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**MODEL OF INDEPENDENT EVALUATION OF TEACHERS'  
QUALIFICATION IN EDUCATIONAL CLUSTER**

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***Abstract***

The research is developed within the framework of the project for the development of the Educational Cluster of the Southern Federal District and, in particular, the development of a model and technology for assessing the level of professional qualifications of teachers for inclusion in the single register of "Leading Teachers of the Southern Federal District." The reason for study is need for implementing modern educational models and practices for independent assessment of the professional teachers' quality, and furthermore, to elaborating of an independent certification of the teaching staff evaluation. At the first stage, the priority is to create such a model for teachers of additional education, since for this category "Professional Standard" Educator "" was introduced as early as January 1, 2018. Another important factor in the development of an objective assessment system is the creation of interregional educational clusters basing on federal universities and fostering modernization of educational systems and communities. In this context, it is the Educational Cluster of the Southern Federal District that can play an important role in developing professional and pedagogical community of the South of Russia, in the formation of mechanisms of reflection, cooperation and standardization. The model of independent quality assessment is correlated with global tendencies in evaluation and examination of educational quality, and includes three main components: assessment of the level of subject knowledge, methodological and psychological-pedagogical competencies. Each of the components contains invariant and variable components, which allows to vary evaluation procedures depending on individual professional experience and the preferred activity.

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**Keywords:** Teacher's qualifications independent assessment, educational cluster.



## 1. Introduction

The study is caused by the growing need to develop evaluation tools and techniques that allow to fix the qualifications of Russian teachers according to requirements of the professional standard "Educator". Within the framework of Federal Laws: "On Independent Qualification Assessment" (Federalny Zakon, 2016), "On Amending the Labor Code of the Russian Federation" (Federalny Zakon, 2015), Government Decree "On Rules for the Development, Approval of Professional Standards" (Postanovlenit Pravitel'stva, 2013), Resolution "On Approval of the Rules conducting the assessment of qualifications of the independent qualification assessment in the form of a professional examination" (Postanovlenie Pravitel'stva, 2016) and the Order of the Ministry of Labor "On approval of the Regulation on the development of evaluation tools for conducting an independent qualification assessment" (Prikaz Mintruda, 2016) methods of measurements should ensure the objectivity of the evaluation, stimulate teachers to improve their professional level, to career growth and reflect the interests of employers.

This study takes a special relevance with regard to teachers of supplementary education, since it is for this category of pedagogical workers that professional standards are applied in certification as early as January 1, 2018. (Prikaz Mintruda, 2016).

The importance of the topic is confirmed not only at the federal, but also at the regional level. The educational clusters created in the regions, actively formed around the federal and basic universities, today act as centers and organizers of regional educational systems. Thus, the activity of the Educational Cluster of the Southern Federal District (hereinafter referred to as the Southern Federal District) aimed at consolidating the efforts of employers, scientific schools, teachers of higher, general, additional and postgraduate education, as well as other subjects of the pedagogical community, to satisfy parents, graduates, entrants (within the framework of the independent certification system) in developing regulations and optimizing the selection procedures for teachers to be included in the Open Register of leading teachers of the Southern Federal District. (Prikaz Rektora SFU, 2018).

This problem has been discussed for several years in the world literature in connection with the development of diagnostic tools for the professional competence of teachers. Such are the "Washington Pedagogical Exam for Confirming the Learned Skills" (Delvaux; Vanhoof, Tuytens, Vekeman, Devos, Van Petegem, 2013) Portfolio plays a special role in professional diagnostics, because "Portfolio should reflect not only the fact that the teacher knows and understands the theory, but also that he can act on the basis of theory and identify inconsistencies between what is given in theory and what happens in practice" (Goldhaber, Gratz & Theobald, 2017).

It is important to note that the general assessment model invariably includes multilevel (multi-layer) assessments of professional competencies, including simple knowledge, "knowledge of how", "shows how" and "professionally fulfills" (Admiraal, Hoeksma, van de Kamp & van Duin, 2011). However, there are significant differences between the procedures for assessing the lower levels of competencies, using objective methods of control and higher levels that require the involvement of indirect assessments, feedback, documentation of activities, etc., and the involvement of peers and external experts (Tigelaar & van der Vleuten, 2014).

## 2. Problem Statement

We are tasked to develop such a model of an independent assessment of qualifications (hereinafter referred to as the IAQ model), a teacher of additional and professional education for children and adults, and then a teacher of other specialties, profiles and directions that will meet the legal and regulatory requirements of the federal and regional levels and take into account the international and domestic experience in solving this problem.

## 3. Research Questions

The research questions are determined by the problem solved in the process of research:

- How to ensure the most compact and objective diagnosis of professionally significant competencies of teachers, which allows to actualize the processes of forming a stable system of professional values of teachers?
- How can the model of the IAQ being developed consolidate the pedagogical community of the South of Russia and actualize its expertise?
- Is it possible that the introduction of an independent assessment of the quality of pedagogical educational activities has become a factor in improving the quality of teacher education in the South of Russia?

## 4. Purpose of the Study

To develop a model for an independent assessment of qualifications in the context of the Southern Federal District, which: is oriented towards objective certification, which establishes the conformity of the qualification of the teacher of the SFD with the professional standard "Teacher"; is aimed at the exchange of experience and actualization of the best practices in the field of education; is directed to the formation of the Register of leading teachers of the Southern Federal District; is focused on the formation of expert communities of teachers involved in solving problems of improving the quality of pedagogical education.

## 5. Research Methods

The study was carried out in three stages, each of which corresponded to its own methods.

At the first stage, a comprehensive analysis and reconstruction of the regulatory framework for independent quality assessment was carried out.

At the second stage, articles from the most authoritative journals devoted to the problems of assessing the professionalism of teachers were analyzed. In particular, it appears that:

- 1) the external quality assessment itself has some limited effect on the growth of pedagogical professionalism, but the key factor in professional development is reflection and communication, that is, the possibility of obtaining "feedback" (Bakx, Baartman & van Schilt-Mol, 2013);
- 2) the teacher's own scores on the subject taught have some significance for students' successes, which makes it necessary to build comprehensive systems for assessing pedagogical professionalism (Cruz-Aguayo & Ibararán, Schady, 2017);

3) it is the qualitative assessments and accreditation procedures that can become the most significant factor of standardization in pedagogical education, the formation of a specific "culture of quality" (Yinger, 2010; Ilanlou & Zand, 2011);

4) professional portfolios (Grossman, 2010; Popescu-Mitroia, 2015; Mogonea, 2015; Goldhaber, 2017) are the most effective tool for comprehensive assessment of pedagogical competences and stimulation of development.

At the final stage of the research, the design of the original model of independent assessment of the qualifications of teachers in the conditions of the educational cluster was carried out, and also its approbation.

## 6. Findings

As already noted, the research is in the general context of developing new multifunctional tools that provide comprehensive and objective diagnostics of the practical readiness of teachers for professional activities.

During the analysis of the optimal form of professional examination revealed valuation techniques, including: testing, portfolio, case method, the performance of a video presentation, on-line performance of complex tasks, photo and video materials, presentations, protection of educational materials, the presentation of the technological map of the occupation, the demonstration of a fragment of the lesson, the development and conduct of a virtual tour, the portfolio of independently developed products (educational programs, presentations); presentation of awareness of the latest trends in the field of professional interest (with analysis of trends). All the indicators were classified into some sets, including:

- qualification assessment indicators, such as: qualification category, academic degree, academic rank, industry awards, state awards, the title of "Honored Teacher of the Russian Federation", "Honored Worker of Education" honorary diploma of the Ministry of Education and Science of the Russian Federation);

- Competence in the subject area of knowledge in research and practice (grant activities, publication activity, the presence of author of textbooks and teaching aids, scientometric indicators, student achievement, exam performance, winning in contests and competitions);

- Professional development indicators (frequency, form and place of training, training of additional professional programs, the presence of an international certificate in the field; participation in joint regional, city, regional, national, international projects and internships;

- Number of author's programs and the level of their expertise;

- Indicators of recognition; taking into account the opinion of subjects of the educational process (students, parents, employers); experience; feedback on teaching.

A model of an independent evaluation of a teacher's qualification in the conditions of the Southern Federal District has been developed, the advantages of which include the presence of an invariant and variable component of the assessment in the model. The variability of the evaluation is realized in several aspects, namely:

- through free choice of the form and method of evaluation with the aim of the most successful self-expression and self-actualization;

- combining the forms of the evaluation procedure: online, remote, full-time;
- graduation of evaluation means for three blocks, correlated with three components of competence: substantive, educational-methodical and psychological-pedagogical;
- focusing on the most relevant and traditionally problematic indicators of the qualification of the teacher (application of practice-oriented educational technologies, the conformity of the objectives of the meeting with the requirements for results, the objective evaluation of the results of the students, based on the criteria for assessing the result, knowledge of the conceptual apparatus of subject discipline, knowledge of the professional standard, knowledge of the algorithm development of programs of training courses, disciplines, modules, etc.);
- combining an event dedicated to the award of certificates based on the results of an independent evaluation with significant scientific and public events;
- the possibility of IAQs for teachers / teachers of general additional, as well as professional (including higher) education.

The IAQ is produced on a 100-point scale with: subject competence is assessed (up to 40 points), educational and methodological competence (up to 30 points), psychological and pedagogical competence (up to 30 points). The candidate's individual score can be increased by providing documentary evidence of admission of graduates who have been studying for at least two years to the candidate for SFU's competitive educational programs (2 points for 1 incoming but not more than 30 points).

The candidate is recognized as the "Lead Educator of the Educational Cluster of the Southern Federal District" provided that 70 or more rating points are obtained. The initial condition for participation in the independent evaluation is participation in the activities of the "Alumni Association" and the presence of a personal cabinet on the SFU administrative portal.

We emphasize that the basic requirements for a candidate for the status of "Educator of the Educational Cluster of the Southern Federal District" correspond to the requirements of the "Professional Teacher Standard". The candidate for the status of "Educator of the Educational Cluster of the Southern Federal District", regardless of the degree and the subject taught, should demonstrate: the fundamental and complex nature of training, the breadth of horizons; responsibility, independence and professional activity; readiness and ability to learn, mobility, the ability to take non-standard actions in changing conditions; openness and communication skills, readiness for productive interaction with students, their parents, colleagues, administration, etc.; positive image of themselves, students, peace, interaction, readiness to overcome difficulties and unfavorable circumstances; ability to self-actualization and reflection.

A methodology for assessing the subject competence (up to 40 points) is developed, which includes an invariant and variable component. An invariant form is the delivery of the subject USE (for subject teachers and teachers of additional education in research areas). The applicant sends (an indication to the contact person in the SFU) a certified copy of the USE certificate of passing the exam. The points are multiplied by 0.4 and determine the final score of the applicant.

Variable forms of the assessment of subject competence are the delivery of the final test on one of the current master's programs or the submission of a creative report on the materials of the exhibitions,

the analysis of clinical cases, etc. (for teachers of preschool institutions, primary school teachers, psychologists, defectologists, heads of sports and artistic and aesthetic orientation, etc.).

The fact of confirming the subject competence of the teacher is communicated to the applicant by the contact person in two weeks. Assessment of educational and methodological competence is based on a maximum score of 30. A common requirement here is the download of one event (lesson, educational event or event) that most demonstrates the features of the applicant's author's methodology. The variable component in the model of assessment of educational and methodological competence includes (at choice) the following tasks: planning a lesson (classes) with elements of interactive methods and forms of work, using information technologies (including virtual or attached reality, robotics, etc.); presentation at the thematic pedagogical / methodological council; development of extra-curricular educational activities (tours, literary and musical living rooms, etc.) for students and / or their parents; development and presentation of the original didactic resource (including, using ICT, laboratory equipment); presentation of work experience in preparing students for participation in different competitions (including grant competitions).

To confirm educational and methodological competence, the applicant performs one task from the invariant part and no more than two assignments from the variable one. Each task is rated 10 points. The evaluation of the educational and methodological competence of the teacher is communicated to the applicant by the contact person within two weeks after the examination carried out by the commissions established on the basis of the SFU on the following criteria: professional competence (knowledge of the relevant material, readiness for rapid orientation in it, understanding of the age specificity of teaching of those or other subjects); the logic of including a lesson (classes, speeches) in the overall process of pedagogical activity (school development), etc. ; ability to prepare interaction with a team of children (adequacy of the content, method and style of interaction with children, forecasting difficulties and opportunities for interaction / cooperation of children); possession and effectiveness of the pedagogical and information-communication technologies used; general culture (culture of communication, speech, brevity of presentation, accessibility); compliance of the product with the planned goal (effectiveness of the session).

A methodology for assessing psychological and pedagogical competence (up to 30 points) is developed, which includes: in the invariant part, preparation and uploading to the personal cabinet of the teacher's portfolio (a set of documents and evidence both objective (electronic test data) and subjective (individual design of the applicant) on the psychological and pedagogical topics. In the variable part of the model, a package of attestation assignments for measuring teacher competencies can be presented: the results of a comprehensive psycho-pedagogical self-diagnostics on the main professional-significant features and writing a generalized self-analysis, a creative essay on his own life and career path, reflection of the main problems and achievements, an individual educational program for a child with special educational needs (including a gifted child with an HIA etc.), the results of a comprehensive psychological and pedagogical study conducted on the basis of a school or class; results of complex psychological and pedagogical diagnostics of students in school; materials of an actively updated site (blog, group in social networks, newsletters, etc.); bank of problematic pedagogical situations (with solutions), based on individual experience of pedagogical activity.

To confirm psychological-pedagogical competence, the applicant performs one task from the invariant part and no more than two assignments from the variable one. Each task is rated 10 points. Evaluation of the educational and methodological competence of the teacher is communicated to the applicant by the contact person within two weeks, after the examination carried out by the commissions established on the basis of SFU.

The procedure of independent certification, which is held twice a year, is offered from September 1 to October 1 and from April 1 to May 1. Acceptance of documents for the competition continues throughout the year, except for the period from 25 August to 1 October and from 25 March to 1 May. Announcements about the contest are published on the SFU website, as well as on the websites of partner educational institutions (organizations) and in periodicals. Based on the results of the evaluation of the three competencies, a final protocol is published, indicating the names of all those who, by the results of their participation in the competition, have received at least 70 points. The presentation of certificates on inclusion in the register of "Lead Educators of the Educational Cluster of the Southern Federal District" is carried out at the SFU twice a year - on Teacher's Day on October 5 and before Victory Day.

## 7. Conclusion

The proposed model of a teacher's IAQ requires targeted actions for verification, examination, testing and implementation of experience, primarily on the basis of various profiles of general education teachers, masters of industrial training for the ACT system, as well as for heads of educational institutions and teaching staff of the university. In addition, the system being developed involves the organization of research in the following areas: the construction of a system of qualification assignments that integrate the multilevel requirements of the GEF, the Professional Standard "Teacher", and the requirements of university standards; preparation of the teacher for the professional exam using the case-method, portfolio, etc .; development of methodical recommendations for applicants and for the certification commissions on the correct evaluation and examination of qualifications. The current stage of modernization of the Russian education requires constant monitoring and identification of requests for new functions and competencies of teachers, the detection of problematic and missing competences in the activities of teachers, and also with the design of vocational education modules that provide both diagnostics and the development of individual professional functions.

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