The Role of Information Technologies in Developing Future Specialists’ Communicative Competence

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Abstract

The use of information technologies in developing communicative competence is a research issue, which consists of analyzing the integration of innovative technologies into the educational process. The issue of the quality of organizing the educational process and the possibility of improving future specialists’ practical abilities is an important task for modern educational institutions. The primary purpose of the academic paper is to analyze the role of information technologies in education and their potential application for forming communicative competence, taking into account the format of remote communication, the organization of educational conferences, etc. Analysis of contemporary educational outcomes following the rise in popularity of distance learning, which served as a catalyst for advancing information technologies in education, is a key component of the research. The theoretical and practical principles of developing communicative competence were outlined and its components were characterized using the scientific research methods. The academic paper examines the features of the modern educational process and information technologies used to improve the communicative component, which is one of the tasks of an educational institution. In addition, the research analyzes the current state of educational services and characterizes the key tendencies in using information technologies, taking into account the opportunities for developing communication competence. The implementation of information technologies in the educational process, whether in a traditional or distance learning format, has the potential to improve it in terms of practicality and efficiency. Using information technologies in education remains a priority, but a debatable issue regarding the possibilities of their implementation, the feasibility of application and prospects for development. The obtained research results can become socially useful to improve the educational process and enhance future specialists’ communicative competence.

Keywords: information technologies, communication, digital technologies, discussion, discourse, digitalization, educational institutions.
Introduction

In current conditions, the issue of applying information technologies is quite acute in the corporate and in the educational sector. After all, they improve operational work and can provide automation of certain processes. The modern market of educational services has fundamentally changed in favor of digital globalization. It created the accessibility of education and the possibility of using various information technology tools for developing almost any type of activity. The uneven and unreasonable application of methods for organizing the educational process continues to be the fundamental issue facing contemporary educational institutions.

Digital technologies can contribute to improving the student’s skills and abilities, and, according to numerous confirmed investigations, significantly reducing mental activity and logical thinking. Under such conditions, modern educational institutions should use information technologies as a means of optimizing the educational process and improving it, and act according to the format that, according to internal scientific studies conducted, will be the most suitable for the educational purpose.

Improving communicative competence is a pressing issue. On the one hand, information technologies provide an opportunity to conduct a dialogue or group conference among people from all over the world. On the other hand, it reduces the level of real professional and lexical competence because of using mass automation and electronic bots. Communication competence can be improved with the help of digital technologies. However, such an approach requires using high-quality methods of pedagogical activity, teachers’ qualifications and the possibility of a real, appropriate assessment of the student’s abilities. Future specialists should possess applied skills in the discipline and the ability to use digital tools that will improve their further professional activities. This is precisely why the issue of communicative competence and the possibilities of its development in educational institutions is a priority objective for the education system in the world. Consequently, it requires increased attention on the part of scientists. The development of information technologies occurs at a fast pace. The global digitalization of any processes is taking place, which with optimal use can improve the quality of human activity not only in the household, but also in the educational sphere. Under such conditions, the research topic of information technologies and innovative means in education is relevant and appropriate for conducting analytical assessments regarding the degree of their implementation in the educational process. The future potential of digital technologies in education is still a primary issue.

The primary purpose of the research is to outline the role of information technologies in developing future specialists’ communicative competence, as well as the possibility of their application in the organization of the educational process. The problematics of information technologies in education is a key trend in the modern
market of educational services, significantly affecting the mechanism of its functioning. The changes in the paradigm of the educational process create the academic paper’s objectives. They involve conducting a qualitative study of the influence of information technologies on the basic components of communicative competence, ways of its development and the possibility of establishing and formation through applying digital infrastructure and special software. The consideration of the current educational market remains a significant research direction. It requires innovative solutions regarding the organization of the educational process and the prospects for further development of its management and direction vector. The use of information technologies has several crucial advantages and significant disadvantages in the educational process. The study of the possibility of optimizing such features is a prerogative in the conducted analysis and the provision of proposals that will be useful for modern educational institutions.

Literature review

The development of modern information technologies creates the necessity to study their impact on the educational process, organization and improvement of students’ skills. The importance of using information technologies in education can significantly improve the quality of mastering the discipline and expand the student’s scope of knowledge and improve his ability to operate with available information. According to the opinion (Aitbayeva, 2017) communicative competence is a factor in developing a person’s lexical and grammatical abilities, which is formed with the help of intellectual potential. Enhancing communicative competence is a significant issue. After all, due to the development of digital technologies, as (Campbell, 2019) believes, there is an opportunity to optimize communication skills and use them to improve one’s own discourse. According to (Chakur, 2018), improving the quality of communicative competence will be possible by transferring traditional means of its development to the digital environment. In fact, the process of transformation of traditional education to digital education is taking place. However, according to (Kalinichenko, 2017), using information technologies, on the contrary, significantly reduces a person’s ability to perceive material and communicate, since the information load occurs in too high volumes, reducing a person’s intellectual activity. This opinion is confirmed by the scientist (Kudratilloev, 2021). He emphasizes that although information technologies can be harmful to developing educational potential, it is significant to use them correctly, in limited quantities and to achieve a specific goal. Under such conditions, the correct organization of training and studying the influence of information technologies on the communication component becomes important. Based on the theoretical approach (Kachmarchyk,
communication competence is the product of a combination of such components as the ability to operate with information, discuss it, form partner social ties to achieve a common goal or gain one’s own. Moreover, the scientist (Meleshchenko, 2019) claims that the policy of modern educational institutions should be aimed at maximizing the implementation of information technologies, forasmuch as they form digital literacy. However, the factor of control and distribution becomes significant. After all, only when information technologies are qualitatively distributed in the educational process and practical tasks are fulfilled, which will be evaluated by an automated system or personally by the teacher, they will be able to bring the real benefit in the educational process. Communicative competence is important for future professionals regardless of their professional direction because it is used in professional discourse and requires high-quality communication skills for further employment. The scientist (Valencia, 2019) notes that the modern principles of establishing communicative competence have been fundamentally changed, which will continue to happen in the following years. Therefore, it is significant to form an optimal system of using information technologies that can provide competitive advantages. Along with this, traditional means will become a method of limiting the negative impact of information technologies. According to (Sitoru, 2018), such a distribution will contribute to improving future specialists’ communicative competence and form a key basis for further education in the world. Prospects for using information technologies in the educational process will constantly grow, causing an increased level of discussion around this issue. A significant factor in the further development of communicative competence, according to (Razdobarova, 2019), is the ability to use digital tools for traditional communication based on applying a special digital infrastructure and the ability to use it. As noted by (Zablotska, 2019), the educational process has changed in favor of the globalization of digital technologies. Consequently, further education will completely depend on the level of using information technologies. It will directly influence the quality of future specialists’ educational activities. Under such conditions, the issue of information technologies in developing future specialists’ communicative competence remains relevant and interesting for discussion from the standpoint of balancing between forms of education and the quality of applying technologies to improve the educational process.

Methodology

The article analyzes the current experience of EU universities and several Ukrainian educational institutions regarding the quality of tourism students' training. Open access materials on the training program and the possibilities of organizing the
Learning process have been used. Using the methods of scientific research, a search for theoretical and methodological approaches to the concept of foreign language communicative competence has been carried out, and the current state of its development has been analyzed, given the lexical features and needs in the tourism industry. Based on the method of synthesis, the key principles of foreign language communicative competence formation have been identified, and the key prospects for the development of modern semantic tourism discourse have been outlined. The prospects of the impact of digital technologies on the organization of the learning process, as well as the improvement of student's professional skills, which are used to develop their skills and abilities that can be useful in practice, have been investigated by the method of abstraction. Based on the methods of deduction and induction, further principles of development of the educational process, which can function in a blended learning environment, have been proposed. Using the analytical method, the advantages and peculiarities of using the blended learning form have been analyzed, and the key principles of the distance form and the directions of the educational process in the traditional format have been outlined. Considering the theoretical provisions on the development of foreign language communicative competence, as well as the peculiarities of its use, the current way of its implementation for students of tourism faculties has been determined. The prospect of developing the educational process for students who plan to pursue a professional career in tourism is considered with the current situation of the tourism market, as well as its instability and threats to its full functioning due to the spread of the coronavirus pandemic. In the course of an analytical study materials from tourism reports and publications of the World Bank, which reveal the peculiarities of the tourism market, have also been used. The study of lexical and semantic features was implemented based on English as one of the most popular languages in the tourism industry.

Results

The modern development of information technologies influences global processes in the world and improves the functioning of the corporate sector. However, strengthening the role of applying information technologies is introduced into all spheres of human life, which fundamentally changes traditional approaches to conducting household, economic or any other activity. Based on using such an approach, the formation of communicative competence changes fundamentally, and the possibility of ensuring its sustainable development plays a debatable issue among scientists and special educational institutions, aiming to improve both practical and communicative skills. The issue of emotional intelligence and the ability to
reproduce and transmit images achieving a communication goal is one of the primary objectives of modern educational institutions.

The problematics of the formation of communicative competence refers to the issue that uses modern approaches regarding the possibility of its development and further use in practical activities. However, the introduction of communicative competence at the beginning of the educational process, namely, in primary school, is a global issue. Most children of early school age use a number of technologies influencing the formation of a vision of the world and developing verbal and non-verbal communication skills. Ignoring the use of this fact and its implementation in modern educational institutions will contribute to the negative development of the child’s competence. That is why, in order to use effective pedagogical teaching methods, it is necessary to implement not only the means of traditional education, which involves minimizing the use of digital applications, reducing the possibility of using information technologies in one’s activities, etc.; on the contrary, it is expedient to use such tools, but with the direction of the educational process. For example, there is a widespread practice of using special information technologies in modern educational institutions that make it possible to communicate online using their own information platform and exchange existing information. Students in the USA have access not only to such information platforms but also to several mobile applications that allow them to communicate with each other. Limiting the use of digital technologies will reduce the quality of students’ digital literacy and reduce their competitiveness in further employment. Therefore, in order to strengthen quality education, it is necessary to use all the available spectrums of tools that can qualitatively improve modern means of education. Consequently, the will be effectively applied both in household activities and in the educational sphere.

Information technologies have several advantages in professional activities. They can really become competitive in the field of communications. This position has several spectra. According to the theoretical implementation, there are many digital technologies that make it possible to communicate and hold special general meetings, conferences or find an interlocutor. However, according to investigations conducted by European analytical centers, the application of digital technologies significantly reduces the communication activity of young people. This is primarily due to using the e-mail technology, the ability to communicate in online chat, as well as because of introducing mass automated responses, which negatively affect emotional intelligence and negatively shape communicative competence. After all, it is necessary to use not only the tools of information technologies, but also real practical means of communication for further development that can strengthen the ability to use one’s own communication abilities. Such negative tendencies in communication development among young people create several debatable issues
regarding the correctness of introducing information technologies in communication technologies and the possibility of their use as the main element of organizing the educational process and information exchange. The key advantages include using such technologies for the purpose of accessibility, forasmuch as the interviewer does not need to be physically present. This technology can be the most qualitative means for further development of special skills aimed at using particular technologies. However, the key disadvantages of implementing information technologies in relation to ensuring communications are a decrease in real educational activity and lowering the quality of information processing. The primary issue of the information space is the high load on the human brain, which is not able to process such a large amount of information, but constantly processes it, reducing communication skills. Under such conditions, the most effective form of organizing the learning process is applying a mixed form, which will be able to use the key advantages of digital technologies in the learning process, but not to mention significant negative aspects when using information technologies.

Under such conditions, more and more platforms and educational institutions are being created in the modern world, which function on the basis of using information technologies, as they are key advantages for the educational business. In order to provide a high-quality education for any specialist at the state level, it is necessary to use digital technologies, since they are a factor in the successful construction of a career and a specialist’s possible further employment. Therefore, in most European Union’ states, using information technologies and conducting a certain number of lessons in a distance format is intensively implemented. This approach will be able to qualitatively improve the skills of applying digital technologies and promote their use in practical activities. Taking into account the negative factors that were cited when applying such technological tools, the question arises about the effectiveness of using study hours for one or another format of education. To ensure quality education, it is possible to use more than 75% information technologies. However, traditional education should occupy at least 25%, in which students’ creative projects will be actively discussed or considered, but which require significant attention on the part of users. This approach will stimulate mastering the material and the ability for future specialists to communicate within the educational process.

The issue of communicative competence is quite acute. After all, in recent years, a significant number of educational institutions, including several private educational institutions, used the distance form of education to the full extent to master disciplines. Under such positions, using information technologies negatively affected not only the quality of developing communicative competencies, but also the learning process, etc. For instance, let’s consider the features of the educational process in the European Union’s states and Ukraine. In the EU, the level of education
after the coronavirus pandemic fell by an average 10.2%. It happened due to the fact although the development of information technologies had positive consequences, but the rapid transformation negatively affected the quality of the communication process and the use of the distance education format as the basic one. In Ukraine, this issue is observed in a different aspect. During 2020 and 2021, the level of education remained negative, as using digital tools reduces the possibility of the quality of information processing and the operation of logic. This is confirmed by the fact that in 2021, almost half of university applicants failed to score basic points from an external independent assessment. In other words, almost half of the future specialists did not get a passing score. Such a negative result is a consequence of introducing distance education, which reduced students’ educational potential and significantly worsened the quality of education and real practical skills.

The issue of communications in this direction is primarily related to the quality of using professional discourse. After all, while effectively using professional discourse, it is possible to improve educational results, which makes it possible to understand the explanatory material. Numerous digital and online platforms in Ukraine were made on the basis of the educational institution’s special communication capabilities, but the quality of its use had a negative impact on the practical aspects of teaching. Under such conditions, returning to traditional education is a logical negative method; however, using information technologies in the educational process requires particular improvements to ensure educational development.

One of the practical principles that negatively affected the education level is the rapid transformation from traditional education to remote education and the rapid popularization of information technologies. Humanity was not ready for this, since the spread of the coronavirus pandemic became the key catalyst of this process. In modern conditions, it is possible to change the current situation with the education quality for the better. However, in order to ensure this, it is necessary to use not only effective means of information technologies that improve the education quality, but also to apply really relevant means of establishing and developing the organization of the educational process. For instance, the modern relevant technologies that can be used in forming communicative competence and establishing the educational process are reflected in Table 1.
Table 1.

Modern information technologies for the formation of communicative competence

<table>
<thead>
<tr>
<th>Innovative technologies</th>
<th>The way of formation of communicative competence</th>
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<tbody>
<tr>
<td>Social services</td>
<td>The use of such services contributes to developing a person’s social environment and provides an opportunity to communicate with representatives of foreign cultures</td>
</tr>
<tr>
<td>Digital libraries</td>
<td>Can improve the quality of mastery of certain terms and the ability to build lexical-semantic constructions</td>
</tr>
<tr>
<td>Voice communication and video conference</td>
<td>Enhances practical skills of communication activity during discussions</td>
</tr>
<tr>
<td>Email</td>
<td>The ability to communicate at any convenient time, speeding up the quality of the organization of the educational process</td>
</tr>
<tr>
<td>File sharing networks</td>
<td>The possibility of transferring the educational material of the educational institution to improve communicative competence, video materials of classes, etc.</td>
</tr>
<tr>
<td>Cloud technologies</td>
<td>Using conferences based on cloud technologies for conducting lectures or seminars</td>
</tr>
<tr>
<td>Internal software applications</td>
<td>The possibility of segmentation of the educational process and the creation of tools for its development</td>
</tr>
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Source: compiled by the author

Based on the technologies represented in Table 1, the features of their application in the educational process aimed at improving and developing communicative competence should provide a structural set of future specialists’ practical skills, namely: the ability to use lexical-semantic constructions to outline the communication goal, to operate with concepts of a professional nature, to conduct a professional and ethical discourse in a specific social environment. Such structural components can significantly improve the quality of implementing future specialists’ communicative competence.

According to modern studies of European universities, about 50% of students studying technical specialties have the greatest difficulties in public speaking. This testifies to both the public speaker’s fear of the audience and insecurity about his own communication skills. Under such circumstances, an important vector for developing communication competence should be the implementation of collective creative projects on scientific issues and holding conferences on their discussion. The results obtained can be useful not only in personal training, but also as a tool to improve and advance the primary tools of the information environment, which is developing in accordance with the educational institution’s modern policy.
The features of influence of information technologies on developing communication competence are difficult to overestimate. They are used to enhance the quality of learning and the possible development of one’s communication skills and specialized discourse. Information technologies primarily affect the ability to analyze information and distinguish key principles from the flow of the information environment and the ability to use them. The advantage of digital technologies can be the introduction of professional communication tools between representatives of the same profession, like holding thematic conferences. Information technologies can also improve verbal communication tools, if communication is carried out using video communication. However, non-verbal communication aspects are much better improved through traditional means. The emergence of such technologies can both positively and negatively affect the development of communication competence, even worsening students’ and high school students’ logical abilities, which requires the pedagogical staff to be more active in teaching activities.

The teacher’s individuality will play a crucial role in conducting modern non-standard lessons and classes and will serve as a key factor in developing communicative competence. In order to improve the student’s ability to analyze information and the ability to operate with it, particular tools should be used in practical classes. They are reflected in Figure 1.

![Figure 1. Crucial components of communicative competence](source: compiled by the author)
Understanding the communicative competence’s components will serve as a factor in emphasizing the educational process and educational institutions for their development. After all, if the goal is to strengthen communicative competence, it can be achieved during practical classes paying particular attention to discussion, information processing and partnership interaction. Based on the represented components, it is necessary to implement information technologies in educational institutions’ further activities forasmuch as they can automate the discussion processes by forming specific students’ groups and performing tasks among themselves. Such approach makes it possible to form one’s professional interpersonal communication skills and to stimulate problem solving. If the educational institution functions entirely according to the distance learning model, using such an approach will be relevant. After all, it improves the quality of possessing and operating information and contributes to the student’s independent activities, which will consolidate the theoretical material obtained. As a rule, the results of a group scientific study are represented in the form of a short discussion and a speech in front of the audience through representing a short professional discourse on the obtained practical results. This type of tasks is the most prioritized and popular in the modern educational process. This is precisely why the development of information technologies should improve the features of the possibility of conducting such a format of tasks. Developing and using a special mobile application that can distribute the roles of students in implementing a certain project can be one of the options. Moreover, the practice of using project management but only in a scientific environment is among the popular information technologies. The ability to use project management tools based on using special innovative technologies will serve as a competitive advantage when conducting scientific studies.

Thus, the modern issue of using information technologies in developing communicative competence will serve as a key factor in advancing students’ practical skills to create lexical-semantic constructions and the possibility of their use in their professional discourse. The significance of developing communication competence lies in the subsequent professional characteristics of future specialists, who will be able to improve their skills and abilities, as well as strengthen the quality of using material that is directly implemented in the educational process. Features of information technologies in the modern world are developing rapidly. Consequently, the approaches to the quality of integration into the traditional format of education are constantly accelerating, strengthening the role of the development of digital education. In such conditions, it is important to preserve the quality of the educational process and the possibility of using effective tools for its improvement. The obtained research results indicate that the mass use of information technologies can be both useful and negative. Therefore, a qualitative component is acquired
regarding the distribution of academic hours among classes in this part of organizing the educational process. The prospects for the further development of communicative competence can become a key factor in the advantage of modern universities. Moreover, it can become one of the priority directions for the activities of educational institutions.

Discussion

Based on the represented research results on the features of communicative competence formation by means of information technologies, it can be argued that the further prospects of the educational process will increasingly develop towards distance learning, forasmuch as the issue of the quality of using and implementing such features will stimulate the formation of innovative means of organizing the educational process. Moreover, the issue of using information technologies in education will remain relevant. After all, technologies are constantly developing and improving, and the introduction of the most effective and relevant is gaining particular importance. A key negative factor of information technologies is a possible decrease in the quality of information processing and the possibility of using it in practical activities. However, in terms of developing communicative competence, they can become a qualitative catalyst for improving the ability to discuss educational projects, integrate with the international community and be introduced as one of the main means of further development of educational activities.

The specifics of the impact of information technologies and mobile applications on the quality of establishing professional discourse and the ability to conduct discussions in a professional direction may become promising areas of the research. Practical studies can be conducted on the basis of universities of any country and serve as certain indicators for developing communicative competence. Conducting empirical experiments can be useful from a scientific point of view regarding the most relevant and important areas of developing information technologies in the education sphere. It can become a signal for the corporate sector to conduct its entrepreneurial activities in the market of educational services. In addition, using such means of analysis can qualitatively improve the features of modern education and expand the range of implementing information technologies, which can be used not only as a means of organizing the educational process, but also become one of the main tools for conducting educational activities for the student.

The significance of using information technologies, regardless of the quality of the formation of certain competencies, is undeniable. After all, more and more specialists need the ability to use information resources or special tools that can
improve practical activities in the modern labor market. Under such conditions, subsequent studies on using information technologies should be implemented not in the context of the expediency of their application, but in the directions of optimizing and improving students’ abilities. This approach will solve the global problem of processing the information environment. It will stimulate the search for effective solutions for implementing the educational process and strengthening the future specialists’ communication competence.

Therefore, further scientific studies should be aimed at searching for effective means of information technology for conducting the educational process and the possibility of strengthening the communicative competence’s quality, which will be directly developed with the help of automated technologies. These technologies will contribute to developing professional qualifications of specialists. The use of information technologies can have several advantages and disadvantages. Therefore, it is significant to conduct investigations on the quality of optimizing the educational process and ensuring the formation of communicative competence.

Conclusions

Thus, the role of information technologies in developing future specialists’ communicative competence should not be underestimated since they are the dominant factor in the formation of the educational process and the education quality in the modern world. The availability of education creates the problem of information analysis and the inability to use the obtained material in practice. Therefore, the policy of educational institutions, based on internal regulations, should be using exactly those technologies that can qualitatively improve the features of the educational process and contribute to developing the student’s practical skills. Under such conditions, the obtained research results testify to the high development of modern services regarding communicative competence and the availability of the widest spectrum for obtaining educational material. Discussion, the capacity to manage knowledge, and interaction continue to be the fundamental components of developing communicative competence. Based on these components, any information technology being developed should enhance one of these aspects, and preferably all together. Therefore, a significant factor in the modern world is preparation for mass digitalization, which is a key trend in education due to several geopolitical challenges and economic instability. Strengthening the quality of teaching should also become one of the factors in developing communicative competence. After all, the teacher assumes the responsibility not only for the quality of mastering the educational material but also for ensuring digital literacy and basic
communication skills, which will later influence the future specialist’s professional activity. Particular courses and special educational programs for teachers should be used to improve the individual qualifications of the teaching staff. They will be able to create the most relevant training program with the help of the material obtained, which will be aimed at developing the student’s abilities in all directions, both communication and technical ones. The current issues of using information technologies are primarily related to the imperfection of applying information technologies and their distribution. By the way, particular attention should be paid to introducing an up-to-date teaching methodology that will contribute to developing communicative competence. Under such conditions, the prospects for developing the educational process will increasingly transform toward digital and distance education. This will change approaches to the traditional form of organizing education, and it will require greater attention to developing digital infrastructure on the part of educational institutions.

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