

Development and implementation of special seminar “Innovative pedagogical technologies”

РАЗРАБОТКА И ВНЕДРЕНИЕ СПЕЦИАЛЬНОГО СЕМИНАРА «ИННОВАЦИОННЫЕ ПЕДАГОГИЧЕСКИЕ ТЕХНОЛОГИИ»

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Abstract

Taking into account modern requirements to teacher's personality in primary education, his knowledge of innovative pedagogical technologies' essence as well as knowledge of methodology, relevance of the search for ways to improve the content and forms of future primary school teachers' training has been revealed. One of the solutions to this problem can be introduction of a special seminar aimed at improving the level of innovative and technological competence of future teachers in primary education into the system of vocational training. The purpose of this article is to substantiate the conceptual and methodological significance of a special seminar "Innovative pedagogical technologies" as well as to describe process of diagnosing effectiveness of the developed special seminar. The aim of the research is achieved through the application of such theoretical and empirical methods of scientific knowledge as method of pedagogical diagnostics, methodical system modeling, method of pedagogical forecasting, analysis of results, synthesis of the results of experimental research. Based on the use of these methods, the main theoretical aspects of a special seminar development are presented, the components of its content and structure are reflected and the stages

Аннотация

Требования к личности учителя начального образования с каждым годом становятся все выше. Современный учитель должен владеть современными инновационными педагогическими технологиями. Возникает актуальность поиска путей улучшения содержания и форм подготовки будущих учителей начальных классов. Одним из решений этой проблемы может стать введение специального семинара, направленного на повышение уровня инновационно-технологической компетентности будущих учителей начального образования в системе профессионального обучения. Целью данной статьи является обоснование концептуальной и методологической значимости специального семинара «Инновационные педагогические технологии», а также описание процесса диагностики эффективности разработанного специального семинара. Цель исследования достигается за счет применения таких теоретических и эмпирических методов научного познания, как метод педагогической диагностики, методическое моделирование системы, метод педагогического прогнозирования, анализ результатов, обобщение результатов экспериментальных исследований. На основе использования этих

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of testing effectiveness of the developed special seminar are described. The scientific novelty of the research is justified by the development of the conceptual foundations and content of the special seminar "Innovative pedagogical technologies", intended for use in the training of future primary school teachers, indicating methodological aspects of its implementation, as well as the development of a diagnostic system to test its effectiveness in the educational process of the University.

Key Words: innovative pedagogical technologies, professional training of future teachers of primary education, special seminar, readiness of teachers for application of innovative pedagogical technologies, pedagogical diagnostics.

Introduction

Analysis of theoretical studies of modern scientists regarding the problems of training future teachers (Vaganova et al., 2019b), as well as the main state regulatory documents regulating the sphere of professional pedagogical education, allows us to state the need to shape the readiness of future teachers to use innovative educational technologies (Vaganova et al., 2019c). This need causes a number of methodological problems, the solution to which will allow choosing the optimal way to shape the readiness of future teachers to innovative educational activities and the application of modern technologies in direct educational practice (Vaganova et al., 2019a). One of the solutions to the outlined problems is the development of a special methodological system (Vaganova et al., 2019d), the implementation of which is possible through the creation and implementation of the training program for future teachers of the special seminar "Innovative Pedagogical Technologies" (Vaganova et al., 2019e).

Theoretical framework

Innovative pedagogical technologies are a relevant topic to consider. For several years, with the introduction of reforms in the field of education, scientists have been actively developing this issue. Modern scientists rely on

методов представлены основные теоретические аспекты разработки специального семинара, отражены компоненты его содержания и структуры, а также описаны этапы проверки эффективности разработанного специального семинара. Научная новизна исследования обоснована разработкой концептуальных основ и содержания специального семинара «Инновационные педагогические технологии», предназначенного для использования при подготовке будущих учителей начальных классов, с указанием методологических аспектов его реализации, а также разработка диагностической системы для проверки ее эффективности в учебном процессе университета.

Ключевые слова: готовность учителей к применению инновационных педагогических технологий, инновационные педагогические технологии, профессиональная подготовка будущих учителей начального образования, педагогическая диагностика, специальный семинар.

developments carried out earlier. To implement the goals and objectives of the study, the following scientific methods were used: method of pedagogical diagnostics, modeling of methodical system, method of pedagogical forecasting, analysis of the results, synthesis of the results of experimental research.

In recent years, I.P. Volkov, I.F. Goncharov, M.A. Balaban and others. All of them were engaged in the development of the issue of improving the educational process using innovative technologies. Innovative technologies contribute to the better formation of the learner's competence, activate his cognitive activity and motivate him to further study the material. Innovative technologies allow you to approach the solution of problems creatively, offering non-standard options for resolving issues.

The essence of innovative technologies is that they are aimed at the development of creative, productive thinking, behavior and communication.

Methodology

The methodological basis of the implemented research was made by the provisions of the competence, system-activity, technological and environmental approaches. To implement the

goals and objectives of the study, the following scientific methods were used: method of pedagogical diagnostics, modeling of methodical system, method of pedagogical forecasting, analysis of the results, synthesis of the results of experimental research. The conceptual basis of the research is based on scientific theories of Yu.K. Babansky, T.P. Salnikova, G.K. Selevko, T.N. Shcherbakova.

The experimental base of the study was the Humanitarian-Pedagogical Academy (branch) of FSAE "Crimean Federal University named after S.I. Vernadsky" in Yalta. The 4th year students (56 people) of the "Pedagogical Education" profile ("Primary Education" major) were respondents to the study.

Chronological framework of the study: the second semester of the 2017-2018 academic year. To implement the experimental study, the respondents were divided into two groups: experimental and control (EG: 30 and CG: 26 students). Before the introduction of the special seminar "Innovative educational technologies" in the curriculum of professional training of future primary teachers, primary diagnostics of the level of readiness of future primary teachers for the use of innovative educational technologies in the educational process of educational institutions was implemented.

Diagnostic tools for determining the level of professional readiness of students to use innovative pedagogical technologies included techniques based on the methods of "analysis of pedagogical situations" and the use of organizational activity games (ODIs), as well as methods for the holistic study of the personality and the effectiveness of the future teacher's activities, which imply questioning respondents.

Results and discussion

Based on the analysis of the FSES HPE (Order of the Ministry of Education and Science of Russia dated December 14, 2015 N 1457) and professional standard "Teacher" (Order of the Ministry of Labor of Russia dated October 18, 2013 N 544n (as amended on 12/25/2014) of education at the Humanitarian Pedagogical Academy (branch) of the FSUEE "Crimean Federal University named after SI Vernadsky" in Yalta, the need was justified in the framework of professional training of future primary teachers implementation to form readiness for professional performance. It was decided to create a creative group of teachers (Makarenko Y.V., Osadchaya I.V., Anisimova L.S.) who

developed and implemented a special seminar "Innovative pedagogical technologies" for 4th year students whose major is "Pedagogical education (profile "Primary Education")".

The purpose of the development and implementation of a special seminar in the curriculum for future primary school teachers is to prepare students for independent professional and educational activities in various types of educational institutions using innovative educational technologies.

The introduction of a special seminar into the curriculum of vocational education of future teachers of primary education assumed the solution of the following tasks:

- deepening the theoretical knowledge of future teachers about the essence of innovative educational technologies;
- familiarization of students with the methodological features of the implementation of the studied technologies in practice (Chirva et al., 2018);
- improvement of methodological studies and skills of future teachers of primary education in the field of application in the educational process of educational organizations of various types of innovative educational technologies (Efremov et al., 2002).

The lecture part of the special seminar includes 12 classes (Cirdan et al., 2019). Students were offered information about the following types of innovative educational technologies:

- student-centered learning technologies;
- design technologies in education;
- multi-level learning technologies (Raven et al., 2017);
- telecommunication and multimedia teaching technologies;
- technologies of distance, electronic and inclusive education (Smirnova et al., 2018);
- modular learning technologies;
- modern information and communication technologies, etc (Denysenko et al., 2018).

The structure of the educational special seminar assumed the holding of 24 practical classes in the framework of which students improved their theoretical knowledge and methodological skills of using innovative educational technologies in educational process (Garnevskaya et al., 2018). To achieve this goal, a series of seminars was held on the basis of secondary education institutions where future teachers in their immediate practical environment could improve their skills

and abilities to apply the elements of innovative educational technologies studied at the special seminar, and also to be convinced of their real effectiveness (Vaganova et al., 2019f).

The form of the final control was chosen by the authors of the special seminar which implies two types of assessment of students' academic achievements:

- written testing on the theoretical aspects of innovative educational technologies (Vaganova et al., 2018);
- conducting scientific readings "Methodical aspects of the application of innovative educational technologies in the educational process of educational institutions."

In order to determine the effectiveness of the special seminar "Innovative pedagogical technologies" developed by teachers of the Institute of Pedagogy, Psychology and Inclusive Education at the Humanitarian Pedagogical Academy, it was decided to implement experimental study to determine the level of future teachers readiness to use innovative pedagogical technologies in educational process after introducing a special seminar into professional training curriculum. To do this, it was advisable to refer to method of pedagogical diagnostics (Nikishina et al., 2017).

As part of our research, we studied the process of pedagogical diagnostic activity. During it (when necessary scientific criteria are met) pedagogical observation of students, questioning, processing of observations and surveys were made, results to describe behavior were obtained, students' motivation was analyzed and their future behavior was predicted (Ingekamp et al., 1999). In this context, we share the opinion of O. Yu. Efremova, who considers pedagogical diagnostics at a higher educational institution as a subsystem of the pedagogical system of a higher educational institution and higher education as a whole, reflecting its structure. According to the scientist a pedagogical diagnostic system should include five main structural components:

- purpose of diagnosis (Kuznetsov et al., 2018);
- content of the diagnosed information;
- object of diagnosis (diagnosed) (Shcherbakov 2013);
- diagnostic tools;
- diagnostician (subject of diagnosis).

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The result of the diagnosis was to determine the level of readiness of future teachers to use innovative educational technologies in the educational process. In this vein, we emphasize that we regard the level as the degree and magnitude of the development of a certain phenomenon, the fact of its differentiation into groups (Babansky et al., 1988).

The level of a certain quality development, in this case, the readiness to use innovative pedagogical technologies, in pedagogy is determined according to certain criteria, which constitute a conditional measure that allows you to realize the phenomenon and on this basis give it an assessment (Guslov 2013). Thus, the criterion allows us to establish the measure of conformity of the approximation of the real level of formation of a certain pedagogical phenomenon to a given model. To determine the level of readiness of future teachers to use innovative

educational technologies, the following criteria were taken into account:

- awareness of the need for innovation in education
- consistency of personal goals with innovative educational activities
- readiness to overcome professional failures;
- the level of technological readiness for innovative educational activities;
- the level of formation of innovative competence of the future teacher (Yusufbekova et al., 1992).

On the basis of diagnostic data, obtained according to the specified criteria, we identified three levels of the preparedness of future teachers to innovate:

- high;
- sufficient;
- initial (Salnikova et al., 2010).

We turn to the consideration of essential characteristics of each of these levels.

Future teachers with the initial level of formation of the pedagogical readiness analyzed by us do not have a systematic approach to the use of innovative technologies. The components of the innovative competence of such students are not sufficiently formed. Such students use elements of pedagogical technology intuitively, without

knowing the pedagogical concepts on which these or other technologies are based (Matyash et al., 2012).

Future teachers of primary education with a sufficient level of preparedness are well-informed about theoretical foundations and content of specific pedagogical technologies and have a technique for using them in their own educational activities. However, their use is more situational. The components of innovative competence of such students are formed at a satisfactory level.

Students with a high level of preparedness for the use of innovative pedagogical technologies are well oriented in the theory and methodology of introducing innovative educational technologies into educational process, they have high-level components of innovative pedagogical competence (Selevko, 2006). Such future teachers show creativity regarding attempts to create copyright technologies and options for combining elements of innovative educational technologies.

Processing the results of the initial diagnostics of the level of preparedness of future primary teachers for use in the teaching and educational process of innovative educational technologies made it possible to obtain the following data, clearly presented in diagram 1.

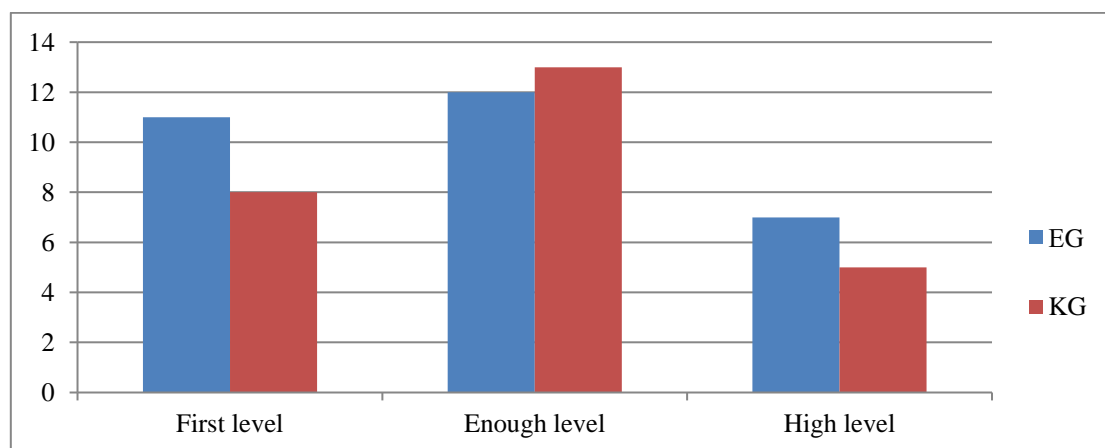


Fig.1. The results of the primary diagnosis of the level of preparedness of future primary teachers to the use of innovative educational technologies in the educational process of educational institutions (author's study).

Upon the introduction of the special seminar “Innovative pedagogical technologies”, secondary diagnostics of the level of formation of readiness of future teachers to use innovative pedagogical technologies in the educational process of educational institutions was implemented. In the secondary diagnosis, the

same diagnostic tools were used as in the primary. Analysis of the results of secondary diagnostics revealed new data on the level of formation of readiness of future teachers to use innovative educational technologies. The data of secondary diagnostics are presented in chart 2.

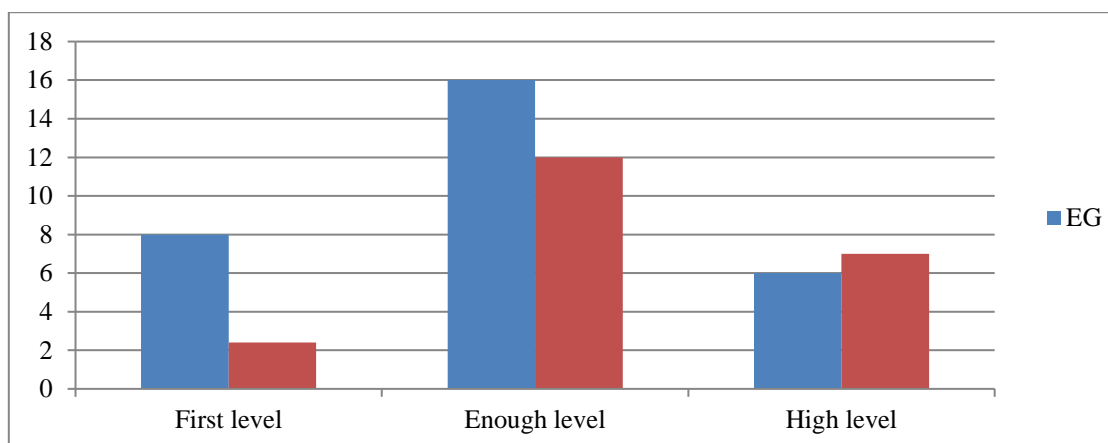


Fig. 2. The results of the secondary diagnostics of the level of preparedness of future teachers of primary education to the use of innovative educational technologies in the educational process of educational institutions (author's study)

Conclusions

Summarizing the above, we conclude the following. Innovative technologies contribute to the better formation of the learner's competence, activate his cognitive activity and motivate him to further study the material. Innovative technologies allow you to approach the solution of problems creatively, offering non-standard options for resolving issues. The work has covered the main theoretical aspects of the development of a special seminar, its content and structure. The substantiation of the effectiveness of the special seminar required testing and description of the stages of pedagogical diagnostics which was implemented in two stages. To implement an objective test of the effectiveness of a special seminar, the study identified criteria and described the levels of future teachers' readiness to use innovative educational technologies, and diagnostic tools used in studying the effectiveness of the developed special seminar.

On the basis of the conducted diagnostic operations and the results obtained, we were able to identify positive dynamics of the level of future teachers' readiness to use innovative educational technologies in their own teaching practice. The increase in the level of pedagogical

readiness analyzed in this study is caused, in our opinion, by positive effect of future primary teachers' involvement into a special seminar “Innovative pedagogical technologies” into the professional training program which makes it possible to substantiate its pedagogical effectiveness and the possibility of wider application in the practice of pedagogical universities.

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