Describing a special education program for 15 American Indian youth at Leupp Boarding School on the Navajo reservation, this article details program components designed for the trainable mentally handicapped. The four levels of the program are identified as: (1) preacademic (development of self-care, social, and physical motor skills); (2) academic (Navajo and English language development, survival sight words, and auditory skills); (3) prevocational (development of number concepts, money concepts, and simple word assignments in preparation for future vocational training); (4) vocational-sheltered workshop (presently in the planning stages for 1975-76 school year). Utilizing individualized language programs based on development of listening, speaking, reading, and writing skills, the language development program is described in terms of: the acquisition of language for second language learners; language disorders; and delayed language development. The program's motor development activities are described as involving gross motor development; body image and body awareness; and fine motor development. On-going parental involvement is cited as an intrinsic part of the program, and evaluation data indicating program successes are presented in terms of percent of objectives completed (90% self-care; 99% behavior; 99% motor; 92% social; 85% health and safety; and 81% readiness). (JC)
Leupp Boarding School, located in the southwestern section of the Navajo Indian Reservation serves students residing within a forty mile radius. The Navajo people of this region live primarily in log hogans with mud chinking or small frame structures. The average annual income in this area of the reservation is less than $2,000.00, with the major source of earning derived from grazing small herds of sheep and cattle, which are not large enough to constitute self-sustaining economic units. Approximately seventy percent (70%) of the families in the Leupp service area, therefore, are receiving welfare benefits. Incidences of tuberculosis, alcoholism, and infant mortality are higher than the national averages. Concomitantly, the average life expectancy is below the national average.

Students who attend the school are defined as educationally disadvantaged since they function one or more years below grade level in the basic academic areas of language arts and mathematics, and require special educational assistance to raise their level of academic achievement. They are handicapped as a result of poverty, and non-Navajo cultural and linguistic factors. Regular school attendance is often sporadic, due to road conditions and the relative isolationism which exists in the area.

Approximately two thousand (2,000) children on the entire Navajo Reservation, categorized as trainable mentally handicapped, are functioning considerably below their chronological age in academic achievement. Fifteen (15) of the students whose intelligence range measures sixty (60) or below, as measured by the W.I.S.C. Performance Scale, are presently enrolled in an individualized instructional program at Leupp Boarding School. The major cause of their deficiencies is attributed to exogenous damage to the central nervous system resulting from malnutrition, spinal meningitis,
middle ear infections, and upper respiratory ailments. These appear to be the most common causes of the problem on the Reservation. The students, whose chronological ages range from six to thirteen years of age, have approximate mental ages of two to seven years. They also exhibit physical and mental handicaps, and emotional and social disturbances. None of the students were enrolled in school prior to the inception of the program in 1971. When the students entered the program, they were not toilet trained nor were they able to perform any of the other self-care skills required of school age children. Behavior problems ranged from aggressiveness to passivity and were complicated by bizarre ritualistic behaviors, seizures, visual and auditory problems, and aphasia. Those students who did possess language were monolingual speakers of Navajo.

The primary objective of the program, funded under Title I of the Elementary and Secondary Education Act is to provide each student the continual opportunity to arrive at his finest moment in the social, personal, physical, and academic areas. There are no fixed or arbitrary standards of measure that each student must attain. Individual behavioral objectives based on task analysis are established when the child enters the program. The behavioral objectives, written specifically for Navajo children, encompass all of the necessary skills to function at home, in school, and in society.

Programs follow a spiralling approach and are divided into four levels:

1. Pre-Academic stresses the development of self-care, social, and physical motor skills.

2. Academic emphasizes Navajo and English language development, survival sight words, and auditory skills;

3. Pre-Vocational includes the development of number concepts, money and simple word assignments, in preparation for future vocational training; and,

4. Vocational-sheltered workshop program enables the students to function as productive members of society. At present, there are no sheltered workshops on the Navajo Reservation and the students travel to Winslow or Flagstaff, Arizona for this training.
The need for a sheltered workshop on the Navajo Reservation, in which the students are able to function in a setting closely resembling their home environment and native language has been recognized by the Navajo Area Division of Education of the Bureau of Indian Affairs. Program development is presently in the planning stages and it is expected that a sheltered workshop to serve approximately fifty (50) students, will be funded under Title I during the 1975-1976 school year.

Language and physical motor skills are stressed at all levels of development in the present program. The language development program considers the acquisition of language for second language learners, language disorders, and delayed language development. Students are involved in individualized language programs founded on the hierarchy of language skills: listening, speaking, reading and writing.

Instructional areas in listening include:

1. auditory perception of non-language sounds to develop an awareness of sounds, sound contrasts, the location of sounds, and sound associations;
2. the discrimination of isolated language sounds necessary for reading readiness;
3. understanding words and concepts, and building a listening vocabulary;
4. structured practice in understanding sentences and comprehending language;
5. the development of auditory memory to store and retrieve experiences; and
6. the development of listening comprehension skills—listening for details, auditory sequencing, and following directions.

Instructional areas in speaking stress a developmental approach to language acquisition; building a speech vocabulary, producing speech sounds, internalizing language structures, formulating sentences, and practicing oral language skills.

The development of reading skills stresses a multisensory approach to reading readiness, sound-symbol association, left to right
directionality, and the acquisition of a crucial sight vocabulary. The children utilize the visual, auditory, kinesthetic and tactile modalities to stimulate several areas of sensory input and to reinforce the acquisition of graphic language symbols.

The writing program at present concentrates on the correct graphic form for each letter and word, the correct manipulation of the writing instrument to produce letter shapes, the integration of complex eye-hand relationships, and the development of visual motor memory.

Visual perception training is closely allied with the development of language skills. Instructional areas include:

1. the development of spatial relationships necessary for seeing words as separate entities in reading;
2. visual discrimination skills to enable the students to differentiate visually, between letters and words;
3. figure ground discrimination to enable students to distinguish objects from the surrounding background;
4. visual closure skills to identify an object, despite the fact that the total stimulus is not present, and
5. object recognition of geometric shapes, alphabetic letters and numbers, and words.

Activities for motor development are concerned with

1. gross motor activities to develop smoother, more effective body movement, and add to the child’s sense of spatial orientation and body consciousness;
2. body image and body awareness to assist the child in developing accurate images of the location and function of body parts; and
3. fine motor activities to develop eye-hand coordination and ocular control.

The students also participate in swimming and gymnastic lessons provided by students of special education at a nearby university.

The nature of the program at present necessitates residential care in a segregated environment to provide a total educational
setting for the child, his peers and his parents. The program is located in a remodeled dormitory wing at the school. Facilities consist of a classroom area and activity center, and a dormitory wing for residential care and the homeliving program.

Parental involvement in the program is on-going. Parents visit and observe the program, and counsel with academic personnel about the personal, physical and social needs of their children. They assist in the program on a voluntary basis and help to reinforce the skills of home training. They are involved in workshops, conducted during the school year, by university consultants and special education personnel, to assist them in guiding their children in social and family relationships.

Evaluation reflects the nature of the program and is based on the attainment of specific objectives developed for each child. Those students who are more advanced have entered a readiness program and have begun work on developing a sight vocabulary through experience charts, the more complex English language patterns, and number concept and skill development.

Successful progress in the program of physical motor development, the primary purpose of which is to establish cerebral dominance, indicates that the majority of the students will enter a readiness program prior to the end of the school year.

Evaluation data, based on the attainment of specific behavioral tasks, indicate that the students have successfully completed the individual objectives outlined for them.

<table>
<thead>
<tr>
<th>Area of Skill Development</th>
<th>% of Objectives Completed</th>
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</thead>
<tbody>
<tr>
<td>Self Care</td>
<td>90%</td>
</tr>
<tr>
<td>Behavior</td>
<td>99%</td>
</tr>
<tr>
<td>Motor</td>
<td>99%</td>
</tr>
<tr>
<td>Social</td>
<td>92%</td>
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<tr>
<td>Health and Safety</td>
<td>85%</td>
</tr>
<tr>
<td>Readiness</td>
<td>81%</td>
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</tbody>
</table>

Current research and programs such as that operating for Navajo students at Leupp Boarding School clearly indicate that trainable mentally handicapped children can and do learn. The future, therefore, holds great promise for them in the area of vocational training and maximum self-realization.