

IFTE 2019
5th International Forum on Teacher Education

**IMPROVING THE ASSESSMENT SYSTEM OF PROFESSIONAL
COMPETENCIES OF FUTURE TEACHERS**

Elena Khodyreva (a, b)*

*Corresponding author

(a) Vice Rector for Education Quality Assurance, Innopolis University, Innopolis, Russia, khodyreva.e@inbox.ru,

(b) Pedagogy Department, Vyatka State University, Kirov, Russia

Abstract

The urgency of an issue is stipulated by the necessity to assure compliance of the professional training quality of pedagogical science graduates with the requirements of the occupational pedagogical standard. Do this requires the improvement of a content and assessing procedure of the professional competencies, ensuring effective implementation of the labour functions established by the occupational standard by future teachers. The research objective consists of conceptual baseline and technology of improving the assessment system of professional competencies of future teachers in the context of requirements of the occupational pedagogical standard. The key research methods were: retrospective analysis, pedagogical modeling, study of regulatory legal acts in the field of education, benchmarking methods; expert methods. The article substantiates the methodological aspects of a research outlined by the competency-based and system approaches to the assessment of professional competencies of future teachers in high school. There is a proposed technology for improving the assessment of professional competencies of future teachers at a higher educational institution. On the basis of the best practices of educational organizations of higher education – the participants of the Pedagogical education modernization project, the features of assessment of professional competencies of future teachers are established and presented in the educational programs. Based on the expert's survey, there are the following recommendations for improving the assessment system of professional competencies of future teachers. The article matter can be useful for upgrading the content and quality assessment procedures for mastering basic professional educational programs related to the enlarged group "Education and Pedagogics".

2357-1330 © 2020 Published by European Publisher.

Keywords: Quality of occupational education, the assessment system of professional competencies of future teachers, the occupational pedagogical standard, the updated Federal State Educational Standard of higher education.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-Noncommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

Professional competencies of future teachers are defined in psychological and pedagogical researches as their ability and willingness to carry out professional activities in accordance with the requirements and standards adopted in the field of education (Shkerina & Keyv, 2015; Khodyreva, 2015). When solving professional issues these competencies reflect their ability to successfully operate on the basis of existing practical experience, skills and knowledge.

From the perspective of the competency-based and system approaches, the assessment of professional competencies of future teachers is traditionally considered by scientists as a process and result of checking the degree of compliance of the professional education results, expressed in preparedness and ability to professional activity, regulatory requirements, social and personal expectations, which is carried out by the subjects of professional education using relevant diagnostic and evaluation procedures (Margolis, 2014; Margolis, Safronova, Shishlyannikova, & Panfilova, 2015).

According to the researchers, the structure description of professional competences, which future teachers should master, is a feature of fundamental importance for the assessment of competencies, taking into account the structure of professional activity, as well as the functions implemented in professional activity (Shishov & Agapov, 2001; Radionova & Tryapitsina, 2006; Sobolev, 2015). The present provision is due to the understanding of the teacher's qualification as a set of his/her professional competencies, reflecting the level of professional training for the activities in the field of education.

The improvement of the assessment system of professional competencies of future teachers in high school is considered as modernization of a set of organizational and functional structures, norms and rules, diagnostic and evaluation procedures, reflecting the degree of compliance of an educational process and results of students training (as a process and a result of the professional competencies formation) with the regulatory requirements, the requests of internal and external consumers (Kalimullin, Khodyreva, & Koinova-Zoellner, 2016). Thus, the regulatory requirements are set by the updated FSES, as well as the professional standard "Teacher (pedagogical activity in the field of preschool, elementary general, basic general, secondary general education) (tutor, teacher)" (The Ministry of Labour and Social Protection, 2013).

Within the research there are considered conceptual ideas, the implementation of which will ensure the improvement of the assessment system of professional competencies of future teachers, among which the basic idea is the integration of requirements of the occupational pedagogical standard and the updated Federal State Educational Standard of higher education. It has been established that the teacher's professional standard describes two generalized labour functions corresponding to the professional activities of graduates, which include pedagogical activity in design and implementation of the educational process in educational organizations of preschool, elementary general, basic general, secondary general education, as well as pedagogical activity in design and implementation of basic educational programs. Generalized labour functions, in their turn, include labour functions. The first generalized labour function includes such labour functions as general pedagogical function, education, educational activity, upbringing activity. The second generalized labour function includes such labour functions as: pedagogical activity on implementation of preschool education programs; pedagogical activity on implementation of elementary education programs; pedagogical activity on implementation of

basic and secondary general education programs; and also the modules "Knowledge-intensive learning. Mathematics" and "Knowledge-intensive learning. Russian language". Further, the realization of each labour function involves the implementation of certain labour activities and relevant knowledge and skills. At the same time, according to the updated FSES, the requirements for the professional education results are expressed in a set of universal, general professional and professional competencies, each of them involves a certain level of knowledge from the future teachers, as well as their mastery of the relevant methods of professional activity.

Therefore, on the basis of requirements integration of the professional standard of a teacher and the updated FSES it is important to justify the subject of assessment (to determine the list of professional competencies), to establish the achievement indicators of competencies, as well as to lay out the procedure and methods of assessment.

In addition, from the perspective of the competency-based and system approaches, the essential conceptual ideas, the implementation of which will improve the assessment system of professional competencies of future teachers, are as follows:

- an idea of complexity, requiring the implementation of assessment procedures not only knowledge and skills of future teachers, but also, in general, a willingness to apply them in conditions as close as possible to the conditions of professional activity;
- an idea of objectivity assessment of professional competencies of future teacher, allowing to establish the correspondence of the level of professional competence formation to the level of qualification necessary for the implementation of a particular type of professional activity on the basis of clearly defined criteria and indicators, as well as the standardization of conditions and assessment procedures;
- an idea of technological assessment procedures of professional competencies, allowing to obtain data about the level of their formation at each stage of professional education in high school;
- an idea of content openness and assessment procedures, providing the subjects of professional education (owner of educational services, student, educational organization, etc.) with the reliable information about the formation of professional competencies of future teachers at each stage of professional education, as well as the formation of coordinated decision on the level of their qualifications.

2. Problem Statement

The urgency of an issue under study is stipulated by the necessity to assure compliance of the professional training quality of pedagogical science graduates with the requirements of the occupational pedagogical standard (Popov, Schebetyuk, & Teslenko, 2015; Belkina & Shkatova, 2016; Yungblood & Khodyreva, 2018). In this regard, the importance of improving content and assessing procedure of the main results of the educational program development - the students professional competencies, ensuring effective implementation of the labour functions established by the occupational pedagogical standard by future teachers (Glebova, Kuznetsova, & Shadrikov, 2012; Stolbova, 2012; Zolotaryova, 2014). Therefore, in the course of determining the results of mastering educational programs of higher education, developed on the basis of the updated Federal State Educational Standards (hereinafter referred to as the

FSES), the priority is to assess not only knowledge and skills of the student, as it is customary, but also the level of his/her professional qualification, necessary for implementation of a particular type of professional activity (Akaeva, 2006; Merkulova, 2016; Cai, Yungblood, Khodyreva, & Khuziakhmetov, 2017). These circumstances dictate the need for improvement of procedures and tools for assessing professional competencies of future teachers, which would be consistent with the methodology of professional standards and updated FSES. To solve this issue, the article will substantiate the concept and technologies for improving the assessment system of professional competencies of future teachers at various stages of mastering the educational program based on the requirements of the teacher's professional standard and the updated Federal State Educational Standards.

3. Research Questions

The study addressed the following tasks:

- to substantiate the concept of assessment of professional competencies of future teachers, when mastering educational programs of higher education;
- to propose a technology for improving the assessment of professional competencies of future teachers in high school;
- to develop recommendations for improving the content and procedures for assessment of professional competencies of future teachers in high school, when mastering educational programs.

4. Purpose of the Study

The research objective consists of conceptual baseline and technology of improving the assessment system of professional competencies of future teachers in the context of requirements of the occupational pedagogical standard and the updated Federal State Educational Standards.

5. Research Methods

5.1. Theoretical and empirical methods

The key research methods for this issue are:

- theoretical methods – retrospective analysis, which allowed to reveal the essence and specific features of assessment of professional competencies of future teachers; pedagogical modeling – when creating a concept and technology of improving the assessment system of professional competencies at the basic stages of professional education in high school, based on the requirements of the teacher's professional standard; the study of regulatory legal documentation – professional standard "Teacher (pedagogical activity in the field of preschool, elementary general, basic general, secondary general education) (tutor, teacher)", the updated Federal State Educational Standard of higher education under the educational program 44.03.01 "Teacher Education" (The Ministry of Labour and Social Protection, 2018), on the basis of which the assessment of professional competencies of future teachers has been carried out.

▪ empirical – benchmarking methods, assuming the study, analysis and adaptation of the best assessment practices of professional competencies of future teachers in educational organizations of higher education, implementing educational programs of the enlarged group, such as "Education and pedagogics"; expert methods, which allowed to draft proposals for improving the assessment system of professional competencies of future teachers in the context of requirements of the occupational pedagogical standard.

5.2. Research milestones

The research has been conducted in three stages:

At the first stage, the substantiation of methodological basis of the research has been carried out; the concept formulation of assessment of professional competencies of future teachers in high school.

At the second stage, based on the analysis of the best practices of professional education, there has been proposed a technology of improving the assessment of professional competencies of future teachers in high school, based on the requirements of teacher's professional standard at the initial, basic and final stages of professional education.

At the third stage, on the basis of expert assessments, there have been developed recommendations for improvement of content and procedures for assessing the professional competencies of future teachers in high school.

6. Findings

To analyze the best assessment practices of professional competencies of future teachers in high school, the analysis of information published by 12 educational organizations has been carried out, participating in the Pedagogical Education Modernization Project in the subsections "Education" and "For Applicants" of a special section "Educational organization data" (see the Table. 1).

Table 01. Assessment features of professional competences in educational programs of the universities, participating in the Pedagogical Education Modernization Project

Assessment features of professional competences in educational programs of the universities, participating in the Pedagogical Education Modernization Project	A percent of educational programs with these features in %
Reference in educational programs to the need of assessment of professional competencies as the results of their development	100
Availability of professional education results in the list, professional and specialized competencies focused on fulfillment of the regional employment market inquiries	11.8
Presence of indication on the formation stages of professional competences in the course of mastering the educational program	75
The presence of correlation justification of professional competencies with labour functions and labour activities of a teacher, defined in the professional standard	33.8
The presence of assessment tools for the current progress monitoring, interim certification of students and for the state final certification	100
Availability of indicators and criteria for assessing the competencies formation at various stages of their development, as well as scales and	57.3

assessment procedures	
Availability of methodological materials, determining the assessment procedures of knowledge, skills and experience, reflecting the stages of competencies formation	62
Availability of test questions and typical tasks for practical training, tests and exams in the assessment tools funds	100
Availability of tests and computer testing programs in the assessment tools funds	72
Availability of the approximate subjects of course papers/projects, reference papers in the assessment tools funds	100
Compliance of the assessment tools with the specifics of labour functions reflected in the professional standard (availability of professional competence tests, cases, situational tasks, WorldSkills format tasks).	23.6
Involvement of external experts with the procedures of current progress monitoring, interim and final assessment, as well as with the expert examination of assessment tools	23.6

When analysing 68 educational programs uploaded on the sites under the educational program 44.03.01 "Teacher Education", it has been established that the assessment of professional competencies of future teachers is a component of the assessment results of mastering the educational program as a whole. In 100% of the considered programs, the lists of professional competencies are defined as educational outcomes, herewith only 11.8% of the analyzed educational programs identified not only professional competencies established by FSES, but also professional and specialized competencies focused on fulfillment of the regional employment market inquiries. When evaluating the results of mastering the programs, it can be noted that only 33.8% of the analyzed educational programs are directly related to the labour functions and labour activities of a teacher, indicated in the professional standard and given in the competency-based and professional model of a graduate.

In 100% of analyzed programs, the assessment tools funds include such funds for the current progress monitoring, interim certification of students and for the state final certification.

Compositional analysis of the assessment tools funds contained in the analyzed educational programs showed its non-uniformity. 75% of educational programs contain a list of competencies indicating their formation stage in the process of mastering the educational program. In 57.3% of educational programs for each learning outcome in a discipline (module) or practice, there are described indicators and criteria for assessment of competencies formation at various stages of their formation, as well as the scales and assessment procedures. Only 62% of the analyzed educational programs contain methodological materials, determining the procedures for assessment of knowledge, skills and (or) experience, characterizing the stages of competencies formation.

Assessment tools funds for the assessment of professional competencies of future teachers, as a rule include test questions and standard tasks for practical training, tests and examinations (100% of the analyzed educational programs), tests and computer testing programs (72% of the analyzed educational programs), approximate subjects of course papers/projects, reference papers (100% of the analyzed educational programs). For 23.6% of the analyzed educational programs, the assessment tools are developed in accordance with the specifics of labour functions reflected in the professional standard and include professional competence tests, cases, situational tasks, WorldSkills format tasks.

In 23.6% of the analyzed educational programs, the external experts – lecture teachers, employers are involved in the current progress monitoring and interim certification, as well as the examination of assessment tools, which allows to approach the current progress monitoring and interim certification of students to the tasks of their future professional activities. In 11.8% of the analyzed educational programs, the prerequisite for admission to the state final certification is the submission of documents confirming the development of students competencies in studying of theoretical material and practical training for each of the main types of professional activity.

Thus, the analysis of the best assessment practices of professional competencies of future teachers demonstrates that the technology described in the educational programs is not fully focused on the requirements of the updated FSES and professional standards and it needs to be improved.

The technology of improving the assessment of professional competencies of future teachers in high school is considered as a set of purposive actions of the assessment subjects at the stages of professional education, ensuring correlation of the professional competencies formation level of future teacher with qualification requirements defined in the teacher's professional standard.

The purpose of the introduced technology is related to the development of the content, methods and procedures for assessing professional competencies, which are focused on ensuring their compliance with labour functions and labour activities defined in the teacher's professional standard.

Technology of improving the assessment of professional competencies of future teachers in high school involves the implementation of three interrelated stages – preparatory, basic and final.

At preparatory stage, the define task is to determine the results of mastering the educational program based on the integration of FSES requirements and the teacher's professional standard.

When describing the specifics of professional competencies of a future teacher as assessment subjects, the following positions, which are contained in the updated FSES should be noted:

- professional standards corresponding to the professional activities of graduates, as well as the analysis of requirements for professional competencies for graduates in the employment market are considered as sources of professional competencies formation; generalization of the existing experience in training and consulting with leading employers, employer's associations in the field of education;
- a list of mandatory professional competencies, as well as recommended professional competencies is determined by the approximate basic educational program, and a list of universal and general professional competencies is established by the updated FSES under the educational bachelor's degree program 44.03.01 "Teacher Education".
- a list of professional competencies defined by the educational program, assumes the inclusion of all mandatory professional competencies; inclusion of one or more recommended professional competencies; and also the inclusion of one or several professional competencies determined by an educational organization, based on the educational bachelor degree program, on the basis of professional standards, relevant to the professional activities of graduates, and also based on the analysis of other requirements for graduates.

- professional competencies should enable the future teacher to carry out professional activities in at least one area of professional activity, as well as their willingness to solve problems of at least one type of professional activity.

Specifics of the assessment subjects of professional competencies of future teachers in the context of the professional standard requirements is conditioned by the need to involve educational services customers, such as potential employers, employer's associations, state and municipal authorities in all stages of assessment, starting from determining the list of professional education results, criteria and indicators of their formation, and ending with the qualification assessment, required for solving certain professional tasks.

At the main stage, the task is to develop a procedure and assessment tools of professional competencies of future teachers, including the following actions:

- determination of criteria and indicators of educational results achievement, as well as professional competencies indicators;
- justification by reference to specific features of professional activity of future teachers of the assessment objects, which can be both the products and the process of the professional activity of a teacher;
- identification of resources which are necessary for the assessment procedure (subject-spatial environment, equipment and materials, information and methodological resources, etc.);
- the selection of assessment methods consistent with implementation methods of the teacher's labour activities defined in the professional standard.

At the final stage, the task is conditioned by the need to develop assessment tools funds to comprehensively assess teacher's readiness to implement generalized labour functions related to teaching activities in design and implementation of the educational process in educational organizations, as well as teaching activities in design and implementation of the basic general educational programs and their approbation.

Based on a survey of Rosobrnadzor experts involved in assessing the quality of mastering educational programs in the enlarged group "Education and Pedagogics" (15 people), there have been made recommendations for improving the assessment system of professional competencies of future teachers, relating both the methodology and assessment procedure and the content of the assessment tools funds. The experts were suggested to select 10 out of 30 judgments concerning the ways of improving the assessment system of professional competencies. Table 2 represents recommendations with maximum number of selections.

Table 02. Ways to improve the assessment system of professional competencies of future teachers (expert opinions)

Ways to improve the assessment system of professional competencies of future teachers	A percent of experts, indicated the effectiveness of this method in %
Establishment of professional competencies list as educational outcomes, reflecting the requirements of professional standards relevant to the professional activities of	100

graduates, taking into account	
Determination of assessment scales, providing a comprehensive assessment of professional competencies	100
Quality verification of the assessment tools funds by the external expertise	100
Justification of criteria and indicators of professional competencies assessment	93.3
Ensuring compliance of assessment tools funds with the requirements of future professional activity of students, as well as the objectives of the educational program	86.7
Establishment of professional competencies list, taking into account the employment market demands and interests of leading employers	80
Development of assessment tools based on a comprehensive analysis of the generalized labour functions of a teacher, his/her labour functions and labour activities	73.3
Modernization of the assessment procedure allowing to determine preparedness of future teachers to perform labour activities at each stage of mastering the educational program	66.7
Establishment of achievement indicators of professional competencies considering key labour actions of a teacher	53.3
Ensuring the compliance of assessment tools funds with the objectives of the educational program	53.3

Thus, for improving the assessment system of professional competencies of future teachers, it is necessary to determine the list of professional competencies as educational results, reflecting the requirements of the professional standard, relevant to the professional activities of graduates, taking into account the employment market demands, interests of leading employers; to establish the achievement indicators of professional competencies recommended and formed by educational organizations, taking into account the key labour actions characterizing a certain level of qualification; to justify the criteria and assessment indicators of professional competencies, assessment scales, which provide a comprehensive evaluation of the learning outcomes data; to develop assessment tools based on a comprehensive analysis of the generalized labour functions of a teacher, his/her labour functions and activities, to ensure the compliance of assessment tools funds with the requirements of future professional activity of students, as well as with the objectives of the educational program; to confirm the quality of assessment tools funds by external expertise; to upgrade the assessment procedures allowing to determine preparedness of future teachers to perform labour activities at each stage of mastering the educational program.

The problem of improving the assessment of the professional education quality in general, and the assessment system of professional competencies of future teachers, in particular, is developed in compliance with the competency-based and system approaches, which are the theoretical grounds of the proposed concept of improving the assessment system of professional competencies of future teachers in the context of requirements of the teacher's professional standard. Despite rather profound research in methodology and technologies for assessing the professional education quality of future teachers, due to the entry into force of the updated FSES under the educational program 44.03.01 "Teacher Education", the integration of FSES requirements and the professional standard becomes actual. Considering new conditions, it is required not only to determine the list of professional competencies, but also to substantiate their achievement indicators, based on the requirements for the graduate's professional activities and to develop such procedure and assessment methods which would be as close as possible to

the content and procedures of professional activities and would allow to determine qualification level of a future teacher.

7. Conclusion

The undertaken study has allowed to develop approaches to improving the assessment system of professional competencies of future teachers based on basic ideas of integration, complexity, objectivity; processability; openness of content and assessment procedures. Their implementation will allow to effectively solve the problem of formation and evaluation of professional skills necessary for implementation of a particular type of professional activity. The proposed technology of improving the assessment system of professional competencies of future teachers in high school, involving the implementation of three interrelated stages – preparatory, basic and final will allow to perform modernization of the procedure, methods for assessing the professional competencies of future teachers, as well as the existing assessment tools, to adjust content and structure.

7.1. Recommendations

The article matter is valuable for managers and developer teams of the basic professional educational programs of higher education based on the requirements of professional standards; for the academic staff of the universities involved in the implementation of educational programs for future teachers and assessment of their professional competencies, as well as for the employers involved in the assessment of the professional education quality.

The article matter can be useful for upgrading the content and quality assessment procedures for mastering basic professional educational programs related to the enlarged group "Education and Pedagogics" to ensure their correlation with the requirements of the professional standard "Teacher (pedagogical activity in the field of preschool, elementary general, basic general, secondary general education) (tutor, teacher)", and the requirements of the updated Federal State Educational Standards under the educational program "Teacher Education".

References

- Akaeva, E. L. (2006). Monitoring of a future teacher's professional becoming based on the competency-based approach. *Pedagogical diagnostics*, 3, 13-18.
- Belkina, V. N., & Shkatova, T.G. (2016). Professional competencies assessment of preschool education bachelors. *Yaroslavl Pedagogical Bulletin*, 4, 77-81.
- Cai, J., Yungblood, V. T., Khodyreva, E. A., & Khuziakmetov, A. N. (2017). Higher education curricula designing on the basis of the regional labour market demands. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(7), 2805-2819.
- Glebova, L. N., Kuznetsova, M. D., & Shadrikov, V. D. (2012) *Monitoring the quality of higher pedagogical education: monograph*. Moscow: Logos.
- Kalimullin, A. M., Khodyreva, E. A., & Koinova-Zoellner, J. (2016). Development of internal system of education quality assessment at a university. *International Journal of Environmental and Science education*, 13(11), 6002-6013.
- Khodyreva, E. A. (2015). Problems and prospects of teachers training in the Universities of the Russian Federation. *Research and methodological electronic journal "Kontsept"*, 6, 96–100.

- Margolis, A. A. (2014). The Requirements for the Modernization of Basic Professional Education Program (BPEP) of Teachers Training in Accordance with the Professional Standard of the Teacher: Proposals for the Implementation of the Activity Approach in Teachers Training. *Psychological Science and Education*, 2, 1–18.
- Margolis, A. A., Safronova, M. A., Shishlyannikova, L. M., & Panfilova, A. A. (2015). Testing of Assessment Tools of Future Teachers Professional Competence. *Psychological Science and Education*, 5(20), 77–91.
- Merkulova, L. V. (2016). The Assessment of a Teacher's Readiness to the Professional Activity in the Personalized Educational Environment. *Vestnik of the Orenburg State University*, 8(196), 33-40.
- Popov, D. A., Schebetyuk, V. V., & Teslenko, I. V. (2015). The assessment system of professional competencies of a teacher based on the professional standard. In N. Yu. Stukova (Ed.), *Proceedings of the VII International Student Scientific Conference "Student Scientific Forum"* (pp. 1-22). Moscow: Informational and Technical department of General Science Academy.
- Radionova, N. F., & Tryapitsina, A. P. (2006). Prospects for the Development of Teacher Training: competence approach. *Man and Education*, 4(5), 7-14.
- Shishov, S. E., & Agapov, I. G. (2001). Competency-based approach to education as a necessity. *The world of education - education in the world*, 4, 8–19.
- Shkerina, L. V., & Keyv, M. A. (2015). *Formation of professional competencies of a teacher in a high school: monograph*. Krasnoyarsk: Publishing House of the Krasnoyarsk State Pedagogical University.
- Sobolev, A. V. (2015). The Program of Teacher Education: New Challenges (Current Status and Development Trends of State Policy in Higher Teacher Education). *Psychological Science and Education*, 5(20), 5-13.
- Stolbova, I. D. (2012). Toolkit for Assessing Education Results within the Competence Approach. *Standards and Monitoring in Education*, 4, 24–30.
- The Ministry of Labour and Social Protection. (2013, October 18). *Professional Standard: Teacher (teaching activities in preschool, primary general, basic general, secondary general education (educator, teacher), Order No. 544*. Retrieved from <http://fgosvo.ru/uploadfiles/profstandart/01.001.pdf>
- The Ministry of Labour and Social Protection. (2018, February 22). *Federal State Educational Standard of Higher Education – Bachelor's Program for 44.03.01 Pedagogical Education, Order No. 121*. Retrieved from http://www.consultant.ru/document/cons_doc_LAW_293567/#dst0
- Yungblood, V. T., & Khodyreva, E. A. (2018). Quality of psycho-pedagogical training of prospective teachers the employer's perspective. In R. Valeeva (Ed.), *European Proceedings of Social and Behavioural Sciences EpSBS* (pp. 2357-1330). London: Future Academy. [https://dx.doi.org/10.15405/epsbs\(2357-1330\).2018.9.1](https://dx.doi.org/10.15405/epsbs(2357-1330).2018.9.1)
- Zolotaryova, S. S. (2014). Assessment of Professional Competences during the Training Process of Students in a Higher Education Institution. *Yaroslavl Pedagogical Bulletin*, 3(2), 116–121.