BLENDED LEARNING OF ENGLISH IN A TECHNICAL UNIVERSITY: NEW REALITY CHALLENGE

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Аннотация/Abstract

The article deals with blended learning of a foreign language at a technical university. The main purpose of the work is to consider various possibilities for the joint use of different types of traditional, electronic, blended learning in new conditions.
Currently, traditional teaching involves full-time teaching of students in classrooms according to the time and place. The term "online learning" is used to refer to any pedagogical process that involves learning entirely via the Internet, which allows students to study regardless of any geographical location and time. There is a concept of "blended learning", which is based on a reasonable combination of traditional and online learning.
E-learning is then used as a general term covering both online learning and blended learning. Educational media used in the context of this definition can consist of a text, a video, an audio, graphics, animation, or any combination of these. A central component of most E-learning courses is some form of two-way interaction between learners and teachers, and between the students themselves. Synchronous communication tools include real-time chat, and asynchronous communication tools are such as email and discussion boards.
E-learning is an advanced form of distance learning, which has been actively used during the pandemic.
The article discusses various possibilities of using traditional and blended learning for teaching students a foreign language at a technical university on the example of Ryazan State Radio Engineering University named after V.F. Utkin. Examples of distance learning courses on the free Moodle platform in various areas of undergraduate and graduate studies are given, tasks and the effectiveness of their use in the current conditions are analyzed.
The article presents the results of a questionnaire survey of the students and teachers on the effectiveness of a foreign language mastering knowledge based on the use of blended learning in new realities.

Введение/Introduction

Digital technologies are radically changing the content of the taught disciplines and their presentation form. Direct connections to electronic databases, news, forums are possible. In conducting practical exercises, you may use social networks. Using skype, zoom, webex, messengers, it is possible to participate in a leading specialist expert's lesson. Publishing houses specializing in educational literature are increasingly switching to electronic versions of their textbooks and teaching aids.
Massive online education is also developing at a rapid pace.

Методы и материал исследования/ Methods & Materials

The analysis of the scientific sources shows that, at present, teachers' practical activities , targeted pedagogical attitudes, the meaning of which is to form a competence developed creative personality of an individual, become integrative in nature and contribute to the effective and economical use of pedagogical tools in achieving their objectives.
When organizing the integral pedagogical process at an educational institution on the basis of different technologies, we relied on a set of the following methodological approaches: humanistic, cultural, axiological, competency-based, communicative, person-centered, system-activity, professional, integrative. The main principles of the research are humanization, creativity, the unity of theory and practice, integration, continuity. The main research methods are: a retrospective analysis and literature review, an observation, a questioning, an interviewing, designing, modelling, monitoring, an experiment. During the experiment we used chi square to analyze the results of the students' success in studying.

Результаты/Results

The university transformation under the digitalization influence during the knowledge economy formation is a multicomponent process that does not develop equally in its various areas.
The university administration in relation to the educational process is competent management of it, which in the digital aspect includes:
1) the improvement of the educational process management system, taking into account the modern achievements of science and technology in the knowledge transfer of all forms and types, as well as information;
2) the determination of the most appropriate digital technologies for teaching students for these areas of training (specialties);
3) the adequate selection and placement of scientific and pedagogical workers, continuous improvement of their scientific, pedagogical and digital competency;
4) comprehensive planning of scientific and educational work in the departments' disciplines is personified for each teacher;
5) the determination of the distance educational programs' volume and content, taking into account the specifics of training areas (specialties);
6) maintaining the internal order and performing discipline through the "task management system".
As you can see, the specified components of the educational process administration are based on the information transfer and explicit knowledge, which is a common property. This allows us to consider them as a means of the organizational support, maintenance and educational process support.
In recent years, blended learning, combining traditional full-time, online and offline education, has been actively discussed in Russian and foreign scientific and educational environment. It is given priority, distance learning is more of a forced option. For pedagogical education, only a mixed version is possible, since it is impossible to learn how to work with people (children) remotely, even with the help of telecommunication networks.
It should be mentioned that using E-learning in teaching foreign languages has its peculiarities. There are three main variants of the educational process organization using E-learning. They are the following: self-study, passive tutoring and blended learning. Nowadays blended learning is seen as the most effective way of learning a foreign language in a technical university because of little quantity of hours for lessons and much time for individual work.
According to a blended learning approach there is a mix of face-to-face and online learning and of synchronous (e.g. Skype, video conferencing rooms) and asynchronous (e.g. discussion groups, blogs, learning management systems) communication tools.
Blended learning can allow teachers to be flexible in five of dimensions according to Collis and Moonen such as programme, study material, location, forms of communication, and types of interaction.
Blended learning has several benefits such as flexibility in location, human contact and interaction, tools to encourage autonomous learning, simulation of work related situations, an optimal learning environment for language learning.
With blended learning, a digital university should provide a student with the opportunity to form an educational route, time, pace and order of its passage, the types of activities used in this case, provide the freedom to choose educational content (resources of the university's electronic information educational environment (EIEE), including the means of control and self-diagnostics, links to the network, the electronic library system and etc.), provide a computerized training place and tutor support.
For this, a significant part of the classrooms is re-equipped, the modular construction of curricula, the teachers develop: modular programs, the necessary electronic resources by discipline (or "collected" from open access resources), methodological recommendations for working with them, control materials and control schemes, a schedule of the necessary classroom work (laboratory and practical exercises).
The significant importance is the quality of the content provided to students. It may be informational (lectures, multimedia support, electronic textbooks and manuals in the electronic information educational environment, network resources by links), methodological (assignments for practical exercises and students' individual work, recommendations, samples of problem solving, lessons, plans and programs, extracurricular activities, etc.), control (test programs, project and other tasks, cases, situational tasks, control work, etc.). It depends on the teachers' professionalism, experience, responsibility, that is, it is also subjective and requires control. Perhaps there will be a need to create a quality service from the most experienced teachers (e.g. methodologists), with the involvement of the employers' representatives.
The next important aspect is the student's ability for self-organization and responsibility for their learning. It is subjective, but it is an objective factor influencing learning outcomes. With a mixed form of education (blended learning), when most of the theoretical training is transferred to independent work, this is especially important, since the quality of mastering the theory determines the quality of solving professional methodological and pedagogical problems.
To realise blended learning, in addition to ICT, including telecommunication and mobile learning technologies, and active and interactive learning technologies, it is possible to use the inverted learning technology. The standard inverted lesson assumes that students get homework: watching video lectures and reading educational materials on the topic of lectures, working in an interactive virtual environment. In practical classes, they practice applied questions: they apply theory to solving problems and problems, carry out laboratory work, explain demonstrations; discuss the lessons. Inverted classes can be discussion, demonstration, virtual, with a predominance of individual or group work, and even fake (when homework is done in the classroom under the supervision of counselors) [Дьякова 2019]. In all cases, they rely on the independent students' work and imply a significant increase in the volume of the teacher's work in the transition period. The technology for conducting an inverted lesson has been developed in general terms, but as applied to individual disciplines, it is almost not specified.
Ryazan State Radio Engineering University named after V.F. Utkin uses platform Moodle for organizing its educational process. The teachers designed many different courses for teaching students, master students, post-graduate students English. For example, «English for bachelors of the 2nd year training program "Power and Electrical Engineering"», «Foreign language in the professional field for the 1st year masters of the training program "Mechatronics and Robotics"», «English. Vocabulary for the training program "Computer technologies in graphics, design and animation"», etc. These distance courses can be used for students' self-work or in the combination with classwork.

Актуальность и значимость (результатов) исследования

New realities give new opportunities for education. The pandemic situation in the world led to the use of digital E-learning technologies in higher educational pedagogical process. The main idea of the educational digital transformation is the movement towards the educational process personalization based on the digital technologies' usage. Its important feature is that digital technologies help in practice to use new pedagogical practices (new models of organizing and conducting educational work), which previously could not take a worthy place in mass education due to the complexity of their realization by means of traditional technologies.

Выводы/Conclusions

During out research we did a survey asking different people's groups' attitude to the idea of obtaining online higher education.
In conclusion we should mention that in new realities it is very important to keep educational process in higher educational establishments at a high level using different types of electronic technologies.

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