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Digital Opportunities for the Development of Inclusive Education in Primary School in Ukraine: A Teacher's Experience

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Abstract: This research aims to explore digital opportunities for the development of inclusive education in primary schools of Ukraine through the prism of the analysis of teachers' experiences. The implementation of this goal involves the use of a mixed approach combining qualitative and quantitative methods. A survey was conducted among primary school teachers (23) from different regions of Ukraine in order to obtain quantitative data on their experience of using digital tools during their professional activities in inclusive education. The method of random stratified sampling was used. The questionnaire consisted of 10 questions; some of them were based on a 1-5 point Likert scale. The results of the study showed that digital tools significantly increased the quality of inclusive education, provided a personalized approach to each student on the part of teachers, and facilitated communication between students and teachers. The results also highlighted that digital platforms and resources made it possible to adapt existing teaching strategies used by teachers to the inductive needs of students. Indeed, such problems, as limited access to technologies, insufficient funding, lack of professional reorientation are significant obstacles to the further effective implementation of digitization. The



conclusions emphasize that the possibilities of using digital tools for the transformation of inclusive education in primary schools of Ukraine have not been exhausted. Further addressing existing challenges and providing adequate resources, training and support to teachers will help overcome the challenges of digital inclusion.

Keywords: innovations, challenges, survey, professional development, tools.

Introduction

Inclusive education is a key part in the current educational space aimed at ensuring equal access to superiority education for all students, regardless of their mental or physical characteristics. For this reason, within the Sustainable Development Goals (SDGs) adopted by the United Nations, the principles of inclusive education play a key role, in particular, within the framework of Goal 4, i.e., ensuring universal and accessible quality education and promoting lifelong learning opportunities. One of the important tasks within the modern educational paradigm – Education 4.0 – is a large-scale and broad transition to inclusive education that meets the challenges of the digital age and is aimed at implementing digital tasks within education. At the same time, these principles are particularly important in primary school. Modern researchers have shown that primary school develops important skills for lifelong learning (Bose & Heymann, 2020). Therefore, the problem of using digital, interactive and information and communication technologies in primary education is widely covered in scientific works. In particular, a number of works have proven their effectiveness (Jena et al., 2021; Pandey, 2020). The study by Krasniqi et al. (2022) proved the importance of using assistive technologies to ensure a quality learning process. The same issue was also emphasised by other authors (Fernández-Batanero et al., 2022). Some authors have also proved that modern interactive technologies also contribute to the formation of additional interest in learning and support a high level of motivation to learn (Pisanu, 2014; Stukalenko et al., 2016). However, this issue requires a broader analysis, taking into account, first of all, the attitude of teachers to the use of digital methods to support an inclusive and cognitive learning environment.

Research Problem

Thus, as can be seen from the previous analysis, most scholars emphasise the importance of using digital technologies in primary school. However, given the possibilities of inclusion, this topic needs to be studied more extensively. In Ukraine, the primary school system is important for the formation of basic competencies and social skills in students. Besides, the widespread introduction of digital technologies in the educational sphere creates new opportunity for the development of inclusive education, ensuring the achievement of the process of adapting teaching materials and methods to the special education needs (SEN(D) of each student. For this reason, teachers play an important role in this process, using modern digital tools to create an accessible inclusive environment.

Research Focus

The central focus of the research is to analyse the impact of digital technologies on the development of inclusive education in Ukraine. In particular, it is important to demonstrate the role of digital technologies in supporting an effective learning environment in Ukraine. The experiences of the primary school teachers selected for the January 2023 survey show some



specific ways in which digital technologies can be effectively integrated into the educational process to support inclusion. The importance of this experience is not just in improving the learning outcomes of children with SEN(D), but also in shaping a modern, tolerant society.

Research Aim and Research Questions

The goal of the study is to identify digital opportunities for the development of inclusive education in primary school, based on a survey of Ukrainian teachers. Therefore, the main research questions took into account both the current state of use of digital solutions in primary education in Ukraine and the prospects for improving this process:

1. Are digital technologies effective in creating an equitable learning environment?
2. What digital technologies do modern primary school teachers use?
3. What are the opportunities for further development of inclusive education in Ukraine based on modern digital solutions?

Literature Review

The work of contemporary scholars confirms the importance of inclusive education in the primary school system. In particular, a number of studies have demonstrated that the attitude towards children with psychophysical developmental disabilities, including those with disabilities, correlates with modern theoretical social models of development that have been formed through the transformation of society and were determined by ideological attitudes or the system of social and political order (Danforth, 2020; Fernández-Cerero et al., 2023). Bencéné Fekete (2021) has shown the importance of using a multicultural approach in the primary school environment. At the same time, Herwartz-Emden (2020) described the importance of establishing cooperation with parents in the organisation of an innovative educational process in modern preschools, and suggested the use of appropriate models for training teachers to understand tolerance in the learning environment. Timoštšuk et al. (2022) emphasised the importance of using innovative approaches in the training of primary school teachers. The authors also determined that modern primary school teachers should express a tolerant attitude towards all children. Other scholars have focused on some important aspects of developing tolerance in future primary school teachers, which has an impact on the appropriate education of preschool children.

Modern scientific research has demonstrated that attitudes towards people with psychophysical developmental disorders, their inclusion in quality social life, and innovative approaches to their education are usually manifested in the formation or approval of new conceptual and terminological characteristics of children with disabilities (Joseph & Nisker, 2020; Konnerup, 2017). These controversial issues are characterised by a variety of approaches, which are conditioned by socio-historical foundations and socio-dynamics of social change. According to Kumari (2022) and Shelton (2020), the current conceptual foundations of social arrangement, recognition of the equality of individuals, and the progress of modern pedagogical science within the framework of active humanisation and educational democratisation have led to the emergence of new terminology that is gradually becoming common and understandable. At the same time, current international trends in international legal norms and social policy indicate the most appropriate use of the concept of 'person with disabilities', as the current focus is on the 'person', and 'disability' is primarily a secondary feature (Sowiyah & Perdana, 2022). At the same time, according to the latest developments of the authors, the complexity and contradictory



interpretation of the concept of disability, which are revealed in the study of both international documents and national regulations, allows to correlate and use this concept, based primarily on the indicators and conclusions of a purely medical examination (Baglieri, 2020; Laas et al., 2019). Yonata (2022) also drew attention to the importance of considering this scientific issue through the prism of promoting an appropriate level of tolerance among preschoolers by primary school teachers. However, modern scholars have also described certain features of the use of digital technologies and their impact on the education system. In particular, Anggraini and Handayan (2022) identified the revolutionary impact of digitalisation on the transformation of education. According to Armour et al. (2020), this transition is especially important in primary school, as digital technologies affect students' interest in learning. The specifics of using digital technologies to support inclusion in the primary school environment have been widely outlined by Cranmer (2020). This researcher has broadly described their capabilities and emphasised their importance for the formation of an inclusive educational environment. Engelbrecht (2020) described the main challenges of implementing an inclusive approach, given current educational trends.

However, without diminishing the importance of these works, as they constitute an important theoretical part of the study, there is an urgent need to characterise the importance of using digital technologies in primary education in Ukraine based on a study of the attitudes of modern teachers towards these technologies.

Materials and Methods

The study uses a quantitative approach to research, which means that it is based on the interpretation of the materials obtained through a survey. This approach was chosen to demonstrate teachers' attitudes towards creating an inclusive learning environment using digital technologies. Teachers were selected in September 2022, where they agreed to participate in the experiment. The final stage of the survey took place in January 2023, in which respondents described their own experience of using digital technologies and their potential to ensure an inclusive and equitable learning environment.

Sample and Participants

In order to study digital opportunities for the development of inclusive education in primary school in Ukraine, 23 teachers were selected. The method of random stratified sampling was used for this purpose. This approach ensured the diversity of participants and included all stakeholders in the study. The use of a stratified sample allowed for full representativeness, taking into account certain demographic characteristics, such as gender, age, and length of service. Thus, the sample included teachers with different backgrounds in primary education and experience with digital technologies, which contributed to the diversity of the data used in this study. Table 1 provides a detailed description of the sample.

Table 1

Sample Description

Demographic data	Number (persons)	Percentage (%)
Gender composition		
Men	3	13%



Women	20	87%
Age composition		
20-30 years old	5	22%
31-40 years old	8	35%
41-50 years old	6	26%
51-60 years old	4	17%
Length of experience		
Up to 5 years old	4	17%
6-10 years old	6	26%
11-15 years	5	22%
More than 15 years	8	35%
Educational background		
Bachelor's degree	6	26%
Master's degree	14	61%
Candidate of Science (PhD's degree)	3	13%

Source: Author's development.

Thus, the study involved 23 teachers with different experiences of using digital technologies and implementing an inclusive approach in the primary school system. The involvement of teachers with such diverse experiences will contribute to a better understanding of the possibilities of using innovative technologies to support an inclusive environment.

Instruments and Procedures

In order to collect the data, firstly, informed consent to participate in the experiment was obtained from the teachers. For this purpose, they were informed in detail about the objectives of the study and the expected results. Subsequently, teachers provided basic demographic information about themselves. The central instrument for this research was a questionnaire about their attitudes and experiences with digital technologies in inclusive education.

The questionnaire consisted of 10 questions about the implementation of inclusive education in Ukrainian schools. Some of the questions were based on a 1-5 point Likert scale (where 1 point means I disagree, and 5 points means I agree, or 1 point means it is not effective at all, or 5 points means it is very effective). The questionnaire also contained other open-ended questions that required detailed responses from the respondents (see Table 2).



Table 2

The Questionnaire

Survey section	Questions
Rating on the Likert scale	1. First statement: My school has a variety of teaching materials and resources to promote inclusive education 2. Second statement: The technical training in my school is of a high standard 3. Third statement: I feel that I have a sufficiently high level of training in an inclusive classroom 4. Fourth statement: My school constantly supports professional development of teachers to build tolerance in inclusive education
Closed questions and open questions	5. How often do you use digital technologies? 6. What digital technologies do you use to create inclusion in the classroom? 7. Indicate at what level the school where you work has specialized equipment for children with special educational needs: A) Very low B) Low C) Average D) High E) Very high 8. What are the advantages of implementing digital technologies in an inclusive environment? 9. Indicate exactly what difficulties are used to use digital technologies in the field of inclusive education in the school where you work? A) Lack of technical base B) Insufficient level of technological and material support C) Lack of specialized equipment for children D) Insufficient training of teachers D) Low level of financing F) Other 10. Do you have experience in participating in or organizing trainings on inclusive education? A) Yes B) NO
Final questions	11. What are the state directions for improving the implementation of inclusion in the digital educational environment? 12. Should continue to use digital technologies for the development of inclusive education?

Source: Author's development.



Data Analysis

Excel software was used to interpret and process the results. All responses were divided into the following thematic blocks: Likert scores, frequency of use, digital tools, challenges and problems, experience of training, and final questions. All responses were entered into special Excel spreadsheets and evaluative judgements were calculated using statistical methods. In particular, the average value for each question was calculated using a Likert scale. The mean values were used to explain each question that was assessed on this scale. Other questions were also processed using statistical indicators. In particular, the number of responses in each category was counted and the percentage distribution for each question was calculated. Questions 9, 10 and 11 were coded to identify the main categories and themes that emerged in the respondents' answers. Using the method of generalisation, the data obtained were summarised and promising areas for further research were identified.

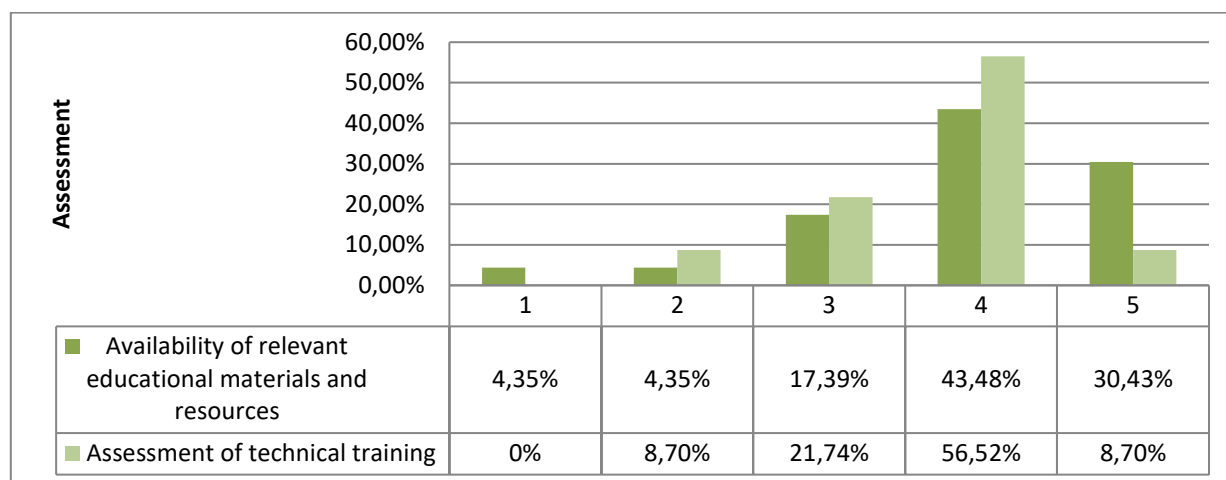
Results

The foundation of contemporary inclusive education in Ukraine is protecting children's rights to an education and the freedom to attend school where they now reside. An educational institution that adapts curricula and plans, methods and forms of educational services, uses adaptive methods and forms of teaching, uses current resources, involves parents and professionals of certain special services in accordance with the needs of the child—a modern, innovative school—should be the provider of inclusive education as a system of educational services. All this together ensures the formation of a favourable climate in the current educational environment. Therefore, it is important to have appropriate teaching materials and resources that promote inclusive primary education. For the statement that the school has a variety of teaching materials, 17 people gave a score of 5 to 4' (i.e., they exist in full), 4 people gave a score of 3 (they exist in a satisfactory condition), and 2 people indicated an inadequate level of teaching materials - a score of 2 to 1 (see Figure 1). Moreover, the appropriate level of technical equipment of an educational institution is important for the implementation of modern innovative methods and forms of education in an inclusive environment. The majority of teachers rated this level as '4' (13 people), so we can state that the level of material and technical support in primary schools in Ukraine is quite high. At the same time, only 2 people rated it as '5' - 'very high level'. This indicates that there is further room for improvement in the technical base of schools. This is also demonstrated by other scores (3 points - 5 people and 2 points - 3 people).



Figure 1

Assessment of Material and Technical Resources

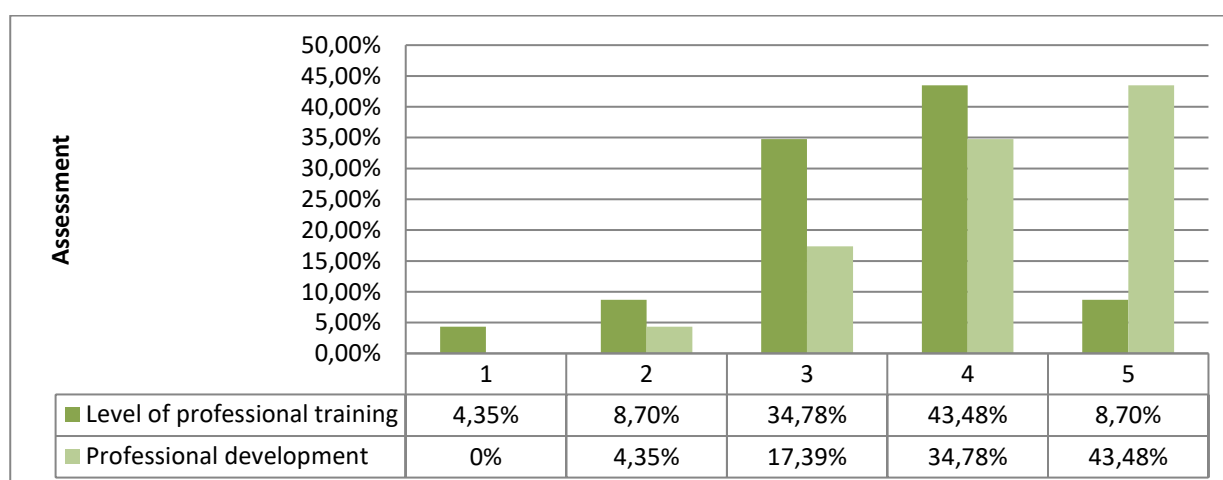


Source: Author's development.

The third and fourth statements of the Likert scale were aimed at finding out the level of teachers' preparation for an inclusive classroom and determining the support for professional development. Obviously, the trends in education are constantly moving towards improvement, so it is important that teachers keep up with modern innovations and develop their skills and competencies. The majority of respondents rated their level of preparation for working in an inclusive classroom as 4 points (10 people), while another 8 people rated their level as satisfactory (3 points). 2 people rated their level as very advanced (5 points), and 3 respondents rated their level as very low (1 to 2 points). Besides, 18 people said that they actively support their professional development by participating in various trainings and in-service courses (scores from 4 to 5). Another 4 people said that they were satisfied with this practice (score 3). Only 1 respondent expressed a negative opinion about this experience (see Figure 2).

Figure 2

Assessment of the Level of Training and Professional Development for Implementing Inclusive Education



Source: Author's development.



As can be seen from Table 3, current Ukrainian primary school teachers are well aware of the importance of professional development for creating a quality inclusive environment. At the same time, it is important to be able to effectively use and understand the latest digital tools to support inclusion and interest in learning for children with special needs. When asked how often do you use digital tools, the majority of respondents answered that they use them daily or several times a week (9 and 8 people respectively). Besides, another 5 people use them several times a month, and 1 respondent uses them only once a month (see Table 3).

Table 3

Frequency of Using Digital Technologies in an Inclusive Classroom

Frequency	N	%
Daily	9	39,13%
Several times a week	8	34,78%
Several times a month	5	21,74%
Once a month	1	4,35%

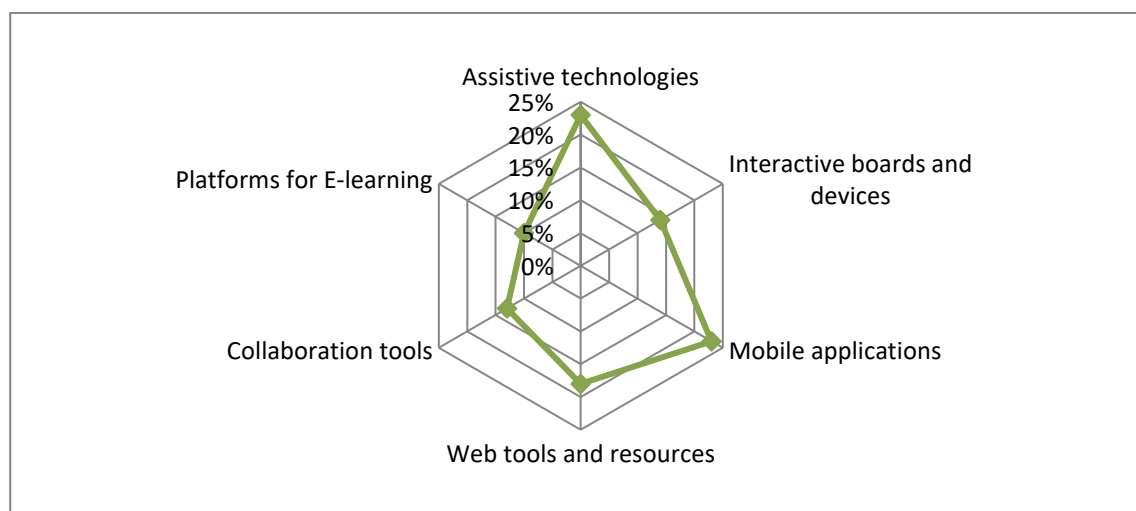
Source: Author's development.

Therefore, as can be seen from the frequency of use of digital tools, they play an important role in ensuring effective inclusive education, as they facilitate the adaptation of learning materials and certain pedagogical methods to the needs of all participants in the learning process, especially those children who require special conditions. In particular, assistive technologies have been found to be important, including screen readers such as JAWS and VoiceOver, the use of screen magnification software, and speech synthesis software such as NaturalReader (Paseka & Schwab, 2019). Some mobile applications also play an important role in providing education for people with visual impairments, including Seeing AI, a Microsoft application designed for people with different visual impairments (Queirós et al., 2018). They also use Proloquo2Go, which is designed to provide alternative and auxiliary communication for people with communication difficulties. At the same time, interactive whiteboards that can be customised to work with children with different needs are important (McKenzie, 2020; Mitiku et al., 2014). Other web-based tools, such as TED-Ed, which contains educational videos with subtitles, also play an important role in providing knowledge to children with special needs. The digital technology system also includes some collaboration tools, such as Padlet and Flipgrid, which are designed to create and share messages, allowing people with disabilities to participate in different activities or ask teachers for additional information. Blended learning platforms are also important in the implementation of an innovative inclusive school. Figure 3 shows a diagram of the use of the above-mentioned tools in a modern inclusive school.



Figure 3

The Use of the Above-Mentioned Tools in a Modern Inclusive School



Source: Author's development.

At the same time, it has been established that the use of digital technologies in primary school has a number of advantages. In particular, they facilitate the adaptation of learning materials to the different needs of students. At the same time, they facilitate access to learning materials on different media - audio, video, etc. This contributes not only to ensuring accessibility to learning resources for children with special needs, but also to increasing motivation and interest in learning with modern innovative tools. Digital resources also contribute to the formation of effective communication between students and teachers (Hmeliak et al., 2020; Lord, 2020). Finally, an important advantage is the involvement of parents or guardians in the learning process, in particular, they can effectively monitor their children's progress.

The effective use of these tools requires specialised equipment for children with special needs (Ediyanto et al., 2021). The survey found that there is a need for additional equipment in Ukrainian schools. In particular, 10 teachers rated the level of availability of specialised equipment as medium, while 8 respondents said it was low, and 2 teachers said it was high. It is worth noting that 3 respondents mentioned a very low level. Therefore, an important area for the development of inclusion in Ukrainian schools is to ensure a high level of accessibility of specialised equipment for children with special needs, including digital capabilities (see Table 4).

Table 4

Level of Availability of Specialised Equipment

Level of availability of specialised equipment	N	%
Very low	3	13,04%
Low	8	34,78%
Medium	10	43,48%
High	2	8,70%
Very high	0	0

Source: Author's development.



This level of equipment availability can be explained by the existence of certain problems on the way to introducing digital technologies for the development of inclusion in Ukrainian schools. Among the proposed areas: A) Lack of educational materials; B) Insufficient technical support; C) Lack of specialised equipment; D) Insufficient teacher training; E) Lack of funding. Teachers were asked to describe the most pertinent problems for their school. In particular, 6 respondents stressed that their school lacks a high level of technical support for the implementation of digital inclusive environments, and 7 teachers mentioned the lack of funding. At the same time, 4 people said that the lack of specialised educational equipment was an important problem on the way to implementing inclusion. Other problems were the lack of teaching materials and insufficient teacher training (2 and 4 respectively). Table 5 shows a summary of the challenges in developing a digital inclusive environment.

Table 5

Summary of the Challenges in Developing a Digital Inclusive Environment

Problems	N	%
Lack of training materials	2	8,70%
Insufficient technical support	6	26,09%
Lack of specialised equipment	4	17,39%
Insufficient teacher training	4	17,39%
Lack of funding	7	30,43%

Source: Author's development.

Thus, as Table 5 shows, the most common problems are lack of funding and insufficient technical support. At the same time, insufficient teacher training is also an important challenge. Besides, the majority of respondents confirmed that teacher training is not always aimed at developing the skills necessary to work in an inclusive digital learning environment. In particular, 64% of respondents said that they had no experience of participating in or personally conducting specialised training sessions on inclusive education. In addition, several respondents (approx. 43%) stressed the importance of regular training to improve their skills in order to work effectively with children with special educational needs. Teachers also noted the importance of providing primary schools with all the necessary resources, including specialised equipment, specialised teaching resources and teaching materials. Besides, respondents were positive about the overall impact of digital technologies, particularly in terms of accessibility of learning materials for children with different needs. The answers to the question whether digital technologies should be further used to create an inclusive environment showed an overall positive assessment. In particular, 95% of respondents expressed support for the further use of digital technologies, identifying that they have the potential to improve the learning process for children with special educational needs. Thus, the majority of teachers support the further use of digital tools and technologies to promote inclusive education.

Discussion

This study demonstrates the effectiveness of digital technologies in creating inclusive environments in primary schools in Ukraine. This work confirms the thesis of Goodley et al. (2020), which details the aspects of robotisation of inclusive learning to ensure a tolerant and equitable education system. The study by Lund & Aagaard (2020) also identified the importance of digitalising the entire education system. The authors emphasised that digital technologies



facilitate access to education from different locations. Other authors also highlight the important link between digitalisation and accessibility, emphasising the importance of developing digital learning environments (Williams et al., 2023).

The findings showed that modern teachers in Ukraine use screen readers, interactive whiteboards, mobile applications and learning platforms to support the learning of children with special needs. López (2010) also emphasises the importance of using interactive whiteboards, which make the learning process more interesting for children. The study also emphasises the role of assistive technology in helping these children to acquire knowledge. This aspect is emphasised by many contemporary authors, which confirms and correlates with the results obtained (Becerra-Lubies, 2021; Sharma et al., 2022; Wray et al., 2018).

At the same time, this work does not correlate with a study that found that the use of assistive technology promotes literacy development in students with disabilities (Stauter et al., 2019). However, this work does not diminish the importance of assistive technologies, and emphasises that they have significant potential to support students with disabilities. In reality, however, the provision of these technologies and teacher training remain significant challenges for modern education.

The results of the study emphasise the importance of inclusion in the modern learning environment. After calculating all the data, Mahanta (2022) found that not only teachers but also students have a positive attitude towards the use of inclusive digital approaches. Among 25 questions, students answered that 56.70% strongly agreed and 35.32% agreed to implement inclusive education. At the same time, only 1.60% indicated that they disagreed. Thus, modern students are also aware of the importance of developing inclusive education.

This study also showed that there are further opportunities for the development of inclusive education in Ukraine based on modern digital solutions. In particular, it was found that not all teachers are ready to work in an inclusive environment. This does not correlate with the work of Vanahans et al. (2023), who found that primary school teachers feel well prepared to create an inclusive environment for newly arrived migrants. The authors of this article disagree with this view, as this study showed that primary school teachers in Ukraine experience significant difficulties in working with students with special needs. Therefore, an important way forward is to improve their professional development, and this should start with university training. In particular, the importance of university training for inclusion has been emphasised by other authors (Méndez et al., 2022). This statement correlates with two subsequent studies, namely Baş (2022) and Barnová et al. (2022), which found that teachers with more experience or who are older feel less prepared to work with students with special needs. Their finding makes sense given that they have little or no training in inclusive education. It follows that, compared to their younger colleagues, it is understandable that they are less receptive to the philosophy of inclusive schools. Also, taking into account the results of the ANOVA test conducted in the study by Czyż (2018), it was determined that length of service is statistically significant ($p = 0.01$) for the formation of an inclusive environment. Therefore, those teachers who disappeared without implementing inclusion are negatively perceived as non-inclusive. The results of the study show that primary school teachers in Ukraine face certain difficulties in implementing inclusive education. This primarily concerns the technical preparation of schools and the level of teacher training. Kristiana (2018) also notes that teachers' self-confidence plays an important role in the development of inclusive education based on innovative solutions. The authors of this study also confirm that



teachers who feel supported and have access to the necessary resources have a higher level of confidence in implementing inclusion. Connor (2020) also identifies that it is important to avoid a deficit approach to students with disabilities and to support the development of research in disability studies. This is also supported by this study, which found that many teachers still need additional training to work more effectively with students with disabilities.

Overall, this study confirms the importance of teacher training, access to resources and technology for inclusion in education, which also determines the importance of further research in this area. Thus, the scientific novelty of this work is the empirical confirmation of the importance of digital solutions for the development of inclusive learning spaces. However, the main limitation of this study is the small sample size (23 people), which makes it difficult to interpret the results for a broader study. Therefore, a further important direction is to develop a larger study to characterise the attitudes of Ukrainian teachers towards the implementation of inclusion principles in primary school.

Conclusions and Implications

Thus, modern teachers' experiences demonstrate different possibilities for the development of inclusive education in primary school in Ukraine. First of all, it is determined that modern school inclusive education in Ukraine is based on the mandatory consideration of children's rights to education, in particular, on ensuring the right to study in accordance with the place of residence. A modern innovative school is the main guarantor of inclusive education as a system of educational services. In particular, educational institutions adapt forms of teaching, make curricula and plans available, and use current resources, using the capabilities of parents and teaching professionals. Together, this approach helps to ensure a favourable learning climate and address the problems of the educational environment. According to the survey, the majority of teachers rated the level of material and technical facilities in their schools quite highly. The level of professional training of teachers to implement inclusive education is also high. These indicators are ensured by the active use of digital technologies, which have turned from a fashion trend into mandatory elements of modern education. The survey found that the vast majority of respondents use such digital opportunities at least several times a week. Given the overall relevance of digital technologies in inclusive education, such indicators can be considered quite advanced. Among the leaders are assistive technologies and mobile applications, whose ease of use determines their popularity in the educational process. It is difficult to implement further integration of digital technologies due to the mediocre level of provision of higher education institutions with innovative technologies. This problem is further complicated by other factors, such as lack of funding and lack of technological support. Obviously, solving these problems in the future will improve the situation with inclusive education in Ukraine.

Suggestions for Future Research

While this work has confirmed the importance of teacher training, access to resources and technology for inclusion in education. However, it also demonstrated the importance of further research in this area. In particular, empirical research should demonstrate the relationship between increasing digital literacy and implementing inclusion in modern educational institutions. This will help determine whether there are improvements in the awareness of the importance of inclusion among Ukrainian teachers. Also, given the small sample size of this study - 23 people - there is a need for a broader study of this issue. Therefore, a further important



research direction is to reach out to a larger number of teachers in order to characterise their attitudes towards the implementation of inclusion principles in primary school. It is also worth conducting research on the effectiveness of the chosen specific technology. For example, it is worth conducting an experimental study of a particular technology to assess the effectiveness of various digital tools and methods in the field of Ukrainian inclusive education. In this context, it is also important to compare the effectiveness of different types of assistive technologies (e.g., screen readers, speech synthesisers, etc.) for Ukrainian students with different needs. Thus, all of these areas demonstrate the importance of this problem and determine its relevance for further research. Therefore, this issue requires new research and empirical testing in the area of implementing inclusion in the digital learning environment of primary schools in Ukraine.

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Conflict of Interest

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