

**CREATIVE LABOR IN THE REPUBLIC OF UZBEKISTAN: STAGES OF
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Abstract: This article develops the "**Honeybee Model**" and explores the impact of digitalization and artificial intelligence on the formation of creative labor among economics students. It emphasizes the growing need to focus on methods for achieving creative labor and provides a comparative analysis between mental and physical work. Furthermore, the study identifies that to enhance the efficiency of intellectual labor, the capabilities of artificial intelligence should be extensively utilized. To effectively train future economists in creative labor, it is essential for all stakeholders to implement diverse educational methods aimed at fostering creative productivity.

Keywords: digital technologies; artificial intelligence; teaching methods; theoretical knowledge; creative labor; physical and mental labor; market reform; new knowledge; mental abilities; development pyramid; personnel qualification; Honeybee Model; speed of thinking.

Introduction. In the Address of the President of the Republic of Uzbekistan, Sh. M. Mirziyoyev, to the Oliy Majlis, it was noted: "We have set a goal—to join the ranks of developed nations, and we can only enter this list through accelerated reforms and the development of science. To achieve this, we need personnel of a new formation". Specialists capable of making effective management decisions under conditions of uncertainty and chaotic economic development are vital for implementing market reforms aimed at ensuring prosperous living conditions for the population.

While creative labor methods are well-covered in economic literature, approaches are shifting due to globalization, digitalization, and the impact of artificial intelligence on human capital.

Socially useful labor takes two forms: executive labor and creative labor. Both are essential for increasing the share of creative thinking and utilizing mental labor resources to drive economic growth.

Literature Review and Author Perspectives

Scholars emphasize that a specialist trained in methods of scientific cognition and the transformation of reality is best equipped for creativity. G. Emerson noted that correct principles in the hands of ordinary people are more powerful than the haphazard attempts of a genius. Accordingly, this article examines the differences between mental and physical labor and methods for teaching creative labor to future specialists.

Table 1: Comparison of Physical and Mental Labor

No.	Physical Labor Results	Mental Labor Efficiency
1	Copies of physical labor are impossible or too expensive (e.g., digging 100sqm of land daily).	Mental labor is spent once, but the result can be used repeatedly (e.g., software can be copied millions of times).
2	Resources (natural, time, human capital) are depleted during use.	Mental labor results are inexhaustible.
3	Rarely creates new knowledge.	Knowledge accumulates as experience and forms the basis for new knowledge.
4	Limited to repetition and individual capacity.	Develops in cycles within technological paradigms (e.g., the 6th and 7th technological waves).
5	Cannot be performed remotely; requires specific schedules and travel.	Can be performed remotely (freelancing) and distributed to millions simultaneously.
6	Only one physical task can be performed at a time.	Multiple types of mental activity can be performed simultaneously.
7	Inherited only in primitive, inefficient forms.	Experience accumulates in the subconscious and is passed down as a legacy.
8	Transferring physical results decreases one's own share.	Sharing ideas (e.g., at a conference) increases the total information available to everyone.
9	Reduces resources and human lifespan.	Increases the efficiency of material resource use through innovation.

The "Honeybee Model" and Artificial Intelligence

Methods for training students must change alongside technology. We propose the **"Honeybee Model"** for utilizing social networks: an innovative idea is posted online (preferably in English), and the "crowd" (professors, freelancers) identifies its flaws. Like a bee, the creator collects these suggestions, analyzes them, and forms hundreds of new ideas.

To enhance intellectual efficiency, **Artificial Intelligence (AI)** should be used to improve memory, thinking speed, and logic, while tailoring individual curricula based on a student's specific abilities (artistic, technical, etc.)²². This selection should begin as early as kindergarten.

By 2030, AI is expected to generate \$15.7 trillion in global revenue. China is projected to gain \$7 trillion (26% of GDP), while North America may see \$3.7 trillion (14.5% of GDP). India is also rapidly advancing, with software sales reaching \$245 billion in 2023 and a workforce of 1.4 million super-programmers.

Main Research Results

AI implementation success depends only 10% on algorithms and 20% on infrastructure; the remaining **70% depends on people, processes, and business transformation**. This highlights the critical role of personnel qualification.

Economic development must be based on **intellectual capital** rather than just natural resources. While natural wealth is an advantage, relying solely on it is not a sustainable path. Modern realities require intensive development methods and a shift in educational standards to account for digitalization and ecology.

Table 2: Types of Preparation, Stages of Creativity, and Research Types

Category	Goal	Means	Result
Theoretical-Cognitive	Provide a base of knowledge.	Study of economic theory and applied sciences.	Broad theoretical knowledge and erudition.
Practical-Executive	Teach executive labor.	Study of practical applications.	Ability to perform calculations and follow regulations.
Creative-Methodological	Teach creative labor.	Study of methodology and sciences of thinking.	Ability to conduct independent economic research.
Creative Process	Transform reality.	Practical-research methods.	Ability to identify flaws and make recommendations.
Research Work	Develop research skills.	Scientific research methods and modern tech.	Scientific contributions and mastery of AI/Digital tools.

Conclusion

Training future economists for creative labor is a collective responsibility—from the Ministry of Higher Education to individual students. We support Klaus Schwab's "**4C**" system: **Critical Thinking, Creativity, Communication, and Coordinating with Others**. Only through the synergy of education, science, and production can a sustainable economy be ensured.

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