

COGNITIVE LEARNING THEORY OF PIAGET AND TEACHING STRATEGIES FOR SPECIAL EDUCATION STUDENTS

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ABSTRACT

Teaching and learning for Special Education Students (MBPK) face various constraints and challenges in ensuring that they can follow all the teaching and learning processes provided by teachers. Accordingly, this study focuses on Piaget's cognitive learning theory and its application in MBPK teaching strategies. The data collection method used is secondary data obtained from local and international studies that focus on the application of Piaget's cognitive theory. Through in-depth analysis, it was found that the application of Piaget's cognitive theory significantly influences the effectiveness of formulating teaching strategies for MBPK. Therefore, the implications of this study can serve as a reference and guide for teachers to address MBPK teaching and learning issues. Consequently, it provides MBPK with the opportunity to compete academically and build their knowledge for their future careers.

Keywords: Cognitive learning, special education students (MBPK), visual impairment, hearing impairment, learning disabilities, Piaget's theory

1. INTRODUCTION

Piaget's Cognitive Learning Theory, introduced by Jean Piaget in the 20th century, is centered on the idea that children actively construct their knowledge through interactions with their environment. Piaget also believed that cognitive development occurs in a fixed sequence through four major stages: sensorimotor, preoperational, concrete operational, and formal operational. Each stage involves profound changes in how children understand the world, ranging from sensory experiences and object manipulation to logical and abstract thinking. Understanding this theory is crucial in the context of special education, as it provides a framework for adapting teaching strategies according to individual developmental stages.

To ensure effective teaching and learning, the application of relevant educational theories is essential (Setiawi, 2024). Teachers must continually learn and expand their knowledge and experience in applying these theories to enhance professionalism in the classroom (Journal of Education and Culture, 2020). Teachers face significant challenges as they are responsible for educating society (Widina, 2023). Therefore, it is crucial to ensure they can conduct teaching and learning activities effectively to achieve the ultimate educational standards and objectives. Through theoretical exploration, teachers acquire knowledge and experience that assist them in

developing professionalism in executing effective teaching and learning activities (Ministry of Education and Culture, 2020; Center for Education Management, 2024).

The application of a particular theory is vital in enhancing classroom teaching and learning. This is because every existing theory offers alternative methods and strategies that can be used to shape effective teaching and learning that yield positive implications for educational development. In this study, attention is given to the analysis of Piaget's cognitive theory. Essentially, Piaget's learning theory is focused on systematic teacher guidance to enhance teaching and learning effectiveness. By ensuring active learning occurs, this theory is highly suitable for addressing learning issues among special education students (MBPK).

Therefore, this study emphasizes that MBPK have their unique learning capabilities. Thus, they require proper teaching methods using appropriate theories to enhance their academic abilities. It is the teachers' responsibility to employ theories that can improve MBPK's learning abilities, enabling them to compete like other students. Piaget's theory emphasizes development and learning, where development focuses on enhancing abilities, and learning focuses on realizing these abilities. Cognitive theory suggests that behavior reflects the emergence of various psychological structures, structured units, or thought patterns that influence how children interpret information.

MBPK refers to students with special learning needs due to physical, mental, emotional, or social differences. This category includes students with learning disabilities such as dyslexia, autism, attention deficit hyperactivity disorder (ADHD), or physical and intellectual disabilities. The existence of special education aims to provide a more flexible and student-centered teaching approach to meet the unique needs of each MBPK. The use of Piaget's cognitive learning theory is highly relevant for MBPK because structured cognitive reinforcement methods can help them overcome learning barriers and reach their full potential. According to research by Mahmud et al. (2021), special education in Malaysia emphasizes a comprehensive and inclusive approach to students with learning difficulties to ensure they are not marginalized from mainstream education (Mahmud et al., 2021).

2. IMPLICATIONS OF THE ARTICLE

The implications of this article aim to identify the significant effects of applying this theory in helping to shape teaching and learning strategies. Additionally, this theory serves as a foundation for developing MBPK's self-potential and managing their lives through the application of Piaget's learning theory. Previous studies have shown that approaches based on Piaget's theory can enhance MBPK learning effectiveness through activities tailored to their cognitive development stages (Rahman & Ahmad, 2022; Cheng & Lee, 2023). However, research related to MBPK remains limited. As the number of MBPK increases yearly, there is an urgent need for studies that highlight learning methods using appropriate learning theories to achieve this goal (Smith, Brown & Taylor, 2021).

3. TEACHING STRATEGIES FOR SPECIAL EDUCATION STUDENTS APPLYING PIAGET'S THEORY

Piaget proposed four stages of cognitive development for children: sensorimotor, preoperational, concrete operational, and formal operational. While Piaget's theory has significantly impacted developmental psychology, it has also faced criticism. One major criticism is that Piaget overestimated adolescent abilities and underestimated infant capabilities. Additionally, he overlooked cultural and social interactions in cognitive development and children's thinking abilities. Cognitive development occurs at various stages during childhood. Consequently, studying cognitive development involves examining how children gain conscious control over their intellect and behavior.

The implementation of teaching using Piaget's theory requires special education teachers to focus more on the challenges faced by MBPK. Teachers must develop effective teaching methods by exploring various alternatives to ensure MBPK can follow all teaching and learning aspects, allowing them to compete with their peers through activities suited to their cognitive abilities. According to Kamaludin et al. (2021), Piaget's approach helps teachers understand students' cognitive development and develop appropriate teaching methods to meet individual needs. However, applying Piaget's theory faces significant challenges, particularly in modifying teaching and learning according to MBPK's cognitive and physical abilities. This is because teachers must employ various methods and strategies to support MBPK's learning development and prevent them from falling behind (Tan & Lee, 2022). To ensure effective teaching and learning strategies, adequate facilities are required to apply Piaget's theory for MBPK's benefit (Muhammad et al., 2020).

3. CONCLUSION

In conclusion, cognitive learning plays a crucial role in ensuring the effectiveness of the teaching and learning process, especially in Malaysia's special education context. This approach emphasizes deep understanding, logical thinking, and problem-solving, aligning with the needs of MBPK, such as visually impaired, hearing-impaired, and students with learning disabilities. The application of Piaget's cognitive theory provides MBPK with the opportunity to acquire knowledge progressively according to their cognitive development. By integrating appropriate teaching strategies, educators can enhance MBPK's cognitive abilities and ensure meaningful learning experiences. Through concerted efforts from educators, parents, and policymakers, inclusive education can be strengthened to foster a more competitive, independent, and visionary MBPK community.

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