Use of Distance Learning Technologies in the Course of Implementing Educational Programs in Preschool Education

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ABSTRACT

The research purpose is to determine certain science-based approaches to using distance education technologies in the course of work with preschool children, taking into consideration the special nature of Russian preschool education; to identify the variable-based models for using Distance Education Technologies (DET) in preschool education. The following science-based approaches to the research problem were determined taking into consideration the special nature of Russian preschool education: *axiological, personality-oriented, system-activity, technological, integrated*. The matrix of DET implementation models in preschool education was presented (model of integrated distance education, Virtual Kindergarten model, Correspondence model, Case-technology model). The study proved that there are real solutions for using DET in preschool education; it also suggested organizational models of DET introduction. The materials of the article can be useful for administrators, educators, teaching staff of preschool educational organizations (PEO), and preschoolers' parents.

Keywords: preschool education, distance education technologies, organizational models of distance education, matrix of DET models

INTRODUCTION

The global trend of "informatization" of life and education is mentioned in all fundamental documents on social and economic development of the Russian Federation. Today, visualization, virtual reality, cloud-based computing, artificial intelligence fundamentally change the type and structure of education, as well as the requirements for the educational environment. This creates challenges and risks: educational organizations often use uncertified electronic educational resources and services; children use social media without supervision, sometimes even via educational organizations' equipment. The consequences of such situation - additional mental and physical stress for children - are not taken into account.

However, the trend to rapid informatization of life and society is no longer possible to turn back. The task of the family, educators, administrators of the Russian education system, and information and communication technologies (ICT) specialists, includes, on the one hand, accurate identification of developing and educational potential of Internet resources, and, on the other hand, making their use as safe as possible for children's physical and mental health.

Importance of the Problem

The relevance of this research is determined by the problem of availability of preschool education for all categories of schoolchildren; by the need to provide disabled preschoolers with constant support while they are receiving their education: children with special needs (CWSN), those who are sickly, who are taught at home in family groups; to provide preschool children from remote rural areas (where no pedagogical specialists are available) with distance counseling; to teach Russian-speaking children living abroad.

Contribution of this paper to the literature

- The theoretical and methodological part is based on the Concept of health care-based education, person-oriented and distance learning.
- In the practice-oriented part of the current study, new science-based approaches to using DET in preschool education are substantiated; the advantages of DET in the implementation of educational programs are identified; models of distance education which significantly change traditional beliefs in this field are developed.
- The research outcomes extend, develop, and introduce new elements into current conceptualizations in the realm of using DET in preschool education.

Until recently, all Russian scholars who wrote about distance education and educational technologies, have studied issues related to professional education, adult and school education, disregarding preschool education and upbringing. There was a lack of common practical need for this form of training. Kindergarten closures, amalgamation of some rural kindergartens with each other, lack of teaching staff in preschool organizations (including domain educational professionals), have made necessary to find different methods of ensuring availability of preschool education.

According to the Federal Law "On Education in the Russian Federation", "Distance education technologies are understood as educational technologies, predominantly implemented by means of using information and telecommunications networks with indirect (distance) interaction between students and teachers. Organizations which carry out educational activities are entitled to use e-learning, distance education technologies while implementing educational programs" (Federal Law "On Education in the Russian Federation", 2012, Ch. II. Article 13.16.

There is no common terminology in the realm of research on distance educational technologies (DET); authors of academic papers on the corresponding topic often use such concepts as distance learning, distance education, distance education technologies, information technologies, ICT technologies, which are applied to describe the peculiarities of distance instruction with the use of both modern information technology or traditional postal service.

According to UNESCO definition, the term "information and communication technologies" (ICT) refers to a set of interconnected scientific, technological, engineering disciplines, which study methods of effective labor organization of people who process and store information; computer technology, methods of organization and interaction with people and manufacturing equipment, their practical applications, as well as the corresponding social, economic and cultural problems. (Polat, 2010).

Publications of foreign scholars confirm the relevance of our research problems. Many of them (Subrahmanyam et al., 2005) believe that, despite the impact of home computer on children, computer games can be used to introduce children to computer literacy in preschool educational organizations. Tran (2013) examines opportunities and ways in which computers can have an influence on child development, as well as on children's educational, cognitive and social skills development. Such scholars as Pekarova & Moravcik (2009), Reed & Canning (2010), Papademetri (2010) confirm the relevance of the problem of preschool education informatization. Practical teaching guidelines for preschool teaching staff are published (Leu, 2000; Sverdlov & Goldhirsch, 2010).

There are such programs as counseling support for parents and children, practice of occasional DET use in developing programs and remedial work with preschool children, though the following training programs are not available in some regions of the Russian Federation:

- homeschooling programs covering all educational domains for disabled children and children with special needs (CWSN) assisted by parents (legal representatives) or tutors;
- organization of distance child development classes covering all educational domains mentioned in Federal State Educational Standard of Preschool Education for talented and gifted children including distance competitions and Academic Olympics for children;
- organization of virtual tours devoted to cultural heritage of the country, the region, the city for family groups, in order to ensure that content of programs and organizational forms of preschool education is flexible and diverse;
- organization of group interactive classes and master classes in remote rural areas where teaching staff is unavailable;
- Distance targeted assistance of specialists (education psychologist, speech therapist, teaching staff of supplementary education institutions), designing and organization of individual educational route for preschool children from small rural PEO, for mixed age groups, for PEO providing development,

supervision, care, and rehabilitation of children, for family kindergartens, for children from groups of short-term stay and adaptation groups in kindergartens;

- organization of classes for Russian-speaking preschool-age children living abroad in order to popularize and promote the Russian language.

The research purpose is to develop science-based and instructional framework for the process of using variable-based models for implementing curricula in preschool education.

Research Objectives include:

1) analysis of science-based approaches to the research problem, as well as developing theoretical and instructional framework for the implementation of DET in preschool education;

2) based on the analysis of the current practice of using distance education technologies within the system of preschool education in the regions of the Russian Federation, to present the matrix of implementation of distance education technology models in preschool education, taking into account the principle of accessibility for all categories of preschool children.

3) to identify the advantages of using DET in comparison with traditional teaching techniques in early childhood education organizations.

LITERATURE REVIEW

Such scholars as Gorvits and Pozdnyak (1997), Novoselova and Petku (1997), Petku (1992), Poddyakov and Mykhailenko (1987) studied using computer games for the development of memory, attention, speech, imagination in children during leisure activities of preschoolers; Kukushkina (2005), Lizunova (2005), Bogoyavlenskaya (1989), Goryachev (2008) suggested using computer games by speech therapists as well as by teachers for organization of socio-dramatic play. Zvorygin (1990) offers a classification of computer games, depending on the educational orientation. Komarova and Novoselova (1990) suggest a comprehensive technique for the control over the course of computer game development. Research by Lukyanenko (2013) reflects the peculiarities of feedback when using DET. There are not so many works devoted to studying the use of distance education technologies in the course of implementing educational programs in the system of preschool education; this situation indicates the novelty of this problem for the Russian scholarship: Babaeva (2003), Bogoyavlenskaya (1989), Gorvits and Pozdnyak (1997), Zvorygina (1990), Lizunova (2005), Moreva and Strunina (2013), Novoselova (1990), Petku (1992), Robert and Lavina (2004).

Badilla-Saxe (2010) describes the need for developing complex thinking in preschool children, teaching them designing and programming. Turgut et al. (2016) in the article "Technology Education in Preschool: An Applied Sample Lesson" focuses on the importance of developing ICT skills in children from early age, arguing that these skills encourage their ability to use online media in the future.

Scholars classify and describe using modern ICT in preschool education in academic journals. Lupua and Laurentiu (2014) give an account of the advantages of touchscreen technologies for preschoolers, as well as of STEM approach due to which children can grasp the logic of happening phenomena, understand their relationship, systematically study the world, develop curiosity, engineering thinking, ability to find a way out of critical situations, and master teamwork skills. Hirsh-Pasek et al. (2015) in his papers focuses on the quality of electronic educational resources for children, the standards of applications for tablets and smartphones.

Peer-reviewed journal contain publications on the problems of using DET. The authors of these publications are practitioners - teachers and administrators. The authors of such articles as "Risks and Potential of Using Computer Technologies in Preschool Education" (Abdulova, 2016), and "Positive and Negative Outcomes of Distance Learning" (Parakhonsky and Venglinskaya, 2011), analyze advantages and disadvantages of using DET in education as well as conditions necessary for using computer technologies in education. Zhbannikova in her article "Using information and communication technologies in the educational process of PEO in modern conditions" (2016) identified the main areas of applying ICT: documentation maintenance, work on developing teaching guidelines, work with parents. When such approach to education is in place, educational process does not involve the implementation of educational programs by means of using DET in various modes of communication. According to Konovalova (2016), ICT use creates new opportunities for preschool education. The problem of the effectiveness of DET use by special education teachers and education psychologists, working with disabled children and children with special needs (CWSN) is quite extensively discussed in academic journals. The authors share experience or offer recommendations mainly devoted to training via Moodle software, as well as case studies on techniques, used by specialists working with children deprived of parental care and pupils with special needs. This version of communication implies predominantly offline communication without feedback. Komarova and Tulikov's book "Information and Communication Technologies in Preschool Education" (2011) is devoted to the

problem of using ICT in preschool education. The computer system "Virtual kindergarten" was tested within the framework of strategic project "Step into the Future" led by professor Komarova. The training package for teachers participating in distance education projects has been developed, including reviews, presentations, and films. However, the system of teaching kits for classes covering all educational areas and for teaching staff specializing in various fields (speech therapists, special education teachers, psychologists) has not been developed yet.

MATERIALS AND METHODS

Research fellows from Semenov-Tyan-Shansky Lipetsk State Teacher Training University carried out research project according to the task given by the Russian Ministry of Education and Science state on the following theme: "Science-based and instructional framework for the mechanism of using distance education technologies in the course of implementing educational programs in preschool education"; while making the research they performed collection, analysis and systematization of information on the current practices of adopting DET in preschool education in the regions of the Russian Federation.

Taking into account the mechanisms of introducing distance education technologies while implementing educational programs in preschool education system, the following science-based approaches suggested by Fedina (2017) are especially noteworthy:

Axiological approach allows identifying the set of key values in distance education. The axiological task in distance instruction is not to turn the learner into a passive actor, but rather to make him a genuine participant of the educational process. This approach reflects developing in pupils value-based attitude towards the world around them; the one based on comprehensive world-view; this approach assumes comprehension, cognition and constructing the holistic image of the world around based on universal human values. Virtual tours, interactive classes and master classes are focused on developing in children the needs in beauty, goodness and faith in their own abilities. Axiological or value-based approach is a kind of "bridge" between the content of preschool education and children's practical activities, which works by means of using distance education technologies.

Personality-oriented approach is the most effective one in conditions of complex use of information technology tools' capabilities. Distance education technologies provide immediate feedback, computer visualization of studied objects, collection, processing, storage and transfer of information, automation of preschoolers' activity control, as well as personalized information and counseling support by PEO specialists. Distance form of instruction involves active communication between teachers, parents and pupils, via both e-mail and other online technologies.

System and activity-based approach makes the main emphasis on organizing various types of child activities in a particular educational sector (the social, communicative, cognitive, speech, artistic and aesthetic ones). Learning material presented in libraries of electronic educational resources is used as means of mastering various activities. Pupils are engaged in activities, which are intense and meaningful for them. Creatively gifted children have the opportunity to systematically participate in Academic Olympics, contests, virtual cognitive tours, etc. The use of DET allows to organize educational activities for preschool children who do not attend PEO, disabled children, children with special needs, children who are sickly, as well as to provide equal opportunities for integral development of all preschoolers, regardless of their place of residence, sex, language, social status, psychophysical and other peculiar features.

Technological approach implies efficient method of constructing educational process as a certain sequence of educator's actions, operations and procedures carried out by technical operator of electronic resources, which may ensure achieving diagnosable and predictable result. In the narrow sense, this is the virtual construction of educational process based on ordering aims of education and upbringing; in the wide sense, this is special organization of distance education for children who attend and do not attend preschool organizations.

Integrated approach makes possible organization of real-time interaction and cooperation between the teacher and the parent; this approach also allows the parent and the child to directly participate in class activities. Distance education technologies allow organization of counseling support for parents as well as assistance with teaching materials for educational activity; they promote the organization of integrated education; they are capable of combining interrelated types of art with kinds of children's artistic and aesthetic activities; they make possible realization of the relationship between the sensory and the logical; they encourage preschoolers' creative activities as well as their transition from reproductive to creative level.

Science-based and instructional framework for the mechanism of using distance education technologies in the course of implementing educational programs in preschool education included the following stages in 2016-2017:

- analysis of science-based approaches to the research problem as well as developing legal framework for the implementation of DET in preschool education;
- analysis of practices related to using existing distance technologies in the system of preschool education.

In the course of the analysis, the following data sources were used: data obtained from replies to informational letter by the Russian Ministry of Education and Science sent to the heads of executive educational departments in the regions of the Russian Federation; analysis and review of PEO websites; the authors' own professional experience, as well as data from research projects related to the context of introducing information and communication technologies.

RESULTS

The main directions of using DET and ICT are as follows:

1. Distance education technologies are partially used in developing and remedial work with the children of preschool age. It is the model of integrated distance insruction based on multimedia programs. The model is oriented towards self-education of both parents (legal representatives) and children; it involves the opportunities of conducting counseling sessions for educational process participants at their convenience (by making an appointment). Game therapy is the main form of remedial and developing work with preschool children. On the websites of Murmansk and Kemerovo regional PEO there are cognitive games, video presentations and links to websites on which parents may select game material for working with children at their convenience.

Classes with children do not only include presentations and video, but also involve using interactive whiteboards, interactive tables, video cameras (Krasnodar and Penza regions, the republic of Buryatia, the republic of Altay). Teachers use such technologies as designing, programming, automatic control over robotic devices, and various graphic editors.

Virtual tours seem to be interesting: they are presented as photo galleries according to specified routes for preschoolers and their parents (Krasnodar region, Kemerovo region). Distance Academic Olympics and contests for preschool children are held in the Republic of Sakha (Yakutia). On the website of virtual educational support center "Aartyk" there are additional Internet links, where assignments for children are presented.

Distance development classes according to Fundamental Program for Preschool Education are organized in preschool organizations of Perm region for 5-7 year-old children with special needs, as well as for children with disabilities. Virtual classes on design are conducted through *LEGO Digital Designer* software.

In educational organizations, individual remedial and development programs for children with disabilities aged from 5.5 to 8 years are implemented using DET in Yoshkar-Ola (the Republic of Mari El). Distance support via *Lekoteka* was arranged for children with special needs in the Chuvash Republic.

A *Lekoteka* branch has been based at state budget educational institution "Kurgan Regional Distance Education School" since 2013. This innovative form makes it possible to expand the opportunities for obtaining remedial care by children with developmental disorders of the musculoskeletal system, with autism spectrum disorders; the main purpose of the project is to provide families raising disabled preschool children and children with special needs with psychological and educational support. Educators conducted their work with children both directly and distantly, via the Internet using IP-technology (Skype).

PEO in the Chuvash Republic bought an interactive telepresence robot named *R.BOT* in order to organize distant support for children with special needs. A closed group "Academy for Parents - Consulting Center" was created in the social media VKontakte; in this group links to educational Internet resources, video materials prepared by PEO teachers are posted.

Counseling assistance to parents by PEO experts (education psychologists, speech therapists, special education teachers) is available in Vologda, Krasnodar, and Murmansk regions. In Iskitim (Novosibirsk region) parents are sent tasks or presentations, together with the corresponding teaching printables and explanations for performing the tasks by the children at their convenience.

Analysis of the conditions in which ICT and DET are implemented in the regions of the Russian Federation demonstrated that the bulk of the PEO (about 77%) are equipped with computers, multimedia projectors, TV sets with DVD players, printers, video and photo cameras. Educators use in their work interactive whiteboards and tables, designing, programming, automatic control over robotic devices, and various graphic editors.

Having analyzed the above-mentioned data, one can draw the following conclusions:

- organization of self- studying for preschool children outside the preschool institution is a way of using ICT;
- remedial and development work with children of preschool age is organized by means of using ICT within the system of preschool education of the regions of the Russian Federation;
- the principal forms of communication between teachers/educational workers and children are forums, social media, Skype, e-mail, presentations, video of classes, materials for teaching children posted by parents on PEO websites;

- there are teaching guidelines, videos of home classes, links to multimedia educational games on certain portals, pictures with tasks for preschoolers on PEO websites, though no feedback opportunity is available;

- some websites are just aggregators of resources that one need to download or print, because one cannot use them online;

- one may not characterize most websites as training systems; they are rather aggregators, collections of information from various sources; one cannot implement full-fledged educational program based only on these websites;

- DET are used only offline in order to conduct remedial and development work with preschool children.

2. Under the guidance of Professor, Doctor of Educational Science T. S. Komarova, *E-publish* company has been introducing science-based project called "Virtual kindergarten" into the practice of experimental PEO since 2012. This is an Internet-based multifunctional framework aimed at assistance with teaching materials, information, counseling, and communication to all those who have preschool children.

The information and educational environment "Virtual Kindergarten" was created within the project of the Russian Ministry of Education and Science "The development of educational Internet resources of new generation, including cultural and information services, systems of distance general and professional education (e-learning), among others resources for people with disabilities".

Preschool educational organizations operate and develop according to the same scheme in Moscow, St. Petersburg, and Krasnodar Region.3.

3. Organization of information and counseling support centers for parents is one of the most common directions of ICT use in preschool education system. The absence of face-to-face contacts between pupils/parents and teachers is a distinctive feature of this model. Organizers offer audio lectures, links to websites, counseling by e-mail, give explanations and recommendations at any time convenient for users.

The Federal Law No. FZ-273 of December 29, 2012 "On Education in the Russian Federation" stipulates the rights of parents who provide children with preschool education using the form of family education, who have the right to receive assistance associated with teaching methods, psychological assessment and counseling free of charge in preschool educational organizations, if the corresponding consulting centers were established in them (Article 64, paragraph 3).

The websites of Vologda, Kemerovo, Sverdlovsk, Chelyabinsk, and Omsk regions inform parents on the issues of upbringing, child development, organization of physical training and health improving activities, and diet quality. Project "Competence-oriented parent of Tambov region" based at the center "Vozrozhdenie" (Renaissance) is implemented in Tambov region; within the framework of this project, a network of consulting centers was created. There are quite interesting counseling and resource centers for parents of both sickly children and children living in remote remote rural areas in Tyumen region.

Automatic online system "Network City. Education" was established for the parents of children with special needs in Chuvash Republic. Project "Distance education and counseling for parents of preschool children" operates in Kirov region. Counseling center for parents of children receiving family preschool education works in Rostov region.

Summarizing the PEO practices related to the organization of counseling and information centers (CIC) for parents in the Russian regions, one can make the following conclusions:

- the main tasks of the CIC are to provide parents with assistance in terms of teaching resources and techniques as well as psychological support to parents in mastering modern technologies of child upbringing and development, to give psychological assistance to parents in overcoming their own psychological problems related to child-rearing, solving problems in child-parent relations, assisting in socialization of children who do not attend PEO;

- this form of interaction between PEO and parents does not use real time DET;

- CICs are created mainly due to PEO's initiative; the categories and content of sections on the website for parents are not regulated; there are no special sections with information for young parents; there is no uniform approach to registration and information updates.

- CICs are established at Institutes for the Development of Education (advanced training of teaching staff); adding the content to corresponding sections of websites, as a rule, is reduced to teaching guidelines and collections of thematic links;

- CIC activities are neither organized by municipal authorities, nor controlled by educational authorities (work is carried out via e-mail, Skype and forums on PEO websites).

Table 1. Models of distance learning implemented in the regions of the Russian Federation

| Forms of implementation	Mode of communication	Participants	Types of work	Regions of the Russian Federation
Model of integrated distance learning	Online (Real-time) Offline (Indirect mode of communication)	Preschool children who do not attend PEO Teachers Educational Professionals Parents (legal representatives)	Counseling sessions Instruction Remedial programs Play activities Development classes	Murmansk, Kemerovo, Arkhangelsk, Novosibirsk, Vologda regions; Krasnodar, Perm, Penza, Kemerovo, Kursk, and Kurgan regions, Republics of Buryatia, Altai, Sakha (Yakutia), Mari El, Chuvash Republic.
"Virtual Kindergarten" model (the Russian Ministry of Education and Science project)	Online (Real-time) Offline (Indirect mode of communication)	preschool children (attending and not attending kindergartens, children from family groups, children who receive preschool education in private kindergartens;	Instruction Remedial programs Counseling sessions (with teaching resources, information, and communication) Play activities Development classes	Moscow, St. Petersburg, and Krasnodar Region
Model of communication counseling and information centers for parents	Offline Indirect mode of communication	Parents of children who do not attend PEO Teachers Educational Professionals	Counseling sessions (with teaching resources, information, and communication)	Vologda, Kemerovo, Sverdlovsk, Omsk, Rostov, Kirov, Tambov, Chelyabinsk regions, and the Chuvash Republic.
Model of case-based learning Supplementary professional education	Offline Indirect mode of communication	Teachers Administration	Instruction Counseling sessions Advanced training	Arkhangelsk, Belgorod, Sverdlovsk, and Tambov regions
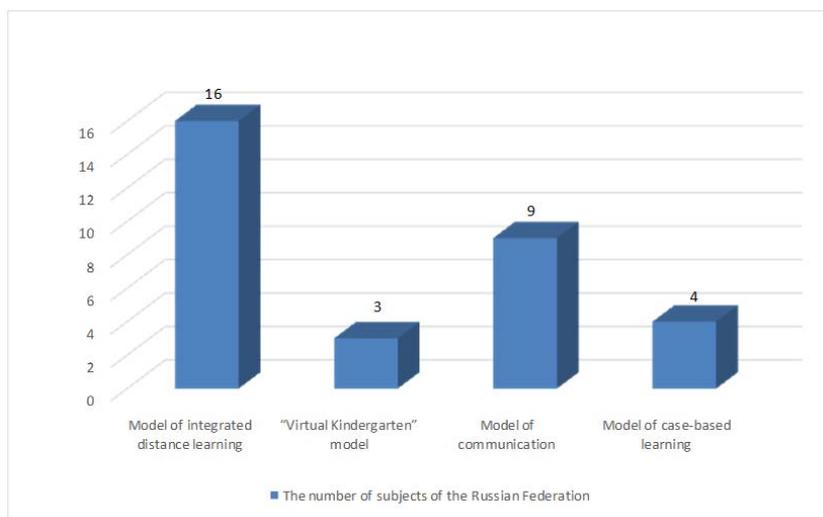
Figure 1. Models of distance education in preschool educational organizations implemented in the regions of the Russian Federation

4. Organization of supplementary professional education for parents is a common direction of ICT use in preschool education system. The model of case-based learning implies self-studying special sets of educational materials (cases, interconnected in terms of content) carried out by pupils. Regional distance education centers are structural units of state educational institutions of supplementary professional education (of advanced training and professional retraining) for educational professionals.

The data analysis on this issue presented in the official letters by regional authorities of the Russian Federation, made it possible both to study DET in the preschool education system and to identify the basic Models of distance learning (**Table 1**, **Figure 1**).

Table 2. The suggested matrix of models of implementing distance education techniques

Target groups	Children who study according to general educational program and receive supplementary education	Special education for talented children	Special education for children with special needs
Children	1. Children attending family groups 2. Children raised at home 3. Preschool children attending private educational organizations which do not implement programs of preschool education 4. Children undergoing long-term medical treatment 5. Rehabilitation centers for people (families) in difficult life circumstances 6. Russophone children living abroad 7. Children for whom the Russian language is not a mother tongue 8. Children attending educational organizations which lack members of teaching staff providing supplementary education Children attending short-term stay groups in educational organizations	1. Participation in Academic Olympics, quizzes, competitions; 2. Receiving supplementary instruction by teacher using proprietary teaching techniques;	1. Children with special needs attending educational organizations which lack such professionals as special education teachers and speech therapists; 2. Children with special needs raised at home; 3. Children attending family groups of organizations of supplementary education:
Parents	Parents of all mentioned groups of children Parenting counseling (separately from children) on issues interesting for parents		
Teachers	1. PEO staff which lacks some specialists; 2. PEO staff of rural kindergartens; 3. Highly-qualified professionals who give master classes for teachers; 4. Mentoring schemes for young teachers; 5. Assessment of teacher's qualification 6. Tutors for children with special needs		

In general, the entire process of using DET can be subdivided into two large groups:

- online method involves using both two-way communication and only online streaming;

- offline method implies posting video and educational resources for teachers and parents on educational portals.

We used the following equipment for the experiment with implementing DET and organizing video broadcasts: a laptop; varifocal wide-angle IP-video camera; microphone; audio mixer; high-speed Internet connection.

Rather low requirements to equipment availability allow almost everyone to connect to the portal and use its resources for educating preschool children.

DISCUSSION

Let us review the key ideas suggested by scholars on the relevance of using DET in the system of preschool education in the course of implementing educational programs.

Lizunova (2009) studied the problem of remediation of language impaired 6-7 year-old children by means of using computer training tools; she also developed a special teaching technique based on original proprietary computer program "Games for Tigger".

Babaeva and Voiskunsky in their book "The gifted child at the computer" examine classical and modern perspectives on the phenomenon of giftedness, as well as the use of information technology for teaching gifted children. The scholars analysed both positive and negative aspects of using information technology by preschool children and teenagers (2003).

A participant of international academic conference "Engineering Science in Russia and Abroad" held in Moscow in 2012 suggested an idea to develop intellectually stimulating computer games for preschool children (Yavich, 2012). This idea was supported in the studies by Zvorygina who believes that preschoolers need games with cognitive benefits. Such games will increase the opportunities for DET in child education; in boosting children's intellectual capacity; in developing logical thinking in children; in organizing conditions for self-directed creative work (preferably under adult supervision); in obtaining intellectual multimedia information about different countries, peoples' customs, natural phenomena, etc. by the child. DET allows the child to hear the languages of different peoples of the world while playing games (Zvorygina, 1990; Makalatia, 2003).

Psychological and instruction techniques-related peculiarities of using computer games, ICT, distance education technologies are of interest for Smirnova and Radeva (2000) – the scholars, who saw in them a new context of children's subculture.

However, in practical terms, the introduction of distance education technologies to preschool education in Russia comes with price of many difficulties, namely: the lack of learning resources and teaching aids for implementing DET, including the development of materials and educational games based on packages for general use; as well as programs for presentations and animation in order to develop preschoolers' language skills, memory, attention, motor skills, etc. Today, there is no framework of requirements for using DET in organizing work with children of preschool age in the course of implementing educational programs.

CONCLUSION

The necessity to use DET for implementing educational programs in the system of preschool education is not only the imperative of our time, but also the need of development-oriented system.

We consider that the advantages of using DET in comparison with traditional teaching techniques in preschool education organizations are as follows:

Providing preschool children with the opportunity to master educational programs just where they live or temporarily stay;

- increased enrollment of preschool children, among other things due to greater number of children from remote areas (where educational specialists are unavailable); or children who did not get a place in PEO;

- intensification of using scientific, teaching technique-related and technical potential for providing parents and children of preschool age with counseling;

- Increased efficiency of PEO specialists' work with children with special needs, children with disabilities, talented children;

- animated cartoons, dynamic images, sounds attract children's attention for a long time and contribute to their interest in the studied material, the development of their memory, imagination, creativity; high speed of the lesson facilitates effective assimilation of learning material;

- video segments, slide-shows allow to demostrate those moments from the world around, the observation of which in nature is difficult: for example, flower growth, wave motion, rain, rotation of planets around the Sun;

- it is possible to simulate life situations that are impossible or difficult to demonstrate and see in everyday life (for instance, reproduction of nature sounds, work of transportation system, etc.);

- IT use encourages children to carry out research activities, including web search by themselves or together with their parents.

The development of distance learning system for preschool children will require a lot of efforts by scholars, education administrators, teaching guideline developers, and, of course, teachers themselves. These efforts will be directed at improving the legal framework of distance education for preschool children, extending material and technical resources of PEO, developing and implementing teaching guidelines for teachers and advanced training courses. Work in this direction will be efficient if one considers distance education not just as one more fashionable innovation, but as activities aimed at achieving the final results - improved quality of and access to preschool education for all categories of children. Distance education in addition to traditional forms of education will allow preschool education to meet the neem demand of the society.

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