The Specificity of Preparing Students at Pedagogical Universities for Educational Activity in the Digital Epoch

Oksana B. Petrenko[#,*], Tetiana S. Tsipan[#], Zhanna H. Stelmashuk[#], Nadiia M. Hrynkova[#] and Liudmyla M. Balika[#]

Rivne State University for the Humanities, Rivne, Ukraine

Abstract: *Objective*: the study is aimed at analysing the problems of forming the skills of educational activities of an individual, leading approaches that outline the range of solutions to education problems, features, and possibilities of these approaches to elucidate the totality of effective methods and techniques for special education pedagogical specialties in students.

Background: education in higher education institutions (HEI) or another educational institution is based on the formation of an individual who has achieved the basic characteristics of his development in the process of professional development and in the framework of cooperation.

Method: the experimental method was used in work during 2014-2019, in which 219 students of experimental groups and 213 students of control groups participated.

Results: The authors determined the possibility of using student training tools as a specialist and a socially responsible person using pedagogical tools implemented in a digital educational environment.

Conclusion: Students can be trained in pedagogical higher education directly using digital technologies. Thus, working with similar technologies will not require additional training in the implementation of practical work in further professional activities.

Keywords: Digitalisation, scale of behaviour regulators, emotional and motivational readiness, pedagogical work with parents.

INTRODUCTION

The modern education system of the developed democratic community is designed to meet personal, educational needs of an individual, including the need for a full and diverse personal formation and development – taking into account personal inclinations, interests, motives, and abilities (personal success); the need for the organic entry of an individual into the social environment and fruitful participation in society (social success); an individual's need for the development of universal labour and practical skills, readiness for choosing a profession (professional success). Creating opportunities at universities to meet these individual educational needs is becoming the basis for building many educational systems around the world. However, there are groups of students whose educational needs are not only individual but also have special features. Special educational needs arise in children when in the process of their education, difficulties arise in mismatching children's abilities with generally accepted social expectations, school educational standards of success, and norms of behaviour and communication established in society.

The axiological approach in education directs professors of higher educational establishments to the awareness of the importance of the development of students' needs to be an individual, while the individual himself acts as the highest value of the society and the end of social development in itself [1]. The application of gender approach provides an opportunity to identify significant hidden contradictions in the curricula and plans of educational work, designed for the adoption of a certain position by the individual – dominant position from the side of the male individual, and subordinate from the side of the female individual, which in the future prevents female self-realization [2]. The differentiated approach provides an opportunity to take into account both the gender and age characteristics of students and their individual psychological qualities in the formation of skills of educational activity, which forms the basis for the development of diagnostics of levels of moral and ethical culture, the organization of education of students in group and micro-groups for the performance of the tasks developed based on relevant levels [3]. The study of research papers in which the dialogical approach is revealed is of particular importance for rethinking the essence of ethical thinking; to explain the contradictions in the internal and personal dialogue and contrasts in the interpretation in different cultures of the criteria for the truth of the categories of good and evil; to reveal the art process of creating ethical codes and guidelines.

*Address correspondence to this author at the Rivne State University for the Humanities, Rivne, Ukraine; Tel: +38(068) 959 88 76;
E-mail: oks-petrenko@nuos.pro

[#]These authors are equally contributed.

The research reveals the essence of the personal approach, which allows one to influence every student and to ensure purposefulness in the formation of skills of the educational activity of the individual [4]. Based on the analysis of research papers, it is revealed that actualization of the problem of formation of skills of educational activity at future teachers is caused by the increase of requirements of the society to a teacher, his moral development and moral competence; the influence of modern trends aimed at the destruction of moral values or their replacement by others. The analysis of the development of the formation of skills of educational activity showed that at the present stage the following trends were important [5]: change of traditional ideas about the goals of moral education and ethical values in the teaching profession; the focus of the national system of education of students on the development of personality, prompting many scientists to rethink the role, purpose, and content of the formation of skills of educational activity of the individual.

The inclusive approach to education began to establish itself due to the fact that in the modern society the "medical" model, which defines disability as a violation of health and limits the support of people with disabilities to the social protection of the sick and the disabled, the "social" model comes, which states:

- the cause of the disability is not in the disease itself;

- the cause of disability is the physical ("architectural") and organisational ("relational") barriers, stereotypes, and prejudices existing in society.

- A social approach to understanding disability is enshrined in the UN Convention on the Rights of Persons with Disabilities (2006): "Disability is the result of the interaction that occurs between people with health problems and relational and environmental barriers and which prevents their full and effective participation in society on an equal basis with others".

The scientific facts and empirical observations given by the authors testify to the formation of skills of educational activity as the phenomenon of transformative activity, the results of which are characterized by purposefulness in the embodiment of a set of ethical universals of high social and personal meaning [6]. The values of the teaching profession (teacher's justice, professional honour, and dignity, pedagogical authority, pedagogical love, moral responsibility) should be protected by relevant legislative documents in the field of education, science and culture. To prevent their destruction, it is advisable to introduce comprehensive programs that will help every future teacher to identify the place of values of the teaching profession in their own development and the development of the society.

The main purpose of the work is to study the specifics of training students with disabilities in higher pedagogical education institutions, taking into account the characteristics of the digital epoch.

LITERATURE REVIEW

Based on the analysis of the research by philosophers, the scale of rational approaches to the definition of a person's place in the society defining the directions of the very process of perfection is built. According to the theory of dynamical systems, this scale, in addition to the central and opposite points, contains numerous values that inseparably connect these approaches in a certain sequence [7]. From focusing the student's attention on strict observance of moral norms and ethical traditions of an individual community to the education of a responsible person to subordinate their own interests to the moral and ethical requirements of society, world, to free use of ethical principles and behaviour rules in private life, obedience and organization of environment for achieving one's own goal without taking into account moral requirements of the society and abandonment of society in general for the sake of self-improvement [8]. The last thesis is related to the change in the requirements of modern society, the vector of educational influence of teachers, primarily aimed at the central point of the imaginary scale of rational approaches in the education of the person who recognizes the value of his own life, understands his purpose and acquires during the moral and ethical development of prudence, peacefulness, sympathy [9]. The complexity of this task lies in the fact that future teachers, as subjects of the pedagogical activity, during professional training, identify various weak points without perceiving them as shortcomings in their own development [10]. Therefore, the study of situations in which the deviations and weak points of the subjects of pedagogical activity are revealed in the actions and behaviour and carry out a projection on the environment's behaviour should be considered a priority direction of research [11].

The modern system of attitude to people with disabilities seeks to provide not just social protection but also full integration into all spheres of society. A necessary part of this process is ensuring access to skilled, highly paid, and prestigious work, which in turn is impossible without obtaining a high-quality professional education. The close relationship between the education of a disabled person and the degree of his participation in society is recognised in world practice. In this regard, in recent years, the special attention of both the professional-pedagogical community and civil society institutions has been turned to the problem of inclusive education of disabled people and persons with disabilities in the system of general and professional education. It is educational inclusion that meets the ideology as much as possible, which eliminates any form of discrimination against people with disabilities and affirms equal treatment of all people, but creates the necessary conditions for people with special educational needs. Attention to this issue is due to the fact that it is educational inclusion that is rightly regarded as the most important mechanism of social inclusion [11]. In the course of the theoretical and methodological analysis of research papers of cultural direction, revealing in historical terms the creation and promotion of moral and ethical values, their influence on the relationship in different societies and social groups between mentors and students also has two opposite poles: the pole of socio-cultural statics (mass culture) and the pole of socio-cultural dynamics (elitist culture), which nourishes popular culture and its development as such [12]. Generalization of research papers on the influence of culture on the moral and ethical development of the individual allowed to reveal how different forms of culture, which contain high moral role models that influence morality, focus pupils on the assertion of universal and national values. Such a position of true morality, which ensures the development of society as a whole and every individual, in particular, makes it a centroid for our research, that is, a central point [13].

The analysis of psychological and pedagogical research papers allows us to build a scale of choice of regulators of students' behaviour which covers the sphere of formation of skills of educational activity of the individual. On the one hand, this is the choice of violent methods for subordinating students to the general goal of development of the society, authoritarian style of communication, and on the other hand, manipulation of consciousness, that is, the justification of their negative traits and their substitution by a positive, liberal style of communication. The central point of the scale of choice of regulators of students' behaviour, in our opinion, is the partnership character of communication among subjects of education, democratic style of management of educational process and the correspondence of the moral word to the moral action of the teacher, since it is the act of the teacher that demonstrates the example of behaviour to children and students [14]. Given a combination of three lines (scales of rational approaches in education, scales of the attitude of the teacher to the influence of culture on the consciousness of students, scales of choice by the teacher of regulators of students' behaviour in the professional activity) with the central point of intersection, we consider it as a parallel projection to mark the area of formation of skills of educational activity of the individual. This area, in our opinion, is an imaginary reflection of the dynamic system that provides an opportunity for the development of educational activities of students of pedagogical establishments [15].

The purpose of formation of skills of educational activity in students of pedagogical higher educational establishments should be the preparation of the specialist who can think ethically, make a moral choice, make moral decisions; ready for active work on self-improvement of moral qualities; educational activity with children and students; able to show a sense of deep attachment to the environment and commission of a moral act. Tasks of formation of skills of educational activity of future teachers of any specialization and the direction of professional training are: increase of the culture of ethical thinking, ensuring positive motivation for self-improvement; inclusion in the process of interaction with the environment for the formation of the ability to express feelings of deep heart affection, a commission of a moral act and reflection of moral and ethical experience; development of special skills of students for making moral choices, moral decisions, development of effective methods and techniques of educational work; formation of readiness for self-education and educational activity with children and students.

MATERIALS AND METHODS

According to the purpose of the forming experiment, the following tasks, which had to be solved during its conduct, were determined: to confirm the feasibility of introducing digital methods in the educational process for the training of teachers with disabilities experimentally; to check the effectiveness of the

introduced content experimentally, forms and methods of training future teachers to work with parents in the environment with different levels of educational competence in the conditions of the educational process of a pedagogical higher educational establishment; to reveal the dynamics of growth of indicators of readiness of future school teachers to work with parents in the environment with various levels of educational competence. Theoretical research methods have made it possible to determine that the three components of the digital society are the factors generating the need for building the digital educational process of vocational education and training:

-      digital generation (a new generation of students with special socio-psychological characteristics);

-      new digital technologies that form and develop a digital environment;

-      the digital economy and the new staffing requirements generated by it.

The forming phase of the research took place during the 2014-2019 academic years. At this stage of the research, 219 students of experimental groups and 213 control groups participated. The forming experiment was carried out using experimental materials. The analysis of the effectiveness of the content, forms and methods of training introduced during the forming experiment (four operational units: cognitive, emotional and motivational, procedure and activity, evaluative and corrective; the set of forms of the educational process: specialized special course and forms of extracurricular, educational work: problematic group, quiz-type, and business games) was carried out in the following sequence: description and generalization of empirical data, construction of frequency and percentage distributions (by each of certain criteria of formation of readiness of future school teachers to work with parents in the environment with various levels of educational competence) and relevant indicators; graphical representation of the results and their analysis.

During the introduction of the specialized academic course "Psychological and pedagogical bases of the interaction of the teacher with parents in the environment with various levels of educational competence" in the educational process of the higher educational establishments, the main principle of selection of theoretical and practical material was that they should be interesting both for future teachers and

useful in their further professional activities, that is, it could be used in planning the educational activities with parents of younger students. The first stage of the forming experiment was the formation of students' concepts of modern diversity and processes that occur, the content of family education, forms and methods, and individual work with parents in the environment with different levels of educational competence. For this purpose, a module with lectures was held. During the lecture sessions, it was important that students with disabilities not only write down the lecture material but also define the proposed concepts on their own and reveal their essence. As shown by the experiment results, this significantly contributed to the activation of students' cognitive activity, their realisation of the importance of the problem of the work with parents of younger school students in the environment with different levels of educational competence, and pedagogical work with them. We have identified the following stages of formation of knowledge necessary for professional activity:

-      initial (students start to realize the purpose of the activity and the search of ways to perform it);

-      theoretical and motivational (evaluation of the importance of the main qualities and properties of the teacher, necessary for pedagogical activity, the importance of theoretical knowledge for productive professional activity);

-      main (mastering by students the primary expertise required for professional activity, mastering the main directions of pedagogical work and acquisition of education for the organization of this work);

-      practical and creative (application of acquired knowledge in practice).

The next stage of the experiment was held in practical classes. The main task of practical classes was the formation of students' relevant skills, namely to be able to find an approach to the different typology of families, to select forms and methods of work with parents, to conduct pedagogical work with them, to be able to properly interact with representatives of different typologies of education on the principles of humanism and tolerance, to hold parent-teacher meetings, thematic evenings for parents and develop the culture of parents regarding the upbringing of children. An important role in the formation of students' ability to analyse various pedagogical facts and carry

out correct, pedagogically substantiated practical actions was played by the solution of pedagogical tasks. They implied the analysis of various facts and situations requiring consideration of students' conditions and individual features and ensured the transformation of theoretical knowledge into practical skills. The emotional and motivational component of the readiness of future school teachers to work with parents in an environment with different levels of educational competence was formed in practical classes, at which various pedagogical situations were solved and created by students, various ways and conditions of their solution were discussed, the optimal psychological climate in the student team was created, which ensured the formation of each student's sense of responsibility for the performance of his professional duties, motivational attitude to the acquisition of knowledge and skills of working with parents.

Forms of classes made a variety, situations of success were created, and students' individual features were taken into account. An important pedagogical condition was to ensure internal, professionally significant motivation. The main motivational factors were awareness of the importance of working with parents in the environment with different levels of educational competence and interest in this work. The means of control were oral questioning, conversations, individual work, discussions, analysis of pedagogical situations, protection of projects. The ultimate control is testing. To establish reliable differences between the experimental and control groups, we used F-test, which is calculated by the formula:

$$\varphi^* = (\varphi_1 - \varphi_2)\sqrt{\frac{n_1 n_2}{n_1 + n_2}} \tag{1}$$

where φ_1 is the value corresponding to the percentage factors of formation of readiness of future teachers to work with parents in the environment with different levels of educational competence in the experimental group; φ_2 is the value corresponding to the percentage factors of formation of readiness of future teachers to work with parents in the environment with different levels of educational competence in the control group; n_1 is the number of students in the experimental group; n_2 is the number of students in the experimental group.

RESULTS AND DISCUSSION

Improving technical capabilities, high-tech equipment lead to the improvement and continuous

modernization of information and communication technologies, digital devices that are used daily in the life of a modern person. The constitutional document, which enshrines the international community's desire to maximise the integration of people with disabilities, is the Convention on the Rights of Persons with Disabilities of the United Nations General Assembly of December 13, 2006 [16]. The Convention on the Rights of Persons with Disabilities states that all participating countries should provide inclusive education at all levels, including at the level of higher education. It defines the main guidelines for inclusive education. In accordance with the Convention, education should be aimed at:

-    the development of mental and physical abilities to the fullest extent;

-    providing disabled people with the opportunity to participate effectively in a free society;

-    access for persons with disabilities to education in their places of direct residence, which ensures reasonable satisfaction of a person's needs;

-    the provision of effective individual support measures in the general education system, facilitating the learning process;

-    the creation of conditions for the development of social skills;

-    training and retraining of teachers.

When comparing the obtained calculations with the limit values of the F-test, we found that there were no significant differences in the experimental and control groups (high level – $\varphi=0.15$ at $p<0.05$; medium-level – $\varphi=0.28$ at $p<0.05$; low level – $\varphi=0.97$ at $p<0.05$. The analysis of the results proved that at the beginning of the experimental work, the differences were statistically significant; therefore, one can consider these groups comparable. In the control groups, the professional training of future school teachers with disabilities occurred according to the current system according to the educational and qualification characteristics and the training program of bachelor's. The introduction of the structural and functional model of the process of formation of readiness of future school teachers of the first stage to work with parents in the environment with different levels of educational competence was obtained from different sources. Their systematization was carried out at first by each component and then by the success of complex tasks. The general

characteristic of the data obtained in this way makes it possible to assert that: in the experimental groups, the increase of the number of students with a high level and the decrease in the group with a low level of the formation of readiness of all components were recorded.

Inclusion is aimed at improving the quality of education, training, and socialisation of all students, not just students with disabilities. Inclusive education necessarily involves creating a flexible, adaptive educational environment that can meet all schoolchildren's educational needs. Therefore, to

obtain a fully-fledged education by people with disabilities, assistive technologies are now created and used, which are devices aimed at providing comfortable conditions in everyday life. So, for visually impaired and blind students, technical means of communication are used in auditory and tactile modalities: text-to-speech programs, or text-speech convectors, speech synthesisers that can voice a label on some images. At the beginning of the formation in the experimental groups, only 14.61% of students showed a high level of formation of the cognitive component of the readiness of future teachers, then after the experiment, such students were already
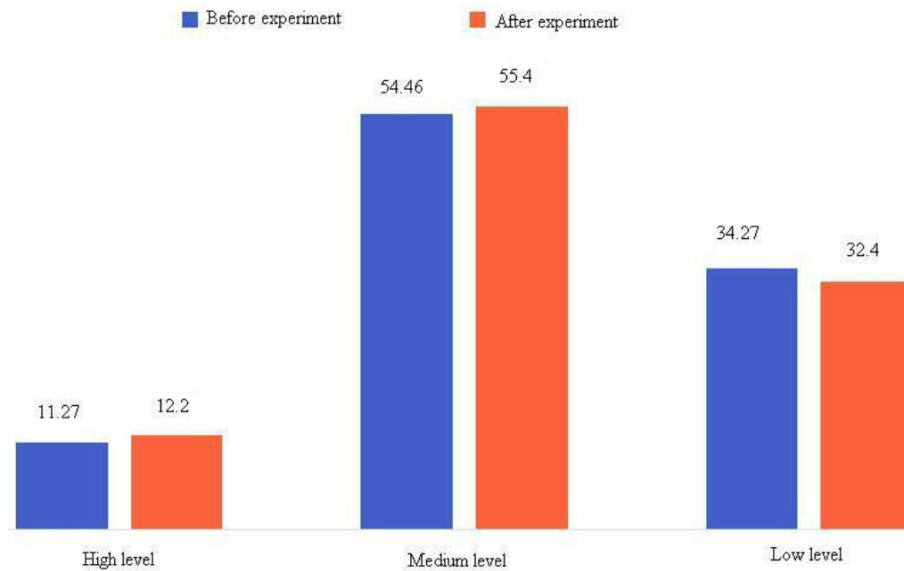

Figure 1: Dynamics of assimilation of socio-pedagogical, psycho-pedagogical, and methodological knowledge by students of the control group (CG) before and after the forming experiment.
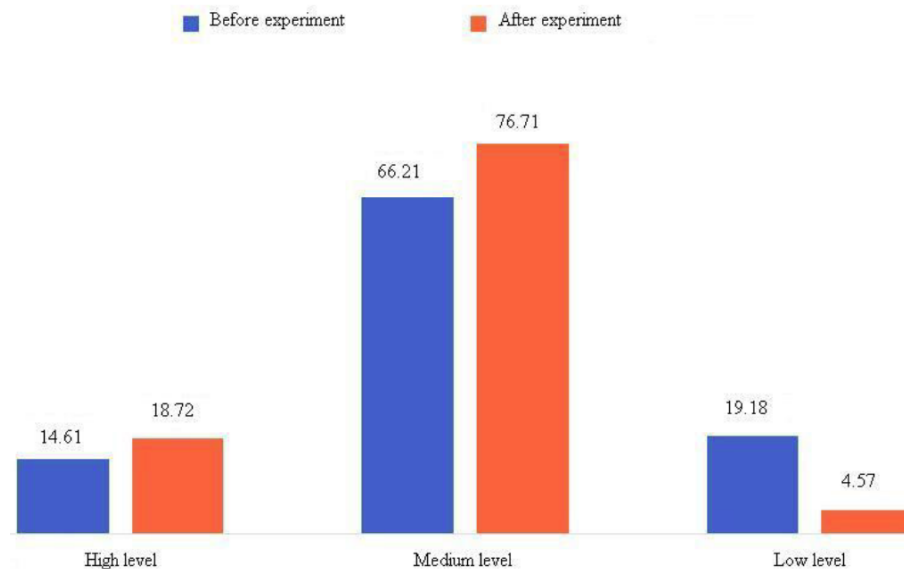

Figure 2: Dynamics of assimilation of socio-pedagogical, psycho-pedagogical, and methodological knowledge by students of the experimental group (EG) before and after the forming experiment.

18.72%, but the number of future teachers with a low level of formation of the cognitive component decreased from 19.18% to 4.57%. Simultaneously, there were no statistically significant distinctions between the results before and after the experiment in the control groups. The dynamics of assimilation by future school teachers of socio-pedagogical, psycho-pedagogical, and methodical knowledge about specifics of teacher's work with the parents in the environment with various levels of educational competence before and after the forming experiment is presented in Figures **1** and **2**.

If before the beginning of the experiment in experimental groups 8.22% of the tested students demonstrated a high level of formation of personal, socially directed as well as professionally and pedagogically directed qualities, as well as the presence of stable professional motives, then after the experiment, such students with disabilities were already 12.78%, but the number of future teachers with a low level of formation of the emotional and motivational component decreased from 35.62% to 13.7%. Statistically significant differences between experimental and control groups of students by the level of formation of the emotional and motivational components are revealed (Figures **3** and **4**). Teaching people with disabilities contributes to their socialisation in the university environment and beyond.
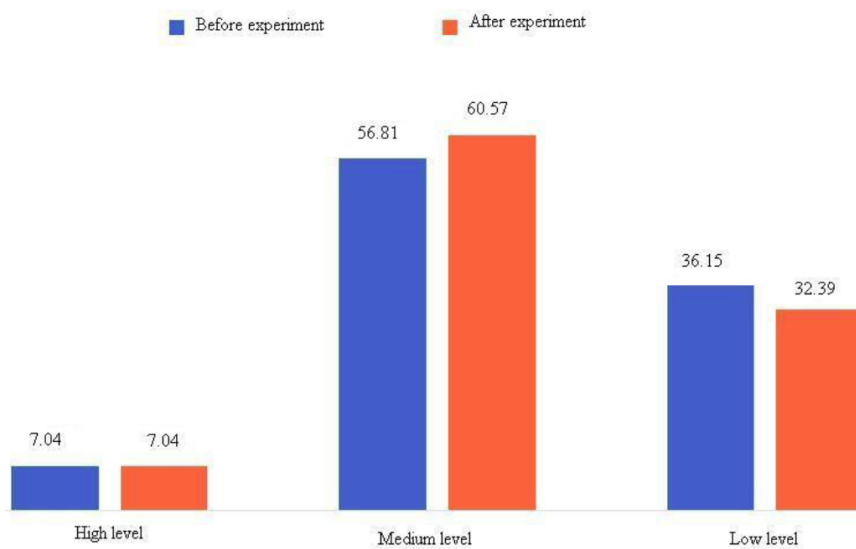

Figure 3: Dynamics of the formation in future teachers of CG personal, socially directed, as well as professionally and pedagogically directed qualities before and after the forming experiment.

Figure 4: Dynamics of the formation in future teachers of EG personal, socially directed, as well as professionally and pedagogically directed qualities before and after the forming experiment.
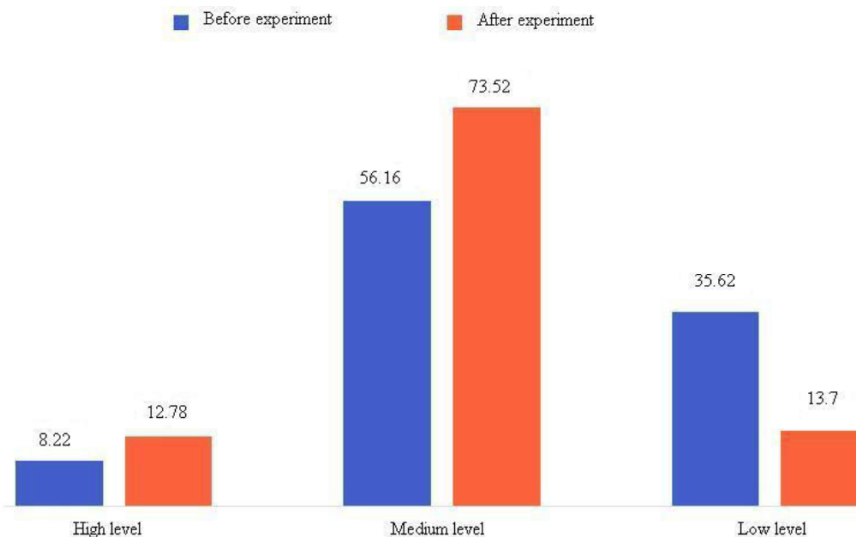
It is the projecting and holding parent-teacher meetings that helped students realize the system's knowledge, see their applied character, and form the ability to project this type of work at the didactic level. A questionnaire survey revealed a problem field related to the education of students with disabilities. The questionnaire was attended by 42 teachers and 74 students with disabilities. In the course of the study, the authors analyzed professors' attitude to the fact that students with disabilities receive higher education. It has been established that: 95% of respondents have a positive attitude; indifferent – 4; taken for granted – 1%. The vast majority of professors have a positive attitude towards the education of disabled people at a university, which should contribute to the successful adaptation of this category of students in a university environment. A study of professors' awareness about students with disabilities in their groups showed that: 85% of respondents know that people with disabilities are studying in their study groups; no – 9%; I don't know – 6%. These data indicate that teachers are sufficiently informed about the presence of students with disabilities in academic groups. At the same time, 39% of respondents said they need additional information about students' characteristics due to disability; 50% said there is no such need; 11% found it difficult to answer.

For students with visual impairments, programs are actively used with the help of which information is read – "Screen reader". A special role in the educational system for blind, partially impaired and partially sighted children is played by audio material, which, depending on specific educational tasks, can be designed as an audio lecture, audio simulator, audio test or audio manual. In the practice of teachers, "Go Tok" speech simulators are actively used – they perform the functions of a speech simulator and means for elementary speech communication and are intended for the assimilation, development or restoration of speech skills either with the help of a specialist or independently. The device has a voice recorder with which it is possible to record or play pre-recorded sounds. Digital technologies make a huge contribution to overcoming educational and social barriers; they have already become familiar with daily tools for solving simple problems in an inclusive education situation. For example, group blogging takes on additional meaning, because this creates a platform for equal communication of the entire group of students, including those with whom it is physically difficult to

communicate in school. The use of various educational platforms helps track each student's progress, in which there are different educational needs.

Today it is unthinkable to talk about the quality life of people with disabilities without the use of special technical means, depending on the type and degree of functioning restrictions. The technological industry offers various modifications of keyboards and manipulators for people with disabilities of the musculoskeletal system, tactile and audio displays for blind users, Braille monitors, and specialised mice for people with hearing and speech impairments. In aid equipment, the 3D printing industry is actively used, for example, in the preparation of embossed photo albums and the creation of Braille texts using 3D printers. And the latest technology is tactile holograms for creating touchable three-dimensional objects. This technology is based on ultrasound focused on a device. Sound waves are perceived tactilely, and when viscous liquids, such as oils, are added, the displayed three-dimensional models become visual.

It should be noted that today in educational organisations, including specialised educational institutions, teachers create a special educational environment through the use of information and communication technologies, including digital educational resources, distance learning, the use of special educational platforms and portals, etc. In 2017, Futurelab research centre published a brochure on the use of digital technology in inclusive education in the UK. In addition to methodological recommendations, it presents various examples of how technologies help implement an individual approach to learning and involve all students in creative projects because modern technologies help people with disabilities create joint projects. The work on the use of distance learning, when working with students with disabilities, is aimed precisely at solving such problems as: creating conditions for full education without any restrictions, providing individual educational support based on inclusive approaches. People with special educational needs obtaining a fully-fledged barrier-free education are the key to their successful socialisation. Mastery of modern information and digital technologies by pedagogues is not only a tribute to fashion but an urgent need to organise the educational process in inclusive conditions. A pedagogue cannot work in conditions of global informatisation without constant self-improvement and self-development. Currently, active work is underway to improve the qualifications and professional retraining of a huge number of

teachers, both in-person and remotely. University teachers and school teachers intensively master interactive teaching technologies: case studies, training, game design, as they develop not only basic competencies, but also a student's meta competence.

The development process of inclusive education, the modernisation of its structure and content remain relevant at present. Equipping educational institutions with modern technical equipment is an integral part of the modernisation of the educational environment when organising an inclusive process, ensuring accessibility for children and adults with different needs and individual developmental characteristics. The purposeful use of the capabilities of modern digital technologies by a pedagogue will contribute to effective work to overcome violations of psychophysical development, and the improvement of the technical capabilities of digital technologies will allow addressing the issues of successful learning and adaptation in society, taking into account the needs of each option of dysontogenesis and each student with disabilities. Thus, pedagogical evaluation and analysis of the results of the level of formation of readiness of future school teachers with disabilities to work with parents in the environment with different levels of educational competence by all criteria, indicators, and levels were conducted. The data obtained in the result of ascertaining experiment of the research for CG and EG (%) and the dynamics indicators are presented in Table **1**.

Therefore, the effectiveness of the introduction of content, forms, and methods is convincingly evidenced by the dynamic growth in the experimental group of the number of students who have mastered knowledge and skills of working with parents in the environment with different levels of educational competence of high and medium levels. To determine the reliability of the results obtained, we used statistical processing methods at the end of the experiment. The determination of the F-test allowed revealing the distinctions between the results of experimental and control groups. The analysis confirmed that the differences found in the experimental and control groups were statistically significant (high level – $\varphi=2.8$ at $p<0.05$; middle level – $\varphi=1.16$ at $p<0.05$; low level – $\varphi=1.64$ at $p<0.05$).

Proposals for organising more effective work with students with disabilities can be systematised as follows: work with students in special (correctional) educational institutions for conducting vocational guidance work; direct work with students with disabilities: the organisation of volunteer assistance to students with disabilities; providing students with disabilities with information about their rights and benefits; holding monthly meetings with the participation of disabled professionals of various professions; conducting periodic surveys of students with disabilities to collect information about their needs in organising special learning conditions; providing psychological support to students with disabilities; work

Table 1:   Evaluation of the Formation of Readiness of Future School Teachers to Work with Parents in the Environment with Different Levels of Educational Competence

Criterion	Levels	213 people		Dynamics	219 people		Dynamics
		CG before experiment	CG after experiment		EG before experiment	EG after experiment	
Cognitive	High	11.27 (24)	12.20 (26)	0.93	14.61(32)	18.72(41)	4.11
	Medium	54.46 (116)	55.40(118)	0.94	66.21(145)	76.71(168)	0.5
	Low	34.27 (73)	3.40 (69)	-1.87	19.18(42)	4.57 (10)	14.61
Emotional and motivational	High	7.04 (15)	7.04 (15)	0	8.22 (18)	12.78 (28)	4.56
	Medium	56.81 (121)	60.57 (129)	3.76	56.16 (123)	73.52 (16)	17.36
	Low	36.15 (77)	3.39 (69)	-3.76	35.62 (78)	13.7 (30)	-21.92
Procedure and activity	High	6.10 (13)	7.04 (15)	0.94	13.24 (29)	16.44 (36)	3.2
	Medium	54.0 (115)	54.46 (116)	0.46	55.71 (122)	71.23 (156)	5.52
	Low	39.90 (85)	38.50 (82)	-1.4	31.05 (68)	12.33 (27)	18.72
Evaluative and corrective	High	3.75 (8)	4.23 (9)	0.48	5.02 (11)	12.79 (28)	7.77
	Medium	57.75 (123)	60.09 (128)	2.34	62.56 (137)	79.45 (174)	16.89
	Low	38.50 (82)	35.68 (76)	-2.82	32.42 (71)	7.76 (17)	4.66

with teachers of the departments: informing about the presence of students with disabilities in academic groups, about the features and difficulties of teaching students with disabilities at a university, the organisation of advisory and methodological work with teachers; improving the methodological and material-technical support of the learning process for students with disabilities: creating specialised sources of information, providing students with disabilities with special teaching aids; work with parents of students with disabilities: counselling parents on issues of obtaining higher professional education for people with disabilities, developing communication and autonomy skills among people with disabilities; organisation of work to create an information field on the activities of the Centre, as well as on disability issues: presenting the experience of the Centre.

Among the special conditions, the following are distinguished: conditions related to the material and technical support of the educational process: special literature for blind and visually impaired students, technical teaching aids for individual and collective use, teaching materials on electronic media; conditions associated with the organisation of psychological and pedagogical support for students with disabilities: individual lessons with a teacher, educational counselling, psychological support, varying forms and methods of work, the creation of special groups of students with disabilities, taking into account the leading disability.

Among the main difficulties, pedagogues distinguish the following: a low general educational base of students with disabilities, an overestimated assessment of their abilities, results, and quality of work, frequent complaints of difficulties, the requirement of condescension to disability and the expectation of help, a high level of infantilism, the resentment of students with disabilities when making contact, the desire to blame others for their misfortunes. Thus, the main mass of difficulties arising in the process of teaching students with disabilities, pedagogues associate with the psychological characteristics of students.

DISCUSSION

Every day, information technologies penetrate more and more into various areas of educational activity. Introducing information technologies in the educational process suggests that the use of their unique capabilities in special education areas will be subordinated to the task of the maximum possible development and correction of secondary disorders in children with physical and psychological characteristics [17]. X. Ren believes that digital technologies provide many opportunities for improving education, but their integration into the educational process is far from simple. The equipment of educational institutions of digital technologies in itself does not lead to an increase in educational results. The digital transformation of education can be imagined as a solution to the problems of bridging the digital gap. At its core, the education system is an information product that is always carried out in the information environment. Recent decades have seen a transition from a "paper" to a "digital" information educational environment. At different stages of development, this transition was called computerisation, informatisation, and today – digitalisation of the corresponding field of human activity [18]. There are many interpretations of inclusion in the literature, which, although they point to certain aspects of the ideological foundations of this process, do not make it possible to describe the characteristic features of the ideology of this stage of reforms, not limited to the field of education, but applicable to the processes of social integration as a whole. It makes sense to briefly dwell on the main approaches, the distinction of which is also significant in the review of e-inclusion by C. Abbott that was chosen as a reference point [19], which allows more accurately formulating those aspects of the problem of determining e-inclusion that will be considered further.

G. Itterstad [20] believes that the principle of inclusion continues the school reform of the 1970s, aiming to ensure the integration of children with disabilities into the "normal" classes of schools by place of residence. She sees the problem arising from this reform in that integration was seen as the task of an individual or a group of people who were supposed to adapt to a mass school's conditions. Whereas inclusion is aimed at changing the conditions of study in schools so that these conditions themselves are adapted to the needs of all categories of students. According to G. Itterstad, there is a certain contradiction between the requirement of inclusion, which implies the adoption of all students' characteristics, including students with mental retardation, and the continued orientation towards school achieving high academic results. G. Itterstad sees the essence of averaging attitude towards them, that is, non-acceptance of their characteristics in focusing on the same performance criteria for all students within the framework of the general program

[20]. The necessity for the school to strive for a high rating in academic performance is, according to Abbott [4], a problem for the successful implementation of the inclusion policy in the UK as well.

Apparently, the recent work [21] devoted to using digital technologies for the training of persons with intellectual disabilities in the preparation of narrative utterances, including greetings, main contents, and conclusions, is in the same vein. Trained persons willingly demonstrated the acquired skills to their communication partners. This work noted that among the special conditions, the following are distinguished: conditions related to the material and technical support of the educational process, special literature for blind and visually impaired students, technical teaching aids for individual and collective use, teaching materials on electronic media; conditions associated with the organisation of psychological and pedagogical support for students with disabilities: individual lessons with a teacher, educational counselling, psychological support, varying forms and methods of work, the creation of special groups of students with disabilities, taking into account the leading disability. Among the main difficulties, pedagogues distinguish the following: a low general educational base of students with disabilities, an overestimated assessment of their abilities, results, and quality of work, frequent complaints of difficulties, the requirement of condescension to disability and the expectation of help, a high level of infantilism, the resentment of students with disabilities when making contact, the desire to blame others for their misfortunes. Thus, the main mass of difficulties arising in the process of teaching students with disabilities, pedagogues associate with the psychological characteristics of students.

Summing up the analysis, it can be concluded that the bulk of the works in the field of using digital technologies in inclusive education is in the transition zone from the previously dominant focus on the needs of special education to the solution of inclusion problem itself, the transition from an individual to a social model. This makes relevant the focus of DT research on the assessment of their effectiveness in the development of socialisation, cooperation in the learning process, support for the physical involvement of students with disabilities in the educational and social community. The psychological problems of using digital technologies have remained outside the field of research attention. Therefore, in the presented work, the authors analysed the features of the preparation of students of pedagogical universities in the digital era and the impact of such education on people with physiological and psychological peculiarities.

CONCLUSION

The authors achieved the main purpose of the work, which was to study the specifics of teaching students with disabilities in institutions of higher pedagogical education, taking into account the characteristics of the digital epoch. The result of the research is the conclusion that for the formation of readiness of students of pedagogical higher educational establishments to work with parents in the environment with various levels of educational competence, there should be introduced studying a subject of work with parents earlier than at the fourth year and study it more deeply than the curriculum implies. It has been determined that future teachers should engage in self-education if they seek to become good teachers and be competent in topical issues. The main indicator of the effectiveness of the experimental work is the formation of a sufficient level of professional orientation of students of pedagogical higher educational establishments to pedagogical work with parents, which was analysed as in the evaluation of the individual component of readiness and a set of quantitative and qualitative indicators in each of them.

Summing up, it should be noted that when creating a system of digital public services, one cannot ignore the needs of citizens who, for various reasons (for example, technical (unavailability of services), functional (lack of digital literacy, unavailability of service due to health characteristics) do not have access to digital technology. The following tasks have to be solved:

- to bridge the digital divide between different social groups;

- to provide an inclusive environment where access for people with special needs is provided during the development phase;

- to provide human control of user interaction with the service;

- to check the availability of existing digital services;

- to provide alternative options for access to digital services.

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