

DOI: <https://doi.org/10.34069/AI/2023.71.11.13>

How to Cite:

Mamchur, L., Shuppe, L., Barkasi, V., Bykova, M., & Bodnaruk, I. (2023). The essence and specifics of organizing the teachers training for children with disabilities. *Amazonia Investiga*, 12(71), 149-161. <https://doi.org/10.34069/AI/2023.71.11.13>

The essence and specifics of organizing the teachers training for children with disabilities

Сутність та специфіка організації підготовки педагогів з дітьми з обмеженими можливостями

Received: August 15, 2023

Accepted: October 19, 2023

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Abstract


In the article, to research the place of inclusive competence in the professional training of future teachers, the ways of forming inclusive competence in the professional training of future teachers, and the development of pedagogical conditions for the formation of inclusive competence, we found out the state of inclusive readiness of future students for inclusive activities among students. The results of the ascertainment experiment showed the need for the formation of inclusive competence in future teachers as early as possible and to continue throughout their lives with the aim of high-quality inclusive education of students. For the formation of inclusive competence of future teachers, we identified the components of inclusive competence, clarified the place of inclusive competence in society and the teacher's professional activity, revealed the content of axiological, anthropological, holistic, personal, activity, differentiated, competence approaches, clarified important principles and developed and implemented pedagogical conditions for the


Анотація


У статті, з метою дослідження місця інклюзивної компетентності у професійній підготовці майбутніх учителів, шляхів формування інклюзивної компетентності у професійній підготовці майбутніх учителів та розробки педагогічних умов формування інклюзивної компетентності ми з'ясували стан інклюзивної готовності майбутніх студентів до інклюзивної діяльності у студентів. Результати констатувального експерименту показали необхідність формування інклюзивної компетентності у майбутніх вчителів якомога раніше і продовжувати протягом життя з метою якісного інклюзивного навчання учнів. Для формування інклюзивної компетентності майбутніх вчителів нами виокремлено компоненти інклюзивної компетентності, з'ясовано місце інклюзивної компетентності в соціумі та у професійній діяльності учителя, розкрито зміст аксіологічного, антропологічного, цілісного, особистісного, діяльнісного, диференційованого, компетентнісного підходів, з'ясувано вагомі

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formation of inclusive competence with the aim of quality inclusive education of students. As a result of the conducted research, we observe a higher formation of inclusive competence in the experimental groups than in the control groups.

Keywords: inclusive competence, professional training of future teachers, components of inclusive competence, teacher's professional activity, pedagogical conditions.

Introduction

In the context of the tolerant attitude of the universe to the problems of comprehensive development of people with mental, physical, social, and emotional health disabilities, the gradual educational spatial position of the worldview paradigm of society has been changed Shevchenko (2023). In particular, we are observing a change in the attitude of society and the entire world community to the problems of people with health disabilities and a new approach to realizing the need for their broad integration into society. (Klochko et al., 2022).

The development of an inclusive educational system requires the determination of methodological principles for the training of psychological and pedagogical specialists who take a direct part in the organization and ensuring the effective functioning of an inclusive educational environment based on the formation of the professional ability to perform the functions of a mentor, tutor, moderator and determine the individual educational trajectory of a child with special educational needs (Voloshyna & Dmytrenko, 2016).

At the same time, as practice shows, the readiness of psychological and pedagogical specialists to work in an inclusive educational environment is extremely insufficient. One of the obvious reasons is the lack of systematic training of psychological and pedagogical personnel in institutions of higher education to work with children with disabilities.

The relevance of training and retraining of psychological and pedagogical personnel to work with children with disabilities is determined, in particular, by the following factors: accelerated implementation of inclusive education in recent years; insufficient awareness of specialists with methodological principles for working with children with disabilities, technological and

принципи та розроблено і впроваджено педагогічні умови формування інклюзивної компетентності з метою якісного інклюзивного навчання учнів. У результаті проведеного дослідження спостерігаємо вищу сформованість інклюзивної компетентності в експериментальних групах ніж в контрольних.

Ключові слова: інклюзивна компетентність, професійна підготовка майбутніх учителів, компоненти інклюзивної компетентності, професійна діяльність учителя, педагогічні умови.

methodical means of implementing inclusive education; increasing the academic component in the formation of students' practical professional competencies necessary for working with children with disabilities; insufficient awareness of the professorial staff of higher education institutions of the significance, features and content of the activities of psychological and pedagogical personnel in the conditions of an inclusive educational environment (Bondar, 2014).

Summarizing the experience of implementing an inclusive model of education in the pedagogical practice of preschool and general secondary education institutions made it possible to determine the theoretical problems of training personnel for inclusive education in the form of the following contradictions:

- at the socio-pedagogical level: between the social order to introduce an inclusive model of education into modern pedagogical practice and the insufficient number of qualified psychological and pedagogical personnel capable of working with children with disabilities;
- at the scientific and theoretical level: between the need to train specialists for children with disabilities and the lack of an effective system of such training and theoretical justification of its content;
- at the practical-methodical level: between the need to implement inclusive practice and personnel training and the lack of programmatic-methodical materials to ensure the development of professional competencies of relevant specialists.

Therefore, the insufficient development of the problem of training specialists to work with children with special educational needs in the conditions of an inclusive educational

environment led to the choice of the topic of the article.

In order to determine the problem of organizing the training of teachers with children with disabilities, in the article we identified the following issues: the actualization of teacher training for the formation of inclusive competence in his professional training was determined; the state of inclusive competence of 1st-2nd year students for inclusive activities has been clarified; the components of inclusive competence are defined; approaches and principles that contribute to the successful formation of teacher training to work with children with disabilities; the state of formation of the inclusive competence of future teachers (3-4 years) for inclusive activities was clarified; an experiment was conducted to determine the problem of organizing the training of teachers with children with disabilities

Literature Review

The essence of the concept of "inclusive competence" is interpreted in the works of various scientists. In particular, inclusive competence is considered "the level of knowledge and skills necessary for the performance of professional functions in the conditions of inclusive education" (Maksymyuk, 2005); as "an integral characteristic of a pedagogue (teacher, assistant), which affects the ability to solve professional tasks in the conditions of an inclusive approach to educational activity" (Pyatakov, 2012); as "the necessary amount of knowledge and skills embodied in the ability to perform professional functions, taking into account the special needs of youth with health disabilities, and to integrate them into the environment of a general educational institution, creating conditions for development and self-development" (Solovei & Tchaikovsky, 2013). Bondar (2014) characterized the essence of the concepts "professional competence", "competence", "inclusive competence". The connection between the components of professional competence and inclusive competence is shown. The author focused in detail on the analysis and clarification of the essence of each component of inclusive competence. The need to include professional competencies and key (vital) inclusive competence as a special competence is emphasized. Shevchenko (2023) considers the problem of forming the inclusive competence of future physical education teachers. The concept of "inclusion" has an innovative content, in particular: "a complex and systematic process of

ensuring equal access to quality education (at all levels) for children with special educational needs by constructing a system of their education in institutions of general secondary education on the basis of person-oriented teaching methods, taking into account the individual characteristics of the educational and cognitive activities of such students. But scientists Lazarenko, & Pylypenko (2022) consider the essence of not only the concept of "inclusive competence", but also "volunteer", "volunteer activity", "volunteer assistance", "volunteer movement", "volunteership", and formulate the definition of "inclusive competence of future volunteer teachers" as "a complex system of abilities of future teachers for volunteering in the conditions of an inclusive educational environment, which is manifested in their value attitude to inclusive education and implies the presence of emotional and volitional, empathetic, socio-economic, communicative skills in working with people with disabilities special educational needs".

Zobenko (2022) examines the professional readiness of the future primary school teacher in the conditions of inclusive education, in particular, substantiates and analyzes the theoretical aspects within the framework of a higher education institution. The author raises questions in institutions of higher education about the possibility of updating the conditions for the entire system of training of pedagogical personnel, special education, and restructuring of professional training of teachers.

Great importance is attached to research on the professional training of future teachers of the basics of health, who must develop inclusive competence and readiness for professional activity in the conditions of inclusive education. Boychuk, Borodina, & Mykytiuk (2015) raise this problem in their research. In their works, the scientists show the result of preparing the future teacher of the basics of health for professional activity in the conditions of inclusive education. The structural components of the inclusive competence (cognitive-operational, motivational-valuable, reflective-evaluative) of the future teacher of the basics of health and its functions (analytical-corrective, educational-educational, constructive-communicative) have been reasonably developed.

Voloshyna & Dmytrenko (2016) deals with issues of work in inclusive classes of future foreign language teachers, their professional training, and the organization of inclusive education at school, clarifying the role of the teacher in the process of introducing inclusion.

The scientist researched not only the theoretical basis but also the methodological basis of training a future foreign language teacher, substantiated the need for separate approaches in the professional training of teachers to work in inclusive classes (anthropological, axiological, personally oriented, holistic, differentiated, competence-based, activity-based). Pedagogical conditions for the formation of inclusive competence of the future foreign language teacher have been developed.

In the conditions of an inclusive educational environment, Chupakhina, Potapchuk, & Liakisheva (2022) deal with the issues of training future speech therapists for pedagogical activity. The researchers singled out significant approaches to the training of specialists in the field of speech therapy and special education. In the conditions of the inclusive environment of the educational institution, the main aspects of the training of future speech therapist teachers for pedagogical activities were revealed. In the research, professional competencies are considered by the authors through the prism of inclusive educational processes.

We see that the essence of the concept of "inclusive competence" is revealed in the works of various scientists. Many scientists deal with issues of work in inclusive classes of future teachers, their professional training, and the organization of inclusive education at school, clarifying the role of the teacher in the process of introducing inclusion and identifying the reasons that inhibit the introduction of inclusive education. There is a need to investigate the place of inclusive competence in the professional training of future teachers.

The aim of the study. To distinguish the components of inclusive competence, to find out the place of inclusive competence in society and the professional activity of a teacher, to reveal the content of approaches, principles and to develop, implement, and test the effectiveness of pedagogical conditions for the formation of inclusive competence of teachers for high-quality inclusive education of students.

Methodology

To achieve the goal, research methods were used: theoretical – study and analysis of psychological-pedagogical, philosophical, methodical literature to delineate the conceptual boundaries of teachers' inclusive competence; classification, system analysis, induction, analogy, deduction, generalization of data to determine pedagogical

conditions for the formation of inclusive competence of future teachers; comparison of the obtained data to clarify the connections; empirical – questionnaires, observations, surveys to find out the effectiveness of the implementation of pedagogical conditions; a pedagogical experiment (declarative, formative) to determine the levels of formation of the inclusive competence of future teachers and to check the effectiveness of the developed pedagogical conditions.

The scientific novelty lies in the fact that the pedagogical conditions for the formation of inclusive competence of students have been developed, implemented and experimentally tested for the purpose of high-quality inclusive education of students.

In order to implement the pedagogical conditions for the formation of students' inclusive competence for the purpose of high-quality inclusive education of students, we have built a system for evaluating the levels of formation of students' inclusive competence.

In our opinion, during the educational process, the formation of students' inclusive competence occurs at four levels: low, medium, sufficient and high.

Let's take a closer look at all four levels of formation of students' inclusive competence.

Let's list the signs of a low level of formation of students' inclusive competence: lack of motivation to study theory and take part in activities; fragmentary assimilation of knowledge about the theory of inclusive education; lack of ability to perform the simplest tasks in the inclusive field, performing them only with the help of a teacher; inability to plan, control one's own work related to inclusive activities; does not show responsibility and does not conduct introspection.

The formation of students' inclusive competence at the secondary level can be characterized as: insufficient motivation to study the theory and take part in students' inclusive activities; partial assimilation of knowledge about inclusive human education; the ability to perform elementary tasks related to inclusive activities by example; partial ability to plan, monitor one's own work related to inclusive activities and carry out introspection.

Signs of a sufficient level of formation of inclusive competence of students are: the

presence of motivation to study the theory of inclusive competence of students and acceptance of participation in inclusive activities; systematic assimilation of knowledge about inclusion; the ability to perform tasks related to inclusive activities; the ability to plan, monitor one's own work related to inclusive activities, show responsibility and carry out introspection.

Future specialists with a high level of inclusive competence development show the following indicators: the presence of constant motivation to study the theory of inclusion and active participation in inclusive activities; have a high

level of independence in the systematic assimilation of knowledge about inclusion; the ability to perform tasks related to inclusive activities in conditions of uncertainty, great complexity or limited time; the ability to systematically plan, monitor one's own work related to inclusive activities, show responsibility, carry out self-analysis and constantly look for ways to improve.

We also distributed the limits of evaluations of the levels of formation of inclusive competence of higher education students (Table 1).

Table 1.
Limits of assessments of the levels of formation of inclusive competence of future specialists.

Limits of integral estimates	The level of formation of inclusive competence of future specialists
4,20 – 5,00	I (high)
3,60 – 4,19	II (sufficient)
3,00 – 3,59	III (average)
1,00 – 2,99	IV (low)

The implementation of the pedagogical experiment was carried out in three stages: preparatory, main and final.

At the preparatory stage, the purpose and tasks of the research were determined, the experimental plan was developed, methods of measurement and processing of results were selected, control and experimental groups were selected, and their homogeneity was checked.

At the main stage, an experiment was conducted.

At the final stage, the results of the experiment were analyzed, their reliability was confirmed, and conclusions were drawn about the pedagogical effect of the experiment.

During the ascertainment experiment, the state of inclusive competence of future students for inclusive activities among students of the 1st and 2nd years was clarified. The diagnosis of the levels of inclusive competence described in the ascertainment experiment was carried out using the method of generalization of independent characteristics.

To form the inclusive competence of higher education students, during the experimental work, we identified the components of inclusive competence, clarified the place of inclusive competence in society and the professional activity of the teacher, revealed the content of axiological, anthropological, holistic,

personality-oriented, activity, differentiated, competence approaches, effective principles were clarified and pedagogical conditions for the formation of inclusive competence were developed and implemented for high-quality inclusive education of students.

The purpose of the formative experiment was to find out the state of formation of inclusive competence of future teachers (3rd and 4th-year students) for inclusive activities. As a result of the conducted research, we claim that the formation of inclusive competence through the implementation of developed pedagogical conditions in the experimental groups is higher than in the control groups.

To improve the quality of education, we surveyed the formation of inclusive competence in the professional training of future teachers with the help of separate pedagogical conditions. a survey among students of higher education showed that 80% of students claim that the implementation of pedagogical conditions is effective and necessary, and meets the requirements of education; 11% believe that it "completely corresponds" and 9% of respondents are inclined to the opinion that it "does not correspond at all".

Students' opinions on ensuring equal access to quality education for children with special educational problems in educational institutions were interesting. They were distributed as

follows: yes – 75%, no – 5%, partially – 20%.

In institutions of higher education, respondents propose to improve inclusive education: the creation of all necessary innovative conditions for education (61%), comprehensive development of this area (24%), and recognition of the rights of children with special educational problems (20%).

To assess the homogeneity of experimental and control data, statistical processing was performed using MS Excel and SPSS (Statistical Package for Social Science).

Results and Discussion

Updating the professional training of the future teacher to form inclusive competence in his professional training

In the context of the innovative development of education in institutions of higher education, the actualization of the professional training of the future teacher, the formation of inclusive competence in his professional training, that is, the training of such a specialist who can effectively work with children who have special educational needs in the conditions of a general education environment, comes to the fore (Kuchai et al., 2019). Taking into account the innovative changes in various spheres of the social life of mankind, to successfully introduce inclusive education in educational institutions, it is the higher education of the world format that should optimize the transition of the educational sector to a new innovative paradigm of education, according to which the training of teachers, the formation of inclusive competence in them in the process of professional training will allow to implement tasks of inclusive content based on competence (Bondar, 2014).

The training of the teacher, the formation of his inclusive competence becomes dominant, allows him to go beyond the limits of his educational subject, to realize professional knowledge in the system of culture, to make interdisciplinary connections, and realize the tasks of inclusive content (Bakhmat et al., 2022). The teacher's ability to engage the personal resources of students and organize the educational process as a social interaction is important for solving life-creating tasks. The teacher as an educator and organizer of the educational process, realizing the humanitarian nature of his profession, stimulates the personal achievements of children, does not limit himself to the assessment of students' learning, while sharing responsibility

for the results of cooperation with the child, and not controlling his activities (Voloshyna, & Dmytrenko, 2016).

Confirmatory experiment. Finding out the state of inclusive competence of future teachers (1st and 2nd-year students) for inclusive activities

To study the place of inclusive competence in the professional training of future teachers, the ways of forming inclusive competence in the professional training of future teachers, and the development of pedagogical conditions for the formation of inclusive competence, we found out the state of inclusive readiness of future students for inclusive activities among students of the 1st and 2nd years. For this purpose, we conducted a survey. The questionnaire included the following questions:

1. What do you mean by the term "Inclusion"?
2. To reveal the meaning of the concept "Children with special educational needs"?
3. Express your opinion: Is it necessary to introduce inclusive education in all general education institutions?
4. Is the implementation of inclusive education justified worldwide?
5. Are you familiar with forms and methods of work in an inclusive class?
6. Are you ready to work in an inclusive class?

The results of the study indicate insufficient informational knowledge of students about inclusive education and not all students of higher education are familiar with the basic provisions of inclusive education, with the forms and methods of work in an inclusive class, are not ready to work in it, and cannot provide arguments in support of the implementation of inclusive education in all the world.

Based on the results of the conducted research, we have developed the levels of formation of inclusive competence of future students for their inclusive activities.

Low level of formation of inclusive competence. Students with a low level of inclusive competence exclude children with special educational needs in a general educational institution but show interest in the problem of integration into society of children with disabilities.

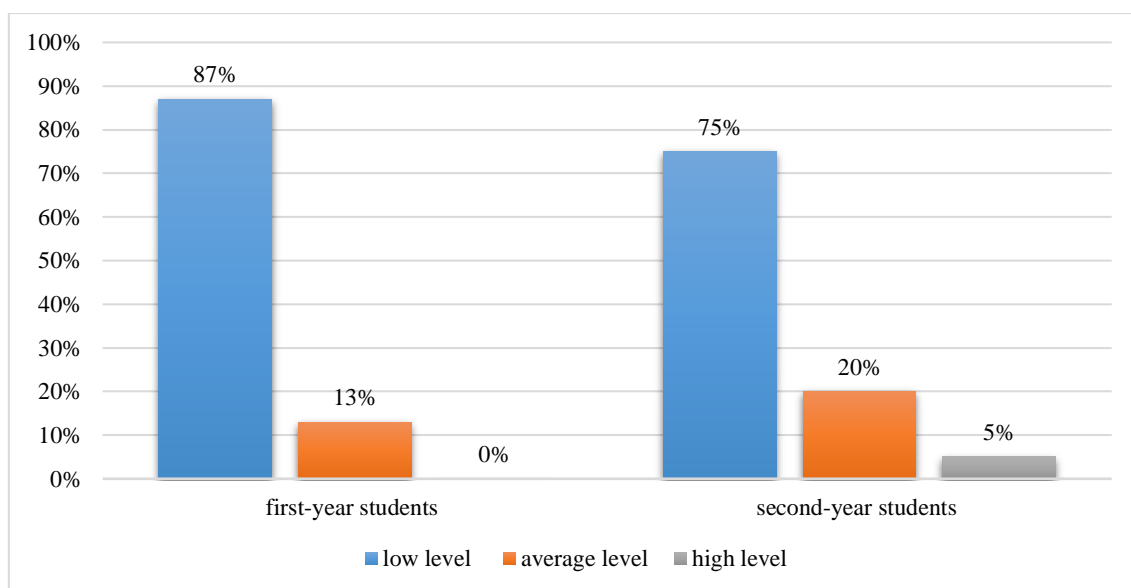
Average level of formation of inclusive competence. Students who have mastered the average level of formation of inclusive

competence recognize the possibility of including children with special educational needs in a general educational institution, show interest in the problem of accessible education for this category of children, but looking at the psychophysical development of children and taking into account the level of deviation of children. Students of this level recognize the importance of obtaining systematized knowledge of inclusive pedagogy at a higher education institution and know the specifics of working in the conditions of inclusive education with different categories of children.

High level of formation of inclusive competence. Students with a high level of formation of inclusive competence are aware of the importance of inclusive education, the importance of including children with special educational needs in society, and the need for

socialization of children in the life of society, they clearly show the position of employment in an inclusive school, even though they have insufficient systematic knowledge of inclusive pedagogy.

According to the results of the experiment, we note that 87% of first-year students have a low level of formed inclusive competence, 13% of students have an average level, and not a single student showed a high level at all. In the second year, students showed the following results: low level in 75% of students, average level in 20% of students, and high level in 5% of students (Graph 1). The results of the ascertainment experiment showed the need for the formation of inclusive competence in future teachers as early as possible and to continue throughout their lives with the aim of high-quality inclusive education of students.



Graph 1. The state of inclusive readiness of future students for inclusive activities among students of the 1st and 2nd years

Therefore, we conclude that to form the inclusive competence of future teachers, it is necessary to distinguish the components of inclusive competence, to find out the place of inclusive competence in society and the teacher's professional activity, to reveal the content of axiological, anthropological, holistic, personal, activity, differentiated, competence approaches, with to clarify important principles and develop and implement pedagogical conditions for the formation of inclusive competence for high-quality inclusive education of students.

Components of inclusive competence

We will highlight the main components of

inclusive competence of future teachers with the aim of quality inclusive education of students.

The motivational component of inclusive competence provides educational activities in the conditions of inclusion of children with special needs in the environment of healthy peers, which promotes their social adaptation; focuses on humanistic value orientations, a system of needs, motives (personal development, social, professional, cognitive, self-affirmation, etc.), values of the teacher's personality aimed at the process of inclusion and is a determinant of professional competence and ensures its successful formation. The student's motivation is formed, its high level implies a positive

orientation towards the totality of human motives and affects the development of all other components of inclusive competence.

The operational component of inclusive competence provides resolution of socio-pedagogical situations; application of successful experience and methods of promoting the process of inclusion of children with special needs in the society of an educational institution; the ability to perform specific professional tasks of socio-pedagogical activity; using techniques of independent work to perform professional tasks; search and research activities.

The cognitive component of the future teacher's inclusive competence activates cognitive work, contributes to holistic ideas about professional activity, and contributes to the enrichment and development of cognitive experience. It is this component that gives teachers the ability to mentally process and perceive the material, store it in memory and, if necessary, reproduce information at the right time to solve both theoretical and practical tasks. The cognitive component of inclusive competence is based on professional scientific knowledge about the foundations of socio-pedagogical influence on the process of children's self-development; basics of personality development; innovations in the education of people with special needs; age, anatomophysiological, individual, and psychological features of healthy children and children with developmental disorders; stimulation of positive self-realization of a person in all possible spheres of activity; patterns of interaction between society and individuals with special needs.

The reflective component of inclusive competence promotes self-knowledge, self-control, the ability to be aware of professional activity, own self-development during which future teachers rethink and evaluate their personal achievements and abilities; self-regulation, analysis of real situations, and control of the results of professional actions. "In the system of inclusive competence, reflection is interpreted as the ability to analyze in the process of professional activity, which is aimed at the inclusion of children and youth with special needs in the society of a general educational institution and involves the analysis of the state of implementation of the ideas of the inclusion process, one's own experience and the experience of colleagues in achieving the inclusion of children and youth with special needs in the society of a comprehensive educational institution in the process of professional activity,

choosing the optimal option for solving various socio-pedagogical situations in the process of inclusion; adequate evaluation of the results of one's socio-pedagogical activity, the ability to recognize one's own mistakes and the ability to overcome them; need for professional and personal growth and increasing the level of inclusive competence" (Solovei & Tchaikovsky, 2013).

The methodological component of inclusive competence contributes to the formation of students' understanding of special pedagogy and its methodological problems.

The psychological component of inclusive competence provides an opportunity for personality development and contributes to the formation of psychological, and moral capabilities and qualities of future teachers.

The scientific and theoretical component of inclusive competence provides professional theoretical knowledge.

Practical contributes to the acquisition by students in the educational space of the ability to professionally use corrective and pedagogical methods and techniques that will be important in the professional life of a teacher.

The special component of inclusive competence provides an opportunity for professional mastery of skills and knowledge of special pedagogy.

The methodological component of inclusive competence provides future teachers with the necessary knowledge of effective and modern technologies and methods of inclusive education.

The personal component of inclusive competence provides a reflective attitude, a motivational orientation of the will, consciousness, and feelings of the future teacher towards the inclusive education of children.

The creative component of inclusive competence gives the teacher personal qualities and creative activity that allows them to create new spiritual and material values, develop the creative potential of children with special psychophysical development, and take into account their capabilities.

The active component of inclusive competence includes a system of professional and pedagogical knowledge about the problem (Zobenko, 2022).

The place of inclusive competence in society and the teacher's professional activity

To train a new generation of specialists, it is necessary to update the system of training of pedagogical personnel. All the work of a teacher of a higher educational institution should be aimed at training a teacher capable of working in an inclusive educational environment, and this needs to be included in the professional competence of a teacher, precisely inclusive competence (Verovkina, et al., 2023). Therefore, we see the logic of supplementing the list of subtypes of professional competence with inclusive competence. In the conditions of an inclusive environment, the system of components of professional competence should contain the necessary knowledge, skills, abilities, and the ability to implement professional functions, and it is also necessary to ensure the appropriate level of readiness of the participant in the educational process to carry out professional activities in the conditions of an inclusive educational environment. Professional competence, as well as its structure, in all members of the team of an educational institution, recognizes the need for the formation of inclusive competence, intensifies the process of creating an inclusive educational environment, is a dynamic educational phenomenon that involves constant updating of technologies and content to implement tasks at all stages of personality development (Bondar, 2014).

Approaches that contribute to the successful formation of inclusive competence

We will single out the most effective approaches for preparing a future teacher to work in the conditions of inclusive education. The methodological and theoretical basis of innovative pedagogical work is competence, axiological, holistic, personal, anthropological, activity, and differentiated approaches.

The competence approach that contributes to the successful formation of the teacher's inclusive competence is represented by a system of socio-personal, professional, and academic competencies, which determine the readiness and ability to successfully implement the achievement of educational results and professional-pedagogical activities, taking into account the needs of all subjects of the inclusive educational space (Stepanova et al., 2020).

The methodological basis of the educational and social position is the axiological approach. It allows you to determine the value position of the

future teacher, defines a system of pedagogical views based on the affirmation and understanding of the value of human life, makes it possible to influence the student's value position, and helps to prevent negative attitudes towards children with special needs.

A holistic approach is related to a personal approach and contributes to the establishment of integrative system-forming relations and connections in the educational system, the formation and study of permanent, variable, main, and secondary in the education system. It involves finding out, as a systemic whole, the contribution of individual component processes to the development of the individual.

The personal approach takes into account the individual and age characteristics of children in the conditions of inclusive education, contributes to the disclosure of the possibilities and abilities of the individual, the creation of conditions for the personal development of the child, the education of his willpower, etc.

The anthropological approach systematically presents the data of human sciences as a subject of inclusive education and takes them into account in the implementation and organization of activities in the conditions of inclusion. Physiology, anatomy, human pathology, logic, philosophy, psychology, etc. can be attributed to the sciences that help the teacher in inclusive activities (Kolbina et al., 2023).

An active approach allows you to study the content of readiness in the conditions of inclusive education of the future teacher to work with students; to optimize methods of its development and formation of inclusive competence; to determine the ways of practical improvement of the teacher and is a theoretical and methodological strategy of the educational space (Hordiichuk et al., 2022).

One of the ways to solve educational tasks, taking into account the socio-psychological characteristics of children with special educational needs, is a differentiated approach to education and training. It is this approach that optimizes the educational activities of the teacher and determines the forms and content of the educational process not for every child (which is impossible in the conditions of large classes), but for students of a certain category (Voloshyna & Dmytrenko, 2016).

Principles that are important in the formation of inclusive competence

It is important in the teacher's work to observe the following principles: an individual approach, active inclusion of all participants in the educational process, support for the independent activity of the child, the principle of an interdisciplinary approach, the principle of partnership with the family, the principle of variability in the organization of learning and upbringing processes in the formation of inclusive competence (Myronova, 2016).

Formative experiment. Finding out the state of formation of inclusive competence of future teachers (3rd and 4th year students) for inclusive activities

To form the inclusive competence of higher education students, we identified the components of inclusive competence, clarified the place of inclusive competence in society and the professional activity of the teacher, revealed the content of axiological, anthropological, holistic, personal, activity, differentiated, competence approaches, clarified effective principles and pedagogical conditions for the formation of inclusive competence were developed and implemented for high-quality inclusive education of students (Knysh et al., 2022).

In the process of experimental training of future teachers (students of the 3rd and 4th years), the following was introduced:

- a complex of educational training "Inclusive Education" for work in the conditions of inclusive education, which includes the following main components: study of the "Inclusive Education" course; pedagogical practice in institutions of various types; use of socio-psychological training and innovative learning technologies during practical classes;
- during the study of mandatory disciplines by future teachers, it is taken into account that the formation of inclusive competence involves adaptation to the needs of a child with special educational needs in the educational space. Therefore, differentiating the educational process of a higher school is a mandatory task. Therefore, students were taught to select appropriate educational and didactic support for each student of the inclusive class, to develop an individual curriculum for each child, and to use the latest and most effective learning technologies. A methodical approach to the

training of future teachers along with the mastery of pedagogical technologies was carried out in combination with the formation of inclusive competence in future teachers, knowledge of creative techniques used to overcome children's speech disorders, production of visual aids for working with such techniques; practical skills; mastering corrective and developmental technologies. During practical classes, future teachers organized work in a complex manner in the following areas: work with facial expressions; training the child to breathe properly; improvement of phonemic hearing; development of general motor skills and fine motor skills; performance of articulation exercises; formation of coherent speech, etc.;

- formation of inclusive competence in working with children with speech disorders was facilitated by the study of selective disciplines. Each student took into account the peculiarities and needs of each student of the inclusive class, ensured the further development of the child, prevented the increase in health disorders of students with special educational needs, and made the educational process successful and effective. The study of subjects of free choice was aimed at the formation of inclusive competence of students of higher education. Systematic significant and systematic work is carried out in this direction. The goal was to study the disciplines, to form students' ability to develop the processes and functions of cognitive activity in students with speech disorders; sensorimotor working memory, and speech functions; students' ability to perform logical operations (establishing cause-and-effect relationships, synthesis, analysis); visual and figurative and verbal and logical speech and thinking. Therefore, in the classes, students of higher education mastered the diagnosis of children's speech disorders, got acquainted with sand animation, and breathing exercises, analyzed lessons in an exclusive environment, developed mental maps in an inclusive class based on video plots, etc. During practice in an inclusive educational environment, future teachers worked with children with speech disorders, as teacher assistants. Students voluntarily worked as volunteers in inclusive classes, as child assistants (tutors), and communicated with families of children with special needs.

Among higher education seekers, great importance was attached to means of organizing

educational work (online meetings with specialists in special education and inclusive education, webinars, curatorial hours, participation in volunteer projects, etc.).

The verification of the developed and implemented pedagogical conditions for the formation of inclusive competence for high-quality inclusive education of students was carried out experimentally. 98 students of the 3rd and 4th years at the first (bachelor's) level were involved in the experiment. In the experimental groups, where pedagogical conditions were implemented, we relied on the components of inclusive competence that we singled out, the content of axiological, anthropological, holistic, and personal, activity, differentiated, competence approaches, and effective principles to form the inclusive competence of teachers. The students of the control group worked according to the usual program, and for the respondents of the experimental group, we developed an experimental program that included the above activities.

The diagnosis of the levels of inclusive competence described in the ascertainment experiment was carried out using the method of generalization of independent characteristics. We observe the following results. The number of CG students who were found to have a high level increased by 2%, in EG the number of such students increased by 18%; the number of students with an average level in CG increased by 4%, and in EG the number of students with this level increased by 28%; the number of students who were found to have a low level of formation of inclusive competence regarding activities in the conditions of an inclusive educational environment decreased by 6% in CG, and the number of respondents decreased by 29% in EG.

As a result of the conducted research, we claim that the formation of inclusive competence in the experimental groups is higher than in the control groups. The formation of inclusive competence should be carried out by the components of inclusive competence that we have identified, the content of axiological, anthropological, holistic, personal, activity, differentiated, competence-based approaches, effective principles that provide the ability to communicate with different categories of children, the ability to build an educational process taking into account the differences of children; the ability to design situations that contribute to the child's emotional and value sphere; maintain a friendly, business atmosphere in the children's team.

To improve the quality of education, we surveyed the formation of inclusive competence in the professional training of future teachers with the help of separate pedagogical conditions. a survey among students of higher education showed that 80% of students claim that the implementation of pedagogical conditions is effective and necessary, and meets the requirements of education; 11% believe that it "completely corresponds" and 9% of respondents are inclined to the opinion that it "does not correspond at all".

Students' opinions on ensuring equal access to quality education for children with special educational problems in educational institutions were interesting. They were distributed as follows: yes – 75%, no – 5%, partially – 20%.

In institutions of higher education, respondents propose to improve inclusive education: the creation of all necessary innovative conditions for education (61%), comprehensive development of this area (24%), and recognition of the rights of children with special educational problems (20%).

We fully share the opinion of H. Vasylieva, who states that "it is the organization of the process of learning about professional activity by future teachers of the inclusive form of education at the pedagogical university that depends on the effectiveness of the formation of the methodical competence of the teacher", which is: a significant factor of influence on the process of educating young people, a component of professional competence; "an integrative professional and personal characteristic that ensures the ability to perform methodical functions in the system of inclusive education by the teacher's professional standard" (Vasylieva, 2021).

So, for the formation of inclusive competence of future teachers, we identified the components of inclusive competence, clarified the place of inclusive competence in society and in the teacher's professional activity, revealed the content of axiological, anthropological, holistic, personal, activity, differentiated, competence approaches, clarified important principles and pedagogical conditions for the formation of inclusive competence of future teachers who, with high-quality professional training, will be able to conduct high-quality inclusive education of students, have been developed and implemented. As a result of the conducted research, we observe a higher formation of inclusive competence in the experimental groups

than in the control groups.

As a result of the conducted experimental research, we deliberately conducted an experiment with future teachers, on whom depends not only the education of children with disabilities, but also their entire life path.

Conclusions

To study the place of inclusive competence in the professional training of future teachers, the ways of forming inclusive competence in the professional training of future teachers, and the development of pedagogical conditions for the formation of inclusive competence, we found out the state of inclusive readiness of future students for inclusive activities among students. The results of the ascertainment experiment showed the need for the formation of inclusive competence in future teachers as early as possible and to continue throughout their lives with the aim of high-quality inclusive education of students.

For the formation of inclusive competence of future teachers, we identified the components of inclusive competence, clarified the place of inclusive competence in society and the teacher's professional activity, revealed the content of axiological, anthropological, holistic, personal, activity, differentiated, competence approaches, clarified important principles and developed and implemented pedagogical conditions for the formation of inclusive competence with the aim of quality inclusive education of students.

As a result of the conducted research, we observe a higher formation of inclusive competence in the experimental groups than in the control groups.

As a result of the experiment, we found out the state of formation of inclusive competence of future teachers (students of 3-4 years) to work with children with disabilities. As a result of the conducted research, we determined the improvement of the formation of inclusive competence through the implementation of developed pedagogical conditions in experimental groups for quality education of children with disabilities.

Further research will be aimed at clarifying the principles that are important for the formation of inclusive competence for high-quality inclusive education of students.

Bibliographic references

- Bakhmat, N., Vyshnyk, O., Moskaljova, A., Fediy, O., & Lisovska, K. (2022). Organization of an inclusive educational environment for the development of children with special educational needs. *Revista Eduweb*, 16(3), 9-22. <https://doi.org/10.46502/issn.1856-7576/2022.16.03.1>
- Boychuk, Yu. D., Borodina, O. S., & Mykytiuk, O. M. (2015). *Inclusive competence of the future teacher of the basics of health: monograph*. Kharkiv, Ukraine: KhNPU. (In Ukrainian)
- Bondar, T. I. (2014). Formation of inclusive competence in the conditions of innovative education paradigm. *Pedagogical sciences: theory, history, innovative technologies: scientific journal*, 7(41), 153-162. (In Ukrainian)
- Chupakhina, S. V., Potapchuk, T. V., & Lyakisheva, A. V. (2022). Preparation of future teachers-speech therapists for pedagogical activities in the conditions of an inclusive educational environment. *Academic studies. Series "Pedagogy"*, 1, 159-167. <https://doi.org/10.52726/as.pedagogy/2022.1.23>. (In Ukrainian)
- Hordiichuk, O., Nikolenko, L., Shavel, K., Zakharina, M., & Khomyk, T. (2022). Analysis of models of inclusive education in European countries (experience for Ukraine). *Revista Eduweb*, 16(4), 32-41. <https://doi.org/10.46502/issn.1856-7576/2022.16.04.3>
- Klochko, O., Pohoda, O., Rybalko, P., Kravchenko, A., Tytovych, A., & Kondratenko, V. (2022). Features of the implementation of inclusive education: The role of the teacher. *Revista Eduweb*, 16(4), 131-140. <https://doi.org/10.46502/issn.1856-7576/2022.16.04.11>
- Kolbina, L., Kasianenko, O., Sopivnyk, I., Karskanova, S., & Chepka, O. (2023). The role of inclusive education in the personal growth of a child with special educational needs. *Amazonia Investiga*, 12(64), 156-164. <https://doi.org/10.34069/AI/2023.64.04.15>
- Knysh, I., Drachuk, O., Kasianenko, O., Chepka, O., Tverezovska, N., Matveieva, N., & Kuchai, O. (2022). Practices of Inclusive Education in the Modern Innovation Space. *International Journal of Computer Science and Network Security*, 22(11), 445-452. <https://doi.org/10.22937/IJCSNS.2022.22.11.64>
- Kuchai, O.V., Shinkaruk, V.D., Bida, O.A., & Kuchai, T.P. (2019). Current state of

- inclusive education in the countries of the European Union. *Educational space of Ukraine*, 1(17), 19-23. <https://journals.pnu.edu.ua/index.php/esu/article/view/2581>. (In Ukrainian)
- Lazarenko, N., & Pylypenko, Ya. (2022). The structure of inclusive competence of future volunteer teachers. *Modern information technologies and innovative teaching methods in training specialists: methodology, theory, experience, problems*, 64, 108-116. (In Ukrainian)
- Maksymyuk, S. P. (2005). *Pedagogy: scientific manual*. Kyiv, Ukraine: Condor. (In Ukrainian) ISBN 966-8251-36-9
- Myronova, S. P. (2016). Realities and prospects of providing inclusive education by specialists. *Scientific journal of the National Pedagogical University named after M. P. Drahomanov: Correctional pedagogy and special psychology*, 32(2), 5-10. (In Ukrainian)
- Pyatakov, T. S. (2012). Development of inclusive teacher competence: Swiss experience. *Comparative pedagogical studies*, 1(11), 93-98. (In Ukrainian)
- Shevchenko, M. (2023). Formation of inclusive competence of future teachers of physical education as a psychological and pedagogical problem. *Scientific bulletin of South Ukrainian National Pedagogical University named after K. D. Ushynsky*, 3(144), 78-84. (In Ukrainian) <https://doi.org/10.24195/2617-6688-2023-3-12>
- Solovei, T. V., & Tchaikovsky, M. Ye. (2013). Substantive components of the professional competence of a social worker of an inclusive educational institution. *Collection of scientific works of the Khmelnytskyi Institute of Social Technologies of the University "Ukraine"*, 1(7), 220-224. (In Ukrainian)
- Stepanova, T., Shapochka, K., Vdovychenko, R., Babaian, Y., & Ivanets, N. (2020). Formation of inclusive values as development of democratic values. *Amazonia Investiga*, 9(29), 107-115. <https://doi.org/10.34069/AI/2020.29.05.13>
- Vasylieva, H. (2021). Organizational and pedagogical conditions for the formation of methodological competence of teachers of inclusive education. *Pedagogical sciences: theory, history, innovative technologies*, 2(106), 193-210. (In Ukrainian)
- Verovkina, Z., Martsinovska, I., Vasylieva, H., Savinova, N., & Chopyk, L. (2023). Organization of inclusive education for schoolchildren with special needs in modern school practice. *Revista Eduweb*, 17(2), 54-65. <https://doi.org/10.46502/issn.1856-7576/2023.17.02.5>
- Voloshyna, O., & Dmytrenko, N. (2016). Preparation of future foreign language teachers to work in inclusive classes. *Scientific notes of Ternopil National Pedagogical University named after Volodymyr Hnatyuk. Ser. Pedagogy*, 4, 142-149. (In Ukrainian)
- Zobenko, N. (2022). To the issue of professional readiness of future primary school teachers to work in the conditions of inclusive education. *Scientific Bulletin of the Uzhhorod National University. Series: Pedagogy, Social work*, 1(50), 98-102. (In Ukrainian)