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PROFESSIONAL SUBJECTIVITY FORMATION OF FUTURE BACHELORS OF PEDAGOGICAL EDUCATION

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Abstract

The authors describe the study results of professional subjectivity formation of future bachelors of pedagogical education in the current educational conditions. The paper presents a theoretical analysis of the literature on the problem under consideration based on the research purpose and subject. The authors also specify the definition of the concept of "future teacher's professional subjectivity." The paper describes the research procedure and results of future teachers' professional subjectivity formation conducted in 2020-2021 in Amur State University of Humanities and Pedagogy (Khabarovsk Territory, Komsomolsk-on-Amur). The article presented the substantiation of the developed diagnostic techniques complex, essential to conducting research. They are the "Self-Attitude Research Technique", "Reflexivity Questionnaire", "Terminal Values Questionnaire", "Multidimensional Personality Self-Realization Questionnaire,". The authors put forward a hypothesis that the use of productive technology complex in the professional educational process of a pedagogical university will contribute to the professional subjectivity formation of future bachelors of pedagogical education. The paper substantiates the pedagogical technologies complex necessary for target quality formation. The latter includes the following technologies: critical thinking development, dialogue, gaming technologies, problem-based learning technologies, semantic reading, research, heuristic and project technologies, and contextual learning technology. The effectiveness of the pedagogical technology complex is proved. The authors also show the dynamics of future teachers' professional subjectivity formation. These affect the efficiency of the professional and educational process realized in a pedagogical university.

Keywords: Future teacher, pedagogical technologies, professional subjectivity of the future teacher, structures of professional subjectivity

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1. Introduction

In the conditions of modernization of the modern world, increasing the volume of knowledge and the amount of information, digitalization of various spheres of contemporary society, the requirements for the personality and professional competence of a modern teacher are growing. According to the normative-legal documents of the Russian Federation (The Concept of the development of lifelong adult Education in the Russian Federation for the period up to 2025 (Kontseptsiya…, 2016), the National Project "Education" (Natsionalnyy proyekt…, 2019), the Federal State Educational Standard of Higher Education (FSES HE 3++) (Federalnyy…, 2018), and the like), society today needs a teacher who has formed personal skills and can carry out individual and professional development throughout life.

A modern teacher faces the need to comprehend these requirements for his personality development and professional training in the conditions of the current educational paradigm. These requirements are relatively high. Society needs not just a teacher who has formed groups of competencies listed in the standard of the field of training. It also requires the professional who has a sufficiently shaped professional subjectivity that allows using proficient knowledge for personal and professional development in continuous professional education.

2. Problem Statement

The Federal Law "On Education in the Russian Federation" (Federalnyy zakon…, 2012), the Concept of the Development of Continuing Adult Education in the Russian Federation for the period up to 2025 (Kontseptsiya…, 2016), the National Project "Education" (Natsionalnyy proyekt…, 2019), the Federal State Educational Standard of Higher Education (FSES HE 3++) (Federalnyy…, 2018), and other regulatory legal documents of the Russian Federation mention the future teacher's professional subjectivity formation as is a condition for the continuous growth of his educational potential. Domestic and foreign researchers consider the development issues of a competitive specialist's professional subjectivity in their works.

In her works, Olkhovaya (2013) associates the university student's subjectivity formation with the development of a system of his value orientations and the internalization of external activity. The scientist defines the student's subjectivity as "an axiological characteristic of a personality, revealed in the activity productivity, the value-semantic self-organization of student's behaviour and in life creation" (p. 47).

Seregina (1999) understands subjectivity as a person's individual quality, as "an integrator of his professional abilities, providing the capability to fulfil professional requirements at a high level of quality" (p. 8).

Slastenin (2003) perceives subjectivity as a person's complex integrative characteristic associated with his actively selective and initiative-responsible attitude towards himself, people, the world, and life in general.

Borytko (2000) connects the subjectivity of a student's personality with different things: his successful adaptation in an ever-changing socio-cultural situation; with the manifestation of activity and independence in the educational space of the university; with the implementation of productive

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pedagogical interaction with the subjects of the educational process; with awareness of responsibility for the results of his education.

Foreign researchers T. Bourner, S. Flowers, F. González Rey, M. O'loughlin also consider the problem of a person's subjectivity formation in the educational process. In their works, González Rey (2016) and O'loughlin (2001) primarily associate subjectivity with his activity characteristics and the subject's independence in the educational process. Researchers Bourner and Flowers (2014) connect the student's subjectivity with his ability to self-control, self-regulation, and reflection.

Having analyzed the psychological and pedagogical literature on the problem under consideration, we can conclude that domestic and foreign researchers represent the future specialist's professional subjectivity using multifaceted characteristics of his personality. These are marked by: creative attitude to the profession, successful adaptation in a continuously changing socio-cultural situation, the manifestation of independence and activity in the professional and educational space of the university, the implementation of productive pedagogical interaction with the subjects of the educational process, awareness of the responsibility for the results of the education received.

We understand the future teacher's professional subjectivity as the integrative quality of his personality. It is determined by a sufficient level of reflection, self-knowledge, subjective experience, allowing the student as a future subject of pedagogical activity to implement self-development and self-realization in continuous professional education.

Thus, the scientific problem of this study is the theoretical justification and experimental verification of the effectiveness of productive technologies complex in professional education for the future teachers' professional subjectivity formation.

3. Research Questions

Experimental work (further referred to as EW) on the formation of future bachelors' professional subjectivity of pedagogical education included the ascertaining, formative, and control stages.

At the ascertaining experiment stage, we studied the formation level of professional subjectivity among students of the control and experimental groups.

The research object was the professional-education process of a pedagogical university. The study subject was the professional subjectivity level of future teachers studying at Amur State University of Humanities and Pedagogy.

The personal, activity-based, and subjective approaches used in professional education made the theoretical foundation of the research.

We set a list of research questions: 1. What is the initial level of future teachers' professional subjectivity at the ascertaining experiment stage? 2. Will productive technologies of professional education contribute to the formation of the target skills in the course of experimental work? 3. Will the level of future bachelors' professional subjectivity change at the control experiment stage?

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4. Purpose of the Study

The relevance of the research problem associated with the formation of a future competitive specialist's professional subjectivity in the field of education has determined the purpose of this study - the approbation and effectiveness verification of a productive pedagogical technology complex contributing to the formation of professional subjectivity.

The research hypothesis was the assumption that the productive technologies complex in the professional-education process of a pedagogical university will facilitate the professional subjectivity formation of future bachelors of pedagogical education.

We solved the following tasks in the course of research: 1. to study the formation dynamics of future bachelors' professional subjectivity of pedagogical education. 2. To develop a productive technologies complex of professional education and their implementation in the professional-educational process of a pedagogical university with 2nd-year students in the academic discipline "Pedagogy".

5. Research Methods

The research subject was studied using the following set of methods of pedagogical research: theoretical (analysis, synthesis, and generalization of scientific literature), empirical (testing, rating, expert evaluation method), methods of mathematical statistics (Fisher's multifunctional criterion using the IBM SPSS Statistics statistical data processing program, version 19.0.).

6. Findings

The experimental study group (further referred to as the EG) consisted of 20 people, 2nd-year students of the field of study 44.03.05 "Pedagogical education (with two training profiles)" with profiles "Primary education" and "Foreign language." The control study group (further referred to as CG) consisted of 22 people, 2nd-year students of the training direction 44.03.05 "Pedagogical education (with two training profiles)" with profiles "Russian language" and "Literature."

The presented sample was made up of students with average and high levels of academic performance and stable motives for educational and professional activities. They were the students who wanted to connect their future professional activities with work in educational organizations. We should note that there was no purposeful work on the target competency formation with the given student groups at the early stages of training.

To identify the formation level of professional subjectivity of future teachers, we developed a complex of diagnostic techniques. We determined the formation level of professional subjectivity based on their sum of the following indicators:

- Self-knowledge: "Self-Attitude Research Technique" by Pantileev (1993);
- Actualized subjective experience and reflection: "Reflexivity Questionnaire," by Karpov (2000);
- Value attitude to pedagogical activity: "Terminal Values Questionnaire," by Senin (1991);

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- Self-realization: "Multidimensional Personality Self-Realization Questionnaire," by Kudinov (2012).

According to each methodology, we identified the indicators levels of professional subjectivity formation (high, medium, low). By summing up the indicators, we determined the overall level of each student's professional subjectivity formation as an integral quality of his personality.

At the ascertaining experiment stage, we revealed a high level of professional subjectivity in 25% of the EG participants, an average level – in 50% of the subjects, and a low level - in 25% of the students. In CG, we identified a high level of professional subjectivity in 18% of the research participants, an average level – in 55% of the subjects, and a low level - in 27% of the students.

We assessed the reliability of the differences between the percentages of the two samples of EG and CG with the help of the multifunctional Fisher criterion (φ*-criterion). Since the received φ*emf =0.553 was fewer than φ* critical = 1.64, this meant that at the significance level $p > 0.05$, the percentage of future teachers of EG and CG with high and medium levels of professional subjectivity formation did not significantly differ.

According to the results at the ascertaining experiment stage, we determined an insufficient level of the target skill formation. For this reason, we proposed a productive technologies complex of professional education. That complex contributed to the professional subjectivity formation of future bachelors of pedagogical education.

The pedagogical technologies aimed to form the future teachers' professional subjectivity included subject-activity and communicative-personal pedagogical technologies of professional education. It was a set of educational, organizational, and educational approaches, principles, methods, techniques, and formation forms of a future specialist in the conditions of continuous professional education. They were focused on activating the student's internal potential, developing his information-cognitive activity, gaining experience in creativity, awareness of his professional competence, ability to evaluate information critically, and carrying out self-professional development.

Such technologies include the following: critical thinking development, dialogue, gaming technologies, problem-based learning technologies, semantic reading, research, heuristic and project technologies, and contextual learning technology.

The implementation of critical thinking development technology in the education process of the university allows students to holistically comprehend the studied subject, establish intra-subject connections with already known information, and form their attitude to new information. A three-stage algorithm of this technology, numerous technological techniques and methods are aimed to organize perception, critical comprehension, interpretation, and comprehensive analysis of scientific information obtained from written sources. The methodological basis of the fundamental thinking development technology includes the following: cluster, cinquain, logbook, KWL table (K- know, W-want to know, L-learned), Bloom's daisy, text marking, reading with stops, brainstorming, a basket of ideas, and the like.

Dialogue pedagogical technologies are focused on developing communication skills and critical thinking. They intensify a future teacher's communicative culture, activity, and independence in the professional education areas. Gaming technologies are focused on activating and intensifying students'

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activities when a future professional activity context is modeled in various pedagogical games. Teachers use them to update the students' life experiences, reveal personal potential, and acquire new knowledge and ways of future pedagogical activity.

The problem-based learning technology in professional education helps activate the independent cognitive students' activity, consisting in the search and resolution of complex issues of future pedagogical activities. The teachers resort to this technology for the creative mastery of professional knowledge, skills, and abilities. It will result in the development of the thinking abilities of the future teacher, his critical, systemic, analytical thinking, the ability to draw conclusions and determine laws and patterns, and independently solve professional tasks of varying degrees of complexity. The semantic reading technology in professional education contributes to reading literacy and productive work skills with different types of texts formation. It also helps understand the informational, semantic, ideological sides of various educational and scientific discourses. This technology allows you to form the ability to analyze and interpret texts, isolate the main idea and secondary information, critically evaluate it, form your attitude to what you read.

Professionals use research, heuristic, and project technologies in professional education to activate students' independent informational, cognitive, and search activities, updating existing subjective experience, acquiring and realizing new professional experience, and creating a finished product of their own educational and professional activities. These include writing scientific articles by students, conducting mini-research, developing lesson plans and educational activities, writing and defending research, creative, social projects, and the like.

The use of all these technologies in the professional-education process of a pedagogical university contributes to the holistic image formation of a future competitive specialist. A sufficiently formed professional subjectivity enables him to carry out professional development throughout his life.

At the stage of the control experiment, based on the results of the formative work carried out, we can detect the dynamics of changes in the formation level of future teachers' professional subjectivity. We present them in Table 1, "Dynamics of formation of professional subjectivity of future teachers."

Table 1. Dynamics of formation of professional subjectivity of future teachers

Studied quality	EW stage	High level		Average levels		Low level	
		Number of people	%	Number of people	%	Number of people	%
		Experimental group (EG)					
Professional subjectivity	Beginning EW	5	25	10	50	5	25
	Ending EW	7	35	12	60	1	5
		Control group (CG)					
Professional subjectivity	Beginning EW	4	18	12	55	6	27
	Ending EW	4	18	14	64	4	18

The data analysis presented in Table 1 allows us to conclude that there are more pronounced positive dynamics in the professional subjectivity of EG students' formation. As a result of the data obtained analysis, we can state that there was a significant decrease in the proportion of future teachers

with a low level of the studied quality and an increase in the proportion of students with high and medium levels of professional subjectivity in the EG.

We additionally used expert assessments (university teachers and employers) and self-assessment methods to identify changes in the dynamics of the formation of future teachers' professional subjectivity. We applied the Fisher multifunctional criterion (φ*-criterion) to assess the reliability of the differences between the percentages of the two samples of EG and CG at the end of the EW. Since the results: φ*emf. =1.885 is more than φ*critical. =1.64, then φ* emf., fell into the zone of "significance of differences," which gives grounds to assert that there are significant differences in the percentages with high and average levels of the studied quality of EG and CG students at the end of the EW as compared to its beginning.

7. Conclusion

Thus, the experimental work on future teachers' professional subjectivity formation was efficient. It allowed us to achieve the research purpose, which was to test and verify the complex effectiveness of productive technologies of professional education. The studied complex contributed to the professional subjectivity formation of future bachelors of pedagogical education. According to the research results, we can note that the number of students with high and medium levels of professional subjectivity has increased. These are reflected in the personal and professional students' growth, the improvement of their academic performance, the formation of a stable professional interest, and the desire to develop throughout life.

The research emphasizes the importance of professional subjectivity formation of future bachelors of pedagogical education. As a solution to this problem, the authors consider the possibilities of using productive pedagogical technologies in the professional-education process of a pedagogical university.

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