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## **Telepractice in the System of Providing Correctional and Developmental Services to Children with Speech Disorders: Interaction at a Distance**

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### **Abstract**

The article is devoted to the problem of optimizing the process of providing correctional and developmental services to children with special needs education in the conditions of significant territorial distances. The study outlines Ukraine's achievements in introducing inclusive education in the country, creating conditions for children with special educational needs to receive quality educational and correctional services, including in educational institutions that are most accessible and close to their residency. It is noted that children with speech disorders make up a significant share among them. Emphasis is placed on the difficulties of receiving correctional and developmental services by such children in rural areas, especially in remote settlements. Taking into account the experience of foreign colleagues, the available legal documents reflecting the consensus developed by all countries of the world on future directions of education for people with special needs education, in the article sets out its vision for their partial solution through the use of speech therapy assistance telepractice. The article formulates and presents the author's definition of "telepractice", which means a teacher-speech therapist providing correctional and developmental services using information and communication technologies to accompany and support children with speech disorders and their parents in significant territorial distances. The main advantages of this form of work are substantiated, the specifics of realization of remote interaction models are covered, the expediency of their association for qualitative estimation, diagnostics, correction, and speech development's monitoring of the child is proved. The problems that hinder the introduction of telepractice in Ukraine, the ambiguous attitude of speech therapists to it are pointed out.

**Keywords:** Telepractice, correctional and developmental services, speech therapy, teacher-speech therapist, children with speech disorders, rural areas.

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## Introduction

Children with disabilities run into barriers to education, which means that the level of school attendance and the percentage of those who have completed their education are much lower than those of their peers (Getae et al., 2018, p. 7). It becomes a barrier to the successful integration of children with disabilities into the social environment. The implementation of the state policy on ensuring the right to quality and accessible education without discrimination on any grounds, including based on disability, was the result of the introduction of inclusive education in Ukraine. The advantages of such training are that it not only solves the problem of education and upbringing of children with special needs in educational institutions that are most accessible and close to their place of residence but also makes it possible for them to receive correctional and developmental services, taking into account the state of health, the peculiarities of psychophysical development. One of the important areas of such work is speech therapy work for children with speech disorders. After all, good speech, as experts say, is the most important condition for the full development of children. The richer and more correct the child's speech, the easier it is to express their thoughts, the much more meaningful and full-fledged relationships with peers and adults, the more active its psychological development (Kryuchkov, 2015, pp. 146–147). In 2017, by the Law of Ukraine "On the State Budget of Ukraine", 209,458.3 UAH thousand was allocated to the area for state support to persons with special educational needs at the expense of the state subvention, and in 2018-2019 – 504,458.3 UAH thousand, which is 2.4 times more than the funds provided in 2017 (Ministry of Education and Science of Ukraine, 2019). As of 2018/2019 academic year across Ukraine, 11,866 students received general secondary education in inclusive classes, and 8,417 inclusive classes were opened in 3,790 secondary schools. During 3 years, the number of inclusive classes has increased 3.1 times, the number of schools with inclusive classes has increased 2.5 times, and the number of children receiving education has increased 2.8 times (Ministry of Education and Science of Ukraine, 2019).

Society's rethinking of attitudes towards children with special educational needs in Ukraine has led to the determination of optimal conditions for the education of such children not only in urban but also in rural areas, especially in remote settlements. In the framework of educational reforms, having solved, to some extent at the state level, the problem of territorial accessibility of education in rural areas through the gradual creation of united communities of educational institutions and their branches, the development of inclusive educational environment is often hampered by the unwillingness of these institutions with special educational needs (On the accessibility of children with special needs to basic educational institutions, 2016). An analysis of the information received as of January 10, 2020, during the monitoring of the process of decentralization of power and local self-government reform, showed that in 564 rural united territorial communities formed since 2015, 423 support schools and 603 branches provide access to education. The number of classes with inclusive education in them is 994, with 1358 students (National Project "Decentralization", 2020). As can be seen towards the total mass, their share is not significant. Complicating the situation and unresolved problems with the organization of regular and free transportation of students, children, and teachers of preschool, general secondary education in rural areas to the place of study, work, and home. Transportation of participants in the educational process is provided by 761 school buses. The additional need for them is another 225 units. Besides, 5928 km. roads in rural areas are in poor condition (National Project "Decentralization", 2020). And this state of affairs is typical for most regions of the country. Other developing countries are facing a similar situation (Langbecker et al., 2019; Nadar et al., 2019; Rao, 2018; Fairweather et al., 2016; 2017). Given the above, given the large geography of coverage of children with special educational needs who need speech therapy, we consider it appropriate to highlight our vision for a partial solution to the problem of providing correctional and developmental services to children with speech disorders over long distances, by establishing

telecommunications between the participants of the correctional and pedagogical process through information and communication technologies.

### **Literature Review**

Recently, there has been an increase in the attention of scientists and practitioners to the study of various aspects of using the information and communication technologies in the diagnosis and correction of developmental disorders. This applies in particular to children and adults with speech impairments. Thus, the psychological and pedagogical aspects of using the computer technology in correctional education with children with special educational needs were studied Kachurovska (2017), Savinova (2015); research is devoted to the issues of support for inclusive education using information and communication technologies at different levels of education Getae et al. (2018); assessment of technical capabilities of information and communication technologies and the feasibility of building speech therapy work based on interactive forms of interaction with children with speech disorders we're doing Nadar et al. (2019), Theodoros (2013), Sicotte et al. (2003), Shah (2018) and all. The search for a solution to the problem of organizing speech therapy in rural areas was actively carried out. Foreign scientists see it possible to partially solve it using synchronous and asynchronous modes of remote interaction with children and adults in this category (Langbecker et al. (2019); Bradford et al. (2018); Fairweather et al. (2016; 2017); Balsamo (2000); Rao (2018) and others), which convincingly prove the results of their pilot studies.

However, despite the considerable attention of scientists to the problems of education of children with special needs, including those with speech disorders, the practice of providing speech therapy services to such children in conditions of considerable territorial distances in Ukraine is almost non-existent. That is why the achievements of our foreign colleagues should stimulate changes in the system of national education. At the same time, we should not forget about our own achievements in this direction.

### **Methods**

The study is based on official data from the Department of General Secondary and Preschool Education of the Ministry of Education and Science of Ukraine, the State Statistics Service of Ukraine, the Directorate of Inclusive and Extracurricular Education of the Ministry of Education and Science of Ukraine, the Institute of Educational Analytics and the National Decentralization Project; on the results of their content analysis of legal documents aimed at ensuring the implementation of state guarantees for quality educational services for children with disabilities, correctional programs that determine the content of work with children on speech development.

### **Results and Discussions**

According to international agreements in the field of human rights (The Universal Declaration of Human Rights (1948), Convention on the Rights of Persons with Disabilities (2006), Convention on the Rights of the Child (1989), The Salamanca Statement and Framework for Action on Special Needs Education (1994)) it's of paramount importance for States Parties to recognize the right of persons with disabilities to education, so that they have equal access to inclusive, high-quality and free primary and secondary education in their places of residence, and that children with disabilities should enjoy all human rights and fundamental freedoms on an equal footing with other children. Despite the positive changes in ensuring the development of national education in Ukraine, it is noted that it is not without problems that hinder its development, do not provide an opportunity to provide a new quality of education, adequate to the current historical epoch (National Strategy for Education Development in Ukraine until 2021, 2013). Among these, limited access to quality education for certain categories of the population, including children with special educational needs living in rural areas. (National

Strategy for Education Development in Ukraine until 2021, 2013). The experience of developing countries shows that the high costs associated with special schools mean in practice that only a small proportion of students, usually the urban elite, can use their services. The vast majority of students with special educational needs, particularly in rural areas, are therefore not provided with any services. Besides, experience suggests that inclusive schools that serve all children in any community are most successful in addressing community support and finding original and innovative ways to use available limited resources (UNESCO, 1994). Therefore, among the strategic directions and tasks of the National Strategy for Education Development in Ukraine until 2021: ensuring the functioning of an effective system of inclusive education, which provides for the creation of new models and forms of education for people with special educational needs, including distance learning for such children; diversification of models of organization of education for children living in rural areas by creating educational districts, regional distance learning centers, branches of primary schools, their full staffing with multimedia equipment, etc. (National Strategy for Education Development in Ukraine until 2021, 2013). On the one hand, it ensures the territorial accessibility of education, in some way solving the problem of education and upbringing of children with special educational needs at the place of residence, on the other – promotes an inclusive educational environment that would allow such children to receive correctional services and psychological and pedagogical support taking into account the state of health and peculiarities of development. The main principles of public policy in this regard are reflected in regulations, in particular, such as: Law of Ukraine "On Education" (2017); "On approval of the Regulations on speech therapy points of the education system" (1993); "On approval of the Procedure for the organization of inclusive education in secondary schools" (2011), "On approval of the Regulations on the Inclusive Resource Center" (2017), "On the accessibility of children with special needs to basic educational institutions" (2016); "On approval of the Standard Regulations on the branch of an educational institution" (2017).

Thus, under the current conditions of constant expansion of the network of support educational institutions and their branches in rural areas, the teacher-speech therapist relationship goes far beyond one preschool or general secondary education institution and, in most cases, needs its support with other educational institutions and service areas. Complicates the situation and the remoteness of some rural settlements that provide access to education at the branch level, from the administrative center, where, due to overwork, parents (or persons replacing them) are unable to provide children with special educational needs, including disorders of speech development, regular attendance of correctional and developmental classes. In this regard, we see it possible to improve the quality of correctional and developmental services in rural areas through coordination and cooperation of teachers-speech therapists with preschool and general secondary education, support schools, their branches, institutions, teachers, and parents of children with speech disorders. based on the construction of telecommunications using information and communication technologies. Moreover, the state of provision of teaching aids (computer (55.1%) and multimedia (42.7%) equipment) both in the basic schools and in their branches, according to a survey of principals of basic schools by the Institute of Educational Analytics of Ukraine, significantly improved compared to the situation observed in rural educational institutions in 2016 (Institute of Educational Analytics, 2018).

In the context of our study, the positive thing is that foreign colleagues already have some experience in using information and communication technologies to assess, diagnose, and treat speech disorders in children with special educational needs. This is especially true for those countries that have faced the problem of significant territorial distances, such as Ukraine. Fairweather (2016), describing the practice of helping children with speech disorders in rural Australia, points out that such help is often limited and non-systematic due to the significant financial and time costs of the road, irregular traffic, its danger, and impracticality. The situation is similar in some regions of India (Rao, 2018), Canada

(Bradford et al., 2018; Langbecker et al., 2019; Sicotte et al., 2003), South Asia (Shah, 2018). Therefore, the decision to provide speech therapy remotely justifies itself in some cases: it makes it more flexible compared to the traditional form of work and effective when it comes to significant territorial distances.

Such practices of interaction in the countries of the world have received various, however, similar names, such as: "telehealf", "telerehabilitation" and "telepractice in the field of health care". Thus, under "telepractice" P. Rao (2018) understands the remote form of rehabilitation of persons with speech disorders using information and communication technologies, the introduction of which is appropriate when it comes to overcoming geographical, temporal, social and cultural barriers; G. Fairweather (2017) links telehealf to the provision of distance medical services through computer programs; D. Theodoros (2013) considers "telerehabilitation" as an alternative way to help people with speech disorders (neurogenic communication disorders, stuttering, voice, swallowing, writing and reading in children), which provides equal access to medical services, improving their quality and system, promoting the development of self-organization due to the audiovisual nature of the interaction between the speech therapist and the client. The use of such terminology is quite conditional and legitimate, because, according to the International Standard Classification of Occupations (2012), a speech therapist is considered a specialist in health (Health Professionals: 2266 Audiologists and Speech Therapists) and pedagogy (Teaching Professionals: 2352 Special Needs Teachers). Such division into groups is typical for Ukraine as well. Thus, according to the "Classifier of Professions" (2010), a speech therapist is included in Section 2. Professionals. Code 234 "Teachers of specialized educational institutions" and to Section 3. Specialists. Code 333 "Specialists in the field of special (special) education" and Code 322 "Support staff in modern medicine, physiotherapy, formation and veterinary medicine (except nurses)". However, it is more typical for our state to consider a speech therapist as a specialist in the pedagogical field.

Therefore, based on the experience of foreign colleagues, the results of our theoretical analysis of legal documents, we consider appropriate and reasonable to use, in our study, the concept of "telepractice", which we consider as a way of providing a teacher-speech therapist correctional and developmental services using information and communication technologies, in order to support and support children with speech disorders and their parents in significant territorial distances. Telepractice, in our opinion, can be a powerful tool in the work of a speech therapist, as it has significant advantages over traditional forms of correctional and developmental care, especially when it comes to overcoming such barriers as distance. These advantages include:

- *Overcoming territorial barriers*: solving the problem of the mobility of children with speech disorders in rural areas; saving money on their transportation; increasing the coverage of correctional and developmental assistance for children with special educational needs, regularity, and accessibility.
- *Solving the problem of human resources* – shortage of teachers-speech therapists in rural areas (among pedagogical positions, support schools and their branches in rural areas need the most teachers-speech therapists – 41.1% (Institute of Educational Analytics, 2018).
- *Elimination of temporal and spatial barriers*: replacement of the physical presence of children with speech disorders indirect; real-time communication; flexible study schedule and favorable atmosphere (which is especially important in the case of children who find it difficult to tolerate separation from their mother, anxious or have mood swings, etc.).
- *Increasing the possibility of timely detection and correction of speech disorders, prevention of secondary abnormalities in children.*
- *Solving the problem of individualization of education*: providing speech therapy per the individual

requests and needs of children with speech disorders; development of educational tasks, taking into account their potential.

– *Promoting effective interaction, communication between participants in the correctional and pedagogical process, providing reserves, additional resources, and opportunities to address issues related to the education and upbringing of children with speech disorders; dissemination of experience in the introduction of innovative technologies in preschool and general secondary education, support schools, resource centers, speech therapy centers in rural areas.*

The organization of this form of correctional and developmental services at a distance requires: on the one hand, some resource support, in particular, the creation of a separate stationary place in each branch, which would be provided with computer equipment, special training and correction programs, Internet access, that will make it possible to constantly communicate with children with speech disorders, their parents and teachers; on the other hand, it requires from the teacher-speech therapist awareness of the possibilities of using information and communication technologies in pedagogical activities, psychological features of communication in a virtual environment taking into account different age groups, competent selection and creation of material, adapting it to work remotely with a child having a speech disorder; and from parents – a certain level of digital literacy and motivation to practice the acquired skills in the daily life of the child.

Telepractice in the work of a teacher-speech therapist is made possible by creating an information and communication environment, by which we mean a set of conditions that provide equal access to resources regardless of the place of residence, time and social status of all its users, promote remote interaction of correctional and pedagogical process using information and communication technologies.

The simplest means of establishing two-way communication without territorial restrictions in the work of a speech therapist are e-mail, social networks (Vk, Instagram, Facebook), and messengers (Skype, Viber, Telegram, WhatsApp). They are convenient for providing ongoing support for the education of children with speech disorders, counseling and informing their parents (or persons replacing them) and do not require significant telecommunications resources.

Separately, as a form of interactive communication should be considered a teleconference, the implementation of which for the teacher-speech therapist becomes possible through the use of software and platforms such as Adobe Connect, Google Hangouts, Skype, Zoom and others. This kind of remote interaction allows you to make meetings with the child systematic, and hence – more effective; develop pronunciation (speech breathing, prosody, vocal function, in some cases it may even be a correction of speech), lexical and grammatical aspects of speech, coherent and written speech; monitor the dynamics of the child's success; to promote the timely correction of mistakes of parents in the upbringing and education of children with speech disorders at home. Of particular note is the function of recording a teleconference session (for example in Zoom), which makes it possible to view classes repeatedly. Correctional and developmental work with the use of information and communication technologies contributes to the formation of positive motivation of children to correctional and pedagogical activities, expands the possibilities of using visual material (Savinova, 2015).

When organizing classes with children in this format, the specialist must clearly define the mode of interaction (synchronous, asynchronous or mixed), the form of conduct (individual/subgroup work: number of children, criteria for their grouping (age of children, type of pathology, level of speech development, etc.) and content. The latter is disclosed through a system of selection of information and communication technologies that are consistent with the mode of interaction.

The synchronous mode of telepractice is as close as possible to the real conditions of correctional and developmental work with a child, which provides for the activity of all participants of interaction and their joint work in real-time. Such activity is provided by services and platforms with access to interactive games, multimedia presentations, audio and video material, graphic images, web quests, etc. Thus, the capabilities of the Internet service Learningapps, Wordwall, Baamboozle, Jigsaw Planet, Scratch and Classtools software, web tool Auto Draw from Google and many others allow you to create a teacher-speech therapist for interactive exercises on various topics, store and distribute material, replenish professional case with the work of colleagues, share links to their exercises. For example, with the help of the Learningapps constructor, a speech therapist teacher can create interactive tasks for children to replenish vocabulary on any topic, automate sounds in words, syllables, phrases and sentences, practice grammatical features of words, developmental processes and all this happen in interesting for the child game form. Internet service Jigsaw Planet makes it possible through the collection of puzzles to develop fine motor skills of the child, attention, orientation in space, the formation of grammatically correct speech, practice in the use of new words in it when working with a picture.

Providing correctional and developmental services to children with speech disorders remotely allows the use of adapted computer programs (educational, diagnostic, developmental) and games in the work of a speech therapist. According to O. Kachurovska, it is better to use them with children over 5 years. This is primarily due to the development of indirect activity (the child uses a computer keyboard while watching the changes in the image on the screen), and secondly, a sufficient level of development of mental processes and volitional self-regulation (2013, p. 122). Training and correction programs ("Speech Development", "Games for Tigers", "Home Speech Therapist", etc.) have simple rules of operation (are understandable even to those who do not have special education); compact (small in size and quickly replicated in a short period), mobile (easily distributed on electronic media and reproducible in any environment with a computer), economical (saves material and human resources), multifunctional (provide the ability to use one game for different purposes). Therefore, with the prior acquaintance of parents with the content and rules of the programs, they can be used when teaching children to speak at home.

Tools from Google are quite functional for the work of a speech therapist. Thus, the web tool Auto Draw from Google reveals the possibilities of creative creation of visual didactic material (such as the method of "Poppelreiter's figures") on various lexical topics. The editor is simple and easy to use. He independently converts sketches of users (teacher-speech therapist, parents, child) into ready-made drawings, which can then be painted, discussed, compiled with interesting stories, stored and distributed.

Fig. 1 shows the screenshots of exercises for the development of the lexical side of speech on the topic "Domestic animals and birds", developed using the Internet service Learningapps (<https://learningapps.org/display?v=p27jfmna519>), Jigsaw Planet (<https://www.jigsawplanet.com/?rc=play&pid=279e227ee14e>) and Google's Auto Draw web tool (<https://www.autodraw.com/share/HCU949H08NCX>).



**Fig. 1.** Exercises for the development of the lexical side of speech on the topic "Domestic animals and birds", developed with the help of: a) Learningapps, b) Jigsaw Planet, c) Auto Draw.

For easy planning of correctional and developmental classes, seminars, trainings, webinars, and methodical associations, a teacher-speech therapist can use such tools as OneNote and Google Calendar, and with the help of Google Forms, on a computer or mobile device, a specialist can create applications and questionnaires for all participants in the educational process; repeatedly use and distribute them to users' e-mail addresses; get results in a short period, compile response statistics in the form of charts and tables (Google Spreadsheets), work with colleagues in real-time over long distances.

Another interesting tool from Google in the work of a speech therapist is Chrome Remote Desktop – an application for remote control of the computer. In some cases, parents during the organization of developmental work with children at home, there are difficulties in performing tasks, setting up software. For example, when it comes to correctional and developmental programs and games. In this case, the speech therapist can provide remote assistance by using the Chrome Remote Desktop, which allows you to control your computer remotely, configure applications, services, and programs.

Special mention should be made of programs and online services for preparing and viewing multimedia presentations. Among such the PowerPoint program differs in the functionality and rather simple interface. It allows you to harmoniously integrate different types of educational information, which can be presented in the form of drawings, photographs, cards; voice recording, music; video clips and animations. With the help of triggers in the presentation (the effect that works after clicking on the object), the teacher-speech therapist can create correctional and developmental tasks in the form of quizzes, tests, interactive exercises, games, etc. Words, numbers, or images can be used as answer



options. If the child clicks on the wrong answer, the answer disappears, otherwise any animation effect is triggered, changing the size, color, or location of the object. Similar features of this presentation program are the online services Microsoft Sway, Google Presentation, and Prezi.

The online platform Nearpod can become quite a powerful tool in the work of a speech therapist in the implementation of telepractice. It allows not only to create multimedia presentations but also to turn them into interactive, saturate online exercises with correctional and developmental nature (an example of the exercise can be viewed at <https://share.nearpod.com/wGu9aFqNS6>). The child will be able to control the pace of their learning, performing the exercise will go to another link. If she has difficulties in working on the task, she can repeatedly practice solving them at home under the supervision of parents.

Another type of telepractice is the asynchronous mode of interaction of the teacher-speech therapist with the child and parents. With this form of work, the participants of the correctional and pedagogical process do not intersect in the physical and virtual space – they receive tasks and recommendations for their implementation by link or e-mail, with a clearly defined deadline for their implementation. This interaction is made possible by the use of cloud storage (Google Drive, OneDrive, Classroom, etc.) and online boards (Glogstek, Dabbleboard, WikiWall, Twiddla, Scribblar, Padlet, etc.), which allow you to create a virtual speech therapy consulting and methodological office and open to certain categories of materials compatible access to certain groups of users. It can contain the necessary educational and developmental materials for children (including those developed with the help of programs and services described above), useful information for their parents, teachers of educational institutions, and institutions. Some of these services include the possibility of interactive communication online. For example, by providing open access to the Padlet online board, not only a speech therapist but also parents and other users can update its content, organize conversations, ask each other questions, discuss problem situations, and collectively seek solutions. The number of boards created online by a speech therapist is not fixed, so it is possible to create them separately for children with speech disorders, their parents, and teachers of educational institutions. Convenient is that most of them have a mobile application, so you can work with this service not only through a computer but also through other gadgets (smartphones and tablets). This allows content participants, even offline, to quickly receive notifications of new messages or information, download materials, follow hyperlinks and read useful scientific, psychological and pedagogical literature and more.

The use of cloud storage and online boards in the establishment of asynchronous interaction of the teacher-speech therapist with the child and parents helps to reduce the time and material resources for routine work (distribution of questionnaires, questionnaires, booklets, literature, exercises, tasks, etc.), opening opportunities more prompt informing of the participants of the correctional and pedagogical process by providing open access to the necessary information, to the free use of materials at a time convenient for them; creation of online correctional and developmental content for parents of children with speech disorders, pedagogical representatives of educational institutions and institutions, etc. However, compared to synchronous communication, asynchronous interaction almost eliminates the possibility of observing the dynamics of the child's development, fully shifting the responsibility for this to the parents, hoping for their knowledge of education and upbringing. In our opinion, this is not objective and expedient enough. Therefore, in the context of the above, we consider it necessary to talk about combining the above two modes of interaction (synchronous and asynchronous). This will make it possible for a speech therapist to work with a child as effectively as possible in the conditions of considerable territorial distances.

Distance speech therapy classes have both supporters who recognize the effectiveness and efficiency

of this type of training, and opponents who rightly point out the many shortcomings of this learning technology. However, distance education of children with special educational needs is becoming more widespread due to the development of information and communication technologies and today the demand for speech therapy in this way is quite high (Burnakova & Dorofeeva, 2017, p. 94). She justified herself in a coronavirus pandemic. And if at one time someone was a little skeptical about the supporters of this form of education, now they are forced to use their experience in their work.

## Conclusion

Therefore, on the basis of the conducted research, it is possible to draw certain conclusions. The process of introducing telepractice in the system of correctional and developmental assistance to children in rural areas is a very promising way to address the issue of ensuring the territorial accessibility of education at the place of residence. This is convincingly proved by the results of pilot studies of foreign colleagues. However, in the context of domestic research, such a practice is almost non-existent. Despite the positive steps of our state in this direction (provision of computer and multimedia equipment to educational and rural institutions, the opening of regional distance learning centers, etc.), there are still a number of problems that prevent systematic and high-quality implementation of such interaction at a distance. These include: frequent interruptions in telecommunications, delayed and unsatisfactory clarity of audio and video images, low-speed Internet connection – makes it difficult to clearly assess the state of speech formation and requires a face-to-face examination; lack of appropriate equipment for such classes with the child at home (computer, microphone, camera, etc.), ignorance of parents about the possibilities and benefits of using information and communication technologies, underestimation of their potential in learning and development of children with speech disorders – hinder the development of skills the daily life of the child; lack of special training for speech therapists and their technical support for the use of specialized information and communication technologies in telepractice, lack of additional pay. Addressing these issues should be a key task at the level of public policy and educational institutions, which are committed to providing children with special educational needs with quality educational and correctional services.

Along with this, it is important in this direction to conduct additional empirical research to study the effectiveness of the telepractice introduction in the system of correctional and developmental care for children with speech disorders in rural areas; assessment of the technical and material component of providing such services in the conditions of significant territorial distances in our state.

## References

Balsamo, F. (2000). *Education Access: National Inquiry into Rural and Remote Education*.

Bradford, N., Caffery, L., Taylor, M., Meiklejohn, J., Smith, A., & Langbecker D. (2018). Speech-language Pathology Services Delivered by Telehealth in a Rural Educational Setting: the School's Perspective. *Journal of the International Society for Telemedicine and eHealth*, 6(1), 1–8. DOI: 10.29086/JISfTeH.6.e20.

Burnakova, D. P., & Dorofeeva, T. A. (2017). Features of the organization of remote speech therapy work with children with disabilities. *The Development of a Socially Sustainable Innovative Environment of Continuing Pedagogical Education: a collection of materials of the V International Scientific and Practical Conference* (Abakan, November 24, 2017). Abakan: Publishing House FSBEI HE "Khakass State University named after N. F. Katanova", 93–94.

Classifier of professions of Ukraine DK 003: 2010. Approved by the order of Derzhspozhyvstandart of Ukraine dated July 28, 2010 № 327. Retrieved from: <https://zakon.rada.gov.ua/rada/show/va327609-10> (accessed on 22.03.2017)

Fairweather, G., Lincoln, M., & Ramsden R. (2017). Speech-language pathology telehealth in rural and remote schools: the experience of school executive and therapy assistants. *Rural and Remote Health*, 17. DOI: 10.22605/RRH4225.

Fairweather, G., Lincoln, M., & Ramsden, R. (2016). Speech-language pathology teletherapy in rural and remote educational settings: Decreasing service inequities. *International Journal of Speech-Language Pathology*, 18(6), 592–602.

Geta, A., Zaika, V., Kovalenko, V., & Nosenko, Yu. (Eds.). (2018). Modern ICT tools to support inclusive education: a textbook. Poltava: PUET.

Institute of Educational Analytics (2018). Education in Ukraine: basic indicators. Information and statistical bulletin. Kyiv: DNU "Institute of Educational Analytics".

International Standard Classification of Occupations: ISCO-08 (2012). International Labour Office. Geneva: ILO.

Kachurovska, O. (2013). Psychological and pedagogical aspect of the use of information and communication technologies in correctional education. Scientific journal of NPU named after M. P. Drahomanov. Series 19: *Correctional pedagogy and special psychology*. 24, 121–125.

Kryuchkov, V. (Ed.) (2015). Actual problems of speech therapy: a collection of scientific papers. Saratov: The science of education.

Langbecker, D., Caffery, L., Taylor, M., Theodoros, D., & Smith, A. (2019). Impact of school-based allied health therapy via telehealth on children's speech and language, class participation and educational outcomes. *Journal of Telemedicine and Telecare*, 25, 559–565.

Ministry of Education and Science of Ukraine (2019). Statistics. Retrieved from: <https://mon.gov.ua/storage/app/media/inklyuzivne-navchannya/statistika-inklyuziya.pdf> (accessed on 04.05.2020).

Nadar, M., Sicotte, C., Fortin, A. J., Malas, K., & Dimova, M. (2019). Home-based pediatric telepractice in speech-language pathology: evaluation of a pilot study. *International Journal of Information Research and Review*, 6, 6480–6488.

National Project "Decentralization" (2020). Monitoring the process of decentralization of power and reform of local self-government: as of January 10, 2020. Retrieved from: <https://decentralization.gov.ua/uploads/library/file/526/10.01.2020.pdf> (accessed on 04.06.2020)

National Strategy for Education Development in Ukraine until 2021: Decree of the President of Ukraine of 25.06.2013 № 344/2013. Retrieved from: <http://zakon3.rada.gov.ua/laws/show/344/2013> (accessed on 21.12.2019)

On approval of the Procedure for the organization of inclusive education in secondary schools: Resolution of the Cabinet of Ministers of Ukraine of August 15, 2011 № 872. Retrieved from: <https://zakon.rada.gov.ua/laws/main/872-2011-%D0%BF> (accessed on 11.12.2019)

On approval of the Regulations on speech therapy points of the education system: order of the Ministry of Education of Ukraine dated 13.05.1993 № 135. Ministry of Education of Ukraine. Retrieved from: <https://zakon.rada.gov.ua/laws/main/z0059-93> (accessed on 29.05.2020)

On approval of the Regulations on the Inclusive Resource Center: Resolution of the Cabinet of Ministers of Ukraine of July 12, 2017 № 545. Cabinet of Ministers of Ukraine. Retrieved from: <https://zakon.rada.gov.ua/laws/main/545-2017-%D0%BF> (accessed on 11.12.2019)

On approval of the Standard Regulations on the branch of an educational institution: order of the Ministry of Education and Science of Ukraine dated 06.12.2017 № 1568. Retrieved from: <http://zakon.rada.gov.ua/laws/show/z0001-18#n14> (accessed on 11.12.2019)

On education: the law of Ukraine of September 5, 2017 № 2145-VIII. Information of the Verkhovna Rada of Ukraine. 2017. № 38-39. St. 380. Retrieved from: <https://zakon.rada.gov.ua/laws/main/2145-19> (accessed on 11.12.2019)

On the accessibility of children with special needs to basic educational institutions: letter of the Ministry of Education and Science of Ukraine dated 09.06.2016 №1 / 9-293. Retrieved from: <https://base.kristti.com.ua/?p=542> (accessed on 11.12.2019)

Rao, P. (2018). Telepractice in speech-language pathology and audiology: Prospects and challenges. 32. 67–72. DOI: 10.4103/jisha.JISHA\_39\_17.

Savinova N. (2015) Innovatyka v lohopedii. *Science and Education a New Dimension. Pedagogy and Psychology*, III(36), Issue: 74, 51–55.

Shah, N. (2018). Changing Trends from Traditional to Technology Based Approach: Speech Language Pathologist's Preferences for Computer Mediated Aphasia Therapy (CMAT) in Pakistan. *Linguistics and Literature Review*. 4. 54-77. DOI: 10.29145/2018/llr/040105.

Sicotte, C., Lehoux, P., Fortier-Blanc, J., & Leblanc, Y. (2003) Feasibility and outcome evaluation of a telemedicine application in speech-language pathology. *Journal of Telemedicine and Telecare*, 9, 253-258. DOI: 10.1258/135763303769211256 PMID:14599327

Theodoros, D. (2013). Speech-Language Pathology and Telerehabilitation. DOI: 10.1007/978-1-4471-4198-3\_21.

UNESCO (1994). The Salamanca Statement and Framework for Action on Special Needs Education. Retrieved from: [https://www.right-to-education.org/sites/right-to-education.org/files/resource-attachments/Salamanca\\_Statement\\_1994.pdf](https://www.right-to-education.org/sites/right-to-education.org/files/resource-attachments/Salamanca_Statement_1994.pdf) (accessed on 07.06.2020).

United Nations (1948). The Universal Declaration of Human Rights. Retrieved from: <https://www.un.org/en/universal-declaration-human-rights/> (accessed on 01.04.2020)

United Nations (1989). Convention on the Rights of the Child. Retrieved from: <https://www.ohchr.org/en/professionalinterest/pages/crc.aspx> (accessed on 01.03.2020)

United Nations (2006). Convention on the Rights of Persons with Disabilities. Retrieved from: <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html> (accessed on 01.03.2020)