The Pedagogy

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Students' motivational stimulation using the technology of diagnostic-qualimetered building of educational process.

It is possible to obtain students' motivational stimulation only taking into account competence approach to organization of educational process, harmoniously combining the concept of personality-oriented education [1], classical theory of educational qualimeter method [2] and technology of projection of pedagogical objects [3]. Motives are the most important factors influencing the formation of vocational competence of a specialist; they have cumulative characteristics in reference to intellectual level of development and create positive feedback.

The quantitative indices of inner motivational factors of personality are the potential capabilities to continue studies in a selected field of science. Potential capabilities characterize the speed of intellectual age of students and can be measured with the help of standard didactic tests [4]. Potential capabilities of students in the field of technical disciplines are integral competence indices of formation of professional competence of a navy specialist.

Theoretical model of motivational stimulation in conditions of uninterrupted professional education is based on two points:

- the beginning of the next educational stage corresponds to the end of the previous one;
- 2. the content of different educational stages is not duplicated

Competence approach to building of uninterrupted professional education suggests decrease of the variance of test results, which is the consequence of efficient side of pedagogical support. Using the information about students' capabilities, the teacher creates problem situations on preliminary stage of studying structural elements of educational programme, learn students to cope with them on essential stage of the educational programme and propose motivational stimulation assignments in the form of different projects, revealing the practical significance of this considered material [2].

Technology of diagnostic-qualimetered building of educational process of teaching technical subjects is based on procedures of standardization of pedagogical measures. The character of content-structure validity let us formulate the necessary condition of pedagogical measure standardization which reduces to the fact that all the



elements of the subject of the research must be reflected in test assignments, providing high level of difficulties. These difficulties are not caused by sophisticated forms of presenting material and process of assignment fulfillment, but they are achieved by problem-motivational orientation. The sufficient condition of standardization of pedagogical measures is obtained by determinate validity of test measures and the necessity of their correspondence with independent criteria index.

The main difference between technology of diagnostic-qualimetered building of the process and the technology of standardization of pedagogical measurements consists in priority of content orientation of pedagogical measurements over procedures of statistic processing of received data, which let make projects about motivational methodical system of teaching, conforming to necessary didactic attributes. Diagnostic-qualimetered building of educational process of technical subjects include qualimeter questionnaire, whose structural characteristics must correspond to criteria test and didactic tests containing the majority of assignments with medium level of difficulties and possessing measuring characteristics of standard tests.

As a result of pedagogical experiment we have discovered the rise of inner motivation of students in experimental group, where the process of teaching was based on motivational methodical system of teaching. Besides we consider as statistic indices of the rise of potential capabilities the decrease of variance and the increase of the median line divergence in tests results of monitoring researches.

Stage of monitoring	Average test score		Standard		Shift of me- dian line, (%)		Divergence of median lines,		Problem stage of
							(%)		learning
	С	E	С	E	С	Е	С	E	E
Incoming data	5,3		1,8		-8		0		0,94
Boundary stage	5,1	5,4	2,1	1,9	-7	-2	+1	+6	0,87
	4,1	4,5	2,0	1,6	-9	-4	-1	+4	0,87
total	5,2	5,4	1,9	1,7	-6	0	+2	+8	0,79

Data of students' potential capabilities

In the experimental group we have regularly determined students' weighted mean capabilities and relative length of learning of the structural elements of preliminary and essential stages of educational programme. Due to increase of students' motivation and potential capabilities, problem stage of learning is reduced to 79%, and the teacher is able to allot more time for the explanation of the new material.

The Literature

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