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## Case Study As A Tool For Stimulating Professional Self-Development Of A Teacher-Educator

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### Abstract

A survey of students and in-service teachers showed that the awareness of the need for professional self-development occurs already in the process of training at a pedagogical university. The question of finding tools to stimulate this process among in-service teachers remains open. The case study is based on a specially modelled real professional-practical situation to analyze and identify problem areas, search for alternative ways to resolve it, and select the most optimal and acceptable one for a particular respondent. This technology provides both the interiorization of knowledge already known to science and the acquisition of objectively new knowledge located in the subject area of the case being solved. Thus, the potential of a case study allows us to consider it as a real pedagogical tool for stimulating the professional self-development of a teacher. The purpose of the study is to identify this potential and describe a possible approach to its implementation to stimulate the professional self-development of a teacher-educator. The following methods were chosen: a review of scientific and methodological literature on the research problem; systematization of research ideas; questioning; generalization of empirical experience. A questionnaire survey of future and practising teachers showed their readiness to master this tool of professional self-development in the absence of experience in its direct use to solve the problem. The developed approach assumes a phased deployment of an acquaintance of students and practising teachers with a case study as a tool for professional self-development and presupposes involvement in the design of cases.

*Keywords:* self-development, professional self-development, case study, practice-oriented education, methodical case.

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## **Introduction**

Mobile, constructive, communicative teachers capable of cooperation, independent decision-making in a situation of choice, predicting the possible consequences of educational influences on students are in demand in the modern world. Willingness to implement teaching and educational functions and self-development in this area is formed in future teachers in the process of studying at a university. Although after 5-6 years of teaching, many teachers stop paying attention to further professional self-determination and self-development (Fishman, 2015). This situation cannot guarantee the quality of education. This means that it is necessary to search for new resource opportunities that will create conditions for high-quality higher pedagogical education and continuous professional self-development, first for the student, and later for the teacher-educator.

The study of scientific and methodological literature confirms the openness of the problem of stimulating professional self-development of both the future and the practising teacher. At the same time, the issue related to the search for tools to stimulate the teacher's professional self-development has not yet been resolved. The case study can be one of such tools.

This technology as a pedagogical tool for stimulating the professional self-development of a teacher-educator did not become a subject of special study. This determines the relevance of the present study.

## **Purpose and objectives of the study**

Within the framework of the article, we will try to identify the resource potential of a Case study in stimulating the professional self-development of a teacher-educator. The results of the study will make it possible to systematically consider Case study as a tool for mastering fundamentally new professional knowledge and skills and improving existing knowledge and skills in the pedagogical field. Tasks are to reveal the content of the concepts of "self-development" and "professional self-development", "Case study"; present the results of an experimental study on the place of Case study in the professional self-development of future and practising teachers; to simulate a pedagogical system that allows the use of pedagogical cases to stimulate the professional self-development of a teacher-educator.

## **Literature review**

The study of the factors and conditions of professional formation and self-development of a teacher-educator is an actual pedagogical problem of the system of professional and post-professional education.

Self-development is understood as: the process of enrichment (transformation) of a person's active abilities and personal qualities in the course of various types of expedient activities, generated by the needs for self-change to achieve personally and professionally significant results (Garanina, 2013, 2014).

For a long time, the problem of professional self-development of a teacher-educator has not been the subject of special research. However, in philosophical and psychological-pedagogical research, a certain experience has been accumulated for its analysis: the process of human development as the basis for understanding self-development; patterns of self-development of students; pedagogical aspects of the organization of professional self-development of a person.

Scientific research reflects the following aspects on the stated topic: the relationship between the processes of professional and personal self-development (Garanina, 2013), factors and conditions for professional self-development (Miniyarov, 2017; Shchurov, 2014), stages of this process, etc.

Serezhnikova et al (2018) note the role of students' understanding of themselves as a subject of pedagogical interaction for the possibility of self-regulation of professional activity and effective personal and professional self-development. Savotina et al (2020) highlight the role of information technology as a tool for student self-development. Researchers are trying to use all possible resources to stimulate the process of personal and professional self-development of future teachers, including opportunities for extracurricular activities (Chirkova, 2019). The ways of professional improvement of a university teacher have also discussed: professional competence of a University teacher is a set of skills to structure scientific and practical knowledge for the optimal solution of pedagogical and educational tasks (Burlakova, 2020; Vekovtseva, 2012).

The case study emerged at the beginning of the 20th century. Its goal is to form students' readiness to solve real problems of professional activity. This method is based on learning through the analysis of a specific case or situation in professional activities. The student is asked to analyze a specific situation, the description of which contains a practical problem (as a rule, which does not have an unambiguous solution). As a result, the set of knowledge required to solve the problem is updated.

The case study (which has become a technology in the 21st century) was born in the American vocational training system (Harvard Business School). Currently, the case study is widespread throughout the world. An American student is "working through" hundreds of cases. European Case Clearing House (ECCH) specializes in case collection, development, and distribution.

In Russia, this method began to be used much later. New approaches to teaching at a university are considered from the standpoint of applying this method (Mirza & Umpirovich, 2014). The essential characteristics of the cases are determined, their structure and approaches to classification are described (Mirza & Umpirovich, 2014; Sokolova & Borgoyakova, 2019; Tulepbergenova, 2014).

This technology provides both the cognition of knowledge already known to science and the acquisition of objectively new knowledge (Tsarapkina, 2015; Tumanyants, 2020). Researchers note the educational potential of the case as a tool for training a specialist in any field. The case study is not a universal teaching tool; it has its limitations since it does not form the entire spectrum of professional skills (Garvin, 2003). However, it allows you to start the process of professional thinking by immersing yourself in the situation described in the case.

The professional-pedagogical case (PPC) is relevant in the professional training (post-professional training) of the teacher-educator. It describes such a practice-oriented situation, which is characterized by the interaction of the teacher and other participants in the educational process and is aimed at discussing business events or tasks (Kozyreva, 2016). As a result, the student acquires the ability to apply theoretical knowledge in specific educational practices.

The obligatory components of a professional-pedagogical case are a generalized description of the situation - the formulation of the contradictions, difficulties existing in practice, and the formulation of a question; the key task in which the product is indicated (what needs to be presented as the result of solving the problem); tasks that will lead to an answer (to a "product"), they can be given in full, incomplete, not given at all; assessment criteria allowing to orient the student towards the qualitative achievement of the final result.

The variety of PPC is predetermined by the multidimensional content of the professional activity of the teacher-educator: analysis of the content, means, methods, structure of educational material; to design training content, problem situations, differentiated tasks, etc.; to systematize educational material; to design the search and research activities of students; on the organization of diagnostics, monitoring, assessment of the quality of knowledge and skills of students; to search for tools for solving educational problems, etc.

Thus, the Case study method is a real pedagogical tool aimed at stimulating the professional self-development of a teacher-educator.

## **Methodology**

During the research, the analysis of psychological and pedagogical, scientific, and methodological, reference and encyclopedic literature, regulatory and legal documents on the stated problem was carried out. Comparative analysis, synthesis, classification and systematization of research ideas, modelling of educational practices, and also generalized the empirical experience of designing pedagogical cases by the authors of the article based on materials collected by students within the framework of pedagogical practice and during the analysis of digital resources located in open sources of information are carried out. A survey of future and practising teachers was carried out to identify their understanding of the importance and resource potential of professional self-development (160 people - students, 65 people - teachers).

To identify the ideas of future and practising teachers about the features of their professional self-development, an author's questionnaire was developed, which consisted of two parts and included open and closed questions. The processing of the survey results was carried out by calculating the average score in closed questions and content analysis of open questions.

## **Results**

We divided all the interviewees into three groups: junior students, senior students, and practising teachers. We will present the results of the study in a generalized form.

The key characteristics of a self-developing personality, according to respondents, are self-education and self-learning (40%, 70%, 60%), continuous personal growth (25%, 20%, 10%); broad outlook (20%, 10%, 20%). Professional self-development of a teacher includes the development of professionally significant qualities (20%, 50%, 50%); ability to use new pedagogical technologies in the process of working with students (10%, 30%, 30%); joint research activities with students (10%); participation in conferences, seminars (10%); training in teacher training courses (50%, 0%, 0%).

Self-awareness of self-developing personality in the chosen profession is demonstrated among junior students (55%), senior students (80%), teachers (90%). Junior students do not realize the resource potential of self-development. Senior students and teachers are confident that they have everything they need to develop themselves professionally.

The following tools of professional self-development are named: analysis of the experience of practising teachers; reflection and self-analysis; advanced training courses; financial incentives, etc. The highest frequency of responses is an analysis of the experience of other teachers (35%), introspection of professional activities (40%) which demonstrates an internal (potential and latent) readiness to analyze pedagogical cases.

The questions of the second part of the questionnaire aimed at identifying the ideas of future teachers and practising teachers about cases as a pedagogical tool and the willingness of respondents to work with them for professional self-development.

Junior students are not familiar with the case studies, but they are ready to understand the potential of this tool for their professional self-development. Senior students and teachers got an idea of the case studies in the learning process. The presence of pedagogical practice also allowed them to take a positive attitude to the idea of self-designing cases.

The analysis of the questionnaire data shows that the pedagogical case can be considered as one of the tools aimed at stimulating the professional self-development of the teacher-educator (the average score is 7.4 on a 10-point scale). Practical experience of teaching at school allows you to realize the need not only for your professional self-development and to think about finding effective means for this process.

The results of the questionnaire are also confirmed by the practice of referring to this technology in the process of training future primary school teachers. The specificity of training future primary school teachers is predetermined by the versatility of their teaching activities. Pedagogical situations-cases that are not related to subject training, are discussed already in junior courses within the framework of the disciplines of the psychological and pedagogical cycle. As part of the study of individual disciplines and their sections in senior courses (Pedagogical technologies, Technologies for the implementation of the system-activity approach in primary mathematical, natural science, language education, etc.), students get acquainted with the actual Case study, which they can apply in an educational process.

At the same time, the authors of the article, as teachers of specialized disciplines, faced a difficulty: on one hand, the use of cases would allow solving the problem of professional orientation of the educational process (Pavlova et al., 2020); solving the problem related to the organization of independent work of students to master their professional competencies in the development of the ability to learn (Antokhina & Zinovieva, 2018). On the other hand, it was not possible to find cases that could be used in the process of studying specialized disciplines, which means that it was necessary to organize work on their design. The relevant questions were discussed within the framework of scientific and practical conferences ("Professionalism of a teacher: psychological and pedagogical support of a successful career" Yalta, 2020; "Modern problems of vocational education: trends and development prospects", Kaluga, 2020) and were reflected in publications by Pavlova, Chirkova and Burlakova (2020), Pavlova and Chirkova (2021).

In 2020-2021, the content of the pedagogical practice of 3-5 year students included an assignment related to the design of a case based on those problematic situations that students will encounter in the process of internship in schools in Kaluga, Tula, and Smolensk region the course of observation of the pedagogical process or the course of their pedagogical activity.

Students were informed about the case study, they knew the requirements for the construction of the case (goals and objectives of the case formation, its structure, assessment criteria). It was about pedagogical cases focused on finding problem areas in the organization of educational work in elementary school. These cases considered situations that arise in the lessons in various academic disciplines (for example, in mathematics). Such a case is a pedagogical case of a methodological orientation or a methodological case (Chirkova & Pavlova, 2021). It highlights situations that reflect various aspects related to the development and education of students through a specific academic discipline (for example, the development and education of a younger student through mathematics).

The thematic focus of such cases can be varied and determined by the significance of historical aspects in teaching academic disciplines (Drobyshev & Drobysheva, 2020; Strecker, 2020), the eventful nature of the interaction of participants in the educational process, the need to organize the project and educational research activities of schoolchildren, etc.

Here are examples of cases developed by fifth-year students after completing teaching practice.

#### Case 1. "So many men - so many minds?"

*The Principle of the school and the head teacher attended the math lessons of two teachers. Lesson's topic: "Solving movement problems." Olga Nikolaevna, teacher of 3 "A" after announcing the topic of the lesson and the purpose of the lesson, called the students to the blackboard to solve problems. Pupils repeated the rules for finding distance, speed, time, pronounced formulas. 10 minutes before the end of the lesson Olga Nikolaevna organized the independent work of the students.*

*The teacher of 3 "B" Tatyana Viktorovna, after defining the purpose of the lesson, suggested that the students independently solve two problems proposed in two versions on the cards. This work took about fifteen minutes. After checking, it turned out that several students made mistakes in the solution. Then T.V. gave each student an individual task card. The students got back to work. The teacher helped some students individually. After a while, the students began to report that they had completed the task. T.V. praised the students and offered new cards.*

*Then it was suggested to compose the problem in pairs: "Each pair makes up its problem!" Three minutes before the end of the lesson T.V. invited the students to form a cluster. When discussing the lessons, the opinions of the director and the head teacher did not coincide.*

*Discussion Questions: Provide your perspective on how each teacher organized the lesson. Did they make didactic mistakes? If so, which ones? Where do you see the effectiveness of the methods and techniques used by teachers in these lessons? What should teachers look for when planning a lesson?*

### Case 2. "A shy student"

*Foreword. A very shy student is studying in the class. In all lessons she is inactive, and during a frontal survey she is so not sure of her answer that even if she knows the answer to the question, she begins to get confused in her thoughts, worry, and any verbal answer ends in tears.*

*Description of the situation. After an illness, a student came to school, and the teacher faced a problem: in almost every subject she has few grades due to missing classes, and in literary reading, an average grade of "3" is expected. The difficulty is that the student verbally answers uncertainly, is afraid to reason in public, which is why the teacher tries not to ask her too often. In a lesson, the teacher asks the student to put a mark for the lesson, and during the answer asks her to answer the question in more detailed, but the student begins to be silent, fiddling with her hands, and eventually begins to cry. The teacher, after a lot of attempts to introduce the student to work in the lesson, puts "2" in the Journal and comments: "Until you learn to speak and answer questions in the classroom, you will have such marks!" The student begins to cry even harder.*

*Issues for discussion. Evaluate the teacher's actions in this situation. What, in your opinion, should the teacher have done in this situation? What approach should the teacher use for further work with this student?*

The verification of the reporting materials provided by the students and their subsequent discussion during the training sessions allowed us to draw several significant conclusions.

- The encounter with problematic situations deserving discussion and exchange of views and experience occurs constantly.
- The teacher and the student need pedagogical support for making a competent decision (resolution) of the situation that has arisen.



- Students experience difficulties and teachers lack time to record situations in writing.
- Different people can “see” the same situation in completely different ways, depending on their status (student, teacher, head teacher, director, university teacher).
- Structuring (description) of the case, carried out by the student (or teacher), needs an indicative basis.
- The greatest difficulties are caused by the formulation of competent questions to the case, which would allow a deeper understanding of the problem areas that have manifested themselves in it.
- One recorded situation (at this stage is not a case) initiates an intellectual search and exchange of views on various aspects of the professional activity of the teacher-educator and only with purposeful work on structuring the case allows one to single out one of the aspects as the most significant and direct oneself to its resolution, which and will contribute to professional self-development.

## **Discussion**

In general, when working with a case, such properties as problematic, dialectical, polyfunctional, and syncretic are manifested.

At the same time, there were situations when students mixed their perception of the case as a tool for managing the educational activities of students and methodological cases proper as cases aimed at their professional self-development. They forgot that the professional-pedagogical case should be perceived as a practice-oriented situation, purposefully recreated in the conditions of vocational training (retraining) at the level of awareness, design and implementation of professional actions both at the theoretical and practical levels to form (develop, improve ) professional competence of a specialist as the basis of professional pedagogical formation.

Cases have an important function. They are aimed at developing teachers' professional competencies and abilities for optimal and effective behaviour in various pedagogical situations. At the same time, in the process of preparing students, The case study should be considered not as unique, but as an equal tool with others for the implementation of practice-oriented and system-activity approaches in education. For example, with such tools to stimulate the professional self-development of students as professionally oriented tasks (Pavlova, 2020) and professionally oriented projects (Pavlova & Chirkova, 2020).

The experience of working with students allows us to transfer it to in-service teacher education.

A gradual acquaintance of teachers with various practices for solving ready-made cases; involvement in the discussion and exchange of knowledge and experience in resolving specific situations through the use of Internet sites, in the work on systematizing and classifying the bank of case studies, should, in the end, be transformed into the need to describe cases from personal practice to identify new problem areas in the pedagogical sphere, based on the implemented professional activity.

At the same time, when using the case study in the lifelong education of teachers, conditions are created for the emergence of risks (Chirkova & Pavlova, 2021):

- empiricism: methodological facts and phenomena obtained in experience, practice, may not have a scientific basis;
- syncretism: observations, analysis of individual pedagogical situations do not allow realizing the inner unity and consistency of methodological knowledge;
- traditionalism: following models, focusing on individual pre-professional experience.

## **Conclusion**

The study confirms that both future and practising teacher-educators are interested in their professional self-development. They see case technologies as one of the most effective pedagogical tools in this process. Practical situations are of interest to students since it is revealed what theoretical knowledge is not enough to solve the problem. The transition from ignorance to knowledge is at the heart of the process of professional self-development.

Case study as a pedagogical technology allows the formation of a person's readiness for self-development and provides stimulation of the professional self-development of a teacher-educator. This is substantiated, firstly, by the general orientation of education towards the formation of the professional competence of the graduate, and, secondly, by the requirement for the teacher to possess the ability for optimal and effective behaviour in various pedagogical situations. The inclusion of cases in the process of professional training and advanced training shows the possibility of applying theoretical knowledge in practice, initiates interpersonal communication, and develops critical thinking of the teacher-educator. The educational potential of the cases is realized due to their problematic nature, dialecticism, polyfunctionality, and syncretism.

The lack of a systematic base of pedagogical and methodological cases, considering the directions and profiles of student training, complicates the situation and prevents the effective implementation of all aspects of the new educational standards. The creation of such a base is possible only with the joint efforts of all interested parties: university professors, students, teachers, and the professional community.

The problem of designing pedagogical cases as a tool to stimulate the professional self-development of a teacher-educator and their approbation will become the object of research in our future publications.

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