REVIST

Educación • Education • Educação • Vol. 41 (35) 2020 • Art. 12

Recibido/Received: 11/06/2020 • Aprobado/Approved: 23/08/2020 • Publicado/Published: 17/09/2020

Criteria approach to assessing the teacher's professional competence: ability for self-organization and self-education (future teacher)

Enfoque de criterios de evaluación de la competencia profesional de docentes: capacidad para la auto-organización y auto-educación en futuros profesores

ANDREEVA, Evgeniya V.¹ ZABRODINA,Inga V.² KOZLOVA, Natalia A.³ PAVLOVA, Larisa N.⁴ STERLIGOVA, Ekaterina A.⁵ FORTYGINA, Svetlana N.⁶ VERTIAKOVA, Elvira F.⁷

Abstract

The article presents the experience of the South Ural State Humanitarian Pedagogical University (SUSHPU) in assessing the professional competence of a future teacher in terms of his ability to selforganize and self-educate. The main research methods were the analysis of psychological and pedagogical literature and the analysis of the results of the diagnosis of future teachers' selforganization features. The authors of the work consider the result of research activities to be a theoretical understanding of the practice of assessing the professional competence of a teacher based on a criteria-based approach.

Keywords: criteria-based approach, teachers' professional competence, self-organization, self-education.

Resumen

El artículo presenta la experiencia de la Universidad Pedagógica Humanitaria del Estado del Ural Sur (SUSHPU) al evaluar la competencia profesional de un futuro maestro en términos de su capacidad para autoorganizarse y autoeducarse. Los principales métodos de investigación fueron el análisis de la literatura psicológica y

¹Department of Pedagogy, Psychology and Subject Methods, South Ural State Humanitarian Pedagogical University, Chelyabinsk.Senior Lecturer .Contact e-mail:: yaeva2005@mail.ru

²Departmentof Pedagogy, Psychology and Subject Methods, South Ural State Humanitarian Pedagogical University, Chelyabinsk, Candidate of Pedagogical Sciences, Associate Professor.Contact e-mail: zabrodinaiv@cspu.ru

³Department of Pedagogy, Psychology and Subject Methods,South Ural State Humanitarian Pedagogical University, Chelyabinsk.Candidate of Pedagogical Sciences, Associate Professor. Contact e-mail: kozlovana@cspu.ru

⁴Department of training teachers of vocational training and subject methods. South Ural State Humanitarian Pedagogical University, Chelyabinsk. Candidate of Pedagogical Sciences, Associate Professor. Contact e-mail: pavlovaln@cspu.ru

⁵Department of English Philology,South Ural State Humanitarian Pedagogical University, Chelyabinsk.Assistant .Contact e-mail: katerinasterligova13@gmail.com

⁶Department of Pedagogy, Psychology and Subject Methods, South Ural State Humanitarian Pedagogical University, Chelyabinsk. Candidate of Pedagogical Sciences, Associate Professor. Contact e-mail:fortyginasn@cspu.ru

⁷Department of Pedagogy, Psychology and Subject Methods, South Ural State Humanitarian Pedagogical University, Chelyabinsk. Candidate of Pedagogical Sciences, Associate Professor. Contact e-mail:vertyakovaef@cspu.ru

pedagógica y el análisis de los resultados del diagnóstico de las características de autoorganización de los futuros docentes. Los autores del trabajo consideran que el resultado de las actividades de investigación es una comprensión teórica de la práctica de evaluar la competencia profesional de un maestro con base en un enfoque basado en criterios.

Palabras Clave: enfoque basado en criterios, competencia profesional del profesorado, autoorganización, autoeducación.

1. Introduction

The term "self-organization" first appeared in 1947 in the scientific publication of the English psychiatrist William Ashby "Principles of the Self-Organizing Dynamic System". In the following years, the term "self-organization" began to be used by scientists (I. Prigozhin, G. Haken, Jean-Marie Lehn, A.P. Rudenko) when describing systems theories. From the point of view of a synergetic approach, the phenomenon of self-organization is the most complex process of spatial, temporal and spatial-temporal ordering in an open system of interaction of many elements of its components. The definition of "self-organization" presented by scientists in the framework of the synergetic approach was interdisciplinary in nature and gradually passed into psychological and pedagogical research.

The relevance of the subject is formed by a contradiction at the scientific and methodological level of the study of the theory and practice of professional competence. The main objective of the study on the problem of assessing the ability of self-organization and self-education of a future teacher to interpret the results of a student survey on the level of self-organization to the quality of professional competency.

To achieve this goal, we have solved the following tasks:

- analysis of terms and determination of the functional fullness of the professional activity of the teacher;

- conducted statistical research on the ability of the teacher to self-organization and self-education in professional activities;

- an interpretation of the results of the study;

- summarized the results of the study based on a criteria-based approach to assessing the professional competence of a teacher.

The conditioned subject is being developed at the South Ural State Humanitarian Pedagogical University. The formation of the ability for self-organization and self-education of a future teacher in the conditions of this university allows characterizing the quality of training from two positions. First position: a formal assessment of the training of professional teaching staff according to a social order (GEF). The second position: assessment and self-esteem of a graduate of a pedagogical university about the ability to self-organization and self-education, as well as in a period that requires adaptation in the proposed conditions of pedagogical activity (non-standard, or requiring special practice).

Thepositions on assessing the quality ofstudents' professional education of a pedagogical university are determined by person's self-education in the professional field of activity. Let us analyze the terms in order to define the concept of "self-education". This operation will help us determine the saturation of the teacher's professional activity.

Self-education is a form of individual educational activity of a person, where it is motivated by the needs and interests intheprofession. It isaimed at the development of professionally significant personality traits (Pavlova, Fortygina, 2017).

Self-educationcan be not only a form of training in which independent education takes place, but also a means, where the form of self-education is presented as a study of scientific, popular science, educational, and other

literature (The Great Soviet Encyclopedia, 1991). Thus, the path of self-education provides targeted activities for vocational education.

Based on the foregoing, professional self-education is a focused continuous process, which is based on the motivation of the teacher to fulfill himself in the profession and is provided by individual and supported by professional self-management. We assume that the components of professional self-education are individual and professional self-management (Pavlova, Fortygina, 2017).

By individual self-management, we mean the ability of a person not to change his personal self in various situations, including extreme ones. Individual self-management can have a performance character (for example, howa person manageshimself in the process of work to complete a task) and managerial, that is, be focused on developing tasks for other individuals. Professional self-management is characterized as the management of a teaching staff in the form of a pedagogical council, methodological association, professional skill competition, search, design, and experimental practical activity (Pavlova, Frolova, 2017).

It is important for us to decide on the semantic content of these concepts in order to form an idea of the content and possibilities of the competence that interests us in the teaching profession. The terms "self-education" and "self-management" are the semantic characteristics of concepts. In the context of professional pedagogical competence, these concepts have the following meanings:

Teacher's self-organization is the need for professional activity, a characteristic of the teacher's personality to self-development. Teacher's self-education is aneed for knowledge acquisition. The teacher's self-managementis a form of professional activityorganization (Pavlova, Fortygina, 2017).

Consequently, the ability of a teacher to self-organize and self-educate is a personality trait that contributes to the successful implementation of professional activities. To do this, we need to evaluate the initial manifestations of the indicated professional competence in the conditions of training future teachers.

Let's consider the views of scientists on the problem under discussion. For example, I.V. Marichevconsidersthat "the quality of education in structural terms should be considered as a multicomponent system, including the quality of teaching staff, the quality of educational and professional programs and didactic support, the quality of the educational process, the quality of students, the quality of school management as a whole" (Marichev, 2016). This author, considering the criteria-based approach to the management of vocational training, suggests parameters by which it is advisable to determine the success of educational practices in vocational training these are the results of research on the problem; activities for the initialization of educational programs that contribute to the formation of professional competence and, finally, the orientation of pedagogical influences on the professional competence formation(Marichev, 2016).

M.A. Pinskaya and A.V. Ivanov described the existing criteria and forms of assessment in education. As an example, the criterion formative assessment in domestic practice based on the standards of educational achievement is taken. They gave an idea of the organization of the educational process, educational goals, forms of assessment, etc. (Pinskaya, Ivanov, 2018)

N. A. Yushkova considers the criteria-based assessment of education as a condition of a competency-based approach. The author considers that the criteria-based approach effectively helps to track the individual development of the student and, as a result, it is possible to correct the individual development trajectory and differentiate the significance of the student's assessments (Yushkova, 2014).

O.V. Grishaeva analyzes the criteria-based assessment of the teacher's professional activity as a means of increasing the effectiveness of the educational process at the university. The scientist is studying the question of

the advantages of the criteria-based approach to assessing the educational activities of students and the professional pedagogical activity of a teacher in the project-based training of bachelors in higher education. O.V. Grishaeva formed the criteria for assessing the quality of the educational process, based on the professional competencies of future bachelors (Grishaeva, 2017).

We assessed the professional competence of a teacher from the point of view of his ability to self-organize and self-educate on the basis of a "criteria-based approach", characterized by the following principles: systempersonal, activity-anthropological, cultural-ethnopedagogical. These principles determine the content of the criteria, taking into account the place of all the features of the educational organization. In our opinion, this approach allowsto objectively determine the list of criteria for assessing theteacher's ability to self-organization and self-education.

The proposed criteria-based approach has the following features of a scientific methodology (Avalueva, 2003):

- objectivity, which is characterized by an abstraction of the phenomena of the object and subject of research;

- versatility, confirmed by the possibility of applying various techniques and test tasks;
- reliability, because it is based on a practically proven methodology;
- novelty and significance for pedagogical science;

- The prospect for obtaining meaningful information in order to organize the educational process;

- indicative basis - professional self-development and development of self-management techniques in professional activities.

The "criteria-based approach" for the purpose of this studyis designed to carry out various types of assessmentsto determine the effectiveness of pedagogical activity: generalized, operational, dynamic and monitoring(AbekovaZh. A., Oralbaev A. B., Berdalieva M., &IzbasarovaZh. K., 2016).

2. Methodology

The main conceptual provisions of the study were tested by analyzing documents from 15 schools in the city of Chelyabinsk(location) and analyzing training programs for future teachers from 8 faculties of the South Ural State Pedagogical University. The main objectof the process for assessing theteacher's competence to identify the ability of self-organization and self-educationin professional activity based on a criterion. Assessment is carried out by the toolkit of the criteria approach.

Criteria based assessment solves the following problems: it makes assessment more objective and transparent, allows the teacher to assess the boundaries of his level and provides objective and supportive feedback. The objectivity of evaluations in the criteria approach is confirmed by practice. An example is given from such practice:

Table 1, presents the analysis of young specialists and the practice of training future teachers.

Table 1	
Comparative characteristics for the Implementation of criteria-based	
approach principles in educational organizations	

The content of the principles of the criteria-based approach	Self-organization and self- education of future teachers (SUSHPU)	Self-organization and self-education (teachers of Chelyabinsk)	
System-personality principle. Design, organization and implementation of the educational process	Educationalcompetencies, practices	Availability of educational process software	
Activity-anthropological principle. The manifestation of the teacher's activity in professional activities in the form of research, transformative and practical activities, which links the practical and abstract theoretical levels of knowledge and attitudes towards the world	Contests, Conferences	Participation in: professional skills contests, speaking at pedagogical councils, conferences; creative pedagogical groups, research projects, continuing education courses and retraining courses, in master classes, organization of copyright master classes, etc.	
Culture-ethnopedagogical principle. The manifestation of culture in the form of the teacher's professional development and its formation as a creative person, the manifestation of the ability to make maximum use of the educational opportunities of the ethnic environment	Project activities	The presence of professional design activities for self-education, taking into account the need for educational organization	

Source: authoring

Thus, the use of the criteria-basedapproach allows, to justify, create and implement technological mechanisms in the field of professional educational practice management; and also to predict, in this case, future teachers' ability professional competence: to self-organize and self-education at the stage of preparation.

The sample included 55 future primary school teachers. A quantitative characteristic of the level of selforganization and self-education of students is represented by the following criteria: the ability of future teachers to set goals, analyze the situation, the ability to plan activities, determine their level of self-control, evaluate and correct themselves, and evaluate their willful qualities.

In conjunction, these criteria allow to determine the level of student self-organization. For this purpose, we used the questionnaire D.A. Ishkova«Diagnosis of the features of self-organization», developed on the basis of the Questionnaire for the diagnosis of stylistic features of self-regulation of behavior «SSB-98» (V.I. Morosanova and E.M. Konoz, 2000); The questionnaire «The ability of self-government», developed under the guidance of N.M. Peysakhova (1995); Reflexivity Questionnaire (V.N. Karandashev, 1994); LSQ Learning Style Questionnaire (P. Honey and A. Mumford, 1992).

3. Results

In the course of the study, we obtained the level of student self-organization of the selected sample, in the specialty 44.02.02 Primary School Teachers on the basis of basic and secondary general education (Table 2).

Studentssen organization indicators									
Faculty	Goalsetting	Analysis of thesituation	Planning	Self control	Correction	Willpower			
PST, based on 11 gr. (N = 30)	75 %	72 %	64,5 %	71 %	53 %	61,5 %			
PST, based on 9 gr. (N = 25)	64%	61 %	55,5 %	60 %	50,5 %	56,5 %			

 Table 2

 Studentsself-organization indicators

Source: authoring

From the above Table, it was revealed that there are differences between graduate students studying on the basis of primary and secondary general education. So, on the scales of "planning", "self-control", "volitional efforts" among students in graduation groups studying on the basis of 11 grades, the indicators are much higher than on students of graduation groups studying on the basis of 9 grades. The highest indicators were shown by graduate students studying on the basis of 11 grades on the "planning" scale, and they showed the lowest indicators on the "correction" scale. They demonstrated rather high indicators on the scales of "situation analysis", "self-control". This is an evidence about their skills in identifying and analyzing the circumstances necessary to achieve their goals, as well as the ability to control and evaluate their own actions. The general level of self-organization among students on the basis of 11 grades is at an increased level (66%).

Analyzing the results of graduate students studying on the basis of 9th grade, it should be noted that they showed an average low indicator on the scales of "planning", "self-control", "correction", "willpower". This suggests that students are not able to plan their own activities, to monitor, correct, regulate and evaluate their actions. The indicator on the scales of "goal setting", "analysis of the situation" among students on the basis of 9 grades takes on the value of an increased level, which indicates the ability of students to set goals and analyze emerging situations. The general level of self-organization among students on the basis of 9 grades is at a low average level (58%).

4. Conclusions

1. Data from an empirical study indicate an average low indicator of the formation of self-organization of future primary school teachers. Significant differences were revealed in the level of self-organization formation among students studying on the basis of secondary full education and secondary general education.

2. The study revealed that the overall level of self-organization among students on the basis of 11 grades is at an increased level (66%), and students on the basis of 9 grades are at a low average level.

3. The results of the study allow us to develop a new approach to assessing the effectiveness of educational activities, which can be designated as criteria-based, because the basis of the approach is designated and theoretically substantiated criteria-based tools for assessing the effectiveness of the studied type of activity.

4. Proof of the validity and relevance of developing an idea for assessing the professional competence of future teachers on the basis of a criteria-based approach related to solving the problem of students' professional self-determination. The study of the issue was carried out by the authors of the work according with their scientific

competence. The obtained research results are used in practice when planning and analyzing work with students at the university. The analysis of the research results was presented in the publications of the authors and monographs.

Bibliographic references

- AbekovaZh. A., Oralbaev A. B., Berdalieva M., &IzbasarovaZh. K. (2016) Criteria-based assessment technology, methods of its application in the educational process. *International Journal of Experimental Education*, 2-2, 215-218.
- Avalueva N.B. (2003) A criterion approach to assessing the effectiveness of educational activities of a teacher: Dis. ... cand. ped Sciences: 13.00.01: St. Petersburg, 169 p. RSL TD, 61: 04-13 / 200-7.
- Bibliotekar.ru.Retrievedfrom:http://www.bibliotekar.ru/nalogovaya-policiya/60.htm
- Encyclopedia of Economics.Retrievedfrom:https://economy-ru.info/info/6113/
- General explanatory dictionary of the Russian language.Retrieved from: http://tolkslovar.ru/s987.html
- Grishaev O.V. (2017) Criterion assessment of a teacher's professional activity as a means of increasing the effectiveness of the educational process at a university. *Science yesterday, today, tomorrow: Sat by mater. L international conference,* 9 (43), 34-39.
- Ishkov A.D. (2004) Student Learning Activities: Psychological Success Factors: Monograph. M .: DIA Publishing House. 224 p.
- Leonova, E.A, Fortygina, S.N. (2018). The structure of professional activity of a teacher in the actualization of the course content of computer science.*Baltic Humanitarian Journal*.3(24), 245-249.
- Marichev I.V. (2016) Criterion approach in the management of professional training of marine specialists, 12, 262–267.
- Order of the Ministry of Labor of Russia dated 10.10.2013 No. 544n "On the approval of the professional standard "Teacher (pedagogical activity in the field of preschool, primary general, basic general, secondary general education) (educator, teacher)" (Registered in the Ministry of Justice of Russia on 06/06/2013 No. 30550) // Reference-legal system "Consultant Plus": [Electronic resource] / Company "Consultant Plus".
- Pavlova L.N., Fortygina S.N. (2017) Professional self-determination of pedagogical university graduates. Novosibirsk State Pedagogical University Bulletin, 6, 26-36.
- Pavlova L.N., Frolova E.V. (2017) Characteristics of the preparation of students of a pedagogical university for professional activity. *Higher education today*, 11, 24-29.
- Pavlova L.N., Gordeeva I.S. "Professional self-determination of students: problems and practice of their solutions". Chelyabinsk: Publishing house of JSC "Library of A. Miller", 2020, 143 p.
- PinskayaM.A.,&Ivanov A.V. (2018) Formative approach: criteria-based assessment in action. *Public Education*, 5, 195-201.
- Popov D.A., Shchebetyuk V.V., & Teslenko I.V. (2015) A system for assessing the professional competence of a teacher based on a professional standard. *VII International Student Scientific Conference "Student Scientific Forum 2015"*. Retrieved from: https://scienceforum.ru/2015/article/2015008817

The economic dictionary. Retrieved from:http://slovariki.org/ekonomiceskij-slovar

The Great Soviet Encyclopedia.Retrievedfrom:http://tolkslovar.ru/s814.html

Ushakov'sdictionary.Retrievedfrom:https://glosum.ru/

- Volchegorskaya E., Fortygina S.N., &Yakovleva N.O.(2018). Information-educational environment as a means for developing projecting competence of future elementary school teachers. *Espacios*, 39 (30), pp. 1.
- Yushkova N.A. (2014) Criteria based assessment of educational outcomes in a competency-based approach.Retrieved from:https://docplayer.ru/41714948-Kriterialnoe-ocenivanie-rezultatov-obrazovaniya-v-usloviyah-kompetentnostnogo-podhoda-nataliya-anatolevna-yushkova.html
- Zabrodina I.V, Kozlova N.A, & Fortygina S.N. (2018). Main approaches to the development of technological lesson maps. *BalticHumanitarianJournal*, 3(24), 310-313.