Current requirements for assessing the results of student training

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Abstract. The article offers an overview of current requirements for assessing the results of student training. To do this, the authors consider the use different evaluation tools established by the Federal State Educational Standard of Higher Education to assess the educational activities of students. The article reveals the tasks of evaluation tools, their structural elements, and the documents they must comply with. The authors have proposed recommendations for the development of assessing students’ knowledge (major "The use of units and the operation of engineering electrical equipment"). The article also considers principles that should guide the preparation of assessment tools. As an example, the authors developed a structure for evaluating the report on the course "Engineering", revealing the expected results and offering a detailed scheme to follow.

1 Introduction

Due to changes in educational paradigm the requirements for university students’ training have also been altered. The necessity for these transformations was also determined by the needs of the state and society. Today, employers require graduates who are fully prepared for professional activity, ready to act in non-standard conditions and to solve tasks quickly.

In the system of higher education there are some measures by means of which the quality of education is regulated, allowing training of competent bachelors. This includes the quality of objectives, educational and occupational standards, norms, and the quality of educational resources.

If these measures are implemented, students’ training can be considered as being carried out at a high level.

Among these requirements, one should pay attention to the way students are trained at a higher educational institution in order society and manufacturing requirements. At the same time, a qualitative assessment of training results should be provided [1].

Today, professionals in the service industry are in demand. The service sector, usually in industrialized countries, accounts for more than 70% of the revenues that form the country's gross domestic product; in Russia, this figure is at the level of 60%. Therefore, highly qualified personnel in a service sector are so in demand. To ensure it, a higher education institution should conduct a qualitative assessment of training results.

The Feral state Educational Standard emphasizes the need to use funds of appraisal funds to certify students for compliance of their achievements with the requirements of the main educational curriculum.
2 Methodology
In the article we consider current requirements for assessing the results of student training. In a higher educational institution, based on the requirements of the Federal State Educational Standard, assessment funds for students are used for evaluating students' activities, which are developed for each discipline. Taking into account the competence approach, they help not only to manage the process of acquiring knowledge and skills by students, but also to check the formation of competencies. We have proposed recommendations for the development of appraisal tools in the specialty “Use of divisions and operation of electrical engineering tools”, for the course “Introduction to engineering”, and also a structure of report evaluation for the specified course is presented [2]. As practice shows, these recommendations help to evaluate the preparation of students more objectively and efficiently.

3 Results and discussions
Assessment tools is an integral part of the normative and methodological support of the system for evaluating the quality of students' mastering of the basic professional educational curriculum of higher education, which is designed to ensure an objective assessment of the quality of students' training in the implementation of the educational process at the University [3].

Appraisal tools contain monitoring materials designed to assess the achieved results. They are created for each discipline and module for the final certification [4].

The tasks of the appraisal tools include:
- managing the process of acquiring learners of knowledge and skills, checking the formation of competencies established by the Federal State Educational Standard for a specific area of training [5];
- management of the achievement of the objectives of the implementation of the basic professional educational program of higher education, defined as a set of general cultural, universal, general professional and professional competencies of graduates [6];
- assessment of students' achievements in the process of studying the discipline;
- ensuring the compliance of learning outcomes with the objectives of future professional activities [7].

Assessment funds are developed and implemented by higher education institutions [8].
This procedure should be guided by the following principles:
- validity (the evaluation tool should check exactly the results that were planned) [9];
- the degree of mastery of competencies should be evaluated, that is, all tasks and criteria for evaluating their implementation should be expressed in formulations that reflect their readiness for a particular type of activity [10];
- assessment of the degree of preparation for future professional activity should not be replaced by an assessment of the level of possession only of special professional competencies [11].
- objectivity (use of tools that ensure the reliability of assessment results) [12];
- openness of the assessment procedure (both students and examiners should have common criteria for evaluating performance);
- timeliness (maintenance of developing feedback) [13].
When developing appraisal funds, its compliance should be considered:
- The federal state educational standard of higher education in the relevant area of training [14];
- the main professional educational program of higher education;
- curriculum;
- work program [15];
- rating plan;
- educational technologies used in teaching the discipline.
Appraisal funds must have the following structural elements:
- title page;
- a passport containing the levels of formation of each competence;
- a set of evaluation tools;
- test and examination materials (examination tickets, questions, assignments, criteria and rating scale) [16].

Each assessment tool consists of three parts:
- the first part is organizational-methodical (with indication of the formed competencies and decomposition at the levels “knows, knows, owns”) [17];
- the second part is the content (a set of test and measurement materials aimed at checking the competencies mentioned in the first part) [18];
- the third part is the criterion-evaluation (indicates the criteria, procedures and scale of assessment, here limits are set that allow you to accept or reject the task performed by the student [19].

As we have said, the country today is extremely in demand engineering personnel, therefore, we will offer recommendations for the development of appraisal tools in the specialty "Use of units and operation of electrical engineering engineering", in the discipline "Introduction to engineering".

The student must achieve the following results:
- be able to develop technical specifications;
- be able to develop technical proposals;
- be able to develop draft, technical and working projects. [20];
- know the regulatory legal acts [21].
These provisions should be reflected in the passport [22].

As we have already mentioned, an integral part of appraisal funds is a set of appraisal funds. Next, we will present the structure of the assessment report or message for students whose major is "The use of units and the operation of engineering electrical equipment":
- formed competencies [23];
- labor activities;
- indicators of the achievement of labor actions and competencies;
- The subject of the discipline: "The design process";
- Approximate topics of reports;
- criteria and assessment procedure (rating scale). Here is the teacher's explanation of the procedure for preparing the report, the estimation algorithm is presented.

The report is prepared once per semester.
The rating is set according to the following criteria: the degree of completeness of the material disclosure, the degree of compliance with the professional standard.

One point is assigned for each completed item:
- the content of the report corresponds to the stated topic;
- the studied theoretical position was formulated, and its place in the theory should be determined;
- marked the range of concepts and terms that will be needed to describe the studied position;
- a description and comparison of examples of the use of the studied situation in Russia and abroad;
- in the report, semantic parts are highlighted and the logic of reasoning is visible when moving from one part to another;
- the student freely expounds the material of the report, communicates with the audience;
- the report is accompanied by a multimedia presentation, the presentation lasts for 10-15 minutes;
- The report traces interim and final conclusions;
- in the report there is a link to sources, authors of studies;
- The student clearly answers the questions asked on the topic of the report.

The maximum score for the report is 5 points. The report will be counted if the student receives at least 3 points.

4 Conclusions
The article reviewed the current requirements for assessing the results of student training. It is determined that the evaluation takes place on the basis of evaluation funds which are developed for each discipline.
We have proposed recommendations for the development of appraisal tools for students whose major is "Application of units and operation of electrical engineering tools". The presented structure of report assessment in the course provides detailed description of the expected results and gives a thorough algorithm of actions. These recommendations help to take a more systematic approach to the development of appraisal tools as a result of which students are trained and evaluated more objectively and efficiently.

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