

Forming diagnostic competence of future teachers-psychologists in the university environment

Formação de competências de diagnóstico de futuros professores-psicólogos no ambiente universitário

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Content

[1. Introduction](#)

[2. Methods](#)

[3. Results](#)

[4. Discussion](#)

[5. Conclusion](#)

[Bibliographic references](#)

ABSTRACT:

The purpose of this article is to determine the possibilities of forming a diagnostic competence of future teachers-psychologists in the university environment. We have used the following methods to solve the problems: theoretical analysis of psychological and pedagogical literature, modeling, and questioning, qualitative and quantitative analysis of experimental data. We have singled out two major aspects: diagnostic thinking and diagnostic skills. We have proved that diagnostic competence can be formed through the psychological and pedagogical courses.

Keywords: competence approach in education, diagnostics, professional competence, diagnostic competence.

RESUMEN:

O objetivo deste artigo é determinar as possibilidades de formar uma competência diagnóstica de futuros professores-psicólogos no ambiente universitário. Utilizamos os seguintes métodos para resolver os problemas: análise teórica da literatura psicológica e pedagógica, modelagem e questionamento, análise qualitativa e quantitativa de dados experimentais. Nós destacamos dois aspectos principais: pensamento de diagnóstico e habilidades de diagnóstico. Provamos que a competência diagnóstica pode ser formada através dos cursos psicológicos e pedagógicos.

Palavras-chave: abordagem de competência em educação, diagnóstico, competência profissional, competência de diagnóstico.

1. Introduction

In modern education, such processes as humanization and modernization contribute to a change in attitudes toward students and pupils; regard to their individual-typological

characteristics, personal characteristics, etc. became the most important component of the job profile diagram. In this regard, there is a need in forming diagnostic competence of future teachers-psychologists which will allow them to solve personal problems in the face of a specific nature of psychological service in secondary or special (remedial) institutions, as well as to support families and individuals based on the received diagnostic data. As part of a psychological service, teacher-psychologist performs correctional-developing, consultative-educational, psycho-preventive work with children and teenagers as well as a diagnostic function, which, in turn, is based on a diagnostic competence. The process of this kind of competence formation will be one of the most important educational outcomes gained in the course of professional training of future teacher-psychologists within the walls of a higher school.

The problem of diagnostic competence formation among students is complex and multifaceted (Ivutina, E.P., 2008). Despite a wide range of studies, we should note that the problem of forming diagnostic competence of a future teacher-psychologist in vocational training remains sketchy.

The analysis of theoretical and experimental studies has revealed a number of contradictions between the:

- demand for professionals capable of performing diagnostic activity in modern educational process and the degree of problem elaboration;
- modern requirements for the specialist's diagnostic competence and student's readiness to master it (Ivutina EP, 2008);
- potential capabilities of the university having resources at its disposal and their inadequate implementation in the process of forming a diagnostic competence of a future teacher-psychologist.

Based on these contradictions, we have formulated the research problem: how to theoretically substantiate and realize the process of forming diagnostic competence among students (future teachers-psychologists) within the system of university education.

1.1. Diagnostic competence in the structure of professional competence

Let draw our focus toward the conceptual field of this problem. The S.I. Ozhegov's Russian dictionary provides several meanings for the concept of "competent person": knowledgeable and well-informed individual, an expert in some field, person having a competence. The concept of "competence" is interpreted as a problem area, in which someone is an expert, or as terms of influence, rights (2004, p. 288). Modern Dictionary of Foreign Words interprets the concept of "competent person" as a "person having a competence – reference of any institution or a range of cases/matters subject to someone. At the same time, there is a second meaning: the range of issues, of which this person has knowledge and in which he/she has experience. In this case, the word "competere" is translated from French as "to demand, to correspond, to be suitable". The word "competens" is translated from Latin as "appropriate, capable", and the English word "competence" – as "ability or competency".

In the 70s of the XX century, the notion of "competence" was widely used in the United States and a number of European countries due to the problem of individualizing learning. The idea was very simple: do not limit people to learning science basics and related teaching methods, but try to develop all levels of interpersonal relationships, microclimate in the classroom, etc. This approach did not go beyond the educational process in school.

Thus, we can argue that different interpretations of this concept, provided by the reference literature, have influenced the wide variability in their use, as well as the fact that the concepts of "competence" and "competency" are not locked-down in pedagogical science.

The concept of a competence approach was firstly proposed and deeply substantiated in the scientific works written by N.B. Lavrentieva, O.M. Kuzevanov (2008), V.A. Bodrova (2001), V.D.

Shadrikova (2012), who drew attention to the idea of integrity in considering "competence" and "competency". They are unanimous in the opinion that the concept of "competence" is wider than the concept of "competency".

V.A. Bodrov (2001) defines the competence approach as a methodological reference point for the process of modernizing modern education that determines new teaching methods and technologies promoting student development in regards to independence, initiative, creativity, critical thinking and orienting them towards an effective outcome.

According to N.B. Lavrentieva, O.M. Kuzevanova (2008), the concept of competence is wider than the system of "knowledge" and "skills", as it includes not only cognitive (knowledge) and operational-technological (skills) components, but also motivational, ethical (value orientations), social and behavioral ones. If the student wants to master the competence, he/she has to be mentally organized and intellectually developed: good abstract thinking, self-reflection, defined attitude, self-esteem and critical thinking. One can say that the concept of "competence" includes cognitive, motivational, "relational" and regulative components.

In the opinion of Kazakhstan researchers – Mynbayeva A.K., Sadvakasova Z.M. (2014), competency is a goal while competence is a result.

The term "professional competence" is often used as a synonym for "professionalism", "pedagogical mastery", but is considered as a complex unity or structure of general and professional knowledge, practical skills, professionally significant traits that ensure successful professional activity in the professional field. Diagnostic competence of a specialist is one of the professional competence components.

Diagnostic competence of teachers was studied by Brante, who said that, besides the basic daily duties of teaching children, they have to perform a very difficult job of diagnosing their state and features of their interaction (Brante, 2009).

Vogt and Rogalla believe that teacher's key task is to diagnose, since he/she has to satisfy the diverse student needs in learning and adapt own teaching style to students with different academic abilities, numerous interests and motivations (Vogt & Rogalla, 2009).

Klug, Bruder, Kelava, Spiel and Schmitz (2013) have developed and empirically tested the model of teacher's diagnostic competence which takes into account educational behavior, thereby closing the gap between previous empirical studies and the latest theoretical requirements. They describe behavioral diagnosis as a three-dimensional process consisting of pre-association, action and the post-reaction phases.

Other researchers note that diagnostic skills training can be built into the process of teaching university teachers. This method focuses on skills that are primarily necessary for planning lessons. They suggest using video as part of diagnostic competency preparation, since it is very close to reality and teachers can be trained online. Since teachers often do not have the opportunity to improve own diagnostic skills, these competencies are poorly developed (Ostermann, A., Leuders, T., & Nickles, M. (2015).

Researchers, who note the great role of diagnostic competence in the educational process, highlight the general trend of modular course integration into the vocational teacher training process with an appropriate level of diagnostic skills development and communicative competence in English that allow teachers to increase their competitiveness at the global level (Karing, C., Pfof, M. (2011), Klug, Gerich, Schmitz B. (2016).

Thus, there is a group of scientists, who believe that structured thinking contributes to educational attainment more effectively than the generation of direct or distinctive diagnoses, and therefore, is an effective educational approach to diagnostic competence development in students (Mamede S, vanGog T, Moura AS, deFaria RM, Peixoto JM, Rikers RM, Schmidt HG., 2013)

J. Klug, S. Bruder, B. Schmitz (2016), and A. Kelava (2013) were reflecting upon the issue of what variables determine the diagnostic competence of teachers. Thus, they have concluded that motivation, attitude and knowledge turned to be essential indicators in predicting

diagnostic competence in regards to teaching behavior, as well as differentiated predictions in regards to teacher's experience. Concepts of experience and self-efficacy unexpectedly turned out to be unsuitable. Practitioners had better results in diagnosing teaching behavior among their students than teachers, who did not have a teaching practice.

J. Hoth, M. Döhrmann, G. Kaiser, A. Busse, J. König, S. Blömeke (2016) have studied the diagnostic competence of primary math teachers in various situations involving students. Diagnosing learning and thinking processes among students is one of the major problems that teachers face during the class. To this end, teachers have to feel the relevant information, interpret it and respond, namely – to choose suitable learning opportunities.

C. Aufschnaiter, J. Cappell, G. Dübbelde, M. Ennemoser, J. Mayer, J. Stiensmeier-Pelster, R. Straesser, A. Wolgastd (2010) have studied the processes of creating and determining the scope of teacher's diagnostic competence, and concluded that professional competency modeling and research play an important role in the field of education research. Besides these competencies determined for practicing and non-practicing teachers, assessment is also often specified. Teachers should be able to determine the educational nature of the subject, student's ability to learn, and based on that, to select instructions for students. They believe that researchers rarely address the problem this competence development, although it is clear that such diagnostic competence is important as part of teacher's professional knowledge.

E. Wuttke and J. Seifried (2012, 2013) have considered diagnostic competence of future teachers in the context of vocational education. They argue that diagnostic competence is an important aspect of teacher's knowledge that can have a positive impact on the learning process and students' performance. Accurate diagnosis usually goes hand in hand with the best teachers: they are able to adapt their teaching style to the individual needs of their students.

Schrader believes that diagnostic skills are a tool that allows teachers to gain information about students, which can be used to make different pedagogical decisions like grading and lesson planning (makroadaptations), but also for short-termed interventions during lessons (mikroadaptations). He relates pedagogical diagnostics to the learning process planning and control, as well as to the process of cognition, which purpose is to gain information that will optimize learning (Schrader, 2013).

Let's consider the concept of diagnostic competence given by O.V. Vechkanova (2012) in relation to future social educators: readiness, manifested in the synthesis of a positive attitude of future social teachers to diagnose, psycho-pedagogical knowledge and abilities to use it while learning students and school groups in the context of pedagogical practice.

Dorofeyeva O.I. (2013) has formulated the concept of diagnostic competence that can be applied to future teachers, regardless of their professional field. She considered diagnostic competence as a unity of theoretical and practical readiness of a teacher to carry out diagnostic activity, to solve professional problems arising during the pedagogical activity. At the same time, she notes that diagnostic competence helps to professionally identify the problems of students' personal development, knowledge gaps and what has caused them, reasonably choose the educational content and teaching methods, etc. In other words, it helps to perform effectively in the new organizational and pedagogical environment.

According to Ivutina E.P. (2008), diagnostic competence of a future teacher is a means of improving his/her professional activity.

Shaposhnikov K.V. (2006) understands the category of "professional competence" as readiness and ability to make effective decisions while carrying out professional activity.

Furletova A.V. (2016) defines criteria, indicators and levels of diagnostic competence formation. If we combine all available modern formulations of this concept, we will get the following definition: diagnostic competence is a combination of theoretical and practical readiness to carry out of diagnostic activity. This integral property of a person includes diagnostic skills, ability to put forward diagnostic hypotheses, solve problems arising during the psycho-pedagogical activity and make own activity better.

Seytenova S.S. and Muhangaliyeva Sh.A. (2013) consider diagnostic competence as an integral part of a research competence.

1.2. Basic aspects of modeling the process of diagnostic competence formation

The system of persistent views, beliefs and attitudes of a future specialist towards the process of gaining profound and complete information about the objects of professional activity at all stages of diagnostic activity is considered as a base of the diagnostic competence formation model introduced by Ivutina E.P. (2008).

Diagnostic thinking should be an important component of the diagnostic competence formation model. In this case, we used the idea of A.S. Belkin (2004) as leverage. This Russian researcher has analyzed the features of teacher's diagnostic thinking and characterized various diagnostic approaches: stage, system-integral, inversion and prognostic approaches. He has also undertaken an attempt to determine the principles of a diagnostic character research (objectivity, systematicity and complexity, character research through activity and group relationships, upbringing nature of education) from the standpoint of Pedagogy. One has to understand the diagnostic problems of the educational process (object of future teacher's activity) in order to form such type of thinking.

Kasen G.A. and Otarbayeva A.B. (2011) have identified the essential list of diagnostic problems (adapted to the Kazakh social environment by Kazakh researchers), which is a minimum for the school teacher-psychologist:

- determining specific achievements in different subjects in certain educational institutions;
- studying various aspects of educational achievements, training and students' ability to learn for rapid identification of learning outcomes, possible deviations and their correction;
- finding gaps in students' knowledge of a particular subject or a particular topic in the context of a specific subject;
- identifying and measuring the composition and structure of life-long person attitudes;
- studying habits and behavioral stereotypes in regards to stability;
- measuring how well did the person learn the cultural potential of mankind;
- identifying various manifestations (and deviations from the generally accepted standards) of socially trained student's manners as an integrative result of purposeful pedagogical efforts and sociogenic influences;
- determining educational abilities of all participants (including the subjects of upbringing) and factors of pedagogical process;
- determining the level of social training according to the chosen criteria;
- identifying the features of individual development;
- identifying abnormalities in development and factors affecting child's personality development;
- substantiating results of personality development in the educational process.

Diagnostic skills of the future teacher-psychologist will also play an important role.

Aleksandrova L.Yu. (2002) has studied the nature of diagnostic skills. She suggests considering them as a set of mental and practical actions and operations that correspond to the logic of a diagnostic process and ensure the success of studying children's personality and activity with certain methods and techniques.

Thus, psycho-pedagogical literature analysis made it possible to draw the following conclusions. Firstly, there are different approaches to the process of defining the concept of a "diagnostic competence". Secondly, we suggest that **diagnostic competence can be considered as readiness of a future teacher-psychologist to use psycho-pedagogical knowledge and skills in own diagnostic activity, as well as the ability to self-diagnose in the light of what has already been achieved.** Thirdly, university can prepare specialist through diagnostic training. In other words, students can learn not only a certain repertoire of knowledge and skills, they can also be informed in the field of diagnostic activity. Fourthly,

diagnostic skills as a means of information provision ensure interrelation between individual groups of professional and pedagogical skills. And fifth, diagnostic skills make it possible to ensure the effective feedback in the process of education and upbringing. They also allow assessing and managing pedagogical process. These functions are of the first order for the future teacher-psychologist.

2. Methods

We have used the following methods to solve the problems that we have set and check the background assumptions: theoretical analysis of psychological and pedagogical literature, modeling, and questioning, qualitative and quantitative analysis of experimental data. We have also used the original methods: "Factors influencing the diagnostic activity development among teachers-psychologists" – questionnaire designed by Dorofeeva O.I. to determine the level of diagnostic competence formation (Dorofeeva O.I., 2013)

3. Results

The study was conducted at the premises of the Al-Farabi Kazakh National University. We have set the following research objectives:

- specifying experimental environment for diagnostic competence formation in the university;
- analyzing the content of psycho-pedagogical courses and the potential possibility of introducing a component of diagnostic competence formation into them;
- establishing criteria for assessing diagnostic competence formation among the graduates of the Al-Farabi Kazakh National University;
- determining psycho-pedagogical conditions for preparing future teachers-psychologists to professional diagnostic activity through the psycho-pedagogical courses.

We have questioned 100 teachers-psychologists graduated from the Al-Farabi Kazakh National University. The poll showed that they were experiencing professional difficulties when it came to diagnostic activity. They have learned how to carry it out mostly independently and intuitively. The major difficulties are related to the assessment side of professional activity (69%), to the process of forecasting the results of psycho-pedagogical interaction (83%), to the ability to analyze psycho-pedagogical information and own professional activity (66%), and to the ability to make adequate psycho-pedagogical decisions (74%). The students have confirmed that these difficulties arise during the pedagogical practice.

This approach is quite applicable while determining the level of diagnostic competence formation with the following refinements. **Epistemological component** includes knowledge of theoretical foundations of psycho-pedagogical diagnostics, knowledge of the basic diagnostic technologies, knowledge of what is the place of a diagnostic component in the system of teaching, knowledge of goals and means, its functions and specific nature, knowledge of the diagnostic skills. **Value-semantic (personal) component** includes readiness to conduct pedagogical diagnostic procedures, value-based attitude to diagnostic activity, readiness to take the initiative, value-based attitude towards people and events. **Activity component** includes the following skills: gnostic, analytical, design, assessment, diagnostic and information skills.

Levels of diagnostic competence formation

Nº	Component	High	Average	Low
1	Epistemological component	22%	29%	49%
2	Value-semantic (personal) component	18%	25%	57%

3	Activity component	12%	25%	65%
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In the course of a pilot study, we have assessed the manifestations of these criteria at high, average and low levels. Thus, in regards to the epistemological criterion: high level corresponds to the rate of 22%, average level – 29%, and low level – 49%. In regards to the value-semantic criterion: high level corresponds to the rate of 18%, average level – 25%, and low level – 57%. In regards to the activity criterion: high level corresponds to the rate of 12%, average level – 25%, and low level – 65%. Obtained data shows that diagnostic competences of secondary school teachers-psychologists are at the low level of formation (Almaty) and confirms the need in strengthening the diagnostic component in the system of university education.

Based on these facts, it becomes obvious that diagnostic competence of future teachers-psychologists has to be formed systematically at the university stage. This problem can be solved through a block of pedagogical courses, which structure, content and technologies make it possible to ensure systematic, progressive and comprehensive learning of diagnostic activity by students. We have conducted a pilot study to monitor the aspects of a problem existing in the field of diagnostic competence formation in the university environment.

We have studied the levels of teacher's readiness to carry out diagnostic activity. Our program provides for teacher-psychologist training with different starting opportunities, determined by the first diagnosis. Diagnostic result processing and interpretation allows each teacher-psychologist to set a personally significant training goal reflecting the formation of readiness to carry out diagnostic activity at the certain level. As learning progresses, goals are being adjusted and changed. Training material is selected and appropriately structured in order to reach each level during the learning process.

Based on the pilot study, we have drawn the following conclusions:

- students can be prepared for diagnostic activity through the psycho-pedagogical courses.
- pedagogical disciplines occupy a special place in the personal and professional development of students.
- activity approach to the process of identifying criteria for measuring professional competence of teachers-psychologists involves the synthesis of epistemological, value-semantic and activity components.

As we noted earlier, diagnostic competence of future teachers-psychologists can be formed through the psycho-pedagogical courses; it is related with the process of building a diagnostic basis for student's personality development and course acquisition. Conditions determining the efficiency of such work may be the following:

- logic of building the content of an academic subject involves the combination of compulsory (according to the state standard) and elective (advanced courses and workshops) courses;
- improving the traditional forms of teaching in the university;
- introducing innovative modes of study;
- studying modern thinking methods and techniques as a base for diagnostic knowledge and skill formation;
- re-thinking the assessment system in the system of higher education.

4. Discussion

This article confirms the results obtained by Dorofeeva O.I., Vechkanova O.V. and Ivutina E.P., who also noted the important role and place of diagnostic competence in vocational training. This problem undoubtedly has to be considered in the context of a competence approach deeply substantiated in scientific papers. The competence approach is a kind of methodological reference point for the process of modernizing modern education. This approach defines new teaching methods and technologies promoting student development in regards to independence, initiative, creativity, critical thinking and orienting them towards an effective

outcome Activity approach allowed us to single out the epistemological, value-semantic and activity components to measure the diagnostic competence. Our experimental work shows that the issue of diagnostic competence formation through psycho-pedagogical courses is little studied, but relevant. Further theoretical and experimental studies in this direction will significantly improve the efficiency and quality of student training.

5. Conclusion

Thus, modern school and teachers-psychologists face new and more complex duties, which successful fulfillment requires a purposeful reconstruction of their future professional activity, namely – formation of a diagnostic competence, professional and personal improvement of future professionals in the university environment as in a kind of educational field, where theory and practice, educational and research activities go hand in hand. Based on the above analysis of the concept of diagnostic competence, we adhere to the following definition:

diagnostic competence is considered as readiness and ability of a teacher-psychologist to solve diagnostic problems effectively. Structurally, it is an integral personality trait that includes a number of particular competencies formed through the synthesis of theory and practice of diagnosis, and manifested in the desire and ability to put forward diagnostic hypotheses, set goals, analyze the solution course and results, make own activity better.

At the same time, we have identified two major aspects by modeling the process of diagnostic competence formation. In our opinion, they should be formed particularly in the educational environment. These are the diagnostic thinking and diagnostic skills. Based on them, one should build a structurally-substantial model of diagnostic competence formation for future teachers-psychologists. In this regard, the training program designed for the special field of "Pedagogy and Psychology" has to be revised and changed, as there is need in changing the toolkit for teaching diagnostic vocation-related subjects. This is be the subject of further research.

Bibliographic references

- Alexandrova, L.Yu. (2002). *Pedagogical diagnosis in the system of primary teacher's professional activity improvement: extended abstract of PhD dissertation* (Pedagogy). Cheboksary. pp. 210.
- Aufschneider, C. et al. (2010). Establishing and Diagnosing Prospective Teachers' Diagnostic Competenc. *Poster presented at NARST*. pp. 1.
- Brante, G. (2009). Multitasking and synchronous work: complexities in teacher work. *Teaching and Teacher Education*. 25(3), pp. 430–436.
- Belkin, A.S. (2004). *Competence. Professionalism. Best Praactice*. Chelyabinsk: South Urals Publishing House. pp. 176.
- Bodrov, V.A. (2001). *The psychology of professional fitness: university textbook*. Moscow.
- Shadrikov, V.D. (2012). *The quality of teacher education: textbook*. Moscow: Logos Publishing House. pp. 200.
- Dorofeeva, O.I. (2013). *Forming diagnostic competence of teachers in additional vocational education: monograph*. Vologda: VIRO Publishing Center. pp. 164 .
- Furletova, A.V. (2016). Criteria, indicators and levels of social teacher's diagnostic competence formation. *Tavria Scientific Observer*. 3(8), pp.1-3.
- Hoth, J., Döhrmann, M., Kaiser, G., Busse, A., König, J., Blömeke, S. (2016). ZDM. 48(1–2), pp 41–53
- Ivutina, E.P. (2008). *Forming diagnostic competence of pedagogy students in the course of vocational training: extended abstract of PhD dissertation* (Pedagogy). Kirov.

- Karing, C., Pfof, M. & Artelt, C. (2011). Hängt die diagnostische Kompetenz von Sekundarstufenlehrkräften mit der Entwicklung der Lesekompetenz und der mathematischen Kompetenz ihrer Schülerinnen und Schüler zusammen? *Journal for Educational Research Online*. 3, pp. 121-149.
- Kasen, G.A., Otarbayeva, A.B. (2011). *Introduction to psycho-pedagogical activity: textbook*. Almaty: Alisher Publishing House. pp. 160.
- Klug, J., Mara, G., Schmitz, B. (2016). Can teachers' diagnostic competence be fostered through training and the use of a diary? *Journal for educational research*. 3, pp. 184-206.
- Klug, J., Bruder, S., Kelava, A., Spiel, C., Schmitz, B. (2013). Diagnostic Competence of Teachers: A Process Model That Accounts for Diagnosing Learning Behavior Tested by Means of a Case Scenario. *Teaching and Teacher Education: An International Journal of Research and Studies*. 30, pp. 38-46.
- Klug, J., Bruder, S., Schmitz, B. (2016). *Journal Teachers and Teaching theory and practice*. 22(22), pp. 461-484.
- Lavrentieva, N.B., Kuzevanova, O.M. (2008). *Conceptual field of the competence approach: education – competence – competencies*. Belovo, Part 2.
- Mamede, S., van Gog, T., Moura, A.S., de Faria, R.M., Peixoto, J.M., Rikers, R.M., Schmidt, H.G. (2013a). Med Educ. *Teaching and Teacher Education*. 30, pp. 38-46; 46(5):464-72. doi: 10.1111/j.1365-2923.2012.04217.x.D
- Mamede, S., van Gog, T., Moura, A.S., de Faria, R.M., Peixoto, J.M., Rikers, R.M., Schmidt, H.G. (2013b). Med Educ. *Teaching and Teacher Education*. 46(5), pp. 464-72.
- Mynbayeva, A.K., Sadvakasova, Z.M. (2014). *Cognitive learning technologies*. Almaty. Kazakh University Publishing House. pp. 130.
- Ostermann, A., Leuders, T., Nückles, M. (2015). Knowing what is difficult for the students. Which factors influence the assessment of the difficulty of mathematics tasks? *Journal für Mathematik-Didaktik*. 36(1), pp. 45-76.
- Ozhegov, S.I., Shvedova, N.Yu. (2004). *Dictionary of the Russian language: 80 000 words and phraseological expressions*. V.V. Vinogradov Russian Language Institute of the Russian Academy of Sciences. 4th Edition. Moscow: ATAMP. pp. 944.
- Schrader, F.-W. (2013). Diagnostic competence of teachers. *Beiträge zur Lehrerbildung*. 31(2), pp. 154-165.
- Seytenova, S.S., Mukhangaliev, Sh.A. (2013). Developing research competence as a criterion of the future teacher's success. *International Journal of Experimental Education*. 8, pp. 56-59.
- Shaposhnikov, K.V. (2006). *Contextual approach in the process of forming professional competence of future linguists-translators: extended abstract of PhD dissertation (Pedagogy)*. Yoshkar-Ola. pp. 26.
- Vechkanova, O.V., Titova, L.N. (2012). The role and place of diagnostic competence in training future social educators. *Novosibirsk State Pedagogical University Bulletin, Series of Pedagogy*. 13(2), pp. 73 - 77.
- Vogt, F., Rogalla, M. (2009). Developing Adaptive Teaching Competency through coaching. *Teaching and Teacher Education*. 25(8), pp. 1051-1060.
- Wuttke, E., Seifried, J. (2012). Diagnostic competence of (prospective) teachers – error identification and feedback in learning processes. *Australian Educational Researcher*. Access mode: <http://www.aare.edu.au/publications-database.php/7307/diagnostic-competence-of-prospective-teachers-error-identification-and-feedback-in-learning-processes>
- Wuttke, E., Seifried, J. (2013). *From Diagnostics to Learning Success: Proceedings in Vocational Education and training*. pp. 222-240.
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