1. Language and ADHD

Although speech and learning disorders are common in children with ADHD (about 20% have reading difficulties and 60% have serious handwriting problems), the disorder does not affect intelligence. People with the problem span the same IQ range as the general population. It was suggested, however, that 90% of ADHD children were underachievers and that half were held back at least once. The child or adolescent with ADHD and learning problems will often present to the Speech Language Pathologist with a complex range of clinical problems, covering all the modalities of language, that are contributing to the learning disorder. Typically problems are experienced in:
Syntax: Disorders of oral and written grammar, difficulties using and / or comprehending the structural components of sentences.

Semantics: Problems with word meanings and organization, including difficulties comprehending written and spoken language, poor vocabulary, word-finding difficulties and difficulties using context to help with the comprehension of reading.

Pragmatics: The social use of language - the ability to use language as a means to interact with others socially or for a specific purpose (requesting information, expressing feelings, holding a conversation with people of different age levels).

Metalinguistics: The ability to reflect on language objectively, to understand language as a rule-bound code, to use humour, multimeaning in words, ambiguity, figurative language (metaphors), ability to segment words into syllables or sounds.

Auditory processing: Related problems in the areas of speed of processing, auditory memory, auditory attention, processing of auditory information, auditory analysis and auditory discrimination, with subsequent difficulties in tasks such as following directions or getting information from reading and listening.

Metacognition: Difficulties in the ability to think about thinking in general, to know what you know and to understand what you need to know in order to learn effectively, with subsequent impairment in the strategies involved in problem solving.

What makes the ADHD child with a language problem different to other children with language problems? The child with ADHD is more likely to have language processing difficulties than a simple language delay. There may be no early developmental history of speech and language problems, and the language problems may only become apparent during school years, especially in the clever, gifted students with subtle language problems and ADHD. In particular, the ADHD child with language problems can experience:

- Auditory processing difficulties such as: short-term auditory memory weakness, problems following instructions, slow speed of processing written and spoken language, difficulties listening in distracting environments (the classroom), problems in listening for information when someone is talking or reading expecting them to listen, missing out on details, or getting the details but without grasping the ‘main idea’, problems in reading comprehension
- Language difficulties related to impulsivity and poor organizational skills resulting in: problems with classroom discourse, poor writing skills, tangential narratives and conversations, word-finding problems, difficulties inferring meaning - ‘looking beyond the obvious’, problems with generative language, social language problems

1. Learning strategies and ADHD

The student with ADHD is likely to have difficulties with the learning style supported by the school system - that of being a good listener, being able to sit and focus for extended periods of time and of having good reading and oral language skills. Children learn by their individual learning styles and teachers tend to teach in a way that complements their own learning style. This is one reason children may learn well with one teacher and not another. Children with language difficulties are often unaware of their own thinking and learning processes; they either do not know that there are certain strategies that can be used to help their learning or they use the wrong strategies for their particular learning style.

The use of learning styles as a diagnostic tool gives an added dimension to the role of the Speech Language Pathologist working with school-aged children and adolescents. Considering learning styles broadens the
approaches taken in intervention and helps in the development of strategies for the general management of language-related problems. Analyzing the child’s learning style can give invaluable information to help you understand how best to support the child’s learning. Some common characteristics of these learning styles are:

**Visual learners**
- Learn best by looking, watching and observing, seeing how things are done
- Enjoy poster, visual overhead, colours and videos
- Doodle and draw, use information mapping systems, visualize inside their heads

**Auditory learners**
- Learn well by listening and communicating with others, from audiotapes
- Learn through rhythm and rhyme
- Have good auditory discrimination and auditory attack skills for reading
- Learn languages easily

**Kinaesthetic learners**
- Use their hands, feelings and whole bodies to learn
- Create things, make things, pull things apart and rebuild them

**Print-orientated learners**
- Read and write to learn and for pleasure, have good reading comprehension
- Interactive learners
- Learn well by interacting with others, from discussion and dialogue
- Group work and co-operative learning, social flexibility, ability to lead/ follow

Children with school-based learning difficulties are often deficient in one or more of these learning modalities and need to focus their learning on the area that is their greatest strength - as well as building up the weaker areas. Typically, the child with ADHD and language problems struggles with the auditory and print-orientated styles of learning. Interestingly, some who struggle with visual learning also have language-based problems - usually related to organization, planning and overall ‘whole picture’ understanding of language-based skills.

**Strategies to help children with language processing problems**

- ‘Pulse style’ approach to learning: this is very useful in children with ADHD, can be applied to any learning task and is a great way to get optimal learning happening (see also Picture 1)
- Classroom and parent management strategies
  - Teaching to learn styles. If the ADHD student with a language disorder has problems with a particular style of learning e.g. auditory learning, try to work with their most successful learning style in order to support the weaker style. For example, a student with weak auditory learning skills and strong kinaesthetic skills benefits from being physically involved in the learning process. If the class is doing a ‘listening type task’ it would be helpful if the ADHD child was demonstrating something or holding something rather than just ‘listening’. It is also very difficult for the poor listener to cope with comments like ‘I am only going to say this once!’ - the added anxiety this causes makes the learning even harder.

This means doing things like: ...Read for 10 minutes, move around for 2 minutes, then write for 10 minutes...
References:


