

Inclusive education in rural schools of Ukraine or how to ensure quality inclusive education in rural schools in Ukraine?

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ABSTRACT. The aim of the paper is to reveal the challenges of implementation of inclusive education in typical rural schools of Ukraine. The authors performed empirical research to identify attitudes of rural school teachers towards inclusive education as well as their understanding of existing barriers and priorities to improve the quality of educational services for students with special educational needs (SEN). To achieve the aim of the research, the following methods have been used: reviewing of psychological and pedagogical literature, questionnaire surveys, quantitative and qualitative analysis of the obtained data. The outlined problem has been theoretically analyzed and the peculiarities and difficulties of teaching students with special educational needs in rural areas have been substantiated. The paper describes survey responses of teachers involved in the inclusive process in rural schools. 192 representatives of different age categories and regions of Ukraine participated in this empirical study. The paper explores questions of effective management of rural schools, professional cooperation in a team of psychological and pedagogical support of students with special educational needs, promotion of inclusive practices via information and communication technologies (ICT) and STEAM-laboratories, cooperation within local communities, introduction of universal design for learning and others. Prospects for the development of rural inclusive schools in current conditions of digitalization of education also have been identified.

Keywords: inclusive education, rural school, students with special educational needs, inclusive design, inclusive learning environment.

Educação inclusiva nas escolas rurais da Ucrânia ou como assegurar uma educação inclusiva de qualidade nas escolas rurais da Ucrânia?

RESUMO. Objetivo do artigo: apresentar os problemas de implementação da inclusão na escola rural típica da Ucrânia com base em pesquisas empíricas focadas na identificação da atitude de professores de escolas rurais em relação à educação inclusiva, sua compreensão das dificuldades e prioridades para melhorar a qualidade do ensino destinado a alunos com necessidades educacionais especiais. Para atingir o objetivo da pesquisa, foram utilizados os seguintes métodos: estudo da literatura psicológica e pedagógica, questionários, análise quantitativa e qualitativa dos dados obtidos. O artigo contém a análise teórica do problema delineado e fundamentação das peculiaridades e dificuldades do ensino de alunos com necessidades educacionais especiais na localidade rural. Descrevemos os resultados de uma pesquisa com professores envolvidos no processo inclusivo em escolas rurais. O estudo empírico envolveu 192 pessoas representando diferentes categorias de idade e regiões da Ucrânia. O assunto do estudo são os aspectos da gestão eficaz na administração escolar rural, trabalho profissional da equipe de apoio psicológico e pedagógico de crianças com necessidades educacionais especiais, apoio ao processo inclusivo com tecnologias de informação e comunicação (TIC) e STEAM-laboratórios para aprendizagem, cooperação com a comunidade, criação de design educacional universal e outros. Determinamos as perspectivas para o desenvolvimento das escolas rurais com educação inclusiva em condições modernas de digitalização da educação.

Palavras-chave: educação inclusiva, escola rural, crianças com necessidades especiais, design inclusivo, ambiente educacional inclusivo.

La educación inclusiva en las escuelas rurales de Ucrania o ¿cómo garantizar una educación inclusiva de calidad en las escuelas rurales de Ucrania?

RESUMEN. Propósito del artículo: presentar los problemas de implementación de la inclusión en la escuela rural típica en Ucrania con base en una investigación empírica centrada en identificar la actitud de los maestros de escuelas rurales hacia la educación inclusiva, su comprensión de las dificultades y prioridades para mejorar la calidad de la enseñanza diseñado para alumnos con necesidades educativas especiales. Para lograr el objetivo de la investigación se utilizaron los siguientes métodos: estudio de la literatura psicológica y pedagógica, cuestionarios, análisis cuantitativo y cualitativo de los datos obtenidos. El artículo contiene el análisis teórico del problema planteado y el razonamiento de las peculiaridades y dificultades de la enseñanza a alumnos con necesidades educativas especiales en el medio rural. Describimos los resultados de una encuesta con docentes involucrados en el proceso inclusivo en escuelas rurales. El estudio empírico involucró a 192 personas que representaban diferentes categorías de edad y regiones en Ucrania. Los temas de estudio son aspectos de gestión eficaz en la gestión escolar rural, trabajo profesional del equipo de apoyo psicológico y pedagógico de niños con necesidades educativas especiales, apoyo al proceso inclusivo con tecnologías de información y comunicación (TIC) y STEAM-laboratorios para el aprendizaje, cooperación comunitaria, creación de diseño educativo universal y otros. Determinamos las perspectivas para el desarrollo de escuelas rurales con educación inclusiva en condiciones modernas de digitalización de la educación.

Palabras clave: educación inclusiva, escuela rural, niños con necesidades especiales, diseño inclusivo, entorno educativo inclusivo.

Introduction

In the present conditions of the development of education at different levels there is an increased attention of scholars and practitioners to the problems of teaching children with disabilities. There is a tendency in the developed countries (for instance, England) of a decrease in the number of students identified as having SEN whereas every year the total number of school students increases, including also those who study in special schools (Black, 2019).

Establishing an inclusive education system (Ainscow, 2005) and organizing a proper inclusive environment in rural schools, providing conditions for the effective development of children with disabilities to exercise their rights to quality education and appropriate special needs services in inclusive settings regardless of where they live are important tasks to modernize education, especially in the third world countries. Modern rural school should have the capacity to provide various activities to students with and without disabilities and their parents (teaching and development, assessment and consulting, skill-building and support, socio-psychological counseling and leadership).

In several post-Soviet countries (Ukraine, Kazakhstan, Georgia, for instance) the notion of a “rural underfilled school” or “one room school” is in use. This concept mostly characterizes elementary school in which there are fewer teachers than classes, and a teacher conducts lessons simultaneously for two or more classes. This is explained by an insufficient number of students in the area that the school covers. Hence, this type of school is typical for rural areas that experience problems with the introduction of inclusion as the total number of students, class size, number of students per teacher are lower than the official standard norm. This means that such schools have no possibility to employ teacher’s assistants and other educational professionals to support students with disabilities in inclusive settings.

Scholars argue that in Spain “rural areas do not take full advantage of the context they are in to favour inclusion processes and continue to develop proposals that are merely integrative” (Callado, Molina, Pérez & Rodríguez, 2015, p. 107). Rural schools in Chile, for instance, constitute more than half in the country where “inclusion, understood as the acceptance of everyone, is a duty of rural schools, a cultural feature that apparently distinguishes them from their urban counterparts” (Nuñez, Peña, González, Ascorra & Hain, 2021). “Seventy-eight percent of Indian population lives in rural areas without provision for special schools. Therefore, inclusive schools have to address the needs of all children in every

community and the central and state governments have to train their teachers to manage inclusive classrooms” (Sanjeev & Kumar, 2007).

Research proves that studying in small rural schools often has its advantages over schools in metropolitan areas. Sufficient funding can make them quite effective to include all students, provide personalized teaching with individual approach, build partnership with parents, assist students from socially disadvantaged families and take into account ethnic peculiarities in the content of education (Raywid, 1999).

However, most children with SEN living in rural areas of Ukraine who study in small schools receive no relevant psychological and pedagogical support that inclusive settings should provide. This is caused by several reasons, namely:

- lack of well-established infrastructure in rural areas to provide psychological and pedagogical assistance to various categories of children with disabilities;
- prevailing low level of awareness and responsibility of parents to choose inclusive education for their children;
- low financial status of families raising a child with SEN;
- absence or insignificant number of preschool institutions in remote rural areas;
- insufficient resources for including students with disabilities in rural schools.

Thus, the relevance of the study is predicated by the societal and educational challenges that rural schools and communities face while introducing inclusive education. Hence, the problem of including students with disabilities in rural schools demands increased attention and efforts of various education professionals.

The aim of the paper is to analyze the problem of implementing inclusion in typical rural schools in Ukraine. The empirical study examines attitudes of rural school teachers towards inclusive education and reveals barriers as well as best practices to improve the quality of educational services for students with special educational needs and disabilities.

The tasks of the study are to (1) determine the present conditions of the problem in pedagogical science and practice, (2) study attitudes of rural school teachers in Ukraine towards inclusion of students with disabilities as well as their evaluation of its implementation in their schools, (3) identify necessary efforts to improve a quality of inclusive education at the level of rural schools.

Research methods

A method of studying psychological and pedagogical texts on inclusive education in rural schools and specific features of teaching children with SEN in remote areas is used for holistic analysis and synthesis of the problem in pedagogical theory.

A questionnaire survey method helps to examine the state of the problem in school practice and to study teachers' understanding of the tasks and challenges of implementing inclusive education in remote rural schools of Ukraine.

Statistical methods are used for quantitative and qualitative analysis and presentation of empirical data.

Instruments and procedures

The article presents a theoretical analysis of the outlined problem and results of the anonymous online survey performed among 192 teachers of different age groups in rural schools of Ukraine. The survey summarizes teachers' attitudes towards introducing inclusive education in rural areas, challenges and barriers of implementing universal design in schools and priority tasks to improve a quality of special education services to support students with SEN.

In order to obtain a clear vision of inclusion in rural schools, its compliance with the existing interests, demands, needs and strengths of children with SEN, the research collected and analyzed responses of school principals, teachers in inclusive classes (elementary and secondary school), teacher's assistants and other professionals, who are involved in the inclusive process (social workers, psychologists, speech therapists, occupational therapists, rehabilitation specialists) from different regions of Ukraine.

This study is not representative as its purpose is to study theoretical materials and to analyze respondents' views on inclusive education in rural schools in Ukraine. The outlined sample for the survey does not allow to extrapolate its results to all similar groups of respondents, but it allows: to identify strengths and weaknesses of the inclusive process in rural schools; to assess a real situation and barriers in teaching students with SEN, to outline priorities and ways to improve a quality of inclusion education services in rural schools.

Results of Research

Challenges of staffing rural schools with specialists in inclusive education

Many rural schools globally have difficulties in employing specially trained and qualified educators who can teach multiple disciplines. “Potential contributing factors include social and collegial isolation, low salaries, multiple grade or subject teaching assignments, and lack of familiarity with rural schools and communities. Together, these challenges can discourage teachers from accepting rural positions or cause them to leave rural settings after teaching there for only a short time.” (Barley & Brigham, 2008). Such problems are common in some areas of the United States of America and in a significant number of rural schools in different countries (Zinger, Haymore Sandholtz & Ringstaff, 2020). This is especially true for developing countries.

Rural schools experience a shortage of teacher’s assistants, a pedagogical profession that was introduced in Ukraine in 2012. Often a mother of a child with disability assumes a role of a child's assistant (for example, being officially employed by school as a lab assistant or a cleaner and thus getting an opportunity to be with and supervise her child at school). A Ukrainian teacher’s assistant who works in an inclusive environment is supposed to have relevant qualifications and perform broader functional duties: assisting a class teacher in working with all students, providing a personalized guidance for students with disabilities, participating in the development and implementation of individualized education programs, adapting teaching resources to meet individual needs and abilities of students with SEN in the classroom.

The survey respondents mentioned numerous cases when a parent of a child with disability is employed as a teacher's assistant at school. We consider such phenomena to be positive, especially in conditions of school staff shortages in small villages. Parents of children with special educational needs also highlighted some of the difficulties associated with the work of a teacher's assistant, namely a 25-hour working week, when an assistant is not present at the last lessons and is absent in the afternoon. Therefore, there is a problem of lack of assistants in schools in extended day programs, as well as staff turnover due to low financial motivation of inclusive education professionals.

Thus, according to our study, Ukraine’s rural schools experience staff shortages and this is the main barrier to successful employment of a team of inclusive education specialists that can adequately meet the needs of and support students with SEN. In most schools where the study was conducted, the practice of forming a multidisciplinary support team is tailored to

offer an individual approach to each student with SEN. However, there is still a need to staff schools with qualified specialists in various fields in order to provide appropriate support to children with specific disabilities. Perhaps the biggest challenge here is to supply rural schools with qualified specialists to provide special needs services and interventions to students with disabilities – rehabilitation specialists, psychologists, speech therapists, speech pathologists.

Universal design in education for successful implementation of inclusion

Universal design as a philosophical and pedagogical approach to the school's organization is a basis for a barrier-free environment in inclusive education. At the same time, a barrier-free environment is not just physical infrastructure and facilities (for example, ramps). This is much broader concept as it includes: an informational aspect, i.e. access to information for people with sensory disabilities; an institutional aspect, related to legal and regulatory compliance of individual schools; and a mental aspect – when dealing with people with intellectual disabilities in schools and communities.

The interpretation of the notions “universal access” and “inclusive design” is rather broad in the scientific literature of today. At the same time, regardless of the content nuances, they are based on the concept of accessibility, which provides compliance with certain quality standards and general convenience to use for a wide target audience (Persson, Åhman, Yngling, et al., 2015). The context of accessibility is also applied while dealing with issues of interaction with new information and communication technologies (Harley, Vetere, Fitzpatrick & Kurniawan, 2012), pedagogical methods for school environment design (combination of assessment tools, brainstorming and traditional teaching methods) (Taxén, Druin, Fast & Kjellin, 2001), and options of technological design for partnerships (Druin & Fast, 2002).

The concept of “inclusive design” is becoming more and more widespread in a school's environment, it is aimed at meeting the needs of the widest possible range of people, regardless of age, gender, learning ability, disability, etc. The structure of inclusive design in the most general form is shown in Fig. 1.

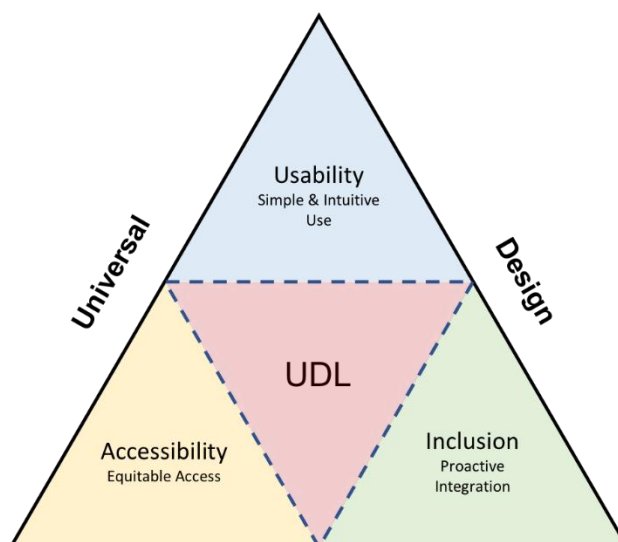
Figure 1 – Inclusive design structure.



Source: <https://www.gsk.com/en-gb/behind-the-science/inclusive-design-making-our-differences-invisible/>

Universal Design for Learning (UDL) is used in school practice, it is a tool for optimizing teaching and learning for all people based on scientific insights into how humans learn, the guidelines to UDL include step-by-step instructions for teachers on the rational organization of the educational process, learning new things, remembering, processing information and constructing (CAST, 2018).

Figure 2 – Universal Design for Learning structure.



Source: <https://sites.reading.ac.uk/tel/accessibility-and-inclusive-practice/accessible-blackboard-courses/>

According to the principles of universal design, adaptation of school environment includes the use of various methods of presenting information, providing students with alternative ways to acquire skills taking into account their interests and cognitive abilities. With regard to rural schools, UDL applies accessibility of the school's premises, sports grounds and library as well as methods of instruction and evaluation of learning outcomes of students with SEN.

The use of ICT in inclusive learning environment

As extensive use of ICT in education is drawing fast near, especially in the context of the COVID-19 pandemic, many schools, including ones in rural areas, have switched to distance/blended learning. Ultimately, ICT (personal computers, SMART-boards, the Internet) is an important pedagogical tool for teachers to create a proper e-learning environment to benefit students with disabilities.

After all, ICT significantly increases students' motivation to study and their interest in online communication, it helps to remove socio-psychological barriers in education, the students from remote areas can gain access to a variety of didactic materials in an acceptable format and have an opportunity to demonstrate their achievements and develop soft-skills (Budnyk, Nikolaescu, Stepanova, Vovk, Palienko & Atroshchenko, 2021).

Creating an effective learning environment in rural schools with a help of ICT has significant benefits for teaching students with SEN:

- access to educational digital resources as a compensatory tool at a convenient time and a place for individual learning at home;
- increasing students' motivation to study and interest in acquiring new skills;
- recognizing individual characteristics of development and traits of personality as each student studies at his/her own pace and, when necessary, has an opportunity for multiple attempts and revision (for example, studying in virtual laboratories);
- expanding opportunities for searching educational information, sharing messages and multimedia, etc. As a matter of fact, students in rural schools have unlimited access to the following online resources: fiction and scientific texts, multimedia presentations, e-textbooks, computer applications, online tests, voice and music files, movies, audiobooks, learning games, educational databases, etc. (Budnyk & Kotyk, 2020, p. 18).

STEAM-education in rural schools

STEAM education is one of the emerging educational trends. However, its implementation in rural schools of Ukraine is hindered by certain difficulties, primarily due to insufficient or poor supply of equipment for laboratories, programming classes and robotics. At the same time, the use of STEAM for teaching children with special educational needs has very promising perspectives as there are many gifted students with disabilities who have certain inclinations to various types of STEAM activities. Moreover, we see a growth of IT specialists with disabilities in the global world (Budnyk, 2018).

The extensive development of digital technologies has created various types of assistive technologies (AT). “The term assistive technologies refers to the equipment, devices and apparatus, and the services, systems, processes and adaptations made to the environment that support and facilitate their functions, used by persons with special education needs” (Erdem, 2017). Such tools are necessary to ensure a quality inclusive process in rural schools, they can be alternative keyboards and manipulators, voice recognition software, monitor magnification software, text-to-speech communication aids, and more. (Adebisi, Liman & Longpoe, 2015).

Even if students with SEN do not plan to pursue coding or robotics as their future career, a quality STEAM education provides them with important skills such as analytical thinking, programming, teamwork, cooperative and innovative thinking. Therefore, we consider it an important task of modern inclusive education to identify talents and compensatory abilities in students with disabilities, who can develop and succeed in activities that require responsibility, diligence, patience and determination. In fact, this is the research activity in the field of STEAM.

Educational management of inclusive schools and a multidisciplinary team of psychological and pedagogical support of a student with SEN

Effective management and leadership skills are required to develop and sustain inclusive education practices in rural areas. School principals need to display innovative skills and abilities not only in the field of modern pedagogy (inclusive education, pedagogical hermeneutics, pedagogical innovation, axiology), but also in education management, leadership and innovations.

Effective school management in inclusive learning environment depends on:

- 1) educational leadership in using innovative forms, methods and means in implementing inclusion to ensure equal access to quality education for all;

- 2) educational entrepreneurship, participation in grant activities and obtaining various types of investments for the needs of inclusion;
- 3) meaningful endeavors to improve educational services that are provided by rural schools to match international standards of inclusion,
- 4) system introduction of digitalization of inclusive education to benefit students with disabilities;
- 5) development of special education services to support academic progress and build life-skills for children with various types of disabilities;
- 6) adaptation of physical environment in a school building and shaping a policy of equity, equality, diversity and cooperation. (Nikolaescu, Budnyk, Bondar, Tepla & Berezovska, 2021, p. 84).

However, no matter how talented and professional a school principal is, he or she will not be able to implement qualitative changes and provide appropriate services for rural students unless a dedicated community of teachers is formed. In this context, we are talking about a multidisciplinary team of psychological and pedagogical support of inclusive education, which involves teachers, teacher's assistants, psychologists and other full-time school staff, as well as outside special education professionals and parents of children with special needs. In Spain, for example, inclusion of students with disability is carried out by the joint efforts of multi-professional teams consisting of psychologists, social workers, support teachers and others (Simón, Palomo & Echeita, 2021).

A multidisciplinary team of support develops an individualized education program for every student with SEN taking into account his/her development, abilities and interests and revises the intensity and length of education interventions basing on monitoring and assessing academic and behavior progress. It is important to ensure diversity and equity in school, therefore a problem of training qualified teachers and other professionals to work in rural areas, taking into account its ethnographic, demographic and socio-economic characteristics arises (Glover, Nugent, Chumney, Ihlo, Shapiro, Guard & Bovaird, 2016). This is especially true for those teachers and education specialists who provide professional support in the context of inclusive learning environment.

The results of empirical research

In order to examine the current state of the problem in school practice, we conducted a survey of teachers working in rural areas in different regions of Ukraine.

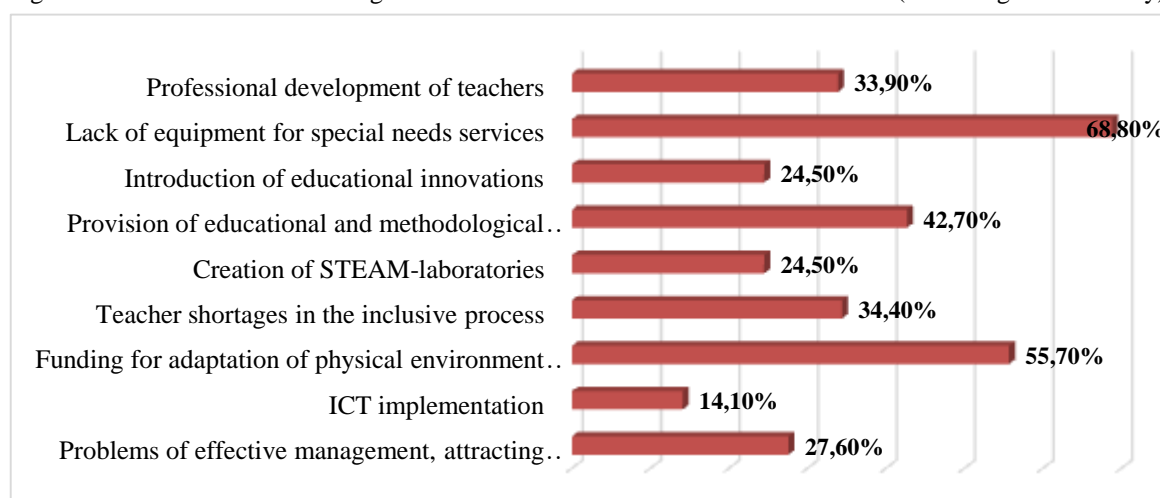
The survey has found that out of 192 respondents (gender sample: 95.3% – females, 4.7% – males), the majority (102 respondents – 53.13%) indicate that there is a difference in the quality of educational services in inclusive classes between rural and urban schools,

23.4% of respondents partially see such differences in teaching students with special educational needs. Respectively, 10.4% state that they do not see any difference, the rest choose the “I don't know” option.

The next questions in the questionnaire are to explore more specific aspects of inclusion in rural schools. So, to the question: “What do you think are the most important challenges for the implementation of inclusion in rural schools?” we received the following answers (Fig. 3).

Note that respondents had an opportunity to choose multiple options when answered. As we can see, among the biggest challenges the teachers consider “the lack of equipment for special needs services” (132 respondents – 68.8%) and “insufficient funding to make adaptations of physical environment of rural schools” (107 respondents – 55.7%). In addition, teachers pointed out the need for adequate staffing to serve the demands of inclusive education (66 respondents – 34.4%), provision of educational and methodological tools and resources (82 respondents – 42.7%), improving pedagogical skills (65 respondents – 33.9%), as well as problems of effective management, attracting investments for development of inclusion (53 respondents – 27.6%).

Figure 3 – Problems of introducing inclusive education in rural schools of Ukraine (according to our survey).



Source: The survey was conducted by the authors of the article.

The teachers of rural schools are unanimous in their opinion that implementing inclusive education entails a number of challenges typical to rural areas at the present stage of modernization of education. They are listed in the order of responses priority:

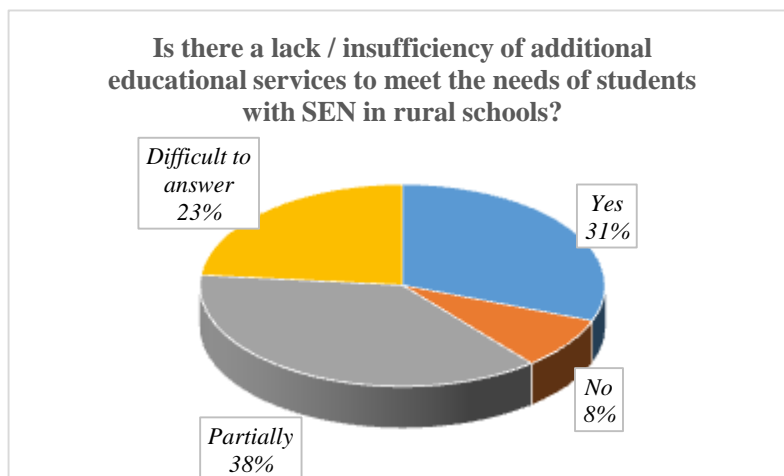
1) absence/shortage of education professionals: psychologists, speech therapists, physio and rehabilitation therapists, special needs teachers for deaf and hard of hearing students, etc. – 129 respondents (67.2%);

- 2) sensory room equipment and its effective use in teaching students with SEN – 116 respondents (60.4%);
- 3) use of digital technologies in inclusion – 70 respondents (36.5%);
- 4) development of inclusive design at school – 67 respondents (34.9%)
- 5) removing psychological barriers and forming a cooperative atmosphere in an inclusive classroom – 64 respondents (33.3%);
- 6) development of individualized educational programs – 61 respondents (31.8%);
- 7) cooperation with parents raising children with disabilities – 58 respondents (30.2%);
- 8) in-service training and professional development of teachers – 40 respondents (20.8%).

So, we observe a real situation when there is insufficient funding allocated to rural schools for creation of inclusive design, provision of appropriate educational and methodological resources and employing qualified educational professionals to work as a team of psychological and pedagogical support of children with SEN.

As a result, there is an absence /insufficiency of additional educational services to meet the needs of students with SEN in rural areas. This was indicated by 59 respondents from rural schools (30.7%) (Fig. 4).

Figure 4 – Absence / insufficiency of additional educational services for students with SEN in rural schools (according to our survey).



Source: The survey was conducted by the authors of the article.

In order to find practical solutions to the problem, it is interesting to analyze responses to the following questions, such as: “What do you think is the priority task of inclusion in

rural schools to improve the quality of additional educational services for students with SEN?” (Table 1).

Table 1 - Priority tasks to improve the quality of additional educational services for students with SEN in rural schools.

Tasks of Inclusive Education	%	Number of respondents
Provide training, counseling and support for local government structures of the village on the quality of additional services in inclusive classrooms	9.4	18
Support Inclusive Resource Centers in registering specialists who provide additional psychological and pedagogical support and special education services for children with disabilities	16.7	32
Assist in establishing short-term day care groups for children with disabilities at the school’s premises as well as conducting cultural events and recreational activities for families of children with SEN	10.9	21
Organize training of various specialists (including social workers) to provide support for students with SEN	11.5	22
Extensively inform parents (guardians) of children with disabilities about socio-pedagogical, psychological, skill-developing, rehabilitation and other services for students and their families	9.4	18
Introduce innovative methods of using ICT in teaching students with SEN	10.4	20
Recruit part-time special needs teachers and other professionals working in special schools on a contract basis, and organize their regular transportation to inclusive schools at the place of study of a child	10.4	20
Examine the real situation concerning the quality of providing educational services to students with disabilities in rural schools	21.4	41

Source: The survey was conducted by the authors of the article.

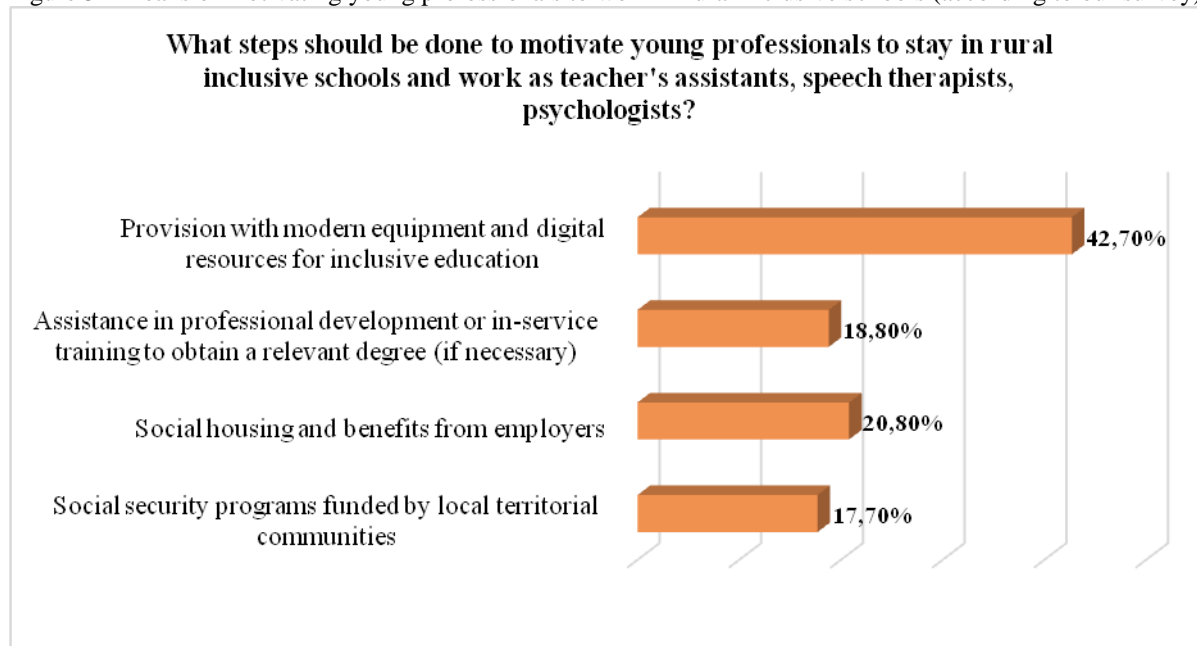
As we can see, the largest number of respondents (16.7%) indicated the need to support inclusive resource centers in forming a register of qualified inclusive education specialists who can provide additional services of psychological and pedagogical support, and building skills for students with disabilities as well as the need to organize in-service training of professionals (including social workers) to provide support in inclusive learning environment (11.5%) of respondents. This evidences that a significant proportion of students with SEN do not receive adequate additional services neither in or outside school. In addition, school teachers opine that successful inclusion of students with disabilities demands part-time recruitment or involvement of qualified professionals in specific disabilities working in special schools, and consequently, their transportation to the schools, where certain students with disabilities study should be organized, this is indicated by 20 respondents (10.4%). As

many respondents admitted that an important task of inclusion is the introduction of innovative methods of using ICT in teaching students with SEN.

According to our research, the difficulties in implementing inclusive education in rural schools are largely influenced by the lack or insufficient staffing of qualified teachers. There is an alarming tendency caused by various reasons (career opportunities, lack of proper infrastructure and modern conveniences, remoteness from metropolitan areas, etc.) for young teachers to leave their native villages and look for a job in urban areas after obtaining a professional degree.

Thus, the local education authorities face a problem of attracting qualified teachers to stay and work in small rural schools. Therefore, our next question for teachers in a survey is to suggest possible mechanisms that would motivate young professionals to work as teacher's assistants, speech therapists, psychologists in rural schools with inclusive education (Fig. 5).

Figure 5 - Means of motivating young professionals to work in rural inclusive schools (according to our survey).



Source: The survey was conducted by the authors of the article.

Thus, the majority of respondents (42.7%) believe the possible solution to this problem can be in supplying rural schools with digital resources and tools for inclusive education and provision of social programs and financial motivation for rural inclusive school teachers who have just graduated (20.8%). Other respondents (18.8%) consider assistance in professional development and in-service training of teachers to be one of the ways to staff rural schools with qualified inclusive education specialists.

Discussion and Conclusion

Initiatives aimed at providing quality education for all and to include students with special educational needs in regular schools receive international attention (Ainscow, Farrell & Tweddle, 2000). Scholars argue that traditional views and beliefs prevailing in society and perceptions of persons with disabilities are important in the inclusive process. This also applies to teachers as their attitudes significantly influence their willingness to work in an inclusive environment (Main, Chambers & Sarah, 2016).

Basing on the results of our study we can draw the following conclusions:

1. It is important to ensure close cooperation between schools and communities (Ainscow, Farrell & Tweddle, 2000) in order to improve a quality of inclusive education in rural areas. “Rural parents, students, community groups and grassroots people can add valuable information to discussions about educational adequacy and, therefore, they should be fully involved in the process of defining and costing out an adequate education” (Malhoit, 2005, p. 4). Local communities today have more power and make many important decisions in Ukraine, so they should also be interested in supporting their members who have special educational needs.

2. “Resources: funding shortages for materials, equipment, and technology as well as barriers resulting from overcrowded facilities and inadequate time for planning and collaboration between staff members” (Villegas, 2021) are one of the main barriers to remove in rural inclusive schools. This entails supplying inclusive schools with ICT, STEAM labs for learning and resources to organize inclusive learning environment.

3. Effective management in rural schools and a professional team of teachers can solve the problem in practical terms (Nikolaesku, Budnyk, Bondar, Tepla & Berezovska, 2021). At the same time, of course, it is necessary to attract outside financing and sponsorship to implement inclusion in a particular educational institution, depending on the number of children with SEN, types of their disabilities and educational needs. In addition, an important task for rural schools at the present stage is to motivate professional activity of young professionals in the field of inclusion through the implementation of social programs and providing additional benefits to encourage teachers to work in rural schools.

4. Participation of small (rural) schools in international educational projects and grant programs that promote inclusive education. This can provide additional resources for development of inclusion and creation of universal design for learning in rural areas. Rural

schools can benefit greatly while adopting best international strategies and practices to organize and sustain inclusive learning environment.

5. The quality of inclusive education is largely determined by psychological aspects, namely attitudes towards students with SEN by teachers and peers, psychological comfort in interpersonal relations in inclusive classrooms (Adderley, Hope, Hughes, et al., 2015). Therefore, we also consider this area to be one of the priorities in forming a new philosophy of inclusion, celebrating diversity and co-creation in inclusive learning environment of rural schools.

We believe that the results of the study will draw an attention of education experts and practitioners to the problem and enable practical steps towards effective inclusion in rural schools.

The article is based on the collective research theme of the Center for Innovative Educational Technology “PNU-EcoSystem” Vasyl Stefanyk Precarpathian National University “Teacher training: socio-pedagogical context” (2017–2027).

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