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MULTIMEDIA TECHNOLOGIES AS AN IMPORTANT PART OF LEARNING FOREIGN LANGUAGES

The content of the paper was determined by multimedia technologies application in teaching English for Specific Purposes. The necessity of multimedia technologies integration into educational process to improve communicative skills of the future engineers has been highlighted. The fact that knowledge of the English language as a means of international communication opens new opportunities for graduates of technical universities to raise their qualification abroad has been mentioned. The main goals of ESP teaching have been pointed out. The focus is made on the competences and skills the students get at the universities to be competitive in the global world. The influence of the multimedia aids use at the English lessons has been analyzed. The teacher's role in teaching English for Specific Purposes is determined. The paper outlines the English language syllabus and the types of work widely used at the English lessons in technical universities. The author describes the stages of creating efficient presentation explains the importance of the acquired knowledge for the engineering students. It is considered that making presentations enables students to organically integrate their knowledge in different fields, generate new ideas, independently think and communicate the results of their work to the audience. The basic principles of communicative learning are mentioned. The possibilities that multimedia presentations give to both teachers and students are distinguished. Example of possible tasks and activities for studying the topic 'Newton's three laws of motion' are presented. The importance of the latest interactive technologies integration into the process of ESP teaching and learning as an inseparable part of training highly qualified specialists with profound knowledge and developed professional communicative competence, ready to solve scientific problems and share the results of their research with foreign partners all over the

world is stated. Recommendations on how to make and apply efficient presentations with colorful images and video files or animation are given.

Key words: multimedia technologies, ESP teaching and learning, communicative competence, efficient presentation, skills.

Чмель В.В., Ахмад И.М. Мультимедійні технології як важлива частина вивчення іноземних мов.

У статті розглядаються роль та застосування мультимедійних технологій у вивченні іноземних мов студентами технічних спеціальностей. Комунікативний підхід розглядається як пріоритетний у викладанні англійської мови професійного спрямування в глобальному світі стрімкого розвитку інформаційних технологій та нових можливостей для міжнародного співробітництва в галузі науки і техніки. Визначається роль викладача в процесі навчання, описуються види завдань, які виконують студенти інженерних спеціальностей при вивченні іноземної мови та наводяться приклади вправ до відео фрагменту.

Ключові слова: мультимедійні технології, комунікативна компетенція, ефективна презентація, навички, англійська мова професійного спрямування.

Чмель В.В., Ахмад И.М. Мультимедийные технологии как важная часть изучения иностранных языков.

В статье рассматриваются роль и применение мультимедийных технологий при изучении иностранных языков студентами технических специальностей. Формирование коммуникативной компетенции у будущих инженеров рассматривается как приоритетная задача в преподавании английского в эпоху стремительного развития информационных технологий и расширения международных связей в области науки и техники. Кроме того, определяется роль преподавателя в процессе обучения, описываются виды заданий и подготовка учебного материала. Особое внимание уделяется обучению студентов созданию эффективных презентаций.

Ключевые слова: мультимедийные технологии, коммуникативная компетенция, эффективная презентация, навыки, английский язык профессиональной направленности.

In global world rapid development of modern society as well as science and technology takes place. Introduction of the latest technologies, re-equipment of production processes, exchange of experience, stimulation of scientific research and discoveries are aimed at improving the quality of people's life. That is why the status of the English language, as a means of international communication, not only in everyday life, but also in scientific circles in different parts of the world is increasing from day to day. Proficiency in at least one foreign language becomes an essential condition for both the development of personality and successful career growth of every young scientist. Expansion and strengthening of international relations opens new horizons for graduates of higher educational institutions in raising their qualifications abroad, communicating with specialists

from other countries, and presenting of their research results at international conferences and seminars.

Students and teaching staff of National Technical University of Ukraine 'Igor Sikorsky Kyiv Polytechnic Institute' have got the opportunity to participate in various international programs: ERASMUS +, Fulbright Program, Horizon 2020, and others, which opens access to information resources of the EU countries and new opportunities for promotion of scientific and innovative projects. Therefore, the formation of communication culture among students of technical specialties and training of their practical knowledge of a foreign language are of particular importance.

The aim of this paper is to review multimedia technologies, to focus on presentations and video files as efficient means of ESP teaching and evaluate their application in teaching/learning process.

It is not a secret that the main goals of ESP teaching at technical universities are to expand the vocabulary of students, to improve their speaking and writing skills, and to teach how to translate specialized literature both from a foreign language into the mother tongue and vice versa. The English language syllabus at technical universities includes:

1. Reading. Students should be able to read and understand the content of different texts, including texts in their specialty.
2. Oral speech. Each student should be able to present the content of the text read or heard, make a message or report on a specific topic, answer the questions asked, take part in the discussion.
3. Written language. Students should master the skills of writing essays, reports, business letters, research papers, etc.
4. Translation. Each student should have the knack of translating different texts, including texts in his specialty [1].

Communicative skills have always been considered an inseparable part of the specialist success, an indicator of his professionalism. Consequently, ESP teachers are constantly looking for new methods, technologies, techniques and approaches to teaching a foreign language in order to meet the demands of modern society.

The communicative methodology is aimed at maximizing the student's immersion into the language environment, and minimizing the native language use. The role of the teacher is to arouse the interest of each student, give him the opportunity to express his opinion, give arguments to prove his point of view and take part in the discussion of the topic, since interest involves all mental processes - perception, memory, thinking, and encourages students' activity at the lesson.

Since foreign language classes are communicative by nature, positive emotions play an important part in motivation students. To increase the effectiveness of the educational process, the teacher should clearly realize the role and place of a foreign language in the life and professional activity of the future engineer and help him determine for himself the purpose of language learning [2, p. 57].

In the course 'English for professional communication' for students of 3-5

courses at National Technical University of Ukraine 'Igor Sikorsky Kyiv Polytechnic Institute' the following types of work are widely used:

- writing abstracts and essays
- making PowerPoint presentations and reports
- participation in briefings and conferences
- role-playing and case studies, etc.

Considering swift development of computer technologies, the ability to work with various sources of information to achieve professional goals is a necessary competence for today's engineer.

In the modern world, information is predominantly presented in the form of presentations, therefore, the knowledge and skills gained at the English classes will help future engineers in their preparing for participation in scientific and practical conferences, seminars, as well as protecting bachelor's and master's works in English. In order to facilitate students and teach them how to create effective presentation, the textbook 'English for Presentations' (Oxford University Press) has been introduced into the curriculum of the 3rd year course. As a result, each student learns the basic rules of presenting information in PowerPoint format, how to make effective openings, state the topic and say why it is important to the audience, describe the structure of the talk, highlight the main points and summarize the main ideas, describe graphs, tables, pie charts, etc., how to make effective conclusions and answer the questions.

Obviously, the acquired knowledge should have practical application in the learning process. That is why our students perform creative tasks. They systematically write essays on the topic of their specialization in English, which includes:

- English text (10-20 thousand characters, depending on the course)
- text translation
- vocabulary (30 terms)
- summary
- references (at least 5).

Obviously, the preparatory stage: search, selection and systematization of the material, writing the report itself, design of the visual structure require a thorough study of all issues related to this problem. Then the students perform the Power Point presentation (10-12 slides) telling about the results of their research (5-7 minutes) with subsequent discussion at the lesson. As the presentation format is limited in time, it is saturated and dynamic and contributes to the maximum concentration of the audience attention. It is presentations that enable students to organically integrate their knowledge in different fields, generate new ideas, independently think and communicate the results of their work to the audience.

In fact, communicative learning should adhere to the following basic principles: structural principle, the principle of consistency, context principle, novelty and interest, as well as involving all students in the communication process. To implement all these principles, it is advisable to widely use multimedia presentations in the educational process, because multimedia is a modern computer information technology that allows the teacher to combine the use of video

materials, audio files, computer graphics and animation. This gives a unique opportunity to make language classes interesting, visual, and therefore accessible and understandable for all students, regardless of their level. The teacher, creating a teaching presentation for the lesson, on the one hand, masters modern teaching technologies, and, on the other hand, considers the best ways to supply educational material, for example, in the form of diagrams, tables, charts, illustrations, etc. to facilitate perception. It is evident that students of engineering specialties better absorb information when it is presented in the form of structure or scheme. Bright colorful images of the slides and the use of a video sequence or animation allow teachers to show visually the device or equipment operation, demonstrate consequences of global warming or environmental pollution, present interesting facts from the life of outstanding scientists and inventors, etc. For example, to study the topic 'Newton's three laws of motion' in the 5th year I have developed some tasks and presented them as a multimedia presentation using the video clip 'Isaac Newton and Atheism'[2].

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Task 1. *Before watching the video:*

A. *Answer the following questions:*

1. What does Atheism mean? Was Isaac Newton an atheist or a religious man?
2. What incident helped Isaac Newton to discover the gravity?

B. *Match English words and word phrases with their Ukrainian translation.*

atheism	різкий прорив
towering intellect	сила тяжіння
sharp break	течія
bring to bear	атеїзм
tide	застосовувати
velocity	видатний геній
pull of gravity	швидкість

Task 2. *Put the following phrases in the order they are mentioned in the video.*

There is one odd sentence, that isn't mentioned in the video, identify which one.

- a. He explained how everything moved from planets to apples.
- b. Everything with mass exerts a pulling force on everything else with mass.
- c. Much of Newton's writings consist of biblical and occult studies.
- d. He was the person who first saw the fundamental laws.
- e. I. Newton was born in 1643.
- f. I. Newton was a towering intellect. It is astonishing what he did.

Task 3. *Choose the most suitable word to complete each sentence.*

1. I. Newton explained the _____ by which the planets moved.

- a. mechanics; b. mechanism; c. road; d. process.

2. This moment in the history of science is a _____ break.

- a. strong; b. short; c. great; d. sharp.
3. He has shown that Maths is the language of the _____.
- a. people; b. Universe; c. cosmos; d. Physics.
4. The Principia revealed that the tides, the _____ of orbiting planets, even the shape of the Earth could be explained through the pull of gravity.
- a. speed; b. direction; c. velocity; d. width
5. The Moon pulls the oceans, the Earth pulls the Moon, the Sun pulls the _____ and the closer these objects are to each other the stronger gravity pulls.
- a. Earth; b. gravity; c. Mars; d. Moon.

Task 4. *Translate the quotation. What does the author mean?*

‘Atheism is so senseless. When I look at the solar system, I see the earth at the right distance from the sun to receive the proper amounts of heat and light. This did not happen by chance.’

Practice shows that using presentations in the classroom helps the students learn professionally-oriented vocabulary better and diminishes difficulties in discussing problems, expressing for and against arguments, making conclusions. Such tasks are interactive and contribute to the development of communication skills at the lesson.

To sum up we can infer that integration of the latest interactive technologies into the process of ESP teaching and learning is an inseparable part of training highly qualified specialists with profound knowledge and developed professional communicative competence who are ready to solve scientific problems and share the results of their research with foreign partners all over the world [4, p. 48].

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