**Working memory in reading comprehension**

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Nowadays, students have started to get lower results than what they are supposed to obtain considering the opportunities that they have for getting a good education. For many years, math and language have been considered the main subjects to learn about at school, but students keep getting low results even though they have undergone psychological treatments because teachers and parents mainly relate low grades with attentional disorders and not to what the real problem might be about: memory capacity (Madruga & Corte, 2008). Academic results not always depend on the attention of students, but sometimes it is affected by a poor working memory; which is directly related to a deficiency in complex cognitive skills, it might not be trained for receiving information and at the same time remembering the old one, and it is also affected because of the susceptibility that it possesses.

In first place, a low working memory would directly affect cognitive capabilities that are related to academic learning processes, taking into account that students need to recall what they already know to ease the process of acquiring new knowledge. Next, it is important to explain that Memory is the capability of holding whole –or at least as much as it is necessary- the new information and recalling some events that occurred in the past, through storage processes and recovering of information, These processes are the basis of learning and thinking development (Etchepareborda; Abad-Mas, 2005). The traditional Model of Memory developed by Atkinson and Shriffin (1986), involves three basic components: the sensory register –where sensory information enters into the memory storage-, the short-term store (STS) and the long-term store –where information that has previously rehearsed by the STS is indefinitely held (Atkinson and Shriffin, 1968). The short-term memory is also known as Working Memory and it is considered to be the one in charge of retrieving old information.

Secondly, retaining and retrieving saved information might become a hard task for kids that have never trained their memory, or do not even know they have these problems. As it is described by Atkinson and Shriffin (1968), short-term memory is where the input from sensory register is received and held, but itis also where the information is recalled from the long-term memory. Furthermore, the information held by the short-term store is assumed to decay and disappear completely in little time, but at the same time this component is known for being the responsible of activities that imply different tasks development in order to achieve just one objective, including problem solving, reasoning and also language comprehension. (Baddeley, Hitch and Bower, 1974). Then, once the stimulus is received, it is immediately transferred to the working memory. This process makes us able to retain the data, compare, contrast and create relationships with old knowledge already saved in the long-term store. As a consequence, researchers Etchepareborda and Abad-Mas (2005) stipulate that the working memory is the one in charge of selecting and manipulating the needed information for developing cognitive processes.

Baddeley (1983), stablishes that the working memory allows us to remember all the previous events and knowledge we were already taught, but the capacity of this component of the memory system is limited and extremely susceptible to external interference, being always “open” to receive new information. As this storage is so sensitive and is able to take in almost everything that is received by the sensory register, sometimes some people might get distracted by external factors. In other situations, as it was mentioned before, few children start having difficulties when it comes to retain huge amounts of information at the same time. According to Madruga and Corte (2008), if these children are not treated as they are supposed to be, or they do not train this working memory through computer programmes or practice, they develop more serious difficulties once they grow up and when they start school they cannot follow instructions neither retain the information for a long time for completing the assignments given.

Concluding, in order to understand and to be prepare for facing these situations, it is necessary to keep in mind that the first place where this needs to be overcome is at home. Parents must prepare their children for being able to retain extra information at the same time and train them to stay focus on one task once they already started it. Then, teachers must be ready to deal with this problem if students cannot deal with multi task assignments and not to overload their classes with unnecessary information and to keep in mind several strategies to apply when it is needed. If the student or the people around him or her are able to recognize this problem and not to confuse it with another one, a change might occur and there might be some progress.

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