

# HAWAII MODEL CHILD SERVICE CENTER FOR YOUNG CHILDREN WITH LEARNING DISABILITIES

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Every public or private classroom may have at least one child whose underachievement can be related to a specific learning disability:

Children with specific learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling, or arithmetic. They include conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do *not* include learning problems which are primarily related to visual, hearing, or motor handicaps, to mental retardation, to emotional disturbance, or to environmental disadvantage. (Public Law 91-320, The Learning Disabilities Act, 1969)

While learning disabilities can be behaviorally defined, there may be much speculation about their etiology or origins, and, consequently effective screening, diagnosis, remediation, and prevention are seldom practiced. Educational programs to meet the needs of children with specific learning disabilities will require well trained staff and increased funding. The need for personnel and support services to classroom teachers is critical. Due to the complexity of these needs, interdisciplinary approaches are essential and necessitate effective research, program development and service. Cooperative teams that can function on a comprehensive and integrated basis must be formed.

The Office of Education, Bureau of Education for the Handicapped's recent funding of the Hawaii Model Child Service Center for Young Children with Learning Disabilities reflects national attention to this problem. The proposal, submitted by members of the Department of Health and

Physical Education and the Department of Special Education, delineated Hawaii's critical need for 1) higher quality service to the community; 2) development of effective curriculum; 3) demonstration centers for training of professional and paraprofessional personnel; 4) research; and 5) cooperative efforts between public and private agencies.

The uniqueness of the Center lies primarily in its emphasis on a *process* model. Throughout the United States and its territories, there are well documented needs for increasing services in the area of learning disabilities. Attempts to create new agencies to meet such demands would be unfeasible; thus, a *product* orientation is untenable.

The replication strategy of the Hawaii Model Child Service Center is a demonstration of the efficacy of the coordinated efforts of four agencies to increase services, both quantitatively and qualitatively. This model program is a joint effort involving two private schools (Sultan Easter Seal School and Variety Club School), the University of Hawaii, and the Hawaii State Department of Health. Each agency will deliver the service for which it is most suited while working cooperatively to provide 1) screening and assessment, 2) prescriptive programming for individual children, 3) evaluation and modification of current materials and methods, 4) preservice and inservice teacher training, 5) paraprofessional aide training, and 6) research. The model is oriented towards replicability of systems and materials in order to increase service in other areas of rural Oahu, the neighbor islands, and the Pacific Basin.

## The Agencies and Community Involvement

The interagency cooperative effort will be directed towards the establishment of

demonstration classrooms in the two private schools; the extension of screening, diagnostic and programming services by an interdisciplinary team working through the Department of Health; and the evaluation and development of materials and procedures, as well as supervision and training of personnel, through the Departments of Health and Physical Education and Special Education at the University. The project staff will work towards sharpening the skills of a local team as it develops a format for on-going service to Hawaii's children.

The University of Hawaii's component will focus on administrative coordination plus the research, training and curriculum development aspects of the major objectives. The Department of Health, which bears the primary state responsibility for service to young children below the age of six, will continue refining its screening and diagnostic test battery, and will eventually extend these services and prescriptive services into a number of preschools in central rural Oahu.

Variety Club School, which currently serves young children (ages three through eight) with specific learning disabilities, will serve as a site in which to evaluate curricular innovations and to train students, professionals, and paraprofessionals. Sultan Easter Seal School, which currently services three- to five-year-old children who have crippling or health disabilities, will offer an additional location for curriculum development and training. Materials and techniques utilized with children who have specific learning disabilities will be further modified for those whose learning disabilities are compounded by orthopedic problems.

In order to provide quality service, the Center will bring together national and community expertise. As part of the first year's program, stress is being placed upon involving the community both in the Advisory Council and in a planning/evaluation conference scheduled for early 1975. The Advisory Council's function is to advise the principal investigators and project director-planner in matters of policy. It is made up of an administrative and a parent representative from Variety Club School, Sultan School, and the Department of Health; an administrative and a student representative from the University of Hawaii; and representatives from the Honolulu Community Coordinated Child Care Committee, the Special Education Branch of the Department of Education, and the Hawaii

Association for Children with Learning Disabilities.

### **Specific Learning Disabilities Defined**

The development of learning disabilities as a specific field of emphasis within special education has taken place primarily during the last quarter century. Strauss and Lehtinen first published their well-known book, *Psychopathology and Education of the Brain-Injured Child* in 1947. They hypothesized that particular syndromes of symptoms developed as a result of injuries to or infections of the brain before, during, or after birth. These included perceptual disorders, perseveration, conceptual disorders, and behavioral problems such as hyperactivity and erratic control.

Objections were raised to the Strauss and Lehtinen classifications by Stevens and Birch in 1957 on the bases that "brain injured" referred to causes rather than symptoms, yet symptoms actually caused the referrals; the focus was on diagnosis not remediation and did not offer directions for teaching approaches. There were also objections to the term "brain injured" as leading to oversimplification; it was pointed out that children with both cerebral palsy and epilepsy were brain injured, yet did not necessarily show learning disorder symptoms.

In 1966 Clements proposed the term *minimal brain dysfunction*, suggesting that disabilities in learning could be ranked on a continuum from mild to severe with impairment of fine muscle coordination, abnormal EEG's, deviations in attention and impulse control, specific perceptual and memory deficits, and non-peripheral impairments of vision, hearing, haptics and speech representing the mild end of the continuum. The severe categories were represented by such traditional labels as cerebral palsy, epilepsy, autism, mental retardation, blindness and deafness.

In 1968, the National Advisory Committee on Special Education offered the definition in the first paragraph of this article (Farrald and Schamber, 1973). The definition was later incorporated into their initial legislation entitled Public Law 91-320, The Learning Disabilities Act of 1969. It is a definition primarily by exclusion of rather than focusing on actual characteristics. However, there appear to be several characteristics of children with learning

**Chart 1**  
**FACTORS TO CONSIDER IN THE ANALYSIS OF CHILDREN'S MOVEMENTS**

Questions	Concepts	Examples
1. What body does? (skills)	LOCOMOTOR:	walk, run, hop, jump
	NON-LOCOMOTOR:	curl, stretch, push, pull, swing, sway
	MANIPULATIVE:	throwing, catching, striking, using implements
2. How body moves?	TIME:	fast, slow
	FORCE:	light, heavy, strong, weak, tense, relaxed
	SHAPE:	normal, curled, flexed, limp, rigid
	FLOW:	interrupted, continuous
3. Where body moves?	SPACE:	general, personal, near, far
	DIRECTION:	forward, backward, upward, downward, sideward
	LEVEL:	high, medium, low, above, below
	PATHWAY:	straight (zigzag, square, triangle), curved (circle, spiral)

disabilities: 1) neurological dysfunction or brain impairment, 2) uneven growth patterns in skills, 3) difficulty in academic and learning tasks, and 4) discrepancy between achievement and potential. Unlike many traditional categories, learning disabilities cover a most heterogeneous group of symptoms and children may show any combination of the above characteristics.

#### **Project Curriculum Focus**

The project will center on basic perceptual-motor processes as they affect the child's ability to learn. The interrelationships between neurological dysfunction and behavioral disorders have been well documented. Early development is in part sensory-motor development; the learning disability child's main developmental struggle is

the effort to achieve stability in perceptions. Muscle skills and kinesthetic feedback are hypothesized by many theorists as the basis for all psychological phenomena, including thinking and reasoning; motor coordination training is seen as vital for the development of cognitive skills, as well as self-image and motivation (Sisson, 1967). Piaget (1952) and other developmental theorists stress the importance of sensory-motor schemata as the foundation for later abstract manipulations of the environment.

In view of these findings, the dearth of research relating education to functions of perception, memory, and motor skills (Wedell, 1973) limits understanding of the effects of perceptual and perceptual-motor deficiencies on the child's ability to understand his environment. It is of prime importance to investigate the contributions and deficiencies in current curricular approaches to the child with learning disabilities in the service setting, and to determine guidelines for modified and/or new approaches through actual use. Once determined, new approaches can serve as models for the preservice and inservice training of personnel, expanding both special classes and the capacities of regular teachers to meet the needs of special children in the normal classroom.

UCLA consultants Dr. Barbara Keogh, Special Education, and Dr. Jack Keogh, Physical Education, have been consulted in discussions with the project staff to clarify curriculum directions. They pointed out that one of the modes by which learning disability children are identified is in terms of deviations from the norm in descriptive movements. To a large extent, diagnostic screeners are analyzing the movements of children. A difference from the normal range often signals that something is wrong—a something that may be a learning disability. (See Chart 1.) For example, writing is a manipulative skill which could be analyzed according to time, force, shape, and flow. It takes place in space with direction, level, and pathway. Or an observer might evaluate a child's movements through such items as: Can he/she jump fast . . . heavily . . . rigidly . . . continually? Can he/she jump backwards . . . high . . . in a circle?

Learning to move involves the organization of enabling experiences. As the child progresses, learning to move becomes moving to learn. The child moves from simple stimulus responses and motor chaining, to higher forms of learning such as principle learning and problem solving.

The curriculum is not limited to one aspect or one type of learning. Dependent upon the organization, the emphasis is where the organizer places it. Within the current project, stress is being placed upon perceptual-motor programs. However, the social-emotional, language, and other cognitive development materials which are currently being utilized in the schools' programs are not being de-emphasized; instead the intentions of the project are to augment and increase, in breadth and depth, perceptual-motor activities, while integrating experiences from language and other areas within the scope and sequence of these activities.

Investigators for the B.E.H. contract are Dr. James R. Little and Dr. George A. Fargo. Dr. Lee Hansen Sisson is serving as full-time project director-planner. At Variety Club School, their occupational therapist, Ms. Amy Sugawa will coordinate the project along with their director, Mrs. Rose Lee. At Sultan School, their director, Mrs. Claire Kam will work with the project. The Department of Health has designated their learning disability specialist, Dr. Hilda Ornitz to help coordinate D.O.H. efforts in the project.

As requested by the Bureau of Education for the Handicapped, the first year of the project will focus on planning activities. The Advisory Council will assist in developing a planning/evaluation conference scheduled for early spring, 1975. At this time teachers and aides from Variety Club School, Sultan Easter Seal School, and the preschools contacted by the Department of Health in central rural Oahu will meet together with project personnel and B.E.H. consultants to help assess the impact of the steps taken, and evaluate and suggest future directions for the coming year.

Although there will be emphasis on examining and evaluating various curricular materials in the perceptual-motor area, and some pilot project services development, much of the first year's energies will be directed towards the thorough planning of second- and third-year activities on an expanded scale.

The second- and third-year programs are planned to emphasize the extension of screening techniques and the delivery of remediation services as well as upgrading school programs, teacher skills, and materials. Lines of communication and responsibility will need to be established, particularly if the project continues to expand in central rural Oahu. Tentative second year plans involve hiring a diagnostic team to

work with screening and assessment and to provide training for teachers and aides in screening techniques.

At the same time, other aides will be trained under the guidance of a diagnostic-prescriptive teacher, at the two project schools, learning to prescribe and utilize remediation activities with young children. Another aspect of the project will be the establishment of parent workshops to actually construct the modified curriculum materials that their children will be using. In many areas, supplies are limited and parental and community support in creating materials can contribute greatly to the success of newly developed centers.

The ramifications of this total process model are extensive. The outer islands are a first target. For example, on an outer island such as Molokai or Kauai, the agencies might differ but the process would remain the same. The local community college program might undertake the major portions of the teacher training and curricula development components. The developmental disabilities program could provide the diagnostic and prescriptive services to the children. The local Headstart program might function as the setting in which services were delivered.

Within the Pacific area, such a process might be adapted to the needs of a particular Micronesian locale. The possibilities are extensive but the goal remains the same—to guarantee to all children, regardless of the form of their disabilities, an opportunity to experience quality educational experiences, adapted to their special needs.

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