

THE ROLE OF AI IN GUIDANCE AND COUNSELING TO OPTIMIZE LEARNING MOTIVATION

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Abstract

In an era where technology continues to develop rapidly, the role of artificial intelligence (AI) has become increasingly significant in various aspects of human life. One of the areas where AI has a great impact is in guidance and counseling, especially in improving learning motivation. Currently, many students have lost their motivation to learn, as can be seen from their indifferent attitude towards learning and absence from completing assignments. This research aims to explore the role of AI in guidance and counseling to increase learning motivation. The literature study method is used to analyze the impact of AI in improving student engagement and learning outcomes..

Keywords: AI (Artificial intelligence); Learning Motivation; Guidance and Counseling

1. Introduction

In the current era of globalization, an influence that cannot be ignored comes from the rapid advancement of information and communication technology on the education sector (Komalasari, 2020). One of the advances in Information and Communication Technology (ICT) is the presence of Artificial Intelligence (AI) Technology, which is a system developed to have intelligence similar to humans. AI is known for its ability to adapt, make decisions, cognitive, problem-solving, and learning. In the context of education, the application of AI can lead to significant changes by enabling personalization in learning, where the learning experience is tailored to the needs and abilities of each student. AI-related education is also important in preparing future generations to face increasingly complex global challenges.

The user community, especially among academics, is increasingly feeling the huge impact of the progress and development of science and technology (IPTEK). One aspect of human life that is significantly affected by this technology is education, especially in learning activities (Serdianus, 2023).

The role of technology in guidance and counseling, as an important part of education, is increasingly strengthened along with its role being recognized in the national education system through Law no. 20 of 2003 concerning the national education system, as well as the confirmation of this profession within the scope of formal education (Abkin, 2008). This should be the main basis for counselors to utilize technology to increase student learning motivation. Motivation plays a crucial role in the teaching and learning process, both for teachers and students. For teachers, understanding students' learning motivation is very important to maintain and increase their enthusiasm for learning. Meanwhile, for students, motivation is a trigger for their desire to learn, encouraging active involvement in learning activities with joy.

Loss of motivation to learn is a problem experienced by many students, which is characterized by indifference, lack of attention, and incomplete assignments. Artificial

Intelligence (AI), as a concept that emerged from the Industry 4.0 Era and Society 5.0, combines computer programs, machine learning, and hardware and software solutions. AI offers great potential in building intelligence using such innovative solutions, including in educational contexts. Reverse engineering of neuron patterns, which operate in the human brain, is one of the flagship products of Industry 4.0. This technology has found wide use in various industrial sectors, including education, where it is used for development and implementation in daily activities (Darajati et al., 2023)

The previous research related to digital learning with artificial intelligence (AI): the correlation of AI to student learning motivation (Ronsumbre et al., 2023) this study aims to describe the implications of using AI on student learning motivation. The effect of Artificial intelligence Tools on student learning motivation in terms of Rogers Theory (Ishmatun Naila, et al. 2023), the results of this study indicate that AI Tools can affect student learning motivation for the better due to the availability of information and personalized needs for each student. Digital Learning with Artificial Intelligence (AI): Correlation of AI to Student Learning Motivation (Selviana, et al), the results of this study show the importance of integrating AI wisely in education and emphasize the need for attention to ethical and practical aspects.

Artificial intelligence (AI) technology is currently an interesting and highly implementable topic, AI involves machines with a certain level of intelligence that can perform functions similar to humans, including perception, knowledge, judgment and adaptation to the environment (Watini et al., 2022) Therefore, researchers are interested in examining how the role of AI in Guidance and Counseling to Optimize Learning Motivation.

2. Method

This study used descriptive qualitative method. Qualitative research is descriptive and tends to apply in-depth analysis. The focus on process and meaning is characteristic of qualitative research. This method is used to investigate natural phenomena, with the researcher as the main instrument (Nasri, 2023) In this context, qualitative research uses a literature study design (literature review). A literature review is a summary of works that have been published on a particular topic by accredited scientists and researchers (Taylor, 2013). The data collection techniques applied include searching for written sources such as books, articles, journals and documents that are relevant to the problem under study. The information gathered from this literature study is used as a basis for strengthening the arguments put forward.

3. Results and Discussion

Motivation to learn plays a crucial role in the learning process, as staying motivated will increase students' enthusiasm for learning, while low motivation will reduce their enthusiasm for learning. Motivation is considered as the main prerequisite in the learning process. Students who lose motivation to learn will not achieve optimal learning success (Watini et al., 2022)

Motivation comes from the Latin, *Movere* which means drive or driving force. Many experts have expressed the definition of motivation with their various points of view, but the point is the same, as a driver that changes the energy in a person into a form of real activity to achieve certain goals.

Motivation comes from the word motive and refers to the internal forces that drive a person to act or behave. Although not directly observed, motivation can be considered as a stimulus, drive or source of energy that moves individuals to take certain actions (XIrra, 2022)

Overall, motivation can be explained as the psychological state that drives individuals to act. The key components of motivation include needs, drives and goals. Needs arise when individuals feel an imbalance between what they have and what they expect. Drive, on the other hand, is the mental force that pushes the individual to perform activities to fulfill the need or expectation. Goals, as the last component, are the results desired by the individual, which direct behavior, including learning behavior.

So, learning motivation refers to everything that arouses the spirit or drive to learn or in other words, the factors that encourage the spirit of learning (Nur, 2016) There are several factors that have a significant impact on learning motivation including intrinsic factors and extrinsic factors. Intrinsic factors include: (1) interest, where students feel happy and excited when doing tasks related to subjects they are interested in. (2) Expectations and values, students must have high expectations or hopes for success, (3) goals, where student behavior tends to be directed towards achieving certain goals. In psychology, there are several types of learning goals, namely achievement goals, work avoidance goals and social goals. Then extrinsic factors: (1) family, is the primary and first environment that teaches the basic foundation of education in school and society, and (2) the school environment, which is the environment where students are familiarized with the values of the order of teaching and learning activities in various fields of study that can seep into conscience. The school environment includes the physical environment, social environment, and academic environment (Siswa et al., 2020).

Learning motivation can be defined as encouragement that comes from both within the student and from outside, which stimulates enthusiasm and desire to learn and provides direction in the learning process to achieve the desired goals (Lumbantobing, 2020) Motivation is a driving force for action, a motor that provides energy for the activities to be carried out. In this context, motivation acts as a driving force that encourages individuals to take certain actions.

- a. Motivation also determines the direction of action, indicating the path to be followed to achieve the set goals. Thus, motivation provides the guidance and encouragement necessary to achieve these goals.
- b. Apart from that, motivation also helps in choosing the right action, directing individuals to choose actions that are appropriate and relevant to the goals they want to achieve, while ignoring actions that do not support the achievement of these goals.

The essence of learning motivation includes encouragement that comes from within and outside the student who is learning, which results in changes in behavior, often with various indicators or elements that strengthen it. Indicators of learning motivation can be classified as follows (Uno, 2008) The desire and motivation to achieve success, such as paying attention to the teacher's explanation and having the courage to appear in front of the class.

- a. Encouragement and needs in the learning process, such as student persistence in completing assignments in class and at home.
- b. Hopes and aspirations for the future, such as the desire to move up to a higher grade level, achieve achievements, and continue education.

- c. Rewards and appreciation in learning, such as giving praise and recognition to students who dare to appear and can answer the teacher's questions.
- d. Interesting learning activities, such as the use of games or activities that support learning material, especially in Islamic Religious Education subjects.
- e. A conducive learning environment, which facilitates students to learn well, for example by preventing students from talking other than about the material taught by the teacher.

In the ever-evolving digital era, technology is evolving rapidly, especially artificial intelligence (AI) which is increasingly penetrating various sectors in cyberspace, including the way information is accessed, processed and delivered. Artificial intelligence is a significant technological innovation that can change the way of life. AI capabilities are claimed to replace the role of humans in some jobs. In general, AI refers to the ability of computers or machines to execute tasks that would normally require human thought. AI encompasses a wide array of technologies and methods that aim to enable computers to learn from experience, mimic human behavior and complete tasks that require understanding, reasoning and adaptation. The application of AI in education has great potential benefits, from improving the efficiency and effectiveness of learning to helping analyze student learning patterns. In education, the integration of AI is expected to support the control and assistance of learning for students, which in turn can increase their motivation to learn and help them in their lives and careers.

4. Conclusion

The role of AI in guidance and counseling to improve learning motivation can include the use of technology to recognize students' behavior patterns, provide suggestions tailored to their individual needs, and provide real-time feedback. AI can help understand students' individual needs and offer appropriate strategies to boost their passion for learning.

Motivation is an important element in learning, as a high level of enthusiasm for learning spurs progress, while a lack of motivation hinders optimal achievement. Factors that influence learning motivation include intrinsic factors such as interests, expectations, values and goals as well as extrinsic factors such as family and school influences

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