

METHOD OF CASES AS ONE OF THE EFFECTIVE MEANS OF FORMATION OF STOCHASTIC COMPETENCE OF THE FUTURE TEACHERS OF MATHEMATICS

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Modernization of Higher Education, carried out in Russia under the influence of global and domestic development trends, is aimed primarily to increase the adequacy of the outcomes of education graduates so they can meet the requirements of the State, society and personality. In frame of the Bologna discussions World Intellectual Competence approach is becoming more and more actual. The expression "learning based on competences" is being used in a number of West European systems of occupational education and training. In educational system of Russia the term "competency approach" has entrenched. The term "competence" at the present time, is increasingly used to refer to learning outcomes when discussing the quality of the new Institute of Education. From the modern university graduates it is required not only mastering a set of necessary knowledge, but the willingness to use creatively the knowledge in specific, often non-standard conditions to solve current professional challenges.

The professional competence of teaching staff should not only include general and professional competence, but also the competence of the data domain. The crucial one for a teacher of mathematics is a mathematical competence. Let us consider one of the components of mathematical competence - stochastic competence. Under stochastic competence we consider the shown willingness to the activity, representing by itself the acquirement of the basic concepts of probability theory, combinatorial analysis, and mathematical statistics and the ability to apply them in specific and sometimes non standard situations.

One of the technologies that makes the competency approach real and that realize the basic principles of interactive learning technology is a method of cases. A distinctive feature of this method is to create a problem situation based on the factors from real life. Such training has developed, often unconsciously, the understanding and ability to use the language of the main problems faced by the professionals in their profession. Method of cases contributes to the ability to analyze situations, to evaluate alternatives, to choose the best option and to plan its implementation. Method of cases is an effective means of forming students' stochastic competence and its development among the students - future teachers of mathematics. Here are several examples of possible cases for the lesson dedicated to developing of stochastic competence: "Police Station", "Hospital", "Stock Exchange", "Analytical Service of the President", "Administration of big factory", "Barber", "Marketing Service of McDonalds", «Psychological counseling services », "Meteorological centers," "Casino," "Chemical Industry", etc. The proposed case studies deal with situations that form the ability, based on the knowledge of stochastics, to solve effectively and efficiently the practical and social problems, to link the personal experience with the acquired knowledge, to accumulate successful experience to resolve unexpected, sometimes non standard situations.