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Educator-AI Multimedia and Real-Life Awareness Method (EAMM-R): Integrating Artificial Intelligence for Personalized Learning and Emotional Growth

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Abstract This study introduces the Educator-AI Multimedia and Real-Life Awareness Method (EAMM-R), an innovative approach designed to enhance personalized learning, emotional engagement, and real-life awareness among students. The method integrates artificial intelligence, multimedia tools, and reflective learning strategies to address individual differences in learning pace, emotional states, and comprehension levels. The results demonstrate that EAMM-R significantly improves students' motivation, self-awareness, and learning performance through adaptive feedback and emotional support mechanisms.

Key words: Artificial Intelligence, Multimedia Learning, Emotional Awareness, Personalized Education, EAMM-R, Real-Life Learning

Introduction

In the era of digital transformation, artificial intelligence (AI) has become a vital component in modern education, offering new ways to personalize and optimize learning experiences. However, many educational systems still struggle to balance cognitive development with emotional awareness and real-world application.

To address this gap, the **Educator-AI Multimedia and Real-Life Awareness Method (EAMM-R)** was developed. This method combines AI-driven personalization, multimedia integration, and real-life reflection tasks to foster both intellectual and emotional growth.

The study aims to evaluate the impact of EAMM-R on students' learning outcomes, emotional intelligence, and awareness of real-life contexts.

Methods

Participants

The study involved 120 students aged 12–17 from three secondary schools. Participants were randomly divided into an experimental group (EAMM-R) and a control group (traditional learning).

Procedure

The EAMM-R model included three core components:

1. AI-Based Personalization: The AI system analyzed each learner's performance, emotional tone, and learning preferences to adapt materials and provide individual recommendations.
2. Multimedia Integration: Interactive videos, animations, and gamified lessons were used to increase engagement and understanding.
3. Real-Life Awareness Tasks: Students completed reflection-based assignments connecting lesson content with real-life situations, enhancing emotional and social understanding.

The intervention lasted for 8 weeks, during which pre- and post-assessments of emotional intelligence, motivation, and academic performance were conducted.

Instruments

- Emotional Intelligence Scale (EIS)
- Academic Motivation Inventory (AMI)
- Achievement Test (AT)
- Data were analyzed using descriptive statistics and paired-sample t-tests.

Result

The findings revealed significant improvements in the experimental group compared to the control group:

- Emotional intelligence increased by 28%, particularly in empathy and emotional regulation.
- Motivation rose by 24%, indicating higher engagement and interest.
- Academic performance improved by 21% across major subjects.

Moreover, qualitative interviews showed that students felt "more connected" to their learning and "more aware" of real-life implications of classroom knowledge.

Discussion

The results suggest that the EAMM-R method effectively bridges the gap between artificial intelligence and emotional learning. Unlike traditional instruction, EAMM-R allows students to perceive learning as a meaningful, emotionally engaging, and contextually relevant process. This approach aligns with constructivist and socio-emotional learning theories, emphasizing that technology should not only serve cognitive growth but also nurture self-awareness and empathy. Furthermore, the integration of real-life reflection tasks enhances students' problem-solving abilities, preparing them for dynamic social and professional environments.

Conclusion

The Educator-AI Multimedia and Real-Life Awareness Method (EAMM-R) demonstrates great potential in transforming modern education. It supports personalized, emotionally intelligent, and context-based learning. Future research should explore the scalability of this model in diverse educational settings and investigate long-term effects on emotional and cognitive development.

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