## A NEW ROLE FOR ORTHOPTICS

Jan Alexander Presented in Sydney, 1971

Frostig reading methods are now being introduced into schools in N.S.W. This method, of American origin, is called the Development Programme in Visual Perception and is described by the promoters, as a "break-through in literacy." It consists of three series of pictures and patterns: Beginner, Intermediate and Advanced.

The books which describe the method, define visual perception and visual motor co-ordination in a manner which seems to refer to normal neurological development of the whole body. Dr. Leckie and I can find no reference to binocular vision or abnormalities of binocular function in these books.

I became involved with the Frostig method when approached by a remedial reading teacher, in private practice in Bathurst, who was worried by the way a child she was teaching was responding to the Frostig exercises. His eyes became red, he rubbed them excessively and was worried by small print.

The boy, N.W. aged 8 years, had been refracted by Dr. Leckie 5 months previously and was found to have no refractive error. Dr. Leckie agreed to his having an orthoptic examination.

This child, according to the representative from the Guidance Department, had an abnormal growth pattern and no visual motor co-ordination.

Cover Test distance: steady

Cover Test near: exophoria to L.D.S.

Convergence near point: 12 inches; with effort and the left eye failing.

Visual acuity: R.E. 6/6-2 L.E. 6/9

Worth's lights: 4

Maddox wing: exophoria 2% and blurred.

**Synoptophere** angles were -IR/L  $1^{\Delta}$ , fusion was held to  $+5^{\circ}$  and to  $-3^{\circ}$  and there was deep left suppression, stereopsis was appreciated, correspondence was normal. Part-time occlusion of the right eye after school was advised. One week later the vision was equal, 6/6-2, the left eye being slightly slower. Theteafter he attended for orthoptic treatment, involving elimination of his left suppression and improvement of convergence. After 6 treatments he was satisfactory.

His remedial teacher reported that there had been a marked improvement in his reading and stated that he is not a "brilliant" child but has progressed from being a non-reader to one who can read lengthy stories.

Four other children who had similar reading problems and showed ocular defects for near have been treated and these also have shown improvement in general school work as well as in reading.

I do not pretend to understand reading procedure - it is not my field - but as an orthoptist, I am amazed that such a method can be introduced and embarked upon without first eliminating the possibility of obstacles such as brain damage, congenital word blindness, refractive errors and abnormalities of binocular function, including convergence insufficiency.

I would like to thank Dr. T.D. Leckie for letting me present this case.

## PRELIMINARY REVIEW OF 325 CONSECUTIVE CASES OF LEARNING DIFFICULTY

Patricia Dunlop, D.B.O. (London)

Presented at Canberra, April 1973 Annual Orthoptic Conference.

Children with learning difficulties are sent for eye investigation when authorities suspect a visual impairment of some kind - motor, sensory or perceptual, or when a child who is not performing for some reason, such as mental retardation, brain damage or aphasia may need to be examined to see whether there is also a visual problem, which, if treated, might make the general outlook brighter.

This is a preliminary review of 325 such cases seen during the past 18 months.

The main problem was failure to **learn** at a rate comparable to other children of the same age, or failure to **achieve** to the level of their intelligence.

This was manifested by a problem of inco-ordination, generally; poor reading or lack of fluent reading, e.g. skipping words, losing the place, difficulty in progressing from one line to the next; untidy writing; poor spelling; reversals e.g. b and d; p and q; was and saw; etc., and more rarely inversions e.g. b and p; n and u; 'and sequencing, making spelling difficult. Most of the children were failing in reading and associated skills although many were good at maths. Some were behind in all phases of learning (51 cases).

The group of 325 included 255 males and 70 females - a ratio of 3.5:1, the mean age was 10.02 years - varying between 4½ years and 21 years of age. This is a biased sample of children with learning difficulties, as they were all suspected of having a component of visual defect in their problem at the time of referral. All were seen as private patients, except two groups, (1) 15 Primary School children, (2) 19 High School children, who had participated in two research projects during that time. No. 1 group was specially selected as having specific developmental dyslexia, age variation between 8 years and 12 years. This study has been accepted for publication in Cortex. No. 2 group (aged between 12 years and 15 years) was specially selected by their remedial teacher as probably having a visual difficulty but not necessarily having specific dyslexia or signs of reversal and confusion. Reversal is not generally a problem at high school age but sequencing and adequate form perception have still to be coped with. This study was undertaken for Mr. E. Gray, Director of Education for the Newcastle area.