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Scientific and Methodic Model of Formation of Future Teachers' Inclusive Competence.

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ABSTRACT

The article focuses on revelation of the scientific and methodic model of formation of future teachers' inclusive competence and the ways of realization of the model in educational establishments. Future teachers' inclusive competence is considered to be an important integral component of their readiness for professional activity in the field of inclusive education. The scientific and methodic model includes certain blocks. They are aim block (it includes the aim, tasks and principles), content block (it includes the structural elements of inclusive competence), operational block (it describes the stages and the complex of means of formation of inclusive competence) and evaluative-resultant block (it describes the levels and the results of the implementation of the model). The article depicts the stages of formation of future teachers' inclusive competence, namely: preparatory, cognitive, practical and analytical stages. The formation of future teachers' inclusive competence is determined by criteria and indicators. They are: personal criterion (level of development of inclusive competence of future teacher's personality), procedural criterion (level of future teachers' awareness regarding the specificity of inclusive education and level of development of special inclusive skills), analytical-evaluative criterion (level of person's capacity for self-improvement and self-assessment).

Keywords: future teachers; inclusive competence; educational establishment; blocks; stages.

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INTRODUCTION

Educational inclusion is a process of inclusion of children with disabilities in secondary schools and ensuring the right to get education, the quality of which does not differ from education of all other children. This position is reflected in a number of international documents (Universal Declaration of Human Rights, Declaration of the Rights of the Child, Convention on the Rights of the Child, World Declaration on Education for All, the Standard Rules on the Equalization of Opportunities for Persons with Disabilities, Salamanca Declaration, World Programme of Action Concerning Disabled Persons, Dakar Declaration). The above-mentioned statement is a basis for organization of disabled children's inclusive education which is implemented in the educational environment with the aim of realization of their right to choose educational institution and educational form by place of residence and with provision of all necessary conditions.

Taking into account the inclusive component in educational process, nowadays the problem of professional training of teachers, who can bring up healthy generation by using methods of maintenance, strengthening and improvement of health, is significant for higher pedagogical school. It is teachers' valeological activity that is aimed at overcoming problems with youth health. These problems can be solved only by a humanistic personality. Teachers form both motivation for healthy lifestyle and individual valeological consciousness.

That is why wide implementation of the idea of inclusion in secondary schools depends greatly on teachers' advanced training, which needs making appropriate changes in the process of future teachers' training. In this perspective, the problem of formation of future teachers' inclusive competence is of great importance. Future teachers' inclusive competence is an integrative and personal formation which determines the ability to perform professional functions in the process of inclusive education, considering different educational needs of disabled students, providing their inclusion in learning environment, creating conditions for their development and complete socialization, due to future teachers' direct mastering health maintenance technologies.

So, in the transition to inclusive educational model, it is a teacher who obtains basic knowledge about health and healthy lifestyle, has creative approach to educational process, forms motivation and health culture of younger generation and carries out health maintenance activity.

A number of scientists have paid their attention to different aspects of the problem of inclusive education. For instance, A. Kolupayeva, O. Taranchenko and O. Bilozerska (2012), T. Sak (2011), Yu. Naida (2010), V. Siniov and A. Shevtsov (2013), N. Sofiy (2017) have worked out the basics of philosophy of inclusive education and conceptual aspects of inclusive education. O. Chebotaryova (2016), E. Daniels and K. Stafford (1999), T. Kalinina and G. Silina (2011), L. Prokhorenko (2017), T. Skrypnik (2014), N. Slobodyanyuk (2014), I. Sukhina (2015) have studied the problem of implementation of inclusive education in pedagogical process. Yu. Boichuk and O. Borodina (2013), E. Danilavichute (2013), L. Savchuk (2010), S. Yefimova (2012) have investigated the peculiarities of teachers' activity in inclusive educational institutions. O. Ionova (2013), Sh. Kroker (2009), T. Lorman (2010) have analyzed the experience of disabled children's education in different countries of the world.

However, the process of formation of future teachers' inclusive competence and their training for professional activity in conditions of inclusive education have not been under careful consideration in pedagogical science. It causes the necessity of solving a number of existing contradictions concerning the investigated problem. The first contradiction is between social order, aimed at disabled children's inclusion in the environment of secondary schools, and teachers' insufficient readiness for implementation of inclusive education. The second contradiction is between educational practice need for qualified specialists, who have a high level of inclusive competence, and traditional content of teachers' training. The next contradiction is between need for purposeful formation of future teachers' inclusive competence and absence of scientific-methodic model that helps to form inclusive competence. The last contradiction is between the potential of future teachers' valeological training and insufficient use of health maintenance technologies in the conditions of inclusive education.

The aim of the research is to reveal the scientific and methodic model of formation of future teachers' inclusive competence and the ways of realization of it in inclusive educational establishments.

MATERIALS AND METHODS

To conducting the research, certain methods were used, namely: theoretical and empirical. The theoretical methods were: analysis and synthesis of philosophical, medical, valeological and psychological-pedagogical literature for comparing scientists' different views on the investigated problem, definition of conceptual and categorical apparatus. The empirical methods were observation, talks, methods of expert evaluation, self-evaluation for developing the scientific and methodic model of formation of future teachers' inclusive competence and identifying the ways of realization of the developed model in inclusive educational establishments.

The research work was carried out during 2011-2016 in Kharkiv; 72 future teachers (students) of H. S. Skovoroda Kharkiv National Pedagogical University were involved in the research work.

EXPERIMENTAL

Future teachers' inclusive competence is an integrative personal formation which determines the ability to perform professional functions in the process of inclusive education, taking into consideration educational needs of disabled students, ensuring their inclusion in general educational environment, creating conditions for their development and self-development, complete socialization due to direct mastery of health maintenance technologies. Future teachers' inclusive competence relates to the group of special professional competences.

Teachers' inclusive competence is ensured by formation of its components. There are three components in the structure of future teachers' inclusive competence, namely: motivational-value, cognitive-operational and reflexive-evaluative. The motivational-value component means formation of positive motivation for inclusive activity, basic qualities of inclusive competent teachers. The cognitive-operational component means availability of special inclusive knowledge, skills and ways to improve and increase knowledge. The reflexive-evaluative component means formation of ability for self-reflection and self-control.

It should be admitted that these components are conditionally determined, and they are formed complexly in educational process. The personality of a future teacher is considered to be formed in the professional aspect and ready for acting in inclusive educational environment only in the presence of developed components of inclusive competence, taking into account the peculiarities of its formation under conditions of professional and pedagogical training.

Description of the model

The scientific and methodic model of formation of future teachers' inclusive competence was developed on the basis of systematization and interpretation of the experience of implementing the ideas of systemic, humanistic, competence and personality-activity approaches in higher pedagogical education and the obtained data on the essence and the structure of future teachers' inclusive competence.

The system connections, which promote interaction of blocks and creation of a whole, are obligatory elements of the model. There are some important blocks of the model, namely: *aim block* (it includes the aim, tasks and principles), *content block* (it includes the structural elements of inclusive competence), *operational block* (it describes the stages and the complex of means of formation of inclusive competence) and *evaluative-resultant block* (it describes the levels and the results of the implementation of the model).

The projected model includes principles of future teachers' education in conditions of the higher pedagogical school. These principles are important for the effectiveness of the process of formation of future teachers' inclusive competence. These principles are: principle of humanism, principle of context, principle of activity and consciousness, dynamism principle, principle of connection between theory and practice. The principle of humanism means expression of love, ability to respect and appreciate the dignity of disabled children etc. The principle of context provides the focus of the learning process on specific vital goals and improvement of inclusive activity. The principle of activity and consciousness mean training of conscious and active inclusive-competent teachers, activation of their inclusive activity due to using forms and methods of



active learning. The dynamism principle provides future teachers' gradual mastery of inclusive competence throughout the training period. The principle of connection between theory and practice means the use of theoretical inclusive knowledge for execution of practical tasks connected with inclusive education.

The implementation of the process of formation of future teachers' inclusive competence can be carried out using a complex of means. It includes forms, methods and techniques of organization of future teacher's educational and cognitive activity, which reflects the purpose of realization of the proposed model most adequately.

When realizing the scientific and methodic model of formation of future teachers' inclusive competence, the stages of formation of future teachers' inclusive competence can be distinguished. They are *preparatory, cognitive, practical and analytical stages*. The scientific and methodic model of formation of future teachers' inclusive competence is presented in Fig. 1.

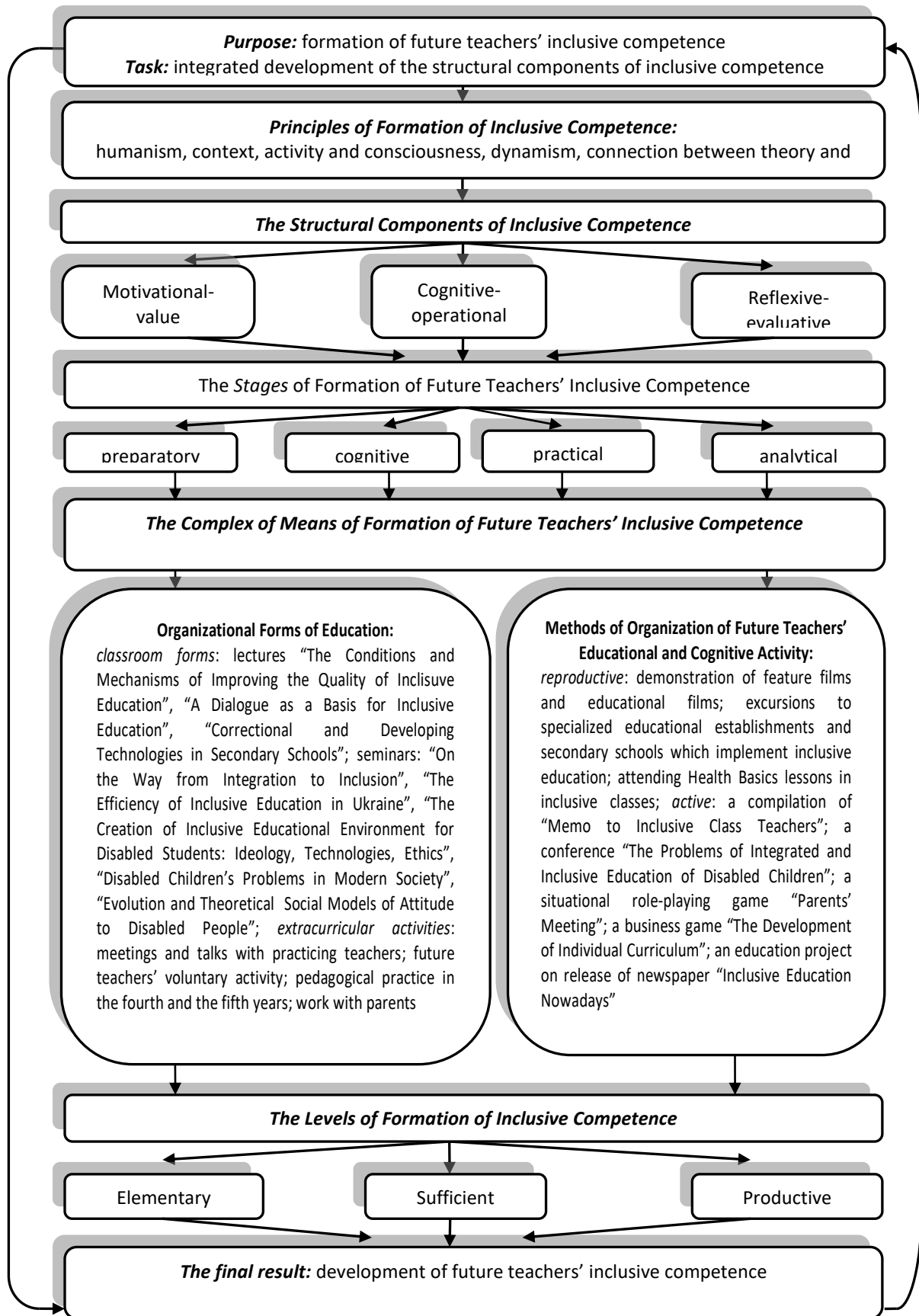


Fig 1: The Scientific and Methodic Model of Formation of Future Teachers' Inclusive Competence

The ways of realization of the scientific and methodic model

The formation of future teachers' inclusive competence is a long, complex and holistic process. The developed model of formation of future teachers' inclusive competence in the process of professional training includes four stages.

The preparatory stage of realization of the scientific and methodic model of forming future teachers' inclusive competence focuses on designing and development of scientific and methodic support of the process of formation of future teachers' inclusive competence. The preparatory stage provides the solution of the many problems. They are: modification of existing programs of the academic disciplines of professional and practical training cycle (these disciplines are General and Pedagogical Valeology (the 1st year university course), Basics of Valeological Monitoring and Valeodiagnosics (the 2nd year university course), Prevention and Correction of Behavioral Anomalies (the 3rd year university course), Valeological Technologies (the 4th year university course), Valeophilosophy and Health Culture (the 4th year university course), Psychovaleology (the 5th year university course), Correctional Pedagogy (the 5th year university course), Health Maintenance Pedagogical Technologies (the 5th year university course), etc.); the development of the program of special course (Basics of Inclusive Education); the development of script of the round table "The Problems of Integrated and Inclusive Education of Disabled Children", situational role-playing game "Parents' Meeting", brainstorm "Teacher's Success in Inclusive Activity", pedagogical situations, project on release of newspaper "Inclusive Education Nowadays", complex of practical tasks for realizing them in pedagogical practice.

The cognitive stage of the process of forming future teachers' inclusive competence has the following tasks: the development and deepening of interest and value attitude to disabled children's inclusive education in secondary schools; formation of basic qualities of inclusive-competent teachers. The education at this stage is mainly focused on formation of motivative-value component of future teachers' inclusive competence.

There are certain activities and factors which promote future teachers' awareness of the importance of inclusive competence, their positive attitude and persistent interest in the problems of inclusion. Firstly, certain information should be involved in the content of educational material (for instance, information about interesting facts on history of inclusive education, experience in implementation of it at schools in Ukraine and different countries of the world, experience in teachers' training for professional activity in the conditions of inclusive education, etc.). Secondly, future teachers should be familiar with the problems of inclusion, inclusive education, inclusive school, inclusive class, inclusive-competent teacher and the ways of overcoming the problems. These problems are: inadequacy of school architecture to disabled children's needs; lack of proper training and methodological support; teacher's lack of relevant knowledge on disabled children's peculiarities, their unpreparedness and ignorance about effective organization of educational process in inclusive classes, etc. The ways to overcome the above-mentioned problems can be the following: the change of physical environment of school for achieving the architectural accessibility; elimination of social barriers; gradual and purposeful change of culture, work of secondary and special schools; providing teachers with appropriate training and retraining for professional activity under conditions of inclusive education, demonstration of feature films and educational films on the above topics. Besides, the tasks can be achieved by working with key concepts, drawing up a list of pros and cons, etc.

Moreover, there are certain activities which promote strengthening future teachers' interests in the problems of inclusion and formation of teachers' basic significant qualities. These activities are: excursions to specialized educational establishments and secondary schools which implement inclusive education; future teachers' voluntary activity in public organizations and charitable funds; future teachers' participation in carrying out valeological actions, charitable auctions of disabled children's creative works, concerts and performances held in close cooperation between all children; attending Health Basics lessons in inclusive classes, meetings and talks with correctional pedagogues, surdopedagogues, speech therapists, defectologists, practicing teachers who teach Health Basics and work at schools where the model of inclusive education is implemented.

The practical stage of realization of the scientific and methodic model of forming future teachers' inclusive competence aims at development of cognitive-operational structural component.

The main means of achieving this goal at the third stage are giving lectures and seminars as part of such academic disciplines as General and Pedagogical Valeology, Basics of Valeological Monitoring and

Valeodiagnostics, Health Maintenance Pedagogical Technologies, Valeophilosophy and Health Culture, Psychovaleology, Correctional Pedagogy. These subjects are taken from the first to the fifth years of study, and active methods of education are widely used at lectures and seminars

The analytical stage is focused on further development of the components of inclusive competence, and the main attention is paid to reflexive-evaluative component. It can be done by distinguishing the relevant aspects during teaching practice in the fourth and the fifth years of study, work with parents, development of individual curricula and organization of introductory teaching practice at inclusive schools.

So, the proposed scientific and methodic model of formation of future teachers' inclusive competence enables to solve many task and problems connected with formation of comprehensively and harmoniously developed personality of a teacher who has high level of development of inclusive competence.

RESULTS AND DISCUSSION

The formation of future teachers' inclusive competence is determined by criteria and indicators which reflect the content of its components.

The personal criterion reveals the level of development of inclusive competence of future teacher's personality. *The procedural criterion* determines the level of future teachers' awareness regarding the specificity of inclusive education and the level of development of special inclusive skills which are necessary for future teachers' professional activity in the process of inclusive education. *The analytical-evaluative criterion* reveals the level of person's capacity for self-control, self-improvement and self-assessment.

The indicators of each criterion can be determined on the basis of essence of the corresponding component of future teachers' inclusive competence.

For instance, there are such *indicators of the personal criterion* as interest to professional activity under conditions of inclusive education, desire to work with disabled students, motivation to succeed in inclusive activity.

Future teachers should have such qualities as humanity, tolerance, altruism, responsibility, courage, love of children, pedagogical intuition, benevolence, sociability, empathy, pedagogical tact, observancy, pedagogical optimism, professional growth, self-control etc. Teachers should be mobile and meet the high standards of culture.

There are such *indicators of the procedural criterion* as mastery of professionally significant knowledge (general scientific, general cultural, psychological and pedagogical, inclusive knowledge), formation of a complex of special inclusive skills and abilities, mastery of health maintenance technologies.

As for *the analytical-evaluative criterion*, the formation of inclusive competence is determined on the basis of such *indicators* as ability to assess and analyze own inclusive activity (self-diagnosis), ability to correct own disadvantages, desire for the professional growth, teachers' ability to regulate, improve and develop themselves under conditions of inclusive education.

Identifying the levels of inclusive competence formation is one of the necessary conditions of development of person's inclusive competence. *The level of formation of future teachers' inclusive competence* depends on the degree of development of its components. The difference between one level of inclusive competence and another level is in different degree of future teachers' awareness of their professional position on implementation of inclusive model of education, degree of mastery of inclusive knowledge and development of special inclusive skills and abilities, understanding of teachers' responsibility for the results of educational process.

Based on the theoretical analysis, in accordance with the above-mentioned criteria and indicators, the levels of formation of future teachers' inclusive competence have been distinguished. They are *productive*, *sufficient* and *elementary* levels.

Future teachers, who have *the productive level* of formation of inclusive competence, first of all should have strong interest in problems of development of inclusive competence, sustainable value motivation for formation of it and further improvement. They also should have a formed system of inclusive knowledge (particularly strong and deep knowledge of the essence of inclusive competence), confidence in its truthfulness. Moreover, teachers should have a system of special inclusive skills and abilities, and they should be able to use them in any situations of inclusive education, to search for ways of actions in problematic situations, to give preference to creative and search tasks, to analyze and generalize facts and experience. Teachers should have a constant desire for self-education, mastery of new ways and methods of action, set perspective goals and aim at independent researches and discoveries. Besides, teachers should be aware of disabled students' individual peculiarities of development, acknowledge their rights to education under conditions of inclusion, appreciate their interests and desire for development. They also should be aware of the importance of their personal moral, pedagogical and professional qualities which are necessary for mastery of inclusive competence. Their reflexive thinking should be well-developed; they should be self-demanding and have a constant desire for self-improvement and the capacity for objective self-control, adequate self-evaluation of formation of own inclusive competence, independent determination of methods of problem solving.

The *sufficient level* of formation of inclusive competence is characterized by a person's situational interest to the problems of formation of inclusive competence, availability of motives for mastery of teaching profession in the conditions of inclusive education (these motives can be unstable and change depending on external factors), unstable desire for professional growth under conditions of inclusive competence. Besides, teachers should take into account disabled students' interests and appreciate their personality, know the peculiarities of disabled students' development, partial recognition of their right to education in the conditions of inclusion. Most teachers' have their special inclusive skills and abilities, which are necessary for carrying out their inclusive activity, formed; implementation of consistent educational actions has been done according to instructions. Teachers act by algorithm on the basis of systematization and analysis of facts, have adequate orientation in different situations connected with inclusive education, but preference is given to reconstructive nature of activities and there is a shortage of original solutions. Such teachers have not fully formed personal moral, pedagogical and professional qualities which are necessary for mastery of inclusive competence; they have just some inclusive knowledge and partial confidence of it, but they can't reveal their inclusive competence in full. Teachers' self-education is not constant; the abilities to exercise self-control and self-evaluation predominantly have unstable, impulsive character. Teachers should have necessary incentive for self-education and overcoming of stereotypes in thinking.

The *elementary level* of development of inclusive competence is characterized by absence of interest in teaching profession under conditions of inclusive education. Teachers do not have enough understanding and perception of the motives and aims of mastering the teaching profession in the conditions of inclusive education. The common values which concern humans in general are dominant. Teachers do not have desire for professional growth in connection with the transition to inclusive educational model. Teachers with the elementary level of development of inclusive competence have lack of knowledge on the peculiarities of disabled students' development and interests and show psychological unwillingness to the work with disabled students. Such teachers' education at higher pedagogical establishments is subordinated to their personal goals or beliefs. These teachers' moral, personal, educational and professional qualities, which are necessary for mastery of inclusive competence, have not been fully formed. Their inclusive knowledge is superficial and unsustainable. These teachers do not use educational, scientific and methodic literature for professional growth under conditions of inclusive education; their knowledge on psychological and pedagogical terminology is poor. Besides, such teachers do not have a formed system of special inclusive skills and abilities, give preferences to the tasks of reproductive nature, do not show inclusive knowledge, perform certain educational actions only according to the instructions, cannot perform actions in a certain sequence and have no success in inclusive activity. Moreover, teachers have undeveloped reflexive thinking and inadequate self-esteem of own level of development of inclusive competence (too high or too low self-esteem).

The criteria, indicators and levels of development of future teachers' inclusive competence can certainly be extended. They can be considered conditional as the process of formation of inclusive competence is long-life, and it is rather difficult to anticipate the relationship between different components, levels of development of inclusive competence, their manifestation and unnoticeable changes.

The conducted work does not cover all the aspects of the problem. The perspective directions of further researches can be the following: analysis of ways to improve future teachers' inclusive competence, study of problems of joint activities of higher pedagogical educational establishments and comprehensive educational establishments for improving the efficiency of inclusive activity.

CONCLUSIONS

The work presents theoretical generalization and solution of the scientific problem of future teachers' preparation for professional activity in the conditions of inclusive education. Future teachers' inclusive competence is a component of professional competence and integrated indicator of their readiness for professional activity in the conditions of inclusive competence. It is an integrative personal formation on the basis of inclusive knowledge, special inclusive skills and abilities, professionally and personally significant qualities and mastery of health maintenance and correction and development technologies, which determine teachers' readiness for professional activity in the conditions of inclusive education.

The scientific and methodic model of formation of future teachers' inclusive competence is the basis of their preparation for professional activity in the conditions of inclusive education. The model includes interconnected blocks, namely: conceptual aim block (it includes the aim, regulatory and scientific support), content block (it includes the structural elements of inclusive competence), operational block (stages of practical realization of the organizational-pedagogical model, set of means, methods and forms of organization of educational-cognitive activity) and evaluative-resultant block (it describes the criteria, indicators and levels of formation of inclusive competence).

The criteria and corresponding indicators of formation of future teachers' inclusive competence have been specified in the work. They are: the personal criterion (interest to professional-pedagogical activity under conditions of inclusive education, motivation to succeed in inclusive activity, formation of future teacher's professional and personally significant qualities), procedural criterion (acquisition of inclusive knowledge, formation of a complex of special inclusive skills and abilities), analytical-evaluative criterion (ability to assess and analyze own inclusive activity (self-diagnosis), ability to correct own disadvantages, desire for the professional growth, teachers' ability to regulate, improve and develop themselves under conditions of inclusive education). The levels of formation of future teachers' inclusive competence have been specified either. They are productive, sufficient and elementary levels.

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