© **Russian Journal of Education and Psychology**
2020, Volume 11, Number 2 • http://rjep.ru

ПСИХОЛОГИЧЕСКИЕ ИССЛЕДОВАНИЯ

PSYCHOLOGICAL STUDIES

DOI: 10.12731/2658-4034-2020-2-7-21

ABILITY TO DIAGNOSE AS A PROFESSIONAL COMPETENCE OF A PEDAGOGUE-PSYCHOLOGIST IN THE TASKS OF COGNITIVE EFFECTIVENESS OF LEARNING SUPPORT[1]

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Aim. *The aim of the work was to find out the level of elaboration of ability to diagnose as a professional competence of a pedagogue-psychologist in the different professional tasks, especially in the tasks of cognitive effectiveness of learning support, to show the necessity of the scientific reseach in the field, to show the necessity of the pedagogues-psychologists diagnostic competence formation during the university education.*

Materials and Methods. *A search and analysis of literary sources were conducted on the key words "diagnostic competence", "diagnostic ability as a competence", "competence approach"; the standards of higher professional education adopted today in Russia in the field of education "Psycho-pedagogical Education" and "Psychology" for the degrees "Bachelor" and "Master" were analyzed.*

Results. *Diagnostic ability definitely refers to the basic professional competence of a pedagogue-psychologist. However, there is no precise un-*

[1] Исследование выполнено при финансовой поддержке РФФИ в рамках научных проектов № 20-013-00283 и № 19-29-14059.
Acknowledgements: the work is supported by RFBR, projects No 20-013-00283 and No 19-29-14059.

derstanding of the content of this competence and agreement on what a specialist-psychologist working at school should know and be able to do within the diagnostic competence, especially in the sphere of cognitive effectiveness of learning support. The article also discusses: the professional diagnostic competence in the framework of the competence approach in education; lack of elaboration and presentation of diagnostic competences in the standards of higher education; relation of thinking and understanding to the diagnostics; diagnostics for the cognitive effectiveness of learning support.

Conclusions. *It is concluded that the effective implementation of the competence approach is impossible without special studies aimed at the study of the content, possibilities and methods of the professional diagnostic competence formation. Consideration of the diagnostic competences in terms of understanding and diagnostic thinking can also help to define more clearly the necessary professional competences, the formation and development of which is the task of modern education. The issue of the formation of diagnostic competence is in the focus of attention of the modern scientists, however, an explicitly effective methodology for the formation of diagnostic abilities has not been presented yet.*

Keywords: *diagnostic competence of a pedagogue-psychologist; diagnostics for the cognitive effectiveness of learning support; competence approach in education; professional competence; diagnosis; diagnostic thinking; diagnostics as a mental operation; understanding; cognitive effectiveness of learning.*

СПОСОБНОСТЬ К ДИАГНОСТИКЕ КАК ПРОФЕССИОНАЛЬНАЯ КОМПЕТЕНЦИЯ ПЕДАГОГА-ПСИХОЛОГА В ЗАДАЧАХ ОБЕСПЕЧЕНИЯ КОГНИТИВНОЙ ЭФФЕКТИВНОСТИ ОБРАЗОВАНИЯ

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Цель. *Целью работы было: определить уровень исследованности способности к диагностике как профессиональной компетенции пе-*

дагога-психолога в различных профессиональных задачах, особенно в задачах обеспечения когнитивной эффективности обучения, показать необходимость научных исследований в обозначенной области, показать необходимость формирования диагностической компетенции педагогов-психологов в рамках университетского образования.

Материалы и методы. *Исследования и анализ источников проводилось по ключевым словам «диагностическая компетенция», «диагностическая способность как компетенция», «компетентностный подход»; были проанализированы стандарты высшего профессионального образования, принятые сегодня в России в сфере подготовки по направлениям «Психолого-педагогическое образование» и «Психология» для уровней «Бакалавр» и «Магистр».*

Результаты. *Диагностическая способность однозначно является базовой профессиональной компетенцией педагога-психолога. Однако, пока еще нет точного понимания и согласия по поводу того, что именно работающий в школе специалист-психолог должен знать и уметь в отношении этой компетенции, особенно в сфере обеспечения когнитивной эффективности обучения. В статье также обсуждаются вопросы профессиональной диагностической компетенции в рамках компетентностного подхода в образовании, недостаточность исследованности и представленности диагностической компетенции в стандартах высшего профессионального образования, отношения мышления и понимания к диагностике, диагностика для обеспечения когнитивной эффективности обучения.*

Выводы. *Сделаны выводы о том, что эффективная реализация компетентностного подхода не будет возможной без специальных исследований, нацеленных на изучение содержания, возможностей и методологии формирования профессиональных диагностических компетенций. Рассмотрение диагностики в аспектах понимания и диагностического мышления может помочь также показать необходимость профессиональных компетенций, формирование и развитие которых является задачей современного образования. Формирование диагностической компетенции сегодня находится в фокусе внимания современных ученых, однако эффективной методологии для формирования диагностических способностей пока нет.*

Ключевые слова: *диагностическая компетенция педагога-психолога; диагностика для обеспечения когнитивной эффективности обучения; компетентностный подход в образовании; профессиональная компетентность; диагноз; диагностическое мышление; диагностика как операция мышления; понимание; когнитивная эффективность обучения.*

Introduction

In recent years, in the Russian national education, competence approach is declared as a priority methodology and basic paradigm. This approach is based on the idea of the need for a priority orientation of education on its results, expressed in the formation of the student's necessary general cultural and professional competences, which are understood as a willingness to use the acquired knowledge, skills, ways to solve practical and theoretical problems [16]. To form specialist's abilities necessary for successful professional activity as the goal of education seems obvious. However, the specific sets of competences necessary for a particular specialist, presented in educational standards, are not yet fully and clearly defined. The task to clarify the specialist's competency profile and the corresponding refinement of educational programs remains highly relevant and requires professional attention. The competence approach focuses on the result of education, and the result is not considered as the sum of the acquired information, as in the traditional knowledge approach, but the person's ability to act in problem situations [15].

Materials and Methods

A search and analysis of literary sources were conducted on the key words "diagnostic competence", "diagnostic ability as a competence", "competence approach"; the standards of higher professional education adopted today in Russia in the field of education "Psychology" and "Psycho-pedagogical Education" for the degrees "Bachelor" and "Master" were analyzed.

Results

Diagnostic competence of a psychologist and of a pedagogue-psychologist (or a teacher-psychologist, in Russia it is a psychologist who

works at school) in the modern Russian National Educational Standards of Higher Education for psychological specialties

The need for professional diagnostic ability seems obvious to almost any specialist. At the same time, a situation in which a specialist needs diagnostics is obviously a problem, and the diagnostics in a problem situation is a necessary action that helps the specialist to solve the problem. Thus, the diagnostic competence in the structure of the professional set of competences obviously should take an "honorable" place or, at least, definitely be there. If we analyze, for example, some of the currently adopted standards of higher professional education, we can see, that this competence appears there in one or another form, but its wording and attribution to the categories of competences can vary greatly.

For example, in the "Federal State Educational Standard of Higher Education. Higher education degree – Bachelor. In the field of education – 37.03.01 Psychology" we find that the graduate should "have the ability to select and apply psychodiagnostic methods according to the goals, situations and contingent of respondents with subsequent mathematical-statistical data processing and its' interpretation (PC-2)" [2], in a similar standard for the Master degree – that a graduate must have a "willingness to conduct diagnostics, examination and correction of psychological properties and conditions, mental processes, different types of human activities in normal and pathological conditions, taking into account the peculiarities of age stages, crisis of development, risk factors, belonging to gender, ethnic, professional and other social groups (PC-6)" [4]. "Federal State Educational Standard of Higher Education. Higher education degree – Bachelor. The field of education 44.03.02 Psycho-pedagogical Education" [3] highlights several competences related to the diagnostic function: the willingness to use methods of diagnostics of development, communication, activities of children of different ages (OPC-3); the ability to diagnose the level of acquisition of the educational program by children, using standard subject tasks, making (together with the methodologists) the necessary changes in the construction of educational activities (PC-8); possession of methods of social diagnostics (PC-20); willingness to apply the approved standard methods and tech-

nologies that permit to solve diagnostic and correctional-developmental tasks (PC-22); willingness to apply the recommended methods and technologies that permit to solve diagnostic and correctional-developing tasks (PC-33).A similar standard for Master degree [5] includes: the ability to design and carry out diagnostic work needed in professional activities (OPC-5); the ability to diagnose the mental development of students (PC-1); the ability to design a strategy for individual and group correctional and developmental work with students based on the results of diagnostics of students' mental development (PC-3); the ability to diagnose the educational environment, determine the causes of learning disabilities, behavioral and developmental disorders of students (PC-7); the ability to choose and apply diagnostic methods in practical work, taking into account the characteristics of students with disabilities (PC-13); developmental work with students with disabilities based on the results of diagnostics (PC-15); the ability to diagnose the educational environment, determine the causes of learning disabilities, behavioral and developmental disorders of students with disabilities (PC-19); the ability to use and develop methods of psycho-pedagogical diagnostics to identify opportunities, interests, abilities and aptitudes of students, features of the acquisition of educational programmes (PC-24).Thus, according to the developers of the presented standards, diagnostics for educational psychologists, firstly, belongs to the more "important" class of general professional competences, and secondly, is represented by a much wider range of different abilities. And for just a bachelor psychologist, diagnostic competency is limited by a standard only in the ability to select and apply psychodiagnostic methods. It is obvious that the existing standards in terms of issues of diagnostic competency of the graduates require serious improvement (especially for standards in psychology). It seems necessary to conduct research, the purpose of which is to clarify the diagnostic component of the professionalism of a particular specialty and the corresponding adjustment of the list of necessary competences of educational standards.

Particular features of the used terminology

In this work, we would like to identify and analyze a number of points that, in our opinion, can help to define more clearly both the actually

necessary diagnostic competences of the modern specialists and the possible ways of their formation in the educational process.

It should be noted that the definitions of "competence" and "competency" are not clearly defined yet. Accordingly, the concepts of "diagnostic competence" and "diagnostic competency" can also be mixed.

Today, the scientific literature presents a large amount of different definitions of the concepts "competence" and "competency" [10, 19, 20]. Competency is usually understood as a personal quality of a person formed in ontogenesis in the aspect of possessing the necessary depth and range of knowledge in a certain area, ability and readiness to perform a certain activity. Competency is a qualifying characteristic of a person, a peculiar feature of a subject of activity, thanks to which he can solve a certain range of tasks. The term "competence" sometimes refers to the range of tasks, the area of problems to be solved, or a certain range of issues in which the person posses a good awareness and has necessary knowledge and experience. These are functional tasks that a person can successfully solve. Competency in this case is the possession of competence. However, in educational standards competences are formulated as abilities, readiness or possession (for example, of methods). In other words, the developers of these standards mean that competences are closer to the characteristics of an individual than to the characteristics of the spectrum of tasks, in other words, we are actually talking about competencies (in this work we will use this understanding of competence as quality, as a general human ability based on knowledge, experience in a particular field, values, inclinations, which he mastered in the educational process; professional competence is the ability to operate successfully in the professional sphere on the basis of one's practical experience, skills and knowledge while solving the professional tasks). If we talk about the definition of diagnostic competence (competency), then this means readiness and the ability to solve diagnostic problems efficiently. At the same time, in structural terms, it is an integral property of the personality and it includes a number of particular competences that are based on the synthesis of the theory and practice of setting a diagnosis, and that are manifested in the ability to propose diagnostic hypotheses [11], test them

and make the necessary findings and conclusions. A number of authors state that today there is still no holistic conception of the structure and content of the term "diagnostic competence" [12, 13]. In general terms, diagnostic competence is necessary for the implementation of a diagnostic function. The concept of "diagnostic function" is widely used today in describing various types of pedagogical, psychological, educational, and social pedagogical work, but it is definitely not limited by pedagogy and is also suitable for describing any other professional activity.

Diagnostic competence as a mental operation

A necessary condition for the formation of the diagnostic competences is the ability to use diagnostic thinking, which is a special form of perceptual-mental activity [14]. By analogy to mental operations of generalization or classification, diagnostics can be considered as a complex mental operation that integrates such necessary elements of mental activity as comparison, analysis, synthesis, etc.. Diagnostics as a mental operation exists not only in professional, but also in everyday life. A person constantly faces various diagnostic tasks (in a broad sense) in a wide variety of situations – for example, to identify the causes of any domestic problems or malfunctions with the aim to fix them, to diagnose one's own condition when there are some ailments, etc. It should be noted that the approach to the diagnostics as a mental operation in modern psychology has not been developed at all, despite the obviousness of including this operation in almost any human activity related to cognition, not only scientific, but also everyday empirical, to causal-and-effect analysis, to decision-making in a situation with insufficient information, etc.

Diagnostic competence and understanding

Diagnostic competence is related to understanding. If we consider understanding as a universal operation of thinking, then diagnostics can be considered as an element of understanding. It is believed that understanding provides a connection between new properties of the object of knowledge with the already known ones and forms the operational sense. Therefore, for understanding (especially if we are talking about forms of understanding that require a deep awareness of causes and consequences), it is necessary to solve a certain mental task, for which the operation of diagnostics is used. Understanding in itself (as a new meaning, not

as a process) we can consider as the result of diagnostics (especially if we talk about causal diagnostics, diagnostics of causes). Along with the use of the term "diagnostic thinking" , it is also possible to use the term "diagnostic understanding", which is considered as a process of forming connections between new properties of the object of cognition with already known ones, which takes the form of diagnostic operations and leads to the acquisition of a new meaning by the subject.

Diagnostics for the cognitive effectiveness of learning support

The role of the cognitive processes in learning is obviously significant, without the cognitive mechanisms proper formation a pupil will not be able to learn. Diagnostics may be very useful for the cognitive effectiveness of learning support. Accordingly, the teacher-psychologist must have the necessary diagnostic competence.

What exactly should a pedagogue-psychologist be able to diagnose in order to support the cognitive effectiveness of training? First, it is the preservation of educational knowledge, skills and abilities in long-term memory. If the knowledge is not stored in the long-term memory of the pupil, the effect of learning will be negligible. Second, sufficiency of the pupil's working memory to perform training operations. Third, the parameters of educational attention. If pupils are not able to concentrate on their studies during school time, their cognitive effectiveness will be low. Fourth, the sufficiency of the formation of the necessary patterns of thinking (especially operational thinking) and imagination for effective learning. It is also important to track the emotional states and personal characteristics that affect the cognitive sphere. it is particularly interesting to assess the impact of gadget stress on cognitive processes (in particular, on educational attention), the problem of the negative influence of gadgets on learning efficiency is more acute than ever today.

Discussion and Conclusions

1. Consideration of the diagnostic competences in terms of understanding and diagnostic thinking can help to define more clearly the necessary professional competences, the formation and development of which is the task of modern education.

2. The issue of the formation of diagnostic competence of educational workers is definitely relevant and is in the focus of attention of the modern scientists [1, 18], not only for psychologists or teachers-psychologists [12, 13], but for teachers as well [1, 6, 7, 8, 9, 17]. However, an explicitly effective methodology for the formation of diagnostic abilities has not been presented yet.

3. Competence approach focuses on preparing the future specialist for solving tasks and problems [15], so it is obvious that if the diagnostic competence of the graduate should be formed during the learning process, then the educational program should include elements that form and develop diagnostic abilities. Didactic diagnostic tasks (teaching diagnostic cases) can be one of the options in this situation.

4. Using the example of diagnostic competences, we see that the elaboration of the content of competences within the framework of the competence approach is still largely insufficient. In general, it is obvious that the development and effective implementation of the competence approach is impossible without special psychological researches aimed at studying both the content of the professional competences to be formed and the possibilities and methods of such formation.

5. Diagnostics for the cognitive effectiveness of learning support is one of the most important directions of the work of a teacher-psychologist, and the formation of the diagnostic competence in this sphere must be a part of training of such a psychologist in the university.

Acknowledgements

The research is supported by grant of the Russian Foundation for Basic Research (RFBR) (project No 20-013-00283 "Diagnostic thinking of teachers-psychologists"). In the part concerning diagnostic competence of a pedagogue-psychologist.

The research is also supported by grant of the Russian Foundation for Basic Research (RFBR) (project No 19-29-14059 "Cognitive mechanisms in the education of schoolchildren in the conditions of digitalization"). In the part concerning diagnostics for the cognitive effectiveness of learning support.

The authors are very grateful to Daria Koretskaya for her help with the translation.

The authors are grateful to the Russian scientific electronic library elibrary.ru for the possibility of the necessary information search.

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