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ORGANIZATIONAL FEATURES OF SUPPORTING PROCEDURES FOR ASSESSING THE LEARNING QUALITY IN A PEDAGOGICAL UNIVERSITY

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Abstract: Verification of the quality of vocational training of graduates of pedagogical universities based on existing and developing professional standards is one of the urgent tasks of modernizing Russian education. Most modern pedagogical research focuses on the search for new methods and technologies of assessment, as well as the study of problems that arise in the process of introducing innovative solutions. At the same time, authors often operate with ideal models of subjects of the educational process (which are students, teachers, university administration, higher organizations and founders, employers and even parents), leaving behind a whole range of problems of a financial, economic, psychological and managerial nature. As a result, effective methodological and technological developments of tools for assessing learning outcomes are not only not widely used, but also “emasculated”, formalized, and perceived by participants in the educational process as a source of redundant and meaningless workflow. This article attempts to conduct a comprehensive study of the conditions under which it is proposed to modernize the assessment system; explicit and implicit requirements to this system are identified by various subjects of the educational process, the role of the electronic educational environment of a pedagogical university in the organization and support of assessment procedures is identified. It is proved that the closed EES of a pedagogical

university is not able to fully solve the task and its double integration is necessary: with institutions of general and secondary vocational education on the one hand, and with other universities of the industry within Russia and the Eurasian Economic Union. The first direction of integration will guarantee the relevance of pedagogical and methodological training of the future teacher, as well as a source of real cases in the field of professional activity. The second direction will help to form a unified methodological, expert community of teachers, to ensure both the exchange of experience and the creation of a single vast database of assessment materials that have passed the real procedure of expert assessment and approbation. This approach will allow not only to comply with regulatory requirements, but also to ensure the objectivity, accessibility and understandability of assessment procedures

Keywords: modernization of higher education, teacher education / teacher training, competency-based approach, assessment, tools for assessing competence, criteria-based assessment, electronic educational environment, learning management systems, feedback (in the educational process), massive open online courses.

INTRODUCTION

The need to revise, modernize approaches to assessing learning outcomes in secondary and higher education for more than ten years can be traced both in various pedagogical studies and in the methodological developments of practicing teachers. Basically, the drivers of the modernization of the assessment system are: the need to implement the competence-activity approach [1] [2] [3] [4], the Bologna process (that is, the transition from a specialist to training bachelors of pedagogical education of different profiles) [5], the introduction »Various assessment models [6] - [9], the growing use of information and communication technologies in education [10] - [12]. Anticipating a detailed discussion of assessment issues in a pedagogical university, we state.

1. Federal state educational standards of the third and subsequent generations require a transition from assessing knowledge, skills and abilities within a specific discipline to assessing the level of formation of subject and metasubject competencies. Nevertheless, teachers often keep the traditional assessment tools - tests, examinations, oral questioning, practically without using modern technologies [13] - [17].

2. The traditional university assessment system - control, colloquia, intermediate certification (tests and exams), state final certification - is currently used in pedagogical universities jointly, in parallel, or supplanted by the point-rating system. This process is regulated by regulations at the university level, which can become an obstacle to academic mobility of students.

3. The existing system is naturally criticized by all participants in the educational process: it is difficult for students to adapt to each discipline and teacher, the teaching staff protests against the increased workload (often unpaid), the administration of universities is not satisfied with the lack of mechanisms for internal verification of the quality of education, subjectivity of assessment, resistance to innovation, employers and parents do not have access to objective and up-to-date information about student performance.

4. Interconnection in the contour: the school-pedagogical university is currently practically not reflected in the assessment system.

METHODOLOGY

Analysis of Russian and, in part (for example, work [5]) foreign experience allows us to see two sources of teaching staff for schools. First, these are people who received a university education, and then completed a relatively short course of vocational and pedagogical training.

In Russia, this mechanism is implemented through additional professional education (the so-called "second degree") or master's degree. In a number of foreign countries, retraining ends with a qualification exam (Canada, Japan, Germany). The second source of teaching staff is actually pedagogical schools (colleges) and pedagogical universities, which are currently training bachelors of pedagogical education in one or several profiles. Accordingly, assessment methods are designed to solve two different problems.

In the first case, this is, in fact, an assessment of the level of readiness of the future teacher for independent (fully or partially) professional activity. At the same time, a criterial assessment of the educational achievements of university students plays an important role, but there is no generally accepted interpretation of this method. As noted in the work of E.N.

Zemlyanskaya [8], the requirements for the organization of criteria-based assessment include the acquaintance of students with the criteria and indicators, clarity and accessibility for students (in this the vast majority of researchers agree with the author), the independent development of a system of criteria by students, uniqueness for of each type of evaluated work (and here teachers-practitioners are unlikely to agree, as the author notes [8]).

Speaking about the modernization of the final assessment, we should mention the modern popular addition to the classical system "state examination in a discipline and methods of teaching it + final qualification work" - the solution of a professional problem (case) for organizing a training session and its demonstration [16].

As well as in work [8], the authors (MA Yakunchev and others) of work [16] present the results of surveys confirming the usefulness and effectiveness of this form of assessment by students and future employers. The experience of the WorldSkills professional skill competition plays an important role in the development of approaches to assessing the qualifications of teaching staff [9].

In the context of this study, a number of areas of modernization proposed by L.A. Hovhannisyanyan and S.V. Semergei in the context of advanced teacher training based on WordSkills standards, in particular "creating a new professional and expert community in the pedagogical field; ... the construction of new models and systems for assessing the professional training of teachers... the transition from internal to external independent quality assessment, the creation of an independent certification system of the pedagogical system of graduates and current teachers" [9, p. 203].

Discussing the issues of modernizing the assessment system in the preparation of bachelors of teacher education, some researchers consider various aspects of the problem, often very narrow. Thus, the authors of [2] state that the assessment of the formation of the competencies of future teachers of mathematics and physics is a rather difficult task, but as a solution they propose the concept of a competence-oriented task based on a "virtual" programming language. The work [3] is devoted to such important components of the assessment as a criterion, parameter, indicator, norm and is

undoubtedly of interest in the context of the implementation of an engineering and technical approach to assessing the quality of education.

Assessment of the level of professional competence of a general education teacher using a questionnaire is discussed in detail in [4], the classification of grades at a university is presented in [6], and typical mistakes made by a teacher in the assessment process are analyzed there. The point-rating system is studied in [7] from the standpoint of the qualimetric approach.

In the work of O.V. Korshunova and M.Sh. Rakipova presents an interesting attempt at a holistic analysis from the standpoint of the educational achievements of university students and substantiating the hypothesis: "one of the promising approaches to building effective assessment practices at a university can be a praxeological approach, the main idea of which is the implementation of the correct evaluative action, its purposefulness, rationality, effectiveness, efficiency, scientific validity" [1].

The authors propose to be guided by the following principles when designing an assessment system: "the principle of minimum expenditure of funds, or rational (economical) use of resources"; "the principle of individual and socio-professional significance of appraisal activities"; "the principle of cautious decisions"; "the principle of humane behavior"; "the principle of optimal interaction with the external environment" [1]. While unconditionally agreeing with the first two of them, we note that the last three are largely trivial statements from the sphere of pedagogical ethics. Unfortunately, in the empirical part of work [1], the authors cite only the results of the ascertaining stage of the study, without dwelling in detail either on the reasons for the observed negative phenomena, or on the ways to overcome them.

The typology of forms and methods of assessment, providing for their division into active, interactive, reproductive, productive, as well as the results of sociological research presented in [11], allowed the authors to formulate a number of significant conclusions, indicating a rather critical attitude of practicing teachers to innovative methods of assessment. There is a pronounced contradiction between the requirements of the Federal State Educational Standard, modern innovative technologies and assessment procedures developed in pedagogical science, and the resistance to their implementation by the collective pedagogical subject.

Let us try to suggest one of the possible ways to resolve this contradiction. Formation of the goals of the article (setting the task). The purpose of this study is to consider an integrated approach to organizing and maintaining procedures for assessing the quality of education on the basis of a single electronic educational space of pedagogical universities of the Eurasian Union.

RESULTS

To achieve this goal, two research objectives were formulated and solved. The task of the empirical stage is to study the methods, technologies and assessment procedures used, the requirements for them from the subjects of the educational process and the formulation of the research hypothesis. The task of the theoretical stage is to generalize the results obtained and search for possible solutions to the identified problems. The methods used at the empirical stage are presented in Table 1.

Table 1. Research methods used at the empirical stage.

Method	Application area
content analysis of published research results	clarification of terminology, preparation of observation plans and interview questions
included observation, interviews of teachers of teacher training universities	identification of requirements and expectations for methods, means and procedures of current and intermediate assessment
observation (direct and indirect), interview (individual and group)	identification of statistically significant and ethically correct preferences for assessment methods and procedures
analysis of regulatory documents	identification of typical requests to the assessment system from the external environment (state, founders, the Ministry of Education, etc.), administrations of pedagogical universities
monitoring of mass media, social networks	identification of the requirements for the assessment system in the pedagogical institution on the part of parents, employers

At the empirical stage, 23 teachers from the Samara State Social and Pedagogical University and the Samara branch of the Moscow City Pedagogical University, 207 undergraduate students in the direction of "Pedagogical Education" were involved. The information collected at the empirical stage is shown in Table 2. In the case of teachers and students, the requirements are indicated that were mentioned by more than half of the respondents.

Table 2. Requirements for the assessment system of a pedagogical university (grouped by sources).

Objectives / motives	Requirements / expectations
Source: parent organizations	
Ensure that the actual assessment model complies with the norms provided for by the legislation of the Russian Federation	building an assessment system based on a competency-based approach
Improving the quality of teacher education, Russia's place in international rankings	inclusion of assessment elements typical for international competitions (WordSkills), rating systems
Source: university administration	
Ensure that licensing and accreditation requirements are met	переход от оценки «знаний – умений - навыков» к оценке (индикаторов) компетенций
Ensure the retention of the student body	возможность своевременной диагностики проблем с текущей успеваемостью студентов
Source: teachers	Source: teachers
Source: teachers	
Avoid conflicts with students	assessment must be objective and / or perceived by students as such
Minimize the time spent on developing an assessment system, checking work	availability of ready-made assessment materials that can be applied immediately or after minor revision
Simplify assessment procedures (the latter should fit into the given time norms, not raise questions from students)	use of traditional assessment methods familiar to the student and teacher, preferably in written or electronic form

Provide the possibility of using it in blended learning (in quarantine, for correspondence students, in retake mode)	
Source: students	
Do not depend on the attitude of a particular teacher	objectivity of assessment, uniformity of the assessment procedure for all students
Opportunity, with good current academic performance, to avoid intermediate certification	positive impact on the final grade of any work done in class / homework
Have up-to-date information about your current academic performance	open system for publishing the results of current assessment

In the context of further research, the following postulate is of significant importance: despite the desire of students and part of teachers to have a simple unified assessment system based on predominantly traditional, reproductive methods, a pedagogical university (and this is a significant difference from other universities) is obliged to provide students with a variety of experience in assessment activities, including number and as its object.

An explanation and one or two examples of the application, for example, of the case method on the methodology of teaching the discipline is not enough for a young teacher to be able to correctly apply this method in his work. We also note that the use of competence-based, active and interactive assessment methods encounters the expected, but, as a rule, not provided for by the procedures.

A specific example recorded during the interview: "I planned and conducted a test in the last session in the form of a discussion. Two students were absent for a good reason, three did not participate, since Russian is a foreign language for them. How should I take credit from them? " Summarizing, active and interactive assessment methods also imply the presence of an alternative form of intermediate certification for retakes - and this is a double work for the teacher.

Methodological illiteracy of teachers also occurs - only 65.2% of the interviewees were able to correctly and with examples draw the line between a text educational task and a case study in the discipline, 17.4% do not consider it possible to use active and interactive methods in their classes. At the same time, the arguments "what kind of discussion can arise when calculating derivatives?" and "as you can see the web-quest on the topic" Newton's Second Law "" are not devoid of practical sense - not every discipline, module, competency indicator should be checked by interactive methods and means. A significant factor is the fact that every third of the interviewed teachers did not have experience of working in a school or a system in the system of secondary vocational education outside of compulsory pedagogical practice, which did not allow developing cases based on the teacher's daily activities.

Another extremely important aspect of the problem of preparing high-quality (and, therefore, understandable for the student) assessment materials is their expert assessment and testing. As a rule, the fund of assessment tools for interim certification is subject to peer review, the question of the correctness of materials for current assessment remains in the competence of the teacher.

Analysis of the data obtained at the theoretical stage of the study allowed us to identify a number of conflicts, a brief description of which is presented in Table 3 (we do not consider here conflicts between the requirements of the external environment and the teacher / student, since the university administration is still an active participant here, as a factor providing fulfillment of these requirements).

Table 3. Conflicts (contradictions) between the requirements / expectations of the subjects of the educational process.

Side / Position 1	Side / Position 2
Resource conflict	
University administration	Teacher
Requires the development of a wide range of assessment tools in accordance with new educational and professional standards based on a competency-based approach.	Considers that the specified activity goes beyond the scope of his official duties and must either be paid for or performed by another structural unit.
Organizational and methodological conflict	
Student (sometimes with the support of the administration)	Teacher
Believes that there should be an opportunity at any time to correct the current assessment (points in the case of BRS) by completing additional tasks	Requires strict adherence to the delivery schedule as a mechanism to prevent plagiarism. Allows retake only on the stipulated dates
Methodical conflict	
Administration	Teacher
They strive to minimize the costs of their time, do not want to change the streamlined educational process built on traditional technologies	

The contradiction between the need to use active and interactive assessment methods and the difficulties of their application within the framework of individual disciplines / teachers can be resolved through several measures: improving the methodological literacy of teachers in terms of modern assessment tools; distribution of the applied methods by disciplines / groups of disciplines (table 4); providing access to the developed assessment materials of an active and interactive nature.

Table 4. Types of disciplines, test results and assessment methods (on the example of the "Informatics" profile)

Types of disciplines	Examples	Testable learning outcomes (generalized)	Assessment methods and tools
"Support"	Mathematical analysis Theoretical foundations of computer science	thesaurus, basic facts, theorems, algorithms, formulas	reproductive (control work, exams, tests, surveys), partially productive (abstracts, notes, mental maps) [24]
"General cultural"	History, philosophy, foreign language, physical culture	thesaurus, basic facts, metasubject competences	any, depending on the specific preferences of the teacher [18] - [26]
"Professionally oriented"	Pedagogy Psychology Methodology of teaching disciplines	complex algorithms, the ability to make decisions in the course of professional activity, the ability to design the educational process and its elements	productive (essays, project development, reviewing, portfolio), interactive (complex situational tasks, cases, business games), active (brainstorming, training) [19] [20] [23]

«Факультативные»	Olympiad problems in computer science Ethical foundations of professional activity After-school activities in informatics	readiness to organize the educational process at school based on modern standards and approaches	active (game simulation situations, organizational and activity games, discussions, trainings) interactive (cases, business games, web quests) [14] [21] [22]
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A significant part of potential conflicts in the development of the assessment system is associated with the problems of developing and using assessment materials, moreover, free access of students to the Internet, their active communication on social networks, forced (quarantine) or voluntary use of mixed (face-to-face and electronic [10]) learning models complicates the task by an order of magnitude.

This is not least due to such immanent properties of evaluative materials as resistance to disclosure and elasticity. By resistance to disclosure we mean the absence of statistically significant differences in the use of assessment tools among students who received and did not get the opportunity to preliminarily familiarize themselves with the assessment materials.

Here are some specific examples. If the assessment tool for the discipline "physical education" provides for counting the number of performed push-ups, then whether the students knew about it a few days before the test or not, this will not affect the result in any way. Opening resistance - high. On the other hand, if the content of a history test is known in advance, then most students will write it with a high score. Opening resistance - low.

In some cases, the validity of assessment materials increases significantly with an increase in the number of options for test items. Let's designate this property as elasticity. All tasks related to the analysis of texts, tasks on the use of the simplest algorithms (calculating matrices, integrals, derivatives), and cases have a high elasticity. The distribution of types of assessment materials by properties is shown in Table 5.

Table 5. Distribution of evaluation materials by elasticity and resistance to disclosure.

Elasticity	Opening resistance		
	High	Average	Low
Low	Practical tasks Role-playing games Discussions Trainings	Poll (oral) Colloquium	Survey (written)
Average	Brainstorm Web Quests	Project development Practice-oriented task	Text task Finding and correcting errors
High	Essay abstract	Case	Test "Stencil task"

The vast majority of traditional grading materials have medium to high elasticity with low to medium expansion resistance. Thus, the effectiveness of their use directly depends on the availability of a significant bank of tasks with open and closed (for students) segments, as well as on an established system of administrative and technical protection against the appearance of tasks in the open access of the Internet. At the same time, a system of expert assessment and full or partial approbation of tasks should be

provided in order to prevent errors, incomprehensible or ambiguous formulations, leading questions or incorrect classification of the task.

The pedagogical community of the region can and should act as a source of practical experience, real professional tasks. Modern information and communication technologies offer a whole range of opportunities for this: from a simple forum on the university's portal, where teachers can offer topics, lessons, workshops, visual materials for methodological development by students, to comprehensive solutions at the all-Russian level (analogue - Professional internship 2.0).

CONCLUSION

Thus, in the course of the research, the features of the organization and maintenance of the assessment procedure in pedagogical universities were revealed. It has been substantiated that a closed information and educational environment of a teacher training university is not able to fully solve the task and its double integration is necessary: with institutions of general and secondary vocational education on the one hand, and with other universities in the industry within Russia and the Eurasian Economic Union.

The first direction of integration will act as a guarantor of the relevance of the pedagogical and methodological preparation of the future teacher, as well as a source of real cases in the field of professional activity. The second direction will make it possible to form a single methodological, expert community of teachers, to ensure both the exchange of experience and the creation of a single extensive database of assessment materials that have undergone a real procedure of expert evaluation and testing.

This approach will allow not only to comply with regulatory requirements, but also to ensure objectivity, accessibility and clarity of assessment procedures. Further scientific research is planned to be carried out in two directions. In theoretical terms, this is the development of the methodological foundations of modern complex assessment systems. In practical terms - the creation and documentation of standards, systems and services for electronic information and educational environments of pedagogical universities, ensuring the functioning of a single databank of assessment materials.

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