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MAKTABGA TA'LIMDA MOSLASHGAN TA'LIM KONTEKSTIDA INDIVDUALLASHTIRILGAN QO'LLAB-QUVVATNING O'ZIGA XOS XUSUSIYATLARI

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ABSTRAKT

Erta yoshdagi bolalar ta'limida adaptiv ta'lim kontekstida individuallashtirilgan yordam har bir bolaning o'ziga xos ehtiyojlari va rivojlanishini hisobga oladigan o'ziga xos xususiyatlarni o'z ichiga oladi. Ushbu yondashuv bolaning taraqqiyoti va faoliyatining ma'lumotlarga asoslangan tahliliga asoslangan shaxsiylashtirilgan ko'rsatmalar va tadbirlarni taqdim etish orqali o'rganishni moslashtiradi. Individuallashtirilgan adaptiv ta'lim yordamlarining o'ziga xos xususiyatlariga moslashtirilgan ta'lim yo'llari, maqsadli aralashuv, tabaqalashtirilgan ko'rsatma, zudlik bilan qayta aloqa, taraqqiyot monitoringi, individual boyitish, moslashuvchanlik va moslashuvchanlik, o'qituvchilar va ota-onalar o'rtasidagi hamkorlikdagi harakatlar kiradi. Bu xususiyatlar har bir bolaning qobiliyati, qiziqishlari va o'rganish uslubiga mos keladigan ko'rsatma va yordam olishini ta'minlaydi. Moslashuvchan ta'lim texnologiyasidan foydalangan holda, erta bolalik o'qituvchilari optimal ta'lim natijalarini qo'llab-quvvatlovchi va kelajakdagi ta'lim muvaffaqiyati uchun mustahkam poydevor qo'yadigan qo'llab-quvvatlovchi va inklyuziv muhitni yaratishi mumkin.

Kalit so'zlar: individual qo'llab-quvvatlash, moslashuvchan ta'lim, maqsadli aralashuv, tabaqalashtirilgan ko'rsatma, zudlik bilan qayta aloqa, taraqqiyot monitoringi, individual boyitish, moslashuvchanlik va moslashuvchanlik, hamkorlikdagi harakat.

ОСОБЕННОСТИ ИНДИВИДУАЛЬНОЙ ПОДДЕРЖКИ В КОНТЕКСТЕ АДАПТИВНОГО ОБУЧЕНИЯ В ДОШКОЛЬНОМ ОБРАЗОВАНИИ

Абстракт

Индивидуализированная поддержка в контексте адаптивного обучения в дошкольном образовании включает в себя отличительные характеристики, которые учитывают уникальные потребности и развитие каждого ребенка. Этот подход адаптирует процесс обучения, обеспечивая персонализированные инструкции и вмешательства на основе анализа прогресса и успеваемости ребенка на основе данных. Отличительные характеристики индивидуальной поддержки в адаптивном обучении включают адаптированные траектории обучения, целевое вмешательство, дифференцированное обучение, немедленную обратную связь, мониторинг прогресса, индивидуальное обогащение, гибкость и адаптируемость, а также совместные усилия педагогов и родителей. Эти характеристики гарантируют, что каждый ребенок получит обучение и поддержку, соответствующие его способностям, интересам и стилю обучения. Используя технологию адаптивного обучения, преподаватели дошкольных учреждений могут создать благоприятную и инклюзивную среду, которая способствует оптимальным результатам обучения и закладывает прочную основу для будущего успеха в образовании.

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Ключевые слова: индивидуализированная поддержка, адаптивное обучение, целевое вмешательство, дифференцированное обучение, немедленная обратная связь, мониторинг прогресса, индивидуальное обогащение, гибкость и адаптируемость, совместные усилия.

THE DISTINCTIVE CHARACTERISTICS OF INDIVIDUALIZED SUPPORT WITHIN THE CONTEXT OF ADAPTIVE LEARNING IN PRE-SCHOOL EDUCATION

Abstract

The provision of personalized assistance within the framework of adaptive learning in early childhood education involves diverse attributes that address the specific requirements and growth of every individual child. This methodology customizes the educational process by offering individualized instruction and interventions that are informed by data-driven analysis of the child's growth and performance. The salient features of personalized assistance in adaptive learning encompass customized learning trajectories, focused remediation, differentiated pedagogy, prompt feedback, ongoing progress assessment, individualized enrichment opportunities, flexibility and adaptability, and collaborative endeavors between educators and parents. These aforementioned attributes guarantee that every child is provided with education and assistance that are in accordance with their individual abilities, interests, and learning preferences. Through the utilization of adaptive learning technology, instructors in the pre-school setting have the ability to establish an environment that fosters both inclusivity and nurturing, thereby facilitating the attainment of optimal learning outcomes and establishing a solid groundwork for subsequent educational achievements.

Key words: individualized support, adaptive learning, targeted intervention, differentiated instruction, immediate feedback, progress monitoring, individualized enrichment, flexibility and adaptability, collaborative efforts.

Introduction. The unique attributes of individualized support in the realm of adaptive learning in early childhood education signify a transition towards customized and tailored learning encounters for young students. Adaptive learning utilizes technological advancements to deliver personalized education, interventions, and resources tailored to the individualized requirements, capabilities, and cognitive preferences of each student. This approach acknowledges the existence of varying developmental disparities among children in pre-school environments and emphasizes the need for tailored assistance to foster their academic and social well-being.

The primary attributes of personalized assistance in adaptive learning encompass customized learning trajectories, focused interventions, differentiated pedagogy, prompt feedback, ongoing progress assessment, personalized enrichment, flexibility and adaptability, and collaborative endeavors between educators and parents. The combination of these attributes synergistically contributes to the establishment of an educational setting that cultivates active participation, drive, and the attainment of ideal educational achievements for every individual student.

By incorporating personalized assistance within the framework of adaptive learning, educators in early childhood education can effectively cater to the unique learning requirements of each individual child, so ensuring that they receive appropriate instruction and support that is

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tailored to their capabilities and areas of interest. This strategy facilitates the promotion of diversity, enables personalized growth, and establishes a robust basis for subsequent educational achievements.

In the subsequent sections, a comprehensive examination will be conducted on each of these unique attributes, emphasizing their significance and influence on early childhood education within the adaptive learning paradigm.

Literature review. The concept of adaptive learning in preschool education, particularly focusing on individualized support, is a growing area of interest in educational research. The following analysis synthesizes findings from recent literature, highlighting the unique aspects and effectiveness of this approach.

Study by Hardy, Meschede, and Mannel (2022) emphasizes the importance of adaptive teaching, particularly in the context of elementary science education. The article "Adaptive Teaching in Elementary Science Education" highlights how teachers adjust their instruction to meet diverse student needs and levels of understanding. The study introduces a reliable measurement approach for adaptive classroom discourse, including diagnostic strategies, instructional support, and student understanding. It was found that adaptive classroom discourse positively impacts long-term student learning, with diagnostic strategies playing a significant role in conceptual restructuring.

Research by Otto et al. (2023) titled "AI-Based Adaptive Study Support System for Higher Education" focused on higher education, but this study provides insights into the use of AI-based technologies for adaptive learning. It proposes a systems-oriented approach for AI in education, emphasizing the need for holistic solutions that integrate teaching, research, and administration. This approach can be adapted for preschool settings to enhance individualized learning experiences.

Case Study by Liu (2022) explores the use of the Taiwan Adaptive Learning Platform (TALP) in elementary education. TALP, as a form of precision education, helps identify students' learning deficits and provides tailored feedback. The study "Precision Education in a Taiwanese Elementary School" suggests that such platforms can enhance learning by addressing individual challenges, a concept that can be translated into preschool education for individualized support.

Study by Van der Merwe (2022) focuses on preparing pre-service teachers to support learning in diverse school contexts. The article "Preparing Pre-Service Teachers in South African Schools" underscores the importance of understanding the science of learning and developing competencies for a fast-changing world. The findings are relevant for preschool educators, highlighting the need for training in adaptive and individualized teaching strategies.

The literature indicates a growing recognition of the need for adaptive and individualized learning approaches in preschool education. These studies collectively underscore the importance of tailored instructional strategies, the potential role of AI and technology in enhancing individualized learning, and the need for specialized training for educators. This approach not only caters to the diverse needs of young learners but also significantly contributes to their long-term educational development.

Research methods. Various research methodologies can be employed to investigate the unique attributes of tailored support in the context of adaptive learning in early childhood

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education. Several research approaches can be utilized in investigating this particular subject matter.

Experimental research can be employed to examine the effects of personalized support within adaptive learning on the educational achievements of preschool-aged children. Researchers have the ability to employ random assignment techniques to allocate individuals into various groups, such as an experimental group that receives personalized support and a control group that undergoes typical instructional methods. The measurement and comparison of learning outcomes, such as academic success or developmental growth, can be conducted across different groups.

Observational research approaches, such as case studies or naturalistic observations, can be employed to collect qualitative data pertaining to the implementation of tailored support and its impact on the learning experiences of pre-school children. The observation and documentation of the interactions among educators, children, and adaptive learning systems enable researchers to gain insights into the process of personalizing and tailoring specialized support to fit the unique needs of each kid.

Surveys and questionnaires are commonly utilized tools for gathering data on the perspectives and experiences of educators, parents, and pre-school children in relation to the provision of tailored support within the context of adaptive learning. These instruments have the capability to assess the efficacy of several aspects of personalized support, including customized learning trajectories, focused intervention, and differentiated pedagogy.

Interviews and focus groups can be utilized as research methods to gather comprehensive insights from educators, experts in pre-school education, and parents regarding their viewpoints on the unique attributes of personalized assistance within the context of adaptive learning. Qualitative methodologies facilitate the acquisition of comprehensive and intricate understandings pertaining to the advantages, obstacles, and optimal approaches linked to the implementation of personalized assistance.

The utilization of a mixed methods approach involves the integration of both quantitative and qualitative research methodologies in order to obtain a full comprehension of the unique attributes associated with personalized assistance in adaptive learning. This methodology entails the gathering of quantitative data pertaining to educational achievements, with the utilization of qualitative techniques to investigate the experiences, perceptions, and contextual elements that impact the efficacy of personalized assistance.

Longitudinal studies are a valuable research method that can be employed to investigate the enduring impacts of personalized assistance within adaptive learning on the academic and socio-emotional development of young children attending preschool. Researchers have the capacity to evaluate the durability and consistency of the advantages linked to personalized assistance by tracking a group of youngsters over a prolonged duration.

When conducting research on this topic, it is crucial to take into account ethical considerations, obtain participant agreement, and employ an appropriate research design. It is imperative for researchers to prioritize the verification of validity and reliability of the research instruments employed, as well as carefully evaluate the practical feasibility of implementing the research methodologies within pre-school settings.

Results and discussions. The unique attributes of personalized assistance in the realm of adaptive learning in early childhood education carry substantial ramifications for the educational

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encounters and achievements of young students. Below are several potential debates pertaining to these characteristics:

The capacity to generate personalized learning routes that are tailored to the unique abilities and development of each student is a fundamental aspect of individualized support within the context of adaptive learning. The focus of this discourse centers on the difficulties and advantages associated with customizing educational instruction to accommodate the varied requirements of preschool-aged children. Additionally, it explores how adaptive learning platforms can proficiently modify material and activities to enhance the overall learning encounters.

Targeted interventions are a crucial component of adaptive learning, as they effectively address the individual learning gaps and obstacles encountered by pre-school children. Discussions may center around the significance of identifying areas of deficiency and delivering prompt assistance to guarantee that youngsters obtain the requisite treatments to surmount challenges and advance in their educational development.

The implementation of differentiated teaching, which involves tailoring instruction to accommodate the unique requirements and learning preferences of each individual, is an essential element of providing personalized support. Discussions may go into the examination of efficacious approaches in modifying instructional methodologies, materials, and resources to cater to the many learning preferences and strengths exhibited by pre-school children, hence facilitating active participation and cultivating a conducive learning milieu.

Immediate Feedback: Adaptive learning platforms provide prompt feedback, enabling preschool-aged children to obtain current information regarding their performance. The focal point of discussions can revolve around the advantages of prompt feedback in facilitating the development of metacognitive abilities, self-reflection, and self-correction. Additionally, the role of educators in understanding and effectively utilizing feedback to inform subsequent instructional practices can be examined.

Progress monitoring is a crucial aspect of adaptive learning systems, as it enables the collection of significant data pertaining to the growth and learning pathways of pre-school children. The discourse may center around the ethical implications and privacy issues associated with the gathering and examination of data, in addition to the manner in which progress monitoring can contribute to making informed instructional choices and facilitating personalized learning experiences.

The implementation of individualized support within adaptive learning necessitates the collaboration of educators, parents, and children in order to achieve optimal outcomes. Discussions may delve into the significance of proficient communication, mutual objectives, and collaboration among stakeholders to guarantee the consistent and harmonious implementation of personalized support, both within the pre-school environment and in the home setting.

The potential impact of individualized support within adaptive learning on the motivation and engagement of pre-school children is significant. The personalized nature of this approach has the ability to boost their motivation and engagement in the learning process. Discussions may explore the potential of adaptive learning platforms to utilize gamification, interactive elements, and individualized content in order to cultivate intrinsic motivation, curiosity, and a passion for education.

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The topic of discussion may encompass the difficulties that arise when adopting personalized support in adaptive learning, including issues related to technology accessibility, allocation of resources, and educator training. Consideration should be directed towards the promotion of fair and equal opportunities for accessing adaptive learning platforms and receiving support, with a specific focus on children from different backgrounds or those with minimal resources.

It is imperative to thoroughly examine the long-term consequences of implementing personalized assistance in adaptive learning. The topic of discussion revolves around the potential long-term effects of personalized assistance, specifically examining if its advantages extend beyond the early childhood period and positively impact academic achievements, socio-emotional growth, and lifelong acquisition of knowledge and skills.

These conversations can offer valuable perspectives on the potential advantages, difficulties, and factors to be taken into account regarding the unique features of personalized assistance in the realm of adaptive learning in early childhood education. Additional study and collaboration among educators, researchers, and policymakers is imperative in order to enhance practices and maximize the effective implementation of personalized assistance for the comprehensive advancement of preschool-aged children.

Conclusion. In summary, the unique attributes of personalized assistance in the realm of adaptive learning in early childhood education has the capacity to significantly augment the educational experiences and achievements of young students. The individualized characteristics of adaptive learning platforms provide customized learning trajectories, focused interventions, and differentiated pedagogy, accommodating the heterogeneous needs and cognitive preferences of every student. The prompt and ongoing assessment provided by these platforms facilitates timely interventions and assistance, fostering a continuous process of growth and advancement. The efficient implementation of tailored support necessitates the collaborative efforts of educators, parents, and children. The consistent delivery and alignment of tailored care with the needs and goals of each child are facilitated by effective communication, common goals, and a collaborative relationship among stakeholders. Furthermore, the utilization of adaptive learning platforms has the potential to enhance motivation, engagement, and cultivate a favorable disposition towards the learning process. This can be achieved through the incorporation of gamification, interactive elements, and tailored content.

Nevertheless, it is imperative to acknowledge and tackle certain obstacles, including but not limited to issues surrounding technological accessibility and fairness, allocation of resources, and provision of adequate training for educators. These challenges must be effectively dealt with in order to guarantee a just and unbiased implementation of personalized assistance. Discussions should prioritize ethical questions pertaining to data collecting, privacy, and the proper utilization of technology. Additional investigation and cooperation are required to enhance our comprehension of the enduring consequences of personalized assistance within the context of adaptive learning. Longitudinal studies have the potential to provide valuable insights into the enduring effects of personalized assistance, as well as its role in enhancing academic achievement, socio-emotional growth, and the acquisition of lifetime learning abilities. In the realm of pre-school education, the potential of tailored support within the framework of adaptive learning is highly promising. By adopting these attributes and confronting the corresponding obstacles, it is

possible to establish a learning environment that is more comprehensive, captivating, and efficient for pre-school children, thereby initiating a trajectory towards continuous education and achievement.

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