

Inclusive Technologies for Cognitive Support

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In schools, universities, and business training situations we see students with cognitive disability who often struggle with traditional learning environments and teaching methods. This cognitive disability may be due to a numbers of causes. It might, for example, be permanent due to neurological issues, temporary due to accident, or acquired due to aging or brain injury. Regardless of cause, such cognitive disability can be supported through the use of inclusive technologies. Computers and mobile devices, with their increasing power and decreasing size, have the ability to address language and communication needs, provide external memory aids, and allow for alternative forms of information presentation. Consider, for example, the complexity of Web content and how such content can be adapted to meet the needs of learners. Web pages typically contain a great deal of information and present the learner with a number of possible selection options. For learners with attention deficits, the sheer amount of information on the page can be overwhelming. For dyslexic learners who struggle to read, such pages are daunting. For those with memory limitations, page navigation can be an error-prone activity. This talk will examine issues of cognition and learning, cognitive disability, ways in which inclusive technologies can provide support for learners, and the importance of considering cross-cutting technology solutions rather than specific disability solutions.