solitary vocal play, some echolalia and a great amount of jargon. The unintelligible jabber that we call jargon is probably more important to speech development than most people realize. The parrot-like echoing of words he hears, that is known as echolalia appears quite prominently in the speech of some children at this age. It is a normal stage of development, but is usually of short duration.

¹³ C. Van Riper, Speech Correction, Principles and Methods (New York: Prentice-Hall, Inc., 1947), pp. 68-89

The child should be talking by the time he is two years old. Speech has become a tool, a safety valve, and a warning siren. His jargon is almost gone and simple and compound sentences are sometimes heard. His articulation is faulty and his rhythm will be irregular, he will have difficulty in controlling the volume of his voice, but he can talk.

During the third and fourth years, the world of words is very important. He is able to express his emotions through speech. He can manipulate his associates and satisfy his needs by using his speech.¹⁴

When the child enters kindergarten he should be ready to develop a favorable attitude toward speech if he does not already have it. He should be encouraged to talk informally with another child, a small group or the entire class. Creative speech activities through story telling, pantomime and dramatic play should be appreciated. Courteous behavior between the speaker and the listener should be developed.

The child's voice should be pleasant and audible. He should be able to recognize quality and volume, knowing the difference between the voice of "Father Bear" and the lovely soft voice of a little princess. There should be an awareness of the amount of voice needed in various situations,

¹⁴ C. Van Riper, Speech Correction, Principles and Methods, pp. 68-89.

a small, quiet voice when with a small group and a louder voice when with a large group. He should develop the use of a suitable rate that will make him easily understood by others.¹⁵

PART II

CEREBRAL PALSY

It has been noted that each child has his unique pattern of development yet shares within limits certain characteristics that are common to his age group. Education is planned to meet the needs usually found within this normal range of development. However, cerebral palsy may drastically alter and curtail the developmental pattern to such a degree that special education provisions will be necessary. Thus it becomes necessary to consider the nature of this disease.

Causes. Perlstein defines cerebral palsy as:

A condition characterized by paralysis, weakness, incoordination, and any other aberration of motor function due to pathology in the motor control centers of the brain.¹⁶

¹⁵ Toward Better Speech, Curriculum Bulletin, 1952-53 Series, No. 5, Board of Education of the City of New York, pp. 56-65.

¹⁶ Meyer A. Perlstein, "Medical Aspects of Cerebral Palsy," American Journal of Occupational Therapy, April, 1950, offprint, non-paginated.

It is more common among first born children, and those with heavy birthweights when there is prolonged labor. It occurs more frequently in children born to older women and to more boys than girls. It occurs more often in white children than in the colored races. There seem to be no economic, social or geographic predilections for cerebral palsy.

Anoxia and cerebral hemorrhage are the two most important causes of cerebral palsy. The brain is highly sensitive to the lack of oxygen. Nervous tissue does not have the property for regeneration. Hemorrhages may be the result of direct or indirect trauma to the brain.

Factors which may precipitate damage to the brain may be divided into those which occur in the prenatal period, natal causes or postnatal causes.

The prenatal factors are hereditary and congenitally acquired. The hereditary causes are static or progressive. The static are those which are manifest at birth or soon after and which do not become progressively worse. The congenitally acquired causes are anoxia, cerebral hemorrhage, infection, metabolic disturbances, malnutrition, Rh factor, and congenital malformation of the brain.

The natal causes of cerebral palsy are anoxia or vascular damage and trauma.

The postnatal causes affecting the brain after birth

are trauma, infections, as sleeping sickness, measles, or whooping cough, neoplasms, drugs, vascular conditions and anoxia.¹⁷

Types. Phelps states there are five general groups of cerebral palsy: spasticity, athetosis, ataxia, rigidity and tremor.

Spastics. Patients with spasticity have very "stiff" muscles and the spastic muscles show what is termed a stretch reflex. That is when a muscle is moved it contracts and prevents normal performance of the intended motion.

Athetoids. In athetosis, there is the presence of involuntary motion. The arms, legs, head and face move involuntarily and to no purpose.

Ataxia. The third type of cerebral palsy is a condition in which directional control and balance is disturbed. These patients are not paralyzed like the spastics; they are not in constant motion like the athetoids. They stagger when they walk without conception of direction and space, and fall a great deal. They are unable to pick up objects because of loss of directional control. When not trying to direct purposeful motion, they are perfectly quiet and normal.

Rigidity. The rigidities are similar to spastics, but the muscles, although stiff and rigid, are not so tense and hyperactive like a spastic muscle, and the stretch reflex is absent....

Tremor. The fifth type of cerebral palsy is the tremor which, of course, is not often seen in children, but is much more frequently seen in old people....

There are not often found combinations of these diagnostic types in one patient. Years ago a good many diagnoses of mixed types were made, but on checking through

¹⁷ Perlstein, "Medical Aspects for Cerebral Palsy," offprint, non-paginated.

the records it is found that fewer and fewer diagnoses of mixed types are made.... However, there are some mixed types found from time to time.¹⁸

Incidence. Based on the studies of Dr. Winthrop M. Phelps and his associates of samplings done in several Eastern States, it is estimated that seven cases of cerebral palsy are born each year in every 100,000 population. Since many of these children are so severely handicapped that they are susceptible to infections, about 15% die within the first five years of life. It was estimated then, that among the population above the age of six, four persons per 1,000, or more than half a million persons in the United States were so afflicted.¹⁹

Not all of the educable cerebral palsied children need special training. Some of them are so mildly handicapped they will present no problem and will grow up to lead more or less normal lives. Some will be so severely involved that they will need constant attention. Although their minds can be trained they will need custodial care all their lives. The remaining ones are moderately handicapped and they can be taught to walk, talk, dress themselves, feed themselves, work and carry on normal activities for daily living.²⁰

Physical Disabilities. The extent of the neuromuscular and sensory disturbances resulting from the cerebral

¹⁸ Winthrop Phelps, "Let's Define Cerebral Palsy," The Crippled Child, June, 1948, offprint, non-paginated.

¹⁹ Eugene Taylor, Help At Last For Cerebral Palsy, Public Affairs Pamphlet, No. 158 (1950), p. 3.

²⁰ Ibid., p. 8.

lesion varies with each child. The paralysis or loss of power of sensation and motion may affect only one part of the body (monoplegic), the legs (paraplegic), one side of the body (hemiplegic), both legs and one arm or one leg and both arms (triplegic), or both arms and both legs (quadriplegic).

Muscle education or re-education is the work of the physical and occupational therapists. The child is diagnosed by an orthopedist and the therapists work from his recommendations. Immediate aims are decided upon and methods selected which can best be used with the individual patient. How much is accomplished depends upon the ability of the individual and the adequacy of his training. For best results, therapy should be started early and the child should have intensive training. Since few treatment centers have the facilities for providing twenty-four hour supervision for these children much of the responsibility for carrying out the program must be delegated to the parents. The parents should learn the importance of the therapy and should be taught the techniques of specific muscle education in order that they may supplement the therapy given at the treatment center.

Conscious relaxation and exercise is the basic treatment used to establish motor control in the cerebral palsied child. Because of the characteristics of spasticity, athetosis, ataxia, tremor and rigidity, some modifications must

be made in the techniques of therapy.²¹

The physical therapist works with the lower portion of the body while the occupational therapist trains for self-help in dressing and feeding.

Mental Capacity. A few years ago it was thought that all of these children were mentally deficient. Seeing a child making queer faces, drooling, and making unusual sounds, people were given the wrong conception, and it was thought that all cerebral palsied children were feeble-minded.

Dr. Winthrop Phelps estimated that 30% of the cerebral palsied were mentally defective as the direct result of brain damage and that the remaining 70% are normal "in the sense that these individuals show the normal spread of the population seen at large".²²

Clinical observation and an increasing number of carefully developed research projects seem to point to a higher incidence of mental retardation than the rating made by Phelps.²³

It is now estimated that more than one third of the

²¹ Esther Hutchinson and Elizabeth H. Lanctot, Handbook on Physical Therapy for Cerebral Palsy, Ohio Society for Crippled Children, Inc. (1950), pp. 7-13.

²² Ann Heilman, "Intelligence in Cerebral Palsy," The Crippled Child, 30:12, August, 1952.

²³ Ibid., p. 12.

children who have cerebral palsy are unable to profit from a regular education. The remaining children range from mentally retarded to normal and occasionally one has superior intelligence. Severe physical disability does not necessarily mean that there is an accompanying mental deficiency.²⁴

Delayed development, both physical and mental, seems to be characteristic of cerebral palsied children.

... the individual rate of development is slower in children who have been handicapped by brain damage. Further, not only is the rate of development complicated by the type and degree of the handicap, but also by the mental and emotional impairment of the child....Although the average cerebral palsied child is slow in development this does not necessarily hold true for all cases.... There is an extremely wide range of variation in the age of attaining a higher rung on the development ladder since each child has his own rate of maturation. Although one might expect the rate of development to be proportionate to the severity of the physical disability, this is not always found to be true.... Usually the more closely the cerebral palsied child follows the normal developmental pattern, the more hopeful is the outlook for his habilitation.²⁵

Family Relations. Adjustments in family life must be made when a new baby arrives and additional adjustments must be made if that child is cerebral palsied.

The key to a good adjustment is family understanding

²⁴ Taylor, Help At Last For Cerebral Palsy, p. 7.

²⁵ Eric Denhoff and Raymond H. Holden, "The Developmental Ladder in Cerebral Palsy," The Crippled Child, October, 1951, offprint, non-paginated.

and acceptance of the child. The family must be the first consideration in the treatment of cerebral palsy. Often a child's progress, physical or otherwise is handicapped by unfavorable parental attitudes. There is a considerable degree of variability in the ease with which parents accept a handicapped child.

Characteristics of the "good" family:

- (1) Mother and father accept the child as he is.
- (2) Parents give the child opportunity to perform as much as possible on his own. Not restricting. Not protecting.
- (3) Child participates in extra-family social situations.
- (4) Family expects progress, but is not "pushing" to achieve it. Does not demand particular school achievement.
- (5) Family provides toys and activities at child's own level of play interest and learning ability.
- (6) Warmth and ease of husband-wife relationship.
- (7) Warmth and ease of parent-child relationship.
- (8) Family trusts qualified professional personnel.
- (9) Siblings accept the handicapped child.
- (10) Family has initiative, stamina to carry out recommendations without extra professional help.²⁶

Children become what they are because of several factors: their original endowment, that which they bring with them when they are born; their capacity for growth, their environment and their training. The cerebral palsied child must learn to work with the things he was born with

²⁶ Eric Denhoff and Raymond H. Holden, "Family Influence on Successful School Adjustment of Cerebral Palsied Children," Journal of the International Council for Exceptional Children, 21:6, October, 1954.

and must never lose sight of the fact that he has the capacity to grow.²⁷

Emotional Health. In order to build a healthy body, a child must have certain basic food elements, fats, carbohydrates and proteins. In order to have a healthy personality he must have his basic emotional needs met satisfactorily. The fulfilling of his emotional needs is as essential to emotional health as good food is to his physical health.²⁸

Parents should keep in mind that the child handicapped with cerebral palsy is a child, he is like any other child except that he has a handicap. Like other children he is sensitive, is possessed of normal desires, is affectionate and is ambitious. He needs everything that any child needs. He should be treated as nearly like any other child as he can be. Sometimes because he appears to be helpless and pathetic, parents find it impossible to be firm with him or deny him any wish.

All of us living in modern society recognize that we must be disciplined. The cerebral palsied child lives in this world too, and so must learn to respect discipline.²⁹

²⁷ Leslie Hohman, "Help the Cerebral Palsied Grow Up," The Crippled Child, April, 1947, offprint, non-paginated.

²⁸ Henry Drewey, "Emotional Needs of Children," Journal of the International Council for Exceptional Children, 21:178, February, 1955.

²⁹ Taylor, Help At Last for Cerebral Palsy, p. 13.

The handicapped child should take his place in the group if he has brothers and sisters. If he is an only child, it is wise to invite neighborhood children in and to let him visit them. Being with other children is good for him and for them. He will learn much from these associations. He may not always be able to do everything they do when they play, but seeing others do things he wants to do, will encourage him to try.

The cerebral palsied child must be dressed a little more neatly and more attractively, must be a little more responsive in interpersonal relations, he must be a little more attentive to detail, he must be friendly and patient to help compensate for his handicap.³⁰

The emotional needs of a cerebral palsied child are no different from the needs of the so-called normal child, but the methods of supplying his needs and the quantitative requirements may vary considerably.

The most important emotional need of all human beings is just plain attention. There is nothing abnormal about the desire for attention, although there are times when the means of getting it may not be acceptable.

Another important emotional need is to be accepted, first by ones family and later by a group. The sense of

³⁰ Taylor, Help At Last For Cerebral Palsy, p. 13.

belonging is what makes him feel he is part of a group and that he has been accepted by that group. One of the most important jobs of parents is to give their children the feeling that they are genuinely loved and wanted.

Another emotional need that a child must have satisfied is accomplishment. Every person must somehow attain his goal of success no matter how small or insignificant it would seem to another person. The basis of personal integrity is self-respect and self-esteem and without these there is no motivation or incentive to accomplish anything. In order to develop self-esteem the child must be given the opportunity to succeed.³¹

Parents often overprotect their cerebral palsied child. Every effort should be made to make him as independent as it is possible for him to be. It is up to the parents to try to give the child the will to succeed in spite of his handicap. A child should never be allowed to exploit his handicap, so that he goes through life using his disability as an excuse for not learning or sharing responsibilities.³²

No matter how good a mind or body a person has, he must have emotional stability or he will fare poorly as a

³¹ Drewry, "Emotional Needs of Children," pp. 178-179.

³² Hohman, "Help the Cerebral Palsied Grow Up," off-print, non-paginated.

human being. A successful human being is one who has made the most of his potentialities in meeting the demands of everyday life in the society in which he finds himself.

The attitude of the cerebral palsied child's family and of the community of his handicap are of extreme importance to the child's adjustment, regardless of how severely he is involved. If the handicapped child is to have an adequate personality he must be able to share in the lives of physically normal individuals.³³

He will not regard himself as a tragic phenomenon unless his parents do. He has never known any other condition than his own and he will make the best of it if he is given a chance. He will make the effort to please others if pleasing behavior is made attractive to him. He must receive recognition for his effort rather than how well he has accomplished any act. If he is given constant encouragement he will practice and eventually accomplish what he has been attempting to do.³⁴

The child with cerebral palsy must understand himself and others. He must learn to view his disability objectively

³³ Emotional Problems Associated with Handicapping Conditions in Children, U. S. Department of Health, Education and Welfare (1952), p. 19.

³⁴ Mary Huber, "Letter to the Parent of a Cerebral Palsied Child," The Crippled Child, June, 1952, offprint, non-paginated.

and unemotionally, to recognize his limitations and understand why people react to him the way they do.³⁵

School Housing. Mackie states that many physically handicapped children, especially the cerebral palsied, are not attending school because there is no place for them. Special schools or classes or special facilities in regular classes are not available to them. Some of these children are receiving home instruction, a limited kind of school experience, but could attend day school if special classes or services were to be found in the home districts. Thousands of handicapped children, including the mildly involved cerebral palsied, are attending regular schools that are not equipped to provide the special services needed to develop them to their full capacity.³⁶

According to 1947-48 statistics (covering both day and residential schools), compiled by the Office of Education, only 10 to 15 percent of the number of exceptional children estimated to be in need of special education are receiving the attention they should have.³⁷

The presence or absence of needed facilities may be the determinant whether a child who is severely involved will be enrolled or excluded from school.

³⁵ Emotional Problems Associated With Handicapping Conditions in Children, p. 3.

³⁶ Romaine Mackie, School Housing for Physically Handicapped, Federal Security Agency, Office of Education, Bulletin 1951, No. 17 (1951), p. 26.

³⁷ Ibid., p. 1.

Although the states are contributing some financial help most of the load of educating these children must be carried by the local schools. As the state and local communities work together to enlarge their programs for the handicapped children more attention will no doubt be given to the features of local buildings so that they will be more functional in serving the handicapped. These specialized building requirements will depend on the needs of the children and the resources of the community.

The needs for the exceptional children can not and should not be met in only one way. Each community must decide what is the most effective way to organize its classes or plan its special services for its children who are handicapped.

The features of the building or classroom should help the child develop a feeling of security and encourage him to attempt physical activity with little or no help from the attendants or teachers. Ramps, elevators, if the building has more than one floor, handrails, sturdy equipment, wide hallways, adequate lighting and spacious classrooms all help to give the children a feeling of security. Swinging doors, slippery floors, thresholds in doorways, sharp corners and easily overturned equipment should be avoided.

Most of the handicapped children are brought to school by bus. Arrangements must be made for loading and unloading

the buses at school. Some schools are constructed so that the floor of the bus is flush with the floor of the building. There should be a covered entrance, so that the children will not be exposed to inclement weather, especially where there is snow and ice. A slippery floor or ramp can be very hazardous.

Doors need to be at least six inches wider than the standard door to accommodate wheelchairs, wagons or other large pieces of equipment.

If the school is to accommodate small children as well as older ones, a double handrail in hallways is recommended.

The classrooms must be much larger than the classrooms of a regular school, although the classes will be much smaller. They must be large enough to accommodate wheelchairs, relaxation chairs, special tables and other cumbersome equipment.

In many respects the quarters that house the physical and occupational therapies are designed more like a hospital or clinical room than a school room.

Toilet facilities should be easily accessible to the most used parts of the building. The cubicles should be large enough to accommodate wheelchairs and have hand rails in them. It is advisable to have running water in each classroom. The kindergarten in the school for physically handicapped children should have all the equipment of a regular kindergarten and additional equipment as well. All

the special equipment should provide situations and means for these children to become more self-sufficient.³⁸

Educational Needs. Each child develops at his own rate and when a group enters kindergarten they have individual differences. If this is true of the so-called normal child, then it is more than true of the cerebral palsied child. Parents begin to be concerned and often become alarmed when they discover their child is not developing as other babies. He doesn't hold up his head, show interest in manipulating toys, walk or talk at the same age as the child of a friend or another sibling.

If the physician or orthopedist tells the parents their child has cerebral palsy, they have difficulty in accepting this disappointment and the long, hard work that faces them.

During this period of concern they may overlook the fact that this child is a growing individual the same as any other child. They are so busy thinking about what he can not do that they neglect to see the development taking place in spite of the handicap.³⁹

³⁸ Mackie, School Housing for Physically Handicapped, pp. 5-11.

³⁹ Ruth Hadra, "Developmental Factors in the Cerebral Palsied Child," The Crippled Child, August and October, off-print, non-paginated.

It must be remembered that the cerebral palsied child is fundamentally like the so-called normal child. Whatever plans are to be made for him must be based on the recognition of basic needs and his exceptional needs. The handicapped child has the same goals as all children, but they are more difficult to attain.⁴⁰

The important thing is to pursue any activity for which the child is ready and it must be realized that there are many factors to be considered besides physical readiness.

Unless there is some medical reason these children do not need to be treated as if they were rare pieces of china. Skill and endurance come only through practice. Many cerebral palsied children are a great deal stronger than the child with no physical handicap. It must be remembered that in most cases that the damage has been done and there is no acute illness. He is not a sick child. Unless a child is motivated he may lose interest and become an apathetic person with a dull life.⁴¹

Development must be considered as a continuous process from the time of birth. Entering school is not the beginning

⁴⁰ Romaine P. Mackie, Education of Crippled Children in the United States, Federal Security Agency, Office of Education, Leaflet No. 80 (1952), p. 3.

⁴¹ Mary Eleanor Brown, "How Normal Is Your C. P. Child," The Crippled Child, June, 1948, offprint, non-paginated.

of a child's learning experience. The limitations imposed on the cerebral palsied child by his handicap mean that he will be deprived and impoverished in learning experiences by environmental explorations made by the children who have no disabilities.

The opportunity for public education is one of the fundamental rights of every American child. The goal of our American democracy is to educate all who can profit from it.⁴²

It is the teacher's responsibility to provide a rich, flexible and individualized program so that each child can have the opportunity to develop at his own rate. Many opportunities can be given the children to work and play together peacefully regardless of their previous experiences and individual interests. Many mechanical adjustments and special techniques may need to be used.

Self-help activities taught in the therapies are reinforced by habitual use in the classroom. Greater accuracy and skill develop with practice. The dynamic drive to grow and the natural curiosity of his environment are apt to wither if they are not given nourishment. If a child develops a defeated attitude it permeates all areas, he makes no effort in physical habilitation, shows little participation in

⁴² Mackie, Education of Crippled Children in the United States, p. 7.

communication and has no interests in the work and play of the group.

The educational needs of the cerebral palsied child at the kindergarten level will reflect the amount of growth the child has made. His interest will begin to widen and his understanding of himself and his place in the world about him will be more realistic. He will become more aware of the fact that he is a separate being with rights and possessions. He is beginning to identify himself with the group and look around a little more objectively. The need to feel recognized and to be able to succeed are factors which help to make the child with cerebral palsy feel that he is no different from normal children. He may not be aware that his handicapping conditions are permanent, but he will begin to realize that he has limitations. He is beginning to experience the reactions of outsiders. It is important that the child be made to realize that if he is trying to improve his condition it is much better than to sit and resent it because he has a handicap. As the child grows in self-acceptance and self-respect, those around him begin to look at him with different eyes. Their appreciation of him helps the child to grow in his ability to take things in his stride.

The teacher must check on the completeness and dependability of the child's basic foundation in all areas and fill

in the gaps. She must provide opportunities to follow verbal directions and to cooperate with others in a group. Slowly and gently she helps the child to develop desirable qualities that will help him to participate in a learning situation.⁴³

The multiple handicaps usually found in the cerebral palsied child make the educational problems more difficult than those which confront a child with only one handicap. Yet every educable cerebral palsied child should have the right to have an education, regardless of how seriously he is involved physically. Most cerebral palsied children are capable of average education and many of them will become useful citizens if guided into activities suitable to their abilities.⁴⁴

The curriculum of the cerebral palsied child, like the curriculum of the so-called normal child, should provide for the best possible social, emotional and physical development of each child....There is evidence to suggest that many of the cerebral palsied children are lacking in the common, everyday experiences of active, normal boys and girls....The curriculum must be flexible and so individualized that the child will be aided in every possible way.⁴⁵

⁴³ Maurice H. Fouracre, Realistic Educational Planning For Children With Cerebral Palsy, United Cerebral Palsy Associations, Inc., Pamphlet No. 2 (1952), pp. 29-40.

⁴⁴ Earl R. Carlson, "Give Them Education," The Crippled Child, December, 1947, offprint, non-paginated.

⁴⁵ Romaine P. Mackie, "What Is Special About Special Education? The Crippled Child," Journal of the International Council for Exceptional Children, 19:311-312, May, 1953.

Caution must be taken that the child's goals are not set too high and that he will fail to make substantial progress towards his achievements so that he will become frustrated, resentful and discouraged. He must have attainable goals toward which he can work and must be motivated to make a persistent effort and acquire self-respect and confidence that are essential to his happiness.⁴⁶

The education of the cerebral palsied child is not only the teaching of the 3 R's. In addition the child must be taught to adjust to his handicap and the conditions of life as he meets them, so that he can take his place in society.⁴⁷

Speech and Language. Communication is one of the large areas which may present a great obstacle to the child's participation in kindergarten activities. The ultimate aim is to help the child develop an acceptable means of communication with his associates. The purpose of this paper is to present ways that the speech of the cerebral palsied child can be developed and improved. Therefore, it appears necessary to describe more in detail the speech of the cerebral

⁴⁶ Charles Strothers, "Realistic Educational Goals For the Cerebral Palsied Child," The Crippled Child, April, 1953, offprint, non-paginated.

⁴⁷ Meyer A. Perlstein, "What Teachers Should Know About the Child with Cerebral Palsy," National Education Association Journal, April, 1952, offprint, non-paginated.

palsied child.

The speech problems of cerebral palsied children are not unique. They have the same kinds of speech deviations as are found among children who do not have cerebral palsy. Perhaps the deviations are more numerous among the cerebral palsied than those who are not cerebral palsied, but are not restricted to them.⁴⁸

Speech disabilities in these children may be due to lack of control of the tongue, lips or breathing mechanism. Faulty articulation and poor breathing patterns make their speech unintelligible to many. They may also have speech defects secondary to a hearing loss or to perceptual defects in hearing. The defect may be functional and due to faulty learning. It may be necessary to develop proper habits of chewing and swallowing and improve social graces by eliminating drooling and grimacing.⁴⁹

There are no two cases exactly alike, so each child must be treated individually. It is necessary to make an inventory of the child's ability and disabilities and work out an individualized program.

The aim in the teaching of speech to the cerebral

⁴⁸ Berneice R. Rutherford, Give Them A Chance To Talk (Minneapolis: Burgess Publishing Co., 1950), p. 3.

⁴⁹ Perlstein, "What Teachers Should Know About the Child with Cerebral Palsy," offprint, non-paginated.

palsied child is for him to develop the most communicative speech that he is able to produce. Any type of walk is better than no walk at all, and any type of understandable speech is better than no speech. The physical handicap must be understood and respected, but the child's background must also be considered.⁵⁰

We want the child to become aware of himself, aware of others and aware of the things he can do to influence others. Smiling and turning of the head toward another is the initial step in social relations. Interaction with people is the basis of communication before words are uttered. Parents of cerebral palsied children should be on the alert for such behavior and make the most of it.⁵¹

The mothers have become so accustomed to interpreting their children's wants and talk for them that the child settles back and sits quietly and makes no attempt to talk.

They show little curiosity when presented with a new situation. In a short time they have passed the normal age for beginning speech. Many of these children are never given

⁵⁰ Juliette M. Gratke, "Speech Problems of the Cerebral Palsied," The Journal of Speech Disorders, 12:129, June, 1947.

⁵¹ Harold Westlake, "A System for Developing Speech with Cerebral Palsied Children," The Crippled Child, June, August, October, and December, 1951, offprint, non-paginated.

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an opportunity to talk or express themselves in any way.⁵²

Unless the cerebral palsied child is strongly motivated to attempt speech, he may not put forth the effort that is necessary. The speech performance of cerebral palsied children indicates that the quality of their speaking skills is more closely related to their environment than to the involvement of the speech muscles.

A major goal should be to help these children have as many and varied sensory experiences as possible that will contribute to their growth both physically and emotionally.⁵³

Comprehension and enjoyment of language come long before meaningful speech is attempted. In selecting appropriate activities, it is his ability to understand that should be considered rather than his ability to express himself.⁵⁴

One of the most difficult things to do is to create a normal language environment around a cerebral palsied child. His environment is not the same as that of any of the other children in the family who are not handicapped.

⁵² Gratke, "Speech Problems of the Cerebral Palsied," p. 131.

⁵³ Ollie Backus and Ruth Coffman, "Group Therapy with Pre-School Children Having Cerebral Palsy," The Journal of Speech and Hearing Disorders, 18:353, December, 1953.

⁵⁴ Westlake, "A System for Developing Speech with Cerebral Palsied Children," offprint, non-paginated.

The child who is able to move about independently is able to explore his environment with his eyes, ears, head, hands, feet and even his mouth. What the average child goes after himself must be brought to the cerebral palsied child and be made meaningful for him in terms of language and experiences. These children must be taught to listen to sounds about them, as the tick of the clock or the ring of the telephone bell. They should be given the opportunity to feel the various textures of materials. They should become conscious of smells. The child should be given solid foods to chew. Too often soft or strained foods are given to these children so they are unable to exercise the muscles that are used in speech production.

It is necessary to give recognition for trying rather than for the successful accomplishment. Constant encouragement for effort must be repeated until by practice and maturity the feat is accomplished.

One must be very careful not to ignore any clumsy effort and consider it not worthy of attention. Any sound that a child makes at any age is likely to be an important phase in his speech development. Failure to note these sounds may inhibit further attempts to speak.

The role of the listener can not be over-emphasized. It is through speech that one is able to reveal his intelli-

gence, personality and character.⁵⁵

Speech and language represent the most human thing about a person. When a child talks he says something to others or to himself. He talks about what he has seen, heard or felt. If the cerebral palsied child has any disturbance in his sensory system the learning of speech is very difficult. In some extreme cases no speech develops because of inadequate intellectual and emotional growth.⁵⁶

Speech is a social activity and when any improvement takes place in a child's emotional or social stability an improvement in speech growth is apparent.⁵⁷

The child's principal tool for social adjustment is speech because his relations to others are affected by it. Any speech defect will cause a child to feel different, rejected, insecure and frustrated. Therefore, the ultimate aim is to help the cerebral palsied child develop the most acceptable means of communication of which he is capable.⁵⁸

⁵⁵ Mary Huber, "Letter to the Parent of a Cerebral Palsied Child," The Crippled Child, June, 1952, offprint, non-paginated.

⁵⁶ Herbert K. Baker, "How Important Is Speech?" The Crippled Child, October, 1948, offprint, non-paginated.

⁵⁷ Carlson, "Give Them Education," offprint, non-paginated.

⁵⁸ Baker, op. cit., offprint, non-paginated.

Chapter three will be devoted to the techniques and materials that can be used by the kindergarten teacher in the orthopedic school to help in the developing and improving the speech of the cerebral palsied children in her classroom.

CHAPTER III

THE KINDERGARTEN TEACHER CAN HELP DEVELOP SPEECH

This chapter will be devoted to presenting and describing ways the classroom teacher can help develop and improve the speech of the cerebral palsied child. No attempt is being made to make a speech therapist out of the kindergarten teacher or to add extra work to the already busy schedule. An endeavor will be made to point out that the activities already being used in the ordinary classroom can develop and improve speech if the proper emphasis is given them.

One of the greatest contributions a teacher can make is to create an atmosphere in the classroom in which the child can function at his best. It is necessary for the child to know that he is appreciated as an individual for any and all talents he has. If a severely involved cerebral palsied child should become a member of a group where the handicaps of the others are less serious, it appears well to explain this child's problem so that the group will accept him more readily and learn to respect his efforts. It would be well to point out that all of us have peculiarities and differences, some mild and some serious, but everyone must try to do the best he can despite any defect he may have. Many tensions can be relieved if the teacher can create a friendly and understanding feeling in the classroom.

The cerebral palsied child needs and deserves to be accepted as a person. The teacher must seek and find the person behind the handicap who yearns for self-expression and the understanding of others. There should be praise for success regardless of the smallness of the act and he should be given help in case of failure.

The kindergarten teacher will be unable to use many specialized techniques that are employed by the speech therapist, but should work very closely with him if one is available. The author has noted that frequently the teacher seems more successful in getting speech, walking or hand function from the handicapped child than the therapists because the emphasis is directed away from the motor skill and to an activity, so that the child is probably less tense and therefore, responds more freely when in the normal classroom situation. Within a group structure it seems easier to succeed when one is among his peers who also have similar limitations and motor disabilities.

Relaxation. The cerebral palsied child may need to have things made easier for him physically. He may need a special seating arrangement, a foot or a head rest, for example. The author has observed that the cerebral palsied child is happier if his chair can be similar to the chairs used by the others in the group. A regular kindergarten chair held firmly by a turnbuckle on a platform with rollers

is excellent for the child who is non-ambulatory. He feels more a part of the group and will join in activities more readily if he is on approximately the same level as his peers.

Relaxation is important for the speech of the cerebral palsied child. The efforts of the cerebral palsied child to move his arms or legs in the case of the spastic or to control the involuntary movements of the athetoid calls for great expenditures of energy. The teacher should be mindful of energy conservation of these children and make arrangements to provide them with frequent, brief periods in which they can relax and revitalize their body mechanisms.

Relaxation does not imply that the child must be flat on his back, slump in his chair or let his mind go "blank". The activities of the classroom should be varied so that after a strenuous activity the children take time out for a game of "rag doll". It is helpful to have a rag doll and have the children imitate what the teacher or another child is making the rag doll do. It is very important that the teacher relax with the children for she is the one who sets the tempo of the room. She unconsciously transmits her feelings of tension or calmness to the children. Frequent short periods of relaxation seem to give the best results and the teacher must be sure the child does not become completely exhausted before he takes time out to rest.

The classroom should be attractive in appearance, but

if there are highly distractable children in the class, it is important that stimulating pictures and colors be kept at a minimum. The classroom should also be free of excessive noises and glaring light.

Exercises for relaxation. During this short period of relaxation, exercises, such as the following, will be of value to release tensions:

Stand easily tall. (If the child is unable to stand, he can sit tall.) Raise your arms over your head and stretch your fingers. Bend at the waist and let yourself go limp.

Swing the right arm forward and back from the shoulder like a pendulum. Have free action in the shoulder, upper arm, elbow, wrist and fingers. Shake loose the right hand gently. Repeat with left.⁵⁹

Poetry for relaxation. The rhythm and words in some poems will be helpful in producing relaxation. The teacher can read them as the children listen quietly or dramatize them. The following poems are very good to use for relaxation:

READINESS

Close your eyes, head drops down,
Face is smooth, not a frown.
Roll to left; head is a ball;
Roll to the right; now sit tall;
Lift your chin, look at me;
Deep, deep breath, one, two, three.
Big, big smile; hands in lap.
Make believe you've had a nap.

⁵⁹ Toward Better Speech, A Manual for Teachers of all Grades, Curriculum Bulletin, 1952-53, No. 5, Board of Education, City of New York (1953), p. 117.

Now you're rested from your play;
Time to work again today.⁶⁰

RAGGEDY ANN

Raggedy Ann is my best friend.
She's so relaxed; just see her bend.
First at the waist, then at the knee.
Her arms are swinging, oh, so free.
Her head rolls around like a rubber ball.
She hasn't any bones at all.
Raggedy Ann is stuffed with rags;⁶¹
That's why her body wigs and wags.

Have a Raggedy Ann that is stuffed with rags. Children imitate what Raggedy Ann does.

Music for relaxation. Soft music played on the piano by the teacher or on the record player will also be helpful to induce relaxation.

Some favorite records of the children in the author's classroom are:

- "Sing Me a Lullaby", sung by Glen Cross with Orchestra.⁶²
- "Lullaby-Brahms", RCA Victor Orchestra.⁶³
- "Rock-a-by Baby", RCA Victor Orchestra.⁶⁴

⁶⁰ Louise Bender and J. J. Thompson, Talking Time (St. Louis: Webster Publishing Company, 1951), p. 19.

⁶¹ Ibid., p. 21.

⁶² Glen Cross, "Sing Me a Lullaby," Pixie Record (New York: Steinway Hall).

⁶³ RCA Victor Record Library for Elementary Schools, Record 1.

⁶⁴ Ibid., Record 3.

Other aids that will help produce relaxation can be found in APPENDIX A.

Breathing. Many cerebral palsied children retain their infantile rate of irregularity in breathing. Since one speaks on the exhalation of the breath, the rapid rate and irregularity of breathing is one detriment to speech. If the exhalations are short, the child is able to speak only a few words until he must stop or gasp for breath before he can continue speaking. During the quiet time the children can practice taking deep breaths and then exhaling slowly. Care must be taken that the child does not continue this activity for too long a time. Doing this exercise four or five times after a period of relaxation will tend to improve breathing habits and the child will usually have more fluent speech.

Lip closure. Many cerebral palsied children habitually keep their mouths open. They have difficulty closing the lips and keeping them closed. This may be due to organic difficulties or poor habits. After consulting with the physical therapist or the orthopedist as to the cause, the teacher can work on lip closure, expecting more from the child who does not keep his lips closed because of poor habits. The children consider it fun to work on lip closure, and it is a great asset to the child because it improves him cosmetically as well as aiding him in controlling his

drool.

A game can be made of it to see who can keep his lips closed for the longest time. One would want to be careful to choose two children of as equal ability as possible, so that one child would not become discouraged if he were never the winner.

Some additional exercises can be found in APPENDIX B, but the teacher's imagination and ingenuity will be valuable in working out ways to teach children lip closure.

Tongue exercises. The tongue makes many types of motions and combinations of motions during speech. A nimble and well coordinated tongue is necessary for good speech.

It is necessary that the cerebral palsied child become aware of the various movements his tongue can make. He can touch it, protrude it, push it from side to side and up and down.

Some exercises that are fun, but valuable are the following:

Stretch the tongue out and down toward the chin: out-down-in. (Repeat several times, slowly at first, then increase the rate.)

Point the tongue upward toward the nose: up-in. (Repeat several times.)⁶⁵

If possible, it is profitable to practice this exer-

⁶⁵ Toward Better Speech, p. 117.

cise in front of a mirror so the child can watch what he is doing.

Chewing and swallowing. Speech is an overlaid function. The same muscles are used in speech that are used in eating. The normal infant gets to exercise his speech muscles long before he talks by using them for all the eating processes. The cerebral palsied child may have difficulty in using the lips, tongue, and jaws which are needed for sucking, chewing, and swallowing, as well as, speech. Thus, it is important that proper chewing and swallowing precede speech training. Many cerebral palsied children drool because they have not learned to swallow, and therefore, are not socially acceptable. Many of these children have never had to chew foods, as the parents have been so concerned with the child getting nourishment that they have continued with a soft or liquid diet. If these children are given food that needs chewing, they may reject it or use a sucking rather than a chewing motion.

The kindergarten teacher will not have much time to work on chewing and swallowing, but if there is no speech therapist available, she can point out to the parents the importance of giving the child meat, raw vegetables and other chewy foods in order that he get practice in chewing.

The peristaltic movement that is developed in straw drinking is valuable to speech and helps eliminate drooling.

During the mid-morning lunch (usually milk and cookies), the child can be helped with straw drinking and chewing. The author has noted that by putting a slight pressure on the upper lip with the thumb, the lower lip with the index finger, and steadying the lower jaw with the remaining fingers that the child is able to learn to use a straw quite successfully. The teacher can observe the child eating his cookie to discover if he is sucking or chewing. She may assist the child in learning the chewing motion by operating the lower jaw manually.

Conversation. One of the most important things the teacher must remember is to talk to the child. He should be encouraged to make a response if that response is only a sound. If the child has a reliable "yes" and "no", questions can be worded so that he can give a "yes or no" answer, if he has no other speech. The first aim is to motivate his speech and corrective work can be started later. If the child has no speech the teacher should make several statements and let him select the one he wants to use. After he selects the statement, it should be repeated so that he has the satisfaction of hearing his contribution to the group and it also provides him with an opportunity to hear the words he was thinking.

Many opportunities will arise during the day in which the teacher can talk individually with each child.

When he arrives at school he should be given a few words of greeting. If the children arrive at different times the teacher will have an opportunity to visit with each child as he enters, but if they arrive all at one time by bus, it is much better to meet in a conversation group for a brief period.

Free play. During the free play time each child should be given an opportunity to choose his own activity. Many of the seriously handicapped children have never had an opportunity to make choices, but have played with the toy that mother or some other member of the family gave him. He needs to learn to make selections. He may select a toy that appears to be unsuitable and will devise a way to have fun with it, although it is not being used as the manufacturer had planned. Making his own selections is helping him to gain independence. The more independent he becomes the more need he will have for speech and a greater attempt will be made to produce it.

The teacher can visit with various groups or work independently with an individual child, while the other children are directing their own play activities. The author has used this time effectively to develop speech through naming objects on cards. One of the most useful packets of cards containing items that are found in the

child's immediate environment are the Kiddie Kards.⁶⁶

Listening activities. It is very important that children learn to listen. Records and stories are good listening activities. Later, listening games are fun. A very simple listening game is to have several sound makers, such as a bell, whistle, drum, etc. The teacher stands where the children can not see her and has them clap their hands when they hear a certain sound, for example, the bell. The child who has difficulty in clapping may indicate that he hears the sound by tapping or attempting to touch his leg with his hand. A more advanced stage would be to listen for a sound, such as: b, k, m, or f, and clap when he hears the sound the teacher tells them to listen for.

More listening activities are listed in APPENDIX C as a help to the teacher.

Creative dramatics. A child lives in a world of play as he is growing and developing, through it he experiences and experiments with new situations. Since the cerebral palsied child is cut off from natural growth experiences, he must rely heavily on play activities to provide stimulation in social and intellectual growth.⁶⁷

⁶⁶ Gustave Holmgren, Kiddie Kards (Sheboygan, Wisconsin: Wolfe Products).

⁶⁷ Charlotte Kersten, "Modern Methods Make a World of Play," The Crippled Child, June, 1948, offprint, non-paginated.

Dramatic play is one of the simplest types of play because it has little or no plot. The expression is free and natural and is the outgrowth of some activity within the experience of the child.

Dramatic play is a natural and flexible process that can foster the growth and formation of personality patterns. The child can direct his impulses into a world of fantasy that permits him to see, do and feel like the person he is pretending to be. Through natural activity and the balancing of emotions, dramatic play develops a happy association with learning. Aggression released through drama is acceptable. Each player must learn to integrate himself into the group with one idea in mind. This is an excellent technique for over-coming feelings of inferiority and timidity.⁶⁸

The play or dramatic incident may be an original one which the child makes up as he goes along, acting out an experience he has had or his favorite story. Creative dramatics can develop from a simple rhythmic activity as clapping, to a complete little story as dramatizing a Trip to Grandmothers or a folk tale like The Little Red Hen.

Poems and fingerplays give the children an excellent

⁶⁸ Louis A. Fliegler, "Play Acting with the Mentally Retarded," Journal of the International Council for Exceptional Children, 19:56-57, November, 1952.

opportunity for speech and lend themselves to dramatic play. They have rhythm that children enjoy and words that can be dramatized by using the hands or other parts of the body. The child does not need to give thought to expressing his own ideas as he does in original dramatics and speech appears to improve when the emphasis is on motions rather than speech.

The following fingerplays and poems have great appeal for the children:

This is the bunny
 With ears so funny.
 (Hold up two fingers on left hand)
 This is a hole in the ground.
 (Make the hole with index finger and
 thumb of right hand)
 When a noise he hears,
 He picks up his ears.
 (Straighten fingers)
 And hop he goes into the ground.
 Unknown

Jack in the box
 Sits so still
 (Hands closed-thumbs inside)
 Won't you come out?
 Yes, I will.
 (Thumbs jump out)
 Traditional

"CUCKOO" CLOCK

I had a little "cuckoo"
 He lived inside my clock.
 For an hour I listened to
 "Tick-tock," "Tick-tock," "Tick-tock."
 Suddenly the door flopped wide
 And first thing that I knew

My small wooden birdie sang
 "Cuckoo," "Cuckoo," "Cuckoo."⁶⁹

POLITELY

When Goldilocks went calling
 On the Little Baby Bear
 And spoiled his bowl of porridge
 And sat holes into his chair-
 I hope she hurried home again
 For others nice and new
 And took them back politely
 To Baby Bear. Don't you?⁷⁰

A more advanced form of dramatic play is to act out some experience. This activity will stimulate the mind and the child will think bigger and better ideas. Such simple ideas as helping mother, going to the store, or going to a party, give the children many varied opportunities for dramatic play.

Still more advanced is playing favorite stories. The folk tales as Little Red Riding Hood, The Three Little Pigs, or Little Black Sambo lend themselves to dramatic play.

Stories like The Little White Rabbit Who Wanted Wings⁷¹ includes both singing and speaking parts.

⁶⁹ Kate Goddard, Compiler, Poems for Little Ears (New York: The Platt and Munk Co., Inc., 1944), p. 28.

⁷⁰ Dixie Willson, One Hundred Best Poems for Boys and Girls (Racine: Wisconsin: Whitman Publishing Company, 1930), p. 34.

⁷¹ Lucille F. Wood and Louise E. Scott, Singing Fun (St. Louis: Webster Publishing Company, 1954), pp. 74-77.

For more fingerplays, poems, subjects for original dramatizations, stories and musical stories that can be used to develop and improve speech, turn to APPENDIX D.

Grace at meals. Before the mid-morning lunch the children can say a grace. It is not too long a time until all the children even the most severely handicapped will be attempting to join in the prayer. Besides being good training the prayer can serve as a signal to begin. Unless a time is set to start, some children will have finished their lunch before others have been served.

The following simple prayers can be used:

FATHER OF CHILDREN EVERYWHERE

We thank Thee for this food
And for Thy loving care,
Father of children everywhere.

We have so much, dear Father,
We ask a chance to share
Our many, many blessings
With children everywhere.⁷²

A CHILD'S GRACE

Thank you for the world so sweet,
Thank you for the food we eat,
Thank you for the birds that sing,
Thank you, God, for Everything.

Mrs. E. Rutter Leatham⁷³

⁷² Frances Cavanah, compiler, Prayers for Boys and Girls (Racine, Wisconsin: Whitman Publishing Company, 1950), p. 6.

⁷³ Ibid., p. 12.

Songs, rhythms and singing games. Many cerebral palsied children have difficulty sustaining tones. Singing is an excellent way to increase phonation. Old MacDonald Had a Farm is a good song to use to teach phonation and is a favorite of all children. They can sing the entire song or join in on the e-i-e-i-o, prolonging the o. In addition to prolongation, the animal sounds can also be introduced in this song. Any song that has relatively few pitch changes and simple rhythm is useful. It is often necessary to slow down the tempo in order to give the cerebral palsied child time to say the words.

Rhythm is fundamental and has a strong appeal for youngsters. A good place to begin is with simple actions as clapping, rocking, swinging or marching in time to the music played by the teacher or on the record player.

After the rhythmic beginning, songs can be sung by the teacher to the children. Mother Goose rhymes set to music are good songs to use at first. Most of the children have heard them and the music is simple. After hearing the song several times and responding to the rhythm, the children will begin joining in the singing of the words. Even if the "words" are merely mouthings of gross sounds at first, the results are worthwhile and the good beginning has been made.

Children enjoy singing songs that contain their names.

One of the favorites of the children in the author's class-room is Who Are You?⁷⁴

Songs like Two Little Kitty-Cats⁷⁵ or I Am Bunny Pink Ears⁷⁶ are very good because a cerebral palsied child can forget he is handicapped and pretend that he is a kitten or a rabbit.

The rhythm band gives the children an excellent opportunity to hold an instrument and keep time to the tunes played on the piano or record player. Children who have difficulty in controlling their muscles get good practice doing something that is enjoyable when they play the simple musical instruments. The children who have fairly good control can use instruments that require two hands while those who have difficulty will use the instruments that can be played with one hand.

Singing games that are simple in content with simple rhythms will aid the development and improvement of speech. The Farmer in the Dell or Did You Ever See A Lassie? are two favorites of all children.

Guessing games are interesting and exciting to children.

⁷⁴ Lilla B. Pitts, Mabelle Glenn, Lorraine E. Watters, The Kindergarten Book (New York: Ginn and Company, 1949), p. 5.

⁷⁵ Ibid., p. 112.

⁷⁶ Ibid., p. 92.

A child may do some action, as flying an airplane, and the other children guess what he is doing, or he can put some small object, as a marble, in his hand and the other children guess what he is holding.

Other songs, rhythms and singing games will be found in APPENDIX E.

Creative art. Normal children like to express themselves through pictures and this is also true of the cerebral palsied child. It is a medium through which he can express himself and the aggressions, conflicts, frustrations and anxieties resulting from his disability. Children with speech difficulties can utilize pictures to clarify their concepts, express their fears, and adjust to their social and personal environments. Art enables the cerebral palsied child to leave his restricted physical environment and remove those barriers existing between himself and his activities. Social and emotional restrictions superimposed on him by his handicap can be overcome somewhat through art. In picture making he can vicariously participate in activities that are denied him because of his handicap. It will also aid him in getting the acceptance from his peers that he needs. Painting and drawing will help him to become a better adjusted individual within the limits of his handicapping condition by helping him to gain a greater self-understanding, leading to the formation of a realistic self-image. Finger

painting, clay (wall paper cleaner is sometimes more satisfactory because it is softer), stick printing, making designs in a plate of flour or wet sand and crayoning are mediums that can be used by the most severely involved child.

When the cerebral palsied child makes a picture he will want to tell the other children about it and will have a need for speech. When one has a need for speech, he makes a greater attempt to make himself understood.

The kindergarten teacher has many opportunities throughout the day to give the child speech training without the child being aware that most of the activities have been planned to this end. Greater progress appears to take place when the emphasis is placed on an activity instead of speech.

Many suggestions have been made, and the kindergarten teacher may be overwhelmed with them until she realizes these are the activities she is already doing everyday, the emphasis has just been on developing and improving speech.

The materials and techniques listed are only a few of many, but the author realizes that each kindergarten teacher has her own favorites: stories, songs and games. By stressing speech she can use her own materials, as well as, those suggested in this paper to assist the cerebral palsied child in improving his communication.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

For many years the children with cerebral palsy were considered feeble-minded and were placed in mental institutions. Since it has been discovered that from 60% to 70% of them have average and superior intelligence, the public schools of America have the responsibility of providing these children with an education that will recognize their differences and assure each of them maximum development. These children are beginning to enroll in the orthopedic schools, especially at the kindergarten level. About 70% of these children have speech problems and specially trained personnel is not readily available, so the kindergarten teacher finds it necessary to assist these children in developing an acceptable means of communication. Speech has a close relationship with all aspects of development, therefore, a speech defect is considered a serious handicap in any adjustment in life.

The cerebral palsied child has the same general needs as every other child, but it is necessary to take into consideration his limitations for achievement.

The people working with cerebral palsied children must work as a team. Until recently, little has appeared in the literature concerning the complete development of the

child and the role of the classroom teacher in the furthering of this growth. It is necessary to keep in mind the normal growth patterns of a child in order that the handicapped is not done an injustice. Special equipment and planning will be necessary for him to develop to the best of his ability. Speech is closely related to every aspect of development, therefore, it is necessary for the teacher to use many techniques and materials that will aid the child in developing a more adequate means of communication.

The kindergarten is not a substitute for the home, but should be a basic phase of the child's education. It offers opportunities for him to learn to live happily and constructively within a group.

The child's readiness to do a job successfully depends upon his ability and past experiences. Long before it is time for him to enter school he should have some experiences where he will guide his own actions. He can not change his behavior overnight.

It is important to know the normal development of speech in order to know in what ways the cerebral palsied child deviates from this normal pattern. A child must have psychological and physiological readiness for speech before direct training is begun.

Many cerebral palsied children are unable to attend school because the housing is not adequate. Most states

contribute some financial help, but the responsibility of educating these children must be carried out by the local schools. The features of the building or classroom should help the child develop a feeling of security and encourage independence. Handrails in the bathrooms and hallways, ramps, or a special chair may aid the child to become more self-reliant.

It is necessary to plan realistically for the child with cerebral palsy in order that he is provided with the kind and amount of education from which he can profit most. No one pattern can be followed because the educational program must grow out of the needs of the individual child in relationship to his school environment, home and community.

Each child has his own unique pattern of development, but the cerebral palsy may drastically alter and curtail this pattern to such a degree that special education will be necessary.

Cerebral palsy is the result of lesions in the brain that cause neuromuscular and sensory disturbances. There are five major classifications: spasticity, athetosis, ataxia, tremor and rigidity. Factors which may precipitate the damage to the brain may occur during the prenatal period, hereditary or congenitally acquired; natal causes, anoxia, or vascular damage and trauma; or post-natal causes, trauma, infections, neoplasms, drugs, vascular conditions or anoxia.

Delayed development, both physical and mental seem to be characteristic of cerebral palsied children. Often a child's progress, physical or otherwise, is retarded by unfavorable parental attitudes. The cerebral palsied child must learn to work with the things he was born with and it must be remembered that he has the capacity to grow.

Like other children the cerebral palsied child is sensitive, possessed of normal desires, affectionate and ambitious. The cerebral palsied child is a part of our modern society so he must learn to respect discipline.

There is nothing abnormal about his desire for attention. One needs the sense of belonging, being a part of a group and being accepted by that group.

Every person must attain some goal of success no matter how insignificant it would seem to another person. A successful human being is one who has made the most of his potentialities in meeting the everyday demands in the society where he finds himself.

Whatever educational plans are made for the cerebral palsied child, they must be based on the recognition of his basic and exceptional needs. Caution must be taken that the child's goals are not set too high because he will become frustrated and discouraged if he is not making satisfactory progress. Education of the cerebral palsied child is not only the teaching of the 3 R's. He must be taught to live

with his handicap.

The cerebral palsied children may have the same kinds of speech deviations as are found among children who do not have cerebral palsy. Their defects may be functional due to faulty learning. Many of them need to be cared for like babies and their parents do not realize that they are growing individuals and continue talking "baby talk" to them. Speech is learned through imitation, so he will talk as he hears others talking. However, his speech disabilities may be due to lack of control of the tongue, lips or breathing mechanism. No two cases are identical. The aim in the teaching of speech to a cerebral palsied child is to help him develop communicative speech. Unless the cerebral palsied child is strongly motivated, he will not put forth the effort that is necessary. Progress is often slow and sometimes discouraging, but the problems must be faced realistically.

The kindergarten teacher will be unable to use many specialized techniques that are used by the speech therapist, but is often more successful in getting speech because the emphasis is put on the activity rather than the speech.

The teacher needs to create an atmosphere in the classroom in which the child can function at his best. There should be a friendly and understanding feeling in the classroom. The cerebral palsied child must be recognized and

accepted as a person. In addition to being attractive, the classroom must provide for the special needs of each child.

Frequent short periods of relaxation relieve tensions, and the teacher must be sure the child takes time out to rest before he is completely exhausted. Exercises, poems and quiet music help to produce relaxation.

Activities to improve breathing, lip closure, tongue exercises, chewing and swallowing can be carried on during the entire day's program.

The teacher has many opportunities to converse with the children. Through natural activity and the balance of emotions, dramatic play develops a happy association with learning. Even the most severely handicapped child can take some part in dramatic play.

Songs, rhythms and singing games are interesting and enjoyable for children and help to improve phonation and motor control.

Creative art gives the cerebral palsied child opportunities to vicariously take part in activities that are denied him, and gives him an opportunity to have something special to talk about and show to the other children.

The kindergarten teacher will not find it necessary to add any new activities to the curriculum in order to help develop speech in the cerebral palsied child. It is only necessary to emphasize the use of speech in the activi-

ties that are already in the program.

Conclusions. Every community has exceptional children, and it is the responsibility of the public schools to provide them with the kind and amount of education from which they can profit most. More and more cerebral palsied children are appearing in schools at the kindergarten level. It is necessary to meet the medical, educational and emotional needs of the cerebral palsied child as early as possible. Educational plans made for the cerebral palsied child must be based on the recognition of his basic and exceptional needs. Delayed development, both physical and mental seems to be characteristic of the cerebral palsied child, therefore, speech development is often retarded. The teacher has the opportunity to observe the child's speech in the natural situation that is found in the classroom. No new activities need be added to the curriculum for speech development or improvement, but the emphasis is placed on speech. Many types of activities in the day's program can be utilized to develop communicative skills.

Recommendations. The author wishes to make the following recommendations: (1) that the kindergarten teacher in the orthopedic school should receive inservice training in cerebral palsy; an awareness of the special needs of the cerebral palsied child is necessary in order that he may have the opportunity to develop to the best of his

ability (2) that the kindergarten program be carefully planned for the cerebral palsied child preceding his entrance into school (3) that the teacher have a thorough understanding of the normal speech development and some knowledge of the special speech problems of the cerebral palsied child (4) that the daily classroom activities be utilized to develop communicative skills (5) that the kindergarten teacher be constantly on the alert for additional activities which may encourage and develop speech (6) that frequent diagnostic tests be given in order to have an accurate record of speech improvement, and (7) that an evaluation be made of the materials suggested in this paper and areas in which more help is needed be suggested.

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Adults, 1953. 60 pp.

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APPENDIXES

APPENDIX A

AIDS FOR RELAXATION

RELAXATION EXERCISES⁷⁷

1. Sit in a comfortable position. Close your eyes. Think of something pleasant. Rest quietly for a minute.

2. Stand upright. Keep the feet firmly on the floor and lift the body upward. Energize from the toes to the head. Gradually relax until you are standing easily tall. (This exercise may be done to a slow count 1-2-3-4)

3. Stand easily tall. Bend from the waist and let the arms swing loosely. Walk forward swaying rhythmically from side to side.

4. Sit in a comfortable position. Yawn and stretch as though you were tired. Repeat several times.

5. Support elbows on desk. Close the right hand and tighten into a fist. Hold the right wrist with the left hand and gently shake the right hand loose. Repeat exercise using the left hand.

POEMS HELPFUL FOR RELAXATION

STILL TIME

I've just come in from playing,
I'm as tired as I can be.
I'll cross my legs
And fold my hands
And close my eyes so I can't see.
I will not move my body;
I'll be like Raggedy Ann.

⁷⁷ Toward Better Speech, A Manual for Teachers of all Grades, Curriculum Bulletin, 1952-53, No. 5, Board of Education, City of New York (1953), p. 117.

My head won't move;
 My arms won't move.
 I'll just be still,
 Because I CAN.⁷⁸

The teacher will pause at the end of each line to see that the children follow directions.

QUIET TIME

When I have my quiet time,
 I walk to sleepy hill
 And climb up to the very top
 Where everything is still.

The darkness wraps its blanket
 Around me, and down deep
 I sink into my pillow,
 And soon I'm fast asleep.⁷⁹

When the teacher finishes reading the poem, she mentions the children who have listened quietly.

SLEEPY THINGS

I like to love my Sleepy Sam;
 I like to hug him, too;
 I like to go to bed with him
 And sleep the whole night through.⁸⁰

Children hold sleepy toys, close their eyes, drop their heads, and pretend to sleep.

⁷⁸ Louise Bender and J. J. Thompson, Talking Time (St. Louis: Webster Publishing Company, 1951), p. 15.

⁷⁹ Ibid., p. 15.

⁸⁰ Ibid., p. 21.

HUSH

Hush... sh...everybody, please;
 Not a speck of noise.
 Tiptoe very quietly;
 We're through with playing toys.
 Hush...sh...everybody, please;
 Not a single peep.
 Let's drop our heads and close our eyes.
 Pretend we're fast asleep.

I'm covering up my kitty
 And now she's fast asleep.⁸¹

Substitute any toy which the child chooses.

THE SKY IS A BLUE, BLUE SEA

The sky is a blue, blue sea,
 The moon is a silver boat,
 The star's are water-lilies
 On the blue, blue sea afloat.

Let's off on the silver boat,
 And away to Dreamland go,
 And gather happy dreams
 In the garden where they grow.

The Sandman will let us in
 At the gateway of Dreamland fair,
 Choose any dream you want,
 They're only good ones there.

But we'll sail again at morn
 In the golden sunboat bright,
 For moonboat and lily-stars⁸²
 Only sail and bloom at night.

⁸¹ Bender and Thompson, Talking Time, p. 16.

⁸² Mrs. Isla Pashal Richardson, "The Sky Is A Blue, Blue Sea," Poems for the Very Young Child (Racine, Wisconsin: Whitman Publishing Company, 1932), p. 84.

WHERE DREAMS ARE MADE

Dreams are made in the moon, my dear,
 On her shining hillsides steep;
 Pleasant and dreadful and gay and queer,
 They're piled in a silver heap.
 And many fairies with buzzing wings
 Are busy with hammers and wheels and things,
 Making the dream that night time brings
 To all little boys asleep.

And if a boy has been good till night,
 When snug in his bed he lies
 The fairies come with a moonbeam bright
 And slide him up to the skies.
 And there he sails as the Moon-king's guest;
 And chooses the dreams he likes the best;
 Then they slide him back to his nags'ry nest
 And leave him rubbing his eyes.

WYNKEN, BLYNKEN AND NOD

Wynken, Blynken and Nod one night,
 Sailed off in a wooden shoe-
 Sailed on a river of crystal light,
 Into a sea of dew.
 "Where are you going, and what do you wish?"
 The old moon asked the three.
 "We have come to fish for the herring fish
 That live in this beautiful sea,
 Nets of silver and gold have we!"
 Said Wynken,
 Blynken,
 And Nod.

The old moon laughed and sang a song,
 As they rocked in the wooden shoe,
 And the wind that sped them all night long
 Ruffled the waves of dew.
 The little stars were the herring fish
 That live in that beautiful sea-

"Now cast your nets wherever you wish-
 Never afeared are we";
 So cried the stars to the fisherman three:
 Wynken,
 Blynken,
 And Nod.

All night long their nets they threw
 To the stars in the twinkling foam-
 Then down from the skies came the wooden shoe,
 Bringing the fishermen home;
 'Twas all so pretty a sail it seemed
 As if it could not be,
 And some folks thought 'twas a dream they'd dreamed
 Of sailing that beautiful sea-
 But I shall name you the fisherman three:
 Wynken,
 Blynken,
 And Nod.

Wynken and Blynken are two little eyes,
 And Nod is a little head,
 And the wooden shoe that sailed the skies
 Is a wee one's trundle-bed.
 So shut your eyes while mother sings
 Of wonderful sights that be,
 And you shall see the beautiful things
 As you rock in the misty sea,
 Where the old shoe rocked the fishermen three;
 Wynken,
 Blynken,
 And Nod.⁸⁴

RECORDS FOR RELAXATION⁸⁵

Record 1
 Lullaby-Brahms
 Little Sandman-Brahms
 Hush My Babe-Rousseau

⁸⁴ Eugene Field, Poems for Very Young Children, pp. 95-6.

⁸⁵ RCA Victor-Recording Library For Elementary Schools,
 Volume 1.

Lullaby-Mozart
Cradle Song-Shubert
Sweet and Low-Barnby

Record 3

Badinage-Herbert
Legend of the Bells-Planquette
Humoresque-Dvorak
Scherzo from 3rd Symphony-Beethoven
Minuet-Peterewski Gavotte-Popper
Minuet-Beethoven
Rock-a-By Baby-Traditional

Record 2⁸⁶

Waltz-Brahms
Light Cavalry Overture-von Suppe
Serenata-Moszkowski
Waltzing Doll-Poldini
Melody in F-Rubenstein
Andantino-Thomas
Evening Bells-Kullah
Elfin Dance-Grieg

APPENDIX B

LIP AND TONGUE EXERCISES

LIP EXERCISES⁸⁷

1. Round and protrude the lips. Then unround and retract them. Alternate these movements.
2. Protrude the lower lip in a decided pout. Relax lip and repeat.
3. Draw upper lip upward exposing, if possible the gums as in a sneering hiss. At the same time protrude and depress the lower lip, exposing the lower gums, if possible. Relax and repeat.
4. Bring the lips together lightly, protrude, open and evert them in succession.

TONGUE EXERCISES

1. Curl the tip of the tongue backwards toward the soft palate. Curl-rest.
2. Touch the tip of the tongue to the upper gum ridge. Up-down.
3. Rotate the tongue around the lips beginning at the right: up-around-down-in. Then beginning at the left: up-around-down-in.
4. Groove the tongue and extend it forward: groove-stretch-back.⁸⁸
5. Flatten and broaden the fore part of the tongue. Place the tongue between the upper and lower teeth so that

⁸⁷ Robert West, Lou Kennedy, and Anna Carr, The Rehabilitation of Speech (New York: Harper and Brothers, 1947), pp. 307-308.

⁸⁸ Toward Better Speech, p. 117.

its rim is barely visible between their edges, especially along the sides. Hold the tongue lax and quiet. Repeat.

6. Separate the jaws. Place the tip of the tongue in contact with the gum immediately behind the lower teeth. Move it to the upper teeth. Place it again on the floor of the mouth.

7. Place the tip of the tongue on the upper gum ridge; draw it backward, sweeping the roof of the mouth along the midline.

8. Place the tip of the tongue laxly between the upper and lower incisor teeth. Now blow out over the tongue tip and note the noise of the out-rushing air.

9. Place your tongue in between the teeth; draw or jerk the tip back and up so that it is in back of the teeth, but not in contact with any surface.⁸⁹

⁸⁹ Robert West, Lou Kennedy, and Anna Carr, The Rehabilitation of Speech, pp. 308-309.

APPENDIX C

LISTENING ACTIVITIES

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_____, Happy Birthday, Playtime Records, Bridgeport, Conn.: Columbia Records, Inc.

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Volume 1. Record 2.

March of the Little Lead Soldiers-Pierne

Petite Suite-Bizet

1. March

2. Impromptu

Volume 1. Record 4.

Run, Run

Ring Around the Rosy March

Little Soldier

Sleeping Time

Hobby Horse-Memories of Childhood-Pinto

Volume 2. Record 1.

Of the Tailor and a Bear-MacDowell

The Wild Horseman-Schumann

Spinning Song-Kullak

The Little Hunters-Kullak

Volume 2. Record 3.

Golliwogg's Cake Walk-"Children's Corner"-Debussy

The Hurdy-Gurdy Man-Kaleidoscope-Gossens
The Little Shepherd-"Children's Corner"-Debussy

Volume 2. Record 4.
 Berceuse-Jarnefelt
Wand of Youth Suites-Elgar
 1. Fairy Pipers
 2. The Tame Bear
 3. Moths and Butterflies

Volume 3. Record 1.
Marionettes-MacDowell
 1. Witch
 2. Clown
 3. Villian
Of Br'er Rabbit-MacDowell
To a Waterlily-"Woodland Sketches"-MacDowell

Volume 3. Record 2.
March of the Gnomes-"Christmas Tree Suite"-Reibikoff
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House, 1948. 24 pp.
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ing Company, 1948. 32 pp.
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Company, 1947. 30 pp.
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Company, 1947. 30 pp.

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GAMES⁹⁰

TREASURE HUNT

Hide five objects beginning with the new sound. Tell the children they may hunt for the objects as long as they hear you making the new sound, but when the sound stops they must stop. They cannot move or go hunting again until they hear the sound again. If anyone continues to move when the sound stops, he must go to his chair. Games continues until all five objects are found.

HOT AND COLD

Hide one object beginning with the sound being taught. As a child nears the "hidden treasure" you make the

⁹⁰ Leon Lassers, Fun and Play With Sounds and Speech (Salem, Oregon: State Department of Education, 1954), pp. 6-8.

sound more loudly, as the child goes away from the "hidden treasure" you make the sound more softly. (A severely involved child can play this game by looking where he thinks the object is hidden.)

SOUND BANK

Place colored sticks on the table near the children. Make a number of different sounds. When the child hears the new sound he takes a stick. See how many get the correct number of sticks.

SOUND LADDER

Use practice steps or chairs for this game for the ladder. Children line up. The first child has a turn. Make a number of sounds, among them the new sound. When the child hears it he steps up a step. If he fails to hear it, he goes to the end of the line. When a child has completed the steps he has won the game.

APPENDIX D

CREATIVE DRAMATICS

FINGERPLAYS

RIGHT AND LEFT

This is my right hand
 Raise it up high,
 This is my left hand
 I'll touch the sky,
 Right hand, left hand,
 Twirl them around,
 Left hand, right hand,
 Pound, pound, pound.
 This is my right foot
 Tap, tap, tap,
 This is my left foot
 Pat, pat, pat,
 Right foot, left foot,
 Run, run, run,
 Left foot, right foot,
 Jump, jump for fun.
 Face right, face left,
 Turn round and round
 Face left, face right,
 Jump up and down.
 Right hand, left hand
 Clap, clap, clap,
 Right foot, left foot,
 Tap, tap, tap.

Unknown

Poor little Jack, poor little Jill,
 They had to carry water
 And they had to climb a hill.
 But Jack was always stumbling,
 Or Jill would lose her shoe,
 So when Jack began to tumble,
 Poor Jill came tumbling, too,
 Of course, they spilled the water,
 What else could they do?
 When Jack was always stumbling,
 And Jill would lose her shoe.

Unknown

This is the mother
 This is the father
 This is the brother tall,
 This is the sister
 This is the baby
 Oh, how I love them all.
 Unknown

The wise old owl
 Sat in the oak,
 The more he saw
 The less he spoke,
 The less he spoke
 The more he heard,
 Why not be like that
 Wise old bird?
 Traditional

Five little birds without any home,
 Five little trees in a row,
 Come build your nest in our branches tall,
 We'll rock you to and fro.
 Unknown

I have ten little fingers,
 They all belong to me,
 I can make them do things
 Would you like to see?
 I can open them up wide,
 Shut them tight,
 Put them together,
 Put them out of sight,
 Jump them up high,
 Jump them down low,
 Fold them quietly
 And sit just so.
 Unknown

Here are Grandma's spectacles,
 And here is Grandma's cap,
 Here is the way she folds her hands
 And puts them in her lap.
 Unknown

OPEN-SHUT THEM

Open, shut them, open, shut them,
 Give a little clap,
 Open, shut them, open, shut them,
 Lay them in your lap.
 Open, shut them, open, shut them,
 To the shoulders fly,
 Let them like the birdies
 Flutter to the sky.
 Falling, falling, slowly downward
 Nearly to the ground,
 Quickly raise them,
 All the fingers twirling round and round,
 Open, shut them, open, shut them,
 Give a little clap,
 Open, shut them, open, shut them,
 Lay them in your lap.

Unknown

Five little squirrels sat in a tree,
 The first little squirrel said,
 "What do I see?"
 The second little squirrel said,
 "I see a gun!"
 The third little squirrel said,
 "Come on, let's run!"
 The fourth little squirrel said,
 "Let's hide in the shade."
 The fifth little squirrel said,
 "I'm not afraid."
 Bang! Bang! went the little gun
 And how those squirrels did run.

Unknown

POEMS

TELEPHONE

I can use the telephone
 See--I do it all alone;
 "Number please" is what I hear
 With the receiver at my ear.

Bells ring at the other end
 When I'm calling up a friend,
 Then a voice comes to me
 From someone I cannot see.⁹¹

BROWN BIRDIE

Little brown birdie is bobbing his head,
 Bobbety, bobbety, bob,
 Looking for something behind the shed,
 Bobbety, bobbety, bob,
 I am going to watch him; perhaps I shall
 learn,
 Bobbety, bobbety, bob,
 If his dinner will be a fat bug or a worm,
 Bobbety, bobbety, bob.⁹²

BUNDLES

A bundle is a funny thing,
 It always sets me wondering;
 For whether it is thin or wide
 You never know just what's inside.

Especially on Christmas week,
 Temptation is so great to peek!
 Now wouldn't it be much more fun
 If shoppers carried things undone.⁹³

HICKETY, PICKETY

Hickety, Pickety
 My black hen,
 She lays eggs
 For gentlemen;

⁹¹ Kate Goddard, Poems for Little Ears (New York: The Platte and Munk Company, Inc., 1944), p. 129.

⁹² Louise B. Scott and J. J. Thompson, Talking Time (St. Louis: Webster Publishing Company, 1951), p. 190.

⁹³ John Farrar, Poems for the Very Young Child (Racine, Wisconsin: Whitman Publishing Company, 1932), p. 61.

Sometimes nine,
And sometimes ten-
Hickety, Pickety,
My black hen.⁹⁴

THE LAZY PIG

A fat little pig
In a big white wig
Was busily dancing
A jig, jig, jig.
"Wee, wee," said the pig
In the big white wig.
I'd much rather jig
Than dig, dig, dig."⁹⁵

MAKING PIES

Tomorrow is Thanksgiving Day.
My folks will all be here.
My pies must be delicious,
Or they'll think it strange I fear.

Now there's the nice deep fluffy crust,
And here's the filling, -my!
I know they will think that I can make
The finest pumpkin pie.⁹⁶

I'M THANKFUL

I'm thankful for my hands
With them I work each day;
I'm thankful for my feet
With them I run and play;

⁹⁴ Phyllis Fraser, selector, This Little Piggy and other Counting Rhymes (New York: Simon and Schuster, 1942), p. 15.

⁹⁵ Louise Abney and Dorothy Minace, This Way To Better Speech (Yonkers-on-Hudson, New York: World Book Company, 1940), p. 49.

⁹⁶ Mary T. Johnson, The Little Tots' Thanksgiving (Lebanon, Ohio: March Brothers, 1928), p. 5.

I'm thankful for my eyes to see;
I guess I'm thankful most for all of me.⁹⁷

LITTLE BIRD

Once I saw a little bird
Come hop, hop, hop;
So I cries, "Little Bird,
Will you stop, stop, stop?"
I was going to the window
To say, "How do you do?"
But he shook his little tail,
And away he flew.⁹⁸

SUBJECTS FOR ORIGINAL DRAMATIZATIONS

1. Helping Mother
2. Going to the Store
3. A Trip to the Farm
4. Going For a Walk
5. Picking Apples
6. Raking Leaves
7. Playing in the Snow
8. Going Christmas Shopping
9. Making a Snowman
10. Making Valentines

⁹⁷ Thomas B. Weaver, Holiday Helps (Cleveland, Ohio: The Harter School Supply Company, 1925), p. 75.

⁹⁸ Sylvestre C. Watkins, My First Mother Goose (Chicago: Wilcox and Pollett Company, 1946), p. 5. ————

11. Flying a Kite
12. Baking a Cake
13. Going Fishing
14. Planting a Garden
15. Driving a Car

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APPENDIX E

SONGS, RHYTHMS AND SINGING GAMES

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- _____, "Knock At the Door," The Kindergarten Book. New York: Ginn and Company, 1949. p. 50.
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Guild.

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Nothing to Do. New York: The Children's Record Guild.

Perry, Donald, Eensie-Beensie Spider. New York: The Children's
Guild.

RCA Victor-Record Library For Elementary Schools
Volume 1. Record 1.

Gnomes-Reinhold

Dwarfs-Reinhold

Fairies-Scherzo-Schubert

Clowns-"Midsummer Night's Dream"-Mendelssohn

Volume 1. Record 2.

Etincelles-Moszkowski

Etude Joyeuse-Kopylow

Barcarolle-Rubenstein

Valsette-Borowski

Valse Serenade-Podini

Love's Dream-Czebulka

Volume 1. Record 3.

March in F Major

Theme for Skipping

Flying Birds

Wheelbarrow Motive

Plain Skip

Tip-toe March

Military March

Galloping, Running, High Stepping Horses

Skipping Theme-Anderson

Volume 1. Record 4.

Gigue in A-Corelli

Jagged-Schumann

Ballet-Gluck

Adagio-Corelli

Volume 2. Record 1.

Soldier's March-Schumann

March in D Flat-Hollander

March-"Nutcracker Suite"-Tchaikosky
March-"Alceste"-Gluck

Volume 2. Record 2.
Boating on the Lake-Kullak
Skating-Kullak
Waltzer-Gurlitt
March-Gurlitt
Waltz-Schubert
Scherzo-Gurlitt
L'Arabesque-Burgmuller
Tarantella-Sain Saens

Volume 2. Record 3.
Run, Run, Run-Concone
Jumping-Gurlitt
Running Game-Gurlitt
Air de Ballet-Judassohn
Waltzes Nos. 1-2-9-Brahms

Volume 2. Record 4.
Praedudium-Jarnefelt
Les Pifferari-The Pipers-Gounod
Happy and Light of Heart "Bohemian Girl"-Balfe
Tarantelle-Mendelssohn

Volume 3. Record 1.
Northern Song-Schumann
Song of the Shepherdess-Weber
March-Bach-MacDowell
Papillons, No. 8-Schumann
Dance of the Moorish Slaves-"Aida"-Verdi
Slavonic Dance, No. 1-Dvorak
Siciliana-"L'Allergo"-Handel

Volume 3. Record 2.
Polly Put the Kettle On-English Folk
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Waltz-Schubert
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John Peel-Old Hunting Song
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APPENDIX F

SPEECH AND COMMERCIAL GAMES

SPEECH GAMES

SPOON GAME⁹⁹

Obtain colored plastic spoons or color paper spoons. Put them in a box and let the children take turns choosing a spoon. Each child holds up a spoon and says: I choose a (color) spoon. This game can be varied by using other objects or other verbs as I see, I bought, I have, etc.

MONEY GAME¹⁰⁰

Use play money, make pennies or use real pennies. Have pictures or articles sold in a grocery store.

Child: I would like to buy some peas.

Teacher: That will be seven cents, please.

Child: One, two, three, four, five, six, seven.

Teacher: Thank you.

HIDE THE THIMBLE¹⁰¹

Use a small play house or have pictures of various rooms in the house. Select a room where you pretend you are hiding the thimble.

Child: Did you hide the thimble in the living room?

Teacher: No, I did not hide the thimble in the living room.

Continue until some child guesses the correct room.

⁹⁹ Louise Scott and J. J. Thompson, Talking Time (St. Louis: Webster Publishing Company, 1951), p. 55.

¹⁰⁰ Ibid., p. 56.

¹⁰¹ Ibid., p. 75.

THE LETTER GAME¹⁰²

Place in an envelope the picture of an object that begins with a sound that the child is trying to correct.

Child: Mr. Postman, please look in your bag and see,
If you have a letter, a letter for me.
When the child opens his envelope he says, "My letter has a _____."

"I CHOOSE" GAME¹⁰³

Mount farm animals on flannel to use on a flannel board. Have a child select an animal, and say "I choose a cow, the cow says, 'Moo, moo,'" and then places it on the flannel board. The class sings the song, "Old MacDonal'd Had A Farm," using the animal the child selected.

THE BALLOON GAME¹⁰⁴

Place colored balloons in a large envelope or box with the strings hanging out. A child selects a string saying, "I choose a red balloon." If he gets the color he chose he may keep it. Continue until the balloons are gone.

COMMERCIAL GAMES

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102 Scott and Thompson, Talking Time, p. 108.

103 Ibid., p. 114.

104 Ibid., p. 110.

Cadaco Ellis, 1946.

Kiddie Kards. Troy, Ohio: C. D. Cocanower, Kiddie
Kard, distributors, 1946.

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Picture-Word Game. St. Louis: E. W. Dolch, The Hart
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