Integration of information and communication technologies into the process of learning the course of English for specific purposes as one of the requirements for sustainable future development

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Abstract. One of the most effective ways to improve the process of teaching foreign languages for specific purposes is to use computer and Internet technologies in the education system. The computer-information model of education is a kind of transitional stage from the system of traditional methods of teaching foreign languages to the modern system of information education. The article describes the advantages and disadvantages of the most progressive and wide used technological means like computers, laptops, interactive whiteboards, tablet PCs and graphics tablets, whose implementation into the educational process can significantly increase the effectiveness of teaching foreign languages for specific purposes and help in organizing lessons. Moreover, various language learning multimedia tools such as Modular Object-Oriented Dynamic Learning Environment and digital presentations, and peculiarities of their use are highlighted. The research of experimental data has been carried out after several surveys among Tavria State Agrotechnological University students. The necessity of information technology implementation into the process of learning foreign language for specific purposes was analysed.

Introduction

According to the Sustainable Development Goals (SDGs) which have been adopted at the 70th session of the UN General Assembly, the providing high quality education is one of the most required conditions for sustainable future [1]. The rapid pace of changes in the world must integrate new perspectives in order to protect the environment, contribute to sustainable cities and community development, promote sustainable economic growth and create inclusive societies. The realization of these tasks requires a new approach to education.

The sustainable future development includes the cooperation and joint participation of professionals and experts from different backgrounds. Academic and labour migration has led to a growing need for learning foreign languages, not only for everyday communication but for successful communication with their colleagues from other countries. All these changes resulted in high demand for learning English as a language for specific purposes (ESP). Meanwhile, the 2030 Agenda for Sustainable Development emphasizes that learning opportunities should be increased and diversified, using a wide range of education and training modalities, so that all youth and adults can acquire relevant knowledge, skills and competencies for decent work and life [2]. Hence, critical thinking and problem solving, communication skills and teamwork, creativity and work-specific skills should be developed in the process of future specialists training. The course of English for specific purposes is aimed at acquisition of all mentioned above skills and forming the professional and communicative competence. In addition, the traditional teaching methods are expanded with the intensive introduction and application of new information technologies, as well as the use of all means of communication.

The purpose of this research is to analyse the influence of information and communication technologies (ICT) on the process of learning English for specific purposes which contributes to the formation of an intellectually developed creative person who is well oriented in the information space, ready for self-development and application of professional knowledge for sustainable future.

The development of revolutionary new products in the market of computer and office equipment is inevitably changing the relationship between the student and the teacher, and in general the entire education system. Today a vast majority of students often own computers (laptops, netbooks), tablets and readers with a high-speed Internet connection, which enable them to access any information in minutes.

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the same topics as in the experimental group, but teaching methods and materials remained traditional and unchanged.

The control test has been performed after completing the experimental training. In order to achieve the most accurate results, the data obtained in the experimental group have been compared with the results of the control group. After processing the obtained data, it became obvious that ICT have contributed to the development of the professional communicative competence at high level and positively influenced the quality of knowledge gained while learning the course of English for specific purposes. All obtained data can be seen in the Fig. 7.

Conclusions

The conducted research makes it possible to stress the necessity of information technology implementation into the process of learning foreign language for specific purposes. The basic principles of modern methods of foreign language teaching are: movement from the whole to the individual, student orientation (learner-centered lessons), purposefulness and content of the lessons, their focus on achieving social interaction, integrating the language and mastering it with the help of knowledge from other fields of science.

The realization of these methods today is almost impossible without application of different technological means such as computers, laptops, whiteboards, tablet PCs and graphics tablets. In foreign language classes, these ICT tools provide a greater opportunity to develop students' educational, informative and communicative competences which are of high demand for sustainable future development. Thanks to information and communication technologies, teachers can solve a number of didactic tasks, namely:
- to develop skills and abilities of reading, writing, listening and speaking, using the materials of the global network;
- to replenish students' vocabulary;
- to form a strong motivation for students to learn a foreign language.

The use of these information and communication technologies provides greater flexibility of the learning process, active interaction between the teacher and students, as well as between the students themselves, openness, mobility and prompt exchange of information.

It should be mentioned that the use of computer technology in the learning process affects the growth of professional competence of teachers. It contributes to a significant increase in the quality of education, which leads to the solution of the main task of educational policy.

Analysing the experience of using ICT in ESP lessons, we can confidently say that the use of information and communication technologies allowed:
- to conduct lessons at a high aesthetic and emotional level (music, animation);
- to increase the effectiveness of the lesson;
- to provide positive motivation for learning;

- to increase the volume of work performed in the lesson in 1.5 – 2 times;
- to provide a high degree of differentiation of education;
- to improve knowledge control;
- to provide access to various reference systems, electronic libraries, other information resources;
- to rationally organize the educational process.

The experimental data confirmed the effectiveness of the information and communication technologies implementation into the process of ESP learning. The results obtained during the experiment indicate that the students of the experimental group, in comparison with the students of the control group, have positively changed the level of foreign language professional competence, motivation to learn a foreign language, formed a positive attitude to self-education and self-realization.

The prospect of further research is seen in the conducting experimental studies on the practical application of other types of ICT in the English language learning process in order to select the most effective ones.

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