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Technology for using a multimedia complex in teaching a foreign language at philological faculties of HEIs

Olena Kravets
Zhytomyr Ivan Franko State University, Zhytomyr
https://orcid.org/0000-0002-2762-9787

Abstract. *The article explores the role of multimedia training complexes in teaching foreign languages, emphasizing their ability to integrate various information formats - text, audio, video, and animation - to enhance motivation and comprehension. The study analyzes theoretical bases, structure, and practical application of MTCs in higher education, focusing on communicative and technological approaches.*
Keywords: *multimedia technologies, training complex, foreign language teaching, motivation, communicative approach, educational process, higher education.*

Multimedia training complexes occupy one of the leading places in the study of any discipline, and foreign languages in particular. They are distinguished by presenting systematized instructional information in the form of lectures, practical and laboratory classes with various types of content; multimedia presentations; illustration galleries; interactive tests and games; sound accompaniment; hints and tips, etc. The format of delivering learning material can stimulate students' interest and motivation and create an artificial environment of the country whose language is being studied.

Our analysis of modern sources devoted to the use of multimedia training complexes has shown that authors mainly addressed issues of expediency of use (Baumann U., Blake R.J., Davis J., Felix U., Ye. Pasov, Ye. Polat, N. Hutarova), technical requirements (Dreyer C., Homberg B., Shelley M., H. Bikkulova, Z. Devterova, T. Zaichenko), advantages and functional capabilities of multimedia tools (Byrnes F., Candilin C., Doughty C., Fay R., O. Okolesov, V. Pashuta, A. Fofanov), problems of informatization of education (S. Beshenkov, V. Lednyov, O. Spirin, et al.); development of content and methods of design in educational systems (V. Bezrukova, D. Matros, O. Ostapchuk, L. Romankova, E. Sundukova, et al.).

Thus, the problem of teaching a foreign language using multimedia technologies is represented by a wide range of issues; however, questions remain open regarding the construction and practical application of multimedia training complexes in studying a foreign language, and the issue of differentiating content by certain levels (motivational-cognitive, training-executive, reflexive-creative) has not been considered.

In technical literature, multimedia (Lat. multum + medium) is the combination of various forms of representing information on one medium–for example, textual, audio, and graphic–and, increasingly in recent times, animation and video. A characteristic, if not defining, feature of multimedia websites and compact discs is the presence of hyperlinks. This concept also denotes the combination of sound, text and digital signals, and still and moving images. Thus, a multimedia database will contain textual and image information, video clips and tables [3].

In pedagogical literature, the term "multimedia" refers to interactive pedagogical systems that provide the processing of moving and still video images, animated graphics, high-quality sound and speech by means of computer technologies. The environment that unites these elements of the information structure is hypertext.

Multimedia technology is an algorithm for working with textual information that makes it possible to establish associative links ("hyperlinks") among individual terms, fragments, and articles in textual arrays and thereby allows not only sequential, linear processing of text–as during ordinary reading–but also free access and associative browsing according to an established structure of links. It outlines the procedure for the development, functioning, and use of tools for processing information of different modalities [4].

The introduction of multimedia technologies into the educational space is inherent to multimedia itself–the harmonious integration of different types of information. Due to the intensification of students' perception of learning material, it becomes possible to involve them in the process of cognition as subjects of learning activity. It has been proven that the use of multimedia materials and computer networks reduces learning time almost threefold, and the level of retention–due to simultaneous use of images, sound, and text–increases by 30–40 percent. Therefore, the use of multimedia technologies in the process of teaching foreign languages significantly expands and diversifies university language programs; provides access to a variety of authentic materials (computer-based presentation of language material from fiction, articles, information websites; work with dictionaries, etc.); engages students in learning foreign languages; and enhances students' motivation by allowing them to work with the language at a pace convenient for them, thereby promoting the individualization of learning and the effective mastery of a foreign language. Multimedia technologies can help the foreign-language instructor adjust the educational process, taking into account the interests and abilities of individual students, and help implement a learner-centered approach by ensuring differentiation of instruction.

Multimedia training complex includes a multimedia educational program, video practica and electronic manuals, sets of information-support tools, and automated systems for assessing and monitoring students' knowledge. The basis for creating a multimedia training complex is the curriculum in a particular discipline. Teaching a foreign language at language faculties using an MTC makes it possible to move from a passive presentation of material to an active mode of educational activity, in which the student becomes not only the central object of the process but also its active participant.

We determined that the theoretical basis for building the technology of using an MTC is the design of instructional information by a higher-education instructor based on a combination of technological and communicative approaches.

While developing an experimental program for designing instructional information by the instructor when creating an MTC on any topic, we relied on a hierarchy of goals as a way to maximize adaptation of the developed technology to the conditions of the higher-education learning process. The presented technology implements the process of goal formation at two levels: strategic and phased.

At the strategic level, there is a pedagogical interpretation of the societal and state demand, and the priorities of the instructor's professional and pedagogical activity in working with instructional information are determined. This leads to a reorientation of the instructor's educational and professional tasks within the information-educational space toward improving information interaction.

The level of phased goal formation provides for further concretization of the strategic aim, the implementation of which is presented in the developed technology based on interpreting the learning process in the context of its project-oriented nature in working with information. Under such conditions, the procedural side reflects the design component of the technology, and the content side–the informational (communicative) component. At the same time, the construction of the general project is implemented on the premise that the instructor's work with information includes both direct and indirect techniques that ensure effective interaction among participants in the learning process.

Thus, within the second level of goal formation, we identified a number of technological stages of a higher-education instructor's activity with instructional information: I – pre-communicative phase; II – communicative phase; III – post-communicative phase, which in fact describe the complete cycle of information interaction among the subjects of communication (sources of information → instructor; instructor → student; student → sources of instructional information).

The proposed ways of structuring information form the basis for developing the content of an academic discipline and are closely related to the development of forms of its presentation. The use of multimedia training complexes in teaching a foreign language at non-language faculties has made it possible to find new approaches to developing instructional materials and to develop and implement pedagogical, methodological, didactic, and psychological principles.

References

1. Artomova, M.H., Bed, V.V. Competence-based approach in the system of higher education as a priority of its modernization in a higher educational institution. URL: https://social-science.uu.edu.ua/article/691 (accessed: 14.01.2023).

2. The TUNING European project. URL: http://www.let.rug.nl/TuningProject/index.htm (accessed: 13.10.2019).

3. On Education: Law of Ukraine of 05.09.2017 No. 2145-VIII. Last updated: 01.01.2023. URL: https://zakon.rada.gov.ua/laws/show/2145-19 (accessed: 14.01.2023).

4. On Higher Education: Law of Ukraine of 01.07.2014 No. 1556-VII. Last updated: 01.01.2023. URL: https://zakon.rada.gov.ua/laws/show/1556-18 (accessed: 14.01.2023).

5. Ostrianska, O.A. Logical-theoretical analysis of the current state of research on the problem of complex pedagogical skills. Collection of Scientific Works: Bulletin of Poltava V.G. Korolenko State Pedagogical University, Issue 3(7), Series "Pedagogical Sciences." Poltava–Zhytomyr State Pedagogical University, 1999, pp. 201–207.