Organizational and Methodological Conditions for Developing a Pedagogical Worldview in Future Teachers

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Abstract: The article is devoted to the problem of the formation of a professional-pedagogical worldview of future teachers. In particular, the authors discuss the pros and cons of a creative workshop developed on the basis of the study “Fundamentals of a New Pedagogy” (V. P. Vakhterov). Particular attention is paid to the specifics of those tasks that move from simple reproductive to complex productive features. The organizational and pedagogical conditions for the development of a professional-pedagogical worldview by means of a creative workshop during the study of the disciplines of the pedagogical cycle are characterized and justified by the authors.

1. Introduction

The problem of forming a pedagogical worldview is one of the priorities in modern education. Global trends in its development, such as the comprehension and concretization of universal competencies, digitalization \cite{6}, necessitated a review of the foundations of professional-pedagogical activity. Moreover, to a greater extent, the attention of researchers is focused on improving the methodological tools of the educational process and the spread of digital literacy. While the Federal projects “Teacher of the Future,” “Young Professionals,” which are part of the National Project “Education,” aim at a conceptual vision of professional and pedagogical activity, emphasize the importance of the worldview in the system of training a future teacher. In this regard, the understanding of the organizational and methodological conditions for using the means of forming a pedagogical worldview may be significant for the effective construction of the training process for future teachers.

Fundamentally important in this regard is the need to consider the specifics of using teaching aids in the educational process of a university, and, in particular, to address the problem of identifying the conditions for the effective use of funds to form a pedagogical worldview of future teachers.

Consideration of the formation of a pedagogical worldview is characterized by a variety of positions: (1) the philosophical and methodological reflection (S. I. Hessen, V. V. Zenkovsky, I. V. Sysoenko, etc.); (2) the psychological substantiation of its formation (N. A. Menchinskaya, T. K. Mukhina, etc.); (3) sociological aspects (J.I. A. Vasilenko, P. N. Fedoseev, etc.); (4) the priority of value-semantic landmarks of worldview (M. I. Dyachenko, K. K. Platonova, etc.); (5) the system-structural analysis of the pedagogical worldview, its conceptual justification (V.A. Slastenin, L.P. Reutova, E.V. Dmitrieva), etc. However, the question of organizational and methodological conditions for using the means of forming a professional-pedagogical worldview among students did not receive detailed consideration.

In order to solve the problem, first, it is advisable to determine the interpretation of the concept of pedagogical worldview and the criteria for its formation. Second, one should characterize the means of forming a pedagogical worldview, providing a theoretical and methodological justification for their use. Third, it is necessary to determine the specifics of the organizational and methodological conditions under which the use of such means will be most effective.
In our opinion, the formation of the pedagogical worldview of future teachers will be more effective when using an integrative creative workshop “In the world of “new pedagogy” by V. P. Vakhterov” in the course of working with students as part of the study of pedagogical disciplines, taking into account all the conditions for organizing the educational process at a university.

Several approaches predetermined the vision of the problem and the advancement of ways to solve it. First, there is a system-structural approach to understanding the concept of a pedagogical worldview (M. B. Batyuta [1], V. A. Slastenin, E. V. Dmitrieva [2] and others). Second, the "motherland" approach determines the choice of the basis for constructing assignments and focusing attention on the environment close to students. Third, cultural and integrative approaches are used for the selection and structuring of the workshop material as a system of complex tasks. An interactive approach is also used for the justification and characterization of organizational and methodological conditions for using the means of forming a pedagogical worldview.

In this regard, this paper highlights the need to create an integrative set of tasks in the form of a creative workshop, which is aimed at forming a pedagogical worldview. Moreover, the fundamental provisions for its use are determined by the authors, and the results of testing are shown. The authors also define and characterize the organizational and methodological conditions for the productive implementation of the workshop as a means of forming a pedagogical worldview. The representation in the work of the organizational and methodological conditions for the selection and use of means of forming a worldview makes it possible to develop a methodological vision of professional and pedagogical activity among future teachers.

The solution of the indicated problems was carried out in the following areas: (1) the study of psychological and pedagogical literature and periodicals on the problem of understanding the means of formation of a professional pedagogical worldview; (2) development and testing of a creative workshop as a means of its development; (3) substantiation of the set of organizational and pedagogical conditions for the use of the workshop as a means of forming a pedagogical worldview.

2. **Materials and Methods**

To test and confirm the hypothesis put forward, a system of complementary research methods that determine each other was used. First of all, we rely on a comparative analysis of the works of authors dealing with the problems of understanding the pedagogical worldview. Second, we conduct the generalization and systematization of the results of the study and analysis of literature, which allowed to come to a justification of the totality of organizational and methodological conditions for using the means of development of the pedagogical worldview. The empirical research methods for testing the hypothesis were as follows: longitudinal observations of the 1st and 2nd-year students, questionnaires, testing, analysis of the data obtained during the pedagogical experiment.

The study was carried out throughout the year. The subjects in the amount of 78 people were students of the Arzamas branch of NNSU (“National Research Nizhny Novgorod State University named after N. I. Lobachevsky”). The desire for objectivity led to the specifics of students joining groups according to the principle of heterogeneity of gender composition and homogeneity depending on the areas studied (those studying the humanities and natural sciences). The control group (35 people) consisted of students of 1-2 courses in the areas of training Pedagogical Education and Psychological and Pedagogical Education, profiles: Biology and Geography, Russian Language and Literature, Psychology, and Social Pedagogy. The experimental group (43 people) consisted of 1-2-year students of the Faculty of Physics and Mathematics, profiles of Mathematics and Physics and students of the Faculty of Psychology and Pedagogy, specialization Pedagogy and Psychology of Deviant Behavior.

3. **Results**

The experiment was carried out in three stages. First, a means of forming a professional and pedagogical worldview was developed. Namely, the authors focused on a creative workshop as a set of tasks related to the activities of V. P. Vakhterov, a Russian teacher of the turn of the XIX-XX centuries, a fellow countryman of students. The authors believed that such a “construct” could serve as an example of a stable professional and educational worldview. And it could be used to update students with such qualities as responsible attitudes to the matter, humanism, love for people, orientations towards the implementation of pedagogical activity, that is, the components of a pedagogical worldview. The workshop is a quotation taken from the work of V. P.
Vakhterova entitled “Fundamentals of New Pedagogy.” The tasks were developed in association with their contents in sections of pedagogical disciplines.

Understanding the professional and pedagogical worldview as a combination of knowledge, value and activity components (L. P. Reutova [4]; T. M. Sorokina [1]) determined the nature of the tasks offered in the workshop: from reproductive to creative (a comparative analysis of materials from the history of pedagogy and modern trends in the development of education, cases, games, etc.), with the priority of the latter, implying the active work of students.

Also, at the first stage, the set of organizational and methodological conditions for using the workshop as a means of forming value guidelines was justified.

The purpose of the first stage of the experiment was to determine the attitude of future teachers to pedagogical activity, the presence/absence of their idea of a professional and pedagogical worldview, interest in the implementation of pedagogical skills, and the identification of social values significant for the profession. To do this, we monitored the students, relying on the next system of methods: (1) the questionnaire to identify the degree of understanding of the importance of professional and pedagogical worldview (L. D. Nazarenko [3]); (2) diagnostics of interest in mastering professional skills (A. P. Chernyavskaya [7]); (3) a truncated method of self-determination of the level of readiness of the teacher for educational work (MOU DPOS “Methodological Center” [5]). And also, tests on pedagogical disciplines were used by us.

We have chosen a tiered approach in selecting criteria for the formation of a professional-pedagogical worldview. The aggregate indicators by methods (points) and testing (3 points are given for the mark "5"; 2 points are given for the mark "4"; and 1 point is given for the mark "3") made it possible to distinguish three levels. The scores of the levels are as follows: the highest from 219 to 147 points, the average - from 146 to 73, the lowest from 72 to 0. The low level is characterized by the fact that the student does not understand or lowly assess the need for a professional and pedagogical worldview, does not show interest in mastering skills, demonstrates low self-esteem of motivation for the profession, a low level of knowledge in pedagogical disciplines.

The second level shows the understanding of the future teacher of the need to form a pedagogical worldview to obtain relevant knowledge, skills; students evaluate their readiness for activity, showing the average result. At the third level, the total indicator of the methods reflects the presence of the future teacher’s understanding of the need for a stable value position, its improvement, the desire to master pedagogical skills, broaden horizons, professional vigilance.

The primary diagnosis was carried out at the end of the fall – beginning of the spring semesters (2018-19 academic year). The results of the control and experimental groups were close, as the highest were low (34% and 40%) and medium (52% and 42%) levels, while the high level was only 14% and 18% of students, respectively. These indicators are partly logical because our participants are the students of 1-2 courses who just began their familiarization with the disciplines of the pedagogical cycle.

At the stage of implementing experimental activities, a creative workshop became a means of developing a professional and pedagogical worldview in working with students of the experimental group. The tasks proposed were used in seminars. During the initial control of mastering the material, the following cross-check prevailed: the students were asked to create crosswords, encryption, etc., exchange them, complete, and hold mini dialogs on issues.

To understand the features of the development of education, oral and written tasks aimed at reflection were used. In particular, we relied on the essay based on quotes of V. P. Vakhterova, conducted a comparative analysis of the positions of modern researchers with the ideas of V. P. Vakhterov. Moreover, we conducted a critical, comparative-historical analysis of current trends in education and past experiences in organizing it, studied the experience of practicing educators (blogs by M. Sonina, G. S. Astvatsaturov, A. Gin, etc.), considered the digitalization of education through the analysis of platforms, solved pedagogical problems, etc. The format of the classes became more complicated and changed. The question-answer form with elements of games and trainings prevailed at first, but later were the expert commissions, round tables, micro-studies, etc. Similar works were carried out in the experimental group throughout the semester.

In the control group, classes were held in the form of classical seminars based on the proposed academic
aids, according to the logic of constructing educational material in them.

The experiment control phase was carried out at the end of the spring – the beginning of the fall semesters of 2019. The same methods and testing were repeated. The analysis of the results obtained in the experimental and control groups showed the dynamics of the development of the pedagogical worldview. The transfer of a number of students with low and medium indicators to the group with medium and high occurred. However, in the control group, the changes were less pronounced. There was a decrease in the number of students who demonstrated the lowest rates (up to 26%), an increase in the number of students with medium and high rates (up to 52% and 20%).

The results of the analysis of the experimental group showed great dynamics. The number of students in the group with low results decreased from 40 to 20%, in groups with medium and high scores, it increased to 47% and 33%, respectively. Thus, the dynamics in the experimental group were 1.5 times higher than the dynamics in the control group. The results of the study suggest that under specially created organizational and pedagogical conditions for the use of a creative workshop as a means of forming a pedagogical worldview in students during the study of pedagogical disciplines, the degree of its formation increases.

4. Discussion

The study of psychological and pedagogical literature allows us to state the absence of special studies devoted to the problem of the development of a professional-pedagogical worldview. In turn, this should be based on the motherland, cultural, interactive approaches. Moreover, the following techniques should be used: creative workshops, a detailed analysis of the impact of such funds on the formation of all the components of the phenomenon of the worldview of future teachers. However, the formation of a professional and pedagogical worldview is presented in dissertation research by L. P. Reutova [4], [5], E. V. Dmitrieva [2], L. D. Nazarenko [3], and others.

5. Conclusion

Consequently, for the successful development of the professional and pedagogical worldview of future teachers, the didactic and methodologically sound means are needed in the form of creative workshops. They should have a focus on local history material, as a demonstration of the possibility of achieving high results by famous compatriots. Introduction to the content of the workshop of historical and pedagogical material from the life and work of famous scientists allows students to form an interest in understanding and organizing pedagogical activity.

Thus, the paper discusses the organizational and methodological conditions for the development of a professional-pedagogical worldview by means of a creative workshop during the study of pedagogical disciplines.

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