TOOLKIT FOR CRITERIAL ASSESSMENT OF DEVELOPMENT ECONOMIC THINKING OF UNIVERSITY STUDENTS

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ABSTRACT

This article reveals a parametric model for assessing the development of economic thinking among students of higher educational institutions, based on mathematical measurements of three main components: cognitive, psycho-emotional and the level of stereotyping. The prerequisites for the creation of this model are the developments and achievements in the field of economic sociology and economic psychology, as well as the presence of intersubject connections between them. The model includes parameters that objectively reflect not only the volume of students' economic knowledge, but also the mechanism for making economic decisions. Knowledge of the initial value of the level of development of students' thinking allows you to effectively design educational technology of teaching, and at the final stage - to assess the degree of achievement of the set didactic goals when applying certain innovative teaching methods.

Keywords: Economic thinking, economic ability, adaptive function, humanistic function, model of economic socialization, multidimensional model for assessing economic thinking, parametric model for assessing the development of economic thinking, cognitive component, psycho-emotional component, level of stereotyping, Maslow's pyramid of needs.

INTRODUCTION

An important area of activity for the formation and development of students' economic thinking is the definition and adequate choice of educational technologies that contribute to the implementation of this goal in a specific pedagogical environment.

In Uzbekistan, Professor of Bukhara State University B.N. Navruz-zoda posed the problem of measuring the economic ability of a person. In the article "Four-Dimensional Man", the author, exploring the model of a four-dimensional man, along with the traditional three qualitative measures of a person - physical strength, moral maturity and mental acuity, also recommends "economic ability" as the fourth measure of a perfect man. In the basis of his position, the author puts the interpretation of human capital as human abilities that generate income for their owner [7; 8-12]. In the article “Measures for measuring the degree of human economic perfection” B.N. Navruz-zoda recommends such multipliers as criteria for measuring economic abilities: "economic education", "economic literacy", "professional skills", "effective implementation of the ability to work", "effective entrepreneurial activity", “proportionality of income and expenses”, “Skills of converting accumulated money into capital”[6; 1-6].

Malek Ninos Pierre, in her dissertation work, investigated the effectiveness of alternative methods of teaching economics, such as imitation, group activities; audio and visual teaching aids, and compared it with the effectiveness of using traditional teaching methods. Her research has shown that the inclusion of alternative teaching methods as a supplement to standard

lectures does not have a significant impact on the student's mastery of the subject, which was confirmed by measuring the level of economic thinking by preliminary and final testing [2].

From this, we can conclude that the enrichment of the essentially traditional teaching system with elements of pedagogical innovations does not have a significant impact on the effectiveness of the learning process; therefore, it is necessary to develop and apply fundamentally new approaches that can radically change the teaching paradigm.

The article by Denegri Marianela Coria, Omar Fernando Cortés Peña, Raimundo Abello Llanos, Andrés Manuel Pérez-Acosta "A multidimensional model for assessing the economic thinking of students" provides a kind of model for assessing the economic thinking of students [1].

Analysis of the multidimensional model for assessing economic thinking allows us to conclude that this model is more consistent with pedagogical behaviorism, and, therefore, performs a predominantly adaptive function, which is associated with the adaptation of a student, pupil to the specific requirements of the modern socio-cultural environment, the ability to best benefit from from the totality of knowledge, skills and abilities of an economic nature; the humanistic function aimed at the development of his personality, creative individuality, is weakly manifested in this model. Along with this, the model does not involve factors that directly reflect the thought processes occurring in the consciousness of an individual when making economic decisions.

Denegri's model of economic socialization deserves special attention.
In the model of economic socialization of Denegri, a person acts as a subject of complex relationships in the system of social and economic interaction. The economic choice, according to Denegri, is influenced by both the socio-cultural environment and the prevailing stereotypes of the economic behavior of society. Here the learning process includes the study of models of interaction with economic reality [1]. However, this model also does not contain a practical guide for the effective organization of the educational process at the university, contributing to the development of economic thinking of students and the implementation of not only the adaptive, but also the humanistic function of the teaching profession.

MATERIALS AND METHODS

Mastering the basics of economic knowledge at the current stage of the development of society for the development of economic thinking among students is insufficient; the author proposes to apply the parametric assessment model developed by her, accumulating achievements in such areas as pedagogy, economics, economic sociology and economic psychology.

In order to identify the level of development of economic thinking among university students, experimental work was carried out in four regional universities of the country. In these universities, a step-by-step work was carried out, including a questionnaire at the level of students and at the level of teachers of economic disciplines, statistical processing of the data obtained, based on the findings, master classes and round tables were prepared and conducted at the department, as well as classes using innovative pedagogical technologies that contribute to the elimination of those gaps that were identified during the survey. Participants were selected for the experimental and control groups, the level of development of economic thinking was analyzed before and after the experiment, a preliminary assessment of the impact of the proposed innovations on the development of economic thinking was made. The results of the experimental work served as the basis for the development of a model of psychological

and pedagogical influence on students, based on innovative technologies for teaching economic disciplines and contributing to the development of economic thinking in students.

At the initial - formative stage of experimental work among students, a questionnaire was carried out, which made it possible to identify and evaluate the current state of the level of development of economic thinking among students. The number of students who took part in the survey was 445 people.

The analysis of the results of preliminary testing of students showed that their economic thinking as such is not sufficiently developed. Consequently, the educational technologies that are used today in higher educational institutions of the republic, as well as the content of academic disciplines of an economic profile, do not fully contribute to the formation and development of economic thinking among students to a sufficient extent.

The question of how to organize the educational process so that all students, who, of course, have different characteristics of thought processes, cognitive and analytical abilities, could fully master economic laws, principles and patterns, not only in order to learn to adapt with the greatest benefit to the changing conditions of the external environment, but also to become full-fledged members of society with a formed active civil position, still remains open.

In order to solve this problem, the author proposes to use the parametric model developed by her for assessing the development of economic thinking. The prerequisites for the creation of this model are the developments and achievements in the field of economic sociology and economic psychology, as well as the presence of intersubject connections between them.

The experience of conducting classes in experimental groups with the use of innovative teaching technologies, such as role-playing games, project method, case studies, essays, flash mob (flash mob), showed that they are far from effective for all categories of students. Educational technologies based on creativity can only be successfully applied to students with high-level thinking reflections, able to model and reason. For students with standardized thinking, the use of these technologies does not bring the expected result, since this category of students is focused on algorithmic learning; therefore, before choosing an educational technology aimed at developing economic thinking in students, it is necessary to carry out a preliminary diagnosis of the level of thinking development in students. Such an assessment provides the teacher with information about what type of thinking a particular student belongs to, what types of learning he has a penchant for. Assessing the level of economic thinking after applying a certain pedagogical technology allows you to evaluate its effectiveness not hypothetically, but in relation to a specific group of students.

Students were conditionally divided into three types: 1) those with reproductive thinking; 2) possessing reproductive and variative thinking; 3) possessing productive thinking.

RESULTS AND DISCUSSION

The parametric model for assessing the level of development of economic thinking, developed by the author, includes three components:

1. Cognitive
2. Psycho-emotional
3. Level of stereotyping

To diagnose students' thinking, a special questionnaire was developed, which includes questions and answers related to cognitive, psycho-emotional components and the level of stereotyping.

Questions for preliminary diagnosis had an economic content, but were not tied to any specific topic, but reflected the general concepts of an economic property, to determine the effectiveness of the application of each technology used in the process of conducting experimental work; new questionnaires were compiled containing questions, directly correlated with the studied economic categories.

Depending on how the students answered the questions from the questionnaire, it was determined to which gradation the level of development of their thinking belongs.

The model includes parameters that objectively reflect not only the volume of students' economic knowledge, but also the mechanism for making economic decisions. In addition to the cognitive component, the factors influencing student decision-making are also the degree of their dependence on the emotional state and the level of stereotyped thinking. High values of these two parameters are factors that hinder the successful socialization of students in a changing environment, therefore, student teaching technologies should be aimed at strengthening the cognitive component and reducing the influence of the psycho-emotional factor and stereotyped thinking.

The influence of social stereotypes on economic thinking also has its negative side associated with the conservation of developed models of perception and behavior, which may lose their relevance in the event of qualitative changes in the external environment. At the same time, the absence of a mechanism for stereotyping would lead to the fact that economic thinking, being in a state of information overload, would not be able to organize human economic activity at all. Therefore, one of the tasks of managing the economic behavior of students is not the eradication of social stereotypes as such, but the formation of flexible programs of economic thinking that can adapt to changing environmental conditions.

The high values of such a parameter of the model as the psycho-emotional component have a great influence on the motivational stimuli of students, the formation and strengthening of akisitive emotions. This can be clearly seen in A. Maslow's hierarchy of needs. This hierarchy, described by Maslow in the 50s of the XX century, was called "Theory of Motivation". Maslow's pyramid of needs has a stepped structure. Maslow explained such an increase in needs by the fact that a person cannot experience needs of a higher level until he satisfies the basic and more primitive ones. A satisfied need ceases to motivate, from which it follows that, having satisfied the needs of a lower order, a person seeks to satisfy the needs of a higher, that is, social and spiritual nature. However, if a person is possessed by akisitive emotions and become his undivided stimulants, a person cannot move to higher stages of development, since the needs of a lower order occupy an ever-larger space. Spending his intellectual and physical resources to meet the needs of the lower 2 levels, a person cannot achieve the most important thing - self-actualization, that is, the full disclosure of his spiritual and creative potential. In order to avoid such a situation in the process of forming a student's personality, it is necessary to timely identify a tendency to increase the influence of akisitive emotions, as well as to implement the entire range of means and methods of economic and spiritual and moral education, aimed at transforming such negative qualities as mismanagement, stinginess, selfishness , extravagance, avarice, dependence, chaos, aimlessness, laziness, complacency in positive economically significant personality traits, such as thrift, frugality, organization,

diligence, responsibility, prudence, discipline, consistency, flexibility, criticality, independence, forecasting, self-control, reliance on moral norms and universal values, organizational skills, willpower, patience.

The educational impact on students, aimed at reducing the level of stereotyping, as the main barrier to the development of innovative ideas, is focused on developing students' personal qualities of an entrepreneur, such as:

- search for opportunities and initiative;
- perseverance and persistence;
- willingness to take risks;
- focus on efficiency and quality;
- responsibility and dedication;
- purposefulness;
- observation and planning skills;
- efficiency;
- professionalism.

The main directions of the regulatory impact on the economic thinking of an individual in order to control his economic behavior: 1) through the use (formation) of social stereotypes; 2) through the activation of economic interest; 3) through psycho-emotional impact; 4) using the norms of economic culture. The choice of specific management strategies depends on the object of management (individual, collective, mass), the goals pursued by the subject of management (strategic - tactical, long-term - short-term), as well as on the capabilities of the subject. Effective management of economic behavior is associated, as a rule, with a comprehensive regulation of the mechanism of economic thinking, when not one, but several components of this mechanism are targeted.

CONCLUSION

The parametric model developed by the author for assessing the level of development of economic thinking in students is a tool for criteria-based assessment of students' readiness to perceive information of various levels of complexity. Knowledge of the initial value of the level of development of students' thinking allows you to effectively design the educational technology of teaching in relation to a certain group of students, and at the final stage - to assess the degree of achievement of the set didactic goals when applying certain innovative teaching methods. Along with this, the mechanism for the formation and use of a parametric model has a universal character and can be successfully used to assess the level of development of other types of thinking: engineering, mathematical, etc., for which it will be sufficient to determine the factors affecting one or another type of thinking, to compile a questionnaire with questions strictly focused on determining the given parameters. Then you should postpone the data obtained after the survey on the coordinate axes, based on the analysis of the resulting graph, you can identify the level of development of the studied type of thinking.

A parametric model for assessing the level of development of economic thinking among students as a tool for designing educational technology of teaching is based on strengthening interdisciplinary connections between disciplines such as pedagogical theory, economic theory, economic psychology and economic sociology.

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