# EFFECTIVE TOOLS FOR TEACHING FOREIGN LANGUAGES AT TECHNICAL UNIVERSITY

## ЕФЕКТИВНІ ІНСТРУМЕНТИ ДЛЯ ВИКЛАДАННЯ ІНОЗЕМНИХ МОВ У ТЕХНІЧНОМУ УНІВЕРСИТЕТІ

UDC 37.211.24 DOI https://doi.org/10.32843/2663-6085/2020/29-1.36

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The article defines features of computer-based effective tools for teaching foreign languages at university; analyzes the dependence of their successful functioning on the choice of computerised training technologies; explores the essence and potentials of computer-based learning as interactive learning which is focused on personal development, students' motivation and effective management of changes as sooner or later students will have to face the challenge of real life: stand out from the crowd and be able to prove they can use academic knowledge introduce themselves professionally and communicate effectively in study situation and work. One of the most important tasks at the present stage of higher education modernization in foreign language educational process is to ensure teaching quality according to international requirements and support students in delivering successful learning preparing them for future challenges. This vision is partly in response to the rapid changes in technology everybody can see around and experience on a daily basis: faster and more. Information technologies, effective tools and timely forehanded receiving of information are becoming essential factors in the teaching foreign languages process at university. There is a need to bring into focus the technology education lessons to improve the design of learning opportunities. In this article, we address computer-based effective tools for teaching foreign languages by identifying key issues that emerge in studying, introducing them as a substantial element of teachers' professional competence and its effective use in foreign language education process. Finally, we offer suggestions for adapting computer technology usage to meet the particular needs of students while learning foreign languages at technical university

**Key words:** effective tools, foreign language, educational process, computer-based technology, multimedia presentation.

У статті визначено особливості ефективних комп'ютерних технологій викладання іноземних мов у вищих навчальних

закладах: проаналізовано залежність успішного вивчення іноземних мов від вибору комп'ютеризованих технологій навчання; досліджено сутність і потенціал комп'ютерного інтерактивного навчання, яке орієнтоване на особистісний розвиток і мотивацію студентів для ефективного управління сучасними змінами, оскільки рано чи пізно студентам доведеться зіткнутися з викликом реального життя; виділятися серед натовпу й мати можливість довести, що вони можуть ефективно використовувати академічні знання в майбутній професії та під час навчання. Одним із найважливіших завдань на сучасному етапі модернізації вишої освіти в процесі вивчення іноземних мов є забезпечення якості викладання відповідно до міжнародних вимог і підтримка студентів у навчанні, готуючи їх до майбутніх викликів. Це бачення частково є відповіддю на стрімкі зміни в технологіях, які кожен може бачити навколо та відчувати щодня в повсякденному житті. Сучасні інформаційні комп'ютерні технології та інструменти в тандемі зі своєчасним отриманням інформації стають важливими факторами викладання іноземних мов в університетах. Існує потреба зосередити увагу на заняттях комп'ютерної освіти для вдосконалення дизайну можливостей навчання. У статті ми розглядаємо ефективні комп'ютерні інструменти викладання іноземних мов, визначаючи ключові проблеми, що виникають під час вивчення, представляючи їх як суттєвий елемент професійної компетентності вчителів та ефективного їх використання в процесі вивчення іноземних мов. Пропозиції щодо адаптації використання комп'ютерних технологій для задоволення особливих потреб студентів під час вивчення іноземних мов у технічному університеті надаються.

**Ключові слова:** ефективні інструменти, навчальний процес, іноземна мова, комп'ютерні технології, мультимедійна презентація.

### General description on research question.

Over the past decade, there has been a trend towards a rapid increase in using and interacting with information technologies. Such growth is caused by global changes in social community, complication of technologies, the growth of demand in education environment, and constant changes at labor market.

Modern universities are required to implement the latest effective tools for teaching that provide the development of communicative, creative, and professional competences stimulating future specialists for self-learning and further life-long learning. The aim of foreign language studies at university is to form students' communicative competence through the development and mastering of all types of speech activity: reading, speaking, writing, and listening [4; 7].

The main barrier that stands on the way of successful teaching foreign languages at technical university is insufficient motivation of students. In this climate the fundamental question has raised: How can students gain the skills necessary to make effective use of technology to enhance their learning? The answer seems clear: One of the best ways to increase students' motivation is the use of ICT. It should be noted that effective learning tools and academic materials used at technical universities for this purpose are definitely related to the future professional activity of students. Collaboration between software and hardware and "well-trained teachers" helps students become digitally literate for the twenty-first century as well as prepare them to be competitive in the future using must know foreign language [4; 5].

# ІННОВАЦІЙНА ПЕДАГОГІКА

The **purpose** of this paper is to present and discuss the potential that computer technologies offer in addressing the whole range of learning objectives, from the low-level to the higher-level goals in the foreign language context. Foreign language teachers use computer-based effective tools that help students learn discrete skills such as language in use and also to find ways of applying ICT to address communicative goals that allow students to use the language creatively.

The role of computerised effective tools has always been given sufficient attention of progressive educators and scientists who combine professional efforts to identify the most innovative methods and tools in the process of mastering a foreign language using computer-based effective tools. Analysis of scientific and pedagogical literature shows the state of technology in a foreign language learning today. Theoretical problems of using innovative methods are reflected in the works of T. Dobrynina, M. Clarina, L. Vavilova, V. Guzeev, O. Golubkova, I. Meleshko, O. Sydorenko, O. Pometuna and others. Features of information computer-based technologies on teaching and learning in the language classroom are highlighted in the scientific works D. Baak, M. Grussendorf, G. Onkovych, J. Gone.

How technology can help solve the language learning problems are analyzed in works of J.-B. Son, H. Voronina. The deepest attention is paid to the innovative technology implementation in foreign language learning are highlighted in M. Bush, C. Chappelle, N. Skrypchuk.

It is proved that information technologies are the best choice to be implemented into the structure of educational process, which meets all the didactic requirements and crucially fulfills the process of teaching foreign languages [1]. First of all, computer is capable to provide all-round control of the educational process. Another advantage is the capability to accumulate statistical information during the whole educational process. Analyzing statistical data (amount of time spent on correcting errors, right/wrong answers, implementation of separate tasks, etc.), teachers estimate degree and quality of students' knowledge.

Computers also create favorable possibilities for organization students' self-assessment [2]. They can use a computer both to study particular topics and self-control gained knowledge generally. One of the most successful examples of computer technology usage is a multimedia presentation. Foreign Language multimedia presentation is a way of showing the creative and adapted for a certain level of student's language skills information as the logically completed selection of slides on definite topics. Multimedia presentation is based on the use of audiovisual possibilities of computer technologies [1; 4].

There is a general algorithm of multimedia presentations creation. Accordingly, it is very important to follow such steps:

- 1) to define pedagogical tasks which are going to be solved by means of the created multimedia presentation;
- 2) to think over an aim and task of the slides creation;
- 3) to take into account students' potential possibilities:
- 4) to pick up illustrations (pictures, sounds), using multimedia possibilities of computer (processing of collected earlier information or a search for new one;
- 5) to think over the texts content considering the basic requirements to all multimedia presentations;
- 6) to write down the script of multimedia presentation:
- 7) to create the structure of the multimedia presentation, using the necessary computer programs;
  - 8) to a multimedia animation and voice effects;
- 9) to analyze and estimate the prepared presentation in accordance with the requirements of multimedia presentations;
  - 10) to correct possible defects [1; 2].

The material positioned as electronic presentations substantially extends possibilities of ordinary educational means due to the use of audio and video tracking and effects of animation. During work with a computer, students' audial and visual channels of perception are involved, which allows increasing not only the volume of the perceived information but also the durability of its mastering.

Examples of multimedia Presentation for foreign language teaching:

- 1) flashcards on a certain topic,
- 2) reports on books and articles,
- 3) scientific presentations that illustrate research students' work,
  - 4) creation of students' portfolio,
  - 5) demonstration of drafts diagrams and charts,
  - 6) tests, etc [1; 2; 3].

It is also important to consider the methodological aspects of creating educational presentations. The type of such presentation depends on the role of that presentation plays in the educational process of foreign language teaching. The presentation can be multimedia or fully-functioning [1; 3].

Foreign language teachers use multimedia presentations for an explanation a new material, using a computer technique instead of posters, maps, or handouts. In this case, the basic informative role belongs to the teacher. Fully functioning presentation takes away the main role of the lesson. A teacher prepares students for working with new material, states the topic and aim of the lesson, and some moments that need special attention, while learning new material. Then, students learn new material on their own via presentation. At the end of the lesson, a teacher conducts the discussion on the topic specifying certain moments, answers the question, and works out the summary of the lesson. It is also very useful to have computer tests, as the

addition to such presentations. A test will be useful both for self-assessment of students and for control of their knowledge by a teacher [5].

For creating multimedia presentations, the basic elements of slides will be graphic objects: pictures, charts, diagrams, graphic arts; and tables. Videosfragments are also used. It is related to such fact that video-fragment needs to be watched and listened to. Thus, high synchronicity is needed in all students' efforts, so that part of them has not experienced technological pause, which has not been planned by the teacher. Project multimedia and interactive boards are very useful for such presentations. In this case video-fragments acquire a greater value. In presentations of multimedia type there should not be multi-text information, because it can also result in an unplanned pause, because the speed of working with the text varies greatly among different students. The teacher replaces possible text information with the explanations. So, the s multimedia presentations are used to visualize and make the new material of the lesson clearer [2; 3].

Fully functioning presentations contain considerably more text information and nearly the same amount of graphic multimedia. Audio-video multimedia is very useful in this type of presentations: audio corresponds with the text on the slide. It brings good results for those students whose aural memory prevails [3; 4].

It should be remembered that text must be distributed on slides in small portions and multimedia by corresponding pictures, charts images, etc. In such case text information is better perceived and understood by students. Not a single slide of fully functioning presentation, except slide with a film object, must contain objects without text tracking. Such slide will be blank, i.e. not clear to the student. The quantity of animation should not be excessive: animation can be useful on a title slide, and very harmful on the other. The reason is that animation tends to distract attention from the material which is studied. If students have textbooks, material of a presentation should maximally correlate with them. It is recommended to create a presentation on the basis of the texts from such textbooks [3: 6].

## **Expected outcomes/results**

The article presents the results of the analysis of presentation survey which has been carried out to show that at present teachers of technical universities are still searching for mechanisms to improve the efficiency and competitiveness of the foreign language educational process, particularly through the use of multimedia presentation.

To discover how much the students of the 3<sup>rd</sup> and the 5<sup>th</sup> courses use presentations in the process of learning English a survey was conducted. It consists of 12 questions taken to analyze learning styles of our students. The participants were the students of National Technical University of Ukraine "Igor Sikor-

sky Polytechnic Institute" with intermediate English language level. 55 students of two faculties participated in the survey students took part in a survey giving answers to define how much they know about presentations. Results of the survey revealed that half of participants have lack of experience both in creating and performing presentations in English. The questionnaire showed that the most of students are aware of common rules for doing a successful presentation though they still need more practice to cope with stress.

While studying the topic, it becomes clear that creating presentations encourages everyone to be involved in the learning process. This opinion is confirmed by students' answers to the questionnaire. Most students (78.2%) agree that presentation helps increase motivation to learn foreign language. Though half of students (52%) experience nervousness presenting in foreign language and confess that 45% lack in dealing with stress while giving a presentation. Vast majority (80%) state that the first minutes of a presentations are the most important and it is obvious for 74.5% of students that they need to have basic techniques to make a successful presentation. 45.5% of participants think personality and culture influence during a presentation. A deeper look at parts of presentation revealed that 51% find main body the most difficult to structure. Most students (85%) are fully aware of features that make presentation good mentioning personality of presenter, simple structure and visual effects [6]. After testing students were suggested to discuss the results and express their opinion if they agree or disagree and to discuss what kind of classroom computer-based activities might be the most productive, based on knowing the dominant learning style.

Computer-based effective tools can act as repositories for ideas and are sure to be able to:

- 1) offer new ways of interacting with information;
- allow students to create the extension of their own minds:
- 3) help students achieve all necessary recognized skills, abilities and competences;
- 4) motivate students to improve their knowledge step by step;
  - 5) satisfy students' demands for progress evidence;
- 6) enhance students' knowledge with training and professional development;
- 7) get support, advice and ideas students need in their studying.

Computerised tools can extend limits of foreign language educational process, augment students-teachers cognition, help both students and teachers use information in new and exciting ways [7].

**Conclusion.** Taking into account all the abovementioned factors, we can conclude that in modern society it is difficult to surprise students by innovative teaching methods. The use of multimedia pre-

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sentation can become an additional effective tool that introduces interactivity into the educational process, inspiring students for further creativity and motivating them. Therefore, the ability of foreign language teachers to use ICT in the educational process at technical university is a substantial element of their professional competence.

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