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## AGENT BASED COMPUTATIONAL MODEL FOR MEMORY RETENTION: A FOCUS ON CHILDREN WITH DYSLLEXIA

Memory retention can be defined as a process by which both working memory and long term memory preserves knowledge so that it can locate, identify and retrieve it in the future. Children with dyslexia suffer from lack of memory retention. They suffer from reduced mental ability, which affects the series such language acquisition, mathematical difficulties and many more. Different interventions have been implemented using computing technologies to aid memory retention among the dyslexic children. Computing techniques such as gaming, assessments and motivation are employed to improve the reading and spelling skills of learners. Unfortunately the computing techniques tend to address either one or the other of these needs being either enabling or instructional. Such computing technologies up to now, have not been designed to respond to personalized feedback from the learner and to personalize the system in line with the user's performance. In view of this, the paper discusses, the use of Intelligent Agents that will help design an adaptive learning support system together with key memory strategies to enhance memory retention. This study will design an Agent based computational model that will be implemented using a computational tool that will be used by dyslexic learners. The computational tool will be used to test grade 3 students in a school in Nairobi County. Data will also be collected using questionnaire. Results from the computational tool will be analyzed using descriptive statistical techniques.

Keywords— Dyslexia, Memory Retention, Agent Based Computational tool

### Keywords

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**Track Classification:** Artificial Intelligence Advances and Applications for Development