Implementing a Network Project for Pedagogical Workers Within the Framework of Continuing Education: A Case Study From Russia

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The article presents the experience of Kursk State University and the department of education pedagogy of the International Children Center "Artek" for the implementation of a network project aimed at programs of continuing professional education of employees of Artek, including pedagogical workers. The authors present the result of providing a network project to implement additional professional programs for a new generation. The research aims at identifying new opportunities for everyone while implementing a network project for training pedagogical workers at Artek. The paper presents the experience of implementing continuing professional education programs at Artek when implementing a network project covering various training areas. All implemented programs are characterized by newness and modern approaches in educational practice. The research is based on the system-activity and personality-oriented approaches, the theory and methodology of vocational education. As a result of the study, the quality of the training program improved, and highly qualified specialists worked on implementing this project. Moreover, the massive coverage of students allowed them to improve their qualification level of education.

Keywords: Network project, continuing professional education programs, new opportunities for everyone

INTRODUCTION

Nowadays, continuing professional education is aimed at the possibility of free choice of various types of activities that contribute to the professional and personal self-determination of young people (Ilina, Tarasyuk & Pozdnyakov, 2017). Additional professional education has an outrunning nature and serves as an innovative platform for testing educational technologies and models. Analysis of V. A. Yasvin shows that additional vocational education is an outrunning factor of developing the social sphere and training personnel ready for innovative development. In this regard, the question of transformation and advanced development arises, and on what basis prerequisites can be created in pedagogical and educational practice (Yasvin, 2000).

Currently, the field of additional professional education is developing rapidly. This allows expanding access to information, new knowledge, and updated content according to the latest prospective developments. In practice, there is a personalization of additional professional education as a leading trend in education development.

Since 2017, the department of education pedagogy created by Kursk State University implements a network project at Artek. The project aims to develop and improve the professional competencies of workers, including knowledge in the digital economy field. The ideas of the National Education Project helped to improve the project. Under current conditions, the idea of providing new opportunities for teachers of summer camps appeared (Asmolov, 1990).

MATERIALS AND METHODS

Implementation of Training for People Within the Network Project

The number of people trained under the network project from 2017 to the present time was 250 people.

In 2019, 14 additional professional programs (APP) were implemented. According to ten enlarged groups of training areas and professional standards, they were developed considering the industry focus of new modern continuing education programs. In 2017–2018, there were only five such enlarged groups. The largest number of students training in continuing education programs were in the enlarged group "44.00.00 – Education and pedagogical sciences."

Six of the 14 APP programs were designed to improve the qualification of specialists in the most popular production areas, including those related to digital transformation. The other seven APP programs for advanced training were for training people working in the social sphere.

The duration of each APP program was 108 hours, including 56 class hours. Comparing to 2017 and 2018, when 80% of the programs were 72 hours long, the volume of hours increased due to the inclusion of internship elements, independent work according to an individual plan (educational routes that allow constantly updating professional skills), and the use of distance educational technologies.

The final assessment for additional professional programs was carried out in the form of testing. Upon graduation, students who mastered the APP programs for advanced training and successfully passed the final assessment received training certificates.

During the implementation of the action plan, internal monitoring of the implementation of the APP programs for advanced training was carried out. According to the plan, the number of listeners in the age category of 45 years and older increased by 20% in such programs as "Digital technologies in accounting," "Safety of building operations in the autumn and winter period," and "Social work: first aid before providing medical care." This shows the increased motivation of students in this age group to master new competencies in the basic sectors of the economy and social sphere.

On the contrary, the age group of students under 25 joined the training according to the programs "Development of websites," "Methodological foundations of STEAM education," "Fundamentals of social entrepreneurship," and "Legal support of entrepreneurial activity." In the opinion of these students, the super subject skills of the 21st century, such as the formation of critical thinking, teamwork, and the development of digital competencies, became the most relevant. This category of students has a bachelor's degree (69%) and a master's degree (31%) in such areas as "38.00.00 – Economics and management," "39.00.00 – Sociology and social work."

The authors mention the stability in the choice of programs addressed to teachers: "Mentoring in education," "Organization of project activities of students to study and preserve biological diversity," "First aid in educational institutions." These programs became relevant for students at the age of 30-40. This group of listeners named communication skills and teamwork as super subject skills of the 21st century.

Such programs as "Methodological foundations of STEAM education," "Digital technologies in accounting," and "First aid in educational institutions" were the most popular among the students. Each of the 14 APP programs included an internship component and working with high-tech equipment. The students of "Digital technologies in accounting" and "Methodological foundations of STEAM education"

programs expressed the greatest satisfaction with this type of work, as it was under these programs that the students received the opportunity to work on modern equipment and acquire new skills (Sorochan, 2005).

Based on the results of APP programs, the final assessment revealed the optimal level of assimilation in more than 85% of trainees. In 15% of trainees, the level of assimilation was acceptable.

Compliance of Additional Professional Programs With the Conditions for Achieving the Results of the Network Project

The content of additional professional programs for people was determined according to the main qualification requirements specified in various qualification guides on main positions, specialties, and professions. Special attention was paid to the satisfaction of individual interests and needs of various target audiences and the elimination of identified professional deficits. The program development process considers the recommendations of professional and public organizations, the requests of organizations of the real sector of the economy, and the results of monitoring basic skills and key professional competencies of the adult population.

The network project provided a personalized, mixed educational process using mass open online courses (MOOC) and informal support during and after training. The presence of a range of modules allowing to achieve targeted preparation and construction of a continuous, consistent personal route of professional development determines the variable structure of the system. The content of the package of educational and methodological materials reflects it.

Quality of the Package of Educational and Methodological Materials (EMM)

The EMM package contains a clear description of the scope of application of additional professional programs. They sufficiently cover various segments of the population.

The goals and objectives of the disciplines and the planned results of the APP programs correspond to the professional standards and (or) qualification requirements specified in the qualification guides for positions. The following components received sufficiently detailed representation:

- The content of the disciplines and conditions for the implementation of the APP programs;
- The types and content of classes by disciplines;
- The forms of current and final assessment;
- Educational and methodological development of competence assessment after training in the APP program;
- The requirements and procedure for the performance of individual work, including the use of remote educational technologies.

The EMM package for each APP program was focused on the need and technological support of the design process optimal for working people.

The EMM package for each of the proposed programs is focused on the following factors: (1) implementation of the network form; (2) provision of practical -oriented (application) component in the amount of at least 50% of the total volume of the APP programs; and (3) application of various digital technologies, innovations, and interactivity to maintain a high level of professionalism and competitiveness of personnel in the labor market. The APP programs have the following structure: (1) 1/3 of the training time is for interactive classroom sessions including project workshops with case analysis; (2) 1/3 of the time is for practical work in network mode on internship sites based on the most efficient organizations; and (3) 1/3 is for training using remote educational technologies and implementation of individual projects. Each of the APP programs implemented provides a pre-course and post-course assessment of the level of competence of trainees in theoretical knowledge and skills (pre-course and final diagnostic works) and practical experience (project protection, performance of case tasks).

The EMM package for each of the proposed APP programs provides for the possibility of using other organizations in the educational process even after completing the federal project "New opportunities for everyone."

Teachers participating in the implementation of continuing professional education programs provide for the development of digital content. This allows trainees to learn individual courses, disciplines, and modules.

The following activities helped to improve the quality of the EMM package for each APP program:

- Creation and implementation of a practical-oriented (application) component in the amount of at least 50% of the total volume of the APP program;
- Making all training materials of the APP programs publicly available;
- When implementing the APP programs, the use of self-instructional online, MOOC, and (or) video courses students;
- Inclusion in online, MOOC, or video courses of text and presentation materials, video lectures, hyperlinks to relevant third-party resources, and evaluation materials of various types;
- Providing free introductory access for an unlimited number of trainees to MOOC content and evaluation tools for professional orientation self-training.

Use of Online Courses During the Network Project Implementation

The online project currently developed online courses to support the APP programs and regulation on the "digital portfolio" and "digital footprint" of the students.

The labor intensity of one online course is 36 academic hours (one credit). An open education laboratory with the necessary video, audio, and other equipment was created to develop online courses.

The practice of online courses and mixed training (when in-place seminars and consultations and in-person control accompany online courses) creates an unlimited field of educational opportunities for advanced training and professional retraining of students (Ministry of Science and Higher Education of the Russian Federation, 2019).

The leading strategic goal of applying for online courses and mixed training is to create conditions for obtaining up-to-date additional professional education in remote access using virtual simulators, electronic methodological complexes, and a digital library system (Grigoryev, Shabunina, Tsarapkina & Dunaeva, 2019).

Mechanisms for Systematizing and Disseminating the Best Practices of Continuous Renewal of Competence

Creating a system for monitoring startup, implementation progress, and intermediate and final results is a prerequisite for forming effective mechanisms of systematizing and disseminating the best practices for implementing continuous renewal of competencies (Kamenez, Smirnova, Vaganova, Bystrova & Tsarapkina, 2019).

The monitoring was carried out according to the following indicators:

- The number of trainees who annually study under the APP programs (more than 40 people under the APP programs for advanced training and about 50 people under the APP programs of retraining);
- The scope of educational services provided (47 APP programs including 36 APP programs for advanced training and 11 APP programs of retraining);
- the level of satisfaction of the participants with the quality of the provided educational services (100% of the participants are satisfied with the quality of the provided educational services);
- The quality of scientific and methodological support of the programs;
- The quality of scientific and methodological support of the implementation of the National Education Project ("New opportunities for everyone," "Digital education environment," "Success of every child," etc.);
- The number of scientific and pedagogical workers who completed advanced training and (or) professional retraining over the past three years (91%);
- Ensuring the positive dynamics of the quality of innovative projects and products presented according to the results after training in the APP programs;

- The effectiveness of research and methodological work presented at scientific and practical conferences on problems of continuing education;
- The level of participation in scientific and practical conferences of different levels;
- The number of scientific and methodical publications;
- The number of electronic education publications, etc.

According to the network project, at the international children center "Artek," a service for continuous renewal of competence is created. The service aims at providing consulting professional services and finding new knowledge. It is designed to perform the following activities: (1) to prepare expert opinions; (2) to hold consultations on interdisciplinary issues to the requests of employees in the field of additional vocational education; (3) generate new ideas; and (4) promote the development of innovation and partnership relations with partner universities of Artek.

The service for continuous renewal of competences is created for the joint implementation of complex projects, breakthrough fundamental research, and innovative transformations into practical activities (Slobodchikov, 2000).

RESULTS

Effectiveness of Information Campaign Mechanisms to Promote the APP Programs Among the Population for Training People

The network project developed effective mechanisms for conducting information campaigns to popularize programs among the population for training people. The number of people covered by the information campaign of popularizing additional programs and vocational training programs amounted to more than 15 thousand people.

For improving the work of informing people, effective feedback mechanisms with consumers of educational services based on modern technologies were introduced, including using publicly available electronic databases and organization of thematic counseling hotlines for future trainees.

The publication of information on the implementation of the project "New opportunities for everyone" was carried out in the news feed on the official website, through press releases for the media and articles with information on implementing programs for people in priority areas of advanced training. Also, web forums, pages in social networks (Vkontakte, Odnoklassniki, Facebook, Twitter) were created to post information material on the proposed advanced training programs.

DISCUSSION

Qualitatively developed EMM packages allow people to use the entire presented arsenal of educational and practical materials and carry out competent feedback at the high-quality education level.

An interesting and competent solution of this study is using mixed training in online courses, when classes are held remotely, and control is carried out in person.

Coverage of the main stages of the project "New opportunities for everyone" was carried out on the official website and on social networks pages (Vkontakte, Odnoklassniki, Facebook, Twitter), which allowed attracting more participants.

CONCLUSION

Thus, the implementation of the network format of the federal project "New opportunities for everyone" within the National Education Project was a powerful resource for the following activities: (1) for increasing the quality of programs, implementing a model of personalized modular training; (2) for confirmation of relevance and necessity of training directions; (3) for attracting highly qualified practitioners, educators and researchers; (4) for a fundamental increase in the coverage of the population by an information campaign on the promotion of continuing education; and (5) for creating a system of continuous renewal of

professional skills by working people according to rapidly changing modern technologies for developing their potential.

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