STRATEGY FOR ENSURING THE QUALITY OF DISTANCE EDUCATION IN UKRAINE

ESTRATÉGIA PARA GARANTIR A QUALIDADE DO ENSINO À DISTÂNCIA NA UCRÂNIA

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ABSTRACT

The purpose of the article is to characterise the formation of a strategy for ensuring the quality of distance education in Ukraine. Methods: content analysis of modern literature, analysis, synthesis, and modelling were used. The main criteria for selecting scientific sources are relevance, reliability, and impartiality. The scientific novelty is the professional development of a modern strategy for ensuring the quality of distance education in Ukraine based on the analysis of modern pedagogical literature. The results of the study describe four stages of the formation of an innovative strategy for ensuring the quality of distance education in Ukraine. It is determined that similar to the system of traditional full-time education, distance learning requires the establishment of rules and the creation of a comprehensive framework and guidelines. At the same time, the clarity and balance of educational regulations is important in the system of empowering educational institutions to ensure the effective participation of both teachers and students at all levels. The results note that the key components of a quality assurance strategy for distance education are programme planning, selection of appropriate digital technologies, teacher training, assessment and reporting, and continuous improvement of the entire educational system. Monitoring and identification of risk areas are also important parts of the strategy, which provide an accurate understanding of the dynamics

of educational outcomes and facilitate timely adjustment of the educational process in distance learning. The conclusions emphasise that monitoring is a particularly important part of this strategy. It is this process that helps to ensure effective and high-quality education that meets the needs of modern students and society.

Keywords: digital technologies, strategy development, quality education in Ukraine, digitalisation.

Resumo

O objetivo do artigo é caraterizar a formação de uma estratégia para garantir a qualidade do ensino à distância na Ucrânia. Métodos: foi utilizada a análise de conteúdo da literatura moderna, a análise, a síntese e a modelação. Os principais critérios de seleção das fontes científicas são a relevância, a fiabilidade e a imparcialidade. A novidade científica é o desenvolvimento profissional de uma estratégia moderna para garantir a qualidade do ensino à distância na Ucrânia com base na análise da literatura pedagógica moderna. Os resultados do estudo descrevem quatro fases de formação de uma estratégia inovadora para garantir a qualidade do ensino à distância na Ucrânia. Determinou-se que, à semelhança do sistema de ensino tradicional a tempo inteiro, o ensino à distância exige o estabelecimento de regras e a criação de um quadro e de diretrizes abrangentes. Ao mesmo tempo, a clareza e o equilíbrio dos regulamentos educativos são importantes no sistema de capacitação das instituições educativas para garantir a participação efectiva de professores e alunos a todos os níveis. Os resultados indicam que os principais componentes de uma estratégia de garantia de qualidade para o ensino à distância são o planeamento de programas, a seleção de tecnologias digitais adequadas, a formação de professores, a avaliação e a elaboração de relatórios, bem como a melhoria contínua de todo o sistema educativo. A monitorização e a identificação de áreas de risco são também partes importantes da estratégia, que permitem uma compreensão exata da dinâmica dos resultados educativos e facilitam o ajustamento atempado do processo educativo no ensino à distância. As conclusões sublinham que o controle é uma parte particularmente importante desta estratégia. É este processo que ajuda a garantir uma educação eficaz e de elevada qualidade que satisfaz as necessidades dos estudantes e da sociedade moderna.

Palavras-chave: tecnologias digitais, desenvolvimento de estratégias, educação de qualidade na Ucrânia, digitalização.

Introduction

The modern world is experiencing rapid development of information technology, which has had a significant impact on the field of education. Due to this, distance education has become a necessary component of the modern educational process, especially in the context of global challenges and adverse circumstances, such as the COVID-19 pandemic (DEMIRAY, 2017). For Ukraine, this problem has become much more urgent, as Russian aggression, which has entered a new phase since February 2022, has significantly raised the issue of distance learning. The physical threat to students, teachers, and administrators of educational institutions, the dispersion of students in different cities and even travelling abroad have led to

the fact that online learning has become the only possible way to implement the educational process. This feature has become an additional challenge for the learning environment as a whole, but it has also sparked interest among specialists in the prospects for further use.

The authors Tsekhmister, Chalyi, and Chalyy (2009) discuss the challenges and strategies for ensuring the quality of distance education in Ukraine, particularly in the context of medical physics (MP) and biomedical engineering (BME). The focus is on the integration of Ukrainian medical and engineering society into European educational and scientific culture through the creation of a BME department at the National Medical University in Kyiv. The research emphasizes the importance of theoretical justification, optimization methodologies, and the incorporation of modern pedagogical practices in MP and BME education to meet the evolving needs of the medical industry in Ukraine, particularly in the development, production, and utilization of medical equipment according to international standards (TSEKHMISTER; CHALYI; CHALYY, 2009, p. 383-384).

For this reason, Ukrainian education did not stay away from the phenomenon of digital learning and is actively developing distance learning. However, one of the key challenges is to ensure the quality of this type of education, which is difficult to solve under martial law. Additional difficulties arise from the fact that a number of medical, transport, maritime, and other specialities require traditional learning.

Research problem

The analysis of key aspects of the strategy for ensuring the quality of distance education in Ukraine is a topical issue that requires a comprehensive approach and scientific substantiation. The proposed article is devoted to the study and analysis of strategies that can guarantee a high level of quality of distance education in Ukraine. Such an analysis is of particular importance, as the quality of education is a crucial factor for the success of society, the competitiveness of the nation, and personal development. In a time of war, the quality and accessibility of education also becomes important for the further recovery and reconstruction of the country in the post-war period. Therefore, research on identifying and potentially solving

existing problems becomes extremely important for the future not only of the educational environment but also of the Ukrainian state mechanism as a whole.

Research focus

Given the importance of digitalisation, the issue of the impact of information technologies and digital tools on the quality of distance education is relevant for scientific consideration, i.e., finding answers to the question: how much does the use of modern technologies affect the learning process and the quality of knowledge acquisition? Given the importance of the quality assurance strategy, it is important to identify specific stages of quality assurance in distance education, taking into account current trends in digitalisation.

Research aim and questions

The purpose of this study is to analyse the strategy of ensuring the quality of distance education in Ukraine. the realisation of this goal will require solving several important tasks:

1.   Implementation of a step-by-step analysis of the formation of a strategy for ensuring the quality of distance education

2.   Identify the main components of this strategy

3.   Characteristics of monitoring processes in the system of quality assurance strategy for distance education

Methodology

General background

The methodology involves a thorough study and systematisation of existing knowledge from scientific sources in order to comprehend and summarise scientific information in the field of distance education in Ukraine. The study is structured in several stages, which requires the use of appropriate scientific methods.

Methods

The realisation of this goal will require the use of a content analysis of the current literature, which outlines the achievements of modern scholars on this topic. The main selection criteria include the relevance, reliability, scientificity, objectivity, and impartiality of the sources. At the stage of critical evaluation of the literature, a thorough analysis of each selected source is carried out. The main concepts, methodologies, and conclusions related to the peculiarities of the implementation and use of distance education are considered. At the same time, different aspects of the principles of forming strategies for ensuring the quality of the modern system of education and upbringing are taken into account. The study also uses analysis and synthesis. An important method is modelling, which allowed to clearly characterise and depict the individual elements of the strategy for ensuring the quality of distance education.

Theoretical framework

The term strategy, which will be used extensively in this study, is derived from the Greek word στρατηγία, which means "the art of command". This concept refers to a comprehensive plan developed to achieve one or more long-term or overarching goals under uncertain circumstances. Accordingly, in modern scholarly works, a strategy is a long-term plan or general direction of action that is developed to achieve specific goals or results (MAKKI *et al.,* 2022).

For this reason, in the field of pedagogy, an education development strategy is a plan or approach aimed at ensuring a high level of education (PRIYAMBODO and HASANAH, 2021). Accordingly, in the context of distance education, a quality education strategy is a plan aimed at ensuring the quality of education provided by distance means (DURSO and DECOSTER, 2022). Thus, this strategy defines how an institution or organisation plans to create, implement and deliver distance learning programmes in order to ensure the highest possible level of quality of education for its students (HEISER, 2019).

Table 1 – Key aspects of strategy development

Aspect	Explanation
Objective	The strategy defines what specific goals or results are to be achieved in the future.
Selecting the main actions	The strategy defines the steps and actions to be taken to achieve the objectives. It may include various capabilities and resources that will be used to achieve the goals.
Planning	The strategy is always long-term and future-oriented. It is aimed at achieving long-lasting and sustainable results.

Source: compiled based on the analysis of references: Priyambodo and Hasanah (2021); Makki *et al.* (2022); BIELIAIEVA *et al.* (2023).

The main components of a quality strategy for distance education include several important decisions: planning and development of programmes, selection of technological solutions, quality training of teachers, assessment, and reporting, etc. In general, most scholars agree that it is worth developing different strategies for the development of distance education, as they will influence the acquisition of better knowledge by students (KUCIRKOVA and LITTLETON, 2015). Thus, a quality strategy for distance education helps to ensure effective and high-quality education in the online environment, which is important, especially in light of the growing popularity of distance learning.

At the same time, when developing a strategy for ensuring the quality of education, it is necessary to find out what quality education is in the modern sense. To do this, let us turn to the results of modern scholars who have studied the key aspects of the development of distance education in the world. Quality education is a specific process of providing knowledge, skills, intellectual development, and training of a personality that meets high standards and requirements (see Table 2).

Table 2 – Modern standards and requirements for quality distance education

Aspects	Explanation
Academic expertise	Quality education includes the provision of knowledge from highly qualified professionals and teachers who have a deep understanding of their field and are able to effectively transfer this knowledge to students.
Balanced content	Quality education should include broad and diverse content that covers both theoretical knowledge and practical skills, contributing to the development of students in various aspects (LAZKO, 2021).
Active participation of students	Discussions, projects, independent research, and other forms of learning that encourage critical thinking and self-development, and creativity (MAKSIĆ and SPASENOVIĆ, 2018)
Evaluation and reporting	Quality education requires an assessment and reporting system that helps determine how well learning objectives are being met. Reports and assessments should be objective and based on objective criteria (OWUSU-ANSAH *et al.,* 2019).
Taking into account the individual needs of each participant in the educational process	A quality education takes into account the individual needs and capabilities of students, allowing them to adapt the curriculum to their personal capabilities and interests.
Continuous and systematic improvement of the educational system	Modern education does not stand still and is constantly improving. It takes into account new technologies, scientific discoveries, and changes in society to maintain the relevance and effectiveness of the learning process.

Source: compiled based on literature analysis: Scherman and Bosker (2017); Lazko (2021); Maksić and Spasenović (2018); Owusu-Ansah *et al.* (2019).

In general, quality education aims to prepare students for successful social and professional activity by providing them with the skills, knowledge, and resources to achieve their personal and professional goals that will be relevant in the future.

Results

The first stage of regulation of distance learning

The clarity and balance of modern regulations play a key role in empowering the heads of educational institutions to ensure the effective participation of teachers, students, and their parents at all levels, maintain transparency of processes and support the quality of educational services. This issue is particularly relevant in the training of maritime professionals. The main goal of the professional training process for cadets of maritime academies is not to acquire knowledge or skills but to acquire competencies, i.e., the ability to apply their knowledge and skills in certain cases, in particular, in extreme situations (VOLOSHYLOV, 2019). At the same time, the state educational standards of the specialty 271 "River and Sea Transport", according to which the professional training of maritime specialists should be carried out, are currently in a state of testing mode, therefore, in the process of training future maritime specialists, modern educational institutions are guided by the use of international standards set out in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (VOLOSHYLOV, 2019).

Thus, distance learning, like its traditional counterpart, requires the formulation of standards relating to various aspects, including:

1. Participation in online classes: defining expectations for students' attendance in online classes and their interaction with teachers during virtual sessions.

2. Absences: The conditions under which absences are permitted, the rules for reporting them, and the procedures for documenting absences by teachers are clearly stated (RAJAB, 2018).

3.	Clear assignment guidelines and deadlines: Setting rules and deadlines for assignments, ensuring that learners understand the importance of meeting these deadlines, and outlining the consequences of not doing so for the assignment grade (DURSO and DECOSTER, 2022).

4.	Assessment criteria: Defining the principles and criteria for assessing student performance in an online learning environment.

At the same time, the management of the institution needs to emphasise to both students and parents that distance learning is primarily about following a daily schedule. This schedule should include participation in online classes, completion of assignments, study of educational materials, etc. Communicating that the rules and guidelines that govern distance learning are just as important as those that apply to face-to-face learning will help ensure a smooth transition and productive learning experience for all involved. It underscores the institution's commitment to maintaining educational standards and providing students with a structured and effective learning environment, whether online or in a traditional classroom.

Second stage: taking into account the main components of the strategy for ensuring the quality of distance education

When developing a strategy for ensuring the quality of education, it is worth considering the existence of the main modern models of distance education: integrative, network, case study, and integrative television models. While the latter is mainly used in primary and secondary education, the integrative and network models are mainly used in higher education. The integrative model involves a combination of traditional and distance learning methods, which allows for a comprehensive restructuring of the entire learning process. The network model frees students from the need to physically attend educational institutions by using various digital and electronic technologies and learning methods. At the same time, the case-based model combines the power of the Internet with case-based learning methods.

Given the innovative trends in education development, the main components of a modern quality strategy for distance education should include several important aspects (see Figure 1).

Continuous improvement of the educational process plays an important role in this system. This means the systematic introduction of separate mechanisms for continuous analysis and improvement of distance learning programmes based on reports, feedback, and new pedagogical methods.

Third stage: quality monitoring

Assessment of students' learning achievements is a critical measure that should begin during the period of distance learning. When an institution switches to a distance learning mode, it is necessary to assess attendance and analyse the activity of students in the learning process. It is also worth identifying groups of students who, for various reasons, may not be effectively engaged in distance learning (MOORE and FODREY, 2017).

The absence of some students for any reason from the learning process in distance learning can have a negative impact on their overall performance and the educational system as a whole.

Figure 1 – Key aspects of the quality strategy for distance education
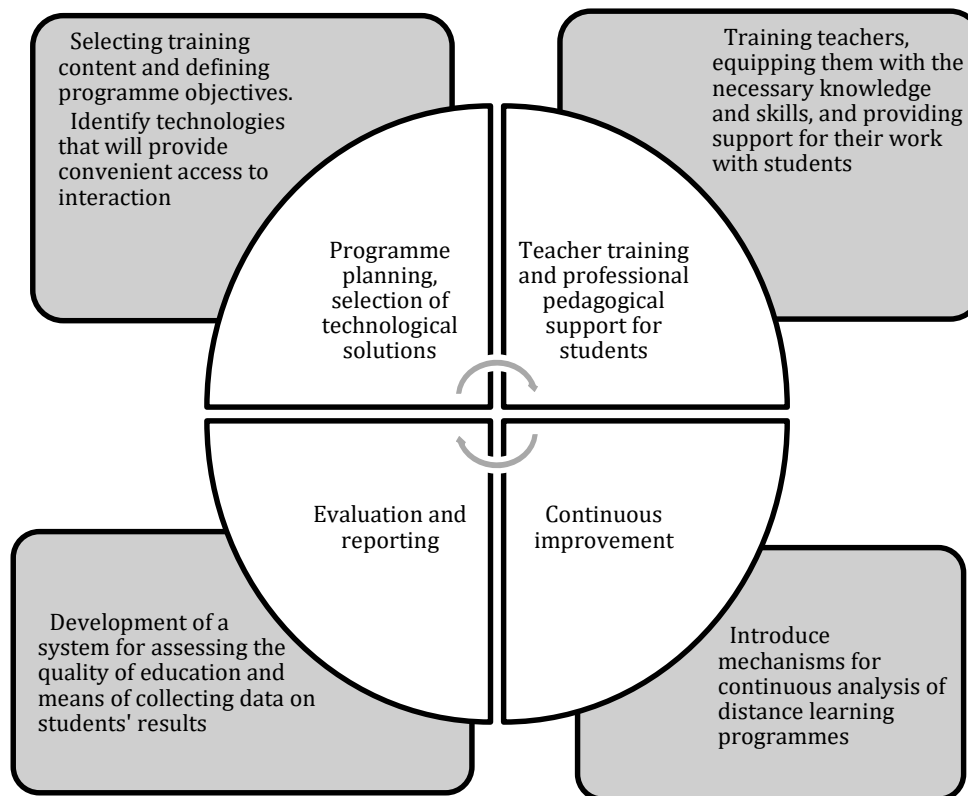
Source: authors' elaboration.

Early identification of such problems, determination of their root causes, and cooperation with parents can provide the necessary support to help such students.

Teachers also need additional support from the school administration. Teachers invest much more effort in distance learning compared to traditional teaching. Therefore, teachers should conduct regular self-assessments, share their experiences, review their schedules, and identify topics that may require additional attention in the context of distance learning. For this reason, the process of monitoring distance education includes several key elements that help to assess and ensure the quality of learning and the effectiveness of the educational process (see Table 3).

Table 3 – Key aspects of monitoring

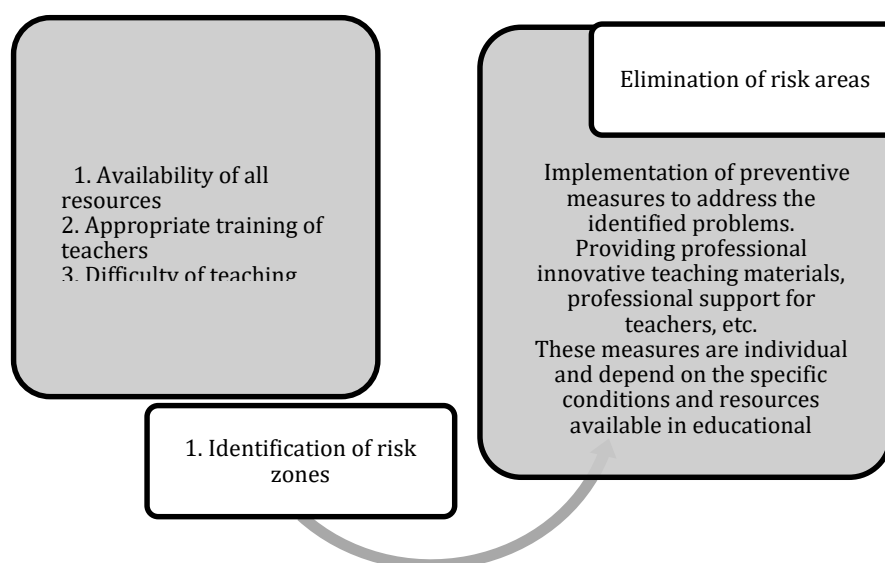| Actions	Explanation
Tracking progress	Students' academic performance should be monitored, including their grades, assignments, and attendance in online classes. Tracking tools can include online journals and e-learning systems.
Data collection and analysis	Monitoring involves collecting and analysing a variety of data, such as student feedback, attendance statistics, and test results. This helps to identify problematic issues and identify areas for improvement.
Evaluation of teachers	Monitoring includes evaluating the effectiveness of teachers, determining their impact on student learning, and providing appropriate support or training.
Ensuring the quality of training	Monitoring helps ensure that the curriculum meets academic standards and learning objectives. This includes checking materials, teaching methods, and whether assignments are relevant to learning objectives (MALANIUK, 2020).
Support for students	It is important to monitor whether students need additional support or assistance and provide them with appropriate support, including counselling and help with difficulties.
Continuous improvement	Monitoring should be a cyclical process that involves continuous improvement of distance education based on the collected data and feedback.

Source: compiled by the authors.

These key elements of monitoring contribute to maintaining and improving distance education, ensuring the quality and effectiveness of learning in this format. Therefore, given the constant change in the educational environment, which includes both distance and face-to-face learning, internal monitoring becomes particularly important (PRIYAMBODO and HASANAH, 2021). It provides an

accurate understanding of changes in educational outcomes and facilitates timely adjustments.

Fourth stage: identifying risk areas

With the right resources and active participation of both teachers and students, distance learning can be as effective as traditional face-to-face learning (RAJAB, 2018). However, there are certain subjects that become difficult to teach in a meaningful way in distance learning due to objective limitations. A striking example is the teaching of some physical education disciplines in the training of maritime specialists, which are difficult to conduct comprehensively in an online format, although teachers make efforts to remotely support the physical activity of knowledge seekers. Therefore, when switching to distance learning, administrators of educational institutions need to identify the categories of subjects that may receive less attention in this mode of learning. The most significant risks associated with distance learning are usually related to methodological support and communication barriers. Thus, school management should constantly evaluate teacher feedback and closely monitor the learning process (see Figure 2).

Figure 2 – The process of identifying risk areas and subsequent actions

1. Availability of all resources
2. Appropriate training of teachers
3. Difficulty of teaching

1. Identification of risk zones

Elimination of risk areas

Implementation of preventive measures to address the identified problems.
Providing professional innovative teaching materials, professional support for teachers, etc.
These measures are individual and depend on the specific conditions and resources available in educational

Source: compiled by the authors.

Once these 'risk areas' have been identified, school leaders can take preventative measures to address them. This may include providing teachers with teaching materials, educational resources, and additional support. This intervention may even take place before students return to face-to-face classes. In cases where immediate adjustments are not possible, more emphasis can be placed on these subjects once traditional learning resumes.

In addition, it is important to focus on how teachers develop holistic skills and cultivate key competencies in learners during distance learning (ABBASIMEHR, PAKI, BAHRINI, 2021). Lack of face-to-face contact, opportunities for collaboration, and group dynamics can potentially affect this aspect of education. Thus, school administrators should encourage teachers to pay special attention to these elements when returning to the traditional form. This may include organising additional exercises aimed at recognising and managing emotions, teamwork, and creative expression (GAJDA, KARWOWSKI, & BEGHETTO, 2017; BIELIAIEVA *et al.*, 2023). Another key factor is the development of effective communication skills. The transition between online and offline formats can impair students' ability to discuss, maintain communication ethics, and establish emotional connections during group discussions. For this reason, modern educators should pay special attention to improving these skills as part of the learning process, especially with the help of modern innovative methods and forms.

Discussion

In Europe, the beginning of the use of individual projects aimed at harnessing the potential of distance learning can be traced back to the early 2000s. Thus, before the COVID-19 pandemic, a significant part of the methodology for the effective use of online resources had already been created, accompanied by proposed methods for optimising these resources and formulating general guidelines for their use. In this regard, the studies by Rajab (2018) and Demiray (2017) are particularly important. Significant attention to distance education, which was once perceived

only as an additional or an option in the absence of traditional means, has contributed to the rapid integration of advanced technological solutions into the field of education (BILIUK *et al.*, 2023). In addition, it has allowed teachers to use their experience in solving problems that have arisen in Ukraine (SHERMAN *et al.,* 2022). This study will be formed in stages: each stage will involve analysis and characterisation of the main mechanisms for developing a strategy for ensuring the quality of distance education.

Based on this study, the importance and expediency of organising a monitoring process of distance learning, the results of which are aimed at improving distance education in general, are substantiated. Modern researchers prove that qualitative monitoring contributes to the emergence of additional opportunities, especially in relation to:

1.   Improving the efficiency of educational institutions through the process of rationalising the use of digital technologies in education (CAPOUCH; DEUTSCH, 2020; IDIALU, 2013).

2.   Ensuring the competitiveness of students because of improving the position of Ukrainian educational institutions in the Internet system.

Modern studies have also shown that the monitoring process can ensure coordination of the activities of an educational institution, contribute to the development of distance education infrastructure, and, as a result, increase the efficiency of using the available resources of an educational institution based on the synthesis of the latest technological solutions and teaching methods (SCHERMAN and BOSKER, 2017; STEBLETSKY, 2020).

In addition, modern researchers agree that checking the quality of education and finding potential risk areas are important for the modern system of distance education. This is due to the following reasons. Monitoring allows to make sure that curricula and methods meet lofty standards of educational quality (YAKIMENKO *et al.,* 2021). This ensures that students receive quality knowledge and skills. Given that the modern system of distance education is changing rapidly due to technological advances and innovative approaches to learning, monitoring allows

the education system to adapt to these changes and introduce new methods of instruction (CHANDRA; TOMITSCH; LARGE, 2020; TÜRKMEN, 2023).

On the other hand, finding potential risk areas helps to identify problems and shortcomings in the distance education system (KUCIRKOVA and LITTLETON, 2015). This may include identifying students who may need added support and identifying problems with resources or infrastructure (HASIUK *et al.,* 2022; OTIENO OKECH *et al.*, 2022). These processes also allow resources to be allocated more efficiently. This means investing in those aspects of distance education that have the greatest potential for improvement.

Dobrovolska *et al.* (2021) explore the features of emotional intelligence (EI) and investigate the motivational factors influencing its development, with a focus on practicing psychologists. The findings highlight the connection between prosocial motivation and emotional intelligence, emphasizing the need for further in-depth research on the unique aspects of emotional intelligence development among professionals in helping professions (DOBROVOLSKA *et al.*, 2021, p. 54-59).

According to Londar and Horna (2021), it is important to use modern methods and technologies for collecting statistical information in the system of providing quality educational services, however, through the use of national information and digital systems, reducing the level of reporting burden. In this context, the Concept of Digital Transformation of Education and Science until 2026 is an important document. This project envisages the formation of a unified educational digital environment that should unite all actors in research and education, create a space for communication, and reduce bureaucratic influence on the education system.

Together, these factors help to create a more efficient, adaptive, and high-quality distance education system that meets the needs of modern students and the innovative digital learning environment.

Conclusions

Thus, taking into account some of the advantages of distance education (accessibility, flexibility, use of technology, and modern innovative methods), the development of distance education strategies becomes an important task for educational institutions, governments, and organisations that want to ensure quality and affordable education for all.

The proposed strategy for ensuring the quality of distance education in Ukraine includes four stages, each of which is important. Therefore, it should be used comprehensively. At the first stage, it is proposed to regulate distance education in Ukraine in detail and with high quality. At the second stage, the author identifies the main components of the innovative development of distance education. It is noted that an important role is played by continuous improvement of the educational process, in particular, through the systematic introduction of certain mechanisms for continuous analysis and improvement of distance learning programmes. The next stages involve detailed monitoring and threat detection. Monitoring processes help to ensure that distance education curricula and methods meet quality requirements and provide students with the necessary knowledge and skills. It has also been proven that monitoring can help to identify whether all groups of students have equal access to distance education, regardless of their geographical location, economic status, disability, etc. To summarise, monitoring the quality of distance education helps to ensure effective and high-quality education that meets the needs of students and society. For this reason, the strategy will help ensure the quality of education and promote the further development of innovative forms of distance education in Ukraine. However, an important area for further analysis of this topic will be the experimental testing of this strategy in Ukrainian educational institutions. This will help to identify its opportunities and threats while improving its weaknesses.

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