Teacher Refresher Course as Digital Pedagogy Tool in Moscow

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Abstract

The actual problem of modern pedagogical science is the development of professional competence of a teacher. The new conditions for the development of society and the implementation of the activities of educational organizations, particularly higher education institutions, show the need to study the organization of professional development courses in society.

The organization of educational space in a higher education institution requires not only logistical equipment of the educational process, but also the development of information competence of teachers. The modern teacher is a part of the digital educational space for the solution of problems, both education and education of students. Corporate courses for advanced training of teachers of higher education are able today to provide the educational process with trained personnel for work in the modern digital educational space of Moscow.

Researches, conducted by local educational specialists proof the importance of raising teacher`s motivation for self-development and implementation of new forms of teaching.

The authors present the guideline for arranging refresher courses for Moscow digital pedagogy. It is suggested to add 2 modules to the traditional course: Module aimed to arrange such digital courses on the basis of an educational institution and Module dedicated to interconnection and cooperation with parents of the students.

The modern educational space is based on digital technologies that all teachers of different levels of education should possess. For this purpose integration of efforts of experts in the field of IT-technologies and teachers of higher school is necessary.

Keywords [1]

IT-technologies educational space, information technologies, electronic educational resources, professional development courses, teachers of higher educational institutions, teachers.

1. Introduction

At the present stage, special attention is paid to the development of educational space in Moscow. Among the target programs the Moscow Department of Education distinguishes the following: evaluation and improvement of the quality of education at all levels; development of educational potential of the city; development of human resources in the humanitarian sphere; digital technologies in education. One of the priorities is the project "Moscow Electronic School (MES)".

In the conditions of pandemic and self-isolation, the need to introduce distance technologies in the traditional format of education of schoolchildren and students was confirmed. It is information and communication technologies that ensured the continuity of the educational process, confirmed the readiness of Moscow teachers to work in the new conditions, determined the prospects of the education system development.

At the same time, distance education revealed a number of problems related to the organization, management and methodology of classes with children and interaction with their parents in the

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educational space. It is indicative that only Moscow teachers were trained to conduct classes online using Internet resources, various Internet platforms, and messengers.

Video lessons, videoconferences, lectures, webinars and master classes were conducted on Moodle, Zoom, Microsoft Teams, Skype, Classroom and others. In this regard, the load on servers has increased significantly, which required an increase in capacity and certain logistics in conducting classes. Thanks to the active use of MES resources in educational organizations were created and supplemented banks of materials for lessons and classes in a distance format, the development of electronic educational resources was underway.

2. Research aims and objectives

Aim of the research is to find the ways to improve Moscow educational space in terms of digital pedagogy

Research Objectives:

1. To define the state of Moscow digital pedagogy
2. To determine content of refresher courses in Higher educational institutions.
3. To develop refreshing courses dedicated to digital teaching for Moscow educational institutions employees

3. Literature Overveiw

According to the All-Russian Center for Public Opinion Research, 53% of students and school graduates rated the level of teaching in the distance format as high or rather high. At the same time, it was emphasized that 55% of the respondents noticed a significant increase in the load on teachers. 62% of parents of school leavers reported an increase in the load on children due to switching to distance education [3, 7, 8, 9, 10]. It follows that the question of transferring education online while maintaining the quality of education remains open.

Not only in Moscow and the regions, but especially in rural areas, material and technical software for the educational process has become an equally important task. The technical problems were identified: insufficient number of personal computers in families and organizations, unstable mobile and Internet communications, incomplete coverage area, lack of Internet, etc..

The conditions of the pandemic and quarantine have identified new challenges for the pedagogical community. If earlier teachers, educators, college and higher education teachers used only multimedia presentations, e-mail and WhatsApp as information and communication technologies, today they have access not only to various information sources and services of the digital library, but also to new forms of communication with students and their parents.

There was a need to update the content and develop the content of electronic educational resources, as well as the need to improve computer literacy in all segments of the population. The pedagogical community faces the tasks of preserving and ensuring the quality of education in new conditions. Professional development courses play an important role here.

Previously, such courses were regarded as "push-button" courses that allowed a teacher to upload educational material according to a given template in a certain sequence. The topics of the courses were not interesting and there was no innovative and promising material in their content. These circumstances significantly reduced teachers' motivation for learning, self-development, and information competence. The courses that were developed almost completely copied the textbook materials. Therefore, professional development courses devoted to work in the information environment were not given due attention.

With the change of attitude to the technologies of personal growth in society, the attitude to professional development courses also changed. From a burdensome duty to obtain a document for the next certification they have turned into an important tool for the development of educational space in Moscow and the human resources potential of the education system in Russia.

The analysis of the presented professional development courses in Russia shows the variability in the forms of their organization, updating the subject matter and content. Courses for parents and

children were opened for the first time, and the distance learning form is still being actively developed.

However, pedagogical science still underestimates the importance of developing a teacher's cognitive and creative abilities, does not identify specific features of their inclusion in professional activities, and does not identify ways of forming informational and digital competence.

The professional standard of the teacher not only discloses qualification requirements for pedagogical activity and the level of possession of information and communication technologies, but also demands constant self-development and self-improvement of teachers, training at professional development courses.

In the Moscow region, all pedagogy must improve their qualifications by attending courses of varying duration. These can be both short (6-36 hours) and long (72 hours and more) courses. At the end of these courses, a participant receives a document - a certificate or certificate.

It is important to emphasize that this requirement was mandatory for preschool teachers and general education teachers, while professional development for higher education teachers was not given due attention.

At a modern stage of development when self-isolation and remote work are a defining factor of existence of a society, problems of professional activity of the teacher and its interaction with parents of students were accurately designated. The contradiction between necessity of use of digital and information and communication technologies in professional activity, on the one hand, and unpreparedness of teachers to approach creatively to educational process and contact to pupils without corresponding methodical instructions, on the other hand, was designated. During the last six months, the situation has changed dramatically. Problems of covering the region's space with the Internet network were resolved and children in poor families were provided with laptops and tablets.

The most difficult situation was in teacher training institutions, where there was a weak material and technical base, lack of training programs and low level of readiness of teachers and students for distance learning.

Therefore, the management of higher education institutions took a comprehensive approach to this problem. A working group was created to develop methodological recommendations for distance learning. As part of the work of the corporate university were organized training courses for teachers to develop and fill electronic educational resources, organized round the clock technical support and digital volunteers.

At the same time there is an increased load on the teacher, as it is required not only to prepare material for the lecture or practical lesson, to place it in the information environment, to conduct the lesson in online or offline format, to think through and apply techniques to activate students, check homework, give feedback and provide interaction with parents.

Therefore, one of the important directions of IT-technologies development is the training of specialists for the development and introduction into the educational process of the Moscow region of a separate educational platform, not tied to the portal of public services. In Moscow

A key element in the digital educational environment should be electronic educational resources, which will serve as a means of learning and improving the quality of education. The development of electronic textbooks, electronic simulators, providing a new campaign to the visibility of learning, the use of remote laboratories becomes relevant.

In conditions of digital education, the ability of a teacher and a student to adapt to new conditions is in demand and becomes possible thanks to the systematic development of education, the inclusion of information technology in the educational process of higher education institutions and the organization of professional development courses. Thus, an important task is to find new forms and develop the content of professional development courses for teachers and parents, to use distance forms, and to increase teachers' motivation for self-development.

4. Methodology

Currently, we are searching for new innovations and information technologies, testing various platforms and LMS-systems, content development and filling of electronic educational resources.

At the same time, the personal and creative approach to the development of teacher's reflection, his creativity, readiness to design his professional activity on the basis of continuous self-development, training at courses of professional development within the framework of corporate universities becomes particularly important.

5. As a result

At a modern stage of development of a society and education the process of the organization and carrying out of professional development courses which maintenance corresponds to labor functions of the teacher, the Federal state educational standard of higher education and the Professional standard of the teacher is observed. These courses meet the requirements and demands of society to the personality of a teacher and improve the quality of education at all levels. This is reflected in the competence of a modern teacher, his or her readiness to use information technology in the educational process, to participate in the development of the digital educational space, and to constantly improve his or her professional skills.

6. Discussion

Summarizing the above, we can conclude that today it is necessary to ensure the development of a system of professional development courses to improve the digital competence of teachers, the introduction of new forms of education, the application of a personal approach to the learning process.

The introduction of electronic resources into the educational process of teacher training institutions requires compliance with a number of requirements.

First, professional development courses should be oriented to the needs of the educational organization and faculty.

Second, it is important that courses make educational materials available to all groups, including educators, students, and their parents.

Third, the courses should be conducted under the corporate training program, which will contribute to the creation of a unified information and educational environment for the organization.

New conditions allow teachers to develop independent creative activity of students; they increase their motivation and promote personal development. All this is necessary to ensure the quality of a graduate's training for the Moscow education system and to prepare him or her for work taking into account modern trends in the information society.

However, studies on integration of different fields of science, information technologies and cognitive development of personality are still insufficient. Basically, studies are conducted on the use of information technologies at certain levels of education, development of creativity and creative abilities of teachers in different activities. These positions are reflected in the works of A.V. Antonova, N.P. Khodakova and A.Yu. Fedosova, T.A. Semenova and other specialists [1-2, 4-6, 16].

In the normative documentation of pedagogical higher education institutions, including IPGU and ISPU, a mandatory requirement for teachers to develop electronic educational resources is introduced. The electronic component covers all courses and subjects within the curriculum in accordance with the curriculum of the educational program. Therefore, the emphasis of professional development courses should be made on the training of teachers to develop courses of disciplines in the electronic educational environment of the organization in the process of training on these courses, and the developed course should become a teacher's credit work. Such practice-oriented training increases the quality of education and motivation of teachers to master modern digital technologies, which contributes to the development of educational space in the city.

Preparing a teacher to conduct traditional classroom sessions using digital technologies requires readiness, development of information competencies, and a culture of communication with the audience. At the same time, mastering remote forms of professional activity is becoming relevant today. In this regard, the role of professional development within a corporate university is growing.

The experience of IGU, MSU and other higher education institutions shows the importance of developing corporate professional development courses for teachers. In the course of training, teachers are introduced to the instruction on working with an employee's personal office, the

technology of creating a course, the logic of placing educational materials, the mechanism of recording users on the course and their contributions, as well as the methods of downloading files, creating interactive lectures, placing video content, technical requirements for equipping the workplace.

Experience in refresher course organisation shows the importance of designing such courses for parents of the students. The authors present the guideline for arranging refresher courses for Moscow digital pedagogy (Picture 1). It intends to use the traditional courses and the 2 new Modules (Module aimed to arrange such digital courses on the basis of an educational institution and Module dedicated to interconnection and cooperation with parents of the students) in optimal proportion. This increases parental competence and unites teacher`s and parental efforts to raise and educate the new generation.

When fulfilling the course each student passes the final test on the chosen topic keeping up with minimal demands for the development of the educational resource including content development, its disposal in the educational platform and presentation of personal projects.

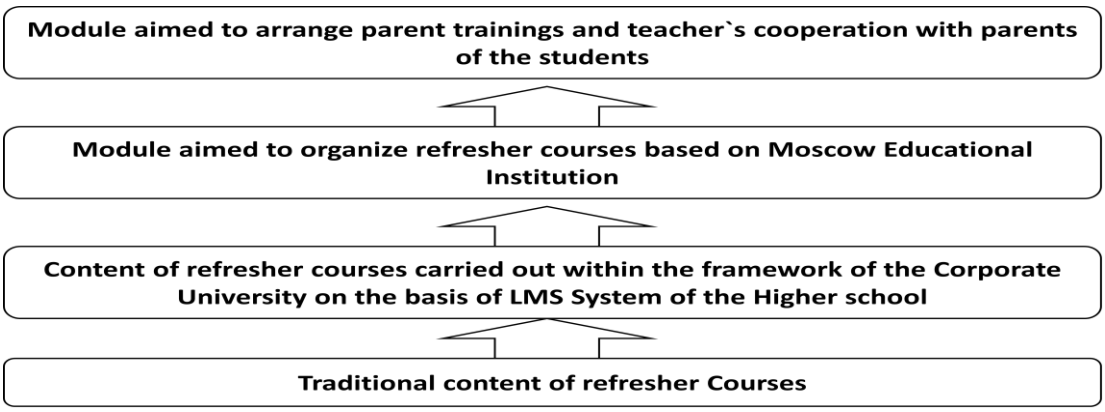

Figure 1: The guideline for arranging refresher courses for Moscow digital teaching

Hence, the more diverse the subject matter of advanced training courses in higher education, the higher the quality of teacher training for work in new conditions and, accordingly, the quality of training of a graduate.

7. Conclusion

The development of the educational space in Moscow has proved the relevance of the new approach to organizing professional development courses for teachers, students and their parents, as well as the need to develop corporate education in higher education.

For IT-specialists there was a request to create a single independent educational platform for preschoolers, schoolchildren and students of Moscow.

Integration of efforts of experts in the field of IT-technologies and representatives of pedagogical community, discussion of actual problems of the organization of educational process with application of information technologies is necessary.

All this will allow improving the organization of activity of teachers of pedagogical higher educational institutions and will give the chance to manage quality of education in system of preparation of teachers.

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