

# The Development of Higher Order Thinking Skills in Students with Mild Intellectual Disabilities

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## **Abstract**

Higher order thinking is derived from the idea - most familiarly from the Bloom's Taxonomy - that some processes require more cognitive processing than others, particularly to synthesize various pieces of information, apply new learning across different contexts and evaluate its effectiveness. The fundamental goal for educators in special education would be for their students to eventually gain independence – and this would undoubtedly be made easier if they have the higher order thinking skills to make rational decisions based on the knowledge and facts they know in their daily and working lives. The teaching and learning of higher order thinking skills would therefore associate with the Living, Learning and Working Outcomes – the mantra of which the Special Education Curriculum Framework in Singapore is based upon. However, there is limited research on the tools and pedagogies that can structure and facilitate the development of higher order thinking skills in students with intellectual disabilities (ID). As a result, students with ID may not have been adequately taught the strategies and structures that can help them to attain, develop or express higher order thinking skills.

The GO Chart is an instructional strategy which involves active reading practices, such as metacognition through self-questioning techniques. This paper aims to research if the GO Chart can be used as a pedagogical tool to develop students' higher order thinking skills through creative writing. The process focuses on the highest three levels of the Bloom's Taxonomy: Analysis, Synthesis and Evaluation. Students with mild ID would be expected to synthesize the events that occurred in a story they have read to create a new and alternate storyline. They would also be required to evaluate their work by using a checklist. A pre-test and two post-tests were carried out to determine the success of using the GO Chart in enhancing students' higher order thinking skills, which were assessed through a set of rubrics at the end of each cycle. Unexpected outcomes such as cooperative learning and self-initiated intra-group correction were also discovered. Lastly, some limitations, challenges faced in this study and possible future implementations will also be discussed.

Key words: intellectual disabilities, higher order thinking, creative writing, GO Chart