

## Methodological Basis of Competency-Based Approach to Bachelor-Defectologists' Training in a Tiered Structure of Higher Education

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### ABSTRACT

The urgency of the problem stated in the article is caused by the fact that the change in the education system's ideology actualizes the need to improve bachelor-defectologists' training, which requires a corresponding change in the field of higher education. The aim of research is substantiation of theoretical and methodological basis and development of scientific-methodical bases of formation and development of the competence-based approach in the preparation of bachelor-defectologists. The methodological basis of the study is competence, personality-oriented and activity approaches to education, which allow to define the basics of interaction, ensuring the stability of "knowledge" and "competence" paradigm, despite the changes in the socio-cultural context of education. Competency-based approaches in the framework of the modernization of the education system were considered. Terminological system of investigated problem was formed on the basis of the dichotomy of systematically interrelated definitions of "competency" and "competence", and their informative characteristics were analyzed. The features of preparation, evaluation of educational outcomes and the basic principles of competence-based approach were identified. Methods of measuring learning outcomes were analyzed. Substantive content of professional competence, presented by a set of motivational-axiological, cognitive, reflective and activity components was emphasized. The work has theoretical-methodological and practical significance, since the results obtained during the study, significantly expand the scope of knowledge of competent approach, contain new conceptual approaches, as well as make it possible to determine the potential field of applied research, relevant to defectological education.

### KEYWORDS

Competency-based approach, competence, competence-oriented tasks, bachelor-defectologists, education quality assessment

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## Introduction

### *The relevance of research*

The development of civilization necessitates periodic modernization of education and, as a consequence - the change in its value content. The current stage of the modernization of higher education in Russia in the context of the

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Bologna agreement and the National doctrine of education marked the transition to a new generation of federal state educational standards. The transition from knowledge paradigm to competence-based approach is one of the priorities of the educational policy of the state at the moment. The change of Education as a social institution in modern society was confirmed by several interrelated processes: increase in the share of students, especially students in the overall population, values of education become instrumental, methods of measuring learning outcomes are being revised (Kalimullin, 2014a). The change in the education system ideology actualize the need to improve training of bachelor-defectologists, which in turn requires the development of appropriate methodological bases. According to the Concept of modernization of Russian education, the aim of modern higher education is to prepare competitive specialists able to think and act systemically, possessing a creative activity, leadership qualities, and other key competencies. In this context, the terms "competency" and "competence" are becoming more widespread in the educational environment.

Competency based education, began to form in the United States in the 70's of the last century. The competency principle originated in framework of the theory of language, and later began to be used as the scientific method applied to various areas of knowledge, including pedagogy. The concept of "competency" was first suggested by the American linguist (Khomski, 1972) in relation to transformational grammar.

The author pointed out the distinction between competency (knowledge of their own language speaking - listening) and use (actual use of language in concrete situations).

Introduction to the professional education of new educational constructs - competencies, powers and key qualifications - was offered in foreign pedagogical publications in the 80s of the last century. Competency-based approach to education was laid by American researchers (Spencer & Spencer, 1993; Spencer, Mcclelland & Spencer, 1994; Raven, 2002) whose works devoted to the problem of competencies and their development within the framework of the modernization of the education system, are fundamental for supporters of the competency approach.

The main developer of competencies (Halasz, 2001) considers them as a response to the challenges that Europe confronts (preservation of an open democratic society, multilingualism, multiculturalism, the new requirements of the labor market, the development of complex organizations, economic changes, etc.). The Council of Europe adopted the definition of five key competencies, which "young Europeans must be fitted with".

Consideration of these issues requires reference to the study of the methodological foundations of the competency based approach in the field of special defectological education. The study of problems of research and literature analysis revealed that the widely used theoretical and methodological approaches to the study of education require the development of new approaches to the study of the process of qualitative changes in the preparation of bachelor-defectologists. The need to implement the competency based approach in education, and the lack of convincing theoretical justification of its content and specificity in contrast to the traditional and current educational paradigms were noticed (Kalimullin, 2014b). That is why the article focuses on the author's ideas

of the desired and possible changes in education. The collection of contradictions defined research problem, which is the need to develop theoretical and methodological bases associated with the implementation of competency-based approach in the preparation of bachelor-defectologists.

### **Methodological Framework**

The basic theories in the analysis of the institutional characteristics of education are the theories of E. Durkheim (1996) and T. Parsons (1998). E. Durkheim (1996) described the importance of education for the functioning and reproduction of society in the context of socialization. T. Parsons (1998) while creating the theory of society as a system emphasizes the role of social institutions in the organization and regulation of relations between individuals.

The scientific value of the research are J. Raven (2002) theory about the need of competence in the life of modern society, and revealed by J. Dewey (1921) contradiction of the formal and informal education are of scientific value for the research.

The choice of theoretical and methodological research guidelines was based on:

- the theory of system-activity approach and features of its application in solving the educational problems on the basis of the principle of systemacity (Abdulkhanova-Slavskaya, 1980; Anokhin, 1978; Leontyev, 2005; Lerner, 1974; Lomov, 1984). A systematic approach is involved to determine the basis of interaction, ensuring the stability of "knowledge" paradigm, despite the changes in the socio-cultural context of education; competency based approach in education (Baydenko, 2004; Bolotov, and Serikov 2003; Zeer, 2004; Zimnyaya, 2005; Tatur, 2004; Khutorsky, 2002; and etc.);

- subject-oriented approach (Haug, & Tauch, 2001; Solovova, 2002), shows the importance and conditionality of reflection and actions of education subjects for the implementation of competency-based approach;

- person-oriented and person-centered approaches in education (Yakimanskaya, 1995; Maslow, 1971; Rojers, 2001) and etc.

Herewith, in the justification of methodological approaches were identified, defined and taken into account the following key system-integration factors:

- main trends of interrelations between the labor market development and the structure of bachelor's training in higher education;

- methods of constructing competency structure and methodology of formation of the maintenance of the competence-oriented way of evaluating the quality of education, which correspond to the traditions of Russian education and European educational standards.

### **Methods**

Theoretical methods: study and analysis of professional literature and research on the problem of quality of education and competency-based approach; classification, comparison, generalization.

### **Results**

The specificity and diversity of tasks in the work with persons with disabilities requires from teacher professional readiness to meet challenges in

the field of pedagogical correction, rehabilitation, diagnostic and consultative, cultural and educational activities.

Structure and content of professional competencies of future teachers-defectologists is represented by a set of cognitive, reflective and activity components. Cognitive component is a set of theoretical knowledge about the specifics of correctional and educational activities, as well as theoretical knowledge about the methods of professional work to provide effective integration and socialization of people with disabilities.

The activity component consists of abilities and skills of professional work in the field of psycho-pedagogical study, correction of disorders, content design of educational programs, counseling and socialization of children with developmental disabilities. The reflective component is the experience of the application and evaluation of knowledge and skills in teaching and professional activities. It should be noted that the work with persons with disabilities requires certain personal qualities and values, which in turn have an impact on the performance of professional tasks. The nature of competence is that it can appear only in the organic unity of human values; on conditions of deep personal interest in this type of activity. Value orientation is usually defined as the orientation of a person on goals and means of action. There is a connection between professional valuable orientations of the future teachers-defectologists and professional competence. We regard them as a targeted process of selecting, understanding, experiencing and professional values assigning of pedagogical activity with persons with disabilities (Akhmetzyanova, 2015). Thus, the professional value orientations are components of professional competence. Features and the basic principles of the competency-based approach in the preparation of bachelor-defectologists are: support of the educational program involves more than learning a particular profession, but the development of key, basic, special competencies, allowing to respond rapidly to labor market changes and challenges of the world; continuity of education; transition from subject-oriented education to the interdisciplinary-modular training based on competence, which provides the flexibility of higher education (Kalimullin, 2014a). We believe that competence as an integral characteristic of the personality is formed in the educational process through a set of specific competencies and professional value orientations, and is manifested in the activity (Akhmetzyanova & Kedrova, 2015). To assess the level of formation of certain competencies in the learning process, the intermediate and final certification that can detect the presence of a theoretical framework of work readiness is used. Today there is a search for methodological approaches to the analysis and evaluation of formation of professional competence. Assessing the level of formation of professional competence includes: evaluation of manifestation features; assessment of formedness of the main components; assessment of professional formation of value orientations.

One of the defectologists' training problem is that the traditional system of education assessment does not meet the requirements of the competency-based approach (Tatur, 2004). Analysis of the sources on this issue shows the complexity, multidimensionality and ambiguity of interpretation of both the concepts of "competence", "competency", and based on them approach to the process and outcomes of education (Baydenko, 2004). In accordance with the FSES requirements to "Special (defectological) education", for ongoing

monitoring of progress and intermediate certification of students to meet their personal achievements with the requirements of the basic educational programs, there were established funds of assessment tools, which allow evaluating the levels of educational achievement and the degree of formation of competencies. Fund of assessment tools is an integral part of the regulatory and methodological quality assessment system of assimilation of the basic educational program (BEP), is a part of BEP and the educational complex of the discipline. The fund, which is used for carrying out interim evaluation of students in the discipline or practice, includes a list of competencies indicating the stages of their formation in the course of development of the educational program, competence-oriented tasks (COT) needed to assess knowledge, skills and experience activities that characterize stages of formation of competencies in the course of development of the educational program. The primary means of formation of competence are the competence-oriented tasks (COT). COT are defined as the integrative didactic unit of content, technology and monitoring the quality of training of students.

Thus, the task includes technology content, teaching and evaluating the quality of training of students in the educational process of the university, to ensure the efficiency of formation of professional competence of students. Competence-oriented task organizes educational and informative, research, design, and professional activities of bachelor-defectologists. In accordance with the selected content of the component composition of professional competence and the proposed criteria for evaluating educational outcomes, levels of formation of the content of components of professional competence have been identified (baseline, increased, high), each of which is determined by expression of the corresponding characteristics, allowing to decompose the criteria for evaluating the formedness the content of the competence the components in the set of measurable indicators.

## Discussions

Problems of efficiency increase and improvement of bachelor training system in the context of the competency-based approach are in focus of many national and foreign researchers. Currently, there is a significant body of works devoted to this issue. Substantial characteristics of these concepts have no clear and generally accepted definitions, and this is confirmed by an active discussion in the scientific literature. The subject of this review is a theoretical and methodological analysis of the essence of competence approach in relation to the concept of "competence / competency". Works of many researchers are dedicated to the analysis of these concepts, as well as to their classification. L. N. Bolotov (2003) believes that competence and competency can be used as synonyms. E.F. Zeer (2004) emphasizes the importance of the introduction into the professional and educational practice "new psycho-didactic construct - competency", due to the need to resolve the contradiction between academic disciplines and future professional activities, and considers the psychological components of competency: self-organization, self-reliance, self-control, reflection, self-determination and self-regulation. S.E. Shishov (2002) defines this term as the general ability and willingness of the individual to the activity, which are based on knowledge and experience that are acquired through learning. «Competency can not be defined by a certain amount of knowledge and skills, since a significant role in its manifestation belongs to circumstances».

A.V. Khutorsky (2004) defines competency as a set of interrelated personality qualities (knowledge, skills, ways of life), defined in relation to a certain range of objects and processes necessary for a qualitative and productive activities, i.e. it is an alienated, predetermined requirement to the educational preparation of student. The foregoing suggests that the competency is a person's readiness to mobilize the knowledge, skills and external resources for effective action in a particular life situation. I.A. Zimnyaya (2003) identifies the following key competencies: related to the person as an individual, subject of action or communication; related to the social interaction of human and social development; related to human activity. Competency of cognitive activity: formulation and solution of cognitive tasks; creative solutions, problem situations, their establishment and decision; productive and reproductive cognition, research, intellectual activity.

The analysis of scientific papers showed that the number of research on the issue of competency-based approach in the preparation of teachers-defectologists is insufficient and they are of debatable character. The variety of approaches to the definition of "competency" and "competence" does not give them a single interpretation. However, evident is the fact that competence as a result of education, involves a set of specific competencies. O.G. Smolyaninova (2006) believes that competence is one's possession of the relevant expertise, including his personal attitude to it, and to the subject of activity, i.e. it is a complete personal quality of the person. The competent person has a certain set of competencies, allowing him to reasonably talk about a particular area of activity and act effectively in it. Although there are many definitions of competence, they all reflect a system-wide shift in the understanding of the phenomenon of education from the previous content-knowledge-subject (discipline) to a new paradigm of competence, in accordance with which education is focused on the formation of a person's readiness to effective life in the wide field of different contexts, on the background of increasing personal autonomy and freedom. Meanwhile, it should be noted that today scientific-methodological approaches and conceptual bases of competence approach to bachelor-defectologists' training in a tiered structure of higher education are not enough developed.

## Conclusion

The psycho-pedagogical interpretation of the concepts of "competency-based approach", regarded as the paradigm of education, offering a set of ways of interaction between the participants on the basis of subject-subject relations in all the varieties of educational activity that involves changing of functions, structural and functional components of educational content and methods of measurement the education's result was given.

The development of a competent personality of bachelor-defectologists is considered as a new objective of education, in which the content of competencies reflects the expectations of modern society. The methodological approaches to the analysis and evaluation of formation of professional competencies were developed. Assessing the level of formation of professional competencies consists of: assessment of manifestation's features; assessment of formation of the main components; assessment of formation of professional value orientations.

## Recommendations

The practical significance of the study lies in the fact that its results can be used in the development of basic educational program for special defectological education, as well as in the analysis and evaluation of formation of professional competencies of bachelor-defectologists.

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No potential conflict of interest was reported by the authors.

### Notes on contributors

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