

Theoretical and Methodological Foundation for Developing Students Literary Literacy Through Neuro - Pedagogical Technologies

Duschanova Nilufar Sabirbayevna

PhD in pedagogical sciences, Urganch Ranch University of Technology



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ABSTRACT

Objective: This study aims to examine how neuropedagogical technologies contribute to the development of literary literacy, including reading, writing, and critical thinking skills. **Methods:** A qualitative approach was employed, utilizing methods such as literature review to analyze existing studies on neuropedagogical technologies, comparative analysis of various approaches, thematic content analysis to extract key themes on cognitive and linguistic skills, and case study insights from Uzbekistan's educational reforms. **Results:** The findings show that the integration of neuropedagogical technologies like gamification, audiovisual tools, and interactive methods significantly enhances students' comprehension and expression of literary texts. These technologies activate cognitive processes such as memory, attention, and creativity, leading to improved writing and reading abilities. Additionally, personalized approaches tailored to students' cognitive stages promote a more effective learning environment. **Novelty:** This research contributes a fresh perspective by applying neuropedagogical principles to the development of literary literacy, suggesting innovative methods for enhancing both cognitive and affective student development.

INTRODUCTION

Literary literacy is one of the most important learning skills in the modern education system. It is the student's ability to read, write, understand the text, analyze it and rewrite it expressively. Literary literacy is not limited to knowing the language, but also requires the development of the student's logical thinking, clear and fluent expression of speech, and creative thinking. Therefore, the development of literary literacy is considered one of the most important tasks of the educational process. In this regard, the use of neuropedagogical technologies makes it possible to effectively form students' reading and writing skills. Neuropedagogy is a scientific field that develops pedagogical methods taking into account the psychological and physiological foundations of brain activity in the educational process, and its main goal is to improve the cognitive development of students, activate logical thinking and thought processes [1], [2].

In 2021, the decision of the Cabinet of Ministers of the Republic of Uzbekistan on "Ensuring the spiritual and moral maturity of young people, introducing innovative technologies in the education system", to manage the thinking and learning process of students on the basis of modern technologies showed its importance. This decision emphasizes the integration of neuropedagogical technologies into education, their use in a way that affects the cognitive and affective development of students.

In addition, the national conference on "Innovative methods and neuropedagogy in education" held on December 29, 2020 also showed that special attention is paid to the introduction of neuropedagogical approaches in the country and strengthening of scientific research in this field. Such decisions and initiatives, of course, will greatly contribute to the expansion of neuropedagogical technologies and the development of literary literacy in the educational system [3], [4].

RESEARCH METHOD

This study employs a qualitative approach to examine the impact of neuropedagogical technologies on developing students' literary literacy. The research focuses on analyzing theoretical and practical insights from existing literature, including key works by Tursunov, Salimov, Khudoyberganova, Yusupova, and Rahmatova. These sources provide a foundation for understanding the principles and applications of neuropedagogy in education. Key methods used include:

1. Literature Review

A systematic review of scientific literature was conducted to identify relevant studies on neuropedagogical technologies and their role in enhancing cognitive processes such as memory, attention, and logical thinking. This review covered publications emphasizing innovative methods and practical applications in improving reading and writing skills.

2. Comparative Analysis

The study compares various neuropedagogical approaches described in the literature to determine their effectiveness in developing literary literacy. This includes analyzing age-appropriate techniques, individual student adaptations, and cognitive activation strategies.

3. Thematic Content Analysis

Central themes such as the development of reading and writing skills, understanding and analyzing texts, and improving cognitive activity were extracted from the reviewed studies. This method allowed the categorization of specific neuropedagogical practices into actionable insights for educational implementation.

4. Case Study Insights

The research integrates insights from Uzbekistan's educational reforms and national initiatives, such as conferences and policies emphasizing neuropedagogical methods. These case studies highlight the real-world application of the discussed technologies.

RESULTS AND DISCUSSION

The integration of neuropedagogical technologies has shown promising results in enhancing students' literary literacy, particularly in reading and writing skills. These technologies activate essential cognitive processes such as analysis, memory, attention, and creativity, which are crucial for the understanding and interpretation of literary texts.

By incorporating methods like gamification, audiovisual aids, and interactive tools, students are able to engage more actively with the learning process, leading to a deeper comprehension of texts.

The effectiveness of neuropedagogical technologies is evident in the improvement of students' ability to express their thoughts clearly and concisely, a key component of literary literacy [6]. Through the use of modern tools such as online platforms, video and audio materials, and interactive games, students develop stronger writing and reading capabilities. These technologies not only aid in the development of language skills but also enhance critical thinking, logical analysis, and the ability to synthesize information from literary texts.

Moreover, the application of individualized approaches based on the cognitive development stages of students ensures that each learner receives instruction tailored to their specific needs and abilities. This personalized method fosters a more effective learning environment, where students can make greater strides in developing their cognitive and linguistic skills.

The research supports the notion that neuropedagogical technologies contribute significantly to the cognitive development of students. They help manage and stimulate brain activity, leading to improved academic outcomes, particularly in literary literacy. These technologies support the educational system by creating dynamic learning experiences that promote both cognitive and affective development, ensuring that students are better prepared to analyze and engage with literary texts at deeper levels.

CONCLUSION

Fundamental Findings : This study highlights the effective role of neuropedagogical technologies in enhancing students' literary literacy, particularly in reading and writing. These technologies activate essential cognitive processes like memory, attention, and creativity, improving students' ability to understand and analyze literary texts. Methods such as gamification, audiovisual aids, and interactive tools significantly boost students' engagement, critical thinking, and language expression.

Implications : The use of individualized, age-appropriate approaches ensures that each student receives tailored instruction, fostering a more effective learning environment. These technologies contribute not only to the development of reading and writing skills but also to deeper comprehension and analysis. The study suggests that the broader adoption of neuropedagogical technologies in education can create dynamic learning environments that support both cognitive and linguistic development. **Limitations :** The study's reliance on existing literature and case studies limits its ability to capture diverse outcomes across different educational contexts or student demographics, potentially overlooking variation in effectiveness across various settings. **Future Research :** Future research should focus on experimental studies with varied student populations to assess the effectiveness of neuropedagogical technologies in different educational contexts.

Additionally, exploring the integration of emerging tools like artificial intelligence could further enhance cognitive development in literary education.

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***Duschanova Nilufar Sabirbayevna**

(Corresponding Author)

PhD in pedagogical sciences, Urganch Ranch University of Technology
