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THE PECULIARITIES OF TEACHING FOREIGN LANGUAGES BY MEANS OF INFORMATION AND COMMUNICATION TECHNOLOGIES

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ABSTRACT

The paper investigates the peculiarities of teaching foreign languages by means of Information and Communication Technologies (ICT). In the course of a comprehensive study the most effective for the development of students' linguistic and communicative competence, the following types of ICT were singled out and analysed: Internet-based project work, online correspondence by e-mail, chat, blogs, wikis and podcasts and training programs.

The **aim** of the article is to identify the peculiarities of teaching foreign languages by means of ICT

The theoretical, empirical and statistical **methods** have been used to reach the purpose. To check the effectiveness of applying ICT in teaching foreign languages empirical (diagnostic) methods such as testing, observation and discussion were used. The pedagogical experiment with the fourth-year students of Simon Kuznets Kharkiv National University of Economics was conducted. The pedagogical experiment showed the effectiveness of developing foreign language activity by means of ICT.

The statistical methods helped to evaluate the **results** of the research. Using ICT is really helpful to increase students' language competencies and, respectively, it provides the development of foreign language communicative competence in general.

Conclusion: ICT creates a new environment and opportunities for foreign language acquisition; they have become an important educational tool successfully used in foreign language teaching.

KEY WORDS: blogs, foreign language, Internet-based project work, podcasts, wikis.

INTRODUCTION

Times have changed, and, with them, so has education. In the last few decades, new methodologies have been introduced in this field to help meet the requirements of new educational systems. Current information and communication technologies (ICT) have made it possible to work with and analyse large amounts of data and disseminate the results via digital media.

The use of these methodological and innovative changes should be explored in all areas, but might be of particular benefit in the field of foreign language learning, as ICT appears to be a suitable way to improve students' learning and knowledge acquisition in this field (Barr, 2016; Kori et al, 2016; Naqvi, 2017; Sampaio & Almeida, 2016). Altun (2015) suggests that integration of technology into the process of teaching and learning foreign languages leads to increased motivation and, therefore, to a more efficient achievement of learning goals.

Hence, in order to enhance the quality of education, it is essential for foreign language teachers to have a wide range of competencies and to be able to put them to use in the classroom to meet students' needs.

ICT provides a number of advantages for language learning as information and communication technologies help increase the independence and autonomy of students; allow to expand the boundaries of classroom communication with the teacher and introduce problem-oriented types of tasks; implement interactive communication between the participants of the educational process; apply alternative forms of control, including self-control and peer assessment.

One of the major tools of ICT in foreign language learning is a hypertext which is the Internet space for collective creation, editing and storage of documents of various formats with shared access to the history of document changes. Also, hypermedia allows students to focus on the content and use various links to get instant access to various

learning materials like grammatical explanations or exercises, vocabulary notes or comments, pronunciation information, questions or prompts.

The appearance of the Web gave rise to the use of the Internet in communication and learning. The Internet-based communication allows users to share not only immediate, short messages, but also create lengthy documents by means of collaborative writing (learning).

What is more, learners are able to share graphics, sounds and video. Even more vital, students while using the Internet can search through millions of files from around the world within minutes to locate and access authentic materials (newspaper and magazine articles, news broadcasts, movie or book reviews), they can use the Web to publish and share both texts and multimedia materials with their partners or the general public.

That is to say, using the Internet we create an environment where authentic and creative communication is integrated into all aspects of the course.

THEORETICAL FRAMEWORK

It should be noted that one of the effective ways to improve the quality of teaching foreign languages is the digitalization of education. The use of ICT in learning a foreign language is a convenient basis to intensify and personalize learning process. In addition, the ICT contribute to overcoming students' psychological barrier to speak a foreign language.

What is more features such as multimedia, publicity, hypertext structure, access to different websites, page privacy settings, shared access to document creation history, communication asynchrony, administrator role and the ability to add content to the site allow students to do a variety of web-based tasks.

Participants do not need special knowledge in the field of computer science to organize

collaboration on the basis of websites. Without a doubt, ICT is a valuable and innovative teaching and learning a foreign language tool. The rapid growth of ICT has naturally influenced every aspect of the language teaching process. Using technology has positive effects on teaching and learning foreign languages. Technology can be applied to teaching practices to enhance and facilitate foreign language learning.

Computer, Internet, smart boards, cell phones, video games, music players and so on are used in the target language learning process to raise students' motivation and language awareness (Altun, 2015). The implementation of ICT will lead to variety in target language content, contexts and pedagogical methods in the teaching environment. ICT makes the language environment interactive, flexible and innovative. (Padurean, & Margan, 2009; Komar, 2020).

The application of information and communication technologies in teaching foreign languages allows to create a student-centred learning process. They give teachers an opportunity to vary learning environment, to motivate students. They also contribute to the systematization of educational information, optimization of the educational process and the organization of students' independent work.

Integrating technology into language instruction reduces teacher-centred understanding and students' language learning anxiety, but encourages them to be risk takers to practice target language as they are digital natives (Houcine, 2011). Jayanthi and Kumar (2016) explain the positive impacts of ICT on ELT under the basic headings such as availability of materials, students' attitudes, learner autonomy, authenticity, helping teachers, student-centred, and self-assessment.

The availability of a large body of authentic materials such as images, animation, audio and video clips facilitate presenting and

practising a language. As for students' attitudes, ICT increases motivation. The students feel highly motivated to learn a language as they displayed positive attitudes towards language learning as they use a computer and learn in the stress-free learning environment.

In addition, ICT fosters learner autonomy as ICT tools provide learners to take responsibilities for their learning. Students are free to choose the material convenient for their learning styles. Furthermore, ICT provides authentic situations and real-life learning environment. As ICT offers different types of facilities and availability of teaching materials, EFL teachers only suggest and design these tools as complementary teaching materials.

Contrary to the traditional learning environment, ICT supports student-centred learning together with teacher-student interaction. As for assessment, with the ICT both receptive and productive skills are easily and effectively assessed. The teacher may decide and design relevant materials to test students' achievement in all skills.

A great number of studies have been conducted to examine the advantages of integrating ICT into foreign language acquisition. Therefore, the integration of new ICT tools such as blogs, chats, correspondence by e-mail, ICT, Internet-based project work, podcasts, training programs, wikis in foreign language acquisition was not the investigation subject of a wide range of scholars.

The **aim** of the article is to identify the peculiarities of teaching foreign languages by means of ICT. According to the aim we set the following tasks 1) to analyse scientific literature and to determine the peculiarities of teaching foreign languages by means of ICT; 2) to overview the available Internet tools which are valuable to foreign language teaching and single out the most appropriate and efficient application of relevant ICT; 3) to

check experimentally efficiency of teaching foreign languages by means of ICT.

METHODOLOGY

There were three groups of methods used for achieving the purpose and tasks of the research. They are theoretical, empirical and statistical methods.

So, among general theoretical methods we have chosen analysis and synthesis of psycholinguistic, linguistic, psychological and pedagogical literature since they helped to study and describe the problem of the ICT use in foreign languages acquisition, also to identify specific ICT requirements, which ensure the development of professional competence and increase the interest and motivation of students.

The empirical (diagnostic) methods, namely testing, observation and discussion were used in the pedagogical experiment where we have been checking the use of ICT on the lessons of foreign languages as means of improving the efficiency of teaching foreign languages. The statistical methods (such as students' test) were needed to evaluate the experiment results.

RESULTS

The following impacts seem to be the most obvious ones when using ICT to support foreign language teaching: the possibility to adapt easily the teaching materials according to circumstances, learner's needs and response; ICT allows to react upon and enables the use of recent/daily news; it offers access to authentic materials on the web; the possibility to combine/use alternately (basic) skills (text and images, audio and video clip etc.); lectures become more interesting and less ordinary which boosts learners' engagement; ICT enables to focus on one specific aspect of the lesson (Houcine, 2011).

As a result, a comprehensive study found that the most effective for the development of linguistic and communicative competence of students are the following types of ICT:

Internet-based project work, online correspondence, chat, blogs, wikis and podcasts, training programs.

According to the analysis of scientific literature, we can state that Internet-based project work is widely used for teaching foreign languages. Authentic materials of projects captivate, motivate, and help students to get a successful outcome. Project work has a great educational potential and can be effectively used in foreign languages classes or serve as a visual support while speech training.

Internet-based project work involves more extended Internet use over a series of lessons and hence increases the proportion of ICT in the blended course. The benefits of this technology-enhanced teaching are numerous: project work can be planned as a short-term or a long-term activity depending on the group or course profile and goals to be achieved; no specific technical knowledge is necessary to plan or design the project; projects are group activities involving communication/interaction and sharing ideas (which is the principal goal of teaching a language); it can be implemented as a combination of language and subject teaching (language for specific purposes or CLIL); it encourages cooperative work and critical thinking; learners are exposed to real-world situations and authentic materials.

Correspondence by e-mail enables students to communicate with each other and collaborate on the tasks given by the teacher both as part of a blended teaching or traditional instruction. They can be used from home, the Internet café or workplace, thus providing lots of flexibility and freedom for the student environment. E-mailing also is a time-saving tool for student-teacher communication as part of tasks may be set, marked, returned with feedback without face-to-face contact.

Finally, e-mail is definitely one of the most used and useful tools in ICT technology. It allows teachers around the world to keep in touch with each other and share ideas and

materials. If you haven't done it yet, consider joining a teachers' network, mailing list or a discussion club, as part of your professional development process. The search engine will provide a list available if you indicate appropriate keywords.

There are some methods and possibilities offered by e-mail in teaching a foreign language: students submit work as attachments to the teacher to be marked and returned; students share assignments and share roles, responsibilities by e-mail; teacher sends students feedback, assignments, links, sites to be visited or online practice addresses; students discuss language problems, do some peer consultation; teachers provide e-mail consultation on certain language points.

E-mail can be used for collaborative writing (e.g., one group begins a story, another group adds to it, and so on) or during the class to contact real companies or organizations (e.g., as part of project work) since the chances that the message will be answered are higher compared to those sent from a private mail address. E-mails may be also used in Key pal projects (a project between groups of key pals who are learning the same foreign language in different countries) both in and outside the classroom (certainly, teacher's guidance in language accuracy and correctness will have a different degree).

Chat is a tool that allows for real-time communication over the Internet in a text or audio format. Audio chats are becoming increasingly available because of simple and cheap or even gratis software (chat facilities are available from Yahoo, Messenger, MSN Messenger, Google Talk or Skype) and devices (minimum equipment required: a microphone, speakers, headphones).

Blogs, wikis and podcasts are examples of software and communication tools which allow people to collaborate online. Blogs, wikis and podcasts are comparatively easy to set up and use and do not require any specific knowledge. The use of blogs in the language classroom is all about cross-cultural

communication, learner participation and collaborative learning. Blogs can be set up and used by a teacher, an individual learner or by a class.

This mode of communication may be used for project-based learning by both students and the teachers as a medium to post news and comments, extra reading, homework, links, study tips, etc. Students' blogs can also be used as a tool for reflection on what they are learning or how they have learnt something. In a class blog, all students post to the same blog. When introducing web blogs in the course, the teacher has to decide on how the language accuracy will be monitored (if at all), which tasks will be moderated, and on feedback pattern.

The advantages of using the blogs in the classroom include: providing a "real world" tool for practising written skills (authentic and broad audience otherwise not available); enabling contacts with students in other countries (identifying cross-cultural differences, developing tolerance); opening more opportunities for developing written skills (more purposeful writing, use of visuals, practising ways of attracting the audience) and assessing them – provided the blog entries are signed and assessment strategies clearly defined; encouraging the quieter and less confident learners to participate (ensuring a degree of anonymity).

Wikis are different from blogs in that they are like a public website set up by one person but subsequently developed by multiple authors who can add, delete, and edit the information posted. The changed parts of the wiki are automatically saved and can be restored or revisited. If you decide to set up a free wiki, visit: www.pbwiki.com.

In language teaching, podcasts can be used in two ways: 1) students listen to podcasts made by others or 2) they produce their own podcast. Podcasts are available on the Internet, so they can be used in class via the computer. An example of the authentic podcast site for learners of English is <http://www.bbc.co.uk>. Site for teachers and

learners of English is <http://www.englishcaster.com/>. Podcast site can be set up at <http://www.podomatic.com>.

At present there are a number of educational computer programs and textbooks that have training programs both domestic and authentic. These applications are easy to apply and they are a convenient and effective tool for individual students' work. Each of these training programs has certain goals to work with grammar, vocabulary, reading, phonetics and require basic computer skills.

The most common programs which might be used in the university: "Living English", "Bridge to English", "All clear", "BBC Learning English", etc. Such programs contain a great number of speaking exercises, exercises to practise pronunciation, grammar exercises, activities and games to practice spelling. The topics of the units make it easy to integrate the course into a learning process.

To summarize, the Internet and the Internet-based technologies offer a variety of modes of learning a language, introducing a different environment, mobility and flexibility in the schedule as well as communicative, collaborative attitudes to acquiring skills. The degree to which these tools will be exploited depends entirely on the complex of

teacher-student, teacher-teacher, teacher-institution, student-student, teacher-syllabus, teacher-technology, student-technology relations.

In order to solve the research tasks, the pedagogical experiment was carried out on the basis of Simon Kuznets Kharkiv National University of Economics in 2020. The group of the fourth-year students was chosen randomly to be the sample of the study. The total number of students was 107. The students of this group were divided into two groups. The control group had 55 students; they were taught more traditionally. And the other experimental group had 52 students; they were taught with ICT mostly. All the students included in this study had the same learning experience. Students during the first term were selected to achieve the purpose of this study.

The students run some placement tests at the beginning of the experiment including Reading, Listening, and Use of English, which allowed us to define their level of the main types of English speech activity. After the training course at the end of the experiment the students were tested as well.

To ensure the equivalence of the two groups before starting the study, a placement test was applied. Table (1) shows the results (%):

Table 1. Students' Academic Results at the Course Beginning

Types of Activity	Groups	
	Experimental	Control
Reading	26.6	26.8
Listening	32.1	33.2
Use of English	41.3	40.0

Table 1 shows that there were no statistically significant differences between the experimental and control group at the placement test of reading listening and use of English skills. This means that the control group and the experimental group were equivalent before starting the study.

During the second term students of the experimental group were taught a foreign language using different ICT tools, students

of the control group were taught a foreign language with using some ICT tools. Are there significant differences in the students' reading comprehension and grammar skills due to the strategy of teaching with the help of ICT? To answer this question final tests were conducted and the results were calculated. Table (2) presents the results in comparison.

Table 2. *Students' Academic Results at the Course Beginning and its End*

№	Types of Activity	At the Beginning of the Course		At the End of the Course		Average Progress (%)	
		Experimental	Control	Experimental	Control	Experimental	Control
1.	Reading	26.6	26.8	47.9	35.3	21.3	8.5
2.	Listening	32.1	33.2	41.6	35.1	9.5	1,9
3.	Use of English	41.3	40.0	50.0	17.0	8.7	23.0

So, the students improved their results in all types of activity. Table (2) shows the progress of the two groups (Experimental and Control). In the Preliminary Reading Test were (26.6) and (26.8) respectively while in the Final Test were (47.9) and (35.3); in the Preliminary Listening Test were (32.1) and (33.2) respectively while in the Final Test were (41.6) and (35.1) respectively; in Preliminary Use of English Test were (41.3) and (40.0) respectively while in the Final Use of English Test were (50.0) and (17).

This means that the students' reading, listening and use of English skills scores in the experimental group were improved in the final test because of the use of ICT.

DISCUSSION

Thus, the study investigated the effectiveness of using ICT in teaching a foreign language. The results showed that there were statistically significant differences in reading, listening and use of English skills due to the strategy of teaching (teaching using ICT and teaching without using ICT) in favour of the ICT teaching strategy. The results showed that using ICT at the lessons of foreign languages contributed to the improvement of students' achievements. Other researchers (Holubnycha et al, 2019), (Kostikova, & Miasoiedova, 2019) come to the same results. Students had the opportunity to receive information from different resources, share their knowledge and skills in an appropriate manner and interact more effectively.

It is evident, the experimental results can be extrapolated for other researchers' data as new means of ICT, Internet recourses, social networking sites are constantly appearing (for example: Nahaev, & Hrynova, 2020). Further practical use of ICT in foreign language acquisition; developing and describing the assessment criteria for the ICT lessons; studying and integrating different approaches, preparation programs for learning foreign languages by means of ICT, also optimization of tasks for students' individual and extra-class activities might be a prospect for further research. Based on the foregoing, it can be argued that the use of ICT is an effective direction in foreign language teaching and needs further study.

CONCLUSION

The importance of using ICT in learning a foreign language is argued and proven in practice. The conducted pedagogical experiment showed that the use of ICT has a positive impact on the quality of teaching a foreign language.

Finally, the study demonstrated that the integration of ICT in the process of teaching a foreign language makes it more dynamic, intensive, helps organize the learning process efficiently, increases the efficiency of communicative competence development, provides a positive learning motivation and cognitive students' activity, and facilitates the activation of students' independent study.

CONFLICT OF INTERESTS

The authors declare no conflict of interests.

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REFERENCES

- Altun, M. (2015). The integration of technology into foreign language teaching. *International Journal on New Trends in Education and Their Implications*, 6(1), 22–27.
- Asabere, N. Y., & Enguah, S. E. (2012). Integration of expert systems in mobile learning. *International Journal of Information and Communication Technology Research*, 2(1), 55–61.
- Barr, D. (2016). Students and ICT: An analysis of student reaction to the use of computer technology in language learning. *IALLT Journal of Language Learning Technologies*, 36(2), 19–38.
- Blackmore, J., Hardcastle, L., Bamblett, E., & Ownens, J. (2003). *Effective use of information and communication technology (ICT) to enhance learning for disadvantaged school students*. Deakin Centre for Education and Change, Institute of Disability Studies, Deakin University and Institute of Koorie Education, Deakin University.
- Dudenev, G. (2008). *How to Teach English with Technology*. Pearson Longman.
- Hennessy, S., Ruthven, K., & Brindley, S. (2005). *Teacher perspectives on integrating ICT into subject teaching: Commitment, constraints, caution and change*. <http://www.educ.cam.ac.uk/research/projects/istl/WPo42.pdf>
- Holubnycha, L., Kostikova, I., Kravchenko, H., Simonok, V., & Serheieva, H. (2019). Cloud Computing for University Students' Language Learning. *Revista Romaneasca pentru Educatie Multidimensionala*, 11(4), 55-69. <http://dx.doi.org/10.18662/rrem/157>
- Houcine, S. (2011). *The effects of ICT on learning/teaching in a foreign language* https://conference.pixel-online.net/conferences/ICT4LL2011/common/download/Paper_pdf/IBL69-437-FP-Houcine-ICT4LL2011.pdf
- Jayanthi, N. S., & Kumar, R. V. (2016). Use of ICT in English language teaching and learning. *Journal of English language and literature*, 3(2), 34–38.
- Komar, O. (2020). European Experience of the Use of Information and Communication Technologies in Initial Education of the English Language Teachers. *Educational Challenges*, 25(1), 55–67. <https://doi.org/10.34142/2709-7986.2020.25.1.05>
- Kori, K., Pedaste, M., Leijen, Ä., & Tõnisson, E. (2016). The role of programming experience in ICT students' learning motivation and academic achievement. *International Journal of Information and Education Technology*, 6(5), 331–337
- Kostikova, I., & Miasoiedova, S. (2019). Supporting Post-Graduate Students Writing Skills Development with the Online Machine Learning Tool: Write & Improve. *Information Technologies and Learning Tools*, 74(6), 238–249. <https://doi.org/10.33407/itlt.v74i6.2600>
- Livingstone, S. (2012). Critical reflections on the benefits of ICT in education. *Oxford review of education*, 38(1), 9–24. <http://dx.doi.org/10.1080/03054985.2011.577938>
-

- Nahaev, V., & Hrynova, Y. (2020). Pedagogical Model of Organization of Distance Teaching and Learning in the Conditions of Network Technology of Students' Educational and Creative Activity Management. *Educational Challenges*, 25(1), 82–95. <https://doi.org/10.34142/2709-7986.2020.25.1.07>
- Naqvi, S. (2017, October). Towards an integrated framework: Use of constructivist and experiential learning approaches in ICT-supported language learning. In *Conference proceedings. ICT for language learning* (pp. 229-234). *libreriauniversitaria. it Edizioni*.
- Padurean, A., & Margan, M. (2009). Foreign language teaching via ICT. *Revista de Informatica Sociala*, 7(12), 97-101.
- Sampaio, D., & Almeida, P. (2016). Pedagogical strategies for the integration of augmented reality in ICT teaching and learning processes. *Procedia Computer Science*, 100, 894–899. www.dest.gov.au/NR/rdonlyres/D63F92A3-931.../ICTreport.pdf
- Yunus, M., Nordin, N., Salehi, H., Sun, C. H., & Embi, M. A. (2013). Pros and cons of using ICT in teaching ESL reading and writing. *International Education Studies*, 6(7), 119-130. <http://dx.doi.org/10.5539/ies.v6n7p119>

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

ОСОБЛИВОСТІ ВИКЛАДАННЯ ІНОЗЕМНИХ МОВ ЗАСОБАМИ ІНФОРМАЦІЙНО-КОМУНІКАЦІЙНИХ ТЕХНОЛОГІЙ

У статті обґрунтовано особливості викладання іноземних мов засобами інформаційно-комунікаційних технологій (ІКТ). Наголошено на важливості модернізації змісту навчання іноземної мови з використанням ІКТ, а також окреслено їх переваги для навчання іноземної мови. В ході дослідження було проаналізовано та виділено завдання, які сприяють найбільш ефективному навчанню іноземної мови, а саме Інтернет-проект, онлайн листування, чати, блоги, вікі, подкасти та навчальні програми.

Мета статті – розкрити ефективність навчання іноземної мови з використанням сучасних засобів ІКТ.

Задля вирішення поставленої мети використовувалися теоретичні, емпіричні та статистичні **методи**. Для перевірки ефективності застосування ІКТ у навчанні іноземної мови використовувались емпіричні (діагностичні) методи, такі як тестування, спостереження та обговорення. Було проведено педагогічний експеримент зі студентами четвертого курсу Харківського національного економічного університету імені С. Кузнеця. За допомогою педагогічного експерименту було доведено ефективність використання ІКТ задля навчання іноземної мови. Статистичні методи допомогли оцінити результати дослідження.

Результати. Використання ІКТ, зокрема у навчанні іноземної мови, є досить ефективним, оскільки сприяє підвищенню рівня різних мовних компетенцій та, відповідно, забезпечує удосконалення іншомовної комунікативної компетентності студентів у цілому.

Висновки: ІКТ створюють нове середовище та можливості для організації процесу засвоєння іноземної мови; вони стали важливим освітнім

інструментом, який необхідно успішно використовувати в навчанні іноземної мови.

КЛЮЧОВІ СЛОВА: *блоги, вікі, іноземна мова, Інтернет-проекти, подкасти, чат.*

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