Criterial assessment as an instrument to improve the efficiency of the independent activity of students

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The aim of modern higher education is to provide high-quality student training. The author’s position is the need to complement the credit system of training tasks formation of skills and self-control through the use of criterial assessment technology. As part of the issue is proposed introduction of criterial assessment system in the educational process of the university in all types of studies, the authors provide recommendations for the use of criteria-based assessment. The article also addresses the problem of transparency of assessment and suggests a way out of this problem through the use of a route map of the discipline. According to the author, the use of a criterial assessment will allow the student to form an individual style of self-education activity. The author’s position is that in the course of organizing self-education activities, the formation of students of such skills as prognostic, projective, constructive and evaluative skills is of particular importance. This allows the future specialist to consciously predict the result of his efforts, areas of possible difficulties in achieving it, plan the upcoming training work, correct and evaluate its effectiveness.

Keywords: criterial assessment, credit technology, system, the educational process.

Introduction

Educational activity as an important part of the educational activities is now understood as a special object of organization, management, control. Of particular importance is the problem of the integration of traditional and innovative methods of educational and cognitive activity.

Credit technology training is aimed at improving the level of self-education and creative development of knowledge based on the individualization of student training. The transition to the credit system of education requires a qualitative restructurings of the teacher works with the students, change the methods and teaching techniques. In terms of the credit system in teaching students the main objectives are:

- unification of knowledge;
- creation of conditions for maximum individualization of training;
- strengthening the role and effectiveness of independent work of students.

We believe that it is necessary to add the formation of students’ skills of self-control and mutual control. This, in turn, can be accomplished through the introduction of educational practice criterial assessment technology, as it helps to solve a number of tasks which can be grouped into three basic unit [2].

First, the teacher and the student appears sufficiently clear, precise and objective tools to determine the level of students solving tasks and, accordingly, the real picture of progress in general.

Second, the use of certain parameters makes it possible to combine the system of evaluation with target settings as a separate academic discipline, and gain knowledge on the next stage of higher education. This will be possible because the assessment criteria actually have learning goals as they formulation of a specifically because it is necessary to establish whether the objectives are achieved by each student.

On the other hand the teacher when planning its work, keeps in sight the overall objectives of the discipline, because they are all incorporated into the criteria, each of which should be developed as a control tasks, and training algorithm to implement them.

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Third, transparency and algorithmic criterial assessment system makes it a powerful tool for active participation in the learning process, both teachers and students. As a result, all of the above conditions can lead to the improvement of mutual cooperation between all participants in the learning process, making it as open as possible. This is especially important for students, as the criterial assessment allows them to actively participate in learning activities (independently set goals and objectives, formulate criteria for completing the assignment, build answers, establish the causes of difficulties, work to correct errors). Therefore, the use of criterial assessment technology can be a tool for comprehensive control and self-control over the level of mastering the discipline by students.

The work of teachers in the situation of integration should be aimed at “creating favorable conditions for individualization”, intensifying the educational process, at ensuring control of cognitive activity, at developing students’ motivation to apply modern innovative technologies [3]. On the other hand, we believe that today’s young people need to possess the skills of self-education, self-esteem and self-control. In order to successfully implement a criterial assessment system, it is important that students actively participate in the assessment process. In addition, teachers need training and development guidelines and the introduction of formative assessment methods that are consistent with summative ones [4].

Thus, the primary task of the university is to teach the student to learn, to be able to navigate in the diversity of scientific material, to be competent in matters of mutual control and self-control. The focus of innovative technologies on the development of students’ skills of independent work will increase their creative activity and stimulation in the development of knowledge, and the introduction of criterial assessment technology in the educational process of the university for all participants in this process will increase its effectiveness. The effectiveness of such work will be ensured by regular communication between the student and the teacher as part of the independent work of students under the guidance of the teacher [5].

Credit technology training provides a system of classes of various types: lectures, practice. Therefore, criterial assessment technology must pass a red thread through the whole system.

One of these elements of the system are lectures. The main person during the lecture lesson is the teacher. On what kind of lectures will select a teacher as organizing material flow depends on the quality of its assimilation by students.

In preparation for the teacher lecture classes, we offer to work on the algorithm:

1. The selection of the content of the material for the lecture classes according to the work curriculum discipline
2. Determining the type of lecture
3. Compilation of a criteria table for assessing the quality of student participation in the lecture process

As the results of the study, if the first steps of the algorithm does not cause issues for educators, the drawing up of a criteria table causes difficulties.

Therefore, we propose the following form of description of evaluation criteria:

| Lecture theme: _____________________________________ |
| Objectives (Bloom) |
| Criterial table |

<table>
<thead>
<tr>
<th>Descriptors for the development of lecture material</th>
<th>Levels of educational achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30</td>
<td>31-60</td>
</tr>
<tr>
<td>The ability to make a summary</td>
<td>The abstract was compiled without following the logic of the presentation of the material, the main issues of the lecture are not reflected.</td>
</tr>
<tr>
<td>The ability to express their thoughts in response to question</td>
<td>The answer to the question is not complete, the necessary arguments are not given, lack of understanding of the question</td>
</tr>
<tr>
<td>Active participation in lectures</td>
<td>The student does not ask or answer questions</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Grade point average</td>
<td></td>
</tr>
</tbody>
</table>

Study of the problems encountered by students in the learning process, and their causes revealed the following:

1. Lack of tasks indicates a miscalculation in the planning of both the students themselves and the teachers
responsible for organizing the students' independent work in their discipline.

2. The reasons that prevent students from performing various types of work are:
   - ambiguity of the wording of tasks;
   - unclear criteria for their evaluation;
   - lack of clear recommendations for their implementation.

3. For the successful organization of students' independent work, it is necessary to organize a clear monitoring and assessment by the teacher, then a mandatory condition for the organization of independent work is the accountability of students to the teacher about its results. Therefore, the lack of self-control on the part of students and insufficiently organized routine control over the performance of tasks on the part of the teacher are also among the reasons that prevent students from performing various types of work in the process of learning the academic discipline.

In our opinion, the use of a student’s route map for the discipline being studied can assist in solving these problems [6]. The route map is a table that reflects the main activities of the student with a set of tasks, criteria for their assessment and deadlines. An example of a student’s criterial card is shown below (Fig. 1). On the basis of the criterial table described above, the teacher sets an assessment in the student’s disciplinary route map. Similar criteria tables are compiled for the remaining elements of the training system.

**Student route map ___________ Group ___________**

**Discipline (subject) Pedagogical technologies in the practice of modern education**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Content</th>
<th>Reporting form</th>
<th>The criteria for evaluation</th>
<th>Deadline</th>
<th>Max point</th>
<th>Scored points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>№1 Modernization of the education system in the Republic of Kazakhstan</td>
<td>Strategic course of school education development The purpose and objectives of the course “Pedagogical technologies in modern education” Classification of pedagogical innovations</td>
<td>abstract</td>
<td>See Annex Criterial Table</td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>№2 The role and place of pedagogical technology in modern education</td>
<td>Classification of pedagogical technology Approaches to the classification of pedagogical technology</td>
<td>abstract</td>
<td>See Annex Criterial Table</td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>№3 Rules for the development of identified learning objectives</td>
<td>Formation of educational purposes. Taxonomy of pedagogical objectives</td>
<td>abstract</td>
<td>See Annex Criterial Table</td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>№4 Differentiated approach to learning technology</td>
<td>The history of the development of ideas of differentiation of learning. Essence, goals and forms of differentiated learning. Psychological and pedagogical foundations and criteria for differential education</td>
<td>abstract</td>
<td>See Annex Criterial Table</td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>№5 The use of pedagogical technology in education</td>
<td>The pedagogical function of the teacher. The use of educational technology in training. Technologization of the educational process. Pedagogical technologies and pedagogical skills</td>
<td>abstract</td>
<td>See Annex Criterial Table</td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>№6 Health-saving technology</td>
<td>Modern theoretical, methodological approaches to the formation of students' health in the pedagogical process and in everyday life. Principles of health preservation.</td>
<td>abstract</td>
<td>See Annex Criterial Table</td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>№7 Smart card technology</td>
<td>The relevance of using smart card technology The history of the appearance of smart cards Rules for building smart cards Principles of smart cards Mind management algorithm Smart card application</td>
<td>abstract</td>
<td>See Annex Criterial Table</td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>№8 Case technology</td>
<td>Case-study method or the method of specific situations. Signs and technological features of the case-study method. Case classification</td>
<td>abstract</td>
<td>See Annex Criterial Table</td>
<td></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 1. - Example of a route map of the discipline**

The use of formative assessment assumes that following the results of the students' work checks, the teacher uses comments on the content and accuracy of the work, which are discussed with the students. The information is equally important for both teachers and students, as it allows you to make adjustments to the process of teaching and learning. Points are recorded in the teacher’s personal journal. Upon completion of the study of the topic, the teacher conducts a summative assessment. Evaluation of such work should be carried out using evaluation criteria. During the semester, the teacher plans the amount of verification work.
that is necessary for him to determine the knowledge and skills of students on this topic and are not tied to the end of the semester. The requirement for these works is one: they must as fully as possible cover the content of the studied topic of the discipline [7].

Thus, our study showed that mastering and applying criterial assessment, using the route map of the discipline, allows us to make the assessment process transparent, increase students' motivation to learn, which will make communication between teachers and students more comfortable and increase the level of learners working with information. A learning model based on assessment criteria provides great benefits to students, since there is a positive relationship between student involvement in the assessment process and academic achievements [8].

Students in the process of self-education should be motivated, conscious, purposeful, flexible, initiative, persistent, accurate and creatively solve educational and professional tasks that are a means of logical and psychological organization of independent activity of students, carried out in order to ensure a certain structure of educational activities. With the solution of this problem, in our opinion will help to cope criterial assessment of educational results.

References

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