

VOCATIONAL PLANNING FOR THE APHASIC ADOLESCENT – A CRITICAL NEED

JUNE B. MULLINS, Ph.D.

Introduction

Residential schools for the deaf have become involved in problems of aphasia because a certain number of their population, showing good intelligence in non-language spheres; and with communication disorders presumed to be deafness, do not respond well to methods of teaching the deaf.

Proliferation of services for aphasic children has attended increasing recognition of this group as a diagnostic entity.

As Rooney (1945, p. 2) states, "Of all the services of an educational system, the school for the deaf is best equipped to handle the aphasic child."

However, Vernon (1967) has pointed out the presence of aphasia or aphasoid disorders among the deaf is a rarely mentioned and little understood subject, probably because of the difficulty of making the diagnosis. "Aphasoid involvements are almost invisible in deaf children, despite their extreme importance. Greater attention must be focused upon their recognition, prevention and treatment (p. 14)."

Recent statistics and studies concerning the aphasic deaf child have indicated that this kind of child represents an important percentage of the present young deaf population.

The vocational needs and potentials of these children may not be realizable within the context of traditional programs provided for deaf individuals. Careful assessment and planning now can prevent a crisis adult in need of vocational and rehabilitation services.

Definition of Aphasia

In a survey of public residential schools for the deaf in the United States (Mullins, 1969) a definition of aphasia was offered which was essentially acceptable to respondents from 18 schools which have established programs for aphasic children:

A child was regarded as aphasic who had difficulty either expressing or understanding language symbols, or both, and whose problem was not primarily the result of peripheral hearing loss, over-all intellectual deficiency, defects in the speech mechanisms, or emotional maladjustment.

Problems distinguishing aphasic children from deaf children were also mentioned in the areas of visual, motor and auditory perception, emotional and behavioral problems, in addition to problems in linguistic function.

Prevalence

A comparison of statistics in the *American Annals of the Deaf* (1955, 1960) shows a rise in neurologically impaired children from 593 in 1954 to 1,293 in 1959. Frisina (1955) studied populations of three mid-western residential schools for the deaf and hypothesized that from .8 per cent to 2 per cent of the population were aphasic, psychotic, or cerebral palsied. Frisina's estimate of the prevalence of aphasic is probably too low, judging from other evidence.

Vernon (1966) has established the prevalence of four etiologies, maternal rubella, meningitis, prematurity and RH factor with multiply disabled deaf in a study of 1,468 cases. Aphasoid disorders or aphasia are among the sequelae associated with each etiology.

It is unclear whether there has been an actual increase of aphasia children in schools for the deaf, or whether refined diagnostic techniques and emphases have redefined the usual population. In either case, schools for the deaf are increasingly cognizant of aphasic children in their populations, and are attempting, to a greater or lesser extent, to meet the special educational needs of these children.

According to Kent (1957) increasing numbers of such children are applying for admissions to schools for the deaf. It is possible, however, that refinement of diagnosis as well as greater sophistication on the part of teachers and clinicians accounts for the apparent increase in this diagnostic category (Myklebust, 1954).

Educational Programs for Aphasic Children

The *Volta Review* periodically publishes a list of facilities for preschool children with severe hearing impairment covering the 50 United States and the provinces of Canada. Over three hundred facilities are listed. Of these, 126 have programs including aphasic children.

Two-thirds of the public resident schools for the deaf in the United States reported the presence of some aphasic children in their population in Mullins' study (1969). The total population in the 18 schools with special educational provisions for aphasic children was 5,193, with approximately 10 per cent of the number described as aphasic rather than deaf.

Thirteen schools with special programs had waiting lists for aphasic children. The trend, as apparent in the study, is toward admission of more aphasic children into schools for the deaf with an increasing establishment of special programs and an expansion of existing special programs.

Mullins (1969) study showed that special programs for aphasic children are usually provided at the primary grade level. Aphasics are integrated with the deaf in the middle grades. All reporting schools have modified physical plant

and instructional materials to some extent to accommodate to the special needs of aphasic children. One school has added an entire building for its aphasic group. Equipment modifications are common.

Few schools have enough graduates of special programs to ascertain their vocational competence as compared with deaf children in the usual kinds of vocational training experiences offered in schools for the deaf. Exploration of secondary educational and vocational potentialities of aphasic children will become critical, as more children graduate from the special programs. It would seem quite likely that modifications will have to be made in this area, just as they were in the primary and middle grade programs.

Vocational Training for Aphasic Children

Highly developed and carefully structured vocational programs have been instituted in some of the schools for the deaf. These programs have incorporated technical processes such as key punching, printing and precise wood and metal working. Much care has been taken in planning the programs of instruction for the development of technical skills of deaf young people. For those deaf people who are not intellectually able to become master technicians there are such courses as garage mechanics, shoe repair, sewing and furniture refinishing.

Interviews conducted by Mullins (1968) with staff people in vocational training of the deaf indicated that the aphasic children are not generally successful in the more advanced programs. They are remarked to be too clumsy or perceptually disorganized to be trusted with complicated and potentially dangerous machinery. They do not appear intellectually able to follow the training programs which were reformulated and adapted to the deaf. Consequently they are often relegated to janitorial tasks. Doubt has been expressed that they will have the social or intellectual maturity ever to enter the world of work. This type of judgment may well be too hasty, and based on false assumptions.

If the premise is adopted that aphasia is a disability different from deafness, it should not be of particular surprise that aphasic people do not benefit fully from a program highly specialized for the deaf, or even for the retarded deaf.

A vocational program truly designed for aphasic people must begin by assessing the capacities and deficiencies of aphasic young people rather than deaf people in order to do a successful job of human engineering.

Inasmuch as the problems commonly associated with aphasia are varied in kind and intensity, particular care should be taken to fit the program, and the job, to the individual. Some tentative guidelines for selection of types of training programs, jobs and modifications are suggested below:

Among the characteristics of aphasic children frequently mentioned by respondents in the survey of Mullins (1969) was high ability in non-verbal parts of intelligence tests, referred to as performance scores on the WISC, as opposed to low ability on verbal parts of such tests. Also, aphasic individuals show wide discrepancies in their ability to learn and respond between the visual and auditory modalities. For example, some may respond far better to the printed than spoken word, or to illustrative pictures and diagrams.

Training programs should be flexible enough to adapt to these different learning styles. It would seem to follow that some aphasic people might learn better in a training program which minimized verbal aspects and, instead, used diagrammatic and demonstration methods of teaching. Some might need instruction which combines pictures, oral and written instruction. Evaluation techniques using work samples rather than oral or written tests should be considered.

On the other hand, respondents usually remarked on such characteristics of aphasic children as poor muscular coordination, poor body image and poor eye hand coordination, which would probably cause depressed scores in true performance tests, such as Purdue Peg Board, indicating

degree of fine manual dexterity, or Minnesota Rate of Manipulation Test, for gross arm and hand dexterity, or Minnesota Form Board, measuring aptitude on special relationships. Individuals should be tested in these areas to determine if they can handle machinery and materials which require a high degree of speed and dexterity to operate.

Summary

Aphasic children have become an increasing concern to schools for the deaf. As an increase in the percentage of aphasics has been reported, specialized educational programs have been developed to meet the special needs of these children. As the present population grows toward young adulthood, the need for vocational and rehabilitation services will become critical.

In those vocational programs which have accepted aphasic children, there is a feeling that aphasic children are too different in abilities from deaf children to profit from the prevocational and vocational programs in schools in the deaf, as they are now administered. Guidelines emphasizing the necessity for individualizing training programs for aphasic young people have been offered. Assessment of non-verbal intellectual abilities, of sensory avenues of least impairment, of learning styles, and of perceptual skills will be necessary for the creation of a successful vocational program for the aphasic young adult.

BIBLIOGRAPHY

- Doctor, Powie (ed.), Summary of Schools and Classes for the Deaf in the United States, *American Annals of the Deaf*, 1955, Vol. C, p. 151.
- Summary of Schools and Classes for the Deaf in the United States, *American Annals of the Deaf*, 1960, Vol. CV, pp. 156-160.
- Frisina, D. R., "A Psychological Study of the Mentally Retarded Deaf Child", (unpublished Doctoral dissertation, Northwestern University, 1955).

- Kent, Margaret S., "The Aphasic Child in a Residential School for the Deaf", Frederick, Maryland: Printed by pupils of the Maryland School for the Deaf, 1957.
- Mullins, June B., "Provisions for the Education of Aphasic Children in Public Residential Schools for the Deaf in the United States", (unpublished Doctoral dissertation, University of Pittsburgh, 1968.
- "Provisions for Aphasic Children in Public Residential Schools for the Deaf in the United States", *American Annals of the Deaf*, March, 1969.
- Myklbust, H. R., *Auditory Disorders in Children: A Manual for Differential Diagnosis*, New York: Grune and Stratton, Inc., 1954.
- Rooney, Alice G., "An Aphasic Child in a School for the Deaf", *Volta Review*, XLVII, 1945.
- Vernon, McKay, "The Brain Injured (Neurologically Impaired) Child: A Discussion of the Significance of the Problem, Its Symptoms and Causes in Deaf Children," *American Annals of the Deaf*, CVI, 239-250, 1961.
- "Multiply Handicapped Deaf Children: The Causes, Manifestations and Significances of the Problem". Paper given at the International Conference on the Oral Education of the Deaf. New York City, June 24, 1967.
- Volta Review*, "Schools and Classes for Deaf Children Under Six." 1963 Edition, Reprint No. 788. Alexander Graham Bell Association for the Deaf, Washington, D. C.