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PEDAGOGICAL FEATURES IN COMPUTER MEDIATED COMMUNICATION ENVIRONMENT

Стаття присвячена встановленню переваг та недоліків використання сучасних технологій навчання іноземній мові. Особлива увага приділяється новітнім підходам до впровадження інформаційних технологій, що базуються на всесвітній мережі Internet.
Ключові слова: *взаємопов'язаний, інструмент, основні режими, у реальному часі, мережа, посилання, застосування.*

Статья посвящена определению преимуществ и недостатков использования современных технологий обучения иностранному языку. Особое внимание отведено новым подходам в применении информационных технологий, основанных на всемирной сети Internet.
Ключевые слова: *взаимосвязанный, инструмент, основные режимы, в реальном времени, сеть, ссылка, применение.*

The paper is devoted to the advantages and drawbacks of using modern educational technologies for foreign language teaching. Much attention is being paid to new approaches of using Internet-based information technologies.
Key words: *interconnected, tool, basic modes, on-line, network, link, application.*

The development of the computer along with the widespread use of the Internet has rapidly promoted computer mediated communication – a very important communication media, which has been used widely and effectively, and has a profound effect on many aspects of education [1, p. 165-168]. Alongside face-to-face communication, writing and printed material, computer mediated communication as a new medium with unique characteristics is becoming an increasingly significant element in teaching and learning environments. In fact, it has proved to be a feasible and preferable alternative to face-to-face communication as in many ways it provides an ideal environment for English to be used in communicative situations. Computer mediated communication-based computer assisted language learning has considerably revolutionized the world of education by offering a great number of new ways to teach and to learn [2, p. 54-58]. Researchers are constantly exploring how computer mediated communication may contribute to the education process in particular sociocultural settings while also identifying some of its limitations. It has not only introduced us to the idea of new literacies and language genres but also blurred the line between written and oral communication [7, p. 18-19]. Hence, language professionals need to capitalise on the advantages and potential strengths that this technology has to offer computer mediated communication has been extensively researched from various disciplinary and methodological perspectives. This form of communication, with a broad scope of processes and tool-use, facilitates information design and delivery, and human-human or human-machine interactions with structural, cognitive and sociocognitive implications. Computer mediated communication, as first coined by Starr Roxanne Hiltz and Murray Turoff, was originally defined as the process when people create, exchange and perceive information using networked telecommunications systems that facilitate encoding, transmitting and decoding messages. This rather technical-oriented definition has been endorsed by a number of researchers. Raumond Luppicini, for example, defines computer mediated communication as communications, mediated by interconnected computers, between individuals or groups separated in space and time. Similarly, according to Richard Herring and Mark Warschauer, computer mediated communication is openly delineated as communication taking place between human beings by means of computer tools. However, the definition of computer mediated communication is not fixed. A human-oriented description of this type of communication can be perceived as any form of organised computer-supported interaction between people [11, p. 199-211]. Computer mediated communication is not just a tool. It is at once technology, medium and engine of social interactions. It not only structures social relations, it is the space within which the relations occur and the tool that individuals use to enter that space [5, p. 21-27]. As a pedagogical shift has moved language educators from cognitive assumptions about knowledge and learning as brain-local phenomenon to contextual, collaborative and sociocultural approaches to language development and activity [7, p. 20-21], computer mediated communication should be considered as cultural tools possessing particular interactional and relational associations, expectations and preferred uses [14, p. 125-129]. Thus, computer mediated communication can be viewed both as mediational tools and as a communication process. Technologically, hyperpersonal and interpersonal communication is facilitated by the use of computer network technology, which theoretically makes on-line participants communicate with each other independent of time and space [15, p. 79-82]. This type of communication affords a variety of media, combining text, audio and video with hyperlink and hypermedia features. Multimedia computer mediated communication is now becoming popular and used everyday by a large number of teachers also in Ukrane (for example, at National Technical University of Ukraine "KPI"). Another technological affordance of computer mediated communication is that it enables multi-dimensional communication including such modes as: one-alone, one-to-one, one-to-many and many-to-many. Regarding language learning, the electronic nature of computer mediated communication makes language manipulable [12, p. 399-416].

In modern literature computer mediated communication is divided into two basic modes including synchronous and asynchronous communication capacity with high and multiway interactivity. Synchronous computer mediated communication discussion involves users exchanging opinions on-line via chat rooms, instant messengers or video conferencing. This mode of communication not only allows learners to communicate similar to face-to-face discourse [8, p. 39-46], but, at the same time, also increases learner monitoring of language usage. Students and teachers must however sign onto a computer system simultaneously to launch the network, which is considered the downside of this mode of communication with regard to different class times and time zones [9, p. 36-38]. In asynchronous communication mode, such as e-mail,

web blog, newsgroups, and postings in bulletin board system, interaction does not need to be simultaneous. This mode allows students more time to read, understand reflect and respond to the posted written messages. Learners also have a chance to monitor and edit their own or other students' writing. Asynchronous computer mediated communication has been widely used in collaborative writing and brainstorming, fostering critical thinking habits of the participants [8, p. 47-48]. For example, at the department of theoretical cybernetics of our university we try to combine synchronous and asynchronous modes during English studying process. It is provided by means of computer-equipped classrooms where students can improve their grammar, phonetic and lexical skills with help of multimedia software suits and open source course management system MOODLE that has become very popular among educators around the world as a tool for creating on-line dynamic web sites for their students. There are many advantages of using such approach. One of them is that students penetrate the educational environment both during the practical foreign language lesson and after it when they have free time to be on-line in order to improve their language skills. The sequence of their work and the results can be visually displayed on any personal computer of our department's laboratory so students are motivated to work harder in the future. But we should not forget about classical methods of teaching. Typical presentation created with help of Microsoft Power Point (prepeared by a student) together with exercises (prepeared by teacher), for example, can give more betefits than usual student's report or just creating a presentation by a person.

Motivation, participation, reflection and autonomy – all play significant roles in collaborative learning and all have been evidently researched in literature. In fact, on-line collaborative learning research in education in general and in language learning in particular has been widely published. The text-based nature of computer mediated communication has meant that collaboration has become a prime source of data for researchers from both interactionist and sociocultural approaches who are investigating second language acquisition. On-line interaction environments, which involve active construction of knowledge, can be potentially used as a powerful tool for collaborative learning and group communication. Computer mediated communication, according to Anthony Kaye, can provide a valuable dimension to collaborative learning as it both fosters more equally distributed turn-taking and supports more thoughtfully composed inputs. Similarly, Linda Harasim claimed that this technology provides a new way for interaction between teachers and learners and among learners themselves and this new form of on-line environment creates a new domain which facilitates collaborative learning.

Computer mediated communication with its particular characteristics, modes and scopes possesses potential benefits applicable to language development, from metalinguistic aspects to language components and skills [3, p. 71-74]. In other words, more comprehensive studies about the introduction and application of computer mediated communication into language learning and teaching in different sociocultural, institutional and individual contexts are required. Teachers should not forget about main advantages of using computer mediated communication, such as:
– text-based and computer-mediated interaction;
– many-to-many communication;
– time and place-independence;
– long distance exchanges.

In the article we made a critical review of computer mediated communication from various theoretical perspectives, namely structural, cognitive and sociocultural. Also, we defined discussion characteristics, modes and scopes of this type of communication which possesses potential advantages capable of improving students' foreign language development. Even though collaborative approaches to foreign language learning via various forms of computer mediated communication have now been well established with a theoretical underpinning, there are still questions left unanswered. As a result, further researches in many aspects of computer mediated communication in language education are still needed.

Література:
1. Beatty K., Nunan D., Computer-mediated collaborative learning, Scientific journal "System", 32(2), 2004.
2. Boone K. C., Speech or writing? E-mail as a new medium, Journal 'Liberal education', 87(3), 2001.
3. Harasim L., Assessing on-line collaborative learning, Scientific journal "Flexible learning in an information society", 2007.
4. Hiltz S. R., Turoff M., Human communication via computer, Norwood, NJ, 2008.
5. Jones S. G., Computer-Mediated Communication and Community, Thousand Oaks, CA, 2005.
6. Kaye A., Computer-mediated communication and distance education, NY, Pergamon Press, 2007.
7. Kern R., Warschauer M., Network-based language teaching, NY, Cambridge University Press, 2000.
8. Lee L., Using web-based instruction to promote active learning, CALICO Journal, 23(1), 2005.
9. Levy M., Stockwell G., Options and issues in computer assisted language learning, Mahwah, NJ, Lawrence Erlbaum Associates, 2006.
10. Luppicini R., Review of computer mediated communication research for education, Instructional Science, 35(2), 2007.
11. Murray D. E., The language of computer-mediated communication. Tesol Quarterly, 34(3), 2000.
12. O'Rourke B., Form-focused interaction in on-line tandem learning, CALICO Journal, 22(3), 2005.
13. Sykes J., Synchronous CMC and pragmatic development, CALICO Journal, 22(3), 2005.
14. Thorne S. L., Computer mediated communication in second and foreign language education, Scientific journal 'Springer Verlag', 31(1), 2008.
15. Walther J. B., Selective self-presentation in computer mediated communication, Scientific journal 'Computers in Human Behaviour', 23(5), 2007.