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The role of interactive platforms in enhancing self-motivation during distance postgraduate studies

El papel de las plataformas interactivas en la mejora de la automotivación durante los estudios de postgrado a distancia

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Abstract

Modern technologies are an active tool for the development of practical skills, which has a positive value for distance learning as well. The aim of the work is to determine the role of interactive platforms in enhancing self-motivation during distance postgraduate studies. The research employed the following methods: comparison, the Stapel scale, calculations of the motivation factor, the activity ratio; Sherman test. The development of the teacher's communication and personal skills in education involved the use of the MOODLE platform; student evaluation mechanisms involved the use of the Liveworksheets application. It was determined that self-motivation was reflected in the search for non-standard methods for presenting information (23.4), the study of new materials (22.1), the research activity (19.7). The study showed that conducting open lessons by teachers who were undergoing postgraduate training was reflected in their obtaining high results. Primary school teachers achieved a high level of knowledge among 68%, Ukrainian language – 71%, mathematics – 64%. The practical significance of the work is the possibility of creating



new approaches to postgraduate training of primary and secondary school teachers. Research prospects may be related to determining the advantages of various interactive platforms for conducting postgraduate studies.

Keywords: Remote platform, active learning methods, pedagogical experience, research activity, professional competence.

Resumen

Las tecnologías modernas son una herramienta activa para el desarrollo de habilidades prácticas, lo que tiene un valor positivo también para la formación a distancia. El objetivo del trabajo es determinar el papel de las plataformas interactivas en la mejora de la automotivación durante los estudios de postgrado a distancia. En la investigación se emplearon los siguientes métodos: comparación, escala de Stapel, cálculos del factor de motivación, ratio de actividad; test de Sherman. Para el desarrollo de las competencias comunicativas y personales del profesor en educación se utilizó la plataforma MOODLE; para los mecanismos de evaluación de los estudiantes se utilizó la aplicación Liveworksheets. Se determinó que la automotivación se reflejaba en la búsqueda de métodos no estándar para presentar la información (23,4), el estudio de nuevos materiales (22,1), la actividad investigadora (19,7). El estudio demostró que la realización de clases abiertas por parte de los profesores en formación de postgrado se reflejaba en la obtención de resultados elevados. Los profesores de primaria alcanzaron un alto nivel de conocimientos entre el 68%, lengua ucraniana - 71%, matemáticas - 64%. La importancia práctica del trabajo es la posibilidad de crear nuevos enfoques para la formación de postgrado de los profesores de primaria y secundaria. Las perspectivas de investigación pueden estar relacionadas con la determinación de las ventajas de diversas plataformas interactivas para la realización de estudios de postgrado.

Palabras clave: Plataforma a distancia, métodos de aprendizaje activo, experiencia pedagógica, actividad investigadora, competencia profesional.

Introduction

Professional skills can be improved through postgraduate training, which requires the use of specialized training programmes, innovative changes. A high level can be achieved by ensuring students' independent motivation, which is aimed at revealing the necessary abilities (Murillo-Ligorred et al., 2023). Therefore, studying the impact of interactive platforms on achieving effective postgraduate training is relevant.

Postgraduate education involves the process of improving professional training as a result of deepening and expanding knowledge or obtaining another profession. At the same time, it is necessary to focus on the previously obtained educational and qualification level, as well as practical experience (McAvoy et al., 2022). The interactivity of training can be provided through educational platforms, which ensures orientation to the students' individuality, their capabilities and acquired professional knowledge. The focus on distance learning helps to ensure the continuity of learning based on the automation of existing approaches. A distance learning approach can ensure targeted learning by providing the possibility of individual perception of information by using cloud storage of learning materials (Lui et al., 2024). Distance learning using interactive technologies has certain advantages for postgraduate education. They are manifested in the growth of student activity, the expanded access to educational materials (Ang et al., 2021). The process may also involve the development of creative skills due to self-expression elements. It is possible to ensure the effectiveness of post-graduate studies as a result of orientation towards the development of erudition, intellectuality, and independence. This approach is necessary for the formation of students' interest in obtaining postgraduate education, which ensures the expansion of professional skills and abilities (Dyka et al., 2023).



Postgraduate education is aimed at a deeper perception of educational materials, their understanding, focusing on the possibilities of innovation. The quality of postgraduate education depends on the implemented areas of study that meet the requirements of education reform (Cui & Wang, 2023). At the same time, an academic and methodical approach to professional training, which is connected with the development of the students' individuality should be ensured. Professional knowledge can be developed during postgraduate education through non-standard educational approaches. Such approaches can be business games, various trainings, project methods, etc. Soft skills are required for the development of professional skills, which will allow solving various educational tasks. Erudition, creativity, and communicativeness can increase the quality of the educational process, which contributes to better self-organization (Lyckander & Spetalen, 2022). The main task of postgraduate education is the preparation of highly qualified and competitive specialists. The organization of postgraduate education is related to the provision of personal training, which is related to the students' motivation. Postgraduate education is aimed at using the accumulated experience to comply with the standards of professional education. Innovative approaches contribute to the achievement of new educational goals and the improvement of professional competence in the system of postgraduate training (Heath et al., 2023).

The theoretical study of the area selected for research revealed significant limitations in the implementation of interactive platforms during postgraduate studies, which contribute to the development of student motivation. Research is mainly aimed at determining the features of postgraduate studies. The aim of the work is to determine the effectiveness of interactive platforms in promoting self-motivation during distance postgraduate studies.

The aim of the work was achieved through the fulfilment of the following research objectives:

- Develop the principles of using interactive platforms in postgraduate education, focusing on the distance form;
- Determine the level of motivation before the beginning and after the completion of postgraduate training of primary school teachers, teachers of Ukrainian language, mathematics;
- Identify positive skills that were developed in teachers on the basis of self-motivation during postgraduate studies;
- Determine the level of developed professional skills among teachers during postgraduate studies.

Literature Review

Postgraduate training can be delivered with the use of STEM technologies, which helps to ensure joint learning and develop thinking skills. The creation of virtual laboratories has a successful impact on students, as it promotes the development of social and cognitive skills. Multimedia technologies contribute to the stimulation of learning, the use of additional equipment to expand practical skills (Nungu et al., 2023).

Multimedia learning has a significant positive impact on changing approaches to teaching, which can facilitate individual learning in postgraduate education. The benefits of multimedia learning are also related to the possibility of collaboration between students, which expands the understanding of a certain subject. Multimedia learning has benefits for motivating students to learn (Spanjaard et al., 2022). Digital technologies are an effective element for learning and assessment, as they contribute to the development of critical thinking and analytical skills. Developed skills contribute to sustainability in learning, which enables learning from the experiences of other students. The development of research skills is related to the orientation to the study of theoretical materials, their supplementing, and modification. This allows for the creation of new opportunities for ensuring the educational process (Naidoo & Reddy, 2023).

The development of professional skills is a complex process that requires a lot of attention to practical activities. These problems can be solved with the use of 3D modelling, which helps to stimulate real scenarios and ensure repeated practice of complex cases. Receiving feedback in learning enhances students' motivation and increases self-efficacy. A simulated environment promotes a deeper learning experience, which facilitates students' integration into the real environment (Lin et al., 2023). The education system has problems with the mismatch between the curriculum and actual practice. This deficiency can be eliminated by the use of STEM principles, which contribute to a better perception of information and the development of awareness. STEM technologies make it possible to take into account the individual capabilities of students and graduate students, to ensure their interaction. Interactive learning promotes full immersion in the mass space, focusing on real professional activity (Brahic et al., 2024). Online education has become widespread during the Covid-19 pandemic, which requires social presence, orientation to research dynamics. Social presence aims to provide a link between learning and cognitive presence. Productive learning can be achieved due to the provision of joint interaction in the learning environment and the use of correct interactive technologies (Mutezo & Maré, 2023).

Competing priorities and social barriers must be taken into account to ensure that students are encouraged to actively participate in learning. They can be implemented using digital technologies. Interactive technologies had a positive value not only for effective learning, but also for increasing the level of students' motivation. Regular assessment determined ways of developing student activity and the ability to express their own opinion (Skaik & Tumpa, 2021). Interactive technologies influence active learning, which contributes to the improvement of the quality of teaching and the students' success. Virtual classrooms can increase learning efficiency among 30% of students. Simulation-based learning promotes learning abilities that increase the level of practical skills (Singhal et al., 2020). Reforming educational systems has different effects on student performance. Therefore, it is necessary to ensure not only a change in the curriculum, but also the development of student motivation. The development of emotional intelligence is related to the success of graduate students, which contributes to their new perception. Emotional intelligence affects self-regulation, self-awareness, self-motivation, social competence, which is reflected in the academic performance of respondents (Patil et al., 2023).

The literature review revealed the impact of interactive technologies on student success. Research is mostly aimed at studying the advantages of digital technologies for obtaining higher education. But this does not contribute to the study of the features of distance postgraduate education.

Methodology

Research design

The first stage of the research involved the development of approaches to the use of interactive platforms during distance postgraduate studies. The studies were organized in accordance with the approved university programme, but the authors proposed changed approaches to the perception and presentation of materials. The second stage of the research provided for determining the level of teachers' motivation during postgraduate training. The focus was the initial and final results of training. The third stage of the study was aimed at determining the positive impact of teachers' self-motivation to improve their professional level. At the third level, the effectiveness achieved by teachers as a result of conducting an open lesson was also determined.

Sampling

The sample of respondents consisted of 112 teachers with teaching experience from 1 to 5 years who underwent postgraduate training at Borys Grinchenko Kyiv University. The respondents' limitations are related to the involvement of school teachers who planned to improve their professional level. The



respondents were teachers of mathematics and the Ukrainian language who taught primary and secondary school students. The experimental part involved teachers who were undergoing the initial stage of postgraduate training, which made it possible to determine the effectiveness of postgraduate education from the implemented innovative approaches. Previously, the authors planned to involve an additional group of respondents who had already undergone retraining during the month. Such a difference could have affected the final results, which would not allow determining the role of interactive platforms in achieving specific results.

Methods

The development of approaches for the acquisition of postgraduate education skills in a distance format involved a comparison of the training programme and possible mechanisms for its practical improvement. The mechanisms of practical improvement were determined on the basis of the most favourable mechanisms for the implementation of practical activities, focusing on academic approaches (Paudel, 2021; Maré & Mutezo, 2021; Turnbull et al., 2021; Yates et al., 2021; Bembenutty, 2023; Patil et al., 2023). The interactive platforms were selected by testing 48 platforms for the possibility of their use among different numbers of people and the implementation of the developed approaches. The knowledge transfer within the distance format was implemented as a result of using the Nearpod platform. Postgraduate studies under the research conditions took place during two months.

The level of teachers' motivation achieved during postgraduate training was determined by summing up the results obtained from respondents and teachers who conducted training. The necessary information was obtained through the use of the Stapel scale, which made it possible to determine the level of respondents' learning motivation. The Stapel scale involved the use of a 5-point rating, where 5 corresponded to the greatest value. The level of self-motivation of the teachers who conducted the training was determined by assessing the respondents' interest in studying the material, the quality of its assimilation. The information transfer using the Stapel scale was implemented using electronic mailboxes. This approach contributed to the identification of all research participants. The motivation factor, which was developed by the authors of the article, was used for the calculations:

$$f^m = \frac{l^e + l^a + cr^{1/2}}{\omega} \quad (1)$$

l^e – the level of teachers' encouragement for deeper study of information;

l^a – the level of assimilation of information and the possibility of its use;

cr – the level of using creative skills to fulfil practical tasks;

ω – the general level of obtaining possible self-motivation (the maximum value is 7 points).

The observation method was used to reveal how the development of respondents' self-motivation influenced the improvement of their pedagogical skills. The observation provided for determining the approaches to the perception of educational material and its use. The final results were obtained through calculating the activity ratios:

$$c^a = (s^c \times l^s) \times 0,5, \quad (2)$$

s^c – the level of a separate self-motivation criterion;

l^s – the maximum coefficient of self-motivation.

The level of results obtained by the respondents through the use of interactive platforms was determined through calculating the obtained points. But first of all, it was foreseen to conduct open lessons by the

respondents, on the basis of which the level of professional skills was determined. Open lessons were conducted among primary and secondary school students.

Data analysis

Statistical analysis of the obtained results involved the use of the Sherman test (Valko & Osadchyi, 2021). It should be taken into account that if the values are lower than those in the table, the values are related to each other. The limit value, which was taken into account during the calculations, is 0.95. Mathematical and statistical analysis involved additional processing of the obtained results, focusing on methods of grouping, analysis of dynamics, etc. Statistical analysis was aimed at excluding random data. Statistical evaluation involved determining the interval where similar and different parameters were observed.

$$w_n = \frac{1}{2n} \frac{\sum_{i=1}^n |x_i - \bar{x}|}{\bar{x}}, \quad (3)$$

n – the number of calculated indicators;

x_i – estimate of the initial value;

\bar{x} – arithmetic mean.

Ethical criteria

Ethical norms required compliance with the established rules of postgraduate training, which were established by the university management. Ethical norms provided for the observance of equal conditions for all research participants, focusing on the established rights and obligations.

Results

The use of interactive platforms in the educational process is a common approach. Therefore, specific approaches to their use were identified to determine their role in the distance system of postgraduate education. The approaches were selected for postgraduate education of secondary school teachers (Figure 1).


	Study of interactive tools and methods aimed at the students' development	<ul style="list-style-type: none"> • Using the Padlet distance platform • Constructive assimilation of information based on simulation training
	Development of the teacher's communicative and personal skills	<ul style="list-style-type: none"> • Using the online platform MOODLE • Formation of a different view on interaction with students
	The search for new mechanisms for evaluating students	<ul style="list-style-type: none"> • Using the Liveworksheets interactive platform • Provision of non-standard methods of student assessment

Figure 1. Approaches to postgraduate studies using interactive platforms

- I. The first approach of post-graduate studies involved the study of interactive means and methods aimed at the students' development. This approach is aimed at developing students' interest, which will contribute to the fulfilment of non-standard tasks. The first approach to learning involved the use of the Padlet distance platform. This platform enables the creation and editing of educational information in various formats, which promotes the students' interest. With the help of Padlet, it is possible to ensure the creation of online games that will contribute to the study of new information. This approach to postgraduate studies is aimed at finding ways to implement educational activities. The training will be aimed at studying new passive and active methods of the educational process, which will contribute to the constructive assimilation of information. This teaching approach involved provision of stimulating learning, which contributes to the development of critical thinking and motivation to carry out professional activities. A positive value is formed as a result of full immersion in the process of creating interactive learning tools and methods.
- II. The presentation of educational material, which depends on the development of the teacher's communication and personal skills, is of great importance in the teacher's pedagogical activity. The development of these skills involved the use of the MOODLE online platform, which facilitated online open lessons. Online lessons were conducted among teachers who were pursuing postgraduate education. This involved the presentation of various forms of work, the holding of master classes for teachers who do not have extensive teaching experience. The process provided for the development of personal skills, confidence skills, and communication skills, which are aimed at understanding approaches to providing information and interacting with students. This stage was aimed at implementing practical skills and achieving practical mastery. The creation of open lessons is related to the provision of meaningful psychological and pedagogical activities. Focusing on experienced teachers allows you to form a different perspective on interaction with students, which changes the standard learning trajectory.
- III. It is necessary to ensure not only the evaluation of the memorized material, but also its understanding, the ability to master it in order to exclude the standard approach in testing students' knowledge. Therefore, the mechanisms of student evaluation were determined in the process of teacher retraining. The process involves the search for the use of non-standard methods of knowledge assessment, which can be manifested in the use of a game format, ensuring competition between students. This approach also motivates teachers to conduct non-standard training. For this purpose, the teacher needs to ensure the development of psychological skills, which contributes to the students' understanding. The teacher must have coordination skills, which ensures the correction of deficiencies in the studied material by students. The process also helps to find new teaching methods for a better understanding of a particular topic. This teaching approach is aimed not only at assessing the students' knowledge, but also at improving their competence as a result of developing mechanisms for the implementation of practical knowledge. The Liveworksheets interactive platform was used to develop student evaluation mechanisms.

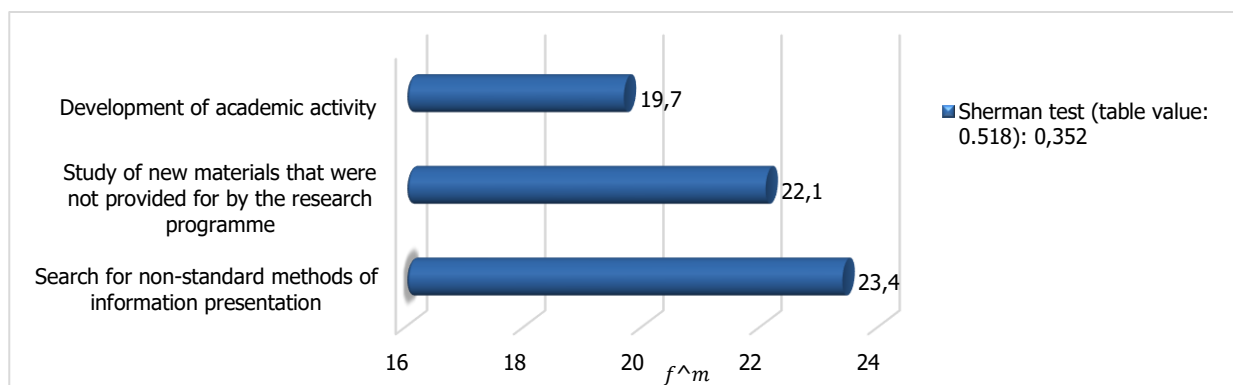
After completing the post-graduate training, it was planned to determine the increase in the motivation of teachers who were improving their qualifications. The results involved taking into account the role of interactive platforms that were used during postgraduate training. The results were obtained at the beginning and at the end of the training, which involved the separate involvement of primary school, Ukrainian language, and mathematics teachers (Table 1).

Table 1.*Level of development of motivation of teachers who received postgraduate education*

Groups of teachers	Beginning of postgraduate training	Completion of postgraduate training	Sherman test, 0.537 - table value
Primary school teachers	2.047	2.31	0.851
Ukrainian language teachers	2.054	2.23	0.793
Mathematics teachers	2.042	2.27	0.597

Completion of postgraduate training had a positive effect on teachers, which contributed to the development of self-motivation due to the use of distance platforms. Interactive technologies had a positive value for the practical use of previously acquired knowledge. The interactive platforms also contributed to the selection of non-standard mechanisms for their use, which promoted the development of creative skills. The process was aimed at developing independent skills in learning new materials, expanding professional and cognitive skills. The process was aimed at a deeper understanding of the materials, which allowed not only to develop pedagogical activity, but also research activity. The research activity is aimed at writing scientific articles, which requires variation with acquired knowledge and the use of creative approaches. This makes it possible to exclude the borrowing of other people's thoughts, the duplication of other people's material, and contributes to the creation of unique work. Self-motivation is related to the self-organization of teachers, which contributes to the development of new mechanisms for conducting classes. Self-motivation is based on awareness of approaches to the implementation of an educational task, focusing on specific algorithms developed by their own, rather than on existing ones. The beginning of postgraduate training was not characterized by a high level of motivation, as the traditional learning process did not involve an orientation to the depth of knowledge. The use of interactive platforms has opened up new opportunities for teachers, which is aimed at expanding their teaching skills.

The criteria were determined that reflected the development of self-motivation among teachers who underwent distance postgraduate studies (Figure 2).

**Figure 2.** *Development of criteria for self-motivation of teachers who underwent postgraduate training*

Self-motivation of teachers during postgraduate training was manifested in the search for non-standard methods of presenting information, as well as in the study of new materials that were not provided by the research programme, the development of research activity. The established motivation criteria made it possible to expand the teachers' professional skills, which was also reflected in their professional activity. Self-motivation contributed to revealing teachers' potential opportunities based on professional and moral self-development. Self-motivation contributed to the development of creative skills, which was aimed at

developing classes that would motivate students to memorize the necessary materials. The use of the latest teaching approaches was aimed at ensuring individualization and practical orientation. It also expanded the possibility of participation in theoretical and practical seminars and conferences, contributed to the publication of manuals and academic articles.

After the teachers' post-graduate training, it was proposed to conduct an open lesson, which involved determining the results of distance learning using interactive platforms. The results of the acquired knowledge were determined based on the conducted open lesson (Table 2).

Table 2.

The level of teachers' professional competence during open lessons throughout postgraduate training

Teacher categories	High level	Medium level	Low level	Sherman test, 0.518 - table value
Primary school teachers	27 (68%)	15 (32%)	-	0.510
Ukrainian language teachers	24 (71%)	12 (29%)	-	0.527
Mathematics teachers	26 (64%)	19 (36%)	-	0.481

The analysis of the open lessons conducted by the teachers established that they were able to achieve mostly high and medium levels of knowledge. The obtained results are related to the use of remote platforms, which made it possible to provide non-standard delivery of educational materials. The teachers also had developed communication skills, which enabled the interaction between students and their answering the questions. The high results also reflected a deep variation in the acquired knowledge, which contributed to the students' interest in the perception of information. The teacher's introduction of new teaching methods had a positive effect on the educational process. This was also facilitated by the applied student evaluation mechanisms, which made them interested in achieving high results.

Discussion

The educational process should involve the interaction of social, cognitive, teaching aspects, which allows to reduce the feeling of students' isolation and ensure the achievement of their success. The results of the study showed that students who took additional classes with online tutors showed higher academic performance. This is explained by the use of effective student support programmes (Maré & Mutezo, 2021). Digital technologies can contribute to the development of game approaches in learning, which affects the understanding of spatial and conceptual knowledge (Konotop et al., 2022; Konotop et al., 2023). Digital games influence academic performance because they are based on the analysis of relevant behaviour patterns. This approach contributes to the development of logical thinking, which is manifested in the students' approach to pedagogical activity. This makes it possible to apply the studied theoretical material in practice, which contributes to the automation of the educational process (Hwang et al., 2023). The use of innovative technologies has a positive meaning in the educational process, as it is aimed at students' acquisition of hard and soft skills. This contributes to the increase in employment, which is manifested in creativity, leadership, innovation, stability, and organization. Innovative technologies were of particular importance for graduate students, which allowed to organize the educational process, to provide motivation to achieve a higher level of knowledge (Brennan et al., 2023). The presented works reflect the possibility of using interactive technologies in the educational process, which are aimed at the organization of education. In our article, the use of interactive technologies was aimed at provided comprehensive postgraduate education.

To implement professional training, it is necessary to focus on enhancing students' motivation by increasing their productivity. Postgraduate education should be aimed at determining the factors that contribute to motivation, increasing the students' independent work. The use of modelling approaches made it possible to provide targeted learning, which was reflected in the students' success (Afzal & Crawford, 2022). The training of graduate students should be based on the development of cognitive and social presence and the provision of informative support. It is also worth ensuring the availability of educational resources, interaction with other graduate students, which will allow to diversify the approaches to research activity. The educational process should be aimed at determining individual academic trajectories (Seymour, 2024). Postgraduate education should involve highly qualified teachers who can diversify the educational process. Professional development should be linked to planning processes that allow for the creation of a proper educational environment. Postgraduate education should be related to theoretical enrichment of the educational process, holding discussions (Lyckander, 2024). The presented works reflect the mechanisms of theoretical enrichment of the educational process to ensure the effectiveness of postgraduate education. In our article, emphasis was placed on the development of practical skills, which contributed to the development of students' self-motivation.

Postgraduate education provides students with in-depth knowledge, which allows for the development of analytical and imaginative thinking. This is reflected in ensuring a high level of student involvement, deep thoughts. Pedagogical strategies should be aimed at enriching professional value, taking into account the nature of the academic subject (Heath & Tynan, 2023). Academic training requires the use of digital libraries, which contributes to a deeper study of a particular topic. It is necessary to focus on updating materials for the effectiveness of training, which contributes to the active students' motivation to implement the educational process. This develops students' awareness of during postgraduate training (Misra et al., 2023). The development of academic skills in the context of postgraduate education should include the expansion of study programmes for the possibility of analysing the acquired knowledge. Training should also include an individual approach, which promotes obtaining professional knowledge. The learning process should also be convenient, which will enhance students' motivation (Fernandes, 2023).

Comparison of academic articles in our work made it possible to determine the necessity of forming a deep understanding of the material in the educational process. Our work is aimed at determining the mechanisms of distance learning in the postgraduate education of primary and secondary school teachers. The level of self-motivation of teachers who underwent postgraduate training and its influence on the development of professional competence was also determined.

Limitations

The limitations of this study are related to the focus on postgraduate training of primary and secondary school teachers, which precluded the involvement of other majors. Despite the presented limitations, the study revealed the mechanisms of training effectiveness and the influence of developed self-motivation on the development of professional skills.

Recommendations

The use of modern technologies significantly increases the effectiveness of the educational process and ensures a smooth learning process, regardless of the possible format — offline or online learning. Postgraduate training should be aimed at deeper assimilation of knowledge and development of professional competence. Therefore, the use of online platforms promotes gaining deeper knowledge. Such an approach may be reflected in the future development of students' interest in the perception of materials.



Conclusions

The aim of the article was achieved as a result of the primary development by the authors of the article of educational approaches for the implementation of distance learning of postgraduate training. The first teaching approach was related to the study of interactive means and methods aimed at the development of students. In accordance with this educational approach, it was planned to define non-standard mechanisms that contribute to the further interest of students. The approach became possible to implement as a result of the focus on the use of the Padlet interactive platform. The development of the teacher's communication and personal skills was aimed at ensuring interaction with students, studying ways of presenting educational information. The presented learning approach was implemented as a result of using the MOODLE application. Student evaluation mechanisms were also given attention during postgraduate training, the development of which involved the use of the Liveworksheets interactive platform. This approach to postgraduate training made it possible to significantly increase the level of self-motivation of teachers who underwent postgraduate training. After completing postgraduate training, primary school teachers had a level of self-motivation of 2.31, Ukrainian language – 2.23, mathematics – 2.27.

The aim of the article was achieved through the educational approaches developed by the authors of the article for the implementation of distance postgraduate training. The first teaching approach was related to the study of interactive means and methods aimed at the students' development. In accordance with this educational approach, it was planned to define non-standard mechanisms that contribute to the further students' interest. The approach was implemented as a result of the focus on the use of the Padlet interactive platform. The development of the teacher's communication and personal skills was aimed at ensuring interaction with students, studying ways of presenting educational information. The presented learning approach was implemented by using the MOODLE application. Student evaluation mechanisms were also given attention during postgraduate training, involving the use of the Liveworksheets interactive platform. This approach to postgraduate training made it possible to significantly increase the level of teachers' self-motivation who underwent postgraduate training. After completing postgraduate training, primary school teachers had a level of self-motivation of 2.31, Ukrainian language – 2.23, mathematics – 2.27.

It was established that the development of teachers' self-motivation contributed to the search for non-standard methods of presenting information (23.4). It was also reflected in the study of new materials to ensure in-depth learning (22.1), the development of research activity (19.7). It was found that the teachers who underwent postgraduate training achieved mostly high level of professional competence. Primary school, Ukrainian language, and mathematics teachers were able to effectively conduct open lessons, which was manifested in their professional competence.

The practical significance of the study lies in the possibility of practical use of the presented interactive platforms to ensure teachers' postgraduate training. Research prospects may be related to the study of the benefits of distance learning using various interactive platforms for post-graduate training of specialists in various professional fields.

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