Ministry of Education of the Republic of Belarus Educational Establishment "Vitebsk State University named after P.M. Masherov"

# THE YOUTH OF THE 21st CENTURY: EDUCATION, SCIENCE, INNOVATIONS

# **Proceedings of the International Conference** for Students, Postgraduates and Young Scientists

Vitebsk, December 4, 2014

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## PSYCHOLOGICAL AND PEDAGOGICAL DETERMINANTS OF THE ESTABLISHMENT

correlation that exists between the passive strategy of "avoidance" and neurotic level was evident that using this strategy can successfully adapt. At the same time, a significant negative correlation existing between the neurotic level and an active strategy "Solution", which may indicate that the person using this strategy succeeds in overcoming negative mental states and actually reaches that level, which can be called a successful adaptation [6].

According to the results of the study we have developed and implemented a program of training with elements of social-psychological training "Objective, resources, motivation" on the basis of the Center of psychological assistance in VSU named after P.M. Masherov. Qualitative analysis of data obtained through questionnaires and during the conversation with the participants after the conference allowed us to say that in the course of employment there have been some changes in their consciousness that showed positive dynamics in overcoming negative mental states. There has been noticed some adjustment and restatement of their old and the definition of new goals in their life, and, what the most important is that they has searched and analyzed the resources needed for their implementation, which ultimately provided the participants with the guidelines in the implementation of their activity. In addition, we have carried out some individual work with people with disabilities, which was a revaluation of the previous experience, the discovery of new resources, that allowed them to switch to the use of active coping strategies and thus to improve their physical and psychological well-being, to become closer to the feeling state of psychological comfort, obtained largely by overestimating their capabilities.

**Conclusion.** Thus, the research and testing program of a psychological adaptation showed us that switching to the use of active coping strategies helps to overcome the negative mental states in terms of physical disabilities, and thereby helps the process of psychological adaptation of a person under these conditions, since the discovery of ways to implement their activity helps to get rid of psychological discomfort caused by withdrawal from solving real problems and based on false resources, which ultimately helps him / her to improve his / her physical and psychological health and to get closer to the feeling state of psychological comfort.

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# FORECASTING OF LEARNING PROCESS QUALITY: **METHODS AND TECHNIQUES**

## Victoria Savchuk

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In modern conditions pedagogical design and forecasting are becoming the dominant technologies in education quality management and account for its performance, effectiveness and "outrunning" nature. According to the concept of Total Quality Management, 70 % of management success is associated with these technologies. Forecasting is the invariant component of pedagogical design. It makes it possible to identify potential "risks" of the poor quality and potential ineffectiveness of a future learning process in advance, to estimate the degree of their probability and, to minimize their impact. Thus, forecasting ensures the quality of the results of pedagogical design (educational standards, training projects, etc.), which is one of the main factors in learning process quality at high school, and of higher education quality in general.

Analysis of research and training projects shows that they are often created without preliminary scientific justification, without recording and in-depth analysis of background factors, without problem analysis of the context and taking into account its dynamics; that they do not undergo prognostic quality assessment. Forecasting is dropping out of the structure of pedagogical design, and this is becoming one of the reasons for the poor quality of learning process projects, and hence low quality of the education process

and outcomes. This situation is due to the fact that the issue of using forecasting as a technology in learning process quality management has not been studied enough; the nature, specificity and technology of didactic forecasting have not been determined and, its standards, algorithms, methods and tools have not been developed yet. That is why the theoretical justification and technological maintenance of didactic forecasting and its "legalization" in the structure of pedagogical design and education quality management are becoming especially important and relevant.

Material and methods: content analysis, critical reflection, generalization and systematization of the results of interdisciplinary research in the field of prognostics.

**Results and discussion.** From our perspective, didactic forecasting is the invariant component of pedagogical design, and the technology used in learning process quality management. It is a specific type of science-based system teaching activity, aimed at the permanent interdisciplinary modeling of probabilistic scenarios in learning process implementation, the use of which in design and management will provide the best quality and efficiency in the future learning process. The value of forecasting is that it not only allows us to identify potential problems and determine the most probable scenarios in learning process implementation; but also to evaluate their possible effectiveness, estimate the consequences of various management decisions, define optimal scenarios in learning process implementation, which provide the achievement of maximum coincidence of learning objectives and outcomes, and on this basis to develop specific recommendations to ensure optimal quality of design results, and to improve the quality of the education process and outcomes in the future.

From our point of view, the dominant method of forecasting learning process quality is an expert method -a method of obtaining prognostic information on the basis of the identification and specialized processing of the opinions of specialists included in a representative group of experts. This is due to the:

- existence of variant semantic shades of the concept "learning process quality";

- dependence of learning process quality on numerous often contradictory factors, some being subjective, the effect of which is almost impossible to take into account;

- existence of variant scenarios, ensuring learning process quality, because of the current polyphony of educational approaches, variability in defining objectives, content and methods of learning process;

- lack of universal criteria and indicators of learning process quality, the need for their permanent updating according to the dynamics of socio-cultural and educational contexts;

- lack of opportunities available for assessing learning process quality quantitatively (it cannot be measured and standardized), for using formalized methods of forecasting learning process quality; the need to use mainly qualitative methods of assessment.

Forms of expert method implementation	Forecasting techniques
Step 1: Critical analysis of prognostic background:	Forecasting techniques
1.1 Identification and systematization of factors affecting learning process quality	
Analytical expert assessment (individual extramural form)	Publication method, statistical and logical extrapolation, self- esteem of the degree of influence of argumentation sources
1.2. Assessment of the nature of the influence of different factors on learning process quality	
"Brainstorm" (collective intramural form)	SWOT-analysis
1.3. Assessment of the degree and duration of the influence of different factors on learning process quality	
Data 12 mathe by Circlin 1 and a structure at a second	Methods of mathematical statistics (ranking, direct evaluation method,
«Delphi's method» (individual-collective extramural	method of paired / sequence comparison, the median, the upper and
form)	lower quartiles, the coefficient of concordance), matrix method
1.4. Construction of prognostic background models	
Analytical expert assessment (individual extramural	
form) + synoptic method (collective intramural form)	Scenario method, evaluation of relative importance of prognostic
/ method of expert committees (collective intramural	background models
form)	
Step 2. Quality assessment (expertise) of learning process projects	
Method of expert committees (collective intramural	
form), analytical expert assessment (individual	Matrix method, facet method
extramural form)	
Step 3-4. Construction of descriptive and normative prognostic models of learning process quality	
Analytical expert assessment (individual extramural	Scenario method, matrix method, methods of mathematical
form) / method of expert committees (collective	statistics (ranking, direct evaluation method), verification (indirect,
intramural form)	by an opponent, by a competent expert)

## PSYCHOLOGICAL AND PEDAGOGICAL DETERMINANTS OF THE ESTABLISHMENT

One of the necessary conditions for ensuring the quality of didactic forecasting results is the selection and use of objective-adequate forecasting forms and techniques. The accuracy of prognostic models constructed as a result of forecasting depends upon the quality of the forecasting tools. We have identified the most appropriate forms and techniques of expert method implementation for each step of didactic forecasting. They are presented in the table below.

**Conclusion.** From our point of view, the presented methods and techniques have significant prognostic potential, and can be widely used by practicians (training project designers, experts and education managers) for forecasting the learning process quality in higher education establishments. We believe that rapid implementation of the above-mentioned tools of didactic forecasting in the sphere of education management will ensure the quality and effectiveness of the learning process, and therefore will contribute to the improvement of higher education quality.

# THE PROBLEM OF STAFFING IN INCLUSIVE EDUCATION

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At the present stage in the Republic of Belarus pays great attention to the expansion of educational space, the inclusion of all children regardless of their abilities, capabilities and social status. At the legislative level, this is reflected in the Code of the Republic of Belarus on education, where the main directions of state policy in the sphere of education are «ensuring access to education, including persons with special needs in accordance with their health and educational opportunities at all levels of basic education and in obtaining additional education». In article 3 of the Code of the Republic of Belarus on education "the State guarantees of the rights in the sphere of education, stated that "persons with special needs in education is the correctional-educational assistance and special provisions are made for education taking into account the peculiarities of psychophysical development"[1].

These benchmarks the development of a national system of education is fully consistent with the goals and objectives of inclusive education, understood as education, which gives each person an equal opportunity to engage in a holistic educational process and provides equal opportunities for socialization. Another P.S. Vygotsky pointed to the need to establish a system of training in which the child with features of psychophysical development would not be excluded from the society of children with normal development. He noted that the main disadvantage of special schools is narrow circle of the school community in which all adapted to the defect of the child, does not introduce it in real life. The main task of teaching a child with disabilities, PS Vygotsky saw in the integration of it in life and compensate for the lack of any way.

**Material and methods.** For the development of inclusive education in the Republic of Belarus of children with special needs has a number of prerequisites: established integrated training and education, a barrier-free environment created in a number of institutions that create the system of training teachers, the extensive work on the formation of a tolerant attitude towards people with special needs.

The transition to inclusive education leads to the creation of special conditions for education of children with special needs in institutions of basic education. One of these conditions is sarigumba school environment that ensures a successful emotional and psychological status of each participant of the educational process.

In the field of inclusive education there are three interdependent problems. The first is, that the proportion of children who have features in psychophysical development, turn out to be socially isolated. Teachers are not always aware of the method of forming constructive interpersonal relationships in the team, which consists of such children. As a consequence, the problem of formation of competence of children with disabilities. With limited social interaction these children do not acquire the necessary positive experience in different situations. The third problem, which largely depends on the efficient solution of the first two, associated with staffing the development of inclusive education.

**Results and discussion.** Currently pedagogical universities are quite skilled training. A distinctive feature is its focus on competence-based approach, according to which the expected result of the educational process is not a system of knowledge, abilities and skills, and the set of key