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**Professional Culture of the Specialist of the Future**

**SITUATIONAL APPROACH TO THE PREPARATION OF  
TEACHERS OF PROFESSIONAL TRAINING IN UNIVERSITIES**

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***Abstract***

Modern education processes are characterized by a variety of situations that can arise spontaneously and be created purposefully. One of the results of teacher training in universities that is defined by the federal state standards of higher education is the ability to perform professional and pedagogical functions to ensure the effective organization and management of the pedagogical process to prepare workmen, employees and middle-level professionals. The methodological basis for the development of this ability is a situational approach that requires repeated correct implementation of teacher's actions in typical professional and pedagogical situations, situations of increased complexity, as well as in non-standard and unforeseen situations. The article provides theoretical analysis of the problem in the domestic and foreign scientific pedagogical literature regarding the competences of future teachers that are built in a university and that are related to the analysis of professional and pedagogical situations, the justification and modeling of their own actions. The authors characterize educational cases in the disciplines of the professional bloc (pedagogy and psychology) as a means of forming future competencies for professional training related to the analysis of professional and pedagogical situations, substantiation and modeling of teacher's actions. Specificity, structure, types, forms of presentation of educational cases on pedagogy and psychology are defined. The results of experimental research are presented, which testify to the effectiveness of applying the situational approach to the training of future teachers in the university.

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**Keywords:** Case method, educational case, professional and pedagogical situation, professional training teacher, situational approach.



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## **1. Introduction**

Modern education processes are characterized by a variety of situations that can arise spontaneously and be created purposefully and therefore it is reasonable to consider the activity of the teacher as a manifestation of creativity (Galchenko & Chentsova, 2015).

One of the results of preparation of professional training teachers in universities that is defined by the federal state standards of higher education is the ability to perform professional and pedagogical functions to ensure the effective organization and management of the pedagogical process to prepare workmen, employees and middle-level professionals. This ability is determined by competencies related to the analysis of professional and pedagogical situations, the justification and modeling of teacher's actions.

## **2. Problem Statement**

To help future teachers of professional training develop these competencies it is necessary to correctly and repeatedly perform specific actions in typical professional and pedagogical situations, situations of increased complexity, as well as in non-standard and unforeseen situations.

At the same time, as evidenced by the results of the analysis of the theory and practice of education, it is impossible to provide such traditional approach to the preparation of future professional training teachers in a university.

Hence, it is necessary to develop and apply such training methods and techniques which can ensure development of competencies related to the analysis of professional and pedagogical situations and the rationale and modeling of the teacher's actions.

## **3. Research Questions**

Obviously, there is a problem related to the development of the types of educational cases that can be offered to future professional training teachers to form competencies related to the analysis of professional and pedagogical situations, by justifying and modeling teacher's actions. Also, it is very important to introduce case studies on the disciplines of the professional bloc (pedagogy and psychology) into the practice of Russian higher professional and pedagogical education.

## **4. Purpose of the Study**

The purpose of the study was to theoretically substantiate and test the effectiveness of the case method in the disciplines of the professional cycle (pedagogy and psychology) as a means of developing the competencies related to the analysis of professional and pedagogical situations, the justification and modeling of teacher's actions.

The subject of the research was the process of building competences related to the analysis of professional and pedagogical situations, the justification and modeling of teacher's actions.

The study focused on educational cases as a means of developing the competences that are related to the analysis of professional and pedagogical situations, the justification and modeling of teacher's actions.

The hypothesis of the study was that development of professional training teacher's competencies that are associated with the analysis of professional and pedagogical situations, justification and modelling of actions will be effective if future teachers are provided with cases in the disciplines of professional bloc (pedagogy and psychology).

In accordance with the purpose of the study, the following objectives were defined:

1) to conduct a theoretical analysis of the domestic and foreign scientific pedagogical literature devoted to the formation of professional training teachers' competencies related to the analysis of professional and pedagogical situations, the justification and modeling of teacher's actions;

2) determine the specifics, structure, types, forms of presentation of cases on the disciplines of the professional cycle (pedagogy and psychology); to develop educational cases that can be offered to future teachers of professional training for the analysis of professional and pedagogical situations, justification and modeling of teacher's actions;

3) to carry out an experimental test of the effectiveness of the formation of competencies related to the analysis of professional and pedagogical situations, the justification and modeling of teacher's actions through the application of training cases in the process of training in the university in the disciplines of the professional cycle (pedagogy and psychology).

## **5. Methods**

The situational approach was applied to studying development of competencies related to the analysis of professional and pedagogical situations, justification and modeling of teacher's actions. Research methods included theoretical methods (analysis, synthesis, comparison, classification, generalization); empirical methods (pedagogical experiment, analysis of results, pedagogical testing).

## **6. Findings**

In accordance with the first task of the study, an analysis of the scientific literature was carried out which showed that in the pedagogical science, in the study of various pedagogical processes, a situational approach is actively used; it is based on the teacher's account of circumstances and conditions in the decision-making process on how to act in a concrete pedagogical situation.

Despite the scarcity of studies of the problem of developing professional training teacher's competences that are related to the analysis of professional and pedagogical situations and the justification and modeling of teachers' actions, scientific prerequisites for solving this problem have been created by joint efforts of scientists.

The concept of the situation is central to the methodology of the situational approach. In the "Explanatory Dictionary of the Russian language" (Ozhegov & Skvortsov, 2012), the situation is treated as a set of conditions and circumstances that create these or other relations, environment, setting. The pedagogical situation is understood as a system of conditions external to the teacher and students that induce and mediate their activity.

We share the point of view according to which "no theory can provide ready-made solutions for all the diversity of pedagogical situations in which a teacher has to choose the correct way of behavior".

Every time the teacher needs to mentally feel and live through the situation (Serikov, 2016, p.5.) Hence there is the need to simulate and "play" such situations as close as possible to educational practice and real conditions of professional activity.

According to the researchers (Bakiyev & Mollayeva, 2015) the case method is an effective way of forming the professional competence of future teachers. The form of the presentation of the content related to teacher's professional activities is an educational case.

The case method (method of case studies) originated in the US, then spread in Western Europe and is now widely used throughout the world. The case method is used in pedagogical education both in the former Soviet Union countries (Azhibekova, 2014, Niyazova & Mussagozhina, 2017), and in other countries (Schritteser, 2014).

In the Russian and foreign scientific pedagogical publications, the essential characteristics of cases have been described and the experience of their use in the organization of teacher training is widely represented.

The case method in the professional training of future teachers is aimed at the following: development of creative and communicative skills, teaching to analyze internal and external conditions, the evaluation of alternatives and for teacher's decision-making (Smolyaninova, Khramov, Kolokolnikova, Mitrosenko, & Lobanova, 2015).

The case-method is interpreted as "the study, analysis and decision-making on the situation that arose as a result of the events that occurred or may occur under certain circumstances in a particular educational organization at one time or another" (Osadchenco, 2012, p. 59).

According to some researchers, the analysis of specific situations is considered as an educational method of a research type. There is an opinion that the case-method is "an innovative way of teaching that enhances development of critical thinking, teaches systematically, in close interrelation between theory and practice, how to solve the topical problems of training and of teacher's professional activity" (Kazak, 2015, p. 153).

Modeling of educational situations in the educational process creates necessary conditions not only for acquisition of educational information by future teachers, but also for understanding the procedural aspect of pedagogical knowledge (Kondrashov, 2014).

The case-method in the training of teachers implies "the active independent activity of students in resolving contradictions in an artificially created professional environment that allows a teacher to classify theoretical knowledge, practical skills and accumulated life experience" (Dalinger, 2015, p. 427).

As a result of their work with cases, future specialists learn rational ways of teaching actions and transfer their experience to situations where a teacher can act according to this logic. This does not imply the immediate transfer of ready-made models of actions in similar situations, but analysis and reflection on the acquired experience and using it creatively to achieve a positive pedagogical results (Myronchuk, 2016).

Researchers developed a classification of cases depending on how complex they are:

- 1) illustrated learning situations, the purpose of which is to master the pattern for making the right decision on a specific practical example;
- 2) problem based exercises, the purpose of which is to identify and clearly formulate the problem;

3) learning situations that are not based on problems but have the purpose to analyze available resources to solve a problem;

4) practical situations, the aim of which is to search for alternative ways to solve a problem (Mirza, & Umperovich, 2014).

The process of selecting information is important for case-based training. The situation should not only be real for certain pedagogical conditions, but also reflect certain didactic goals. The amount of information depends on the type of the case. On the one hand, there should be enough information to solve it, on the other hand, the case should not be overloaded with unnecessary information. At the same time, a well-prepared case does not guarantee the realization of the goal of the lesson. It is also important to know how to use the case method, which includes teacher's ability to organize a class discussion, maintain a businesslike approach to classroom tasks and evaluate the activities of students to solve the problem (Androschuk, 2015).

Noteworthy is the way how video cases in the teaching of psychology to future teachers are used. During the research, three methods of work with video cases on psychology were tested: group and individual analysis of episodes of feature and animation films on psychology; selection of episodes from films reflecting the psychological characteristics of children of different ages; creation of a film about the psychology of a student group (Shen, Gromova, Zakirova, & Yalalov, 2017).

Scientists developed a typical scenario for organizing a training session using the case-study method, which includes four stages. At the first, introductory stage, students' knowledge of the problem is defined and the level of their awareness of the problem is determined. Realization of the second, analytical stage involves studying a specific situation and, if necessary, the individual independent work of students or brainstorming within a small group. The third, presentation stage is made up of public presentations by students with the presentation of and defending the proposed solution to the problem. During the fourth, reviewing stage in the general discussion, a joint solution of the problem is found and the teacher justifies his own version and evaluates the work of each small group and each student.

The structure of the study case includes the subject, information and methodological parts. The subject part contains information that allows you to understand the environment in which the situation develops, indicating the source of the data. The information part includes description of the points of view of the different participants in the events; resources allocated to address this situation; chronology of the development of the situation, indicating the actions or influencing factors. The methodological part explains the place of this case in the structure of the academic discipline, formulates assignments for the analysis of the case for students and provides an explanatory note for the teacher (Kot, Sazanova, & Tatarinova, 2016).

Scientists recognize that the analysis of specific situations can be used as a means for assessing the level of students' competence development. According to the results of the study, the case method is more productive in comparison with traditional reading and discussion of educational literature. Case-based learning increases the motivation and performance of students that was measured during testing and examinations (Bonney, 2015).

The analysis of scientific literature made it possible to conclude that development of competences of future professional training teachers related to the analysis of professional and pedagogical situations and the justification and modeling of teacher's actions can be enhanced through the use of case studies.

According to the second task of the research, educational cases were developed for the disciplines of professional bloc (pedagogy and psychology).

The case for pedagogy and psychology, intended for future teachers of professional training, was a specially prepared and specially designed material containing information on a specific case from educational practice, through the analysis of which the modeling of the decision-making process was made on how the teacher should act.

Specific features of case studies on pedagogy and psychology are as follows:

- professional and pedagogical orientation (connection with the future profession and focus of training);
- realism (conformity to pedagogical reality, relevance);
- problem-based approach (the presence of an explicit or implicit contradiction, in the form of opposing positions in explaining pedagogical and psychological phenomena and requiring an adequate theory to resolve this contradiction);
- appeal to emotion (a vivid description of the situation, causing certain emotions and feelings);
- ethical appeal (the moral nature of the situation, requiring the manifestation of pedagogical ethics in the search for a solution to the problem).

In the structure of the case study on pedagogy and psychology, four components were identified:

- 1) the purpose of the case;
- 2) the context of a problem solution: an incident definition, conditions, circumstances, participants, resources;
- 3) key task: noting the result of application of the situational problem solution;
- 4) tasks that will lead to the solution of the situational problem: questions to which answers should be given.

Cases on pedagogy and psychology were based on the practical experience of various teachers, episodes of feature films, literary sources, documentary materials. The information presented in the case studies illustrated both positive and negative experience in solving pedagogical problems.

Three types of cases on pedagogy and psychology were defined in accordance with the complexity of the professional and pedagogical situations presented in them:

1) cases with typical professional-pedagogical situations, i.e. cases that are often repeated under the same circumstances, have the same sources and causes;

2) cases with situations of increased complexity, i.e. cases, where there are many contradictory factors which require intellectual and volitional efforts;

3) cases with non-standard and unforeseen situations, i.e. with atypical, unexpected cases that can violate established rules, values, cause material and moral damage, and require immediate and radical intervention.

The types of cases on pedagogy and psychology have been correlated with the levels of competence development:

- the basic level of competence development was characterized by the ability to substantiate and model their own actions in typical professional and pedagogical situations;
- the productive level corresponded to the ability to substantiate and model their own actions in typical professional and pedagogical situations and situations of increased complexity;
- the high level of competence development was distinguished by the ability to substantiate and model their own actions in typical professional and pedagogical situations, situations of increased complexity, as well as in unusual and unforeseen situations.

In accordance with the third objective of the study, a pilot experimental verification of the effectiveness of the formation of professional competencies of future teachers was made, related to the analysis of professional and pedagogical situations, the justification and modeling of teacher's actions.

Experimental work was carried out at the Department of Engineering Pedagogy of the Siberian State Automobile and Highway University from September 2017 to May 2018. The study involved 2 teachers and 30 students who major in Transport Engineering Pedagogy.

The pedagogical experiment involved the use of case studies aimed at formation of competencies related to the analysis of professional and pedagogical situations, the justification and modeling of teacher's actions.

Four forms of presentation of the study case were used: a text form, which is a description of the situation in writing, graphical representation of information is acceptable); video presentation (video clip), multimedia slides, panoramas of photographs; role-plays or business games on the basis of the scenario developed in advance; a combined form of presentation that involves the use of different ways of presenting information.

The analysis of the situation took from 30 minutes to 2 hours of study time. The methodology of working with cases on pedagogy and psychology included both group and individual work. During this case study the students familiarized themselves with the description of the situation, independently analyzed it, identified the problem, presented and substantiated their ideas for solving it in the course of discussion with other students and the teacher. The teacher compared the options for actions that were proposed by the students, analysed mistakes made by them, and highlighted the most productive solutions.

The results of the research showed that the case-method can be applied at all stages of training and at all types of educational activities in the university, but it is most effective in practical classes devoted to systematization and consolidation of educational material as well as to checking the quality of material acquisition. Cases are most suitable for studying problems that involve multiple solutions and, as a consequence, the possibility of discussion, research and "discovery" of the truth.

To evaluate the effectiveness of the development of professional competencies of future teachers related to the analysis of professional and pedagogical situations, the substantiation and modeling of their actions, the following criteria were selected:

- 1) professional, competent (with the support of the theory) solution of the problem;
- 2) novelty and originality of the solution of the problem; 3) brevity and clarity of the presentation of the solution to the problem.

Successful testing of the developed training cases was confirmed by the results of certification of future professional training teachers: a high level of development of competences by methods used in the disciplines of the professional bloc.

## 7. Conclusion

- 7.1. A case for the disciplines of the professional bloc of teachers training program is a specially prepared and designed material containing information taken from real educational practice, through the analysis of which the decision-making process of a teacher is modelled.
- 7.2. The specific features of the case studies on pedagogy and psychology are: professional and pedagogical orientation; realism; problematicity; emotionality; ethical appeal.
- 7.3. The case study on pedagogy and psychology contains four components: the purpose of the case; the context of the solution of the problem; the key task; tasks that will lead to the result of the solution of the problem.
- 7.4. Three types of cases on pedagogy and psychology are defined: cases with typical professional and pedagogical situations; cases with situations of increased complexity; cases with non-standard and unforeseen situations.
- 7.5. There are four forms of presentation of a case: text; video presentation; game; combination of different forms.

Thus, the hypothesis of the study of application of a situational approach to education of future professional training teachers in the university was confirmed.

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