ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS FOR THE DEVELOPMENT OF TEACHERS’ PROFESSIONAL COMPETENCE IN THE SYSTEM OF METHODICAL WORK

The article clarifies the definitions of the concepts of "condition", "pedagogical conditions", "organisational and pedagogical conditions". It has been found that organizational and pedagogical conditions for the development of primary school teachers’ professional competence in the system of methodological work are considered as macro conditions (social order of society for motivated and professionally trained teachers, development and harmonization of normative documents); meso conditions (development of teachers’ professional competence, adaptation and improvement); micro conditions (individual educational trajectory of primary school teachers’ professional competence development, active involvement in research activities).

It has been proved that the organizational and pedagogical conditions for the development of primary school teachers’ professional competence are associated with the use of new technologies in teaching, the development of students’ practical skills and the acquisition of new skills by teachers, as well as with increasing the effectiveness of interaction between teachers, students and their parents.

Key words: "condition"; "pedagogical conditions"; "organisational and pedagogical conditions"; methodical work; development of primary school teachers’ professional competence

Організаційно-педагогічні умови розвитку професійної компетентності вчителів у системі методичної роботи

Уточнено дефініції понять «умова», «педагогічні умови», «організаційно-педагогічні умови». З’ясовано, що організаційно-педагогічні умови розвитку професійної компетентності вчителів початкової школи в системі методичної роботи розглядаються, як макроумови (соціальне замовлення суспільства на вмотивованих і професійно підготовлених учителях, розроблення та узгодження нормативних документів); мезоумови (розвиток професійної компетентності вчителів, адаптація та вдосконалення); мікроумови (індивідуально-освітня траєкторія розвитку професійної компетентності вчителя початкових класів, активне залучення до науково-дослідницької діяльності) і уявляють собою комплекс взаємопов’язаних та взаємообумовлених компонентів, які забезпечують неперервність професійного зростання педагога.

Доведено, що організаційно-педагогічні умови розвитку професійної компетентності вчителя початкової школи пов’язані з використанням нових технологій у навчанні, з розвитком практичних навичок учнів та опануванням нових навичок учителів, а також із підвищенням ефективності взаємодії між учителями, учнями та йншими батьками.

Ключові слова: «умова»; «педагогічні умови»; «організаційно-педагогічні умови»; методична робота; розвиток професійної компетентності вчителів початкової школи
The relevance of the problem. Today's Ukrainian modern pedagogy makes many attempts to find the most optimal way to implement new educational tasks. Therefore, the activity of primary school teachers as direct participants in the educational process of the New Ukrainian School and their level of readiness for professional activity in the modern educational environment, which requires the creation of certain organisational and pedagogical conditions for this activity, which affect the development of primary school teachers' professional competence in the system of methodological work, remain in the foreground. The scientific literature we have analysed makes it possible to clarify the essence of these conditions within the framework of our study, but the results of research by scientists give grounds to assert that there is no single approach to determining the content, and therefore there is a need for further development of theory and practice.

Analysis of previous studies and publications. In the academic explanatory dictionary of the Ukrainian language, the term "condition" is understood as “a mutual oral or written agreement about something; an agreement, a contract" [1]. A pedagogical condition is a circumstance, factor and set of measures that affect the effectiveness of the pedagogical system [6]. Interpretations of the terms “condition”, "pedagogical conditions" and "organisational and pedagogical conditions" can be seen in the scientific research of such scholars as: Y. Babanskyi, V. Belikov, G. Vasylieva, R. Gurevych, M. Zvereva, I. Ziiaiun, G. Demidova, N. Dvulichanska, A. Demin, N. Ippolitova, O. Yezhova, V. Klokho, A. Nain, I. Pidlasyi, O. Pekhota, I. Repko, T. Sorochan, E. Khrykov, A. Khutorskyi, L. Filippov, N. Yakovleva.

Let's consider the results of the study of the concept of "organizational and pedagogical conditions" by different scientists (table 1):

<table>
<thead>
<tr>
<th>Authors</th>
<th>Definition of the concept &quot;organisational and pedagogical conditions&quot;</th>
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<tbody>
<tr>
<td>E. Sinkina</td>
<td>a set of factors necessary for the formation of skills and qualities [14]</td>
</tr>
<tr>
<td>C. Pavlov</td>
<td>circumstances of interaction of subjects of the educational process [15, p. 11-12]</td>
</tr>
<tr>
<td>A. Galeeva</td>
<td>circumstances of interaction of organisational forms and pedagogical support [6]</td>
</tr>
<tr>
<td>E. Khrykov</td>
<td>circumstances that determine a certain direction of development of the pedagogical process [16]</td>
</tr>
<tr>
<td>O. Pekhota</td>
<td>circumstances in which the components of the educational process (content, teaching and learning) are presented in the best possible way and create an atmosphere of fruitful cooperation between teacher and students, which ensures fruitful teaching, management of the educational process, and successful learning for students [13]</td>
</tr>
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</table>

Most authors define organisational and pedagogical conditions as an interpretation of the pedagogical process circumstances that organise and coordinate the interaction of the subjects of the educational process, who jointly implement a certain programme or goal.

The purpose of the article is to reveal the essence of the concepts: "condition", "pedagogical conditions", "organisational and pedagogical conditions" and to identify and substantiate the organisational and pedagogical conditions for the development of primary school teachers' professional competence in the system of methodological work.

Presentation of the main material. We consider "organisational and pedagogical conditions" as a set of interrelated and interdependent components that ensure the continuity of a teacher's professional growth. The structure of the complex of conditions should be quite flexible, adaptable, dynamic, and develop depending on the characteristics and components of the process of continuous professional growth.

Professional growth of a teacher is a process of qualitative and quantitative transformations of his/her professional potential, which are caused by both internal and external conditions and by controllable and uncontrollable factors that influence these conditions.

The main goal of every educational reform is to improve the quality of education, which results in the formation of a competent personality.
An important component of the new educational paradigm, according to Stanford University researchers in their report "The University of 2025", should be a focus on individuality, development and support for the uniqueness of each person. The researchers believe that the educational system of the future should become more flexible and comprehensive, providing students with much more information freedom than just a set of competences [18]. Thus, modern education should be aimed at the continuous harmonious development of a personality capable of considering a problem from different perspectives.

The Concept of the New Ukrainian School defines the social demand: competence-based education through the implementation of a competence-based approach, its focus on results in the form of developed key competences of students, the structure of their knowledge, views, values, successful self-realisation in the profession and life, formation of a personality, patriot, innovator who is capable of competing in the labour market, developing the economy, and learning continuously throughout life [7; 13]. In the component formula of the new school, the leading place is given to teachers of the new formation, who are at the forefront of social and educational transformations, successful, motivated, competent agents of modern change. Such teachers play the role of mentor, facilitator, consultant, manager in the educational process, have academic freedom, possess skills of proactive project management (planning and organising learning, developing teaching and learning materials, assessment, etc.), independently and creatively obtaining information, etc. Thus, teachers of the new formation create a reliable basis for lifelong learning for personal fulfillment.

The new mission of the teacher is seen in the context of European professionalism, while preserving the best mental Ukrainian characteristics and the European dimension of pedagogical qualities. The process of teachers' professional growth in the system of postgraduate education is observed through the methodological work of the GSEI.

Ideally, methodological work is a means of enhancing the professional competence of teachers, and for an educational institution it is the creation of a creative professional and educational environment for educators, where experiments and innovations are tested, and the development of teachers' creative potential is constantly stimulated.

Methodological work in real life is not always effective. Questionnaires and personal communication with teachers helped us to identify the reasons that hinder the quality of methodological work of primary school teachers and outlined ways to solve these problems (table 2).

These are just a few of the reasons that may hinder the quality of the system of methodological work of primary school teachers at the present stage, and the list is not complete. Taking into account the reasons and ways of solving these problems, we can talk about the modern methodological work of primary school teachers aimed at developing professional competence.

From the above, it follows that methodological work in educational institutions makes it possible to solve problems related to a specific teacher’s personality, his/her professional development, and promotes the establishment of pedagogical values that are important both for the school’s teaching staff and for the pedagogical community as a whole.

A modern system of methodological work in an educational institution requires the definition of a set of organisational and pedagogical conditions for the development of primary school teachers’ professional competence with a view to the future and perspective.

We are impressed by the study of O. Chepka [3], who identifies three groups of organisational and pedagogical conditions: macro conditions, meso conditions and micro conditions. In our study, we will consider organisational and pedagogical conditions as:

- macro conditions – social order of the society for motivated and professionally trained teachers, development and approval of regulatory documents;
- meso-conditions – development of teachers’ professional competence, adaptation and improvement;
- microconditions – individual educational trajectory of primary school teachers’ professional competence development, active involvement in research activities.

So let’s describe them.

**Macro conditions. Resources: human, financial and logistical support.**

Due to the massive introduction of information and communication technologies (ICTs) into the education system, teachers who are able to work effectively in the new information and pedagogical environment are becoming increasingly competitive in the
<table>
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<th>Reason</th>
<th>Impact on the quality of methodological work</th>
<th>Ways to solve it</th>
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| Insufficient level of teacher training to work with modern technologies | Lack of necessary knowledge and skills to use computer technologies and software applications, which are necessary for the effective work of modern teachers: - use of Internet resources and electronic educational platforms; - there is no possibility to get the necessary training and support, as it requires additional financial costs and free time. | Attendance of professional development courses on teaching modern technologies or conducting a relevant methodological seminar by computer science teachers and IT specialists: - «use of computer and information technologies»; - «introduction to electronic educational platforms and their use in the classroom».
| Unstable methodological support. | 1. Insufficient number of in-service training courses for teachers that allow them to improve their profession free of charge. 2. Lack of time for teachers to conduct the necessary research and prepare for lessons. | Development of methodological recommendations and educational materials on a paid and free basis: - consultations and on-the-job training by relevant methodological services; - preparing and distributing free educational materials and textbooks |
| Inadequate salary levels | 1. Limited opportunities for training and professional development 2. Inability to purchase new computer technologies and up-to-date software applications 3. Lack of motivation for further professional development. | 1. Increase the level of remuneration, as well as provide special bonuses and additional benefits for the purchase of new computer technologies and up-to-date software applications. 2. Organising professional competitions in accordance with the category and awarding the most active and innovative teachers, introducing a rating scale in their work. 3. Financial incentives for writing articles and developing new technologies in the educational process. 4. Consideration of the number of children in the class. |
| Inefficient use of working time. | There is no possibility to devote oneself fully to professional self-improvement and high-quality methodological preparation for the educational process. | 1. Reducing the burden of extracurricular activities (too many mandatory competitions and creative initiatives in working with children) Free choice of teachers in working with children out-of-school time. 2. Providing sufficient time for preparation and methodological work, as an option - a methodological day. |
| Inadequate level of material and technical facilities of the educational institution to meet modern requirements. | 1. Lack of necessary teaching materials and tools for conducting quality lessons. Lack of access to relevant resources and methods necessary for organising quality learning 2. Unstable access to the Internet. Inability to use online resources and e-learning materials that require Internet access. 3. Limited access to information resources. Lack of access to various databases and reference materials that can be used in the learning process Limited access to international educational communities, teachers and their experience 4. Insufficient number of free e-learning materials that can help to teach students the skills of using modern technologies. | 1. Increase funding for the material and technical base. Organise funding to update software applications 2. Providing access to the Internet. Providing different packages of services from Internet providers. 3. Providing access to information resources. Carrying out digitisation of educational materials into an accessible electronic form. 4. Development of new educational materials. Conducting seminars and workshops on the development of educational materials by teachers and specialists. |
| Political and economic instability | 1. Closure of educational institutions or inability to continue working in the context of hostilities. 2. Loss of highly qualified education professionals entering and adapting to the foreign labour market. | 1. Support for educators (volunteer foundations, international organisations...). 2. Preservation of the staff of the educational institution to minimise losses on the search for new staff in the context of military operations. |
educational environment. This knowledge and skills provide fundamentally new opportunities for self-improvement and contribute to the individualisation of the educational process, development of the creative potential of primary school teachers, expansion of cognitive activity, improvement of thinking techniques, and improvement of the quality of the methods and technologies used to teach students at the first level of complete general secondary education. The NUS concept defines the formula of the New School, namely, «The cross-cutting application of information and communication technologies in the educational process and management of educational institutions and the education system should become a tool to ensure the success of the New Ukrainian School. The introduction of ICT in education should move from one-off projects to a systematic process that covers all activities» [13]. Changes in the education system associated with the implementation of the New Ukrainian School Concept provide conditions for a gradual transition to a new level of education based on information and communication technologies (equipping schools with computers, connecting them to the Internet, developing e-learning programmes, retraining teachers in the context of educational renewal, etc.) This suggests that the state is gradually laying the material and technical foundations for the process of informatisation of general secondary education in Ukraine. It is quite clear that informatisation of education today is a key issue that involves a radical change in the process of teacher training in an information-based educational environment. We propose to update the content of the normative disciplines of the curriculum for primary school teachers in the following specialities:

1. A specialist in technology in education will be a teacher who will help other teachers to master and use modern technologies in the educational process of an educational institution.
2. A specialist in distance learning management is a teacher who specialises in creating and organising distance learning courses for primary school children, allowing them to receive quality education both at school and outside of school.
3. A virtual reality specialist is a teacher who specialises in creating and using virtual educational tools for primary school children.
4. A specialist consultant (medical and educational psychology) is a teacher who specialises in working with children who need special attention (children with disabilities and children suffering from psychological problems).

In general, in the future, primary school teachers will have more diverse and specialised skills related to the use of modern technologies and innovative teaching methods to better meet the requirements of the educational system of the future.

Meso-conditions. Creating a modern innovation and communication environment. Ensuring personality-oriented training of primary school teachers in the system of scientific and methodological work. Diagnosis and self-diagnosis.

Today, there is a rapid development of information and communication technologies. Accordingly, the information educational environment is an integrated environment of information and educational resources (electronic libraries, educational systems and programmes), software, hardware and telecommunications tools, rules for their support, administration and use, which provide unified technological means of information, information support and organisation of the educational process, research, and professional counselling.

Modern education, taking into account the peculiarities of the development of the information society, is rapidly mastering information technologies. Therefore, processing various types of information using a computer and other means of information and communication technologies, working with computer software has become a professional necessity for teachers.

Among the advantages of ICT are the following:
− an irreplaceable source of information, as the use of ICT provides quick access to large amounts of information, high-quality, diverse databases and the storage of large amounts of information in electronic form;
− a tool of cognition, which allows for a variety of forms of information presentation and types of learning tasks, expands the possibilities of perceiving information, promotes better understanding of the information presented by students, and has a positive impact on productivity and the quality of information assimilation;
− a means of individualising learning, taking into account the cognitive needs and educational requests of teachers, activating their independent work and developing positive motivation;
− a tool for processing and transmitting information, a means of self-expression and...
creativity (text editors, graphic programs, Web pages, multimedia presentations), the ability to create a learning environment for working with students;

- a communication channel that allows for information exchange (e-mail, forums, chats), the possibility of real-time communication; creating conditions for interaction between family, school and the public through a single information space of educational institutions [1].

To summarise the above:

1. Introduction of new teaching methods based on the principles of distance and blended learning.

2. Development of intelligent technologies, such as artificial intelligence, to create personalised learning programmes and assess students’ knowledge.

3. Project activities and case studies aimed at developing practical skills of students who will act as experts and scientists.

Both methods develop students’ critical thinking, organisation and planning skills, as well as teamwork and communication with other stakeholders.

4. Widespread use of multimedia technologies in education, such as AR and VR.

Multimedia technologies in education include various means and forms of learning based on the use of sound, video, graphics, as well as information and interactive technologies. One example of such technologies is augmented and virtual reality (AR and VR).

Augmented reality (AR) in education can empower teachers by providing highly engaging digital content and features that can motivate students to learn in no time. This technology gives you an enhanced experience by adding digital elements to the real world. All you need to do is scan a key card (image) in a textbook or methodological guidelines, lab notebooks, and you will be offered a 3D interactive model, text, video, etc. What cannot be achieved with traditional pedagogy can be done with the help of augmented reality technology [16].

VR (virtual reality). With the help of virtual reality, students can visit any place without leaving the classroom or home. It is not only about the tourist attractions of Paris or London, but also about the depths of the ocean, outer space, and even the construction of atoms [5]. Thus, multimedia technologies such as AR and VR have a huge potential in education and can improve the learning process, making it more engaging and effective.

5. Develop and improve the efficiency of services and educational platforms aimed at organising interaction between teachers, students and their parents.

These conditions ensure the development of professional competence of primary school teachers-professional growth, which implies that in-service training is aimed at understanding further professional prospects in the chosen profession. The implementation of this condition involves planning the expected learning outcomes achieved by the teaching staff of teachers, both in the case of active cooperation with each other and in active interaction with students in the educational process.

Of particular importance in the study was a comprehensive assessment of the level of development of teachers’ professional competence, which allows to study their needs and demands, conduct diagnostics and self-diagnostics, analyse and improve the structure, content and forms of methodological work; determine the effectiveness of teachers’ educational and self-educational activities, predict and implement managerial and methodological influence, use effective teaching methods [1]. In order to ensure the objectivity of the study, to reflect the real state of development of professional competence, the issues of input and output diagnostics are mutually agreed upon. It is in this way that the least developed indicators of primary school teachers’ professional competence development can be identified and individual trajectories of teachers’ professional competence development can be formed.

Micro-conditions. Professional growth (individual vector of professional development of the teacher's personality in the process of personality-oriented learning in the system of scientific and methodological work).

The implementation of this condition implies subordination of the learning process in the system of methodological work to the laws of personal development of teachers, because professional development (professional skills) is a personality-oriented process that uses various forms, methods and ways of methodological work, depending on the personal characteristics of teachers. Personality-oriented learning is a system of development of professional competence of a personality, taking into account individual and professional characteristics of teachers [9]. In the future, given the rapid technological progress and the increasing amount of information,
it is not enough for primary school teachers to have only traditional pedagogical skills, but also to master and develop new ones.

1. Ability to work with various technologies and software. It is necessary to know how to use numerous computer programs and technologies (from educational platforms to interactive whiteboards) and to be able to protect oneself and students from danger due to the possible use of these devices.

2. Flexible thinking and the ability to adapt to new circumstances. In a world where everything is changing so fast, teachers need to be able to switch gears and look for new ways to solve problems. Ability to work creatively.

3. Communication and pedagogical skills. In addition to technical knowledge, a primary school teacher must be able to communicate with students of different ages, be tolerant, flexible and understanding. The teacher must be able to assess the level of knowledge of each child and adapt to his or her individual needs and build a trajectory of development and learning.

4. Ability to work in a team. Collaboration with colleagues is an important aspect of primary school teachers’ work. Joint activities, exchange of experience and ideas allow you to diversify teaching methods and come up with new technologies in education.

5. Analytical and research skills. Primary school teachers should be able not only to conduct research to identify gaps in their methods, competently identify the level of development of their professional competence, draw up a plan of individual educational trajectory, but also to find ways to solve the identified problems.

Thus, a primary school teacher should be a qualified specialist who combines pedagogical, technical and creative skills to meet the challenges of the present and the future.

Conclusions. Thus, the organisational and pedagogical conditions for the development of primary school teachers’ professional competence will be associated with the use of new technologies in teaching, the development of students’ practical skills and the acquisition of new skills by teachers, as well as improving the effectiveness of interaction between teachers, students and their parents.

We see prospects for further research in determining the effectiveness of the implementation of organisational and pedagogical conditions for the development of primary school teachers’ professional competence.

References


