How Does Processing Speed Impact Academics?



How does processing speed impact academics? Processing speed involves the ability to process information without quickly, requiring significant amount of effortful thinking. Individuals with slow processing speed require more time than their peers to make sense of the information with which they have been presented. For example, a child with slow processing speed may take a long time to make decisions, and/or have difficulty performing tasks within a

time limit. Processing speed issues may involve writing, speaking, or formulating responses. It may also involve delays in inputting information into the brain, internal processing and thinking, and output of an answer. At school, a child with slow processing speed may require more time than other children when reading a passage quietly, taking tests, writing sentences, or completing math problems. Slow processing may also result in homework taking hours, rather than minutes, to complete. It is important to note that children with slow processing speed may not necessarily have difficulty with comprehension, or have lower intelligence than their peers. However, their delayed processing makes it difficult for such children to demonstrate their knowledge. Assessing processing speed is usually done using tests that require the individual to perform a simple task within a time limit (e.g., Coding or Symbol Search subtests within the Wechsler Intelligence Scale for Children IV and Wechsler Adult Intelligence Scale IV; Denckla Cancellation Tests). Additionally, some tests involve writing sentences within a time limit.

For More Information Regarding Processing Speed, Informative Articles are Provided Below:

How does processing speed affect learning?: This article explains the importance of processing speed for children, as well as the different types of processing speed. PROCESSING SPEED, WORKING MEMORY, AND FLUID INTELLIGENCE: Evidence for a Developmental Cascade: This article is a research report from Washington University, and it assess the difference in processing speed, working memory capacity, and fluid intelligence in young children, adolescents and young adults. It explains and discusses the results. Children's Arithmetical Difficulties: Contributions from Processing Speed, Item Identification, and Short-Term Memory: This article discusses the difficulties in arithmetic that children face. It explains how and why processing speed, identification, and short-term memory are all contributing factors to why children have difficulty with arithmetic. Coping With Slow Processing Speed At Home And At School: This website explains to parents the difficulties their child may be having in school while having slow processing speed. It explains how parents can help their child to handle having slow processing speed while in school. Intro To Processing Speed: This website explains to parents a detailed introduction to processing speed, and what they should know about handling their children who suffer with slow processing speed. Photo Credit: Kristine Lewis / CC BY-SA 2.0