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Thesis

DEAF-BLIND CHILDREN AND RHYTHM DEVELOPMENT: SUGGESTIONS FOR A BEGINNING PROGRAM

Submitted by

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(A. B., Brown University, 1958)

In Partial Fulfillment of Requirements for

the Degree of Master of Special Education

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CHAPTER I

SELECTION OF THE PROBLEM

1. Statement of Purpose

Purpose.— The purpose of this thesis is to review the existing literature in relation to rhythm programs for variously handicapped children, and to suggest a beginning program of rhythm development for the deaf-blind child. Though a child may be lacking both sight and hearing, he will have in most cases retained sensitivity to vibratory stimulation. When developed, this sensitivity should become more acute, and thus aid the individual in his interpretation of sound. The ultimate goal of this writer is to put forth some ideas which will provide teachers of the deaf-blind with a core upon which to develop individually geared rhythm programs leading to the improvement of bodily control, speech reading, and speech in young deaf-blind children.

Method of approach.— In order to set up general procedures for the deaf-blind child, the writer decided to approach the subject of rhythm from numerous directions. Therefore, literature pertaining to this topic as applied to the normal, the deaf, the blind, and the mentally retarded child has been reviewed. This was done with the idea that from this material some valuable material could be sorted out and adapted for use with the deaf-blind child.

2. Justification

Need.— There is no printed material on the subject of rhythm as

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applied to the deaf-blind child. The importance of rhythm has been stated many times in regard to normal children and children with other handicaps. In subsequent chapters some of these valid reasons shall be restated. If rhythm is such an important part of the educational program of normal, healthy children, is it not probable that it should also become an integral part of a deaf-blind child's education? It is with this belief that this writer has felt justified in choosing this topic.

Possible value.— It is with sincerest hope that the task of reviewing the literature in the various related areas of special education and the citing of some suggested procedures will be of some value to other teachers in the future.

3. Scope and Limitations

Subjects.— This thesis is directed toward the young deaf-blind child. It is only a place to start. As the need seemed greater here, due to the number of young children today who are afflicted with multiple handicaps, this writer chose to investigate rhythm primarily as it is utilized in regard to preschool and kindergarten-level children. As the education of the deaf-blind child seems to approximate most closely that of the deaf child, more time and space was given in the reviews to the latter area as compared to the related areas of exceptionality reviewed.

CHAPTER II

REVIEW OF RELATED LITERATURE

1. Rhythm and the Preschool Non-Handicapped Child

Purposes.-- The aims of rhythm programs in the regular nursery and elementary school are primarily body development and coordination, release of emotional tensions, and socialization. The objectives of units on rhythm can be quite effectively stated as follows:

1. To increase extension of the body
2. To develop the ability to express through rhythmic movement the individual's conception of simple and familiar objects or living things
3. To offer guidance in movement explorations that result in discovery of movement variations
4. To develop better control by improved use of the feet
5. To stimulate self direction, independent thinking and good judgment in evaluating results
6. To increase the ability to use the total body in moving to rhythmic patterns
7. To give the opportunity to receive satisfaction from self expression and from group interaction

8. To broaden social experiences by giving a wide background in folk, square, and social dancing
9. To provide enjoyment and emotional release for the child
10. To develop an attitude favorable to wholesome boy and girl relationships
11. To acquire an appreciation for the contributions and character of other peoples as they are reflected in certain dances

In teaching children, one starts with the familiar and progresses as skill and discrimination increase. The teaching of rhythms naturally follows this progression of discriminatory powers. For example, clapping to a popular television commercial would draw more response than clapping to a strange song.

> "When young children are completely absorbed in imaginative play they are unconscious of any growth that might be taking place in rhythmic expression. They should, therefore, be creative and initiate their own rhythmic expression through a feeling of security."1/

The teaching of rhythm could be referred to as the teaching of movement in all its forms to patterns in space and time. Sound patterns are most frequently used as the impetus for spontaneous and individualistic response. Though the sound can be produced by percussion, voice, or music the use of a single isolated sound or progression of sounds removes confusing overtones and contrapuntal rhythms.

"If rhythmical activities are taught several days in succession,

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1/Angela Wiechard, "Rhythm Play," Childhood Education (October, 1946), 23:87.

learning takes place more rapidly because new skills build upon skills learned the day before and insure quick mastery."[1] The young child's muscles are under full domination of the child's will since they are not fully developed. Therefore, as greater development and control are established, balanced posture, coordination, physical efficiency and emotional freedom are achieved.

> "Learning takes place wherever there is life. It is a growth process which results from activity. One learns when he acts differently or when his behavior changes. This mastery through experience comes as the resultant interaction of the individual and his environment. One learns all over, for the whole body is engaged in the process. Feelings and emotions determine not only how much and how rapidly one will learn but also the depth and span of retention."[2]

Programs.-- There are primarily four types of rhythms offered in the elementary schools today.[3] These are: (1) fundamental rhythms; (2) rhythmic interpretations; (3) dramatized rhythms; and (4) folk dances and singing games. Fundamental rhythms are those dealing with variations and combinations. The fundamental rhythms would include such locomotor activities as walking, running, skipping, sliding, jumping, and hopping. (They would also include the axial movements of going up and down, sideward, backward, and rotating as well as the nonlocomotive activities of pushing, pulling, stretching, lifting, and swinging.) Rhythmic interpretations are those body movements through which the child imitates

1/W. VanHagen, G. Dexter, and J. F. Williams, Physical Education in the Elementary School, California State Department of Education, Sacramento, 1951, p. 65.

2/Maryhelen Vannier and Mildred Foster, Teaching Physical Education in Elementary Schools, W. B. Saunders Company, Philadelphia, 1954, p. 61.

3/E. Benton Salt, Grace I. Fox, Elsie Douthett, and B. K. Stevens, Teaching Physical Education in the Elementary School, A. S. Barnes and Co., New York, 1942, pp. 190-192.

the movements of other things - real or imaginary. The child might give his conception of the movements of animals, mechanical toys, play activities or many other things. Dramatized rhythms are those which appropriately accompany nursery rhymes, songs, and poems. Folk dances are initiated quite early in most elementary schools. They cultivate a curiosity about different countries and races as well as provide definite socialized group relationships.

> "Rhythm makes patterns. It is fun to make something yourself with your own rhythm because it will always be different from what anyone else can make.
>
> The rhythm of the heart is the first and most important rhythm of human life. Thousands of years ago men transferred the rhythms of the heartbeat into a drumbeat, and the rhythm of music began. Rhythm begins in movement. Even, steady motion is rhythm. Steady, even rhythms are not always the most exciting, or the most interesting. An even rhythm is restful, but an uneven rhythm is more interesting because it seems to be changing, to be going somewhere, to be doing something."1/

In the book, Teaching Physical Education in the Elementary School,2/ the authors suggest that teachers use every possible opportunity in the class period for having children move to music. Rhythm activities should be conducted informally though each child needs a clear conception of the idea he is expected to express before trying it. Therefore, they feel it is wise to allow the children to listen to the music thoroughly, to think about it, and to discuss the characteristics and qualities of its movement as related to various rhythms before permitting the child to try performing the activity. The authors also suggest using student

1/Langston Hughes, The First Book of Rhythms, Franklin Watts, Inc., New York, 1948, p. 4.

2/E. Benton Salt, et al., op. cit., pp. 193-194.

demonstrations, encouraging originality and creativeness in all activities and planning correlation of rhythm activities with the classroom activities. It can be concluded from the numerous books reviewed for this thesis that children of kindergarten age through the third grade should have several periods weekly or a daily period, if possible, scheduled. At these times all varieties of rhythm activity should be experienced.

This writer feels that it is important to keep in mind the characteristics of child development and, therefore, has chosen to reproduce the following table.[1/]

Table 1. Characteristics of the Child During Four Developmental Periods and Implications for Physical Education

Characteristics of the child	Implications for Physical Education
1. Exploratory period: Self is center of Attention: $4\frac{1}{2}$ - 7 years.	
a. endurance low; heart small	a. frequent periods of relaxation and rest
b. low visual ability to focus on small fast moving objects	b. need to control physical environment in relation to spacial senses
c. bones soft	c. emphasize posture in standing, sitting and all activity
d. muscular control more effective with large objects	d. need to use large objects for muscular control
e. imitative	e. develop rhythms and dramatization
f. marked activity urge	f. encourage running, etc.

(continued on next page)

1/Winifred VanHagen, op. cit., p. 29-31.

Table 1. (continued)

Characteristics of the Child	Implications for Physical Education
2. Exploratory Period in which Self in Relations to Others is Center of Attention: 7-10 yrs.	
a. muscular control improving, finer coordination possible b. ossification progressing c. liking for excitement and adventure	a. need to offer opportunity for finer coordination in all activities b. continue postural emphasis in all activities c. continue rhythm and drama
3. Period of Rapid Growth in which self development is Comparable to Ideal or Hero as Center of Attention: 10 - 13 years	
a. variability in muscular control b. rapid growth of long bones	a. act in cooperation with special interest area b. instruct in techniques of relaxation and good body mechanics
4. Maturing Period in which there is a Consolidation and Refinement of Powers: 13 - 16 years.	
a. same as above b. ossification practically complete	a. same as above b. postural emphasis

Materials.-- One of the most basic materials for rhythms is the self. This is not being facetious since naturally the self is the entity with which we are concerned. However, it is through such things as clapping the hands, stamping the feet, and clucking the tongue that the

basic aspects of rhythm become real to the child. Rubber balls, jump ropes and objects such as pegs, marbles, plastic cars, etc., to be used for counting are a few of the simple materials used for rhythm. Accompaniment to rhythms is successfully supplied by all types of drums (including those which are hand-made) sticks, piano, vocal renditions, records, and rhythm band instruments. The subject materials used for mimetics should be selected on the basis of their actual functioning in the life and mind of the child. Some of the most common ideas which are used for imitation and interpretation are: (1) a bicycle; (2) "see-saw"; (3) Jack-in-the-Box; (4) an airplane; (5) a clock; (6) a fire engine; (7) a train; (8) a swing; (9) a walking doll; and many others. The animals of greatest popularity are the camel, elephant, and kangaroo. The miscellaneous category includes such things as clowns, giants, and birds. It should always be kept in mind that children learn from experiences which are meaningful to them and, therefore, they require the opportunity to identify themselves rhythmically with familiar things.

2. Rhythm and the Young Blind Child

Purposes.-- Rhythm activities for the blind child are concerned primarily with their relation to physical and motor development as well as socialization and enjoyment. This place of emphasis is similar to that of the sighted child. However, it is probably considered to be of greater importance for the blind child. For instance, the chances of a sighted child learning to run with balance without specified classroom time devoted to this are much greater than the chances of the blind child under similar circumstances. The independence of the blind child must be

encouraged, as well as initiative and orientation. Many blind children must be taught to play in hope that play may become a spontaneous activity rather than purely a mechanical one. Methods used in teaching blind children vary little from those used with sighted children except that their administration should be very explicit and within the realm of the child's immediate knowledge of language. Besides the physical benefits of rhythm, educators of the blind are also very concerned with developing a child's basic interests in rhythm and tonality into a true love of good music which will provide him with worlds of enjoyment in the future. In addition to its usage in physical education, rhythm in schools for the blind is closely united with music, and music is treated seriously. For example, in the Batavia School for the Blind, Batavia, New York, the knowledge of elements of music, how they are put together and why, are taught in grades three through six.[1/] Much opportunity should be provided for the blind child to learn the basic rhythms of walking, running, etc., in order that these motions can grow into large body movements. Creatively there is need for children to express outwardly what they are feeling inwardly. "The blind child especially needs (opportunity to express) an abundance of uninhibited movement while standing, sitting, and lying on the floor."[2/]

1/Grace T. Towsley and Muriel K. Mooney, "Elementary School Music in Batavia School for the Blind," Fortieth Convention of the American Association of Instructors of the Blind (June, 1950), p. 175.

2/R. Paul Thompson, "A Music Program for Visually Handicapped Children," The New Outlook for the Blind (February, 1957), 51:46.

Programs.-- Eleanor W. Thayer,[1] a teacher at Perkins School for the Blind, explains the progressive order of events in a music program for the elementary grades. The first concern is to develop light, expressive, spontaneous singing - to teach children to carry a tune. Rhythm takes second place to lyrical quality. Therefore, self-expression through bodily rhythm is next on the agenda. Tonal qualities are then taught, establishing an apprehension of tone color for expression of emotions and moods. After this comes the blending and balancing of two-part music and the discovery of details of repetition, rhythmic patterns, sequence, imitation, and variation. Leading up to a taste for better music, time is spent on the ability to reproduce with voice correct pitches, rhythms, and tempos. At Perkins the kindergarten children have two thirty-minute singing periods a week. Rhythm bands are used only in the kindergarten at Perkins for herafter the development of taste in performance and composition becomes more important.

The young blind child needs to find free rhythmic expression in many ways and in response to all types of stimuli about him. As has been mentioned, the goal of a rhythm program for the blind child approximates that for the sighted child. However, in order to achieve this the techniques must be altered somewhat. For example, free exploration of such things as the piano and drum is necessary. If a blind child is expected to imitate the movements of animals, it must be ensured that the child has experienced the animal in action through the sense of touch. Actual experiences must provide the mental picture for a

1/Eleanor W. Thayer, "Music, Kindergarten Through the Elementary Grades," Fortieth Convention of the American Association of Instructors of the Blind (June, 1950), pp. 172-175.

young blind child. Rote singing is used up until the third grade when braille is used. Folk Dancing, creative rhythms, and recognition of waltzes, marches, etc., by their rhythms are usually introduced about the fourth grade.[1] Good rhythm exercises can't be surpassed in helping a blind child to develop graceful, coordinated, and guided physical movements as well as in giving free play to creative imagination.

Materials.-- Materials are similar to those used with sighted children, but greater imagination and ingenuity must be added in many cases. For instance, to encourage running, such things as a ball or a hoop with a bell attached for chasing and guide wires or rails are often successful. "Galloping and skipping are usually learned before running with the blind child because there's no quick transfer of weight."[2] Bouncing balls in different rhythmic patterns is a source of enjoyment. Activities involving use of hand apparatus are good if they do not require too much accuracy in touch and motion of the hand. "With children who must of necessity use their hands in fine coordinations, large apparatus is best, such as basketballs, large rubber balls, ropes, bean bags, or hoops."[3] The rhythmic beat of a rope or ball on the floor gives the child necessary cues. When choosing equipment for a rhythm program with blind children, interesting and contrasting textured materials are chosen.

1/R. Paul Thompson, op. cit., p. 47-49.

2/Merle E. Frampton (Editor), Education of the Blind, World Book Co., New York, 1940, p. 80.

3/Ibid., p. 81.

3. Rhythm and the Young Mentally Retarded Child

Purposes.-- A program of music was initiated in a school for the mentally retarded in Lincoln, Nebraska, for the following purposes:[1/]

1. To improve speech in rate, diction, and enunciation
2. To serve as a positive emotional outlet through action and dramatization
3. To improve poise
4. To provide opportunities for individual initiative and leadership
5. To increase sense of rhythm, dexterity, and freedom of movement.

The results of the program showed that all the above goals were achieved plus a few more.

With their limited ability to express themselves in other areas, the mentally retarded seem to get a great deal of satisfaction from their ability to respond in this area of music and rhythm. Rhythm serves the same purposes for the mentally retarded as it does for the normal child, but progress advances at a much slower pace and more minimal goals must be set. Rhythm and music can be used to channel a child's unacceptable activity into a worth-while expression. Rhythm helps to reinforce number concepts, through the imitation of beat patterns, for the child and also serves as a type of emotional therapy - a release of tension.

Programs.-- The rhythm programs for the retarded child are similar to those previously mentioned it seems, though there is not too much information on the subject. Fundamental rhythms are taught, as are singing and rhythm band work. Children should be encouraged to respond

1/Ann Miller, "Growing with Music - A Program for the Mentally Retarded," Journal of International Council for Exceptional Children (April, 1954), 20:305-306.

to rhythms on their own, but they will need help and ideas in most cases with new rhythms and records. Some of the imitative rhythms used for the mentally retarded blind child are those which call for twisting and turning, bending, and stretching, shaking, swinging, swaying, and stopping.[1/] Fundamental rhythms are also a very important part of the curriculum. Music and rhythmical recreation are used primarily for improvement in morale, release of tension, and enjoyment for the children.

Materials.— The mentally retarded child will enjoy materials with which he can initiate his own noise such as sticks, tin cans, etc.

> "Materials should be of such a nature that effort will have to be put forth for success, but they should not be so difficult that success is impossible. Materials that are too immature for him will be as much a detriment to good emotional adjustment as play materials that are too advanced."[2/]

4. Rhythm and the Young Deaf Child

Purposes.— The universal goals of rhythm programs for children in general hold true for deaf children also. For the deaf child, however, rhythm becomes extremely valuable in its relation to improving the intelligibility of speech and to speechreading. This is of course in addition to the values previously discussed of better balance and coordination of muscular activity, enjoyment, and socialization. Many articles have been written in support of rhythm for the deaf, perhaps in justification of what might seem bizarre to the lay public. As summarized from the literature reviewed, the aspirations of those who

1/Mrs. Marcella Albrecht, "A Curriculum for a Class of Mentally Retarded Blind Children," The International Journal for the Education of the Blind, (December, 1957), 7:40.

2/Samuel A. Kirk, Merle B. Karnes, and Winifred D. Kirk, You and Your Retarded Child, The Macmillan Co., New York, 1955, p. 95.

support rhythm activities for the deaf would be as follows:

1. To help the child to become more natural and lose awkward movements, especially for the child who needs to substitute kinaesthetic for vestibular sensitivity
2. To train him for future social adjustment to the hearing world
3. To help the child to consciously control the tone of his voice
4. To train him in the use of accent and in the articulation of words
5. To train him in the use of emphasis in phrases and sentences
6. To help him to develop resonance and volume
7. To provide him with pleasure and enjoyment
8. To provide relaxation and improve spontaneity
9. To develop muscular and imitative skills
10. To become profoundly aware of vibration and its almost imperceptible variations
11. To improve his concentration and attention.

Kent has written by far the most complete account of a rhythm program for the deaf. Her book, now out of print, is used by most schools for the deaf in the country.

> "Rhythm in speech was used at first in a very general way to improve the speech of the child who had already formed speech habits. It was thought that the rhythm found in natural conversation of hearing people could be incorporated in the deaf child's speech by reciting songs at the piano; that it would give a smoothness and flow noticeably lacking in the speech of the deaf child. A totally deaf child responds to sound through a tactile experience much as the partially deaf child does through auricular training. The deaf child responds to the vibrations of sound. The piano as well as other sound-producing instruments, including the drum, bells, rattles, etc., are used as a type of sense-training to refine the sense of touch preparatory to formal speech training. The child is ultimately required to detect slight differences of vibration in the teacher's chest and face through the sense of touch as she teaches him the elementary sounds and later words and phrases. The piano is of particular aid in the teaching of accent. The rhythmic pattern of accented words can be reproduced at the piano very distinctly by a group of chords. The child can feel the pattern as well as see it on the

"instructor's lips. The combination of sight and touch strengthen the memory of these rhythm patterns, facilitating the application of accent to the speech of the deaf child. The phrasing of a sentence may be treated in a similar manner. A rhythmic pattern of a group of chords accenting a particular work may be presented to establish one meaning and by shifting the accent may convey a different one.

The rhythmic flow of speech, as a correction of the slow disconnected speech commonly found among deaf children who have been exposed to rigorous speech training and have in consequence become extremely conscious of every position of their visual organs, may be developed to some degree by choral work at the piano. The children grouped around the piano, may speak simple folk songs and rhymes in unison. They absorb the continuity of the rhythm which helps to accelerate their speech to a more normal rate.

The advantage of rhythm in teaching of speech may be summarized as making the speech of a deaf child more intelligible through exercises at the piano in accent, phrasing, and a rhythmic flow of speech. Combination of sight and touch aid in strengthening memory of speech patterns which the child is required to reproduce."[1]

It is vitally important for the speechreader to be aware of the rhythm of the sentence, for knowledge of this rhythm will provide him with valuable added information. An appreciation of the flow and cadence will help supply the voids in what the child sees and hears. Meaning can be obtained by watching the timing of syllables and the pauses between them. Every deaf child should be encouraged to listen to speech as often as possible for "normal patterns of speech will furnish a guide for the rhythm and intonation of the child's own speech, which in the case of very deaf children needs every possible help to make it intelligible."[2]

1/Margaret S. Kent, Suggestions for Teaching Rhythm to the Deaf, Maryland School Press, Frederick, Maryland, 1938, pp. 6-7.

2/Hallowell Davis (Editor), Hearing and Deafness, Murray Hill Books, Inc., New York, 1947, p. 286.

> "If the loss of hearing occurs in someone with a pronounced aesthetic need in the auditory field, the absence of musical experience is felt as an impoverishment, and the lack is interpreted unconsciously as a lack in one's self.
>
> A hearing aid for those with residual hearing, or even the vibratory sense by which the totally deaf can appreciate the rhythm of music, may enable a person with an auditory aesthetic need to capture enough of the desired sounds and rhythm to stimulate his imagination to recreate familiar and beloved auditory images either from music or from the natural world and satisfy his need in part."[1]

Muyskens[2] feels that the order of progression of activity should be body movements beginning with melody, then rhythm, and then accent. This is based upon the belief that only when the accent has been fully acquired for the flow of muscles can the energy be shifted successfully to the smaller more complicated muscles of the larynx and aural cavity. Though it is recognized that formal rhythm periods should be a definite carryover from the speech program, the tedium of mechanical speech and language can assume a more interesting and anticipatory aspect through coordination with body rhythm and musical rhythms. Meyer[3] questions the value of a percussion band for the deaf. He feels that a deaf child has more to learn than a hearing child and, therefore, one need be economical with the educational time of the school child. He states that

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1/Ibid., p. 403.

2/John H. Muyskens, "The Building and Maintenance of Clear Speech for the Deaf," The Volta Review (November, 1938), 40:11:656.

3/Max F. Meyer, "Does a Percussion Band Educate the Deaf?", American Annals of the Deaf (March, 1932), 77:106-114.

the percussion band is not justifiable beyond the kindergarten stage. Meyer finds it "hard to understand how the notion arose that rhythm training could be given best by 'a rhythm band'."[1] "The rhythm of one's speech is part of the expression of the self and its teaching should go along with the teaching of verbal language."[2] The deaf child should be given an appreciation of the fact that rhythm and accent are primarily matters of movements into dynamic patterns.[3]

Too often we think of rhythm only as a means of speech improvement, but the deaf are particularly in need of rhythm activities, for they seem as a rule to have poorer body coordination than hearing children. A great part of the success of teaching rhythm to the deaf is dependent upon the correlation of rhythm in speech with rhythmic action throughout the curriculum.

Programs.-- It is generally concluded that short daily rhythm periods are preferable to longer ones once or twice a week. Fifteen or twenty mimute periods should be divided into two parts -- one for speech and one for rhythm action.[4] Nursery school children enjoy action songs based on their vocabulary.[5] According to Kent[6] the order of procedure

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1/Ibid., p. 113.

2/G. Sibley Haycock, "Intelligible Speech: How to Promote Intelligibility of Speech Throughout the School," American Annals of the Deaf (April, 1934), 79:171.

3/Charles G. Rawlings, "A Comparative Study of the Movements of the Breathing Muscles in Speech and Quiet Breathing of Deaf and Normal Subjects - II," American Annals of the Deaf (March, 1936), 81:143.

4/Margaret S. Kent, op. cit., p. 15.

5/Kathleen J. Wojan, "Eurythmics," The Volta Review (June, 1955), 57:253.

6/Margaret S. Kent, op. cit., p. 9.

in the development of rhythm in speech is as follows:

1. Develop a tactile perception of sound
2. Develop a perception of sound vibrations in relation to volume, resonance, perception and time
3. Build voice in volume, resonance, and pitch
4. Build a vocabulary of 2-5 syllable accented words
5. Train in emphasis of words, phrases, and sentences
6. Teach rhymes and songs.

At the same time rhythmic action should be developed. A tactile perception of time must be taught, followed by a sense of time and then an interpretation of time with the hands and feet.[1] "Primary children are taught to march soon after they have had training in keeping time by clapping their hands."[2] 2/4 time with an accented first beat is the first time taught for marching followed by 3/4 time. To this latter beat, the waltz step is eventually taught. Simple folk dances, The Heel-Toe Polka and others can be learned. Percussion orchestras give children a tangible knowledge and another pathway to learn rhythm. They also have been successful in developing concentration and a consciousness of group activity.[3] Before songs are taught at the piano for exercises in rhythm, the child should know how to speak the words so that he can focus full attention on the new and interesting ways of saying them.[4]

1/Margaret S. Kent, op. cit., p. 37.

2/Ibid., p. 44.

3/Ibid., p. 48.

4/Ibid., p. 37.

Materials.— A piano is of primary importance because of the strong vibration produced from the strings. Work on pitch, volume, rhythm, and resonance can be done at the piano. However, "as much voice building as can be done from teacher to pupil through imitation without medium of the piano should be done in the classroom where the situation is more ideal."[1/] Chords in the piano are good for breathing and resonance. Records and songs played on the piano should be chosen to fit the appropriate needs — rhythmically, vocabulary wise and so forth. Charts are often used for learning words to rhymes and songs and the places of accent. Nonsense syllables (such as "pum") are used until proper emphasis and accent are achieved. For example, "PUM pum" can be used in preparation for "Father." Drums and the usual rhythm band instruments are utilized.

1/Ibid., p. 24.

CHAPTER III

SUGGESTIONS FOR A BEGINNING PROGRAM OF RHYTHM FOR DEAF-BLIND CHILDREN

Introduction.— If the ultimate goal is to teach speech through vibration, the child should be saturated with vibration from the time when he is very small. All the time he is developing inner language, the teacher should have the child's hands on her face when she is talking. At this stage of development (which cannot be guessed at chronologically in reference to a deaf-blind child) one does not expect specific responses to all language that is spoken. By the same token the child should not be expected to make specific responses to rhythm at this time. He should have the opportunity to enjoy the feeling that comes from different rhythms. The teacher might direct the child for the purpose of instilling ideas, but she should not demand so much that she inhibits spontaneous movement.

The tendency in deaf children to make direct one to one associations and fail to see shades of meaning is even greater for the deaf-blind child. If the basic feeling for rhythm is not established, a child may learn to march only within the framework of a particular set of environmental conditions. For example, he may never respond rhythmically to the radio at home if his experience has been limited to marching to the music of the piano in the rhythmroom.

The writer feels that a beginning program cannot be too specific due to the nature of a deaf-blind child. It makes a great deal of difference whether or not the child has some vision and the amount of residual hearing he might possess. As a beginner, the child with a little sight, or a little hearing would probably benefit from group rhythm work in the area of socialization much more so than would a totally deaf-blind child. Rhythm work must be adjusted to meet the needs of the individual child. When a child has some remaining sight it should be utilized as often as possible for purposes of reinforcement during all rhythm work.

From the beginning throughout their advancement, children should be encouraged to interpret music and rhythm freely and imaginatively if they feel so inclined. Too often the teacher is guilty of thwarting a child's spontaneity by demanding of him too specific a response. If a child is supposed to march, but instead sits down and bangs a nearby pencil, this activity should not be curtailed. He is feeling the rhythm, and that is the essential point. If the child can experience rhythm in this manner, there is little doubt that eventually he will learn to march.

Implications for coordination.— Having two distance senses impaired, the deaf-blind child easily withdraws into a severely isolated world. In the area of coordination a deaf-blind child's problems are much the same as those of the blind child. The simplest of body movements must be developed through external stimulation. Independence must be encouraged in hope that activity may become spontaneous rather

than mechanical. It is necessary to consider the manner in which the physically normal child comprehends rhythm.

> "The first stage is one of bringing into awareness the rhythmic variations of the most familiar everyday movements. The second stage is one of extending that awareness to less familiar movements and giving it greater rhythmic variation. The third stage is one of application of rhythmic movement to the materials of the various media of expression."1/

Deaf-blind children should have the opportunity to experience a great deal of uninhibited movement in response to rhythm before their activity is directly channeled. The child must be made aware that rhythm exists so that he might come to recognize it in all aspects of life and not associate it with only a few specific activities. If rhythm is kept a pleasurable experience, it will provide for release of emotional tensions, muscular relaxation and, therefore, improved coordination.

Implications for speechreading and speech.-- Every language has its own rhythm, and thus it is beneficial to the individual if he can respond to the rhythm of a whole expression rather than single movements of sounds. By developing the child's awareness and response to vibration, rhythm, and accent through music and isolated beats, it is hoped that his discrimination and sensitivity will become acute enough to enable him to respond to these three characteristics of speech. The individual with normal hearing utilizes rhythm as a subconscious process when he listens to a speaker. Because a deaf-blind child must understand speech through his sense of touch, he must become conscious of almost imperceptible variations in vibration and rhythm in order to be successful

1/Elizabeth Waterman, The Rhythm Book, A. S. Barnes and Company, New York, 1936, pp. 6-7.

in his speechreading and his own speech development. If a deaf-blind child learns to incorporate rhythm in his speech, his speech will be a great deal more intelligible to all. Before this skill can possibly be developed, the child must become aware of the existence of rhythm as it permeates life's more gross activity. Rhythm must first become a part of the self if its application is to have significant meaning.

Outline of the Goals of Beginning Rhythm Work.--

A. Body development
   a) increased relaxation
   b) outlet for self-expression
   c) emotional release of tensions
   d) independence and freedom of movement
   e) greater muscular control

B. Speech and speechreading
   a) create a tactile awareness of vibration
   b) develop a sense of rhythm in the self
   c) improve concentration and attention
   d) improve consciousness of pitch, intensity, and accent

List of Suggested Materials.--

1. piano
2. phonograph
3. radio
4. table or desk
5. self-winding metal music box, crickets, and any other simple vibration toy
6. drums of all kinds - eg., metal waste paper basket, tin cans with rubber ends, parchment drums, wooden drums, metal drums, etc.
7. all appropriate rhythm band instruments - eg., triangles, cymbals, bells, sticks, blocks, tambourines, clogs
8. art media - eg., finger paint, blackboard, chalk, paper, crayons, paint, inks

The classroom.-- In a school where there are numerous deaf-blind children few, if any, will be functioning on the same level. For this reason it is extremely difficult to coordinate a rhythmroom program with the classroom, but a carryover is essential to a successful rhythm program. Therefore, this writer believes that a group rhythmroom program serves little function once speech is incorporated into the rhythm work. In a school for the deaf, group work can be accomplished with a whole class for there tends to be a more homogeneous grouping. However, there is little homogeneity within a group of deaf-blind children, and this writer questions the value of a group rhythmroom program after a basic awareness of vibration and rhythm has been established. Thus, it is felt that for the beginner the rhythmroom should be used for limb and body movements apart from speech. Each child should be accompanied by a teacher who would assist in such activities as running and walking around the room in response to changing tempos played on the piano.

Ideally, each room would have a piano which would enable the teacher to adapt music to the child rather than vice versa. A child's random movements, such as rocking or beating a drum, provide wonderful opportunity for the teacher to motivate rhythmic associations by playing music in time with the child's activity. If this occurred often enough, the child would eventually establish a connection between the rhythm of the music and something which he is doing. Such a set-up would necessitate every teacher being a piano player and this, of course, would be unlikely. However, a small inexpensive record player and carefully selected records would succeed in serving the same purpose.

Basically, the essence of the classroom program is to stimulate an awareness of vibration and rhythm in a general sense, followed by a progression in the areas of sensitivity to and acute discrimination to sounds. In the classroom the teacher is able to seize upon the "correct" moment to introduce rhythm, bringing it to the child rather than using the illogical reverse procedure. Speech elements, syllables and words may be coordinated with rhythm according to the child's individual ability within the confines of the classroom.

In regard to sound per se the first step should be to provide the child with the opportunity of distinguishing between crude noises and musical sounds. As with blind children, deaf-blind children need to associate noise with an object in space. The classroom should be provided with an abundance of vibration-type toys such as a small manual music box, cricket, bells on the end of a stick, drum, cymbals, tambourines, and sticks. The child should be permitted first to become acquainted with each in an unstructured situation. Harmonicas and whistles will help develop breath control. When he has become familiar with them he should be allowed to play with them if he so desires. At this point, the teacher can introduce imitation techniques. For example, the teacher could play the cymbals twice and have the child do the same. Imitation of patterns could be extended by having the child place his head down on the table and repeat taps.

The meaning of "on and off" can be introduced simultaneously. If there is no piano in the room, a record player should be used. A child's own response when the record stops may be enlarged upon or removing one hand from the speaker box would be appropriate. As a beginning response

this seems more suitable than some more active response like turning around. It will help if the teacher holds the child on her lap while various music is being played so that the child will feel the various responses made by the teacher. Humming and stopping provides a good vocal response to the "on and off" procedure.

When commands are being established it will be reinforcing if this is the pattern which the teacher taps for imitation. After this pattern can be imitated on the table, speechreading can be added with the child's one hand on the teacher's face and the other on the table. The different rhythms of the commands can then be played on the piano for purposes of developing finer discrimination.

To stimulate the recognition of beat, the teacher should find it helpful if the child sits on the floor while the teacher marks time with the child holding on to the teacher's legs. When the child begins to feel the beat, both teacher and child should march together until the child is capable of doing this independently. The teacher can introduce accent in the previous manner also by raising one leg higher than the other, thus raising the child's arm.

For pitch discrimination a high pitched bell and a mellow drum are good to use first in imitation to a sound heard and then for matching the correct instrument with the corresponding range of the piano keyboard - the bell with high, the drum with low. When this is established middle can be introduced with a horn. After various vowel sounds are learned "oo," "a(r)," and "ee" can be used on the same continuum - low, middle, and high.

Tapping, clapping, and beating the drum are three responses which can be easily regulated as to loud and soft. The child should have ample opportunity to discriminate and imitate all combinations of these two degrees of volume - for example, SSL, LSS, SLS, and LSL. This practice will be important in the carryover of accent in speech. When elements and syllables have been perfected in the classroom, they should be brought to the piano for accent leading up to words. To illustrate, a teacher might work with "FAR far" at the piano before introducing "father" in the classroom.

When a deaf-blind child has progressed to the stage where work on syllables, words, phrases and sentences can be done in conjunction with the rhythm of music at the piano, he is no longer a beginner and, therefore, beyond the scope of this thesis. At this point the rhythm program would approximate that of the deaf very closely, and teachers should find Kent's book, Suggestions for Teaching Rhythm to the Deaf[1/] extremely helpful.

The rhythmroom.— This writer is not strongly in favor of a rhythmroom program for the beginning young deaf-blind child because one can't expect a child to suddenly respond to rhythm at a specific time on a specific day each week. It seems much more important that the teacher find something the child likes and then put rhythm into it. However, if a rhythm program is thought to be beneficial at this stage for purposes of socialization or a lack of classroom facilities, it is vital to keep in mind the fact that this should be a time of pleasurable experience.

1/Margaret S. Kent, Suggestions for Teaching Rhythm to the Deaf, Maryland School Press, Frederick, Maryland, 1938.

An exploration of the materials being used is essential. The teacher should not expect a child to respond to the piano in a set pattern without ever letting the child explore the piano fully. Allow him to bang it and "hear" the range of the entire keyboard for himself. Play different short pieces for him and let him just enjoy it before expecting to channel his responses.

A consciousness of vibration can be stimulated by having the child stand at the piano with the side of his head and both hands resting lightly on the top. Play a few measures of loud rapid music and watch the manner in which the children respond when the vibration stops. This should be repeated until all children respond quickly. It should be fairly easy at this point to channel the logical response of raising the head when the vibration terminates. When the children have learned to respond in this manner they should attempt to do it with just their hands on the piano, thus eliminating the bone conduction. When this fundamental concept has been successfully accomplished, the activity should be varied. Keeping bodily contact with the piano, the children can learn to sway, tap, and clap. After the children are able to clap when in contact with the piano, try having them sit down and clap according to the vibrations received from the floor - responding primarily to stop and start. Depending upon the stage of development of these children, they might enjoy a circle game, such as "ring-around-the rosy," falling down when the music stops. The child should be introduced to walking in time with the music. Shoes should be removed for this to facilitate picking up all the vibration possible. It might

help for the teacher to carry the child on her back, swinging the child's legs while she exaggerates her own walk. If this can't be done, just getting the child to swing his legs in time with the music while sitting on a chair should help.

Following the above stages of progression, the children should learn to discriminate tempo, volume, and pitch. When the children become aware of the differences in tempo at the piano, running can be incorporated with walking in response to their respective tempos. Jumping, marching, tiptoeing, swaying arms, nodding head, twisting, and turning, rising and falling, etc., should be integrated.

For pitch discrimination, the children can imitate by banging on the upper or lower end of the keyboard, or by raising and lowering their arms in accordance with that which is played by the teacher. Raising and lowering the head is a helpful response because it relaxes and stretches the vocal cords which can be carried over into speech work at a later date.

Conclusion.— When conducting a beginning rhythm program, it is important to keep the following in mind:

1. At the beginning level primary concern is with keeping time with the music. More attention can be given to improving the quality of the activity as the child advances.
2. As activities are perfected in the classroom, they should then be expected as responses to the piano or phonograph - not before.
3. Never perform an activity beyond the time that the child tires or loses interest. Attempt to anticipate the child's saturation point.

4. "What may have been powerful in expression the first few times will become monotonous without richness of variation. Even if one were not interested in expression, it still takes as wide an experience to appreciate...rhythms... as it does to execute them, and all of us are appreciators in so far as we are capable."1/

1/Elizabeth Waterman, The Rhythm Book, A. S. Barnes and Co., New York, 1936, p. 7.

CHAPTER IV

TWO BRIEF, REPRESENTATIVE CASE STUDIES

The following case studies were chosen to illustrate the great individual differences of handicap existing between deaf-blind children. They offer additional evidence that attempts to be highly specific in regard to a general rhythm development program would be unrealistic.

Case A:

The chronological age of Case A is eight years and two months. He entered a residential school for deaf-blind children in November, 1957, having had only two months previous schooling elsewhere.

This child's visual handicap was caused by congenital retrolental fibroplasia. Acuity is nil. His hearing loss is believed to have been caused by factors related to retrolental fibroplasia. The loss is undetermined and thought to be profound.

General Behavior: Subject to frequent temper tantrums, shows little independence, attempts to communicate on a gesturally symbolic level primarily in the area of bathroom needs, and becomes easily frustrated

Speech: Upon request will imitate several isolated speech sounds and on occasion uses voice in a somewhat playful manner

Language: Does not associate words with objects, responds to commands through situational clues rather than speech itself, and seems aware of simple similarities and differences in objects

Experience Training: Seems capable of performing, but does so very slowly and, evidently, with little interest

Auditory Training: Shows only indirect response of smiling to music with amplification - and this response is not consistent, shows no initiative in clapping hands or marching to indicate awareness of sounds

Motor Development: Balance poor, wide awkward stance, tactually sesitive with his hands

Suggestions for Rhythm: In the writer's opinion, the rhythm program for a child such as this should exist within the classroom. Here rhythm could be brought to the activity of the child on the individual basis which is necessary. As the child's behavior is excessively rigid in structure he should be provided with ample opportunity for freedom of movement. It might help to place the child's hands on top of a phonograph while sitting on the teacher's lap. In this way he could feel the movement which permeated the teacher's body. With amplification and without, the child should be permitted to respond in whatever way he may choose. When the child becomes aware of vibration per se and can express his awareness in some terms through the means of his body the teacher can present him with various rhythm band instruments. Cymbals, sticks, drums, and bells would probably be most preferable for this child because the vibration would be more obvious to him. The child should then be given the opportunity to utilize these instruments in free response to the vibration of the piano or phonograph.

After the child has been given frequent opportunity for free

expression, the teacher should begin to structure the activity of the child. Since on and off is the first concept to be learned, it might be beneficial for this child to respond in gross motor behavior due to his rigidity rather than in smaller muscle activity which is required for the instruments. Such behavior patterns as standing up and sitting down, swinging the arms, kicking the legs, or punching a punching bag might be used for this concept. Gross motor movements or the rhythm band instruments mentioned could at this time be incorporated into association with speech patterns. For example, one, two, and three beats on the drum could be given with bu, bu bu, and bu bu bu, respectively. Having the child place his head on the top of his desk and then tapping the desk with his hand is a reinforcing factor to the "beat" element.

Body movements such as raising and lowering the arms or head could be used to introduce the concept of high and low after which instruments such as bells and drums could be combined or substituted for the body movements. Vowel sounds or consonant and vowel combinations can be adapted very well to the concept of high and low. For example, ee - a(r) - $\overset{1}{\text{oo}}$ or fee - fa(r) - $\overset{1}{\text{foo}}$, etc., could be used with chords of high, medium, and low. Before each portion of a structured lesson the child should have time to utilize movements freely with or without instruments.

Such a program might be embarked upon for Case A at this time. A group rhythmroom program would seem to offer little of value at this time. As this child would not enjoy it on a social level because

of his pre-communicative stage of development and lack of interest in his environment, it would seem that more could be accomplished on a one to one relationship with his teacher.

Case B:

The chronological age of Case B is seven years and nine months. He entered a residential school for deaf-blind children in September, 1957, having had only three months previous nursery schooling elsewhere.

As with Case A this child's visual handicap was caused by congenital retrolental fibroplasia. Acuity in the left eye is nil while in the right acuity is thought to be about 20/200. The hearing loss is thought to be caused by factors relating to retrolental fibroplasia. The exact loss is undetermined, but thought to be profound.

General Behavior: Just beginning to relate to people in a meaningful way, through a new-found awareness of people seems to be forming deeper attachments.

Speech: Most of the breath consonants plus "m" and a couple of vowels, lacks the ability to combine any of the elements as yet

Language: Is able to use situational clues in speech reading, is beginning to develop a number concept through matching, is not ready for print, but enjoys looking at pictures

Manual Skills: Able to do handwork such as simple sewing and weaving, works with plasticene

Auditory Training: Rejects earphones

Motor Development: Slight motor involvement, poor balance, Hyperactivity, need for structure

Suggestions for Rhythm: Although the concepts to be taught are in essence the same as those discussed for Case A the procedure differs somewhat because of the visual factor. Due to the bit of vision present and the fact that the child is just beginning to relate to people in a meaningful way a group rhythmroom program would be advocated. The socialization value here cannot be overlooked.

For the on and off concept such activity as resting the head on top of the piano and raising it when the music stopped might be a good place to start. When this concept is established through the previously mentioned activity as well as clapping, tapping, etc., circle games can be introduced. Games of "ring-around-the rosy" (falling down when the music stops), or passing a ball around the circle (ceasing movement when the music stops), are varieties that might be enjoyed.

When introducing the high and low concept for this child, rhythm band instruments would work well. Upon associating certain instruments with specific areas of the register, each child could choose an instrument and play according to the high or low pitch which is played on the piano. There is value in seeing the other children's activity here. As this child enjoys the role of the teacher, the children and teacher could reverse roles occasionally for purposes of understanding, relaxation, and pure fun. Imitation of activity plays a large part in the activity of this child because of the slight visual acuity, and a group rhythm program allows for imitation while at the same time encourages self-expression.

A group of deaf-blind children might be formed for the above

activities because of their somewhat homogeneity in social areas and gross activity. However, when it comes to the finer learning activities, it isn't likely that there will be two children functioning on the same beginning level. Consequently, rhythm should be incorporated into speech work in the classroom situation. For example, the teacher could beat patterns on the drum to which this child could use speech elements for imitation. In coordination with this the teacher could tie in number cards.

This child has enough vision to enjoy working at the blackboard. For the on and off principle drawing a continuous circle could be used. The child is taught to start drawing when the music starts and to stop when the music stops. Enjoyment is derived from watching the circle grow, and the whole procedure can be transferred to exercises on breath control.

The principle concepts to be learned in regard to rhythm remain similar for all the children, but the means by which they can be introduced and reinforced vary considerably according to the degree of handicap possessed by each child.

CHAPTER V

CONCLUSION

Literature in regard to rhythm for the normal child as well as the child with visual, auditory and mental handicaps has been reviewed with the purpose of sorting out materials and ideas which would be applicable to rhythm work with deaf-blind children. However, the writer found it impossible to create any more than general conclusions concerning a beginning program due to the nature of the individuals under consideration. Such a program would depend so entirely upon the degree of handicap possessed by the individual child, that it seemed of little worth to be very specific. Therefore, it is hoped that the reader may find value in the consolidation of literature if not the opinions expressed in the suggested program.

It can be concluded that once a child has attained a level of elementary speech the teacher can follow the programs of rhythm for the deaf, making the necessary adaptations to meet the individual's visual handicap. If deaf-blind children are to learn to express themselves spontaneously in rhythmical and intelligible phrases and sentences, the habit must be established early in their lives. Skills must not be neglected, but the child need not make the connection between rhythmical movement and the mechanical aspect of speech until rhythm becomes a part of the child himself.

Rhythm work should be kept enjoyable at all times, and thus, the interest and experience level of each child should be the basic premise upon which a program is developed. The teacher's ingenuity is a major factor in rhythm work, as it is in all teaching, and it is through this ability that she will be able to aid the incorporation of rhythm into a child's life.

Since so much material has been written on the subject of rhythm for the deaf it seems of little value for anyone to embark upon a more advanced program for the deaf-blind. The time might better be put forth into the ingenuity necessary for adapting the programs already developed for the deaf to meet the particular needs of the child or children concerned.

It might be of benefit to establish a list of records which have proved, on the basis of experience, to have been especially successful for particular areas of rhythm.

CHAPTER VI

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