



### THE SYSTEMATIC USE OF ARTIFICIAL INTELLIGENCE PLATFORMS IN MOTIVATING STUDENTS

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**Abstract.** *This article discovers the strategic implication of Artificial Intelligence (AI) applications and programs as a methodical strategy for encouraging students, outlined within the context of Uzbekistan's national education modernization program. The writer bases the discussion according to the policy objectives of President Shavkat Mirziyoyev, notably Decree No. UP-5117, which mandates the integration of modern educational technologies. The article argues that advancing beyond occasional use to an integrated implementation of AI can directly deal with enduring problems related loss of interest in studies by individualizing the learning process.*

*The investigation is based on the theoretical foundation of Self-Determination Theory (STD), showcasing how AI platforms are able to meet students' fundamental psychological requirements for autonomy, competence, and relatedness. It offers an experimental evaluation of AI programs – such as Intelligent Tutoring Systems (ITS), tailored educational paths, digital formative feedback, and dynamic gamifications - illustrating their particular roles in building internal and external motivation. Moreover, the text puts forward an organized, three stage framework for using and integrating AI systematically in educational facilities, addressing infrastructure, developing teacher capacity, integrating curriculum, and ethical concerns including data confidentiality and bias in algorithm.*

*Eventually, the article highlights that the systematic integration of Artificial Intelligence is not merely a technological development but a crucial educational evolution. The article emphasis that if AI implicated ethically and strategically, it serves as a strong tool for teachers, capable of creating more inspired, adaptable, and independent learning generation, therefore directly promoting national educational progress targets.*

**Keywords:** *Artificial Intelligence (AI), Student Motivation, Self-Determination Theory, Personalized Learning, Educational Technology, Systematic Implementation, Uzbekistan Education Policy.*

#### 1. Introduction

The enhancement of Uzbekistan's educational system is an established as a national focus, intended in creating a competitive, cutting-edge generation. This vision is articulated in strategic documents including, President Shavkat Mirziyoyev's Decree No. UP-5117, which emphasizes the imperative to "widely introduce modern pedagogical and information technologies" to improve the quality of teaching and learning (President of the Republic of Uzbekistan, 2019). As a response to this mandate, Artificial Intelligence (AI) arises not solely as one more tool, but as a changing power enable to tackling a core educational issue: student motivation. Classic, same approach for all learners often is not



able to involve various knowledge seekers, resulting in disengagement. This article supports the systematic application of AI platforms as a strategic solution.

## **2. AI and the Science of Motivation**

Student motivation grows when fundamental psychological demands are fulfilled. Self-Determination Theory (SDT) identifies these as autonomy, competence, and relatedness (Ryan & Deci, 2020). AI platforms are ideally positioned to meet these demands systematically.

### **Autonomy:**

AI-driven systems support learners by providing individualized learning methods. Learners can often influence their journey - choosing topics, adjusting difficulty, or selecting practice modes - which fosters a sense of ownership and control (Ukwuoma et al., 2023).

### **Competence:**

AI excels at delivering the "just-right" challenge. By continuously analyzing performance, it adapts task difficulty in real-time, keeping students within their optimal zone of learning. Immediate, specific feedback on errors and progress builds self-efficacy and a mastery-oriented mindset (Holstein et al., 2019).

### **Relatedness:**

As Artificial Intelligence is not a human, it can aid in building social ties. It is capable of powering cooperative platforms that group students successfully and offer interactive, helping interfaces. This enables teachers, liberated from routine responsibilities, to concentrate on fostering stronger motivational connections and tutoring.

## **3. Strategic Applications for Motivation**

A systematic method implements Artificial Intelligence across core learning domains:

### **Personalized Learning Pathways:**

Platforms such as Knewton deals with algorithms to process student data and produce tailored instructional sequence. This guarantees every learner is appropriately challenged, directly challenging the boredom, disengagement or irritation caused by a lack of variety.

### **Intelligent Tutoring Systems (ITS):**

ITS (e.g., Carnegie Learning for math) act as personal tutors, offering step-by-step guidance and hints. This 24/7 support prevents students from feeling "stuck," maintaining learning momentum and reinforcing that effort leads to improvement (Mousavinasab et al., 2021).

### **Automated Formative Feedback:**

Tools including Grammarly or Elsa Speak allow immediate, specific suggestions on writing and pronunciation. This transforms analysis and assessment into an ongoing, informal discussion, inspiring learners to review and enhance constantly rather than concentrating merely on a final grade.

### **Data-Driven Teacher Insights:**

AI analytics dashboards give educators a clear view of class and individual progress. This enables timely, motivational interventions – from praising effort to providing



targeted encouragement - elevating the teacher's role to that of a motivational coach (Baker et al., 2020).

### **4. An Implementation Framework for Uzbekistan**

To realize this potential, a structured, three-phase framework aligned with national goals is essential.

#### **Phase 1: Foundation (Policy & Capacity):**

Systematize AI literacy as a key teacher proficiency. Commence creating national PD (Professional Development) program and take steps to ensure equal opportunity to access important digital infrastructure.

#### **Phase 2: Integration (Curriculum & Pedagogy):**

Manage AI platforms and tools to defined curricular aims in subjects such as languages and STEM. Teach educators to hybrid lesson design, where Artificial Intelligence personalized practice, leaving class time for human-centered, joint activities. Launch new programs in a small scale at various schools.

#### **Phase 3: Sustainability (Culture & Ethics):**

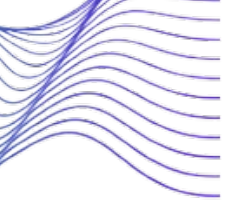
School leaders need to promote this transformation. Involve parents and communities. Specifically, implement ethical standards to secure student data, audits for algorithmic bias, and the principle of augmented intelligence - where AI supports, but never replaces, the essential human connection provided by teachers (Zawacki-Richter et al., 2019).

### **5. Conclusion**

President Mirziyoyev's advocating for technological transformation in education finds an effective solution in the systematic integration of AI for motivation. By cooperating with motivational science, AI is capable of fulfilling learners' individual demands for independence, ability, and interaction. Effective usage requires a carefully designed structure of policy, guidance, and ethical management. When administrated systematically, Artificial Intelligence platforms do not replace teachers but support them to become more successful motivators. The result is a more attentive, adaptable, and independent group of learners, completely ready to equipped to contribute to Uzbekistan's future in the age of digital innovation. This strategic adaptation is not merely an educational evolvement but an essential step in realizing the nation's development goals.

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