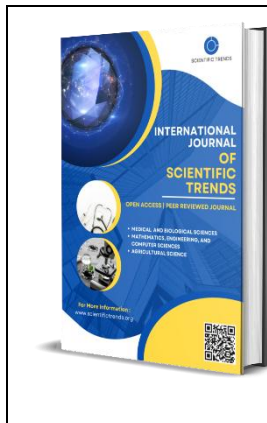


Indicative Characteristics and Models of Innovative Thinking in The Thinking of Youth Today

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Abstract

This article analyzes the formation of innovative thinking in the thinking of today's young generation, its main forms of manifestation and development models. Attention is paid to the reflection of innovative thinking in education, technology, social activity and creative processes. The article scientifically highlights the role of young people in solving modern problems, their creative approaches and activities in promoting innovative initiatives.

Keywords: Innovative thinking, creativity, youth, model, modern thinking, technological development, creative approach.

Introduction

In the modern world, globalization processes, digital transformation and technological progress directly affect the thinking of young people. In particular, innovative thinking - thinking in a new way, finding creative solutions to unconventional problems - is becoming a criterion for the intellectual potential of today's youth and their socio-economic activity in society. The concept of innovative thinking and its role in the thinking of young people. Innovative thinking is the ability to create new ideas based on existing knowledge and experience, to apply advanced, unusual approaches to achieve effective results in practice. Young people are active participants in this process, and it is they who are one of the main drivers in promoting innovative initiatives.

Innovation in the thinking of young people is manifested through the following factors:

- Creative thinking: Creating new ideas, making unconventional decisions.
- Critical thinking: Deeply analyzing problems, proposing alternative solutions.
- Technological literacy: Effective use of digital tools, mastering modern IT solutions.
- Entrepreneurial skills: Promoting new business ideas, implementing innovation through startups.

Forms of innovative thinking

In the thinking of today's youth, innovation is manifested in the following forms:

1. Academic innovations - new approaches in the field of scientific research and education.
2. Technological innovations - innovations expressed through startups, mobile applications, AI technologies.
3. Social innovations - innovative solutions to social problems (for example, environmental projects, volunteer initiatives).
4. Cultural and artistic innovations - introducing new styles in art, design, fashion, digital content.

Models of innovative thinking

The following models can be used to form the process of innovative thinking:

- "Design Thinking" model - creating an innovative product or service based on user needs.
- TRIZ (Theory of Rapid Problem Solving) - systematically developing creative solutions to existing problems.
- Creative Synergy Model - creating a new idea or product through an interdisciplinary approach.
- Lean Startup Model - a business model based on rapid testing and flexible development.

The growing importance of information of all types and forms in all aspects of modern social life justifies the urgency of studying the problem of innovation and innovative activity. These concepts are often equated, but in our opinion this is wrong. As a result of research, a categorical apparatus has not been formed within the framework of this problem. There is a lot of talk about innovation in the literature, but for some reason it is considered only as an economic category, and the question of what innovative thinking is, which is the core of the issue, has been ignored. In our time, when science and technology are increasingly developing, it is important to study this issue in a more comprehensive and deeper way, that is, from a philosophical point of view. In our opinion, it is not enough to simply define the concepts themselves, but rather to systematically study them as a phenomenon, based on existing methodology, and conduct comparative analyses between innovation and non-innovation.

Innovations should become the main criterion determining human activity and require attention to material and spiritual values in the sphere of activity. Innovation, being an objective process, is based on the intellectual labor activity of subjects and is improved by them. The owners of innovative thinking are innovators, innovators, early adopters and other persons involved in the process. As a result of the development of innovations, the emergence of an innovative environment, consciousness, culture, goals and choices, the implementation of activities on their basis and the support of the activities of innovation groups are becoming increasingly relevant. That is why "Culture," writes P. Kozlovsky, "is today recommended as the key to innovation and social development, it facilitates the introduction of new technologies and their "recognition" by society, helps to exchange international experience and mutual understanding. Culture should be among all social indicators and criteria for the growth of social development." In the innovation system, the phenomenon of culture plays an important role and ensures innovative development. The driving force of modern society is the young generation. Currently, the education of innovative individuals is an urgent factor. The concept of "innovative individuals" was introduced into scientific circulation by the American philosopher Everett Hagen.

In the current development process, the problem of educating young people with innovative worldviews remains an urgent issue. Modernization of education is an important issue in the education of individuals with innovative worldviews. As the President of the Republic of Uzbekistan Shavkat Mirziyoyev noted: “In developed countries, great attention is paid to investing in the full cycle of education, that is, investing in the upbringing of a child from 3 to 22 years old. Because this investment brings 15-17 times the benefit to society. In our country, this indicator is only 4 times. Therefore, we must increase attention to human capital and mobilize all opportunities for this.” Innovative approaches are the socio-cultural development of society, which implies setting clear goals for young people and implementing them in practice.

Literature Review

The definitions given to innovative thinking are as diverse as the views and approaches to it. A. Begmatov describes innovative activity, which is a product of innovative thinking, as follows: The term “innovative activity” means the performance of services for the creation of a new improved product in production, a new improved technological process. The specific features of innovative activity are: - activity for the creation of a new product; - marketing of new original ideas as a finished product; - development of new original ideas, etc.”. This means creating a system of research and leadership of young people. Young people with a modern innovative mindset will build a smart economy, smart cities, a smart country in the future... We need to guide such young people on the right path, from school, university and post-university, as soon as they show the first results. We need to provide an innovative society with new professionals with a developed innovative mindset. Indeed, developing nanotechnologies, information technologies, fundamental science, we must remember that we need to start from the bottom up, from kindergarten, school desk: we need to form the right mindset in kindergarten children to use high technologies.

Empirical, theoretical, visual, logical, spatial and other types of thinking have their own characteristics in the formation of innovative thinking. For example, theoretical thinking is a part of innovative thinking associated with working with high-level abstract concepts. Empirical thinking is described as the process of innovative thinking through visual images obtained as a result of sensory perception. In fact, innovative thinking is a single, separate component of innovative activity. Because it is innovative thinking that is characterized by its own characteristics that are manifested in innovative activity. In our opinion, innovative thinking should reflect creative, scientific and theoretical, social, constructive, pragmatic, transformative features. For example, innovative thinking can be creative, that is, go beyond the framework of existing algorithms, samples, models. Because it is creative thinking that helps a person achieve new results in a primarily subjective manner. In addition, innovative thinking differs from creative thinking implemented in art. Works created by an artist through the inner emotional world are always evaluated as objectively new. For an inventor, the goal of innovation is to achieve great results with minimal effort. The concept in the creative thinking process is the moment when something new is born that could not have been born within the framework of existing algorithms.

Research Methodology

Innovative thinking is manifested in human activity in a special way, both scientifically and theoretically. Because, as V.P. Delia rightly noted, scientific thinking “has its own characteristic

in relation to theoretical thinking, which allows us to distinguish the theoretical thinking of this era from its predecessors". Concepts based on theoretical thinking also have the level of abstraction that exists at the level of modern science. Because without this, it is impossible to create an innovative product that is required in the modern development of science and technology without creating and generalizing repeatedly tested theoretical models for the phenomena and processes being studied. For example, the creation of a new energy source can only be carried out on the basis of modern knowledge and technologies.

Innovative thinking is constructive. Constructivity is the ability to correctly formulate the desired goal and select the methods and means that correspond to it in the process of activity, determine the sequence of the process, determine the achievement of the goal and dialectically update it, make timely changes to the goal, and understand the circumstances of the implementation of innovations in practice. The concept of constructivism can have a good result in the form of its perfect embodiment. Performing music on an assembly line is an ideal combination of creative and technological aspects in innovative thinking. This is exactly what the famous American inventor Edison did, who managed to translate his technical ideas into practice and profit from them.

Pragmatism of innovative thinking accompanies this phenomenon. It is natural that in each profession there are innovative changes of its own. Because innovative knowledge in medicine is different from that of an architect, and knowledge in these areas serves to direct their innovative thinking towards specific goals. Because, as Sh.T. Kubaeva said, "...innovations are implemented by individuals with innovative thinking. The objectification of innovative thinking occurs through the creation of innovative education. Innovative education, in turn, helps future specialists develop an understanding of the meaning of life and its processing, thereby forming an innovative thinking that encourages individuals to implement innovations."

An innovative thinker must be aware of existing conditions and use them effectively. In particular, as Nick Bostrom, the director of Oxford University, rightly noted: "It is likely that humanity is now rapidly approaching a turning point in its development due to the acceleration of technological progress. The threat of nuclear weapons familiar to society is being joined by the unprecedented opportunities and dangers of rapidly developing technologies in areas such as nanotechnology and machine intelligence. Our future, if it is to exist, depends on our attitude towards these processes. Since we depend on rapidly developing technologies, we need to understand the dynamics of the transition of humanity from a "post-human" (non-human) society. In particular, where are the pitfalls "We must notice the path that can lead to inevitable death."

The development of innovative thinking also requires innovative behavior, the implementation of innovative ideas. That is, people need to be given the opportunity to implement their ideas and dreams in their lives. After all, the need for each innovative idea must be met by the consumer. For this reason, one of the components of innovative thinking is the commercialization of ideas. Innovative thinking means the end result - profit, it is a tool for the development of any business. "The systemic nature of innovation processes is also associated with their goal-oriented nature, therefore, all components of innovation processes determine the balance of interests and the overall dynamics of development."

Innovation is a concept that includes various aspects of synthetic, self-active thinking. At its core, it is necessary to understand the orientation of consciousness to new knowledge, the psychological

need for it and the intellectual readiness to accept it. Power is not in knowledge alone. Only relevant and fundamental knowledge has power. Innovative thinking is a creative person who has many options - either to create innovations himself, or to respond to innovations in a timely manner, based on the necessity and purpose of introducing innovations into production. Thus, innovative thinking is a phenomenon inherent in creative consciousness.

Innovator – homo pragmaticus – a pragmatic person. He knows exactly how to put an idea into practice, turn it into an innovation. Conservative – homo technicus – a technological person is considered the owner of technologies that allow us to eliminate previous negative situations, to accept innovations for society and man and to use them effectively. As we can see, all people involved in the innovation process are distinguished from each other by their abilities and experience. For us, it would not be wrong to say that how young people perceive themselves as individuals is determined by their place in the world and the process of innovation changes. Therefore, I.G. Abdullayeva explains the characteristics of an innovator as follows: “1. Intellectual property, which is a product of thought, is owned by innovators (individually or jointly with others). 2. Economic rights are used when implementing innovation. 3. Labor and the type of labor are freely chosen. 4. No one is illegally deprived of the right to innovative research, improve property relations and expand their property. 5. Innovators have the right to join professional associations and through them manage the country, their enterprise, and economic life. 6. The will of the people or the labor community, in particular, the activity and initiatives of innovators, are the basis for the activities of the authorities or property owners. is considered the basis. 7. Innovators have the right to social support (provision) to exercise their creative and economic rights and develop their skills. 8. An innovator has the right to receive remuneration and rewards commensurate with his work as a human being. 9. Innovators may form trade unions (unions) that protect their economic and cultural rights. 10. The fact that innovators have special privileges is not considered a violation of labor regulations and contracts.

The innovator, homo creator, is considered a generation that creates new ideas. The innovator is a person with his own ideal, a creative person. The worldview of such people is closely connected with civilization. The civilizational approach gives the innovator many opportunities to attract his ideas from different parts of the world. The discoverer usually pays attention to only a few elements of civilization. The innovator, homo pragmaticus, introduces new things received from the innovator, transforms them into innovations and gives them to the conservator for implementation.

Analysis and Results

Independently mastering new knowledge, systematically organizing it, and reflecting the set of basic competencies that an “innovative person” should possess. Innovative thinking and innovative activity based on it, in turn, are one of the strategies for adapting to social changes. The transition to innovative development is an important task of modern society. “Innovative education” ensures the stability of the process of creating innovations as a unique intellectual tool or technology. “Today, no industry in the world can develop without innovative ideas and scientific achievements.”

Innovation intelligence refers to an individual's assessment of the content and likely/observable consequences of an innovation and "the importance and priority of the search, expressed in

acceptance/disapproval, support/resistance, and participation in it to the best of their ability." Trust refers to the forward-looking trust, anticipatory trust, shown by individuals in social systems.

Conclusion/Recommendations

In short, innovative thinking is always aimed at innovation. Innovative thinking is based on humanitarian ideas, and innovations increase labor productivity, alleviate working conditions, and serve to ensure the well-being of life. We call this feature of innovative thinking socially positive. Therefore, it is not appropriate to call it innovation, for example, gas chambers, which were invented and used to kill people. The idea of the Nazis who invented the gas chamber, although it corresponds to the features of innovative thinking both practically and constructively, cannot be called an innovation and creative achievement.

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