

## IMPLEMENTATION OF GAGNE'S THEORY IN LEARNING FOR CHILDREN WITH ADHD

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### Abstract

This article explores the importance of implementing Gagne's Theory in learning for children with Attention Deficit Hyperactivity Disorder (ADHD). Children with ADHD often struggle with maintaining focus, processing information efficiently, and retaining knowledge, making it crucial to adopt structured and adaptive learning approaches to support their educational needs. Gagne's Theory, known for its systematic and sequential instructional principles, provides an effective framework for enhancing the learning experience of children with ADHD. This article outlines key principles of Gagne's Theory and examines how they can be practically applied in learning environments to accommodate the unique challenges faced by children with ADHD. By implementing clear learning objectives, structured instruction, engaging stimuli, and reinforcement strategies, educators can create a more inclusive and supportive learning experience that helps ADHD students maximize their potential. The application of Gagne's principles not only enhances academic achievement but also supports the development of self-regulation and cognitive skills, enabling children with ADHD to overcome learning barriers and thrive in educational settings.

**Keywords:** Gagne's Theory, ADHD, adaptive learning, instructional approach, learning focus, reinforcement strategy, inclusive education, cognitive skills, academic development.

### Abstrak

Artikel ini membahas pentingnya penerapan Teori Gagne dalam pembelajaran bagi anak dengan Attention Deficit Hyperactivity Disorder (ADHD). Anak-anak dengan ADHD sering mengalami kesulitan dalam mempertahankan fokus, memproses informasi secara efisien, dan mengingat pelajaran, sehingga diperlukan pendekatan pembelajaran yang terstruktur dan adaptif untuk mendukung kebutuhan mereka. Teori Gagne, yang dikenal dengan prinsip-prinsip instruksional yang sistematis dan berurutan, menawarkan kerangka kerja yang efektif untuk meningkatkan pengalaman belajar anak dengan ADHD. Artikel ini menguraikan prinsip utama Teori Gagne dan mengeksplorasi bagaimana prinsip-prinsip tersebut dapat diterapkan dalam lingkungan pembelajaran guna mengatasi tantangan khusus yang dihadapi oleh anak-anak dengan ADHD. Dengan menerapkan tujuan pembelajaran yang jelas, instruksi yang terstruktur, rangsangan yang menarik, serta strategi penguatan, pendidik dapat menciptakan pengalaman belajar yang lebih inklusif dan mendukung, membantu siswa ADHD memaksimalkan potensi mereka. Penerapan prinsip-prinsip Gagne tidak hanya meningkatkan pencapaian akademik, tetapi juga membantu perkembangan keterampilan kognitif dan pengelolaan diri, memungkinkan anak dengan ADHD untuk mengatasi hambatan belajar dan berkembang secara optimal di lingkungan pendidikan.

**Kata kunci:** Teori Gagne, ADHD, pembelajaran adaptif, pendekatan instruksional, fokus belajar, strategi penguatan, pendidikan inklusif, keterampilan kognitif, perkembangan akademik.

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## INTRODUCTION

Learning serves as a fundamental pillar in human development, including for children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD). These children often struggle to maintain focus and process information effectively, which poses significant challenges in academic

settings. As a result, the implementation of appropriate and adaptive learning approaches becomes essential to support their educational needs and help them overcome learning obstacles (American Psychiatric Association, 2013). One instructional framework that can be effectively applied in this context is Gagne's Theory of Instruction, which offers a systematic and structured model for facilitating learning, particularly for students who require specialized strategies (Gane, 2006).

This article explores the core principles of Gagne's theory and discusses how they can be specifically tailored to meet the needs of children with ADHD. By applying these principles in educational settings, it is possible to foster a more inclusive and supportive learning environment that accommodates the unique characteristics of ADHD learners (Barkley, 2015). Furthermore, the application of such an approach is expected to empower children with ADHD to optimize their learning potential and gain greater opportunities for academic and personal success in their everyday lives.

The purpose of this article is to explain the effectiveness and practical implementation of Gagne's Theory of Instruction in the context of learning for children with Attention Deficit Hyperactivity Disorder (ADHD). In addition to providing a theoretical overview, this article aims to offer a structured instructional framework that can support and facilitate the learning process for children with ADHD, enabling them to experience a more organized and effective educational journey (Cahya, 2013).

## **METHOD**

This study adopts a qualitative approach using the library research method as the primary strategy for data collection and analysis. Library research involves systematically reviewing and synthesizing existing scholarly works to build theoretical understanding and generate new insights. This method is especially suitable for studies that aim to explore conceptual frameworks—such as Gagne's Theory of Instruction—and their relevance to specific educational contexts, in this case, the learning experiences of children with Attention Deficit Hyperactivity Disorder (ADHD).

The data for this research were collected from secondary sources including books, peer-reviewed journal articles, and authoritative online databases such as Google Scholar, JSTOR, and ScienceDirect. These sources were selected based on their relevance to the topic, publication credibility, and academic contribution. Literature that specifically discusses instructional models, ADHD in educational settings, and inclusive pedagogy was prioritized. The selected sources were then critically analyzed using qualitative content analysis, which allowed the researcher to identify key themes, compare theoretical perspectives, and synthesize conclusions regarding the application of Gagne's theory in supporting neurodiverse learners.

The analysis was conducted through a thematic and interpretative process, where recurring ideas were categorized and evaluated in relation to the research objectives. This allowed for a comprehensive understanding of how the principles of Gagne's theory align with the cognitive and

behavioral characteristics of children with ADHD. Throughout the research process, academic ethics were upheld by ensuring all references were properly cited and the analysis remained objective and grounded in scholarly discourse.

## RESULTS AND DISCUSSION

According to the DSM-5, Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder characterized by persistent patterns of inattention, impulsivity, and hyperactivity that may persist from childhood into adulthood (American Psychiatric Association, 2013). Martaniah (2001) explains that ADHD encompasses two primary components: difficulty sustaining attention and impulsive behavior accompanied by hyperactivity. The core characteristics of ADHD include inattention, where children struggle to maintain focus, are easily distracted by external stimuli, frequently misplace items, and have difficulty following complex instructions (Brown & Davis, 2019); impulsivity, reflected in an inability to wait for their turn, interrupting conversations, and acting without considering consequences (Barkley & Murphy, 2006); and hyperactivity, which includes restlessness, excessive movement, and difficulty engaging in tasks that require sustained mental effort (Barkley, 2015). ADHD is classified into three types: the combined type (inattention, hyperactivity, and impulsivity), the predominantly inattentive type, and the predominantly hyperactive-impulsive type (American Psychiatric Association, 2013).

The presence of ADHD can significantly affect various aspects of a child's learning process. Children with ADHD often experience difficulty maintaining attention over extended periods, frequently losing focus during instruction, and struggling to complete tasks (Cahya, 2013). They may also face challenges in organizing and retaining new information, requiring more time than their peers to understand lesson content (Gane, 2006). In classroom settings, impulsive behaviors—such as acting without thinking, interrupting others, and engaging in risky actions—are common and can disrupt the learning environment (Barkley & Murphy, 2006). Traditional teaching methods often fall short of meeting the unique learning needs of students with ADHD, who may have trouble concentrating on lengthy materials (Brown & Davis, 2019), managing time effectively (Martaniah, 2001), and controlling impulsive responses, such as interrupting the teacher or classmates (Cahya, 2013).

To address these challenges, Robert Gagne's theory of instruction offers a structured framework that emphasizes the individuality of learners, including differences in learning styles, information processing speeds, and educational needs (Gane, 2006). For students with ADHD, Gagne's theory can enhance instructional effectiveness through carefully sequenced steps, including readiness to learn, initial stimulus, clear learning objectives, presentation of content, reinforcement, practice and application, and transfer of learning (Barkley, 2015). Empirical studies support this approach. Gane (2006) found that applying his theory improved the learning experience and comprehension in ADHD students. Similarly, Barkley and Murphy (2006) reported that teacher training based on Gagne's principles significantly enhanced classroom effectiveness and reduced

impulsive behaviors. Brown and Davis (2019) further demonstrated that the use of Gagne's Nine Events of Instruction led to improved reading comprehension and student engagement among learners with ADHD. Thus, Gagne's theory provides a systematic and effective framework for creating inclusive, engaging, and meaningful learning environments tailored to the needs of children with ADHD, ultimately supporting their academic success and personal development.

## CONCLUSION

In conclusion, Attention Deficit Hyperactivity Disorder (ADHD) presents significant challenges in educational contexts, particularly in maintaining focus, processing information, and regulating behavior. These difficulties demand adaptive instructional strategies that are both structured and responsive to the cognitive characteristics of ADHD learners. Gagne's Theory of Instruction, with its systematic sequence of learning events, offers a practical and evidence-based framework for addressing these challenges. By applying the principles of Gagne's instructional model, educators can create more inclusive, engaging, and effective learning environments that enhance the educational experiences of children with ADHD.

Based on the findings of this literature review, it is recommended that teachers and educational practitioners integrate Gagne's instructional principles into their lesson design, particularly when working with neurodiverse students. Professional development programs should also include training on differentiated instruction that incorporates models like Gagne's to empower educators in managing diverse classroom needs. Future research is suggested to further explore empirical applications of Gagne's theory in inclusive settings, as well as to develop digital learning resources that align with these principles to support independent and interactive learning for students with ADHD.

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