



Research Article

DEVELOPMENT OF INNOVATIVE POWER OF STUDENTS IN TECHNICAL INSTITUTIONS

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ABSTRACT

This article aims to provide an innovative direction of thinking through the development of person-centered pedagogical technologies that fully meet the level of intellectual, intellectual and social development of students in the educational process; the development of innovative potential, taking into account their extracurricular interests and life experiences.

KEYWORDS

Technology, education, university, student, pedagogy, society, information, innovation, projects.

INTRODUCTION

New Uzbekistan's choice of innovative forms of development, the creation and introduction of

high technologies, the growing role of knowledge and information in the economic activity of



enterprises create a great demand for innovation. However, the cycle that determines the innovative nature of the national economy: the creation of new knowledge, education and training, production of goods and services required by society, innovative infrastructure and financial support is gradually being established.

In this regard, the national education system faces new challenges:

- Improving the quality of educational services and requirements for research results;
- Increasing the productivity and quality of pedagogical and educational work of students;
- Improving the informatization of education;
- Involvement of students in active creative activity, ensuring their public participation in research and design work;
- training of new level specialists to implement innovative projects and participate in the development of innovative technologies.

President of the Republic of Uzbekistan February 7, 2017

In the "Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021", approved by Decree No. PF-4947, the quality of the national higher education system based on the competitiveness of national personnel and world practice, diplomas of the Bologna Process mutual recognition, implementation of exchange programs with teachers and students. [1] In addition, by 2030, 85% of all higher education institutions (HEIs) in the country will be transferred to the new credit-module system, and 33 higher education institutions will be included in the 2020/2021 academic year alone. [2]

It is necessary to introduce innovative models and mechanisms of training to address the identified tasks.

The higher education system has a special place in the field of education. Sociological research has shown that the share of higher education graduates in working professions is increasing, in some sectors it reaches 83% and more. [3] According to scientific forecasts, the development of science-intensive technologies in the near future will require an assistant engineer (new functions) and specialists trained to perform the functions of workers of especially complex

professions. In this regard, the demand for senior specialists - technicians will increase. [4]

The purpose of the article is to develop and experimentally test meaningful, organizational, pedagogical and procedurally effective tools for the formation and development of innovative potential of higher education students.

Diagnostic measures have been taken to confirm the effectiveness of the model we have developed for the formation of innovative potential of students in technical higher education and the set of pedagogical conditions that will help to implement it.

Table 1

Methodology of formation and development of innovative potential in future techniques.

PEDAGOGICAL CONDITIONS		
Condition 1 - creating an innovative environment in higher education	Condition 2 - Ensuring innovative thinking through the use of person-centered developmental pedagogical technologies in the educational process.	Condition 3 - Designing an individual trajectory for the realization of innovative potential for each student
PREPARATION STAGE		
Line 1 - staff - Conducting analytical seminars on "Lesson Analysis", "Methods of	- contextual education (creation of workbooks on philosophy, geography, social sciences. Introduction to practical training in the analysis of technical cases; Pre-planned lectures and visualization.	- Development of "Map of innovative activities." - Participation in the All-Uzbek Olympiads in Informatics, Foreign Languages, Social Sciences, specialty 5310600 "Transport Engineering"

<p>formation of knowledge in the classroom",</p> <p>"Methods of pedagogical communication",</p> <p>"Methods of formation of practical skills of students";</p> <p>- Conducting seminars for invited guests</p> <p>"Using project technologies in teaching",</p> <p>"Methods of organizing joint lessons",</p> <p>"Methods of organizing classroom control" and "Approach to the development</p>	<p>- Project education ("Higher education site" with students; "Information program" "The best student", "The best group of students" Independent projects "Application of the computer program in course and graduation projects" Practical use. Working with / CAM / CAE / SAD software.</p> <p>- Simulation classes (competitions - "Adjusting the machine for machining parts" and business games developed by university teachers, preparation in the system CNCplus TRAINING, etc.</p> <p>- Modular training. At this stage, the design of the modular program is complete. A chain of technological actions has been developed for teachers</p> <p>Non-traditional methods: Methods of applying barrier conditions (New options method, Insufficient information method; Information filling method); Logical puzzles, etc.</p>	<p>- Participation of young people in scientific and technical trade fairs</p> <p>- Participation in the forums "Youth, Science and Culture".</p>
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<p>of competency-based guidelines"</p> <p>Line 2 - Expanding information on topics:</p> <ul style="list-style-type: none"> - Construction of an inter-university virtual information network; - Creation of an electronic library of the university; - opening of self-study rooms, test centers for students and teachers of the university. 		
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The data obtained from the detection phase of the experimental-research work showed that almost all students in all groups are passive and active, have a high level of innovative potential, a small proportion of students; there are no active degree

and igroactive level students. This confirmed the relevance of the topic of the selected article. [5]

The definition of "students' innovative potential "is based on the idea that human

potential is a set of renewable resources that can be used and realized to achieve a specific goal or outcome. Human potential reflects the measure of the unity of what has been achieved and what is possible, the existence of hidden possibilities or abilities that have not yet manifested themselves in the relevant spheres of life. [6]

Innovative potential of students of technical universities is an integral personal feature that reflects the combination of innovative knowledge, skills and attitudes in the educational and practical work, as well as the opportunities and reserve abilities to apply them in educational and practical activities.[7]

Innovative potential of students is the real potential of students (in the type of activity that is relevant to them - the knowledge, skills and attitudes they use in teaching or learning and professional activities) reserve skills and abilities (qualities and characteristics)) unit. which has not yet been clearly demonstrated, but which are necessary in subsequent professional activities in the context of an innovative economy, and their conditions have been found).

THE RESULT

The innovative potential of technical university students consists of two components: **explicit and implicit** potential.

Clear potential is determined by students' knowledge and skills in the field of innovation, as well as the innovative experience they have accumulated.

Hidden potential in education and professional activity is characterized by innovative thinking; encourage students to acquire innovative knowledge and skills, involve them in innovative activities; innovative work ability, as well as a number of personal qualities.

The formation of innovative potential is a progressive, oriented process of acquisition of new intellectual, psychological and social forms by students through the development of innovative knowledge, skills and abilities necessary for the implementation of educational and subsequent professional activities. The mechanism of the process of formation of innovative potential is determined by resolving the dialectical contradiction between the aspirations of students to carry out future professional activities in the context of innovative changes and their independent formation of

knowledge, skills and abilities. setting and solving innovative problems that arise in the process of teaching and practical work.

CONCLUSION

This article is a model of formation of innovative potential of students - a pedagogical system aimed at implementing the mechanism of interaction between teachers and students of the college and the development of their knowledge, skills and experience in the field of innovation. innovative thinking and skills, as well as personal qualities. The methodological basis of model design consists of activity, person-centered and competency-based approaches.

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