Application of hybrid educational technologies in the context of a personalized approach in adult education

Alevtina Aleksandrova¹, Marina Alekseeva, Elena Lobanova and Svetlana Feoktistova
Russian New University, Moscow, Russia

Abstract. This paper examines the problem of using hybrid educational technologies in the context of the personalized approach in adult education. The innovative use of hybrid technology in pedagogical methods allows faculty and students to communicate on a new technological level. Here it is necessary to consider the motivational component, which is one of the main driving forces in making decisions to continue learning both in the postgraduate period and in professional development. The article contains statistics from international analytical agencies, obtained from studies of hybrid educational methods. Theoretical analysis of the literature has allowed us to find out that the problem is considered widely enough by researchers around the world, which gives us the right to address the problem of hybrid learning as the main point in the personalization of the educational process in the education of the adult population.

Keywords: high technologies, innovative methods, hybrid learning, personalized approach

1 Introduction

The second decade of the 21st century marked the beginning of a new phase in the development of pedagogy at all levels of education. Digitalization of the educational process has fundamentally changed the approach to learning practices. The emergence of conceptually new ways of transferring knowledge and acquiring qualifications on the Internet has prompted educational institutions to turn to digital platforms providing access to Internet services in the field of educational practices. The COVID-19 pandemic has forced humanity to turn to high technology as a necessary means of interaction at all levels of social and economic relations. The first to respond was the international education system. In the shortest possible time, schools and universities switched to a distance learning process.

Here it should be noted that between 2020 and 2021, a huge number of academic projects suspended their activities due to the introduction of a self-imposed isolation regime, but most of them have recovered 90% of their activity through the use of high

¹ Corresponding author: Tanyaalexandroff@yandex.ru

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technology. International student exchange programs as part of the academic mobility process have closed the bulk of their activities. At the Russian New University in Moscow in 2019-2020, 34 people participated in full-time academic exchange programs, for a study period of 30 days to three months (21 of them went to China). During the pandemic, thanks to the timely introduction of digital educational Internet platforms, the number of student online exchanges has grown to 121 participants [1].

Objective. The decision to address the topic of the application of high technology in the pedagogical process in our work was the objective of researching the topic of the application of hybrid learning in the conditions of a personalized approach in adult education, as direct participants in the educational process.

2 Materials and methods

The method of our study was an in-depth analysis of theoretical and analytical literature, including official statistical studies and scientific articles of Russian and foreign researchers.

3 Results

The work of Bekisheva T.G. attracts attention to the aspect of the problems of our study. In the article “The effectiveness of hybrid and blended forms of foreign language learning at the university”, where the author identifies the following forms of learning:

- remote;
- hybrid;
- blended;
- traditional [2].

Distance learning system implies the use of Internet technologies in the transfer of knowledge, the interaction of students and teachers mediated at a distance [3].

Hybrid learning is defined by many researchers as a form of a blended process of application of the electronic and traditional system of pedagogical practices.

In the investigated problem of blended learning, according to scientists, the basis of the above learning process is the “connection of online and offline environment” [4].

Considering the use of a hybrid type of educational process, we need to pay attention to the fact that this type of learning, involves the simultaneous use of Internet technology and traditional techniques. In the context of higher professional education, it seems convincing that the above type of educational process allows us to combine the work of remote groups of students with face-to-face work in classrooms [5].

In the studied problem of the hybrid learning application during the pandemic period, it should be noted that the aforementioned method of learning has some differences from the blended type of knowledge transfer.

The blended type of learning involves face-to-face contact work in classrooms, followed by the use of high technology in independent work and preparation for practical classes. The important for our study is the position that blended learning of learning is not new. Face-to-face classes are designed one way or another by teachers with the application of a variety of didactic material, including Internet technology [6].

4 Discussion

Numerous studies show that the rapidly developing educational Internet technologies have a significant impact on the development of hybrid learning application in the field of higher
professional education. In keeping with this statement, it should be noted that educational institutions moved to the Internet in the field of education in the shortest time and the academic community was at the forefront of the transition from the traditional method to the hybrid way of the pedagogical process.

The identification of the specific features of hybrid learning is the basis on which all other aspects of our study are built. The basis of the innovativeness of the hybrid educational process is its ability to involve the student as the main regulator of his educational activity. This type of educational technique allows the participant of the process to choose the form most suitable in the given conditions in a personalized way.

For example, Australia’s Monash University employs several hybrid forms in educating the student community:

- Combined type, when students choose the format of participation in the lesson.
- Parallel format involving an online class and a repetition of the same lesson in an offline format.
- The adaptive aspect of delivering hybrid learning simultaneously offers classes in two streams (online and offline) [7].

The validity and orientation of our work on the use of high technology in the learning process are confirmed by the increasing use of online technology in the process of obtaining knowledge.

35% of teachers say they use Internet technology because it gives them quick access to the latest information on their subject matter. 63% of the teaching staff agree that digital technology makes it much more effective in terms of presentation and variety of material. 89% of foreign language teachers use Internet content as the most valuable resource for finding didactic material [8].

Along with the above, it should be noted that on the part of the student community, in turn, 61% of respondents noted that in the process of online learning during the pandemic restrictions, they enrolled and completed additional courses to improve competencies in a distance format. 57% of students in higher education institutions combine face-to-face classes in educational institutions and courses in Internet programs of other universities [8].

However, the new challenges pose new requirements in terms of the potential application of hybrid learning technologies. First of all, this type of pedagogical interaction is a significant motivating factor in the decision to start or continue learning.

In the context of higher education programs and corporate universities, hybrid education allows students anywhere in the world to gather indirectly in one place, such as participating in practical classes or listening to lectures via video link. After a certain time, according to the schedule, to meet within the walls of the educational institution, which is convenient and efficient not only in the transfer of information but also in mastering the material. The availability of information resources allows students and teachers to prepare in more detail and much faster for seminars, as well as in the work on the research qualification work.

Rudinsky I.D. and Davydov A.V. in their work “Hybrid educational technologies: analysis of possibilities and prospects of application” referring to B. Tomlinson and K. Witteiker, described a four-dimensional system of e-learning types classification:

1. Blended learning (up to 45% of online learning)
2. Hybrid learning (40-80% of online learning)
3. Distance learning (more than 80% of online learning)
4. Learning with the help of the Internet (online learning minimum) [9]

Based on this classification, we can conclude that hybrid learning can be considered the golden mean, which allows us to apply digital technology, to the extent allowing to find and apply information most effectively.
As stated earlier, access to education is one of the main reasons for the growing demand for hybrid technology in learning. In adhering to this position, we draw attention to the fact that a significant portion of the student community consists of adults who have one or two qualifications in their academic stock. At the end of 2021, there were 78,100 postgraduate students (86.7% of their total number) in higher education institutions; at the end of 2020 – 75,100 postgraduate students (85.6%) [10].

The decision to continue improving skills and competencies in the context of career development, having one or two qualifications in their academic stock, makes representatives of this student segment turn to a hybrid learning scheme.

Hybridity in the educational process allows all participants in the learning process to independently control the use of time, regardless of the form of lessons, it may be a lecture and practical exercises, which involve contact work with the teacher.

5 Conclusion

This leads us to believe that the main advantage of the application of hybrid educational technologies in the period when the pandemic restrictions are removed, is the accessibility of knowledge without disruption directly from the workplace and the choice of the most convenient time to meet with a teacher directly in the walls of the educational institution. The opportunity to gain knowledge without disconnecting from social interaction in society is one of the most important factors in participating in hybridization educational projects.

It is necessary to highlight the fact that the hybrid type of educational methods paves the way for endless possibilities of working in a content-rich mode of information.

More extensive use of online technologies in conjunction with the offline format develops the potential of all participants in the pedagogical interaction, thereby equalizing professional opportunities, which in turn increases competitiveness.

At the same time, it should be emphasized that hybrid learning requires certain qualification competencies on the part of the teaching staff. Readiness of teachers to master completely new pedagogical methods and presentation of didactic material in a combined digital and analog form.

On the part of the students, a prerequisite for a more effective perception of information is to prepare for the constant attention of video equipment, which can cause some discomfort.

Educational institutions, in turn, must consider the purchase of additional equipment for the introduction of training sessions in a hybrid format, which entails certain financial costs, which often entail an increase in training costs. The most in-demand training and professional development courses require significant expenditure on the part of the students.

In general, hybrid forms of educational technology allow for all participants in the pedagogical process a significant advantage in the development and presentation of the latest didactic material, increasing the motivational factor and creating conditions for building their educational path.

References

2. T. G. Bekisheva, The effectiveness of the use of hybrid and mixed forms of teaching a foreign language at the university, in Collection of scientific papers of the International
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