

# Implementation of a student-centered approach in blended learning in a higher educational institution

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**Abstract.** The competence approach and e-learning have changed the role of the teacher in the student's life. In the article, the authors reveal the essence and features of this type of training (mixed). The authors consider the development of a student-centred approach. It is noted that working with the whole group, the teacher organizes the work of each, creating the conditions for the development of students' personal opportunities. Since with the entry into force of the new requirements of the Federal state educational standards, a qualitatively new relationship between the student and the teacher has appeared, the identification of their features and the determination of their role in the educational process have become particularly relevant. The article pays attention to the model of the teacher's activity within the framework of student-centred education and its main elements are noted. The authors identified features of blended learning and tools of electronic platforms that support the development of subject-subject relations between students and teachers. The authors emphasize the need to ensure equal starting conditions for the study of the discipline as a whole and suggest principles that should be followed when implementing the student-centred approach within the framework of blended learning.

## 1 Introduction

The reform of higher education has had a large-scale impact not only on the construction of the learning process itself in higher schools, but also on its very essence. Many scholars pointed out these transformations which gave rise to a new goal of preparing students, which we will discuss below. Developing the question of innovations, we should start with the requirements of the Federal State Educational Standards [1]. As soon as they entered into force, a competence educational paradigm appeared in the higher education of the Russian Federation [2]. Now the training of students is more independent.

Traditional training of students, undoubtedly, brought good results for many years, but its purpose (the transfer to students of a certain amount of knowledge and skills) no longer corresponded to the modern needs of the state and society. A graduate with a high level of theoretical training could not quickly cope with the solution of a practical problem [3,4,5]. Therefore, the state decided to introduce new provisions on education [6]. It led to the emergence of the competence-based approach, the purpose of which is to develop students' competencies so that that future graduates can apply them independently in practice [7]. The competence approach was addressed by such researchers as E.A. Bystrov, I.A.

Winter, A.A. Leonov, L.A. Petrovskaya. Among foreign scientists, this issue was studied by J. Raven, R. Merton, R. White [8].

Federal state educational standards of a new generation have also introduced requirements for the use of e-learning [9,10]. Competence and e-learning have led to a new type of relationship between teachers and students. The role of the teacher in the student's life has changed radically [11]. Now he is not a transmitter of knowledge, but a tutor accompanying students in the classroom [12]. Thanks to these trends, a mixed type of training has emerged [13]. Within its framework, both students and teachers act in a completely different way. Despite the great attention of scientists to this topic, it remains insufficiently studied. The relevance of the article is to identify new features in the implementation of the student-centered approach in vocational education in blended learning.

## 2 Methodology

The analysis of the experience of applying the student-centered approach allowed a deep study of the issue of its development and application in higher educational institutions as part of blended learning. We studied literature on the issue of blended learning and the

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subject-subject relationship between students and teachers. By analyzing the given information and synthesizing the identified characteristics of student-centered learning, the main points of the research were formulated.

### 3 Results and discussions

Within the framework of the new educational paradigm, as we have already mentioned, the relationship between the teacher and the student has changed and acquired qualitatively new characteristics. These relationships are considered in the framework of the student-centered approach [14].

The goal of learner-centered learning is to maximize the development of the individual abilities of the learner through the use of his experience (treating the student as an individual, as a self-conscious responsible subject of their own development [15]. The personality-oriented approach allows the student to identify and discover their potential through self-awareness development. Personal realization is significant. Socially approved motives of self-realization and self-affirmation should be taken into consideration [16].

The model of teacher activity in the framework of the student-centered approach should have the following elements:

- goal setting (goal: the creation of such conditions in which the student becomes an active subject of cognitive activity; in the lesson a constant dialogue is organized between the teacher and the student) [17];

- the activity of the teacher (relying on joint work with the teacher, the student carries out an independent search for information; the teacher guides the learner to achieve the goal) [18];

- student's activity (student - a subject of pedagogical activity, the initiative for solving the problem comes from the student himself; methods of problem-searching and project training are used) [19];

- subject-subject interaction between the student and the teacher (working with the whole group, the teacher organizes the work of each, creating conditions for the development of students' personal capabilities, including the formation of reflective thinking and their own opinions) [20].

The educational model is based on the following principles:

- training is aimed at personal development. The teacher and the student are equal subjects of education [21];

- the teacher is a partner, coordinator and adviser in the learning process and only then he acts as a leader [22].

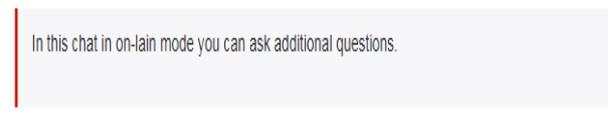
To implement a student-centered approach within the blended learning framework, it is necessary to ensure equal starting conditions for studying the discipline as a whole.

We emphasize that blended learning is the most favorable condition for the development of subject-subject relations between students and teachers. The teacher selects the necessary content in accordance with

the level of training of students or uses authoring, applying multimedia content. The teacher, through his actions, directs students, influences them, encouraging them to develop themselves. Constant online access to e-course tools increases student engagement and thus ensures his active participation in training [23].

The educational process in blended learning is lined up with alternation of traditional and electronic types of learning [24,25,26]. Initially, the teacher should prepare students with the help of special information letters, consultations, conducting in-person briefings and a brief overview of the course using video materials [27,28,29]. Further, he conducts conceptual presentations to the audience, demonstrates virtual seminars and example-based learning [30,31].

Conducting work in electronic form, the teacher has the opportunity to implement the student-centered approach through the tools of various electronic platforms [32]. Often, higher education institutions use Moodle for this purpose because of their openness, free of charge, and convenient management system. Wiki, forum, chat and personal messages allow the student to contact the teacher and get timely advice on any issue. Figure 1 shows the chat placed in Moodle that the teacher offers his students to use.



**Figure 1** Chat on Moodle platform.

These tools also allow the teacher to make the student pay attention to gaps in knowledge in time. The teacher points to topics that should be given more attention and the student himself obtains the necessary information on these issues, having the opportunity to always ask for help.

It is necessary to note that humanitarian and technical areas of training have their own characteristics. Training future engineers is a long and multi-faceted process where it is extremely important to pay attention to each topic. Competitiveness of future professionals depends on it. In blended learning, the teacher should prepare his e-course especially carefully and, if possible, provide feedback not only through chat rooms, but also video conferences. It is often easier for a student to formulate his question under such conditions. So, the teacher will be able to quickly help the student build his educational path.

It is advisable to emphasize the requirements that must be met in the context of the student-centered approach in blended learning:

- at the stage of results formulation, it is necessary to plan adequate control methods and assessment tools;

- a clear definition of learning outcomes;

- development of positive perception of modern test options by students.

## 4 Conclusions

We reviewed the implementation of the student-centered approach to blended learning in higher education institutions. The study is carried out with the grant support for young scientists - candidates of sciences, number MK-313.2019.6, issued by the President of the Russian Federation. We found that the use of this approach gives students great advantages since the educational process in such conditions acquires flexibility and openness. Students have the opportunity to choose the pace, rhythm and amount of educational material necessary for mastering on an individual basis. Many high schools choose Moodle for providing blended learning. These tools contribute to the development of subject-subject interaction (partnerships) between students and teachers. From the passive consumer of ready-made knowledge, the student becomes an active independent participant in educational process becoming responsible for the results of his own activities.

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