

Motor training



**ASSIGN
BUSTER**

.. h, and Bryant Crate. Marianne Frosting has a test based system (Gearheart, 1973). The classroom teacher may administer her test in groups. She has five subtests which measure various skills which she states " are necessary to success in academics".

She has a series of training exercises in both gross and fine motor skills. Her test is limited to visual-perceptual skills, and the program is basically a visual-perception program. Musk Moisten (Hellmuth, 1968) involves a theoretical framework in which a child can be led in an orderly manner from situations in which he simply responds to commands, to situations in which he actively engages in problem solving and can see for himself the quality of his decisions through movement. Following Mosston's general guidelines, the Visual Motor Center of Montreal has developed a motor learning program for elementary children using an intrasensory approach. The program involves the use of large forms such as a climbing wall, a " people-size" barrel, and various sized balls attached to strings hanging from the ceiling. The forms are designed to improve the child's physical coordination while a multi-directional series of tasks serves to increase the child's mental capacities in coordination with his motor patterns.

The series consists of tasks organized into five areas: 1. Body Image 2. Motor Planning 3. Laterality 4. Balance 5.

Visualization Another perceptual-motor approach is that put forth by Newell Kephart (1969). He illustrates his emphasis in his theory which is organized into three stages of learning development " practical, subjective, and objective all stages based upon four motor generalizations; posture and

maintenance of balance, contact, locomotor, and receipt and propulsion."

The practical stage is the early stage going back to infancy and lays the foundation for future learning and the theory that all behavior is basically motor. Many specific motor skills, such as walking, may be taught with ease, but the teaching of Movement patterns presents a more difficult task. Each child should have motor awareness and a concept of body schema or body image. Once the child has established his body image, he is able to develop other motor skills such as directionality.

The subjective stage is the second stage of learning development or the perceptual-motor stage. This stage is based upon motor contact and locomotion. Reach, grasp, and release enable the child to manipulate and explore object shapes in terms of movement and body schema. Locomotion enables the child to explore space. The objective stage is the perceptual stage and is reached only after the child has passed through the other two stages.

One problem in this stage faced by the child is that of crossing the body midline as the pattern changes from outside-in to inside-out, but does not change in shape. Kephart's manual for the classroom teacher is divided into four major sections: 1. chalkboard training 2. sensory-motor training 3. training ocular control 4.

training form perception Under each section many activities are suggested that will strengthen perceptual-motor skills. For example, under chalkboard training come scribbling, finger painting, drawing circles, and other geometric forms. Problems in children in many classrooms are quite often

perceptual-motor in nature. Therefore, remediation is aimed at those skills. Although the perceptual-motor problems are usually anatomical or physical in nature, a restricted classroom environment magnifies them.

Children do not have a chance for adequate practice or development in some very basic abilities such as eye-hand coordination, form perception, and spatial relationships. Many of the activities suggested by Kephart are already used in many kindergartens and first grade rooms, but sometimes not to a great extent. More practice in many of these activities would, perhaps, help more children develop their basic motor skills. Gerald Getman (1970) emphasizes a developmental approach to visual perception. Getman and his associates have developed a program of visuomotor training.

It is based upon the belief that visual perception is learned and that it evolves from actions of the entire organism. He also believes it is necessary to have good coordination of the body parts and body systems in order to develop perception of forms and symbols. The foundation of Getman's training program of growth and development is associated with the first five years of life. There are six developmental areas or stages as follows: (1) General Movement Patterns When a child moves he learns. Without movement, learning does not take place. Eye-hand coordination is achieved early and sets the pattern for further learning.

(2) Special Movement Patterns - The movement patterns are extended and all parts of the body are used. The body gets ready for further perceptual work. (3) Eye Movement Patterns - Action is reduced and vision replaces general or special movements. The hands are freed for more economical

uses. (4) Communications or Visual Language Patterns This replaces action and the mastery of speech takes place.

(5) Visualization Pattern - Sometimes called visual memory, this involves the recall of previous learning, the matching up of things already known, and the inspection of new learnings

(6) Visual Perceptual Organization This stage of development makes it possible for an individual to interchange body mechanisms when interpreting the environment. Vision remains most important in interpretation. Another approach is that by Ray Barsch. Barsch is a man very much interested with the world of space and movement within that space. According to him (1965), a curriculum for children with learning disabilities can have only one objective, namely " to correct whatever impediments stand in the way of the child taking full advantage of the offerings of the regular curriculum." The deficits that a learning disabled child exhibits cannot, as a rule, be explained as basically intellectual or emotional; therefore, one must consider the child as a sensory-perceptual-motor organism. Since the " usual" curriculum has failed with many of these special children, then an " unusual" curriculum is required. Movigenic (Barsch 1970) is " the study of the origin and development of movement patterns leading to learning efficiency." The movement theory, based on movigenics, is the basis for Barsch's physiologic program.

This theory of movement is based upon ten postulates encompassing the work of many theorists and researchers. Without exception, all of the postulates deal with man as a moving being within a spatial world. A movigenic curriculum is one in which the child with a problem in learning receives the opportunity to explore and experience himself in space. A brief

description of an actual classroom might give some idea of the operation of the movigenic theory. All windowpanes are covered with black plastic sheeting (this allows for complete control of lighting). Lines are painted on the floor to mark where children will stand for chalkboard writing, transport routes, and other activities.

A three-foot strip of carpet on the floor provides a surface for crawling and rolling. Children go barefooted or in stocking feet. Activities are planned carefully, but no effort is made to follow a regular order of activity.

Equipment used includes walking and balancing rails, tracing templates, scooter and teeterboards, plastic balls, a metronome, Cuisenaire rods, and many other concrete materials. McCarthy and McCarthy (1970) conclude that a " movigenic approach might work well with some children and not at all with others, depending on the cause of their inept school performance."

Bryant cratty (1969) has developed a motor learning program where teachers may work with a classroom on a task such as shape recognition using tactile and visual modalities. Then the teacher takes the students to a playground which is composed of huge shapes which the children can name, play on, play in, play around, and explore. The type of transfer that develops from this direct intercourse with the form is something much more valuable than any picture or lecture. This new playground concept was developed from studies made by Cratty which demonstrated that the acquisition of gross movement patterns at times influenced the acquisition of small movement patterns and from studies by E. Dean[(#)]that indicated that there are individuals who seem to block stimuli presented to them kinesthetically and visually and prefer rather to move, creating their

own input. The playground itself consists of four areas including grids, lines, squares, circles, forms, etc.

An example of how the learning playground is used is illustrated by the child who is learning his letters. He begins by exploring the different shapes and analyzing how shapes form letters. He later becomes familiar with the letters themselves through work on the letter grids. Cratty's overall philosophy, which this writer believes should be a guideline for all learning situations, is that children be exposed to a variety of perceptual-motor activities, which are presented in the order of their difficulty, including such areas as balance, agility, manual skill and ball handling, and most important he believes that children should be well motivated when they perform and not simply pushed into the intellectual competitive race (1969). This writer feels that basic to the above theories is that of Jean Ayres (1972, 1973) dealing with sensory-motor-integration.

Much of that written above, Ayres also discusses - but from a more neurological point of view. Her theory is extremely believable after one has spent some time in the field applying other perceptual-motor theories. Ayres states (1972) that "disorders consistently observed in learning disabled children that are suggestive of inadequate sensory integration in the brain stem are immature postural reactions, poor extraocular muscle control, poorly developed visual orientation to environmental space, difficulty in the processing of sound into percepts, and the tendency toward distractibility." It is felt by this writer that most, if not all, of the theories being applied in L. D. classes are overlooking basic sensory-motor-integration theory, thereby causing more luck than skill to be the effective agent in their remedial or

<https://assignbuster.com/motor-training/>

developmental programs in perceptual-motor skills There are, of course, other views in this field,, but the above are representative of the group. Movement is important to learning and some would put a great deal of emphasis on it.

This writer feels that it is basic but should be combined with other skills such as auditory. One other interesting aspect, not covered in this paper, is that research (Fisher 1971) has shown that the mentally retarded child is inferior to normal children in motor performance. Experimental studies show that motor proficiency in retarded children can be improved through motor training. If poor motor performance can be remediated, an improvement could take place in the perceptual process as well. This would apply, in the most part, to those children with a learning disability.

Programs involving perceptual motor development need to be carefully studied before use so that the instructor has a clear understanding of what to do, what to expect, what is needed. After the disability is diagnosed, then it must be decided which tasks are needed for development or remediation. Any young child in the primary grades that has a learning disability problem may need some motor work and would probably benefit from some, but this would be determined only after diagnosing the disability. In conclusion, perception, motion, and academic achievement do relate to each other. One is needed to help the other. Bibliography Ayres, A.

Jean. " Improving Academic Scores Through Sensory Integration," Journal of Learning Disabilities. Vol. 5. No. 6. -June-July 1972, P.

336-343. Ayres, A. Jean. Sensory Integration and Learning Disorders. Los Angeles, California: Western Psychological Association, 1973.

Barsch, Raymond. A Movigenic Curriculum. Bureau for Handicapped Children. 1965. P. 3.

Madison, Wisconsin. Cratty, Bryant T. Perceptual Motor Behavior and Educational Processes. Springfield, Illinois. 1969. PP.

16-18. Perceptual Motor Behavior and Educational Processes. Springfield, Illinois. 1969. P. 79.

Fisher, Kirk L. " Effects of Perceptual Motor Training on the Educable Mentally Retarded." Exceptional Children XXXVIII, Nov. 1971, PP. 264-265. Gearheart, B. R. Learning Disabilities - Educational Strategies.

Saint Louis: The C. V. Mosby Company, 1973. P. 70. Learning Disabilities - Educational Strategies. Saint Louis: The C.

V. Mosby Company, 1973. PP. 76-77. Hammill, Donald and Myers, Patricia, Methods for Learning Disorders. New York: John Wiley and Sons, Inc.

1969. P. 94. Hellmuth, Jerome, Editor. Learning Disorders Seattle. Special Child Publications.

1968. P. 533. Johnson, Doris J. and Myklebust, Helmer. Learning Disabilities: Educational Principles and Practices.

New York: Grune and Stratton, 1967. P. 199. Kephart, Newell. The Slow Learner in the Classroom. Columbus.

Charles E. Merrill Publishing Co., 1960. P. 63. Maccoby, Eleanor E.; Dowley, Edith M.; and Hagen, John W.

'Activity Level and Intellectual Functioning in Normal Preschool Children.'" Child Development. 36: 761, 1965. McCarthy, James and McCarthy, Joan. Learning Disabilities. Boston. Allyn and Bacon, Inc.

1970. P. 37. Learning Disabilities. Boston. Allyn and Bacon, Inc.

1970. P. 41. Learning Disabilities. Boston. Allyn and Bacon, Inc.

1970. P. 46. Myklebust, Helmer R., Editor. Progress in Learning Disabilities, Vol. 11.

New York; Grune and Stratton, 1971. P. 152. Progress in Learning Disabilities, Vol. 1.

New York; Grune and Stratton, 1968. P. 263. Skabic, Vera, et. al., " The Interrelationship of Perceptual-Motor Achievement, Academic Achievement and Intelligence of Fourth Grade Children." Journal of Learning Disabilities.

Vol. 3, No. 8, August 1970, 33-34. Whiteraft, Carol J. " Motoric Engramming for Sensory Deprivation or Disability." Exceptional Children. Vol.

38, No. 6, February 1972, 475.