

LITERACY... RELATES TO CENTRAL AUDITORY PROCESSING

Literacy is further complicated when there are **Central Auditory Processing (C.A.P) Difficulties**.

The relationship between hearing sounds and understanding that literacy is closely related has been discussed in the past couple of articles.

The term Central Auditory Processing refers to a breakdown in the auditory system at a point somewhere along the nerve pathways that take auditory information from the inner ear to the brain.

Sounds enter our ear through the ear canal (outer ear). These sounds are amplified in the middle ear and then in the inner ear are changed into electrical impulses which are sent along the nerve pathways up to the brain. By the time the nerve impulses reach the brain, we have been able to attach **meaning** onto the sounds we have heard.

Central Auditory Processing allows us to make sense of spoken instructions. It allows us to "screen" the important auditory information (e.g., teacher giving instructions in the classroom) from the irrelevant information (e.g., traffic noise).

Central Auditory Processing also allows us to understand how spoken words can be broken up into individual sounds and the order in which sounds are organised. These skills are necessary for developing reading and spelling. Children with poor auditory processing skills often find learning to read and spell very difficult.

Central Auditory Processing also allows us to have an intact auditory short-term memory. That is, the ability to keep spoken words in our memory long enough to analyse them, compare them and manipulate them.

Children who have Central Auditory Processing difficulties find it difficult to understand long and complex sentences, particularly when there is some background noise present. This is seen very clearly in the classroom. They can be expected to miss or misunderstand parts of conversation or instructions.

An Audiologist or a Speech Pathologist with specific training is the professional who tests for Central Auditory Processing difficulties.

Speech Pathologists usually see children with Central Auditory Processing difficulties due to the significant negative effects this disorder can have on a child's listening, comprehension and reading and spelling.

If a child is diagnosed with Central Auditory Processing difficulties, then these suggestions should help the child in the classroom:

- sitting the child towards the front
- reducing or eliminating background noise and avoiding open plan classrooms,
- providing extra visual cues (e.g., drawing a plan on the board or writing the information down)
- checking to see whether the child has understood your instruction