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# Remediation of Reading, Spelling, and Comprehension

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## INTRODUCTION

As a qualified teacher, trainer and psychologist with a background of over 25 years in special education, school counselling, educational psychology and neuropsychophysiology, I provide full hands on teaching to children and adults in need of specialised and individualised remedial teaching.

I initially learned the Lindamood-Bell method 13 years ago, in training courses authorised by Lindamood-Bell Learning Processes in Australia and in San Luis, Obispo, California. It was found that the methods, whilst suited to the needs of American students, required substantial modifications and additions for those individuals experiencing reading, spelling and comprehension difficulties here in Australia. Later, the Spalding Method was added, and this too was modified extensively to suit Australian demographic needs.

It has been my experience in clinical practice that there is no "single programme" or "package" available which can be used "as directed" given the diverse needs of people with learning difficulties and associated comorbidities. Therefore a multi-modal, eclectic approach has been adopted.

## READING STRATEGIES

For decades people have searched for that vital component to explain why some children learn to read easily and why others struggle. There have been many contenders as to the "cause" of reading success or failure: intelligence, visual perception, and most recently language ability.

Although language ability and intelligence have some predictive value, children with excellent language abilities and high IQ's still have difficulty with reading. These problem readers became the "Learning Disabled" (LD) population in succeeding classes.

During the 1980's, phonological awareness - the ability to retain auditory information and distinguish the identity, number, and sequence of sounds in words - proved of greater predictive value in reading success than previously examined areas.

The Lindamood method is based on the premise that many LD children (85%) have an inability to remember what they hear. The authors refer to this as an ***"incompletely developed auditory conceptual function"***. The primary cause is neurophysiological and it appears randomly in $^{1}/_{3}$ of the general population, without apparent linkage to race, sex, cultural factors such as education and socio-economic class, or even intelligence.

Disabled readers have great problems with decoding sounds (ie reading), vocabulary development, auditory memory for reproducing sound segments (i.e. encoding) and grammatical and syntactic differences among words and sentences. The disability initially involves only a phonological processing difficulty, but by the end of first grade those who cannot sound out words do not learn new vocabulary or content knowledge either. They experience the "Matthew effect' (Stanovich 1986), i.e. the good readers get better and the poor readers get poorer. Recent research supports the theory that "language deficits lie at the core of most cases of developmental dyslexia" (Catts 1989).

It often seems that such people are not paying attention because they add, omit, or substitute sounds or letters when talking, reading or spelling. Because they are unable to judge sounds in words, they can't tell whether what they say matches what they see or hear.


When auditory conceptualisation is developed, a person is able to make judgement about sounds in words. They become self-monitoring and self-correcting in reading, spelling and speaking. It has been found that intensive auditory stimulation for adults with lifelong reading and spelling difficulties is also consistently effective.

The basis of auditory conceptualisation is the organisation and labelling of sound, plus the feeling and hearing of sounds. Encouraging the student to feel the motor input from the action of the lips, tongue and mouth in producing speech sounds gives the sounds an additional dimension. The sequence of the sound-letter relationship dealt with in reading and spelling can be verified by this additional feedback.

Feature and letter recognition; spatial placement; orthographic; lexical; syntactic and semantics are taught by direct instruction methods, for example the correct hand movements required for letter formation (muscular memory). Through this functional and integrated teaching approach cerebral integration is encouraged, enabling the recognition of letter patterns and the concept of the unity of single words.

When both cerebral hemispheres interact, auditory, visual and motor information is integrated. This allows children or adults to become self-correcting readers and spellers because they THINK about how to read and spell. Once a base of auditory-perceptual judgement has been established, individuals with learning difficulties can be taught the rules of spelling therefore building the skills to attack the tasks of reading, spelling and speaking in an organised, coherent manner.

These approaches to teaching reading, spelling and comprehension are directed toward a persons inherent strengths to correct the weakness, proving particularly effective with those students who have failed to learn to read and spell with all other approaches.

## COMPREHENSION STRATEGIES

The only reason we read is to obtain or extract meaning from print. However, there are many individuals who have a weakness in reading comprehension and find that "the words go in one ear and out the other" forcing them to re-read material many times. What is the process involved in language comprehension?

**Visual Imagery:** is the process basic to reading comprehension, oral language comprehension, and/or written language expression. Individuals with a weakness in comprehension do not create mental images of the words and concepts presented. Instead of processing the "whole" or ***"gestalt"*** of the information presented, they tend to connect only to "parts" of what they read or hear.

Such individuals may present with some or all of the following characteristics: weak oral/written expression; weak reading/written comprehension; weak writing skills-poor organisation, unfocused, sees only parts not the gestalt; reading/spelling problems, poor social skills; weak sense of humour; poor at following directions, poor concentration; difficulty understanding cause and effect; poor sequencing ability-difficulty ordering or sequencing information; confusion when presented with multiple bits of information; misinterpretation of the actions or intention of others; inability to abstract-missing the point and taking information literally not symbolically; slow in processing information-slow reaction time, takes a long time talking/writing; and finally poor short term memory.

Research from both cognitive psychology and reading supports the idea that imagery is related to language comprehension. Images are the means by which we connect to language. Aristotle in 348 B.C. said -"It is impossible to even think without a mental picture" - and it appears that the evolution of images is a kind of intermediate between that of the perceptions and that of the intelligence.

Comprehension is more than remembering and understanding - it is "critical thinking", that is it requires questioning and connecting. It is the ability to recall, relate, and reorganise. It is the process of organising and relating new information to one's previous knowledge and experience. When individuals generate images for what they are encountering, their images assist them in transferring and linking meaning from old information to new, and new information to old. Therefore, **"comprehension and critical thinking are a generative process with imagery as the foundation and sensory connector"**.


Teaching students to visualise concepts (imagery training) and having them verbalise what is visualised significantly develops language comprehension. The imaging process moves from small units of language (a word) to larger units of language (sentences, paragraphs, pages, chapters). Verbalising requires the organisation of language and the imposition of a logical structure or framework. Visualising incoming information allows us to remember information in sequence and "see" how different parts relate to each other.

These methods have proved powerful remediation tools especially for those LD children who have failed in learning to read, spell, and comprehend language with all other approaches.

## REFERENCES

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2. Bell, N., (1991) Visualising and Verbalising For Language Comprehension and Thinking.

3. Spalding, R.D., & Spalding W.T. (1990) The Writing Road To Reading. Quill William Morrow, New York

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