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Actual problems of determining the expression of diagnostic competence future teachers- psychologists

Abstract. *In the modern world of the educational system, there is an increase in the requirements for the professional training of specialists in order to successfully implement them outside the walls of educational institutions. It is to solve this problem that the need for possession of diagnostic competence is determined, thanks to which future educational psychologists will be able to identify difficulties not only of a procedural, but also of a personal nature, select methods taking into account the specificity of the request, thereby forming their own unique approach and professional style.*

In the article, together with the concepts of professional competence and competence approach in education, the concept of "diagnostic competence" is considered in the aspect of various subjects and approaches. The first stage of experimental work to determine the severity of indicators of diagnostic competence of future educational psychologists is also presented. The analysis of the data obtained allows us to suggest that, despite the awareness of the significance and readiness for diagnostic activities, there is a need to replenish knowledge in this area, both in the theoretical and practical parts, based on those motivational factors that have the greatest impact. Immediately in the future, this will become the basis for creating a model for the formation of diagnostic competence, which is necessary for the successful implementation of the increasingly complex tasks facing the modern school and the educational psychologist.

Keywords: *competence, diagnostics, diagnostic competence, psychological competence, pedagogical competence, professional competence, education, high education, psychology, students.*

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Introduction. Today, in the educational sphere, there is an acute issue of finding solutions to urgent problems in the formation of professional competencies of future educational psychologists. Among the aforementioned competencies, the diagnostic competence of specialists is of no small importance, since this competence helps to find the correct ways to solve possible problematic situations that arise among the participants in the educational process.

The ideas of humanization of education put forward the problem of creating an educational model that ensures the intellectual, psychological and physical development of the student. This situation is an opportunity for future psychologists to adequately study the individual characteristics, relationships, interests and needs of each student, based on this, professionally determine the ways of successfully mastering subjects, create their own development trajectory, and also carry out work on choosing the best methods of education and development.

Thus, he contributes to the successful implementation of his professional activities in a new pedagogical situation. For the implementation of all this, the diagnostic competence of the future teacher is necessary, as a unity of psychological and pedagogical knowledge, practical readiness for the implementation of diagnostic activities and the desire for a creative transformation of the pedagogical process [1]. **This makes the problem of diagnostic competence of future teachers relevant.**

In the course of the study, we will determine the key points for the formation of this competence in future educational psychologists, which is determined by the subject of the study, the method of conducting a survey among the objects of study - students of 1-4 courses.

The purpose of this study is to identify the attitude of students to psychological and pedagogical diagnosis as a special type of professional activity, as well as to identify their knowledge and skills in this direction. Research objectives: 1. To carry out a meaningful analysis of theoretical data on the features of diagnostic competence in the space of higher education. 2. Conduct an experimental study aimed at collecting data on the nature of the knowledge of students of educational psychologists about diagnostic competence.

Scientific significance: the data obtained during the study are essential indicators for the creation of a remedial program for the development of this competence. Practical significance: the results of the study will be used in the formation of a model of diagnostic competence for students in higher educational institutions and form a theoretical basis for the development of the professional activities of psychologists.

History. The processes of modernization of current education contribute to a change in attitude towards students and students, their personal and typological characteristics, personal characteristics, etc. Accounting for these criteria is an important component of the professional profile of the future teacher-psychologist.

In general research, the concept of diagnostic competence is defined as the ability to evaluate and analyze individual performance according to predetermined criteria. According to the Ukrainian scientist T.V. Richter, a teacher with a developed diagnostic competence orientation organizes the educational process with an understanding of what learning difficulties need to be addressed [2]. In addition, this competency can help teachers tailor their student-centered instruction. Therefore, it matters for what purpose and how diagnostic competence is used.

Such Malaysian researchers as, Z. Rozdi, N. Ahmad, Z. Mohamed, believe that the competence of the teacher is considered today as the main factor influencing student learning, because through teaching, communication and management methods, teachers can structure the learning environment, which either facilitate learning or hinder it [3].

The current situation shows that the practicing forms of student training do not meet the requirements of the actual tasks of higher educational institutions, namely, the conditions for the formation of social and professional mobility of future teachers. A specialist can be considered successful when he is competent, and this, in turn, means owning a wide range of different behaviors, applying and selecting from them those that correspond to his moral, social values, contributes to the development of his own style of professional activity and individual style.

In this regard, the need to develop the diagnostic competence of future educational psychologists is relevant, namely the ability to solve personal issues and problems, taking into account the characteristics of the psychological service in general education or special institutions, to provide psychological and pedagogical assistance to families and individuals based on the obtained diagnostic data.

A number of works of foreign philosophers were considered by D. Chorjeva and classified as follows, that E.I. Vorobieva, S.A. Gilyarevsky, K.E. Koptina, K.E. Tarasov, G.I. Tsaregorodtsev, E.I. Tselishchev, devoted to the consideration of the problem of a general diagnostic technique as a specific type of cognition. M.K. Belova, K. Engenkamp, K. Klauer, A.I. Kokhstov, M.I. Kurilova, M.S. Reznikov and others. And such authors as Bitinas B.P., Golubev N.K., L.I. Kataeva, M.I. Shilov studied and described the system of diagnostics of education [4].

However, such German researchers as Rieu A., K. Loibl, T. Leuders, T. Dörfler consider studies of the teacher's diagnostic competence to be unsatisfactory, since theories about the cognitive processes underlying diagnostic judgments have not yet been presented [5]. The model they propose is based on such components as: the characteristics of the diagnostic situation (situational characteristics), the characteristics of the teacher (personal characteristics), the cognitive processes at the genesis of the diagnostic judgment (internal information processing is understood) and, finally, the externalized diagnostic action or verbalization of the teacher

(diagnostic behavior). True, their focus excludes the processes of self-assessment or metacognition of students, and also does not include the overt actions of teachers [6].

It is worth noting the opinion of the Swiss researcher E. Moser Opitz that one of the most important skills that teachers should have is the ability to adapt teaching in the classroom to the abilities of the student, which includes both diagnostics and teaching. She developed a process model that demonstrates that at each stage - diagnostics, educational assessment, educational decision and training - relevant professional knowledge (diagnostic knowledge, mathematical knowledge for learning) is important. In addition, the results of the study show that the skills required to perform a single task, such as assessing student achievement, can be very different from the skills required to assess an individual student's support needs. However, here the process model is specialized, namely, in the context of didactics of mathematics, the role of professional knowledge of teachers at certain stages of the process of diagnostics and support is considered [7].

Pedagogical assessment has taken center stage in educational psychology research in Germany, especially since the Program for International Student Assessment (PISA) 2000 study pointed to social differences in judgment and teachers' lack of diagnostic ability [8]. Thus, according to the German authors, J. Klug, S. Bruder, B. Schmitz, diagnostics is one of the key competencies of a teacher. Recently, they have developed a new model of teacher diagnostic competence, and with it a new measurement method focused on diagnosing student learning behavior in an interdisciplinary approach, which can form the basis for improving the diagnostic competence of teachers. However, some questions related to promoting the diagnostic competence of teachers in relation to student learning behavior still remain unanswered: what values are acquired by teachers in the workplace as opposed to teachers with or without teaching experience, and which ones are relevant. , variables that lead to a high level of diagnostic competence focused on learning behavior?

To find answers to these pressing questions, they conducted a study in this direction, where the sample consisted of 293 participants: 93 German gymnasium teachers, 107 German student teachers in the second stage of teacher education and 93 German student teachers in the first stage of teacher education. Teachers' diagnostic competence in relation to learning behavior was measured, as were teachers' reflections on motivation, self-efficacy, attitudes, knowledge, and diagnostic experience. Motivation, attitudes, and knowledge have been found to be significant positive predictors of diagnostic competence for learning behavior, with differentiated predictions for teacher experience. Reflections on experience and self-efficacy were unexpectedly irrelevant. Teachers in the workplace tended to be better at diagnosing their students' teaching behavior than teachers without teaching experience. However, the diagnostic work of preservice teachers with teaching experience was just as credible as the work of in-service teachers [9].

It is important to take into account the fact that for young people training and professional activity become the main activity, therefore, the core of their self-awareness of their personality is the desire and ability not only to plan their future life, but also to look for means to implement their plans. The situation is aggravated by the fact that high school students often cannot decide on personal and professional preferences and wishes [10]. This determines the importance of the personal potential of each participant in the educational process, including teachers, and the social and psychological relationships between participants in the educational process.

In the domestic literature, various issues in the field of competence in training are studied in the works of N. Rakhmetov, Zh. Sandibaev, Kalabaev D. [11].

Analysis of literary sources shows that the relevance of modeling diagnostic competence is reflected, both in different disciplines and in different approaches. However, in the direction of the psycho-pedagogical discipline, there is a clear gap, as well as the insufficiency of indicators to describe the actual situation among students of pedagogical psychologists. Thus, when designing a model for the formation of the diagnostic competence of means, it is necessary to take into account a number of factors, such as the attitude, knowledge and skills that bachelor's and master's students of the higher school of pedagogy actually possess.

Methodology

Theoretical content analysis of the literature made it possible to choose a systematic approach to determine the criteria and levels of the formation of diagnostic competence in future educational psychologists. In our study, we rely on the following two components, motivational and cognitive. This will help determine the attitude towards diagnostic activity, what encourages them to engage in it, what is the readiness of students for diagnostic activity, which motivational dominant prevails: external or internal. And also, to reveal knowledge of the basics of psychological and pedagogical diagnostics, the need for their expansion, the ability to make diagnostic conclusions.

To determine the current level of formation of diagnostic competence, we used sociological research methods based on self-assessment, such as questionnaires and surveys, as well as testing to test the cognitive component - general knowledge in the field of psychological and pedagogical diagnostics, namely:

1. Questionnaire «Analysis of motivational dominants of the diagnostic activity of teachers» - O.I. Dorofeeva.
2. Author's questionnaire «Research of diagnostic competence»
3. Test for knowledge of the basics of psychological and pedagogical diagnostics.

The study was conducted at the Faculty of the Higher School of Pedagogy and Psychology of two universities, Zhetysu University named after I. Zhansugurov, as well as the Kazakh National Women's Pedagogical University. The study period is 2022-2023 academic year.

Undergraduate students in the specialties:

1. Pedagogy and methodology before schooling
2. Pedagogy and psychology
3. Pedagogy and methodology of primary education
4. Psychology

Master students of the scientific and pedagogical direction in the specialties:

1. Pedagogy and Psychology
2. Pedagogy and methodology of primary education
3. Special Pedagogy
4. Psychology

The sample of respondents who participated in the study, taking into account the Kazakh and Russian branches, amounted to 132.

The main focus of the study was aimed at students' understanding of the phenomenon of diagnostic activity, their opinions on its needs, knowledge of diagnostic methods and tasks.

Research results:

To determine the specifics of the problems in the field of diagnostic activity, a stating experiment was carried out, where the data obtained during the study correlate with 100% of the number of informants. Thus, as a result of the experiment, it was found that among the participants: 75% consider a mandatory component of pedagogical activity; do not have sufficient knowledge of diagnostic competence 72%; 34.3% have experience and can independently determine the diagnostic request. However, it was found that 90% of respondents are interested in studying diagnostic activities. Slightly more than half of the subjects do not know the methods and techniques of pedagogical diagnostics - 67%; in this connection, 68.7% have difficulties in modeling the learning process based on diagnostic data; as well as difficulties in interpreting diagnostic information were identified in 76% and about a quarter of the participants have no difficulty in providing feedback - 23.6%.

Discussion. Based on the data obtained from the study, it becomes obvious that the participants do not have developed diagnostic competence due to the lack of basic knowledge, which in turn determines a number of difficulties, both with self-diagnosis and with information

processing. Deficiency in the possession of methods and techniques also gives rise to difficulties, but already in the correctional program, including the regulation of the educational process and the provision of feedback. Most of the respondents indicated that they encountered diagnostic activities mainly during their teaching practice, which may be the reason for a significant gap in the theoretical part. However, despite the nature of the difficulties, 75-90% of the respondents are aware of the importance of diagnostic competence in the professional activities of a teacher-psychologist, and directly feel the desire to master it. It follows from this that students and undergraduates understand the significance of this process, and have a focus on studying the material in the diagnostic discipline. Thus, consideration of the motivational component becomes a priority for the introduction of a specialized course that takes into account a personal approach to students.

The results of the survey provide an opportunity to differentiate external and internal motivational factors, as well as to consider their influence on the diagnostic activity of future educational psychologists [12]. Thus, we have identified the main motives of students and undergraduates for the use of diagnostic competence in their professional activities, namely the possibility of influencing the pedagogical process, the need for professional development and the desire to provide timely assistance to the student. It should be noted that the internal motivational dominant prevails over the external one, which increases the efficiency of work in professional activities. Here I would like to note that all respondents respond to the opportunity to participate in innovative activities, in connection with which this motive can also be identified as a priority. This information obtained during the study justifies the creation of a specialized course for future educational psychologists in order to increase the theoretical base, and further contributes to the creation of a model for the formation of diagnostic competence, which will go beyond simple assistance in improving the educational process in higher education, and based on current motivational needs.

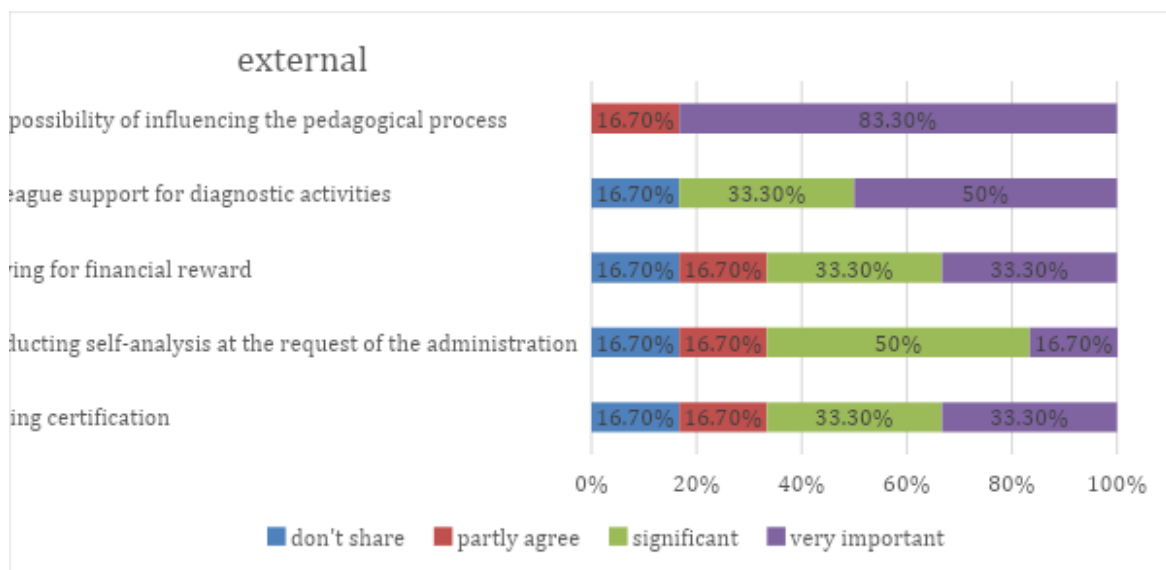


Diagram 1. External motivational factors

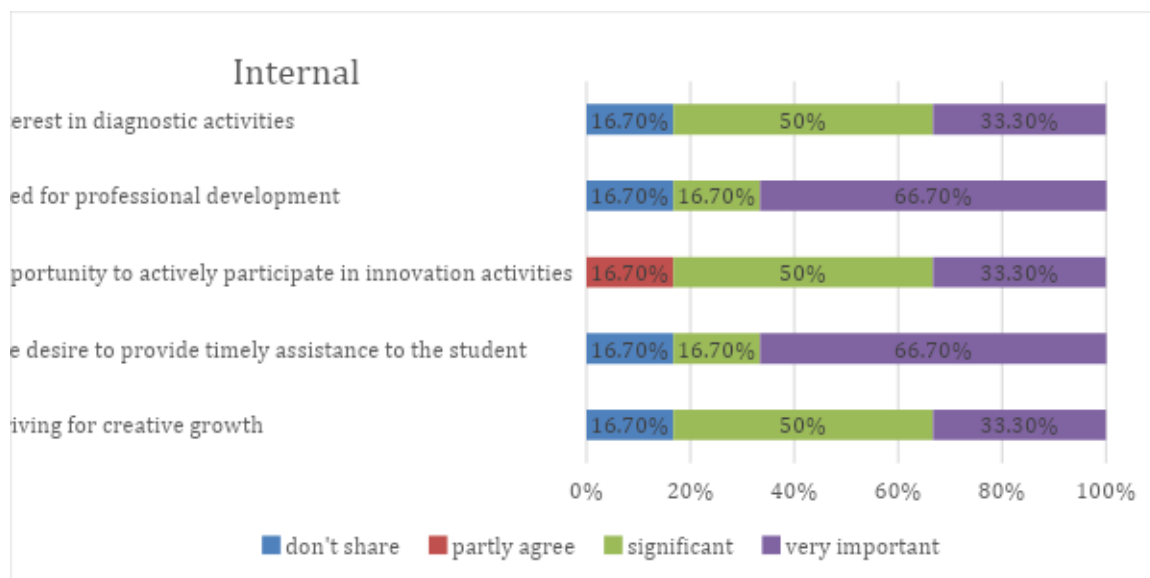


Diagram 2. Internal motivational factors

Conclusion

Analyzing the literature review on this topic, we confirm the relevance of the problem of developing diagnostic competence among future teachers - psychologists in the space of higher education, thereby emphasizing the importance of meaning and the ability to use it in their professional activities.

In the course of our study, the insufficiency of theoretical knowledge for students and undergraduates was revealed, as well as the difficulty of its implementation in the practical part, thereby detailing the nature of the difficulties for organizing high-quality professional training for future specialists.

It should be noted that regardless of the course of study, students realize the importance of diagnostic competence in their professional activities in comparison with previous years, as reflected in the works of foreign Belarusian researchers I.I. Tsyrukun, E.N. Artemyonok, Russian E.P. Ivutin, Kazakhstani P.T. Abdullayev. And this prompts us to the appropriate conclusion that students' awareness of the importance of diagnostics in their future activities contributes to the development of their own diagnostic programs already in the course of professional training in a higher educational institution [13], [14], [15].

In the framework of our study, the study of indicators is the first stage in experimental work. Based on the results obtained, a program for the formation of diagnostic competence will be created in the future, which will make it possible to fill in the missing academic knowledge and acquire practical skills in the diagnostic field. In addition, the identified motivational factors will contribute to taking into account the desires and aspirations of students, thereby causing a natural interest in the program to study. As a result, we will get a solution to the increasingly complex tasks facing the modern school and the teacher-psychologist, which will give further development of diagnostic competence in the conditions of the educational process, and with personal improvement of future specialists.

References

1. Kutovaya N. V. Formation of diagnostic competence of future teachers in vocational training // Bulletin of Bryansk State University. – 2012. – №1 (2). – P. 69-72.
2. Richter T. The structure of professional competence of teachers of mathematics // Physical and mathematical education: scientific journal. – 2017. – Vol 1(11).– P. 89-92. [Web resource]. – 2023. – URL:<https://cyberleninka.ru/article/n/struktura-professionalnoy-kompetentnosti-uchitelya-matematiki/viewer> (accessed 02.03.2023).
3. Rozdi Z., Ahmad N., Mohamed Z. Competency Model of Science Teacher in 21st Century // International Journal of Academic Research in Business and Social Sciences. – 2016. – Vol 6 (12). – P. 33-38. [Web resource]. – 2023. – URL: DOI:10.6007/IJARBS/v6-i12/2467 (accessed 04.03.2023).
4. Chorjeva D. Diagnostics as a branch of psychological and pedagogical knowledge and type of research activity of a teacher // European Journal of Research and Reflection in Educational Sciences. – 2020.– Vol 8 (3). – P. – 23-30. [Web resource]. – 2023. – URL: <https://www.idpublications.org/wp-content/uploads/2020/03/Full-Paper-DIAGNOSTICS-AS-A-BRANCH-OF-PSYCHOLOGICAL-AND-PEDAGOGICAL-KNOWLEDGE-AND.pdf> (accessed 08.03.2023).
5. Rieu A., Loibl K., Leuders T. Teachers' diagnostic judgments on tasks as information processing – The role of pedagogical content knowledge for task diagnosis // Teaching and Teacher Education. – 2022. – Vol 111. [Web resource]. – 2023. – URL: <https://doi.org/10.1016/j.tate.2021.103621> (accessed 10.03.2023).
6. Loibl K., Leuders T., Dörfler T. A Framework for Explaining Teachers' Diagnostic Judgements by Cognitive Modeling (DiaCoM) Teaching and Teacher Education. – 2020. – Vol 91. [Web resource]. – 2023. – URL:<https://doi.org/10.1016/j.tate.2020.103059> (accessed 11.03.2023).
7. Moser Opitz E. The Interrelationship of Diagnosis and Teaching: Developing a Process Model Incorporating Knowledge of Educational Diagnostics and Individual Education Plans // Journal für Mathematik-Didaktik. – 2022. – 43. – P. 205–230. [Web resource]. – 2023. – URL:<https://doi.org/10.1007/s13138-022-00201-1> (accessed 15.03.2023).
8. OECD. PISA 2009 Results: Overcoming Social Background-Equity in Learning Opportunities and Outcomes], volume 2.[Web resource]. – 2023. – URL:<https://doi.org/10.1787/9789264095359-de> (accessed 18.03.2023).
9. Klug J., Bruder S., Schmitz B. Which variables predict teachers' diagnostic competence when diagnosing students' learning behavior at different stages of a teacher's career? // Teachers and Teaching: Theory and Practice. – 2016. – No.22(4). – P. 461–484. [Web resource]. – 2023. – URL:<https://doi.org/10.1080/13540602.2015.1082729> (accessed 04.04.2023).
10. Shchelina T., Akutina S., Begantsova I., Ageeva L., Shchelina S. Psychological-Pedagogical Diagnostics of the Development of Individuals and Groups in the Education of Modern Students. Revista Espacios. Education. – 2017.– Vol. 38 – P. 33-43. [Web resource]. – 2023. – URL: <https://www.revistaespacios.com/a17v38n35/a17v38n35p33.pdf> (accessed 21.04.2023).
11. Rakhmetova N., Sandybaeva J., Kalabaeva D. Pedagogical conditions of formation of competence of future teachers of professional education // international journal of applied and fundamental research. – 2016. – № 4-5. – P. 987-990.12. Dorofeeva O. I. Formation of diagnostic competence of teachers in the process of additional professional education: monograph. – Vologda: Publishing center VIRO, 2013. – P. 164.
13. Tsyrukun I.I., Artemyonok E.N. Differential methodology for the formation of diagnostic competence of students in the field of organization of the learning process of students // Belarusian State Pedagogical University Repository. – 2006. – [Web resource]. – 2023. – URL: <oai:localhost:doc/519> (accessed 25.04.2023).
14. Evutina E.P. Diagnostic competence and technology of its formation at students of pedagogical specialties. Messenger of N. A. Nekrasov KSU – Vol. 13. – 2007. – P. 55-58.
15. Abdullayeva P. For the study of the development of diagnostic competence of future teachers-psychologists in a university environment. Materials of the XII International scientific and practical conference Areas of scientific Thought // Pedagogical sciences, Sheffield. – 2016. –Vol. 2017. – P.14-23.

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Болашақ психолог мұғалімдердің диагностикалық құзіреттілігінің экрессиясын анықтаудың қазіргі мәселелері

Аңдатпа. Қазіргі білім беру жүйесінің әлемінде мамандардың оқу орындарының қабырғасынан тыс жерлерде де білімін сәтті жүзеге асыру үшін, олардың кәсіби дайындығына қойылатын талаптардың артуы байқалады. Осы мәселені шешу барысында болашақ педагог- психологтар тек процессуалдық ғана емес, сонымен қатар жеке сипаттағы қиындықтарды анықтай алатындай диагностикалық құзыреттілікке ие болу қажеттілігі туындады, себебі оның ерекшеліктерін ескере отырып, әдістерді таңдай алады, сол сияқты өзіндік ерекше көзқарас пен кәсіби стильді қалыптастырады.

Мақалада кәсіби құзіреттілік және білім берудегі құзыреттілік көзқараспен бірге «диагностикалық құзыреттілік» ұғымы әртүрлі пәндер мен тәсілдер аспектісінде қарастырылады. Сондай-ақ, болашақ педагог-психологтардың диагностикалық құзыреттілігінің көрсеткіштер деңгейін анықтау бойынша эксперименттік жұмыстың бірінші кезеңі ұсынылған.

Алынған мәліметтерді талдау барысында педагог-психологтардың диагностикалық іс-әрекеттің маңыздылығы мен дайындығын түсінгеніне қарамастан, ең көп әсер ететін мотивациялық факторларға сүйене отырып, бізге осы саладағы білімді теориялық және практикалық жағынан толықтыру қажеттілігі бар деген болжам жасадық. Бұл тікелей змануи мектеп пен педагог-психологтың алдында тұрған күрделі міндеттерді сәтті жүзеге асыру үшін қажетті диагностикалық құзыреттілікті қалыптастыру моделін құруға негіз болатындығына көз жеткіздік.

Түйін сөздер: құзыреттілік, диагностика, диагностикалық құзыреттілік, психологиялық құзыреттілік, педагогикалық құзыреттілік, кәсіби құзыреттілік, білім беру, жоғары білім беру, психология, студенттер.

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Актуальные проблемы определения выраженности диагностической компетентности у будущих педагогов-психологов

Аннотация. В современном мире образовательной системы наблюдается повышение требований к профессиональной подготовке специалистов с целью их успешной реализации вне стен учебных заведений. Именно для решения этой задачи обуславливается необходимость владения диагностической компетентностью, благодаря которой будущие педагоги-психологи смогут определять затруднения не только процессуального, но и личностного характера, подбирать методы, учитывая специфику запроса, тем самым формируя свой неповторимый подход и профессиональный почерк.

В статье совместно с понятиями профессиональной компетентности и компетентностного подхода в образовании рассматривается понятие «диагностическая компетентность» в аспекте различных предметов и подходов. Также представлен первый этап экспериментальной работы по определению выраженности показателей диагностической компетентности будущих педагогов-психологов. Анализ полученных данных позволяет выдвинуть предположение, что, несмотря на осознание значимости и готовности к диагностической деятельности, существует потребность в восполнении знаний в данной области как в теоретической, так и в практической части, исходя из тех мотивационных факторов, которые имеют наибольшее влияние. Непосредственно в дальнейшем это станет основой для создания модели формирования диагностической компетентности, что необходимо для успешного выполнения усложняющихся задач, стоящих перед современной школой и педагогом-психологом.

Ключевые слова: компетентность, диагностика, диагностическая компетентность, психологическая компетентность, педагогическая компетентность, профессиональная компетентность, образование, высшее образование, психология, студенты.

References

1. Kutovaya N. V. Formation of diagnostic competence of future teachers in vocational training // Bulletin of Bryansk State University. – 2012. – №1 (2). – P. 69-72.
2. Richter T. The structure of professional competence of teachers of mathematics // Physical and mathematical education: scientific journal. – 2017. – Vol 1(11).– P. 89-92. [Web resource]. – 2023. – URL:<https://cyberleninka.ru/article/n/struktura-professionalnoy-kompetentnosti-uchitelya-matematiki/viewer> (accessed 02.03.2023).
3. Rozdi Z., Ahmad N., Mohamed Z. Competency Model of Science Teacher in 21st Century // International Journal of Academic Research in Business and Social Sciences. – 2016. – Vol 6 (12). – P. 33-38. [Web resource]. – 2023. – URL: DOI:10.6007/IJARBS/v6-i12/2467 (accessed 04.03.2023).
4. Chorjeva D. Diagnostics as a branch of psychological and pedagogical knowledge and type of research activity of a teacher // European Journal of Research and Reflection in Educational Sciences. – 2020.– Vol 8 (3). – P. – 23-30. [Web resource]. – 2023. – URL: <https://www.idpublications.org/wp-content/uploads/2020/03/Full-Paper-DIAGNOSTICS-AS-A-BRANCH-OF-PSYCHOLOGICAL-AND-PEDAGOGICAL-KNOWLEDGE-AND.pdf> (accessed 08.03.2023).
5. Rieu A., Loibl K., Leuders T. Teachers' diagnostic judgments on tasks as information processing – The role of pedagogical content knowledge for task diagnosis // Teaching and Teacher Education. – 2022. – Vol 111. [Web resource]. – 2023. – URL: <https://doi.org/10.1016/j.tate.2021.103621> (accessed 10.03.2023).
6. Loibl K., Leuders T., Dörfler T. A Framework for Explaining Teachers' Diagnostic Judgements by Cognitive Modeling (DiaCoM) Teaching and Teacher Education. – 2020. – Vol 91. [Web resource]. – 2023. – URL:<https://doi.org/10.1016/j.tate.2020.103059> (accessed 11.03.2023).
7. Moser Opitz E. The Interrelationship of Diagnosis and Teaching: Developing a Process Model Incorporating Knowledge of Educational Diagnostics and Individual Education Plans // Journal für Mathematik-Didaktik. – 2022. – 43. – P. 205–230. [Web resource]. – 2023. – URL:<https://doi.org/10.1007/s13138-022-00201-1> (accessed 15.03.2023).
8. OECD. PISA 2009 Results: Overcoming Social Background-Equity in Learning Opportunities and Outcomes, volume 2. Available at: <https://doi.org/10.1787/9789264095359-de> (accessed 18.03.2023).
9. Klug J., Bruder S., Schmitz B. Which variables predict teachers' diagnostic competence when diagnosing students' learning behavior at different stages of a teacher's career? Teachers and Teaching: Theory and Practice. 2016. No.22(4). P. 461–484. Available at: <https://doi.org/10.1080/13540602.2015.1082729> (accessed 04.04.2023).
10. Shchelina T., Akutina S., Begantsova I., Ageeva L., Shchelina S. Psychological-Pedagogical Diagnostics of the Development of Individuals and Groups in the Education of Modern Students. Revista Espacios. Education. 2017. Vol. 38. P. 33-43. Available at: <https://www.revistaespacios.com/a17v38n35/a17v38n35p33.pdf> (accessed 21.04.2023).
11. Rakhmetova N., Sandybaeva J., Kalabaeva D. Pedagogical conditions of formation of competence of future teachers of professional education. international journal of applied and fundamental research. 2016. No.4-5. P. 987-990.
12. Dorofeeva O. I. Formation of diagnostic competence of teachers in the process of additional professional education: monograph. (Vologda, Publishing center VIRO, 2013, P. 164).
13. Tsyrukun I.I., Artemyonok E.N. Differential methodology for the formation of diagnostic competence of students in the field of organization of the learning process of students. Belarusian State Pedagogical University Repository. 2006. Available at: [oai:localhost:doc/519](http://oai.localhost:doc/519) (accessed 25.04.2023).
14. Evutina E.P. Diagnostic competence and technology of its formation at students of pedagogical specialties. Messenger of N. A. Nekrasov KSU. Vol. 13. 2007. P. 55-58.
15. Abdullayeva P. For the study of the development of diagnostic competence of future teachers-psychologists in a university environment. Materials of the XII International scientific and practical conference Areas of scientific Thought. Pedagogical sciences, Sheffield. 2016. Vol. 2017. P.14-23.

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