ФИЛОЛОГИЯ

(шифр научной специальности: 5.9.8)

Научная статья
УДК 378.02
doi: 10.18522/2070-1403-2026-116-3-139-145

РЕСУРСЫ ИКТ КАК ТЕХНОЛОГИЧЕСКАЯ СОСТАВЛЯЮЩАЯ СОВЕРШЕНСТВОВАНИЯ ГРАММАТИЧЕСКИХ НАВЫКОВ ОБУЧАЕМЫХ

© Борис Георгиевич Солдатов[1], Наталья Викторовна Солдатова[2]
[1]Донской государственный технический университет, Ростов-на-Дону, Россия; [2]Российская таможенная академия, Ростовский филиал, Ростов-на-Дону, Россия
[1]bsoldatov@rambler.ru [2]natalya.nsoldatova @yandex.ru

Аннотация. Рассматриваются компьютерные обучающие программы на цифровых платформах, которые применяются в учебном процессе на практических занятиях по английскому языку преподавателями кафедры иностранных языков. Подчеркивается, что данные программы являются эффективным педагогическим средством формирования грамматического навыка студентов. Показано, что использование компьютерных технологий при обучении грамматике в современном вузе, которое является обязательным требованием, прописанным в Федеральном государственном образовательном стандарте высшего образования, представляется целесообразным с точки зрения практики преподавания иностранного языка, так как способствует повышению интереса к учебному материалу и процессу обучения в целом.

Ключевые слова: информационно-коммуникационные технологии, учебный процесс, грамматика, английский язык, обучающие программы, инновационные методы, мотивация, грамматические навыки.

Для цитирования: Солдатов Б.Г. Солдатова Н.В. Ресурсы ИКТ как технологическая составляющая совершенствования грамматических навыков обучаемых // Гуманитарные и социальные науки. 2026. Т. 116. № 3. С. 139-145. doi: 10.18522/2070-1403-2026-116-3-139-145

PHILOLOGY

(specialty: 5.9.8)

Original article

ICT resources as a technological component of improving students' grammatical skills

© Boris G. Soldatov[1], Natalya V. Soldatova[2]
[1]Don State Technical University, Rostov-on-Don, Russian Federation; [2]Russian Customs Academy Rostov Branch, Rostov-on-Don, Russian Federation
[1]bsoldatov@rambler.ru [2]natalya.nsoldatova @yandex.ru

Abstract. The article considers computer training programs on digital platforms that are used in the educational process in practical English classes by teachers of the Department of Foreign Languages. It is emphasized that these programs are an effective pedagogical means of forming students' grammatical skills. It is shown that the use of computer technologies in teaching grammar in a modern university, which is a mandatory requirement prescribed in the Federal State Educational Standard of Higher Education, seems appropriate from the point of view of teaching a foreign language, as it helps to increase interest in the educational material and the learning process as a whole.

Keywords: information and communication technologies, educational process, grammar, English language, educational programs, innovative methods, motivation, grammatical skills.

For citation: Soldatov B.G., Soldatova N.V. ICT resources as a technological component of improving students' grammatical skills. *The Humanities and Social Sciences.* 2026. Vol. 116. No 3. P. 139-145. doi: 10.18522/2070-1403-2026-116-3-139-145

Introduction

Grammar is an integral part of the teaching foreign languages process, an important component of all the types of speech activity. Currently, a practical approach to teaching foreign language grammar is manifested in the careful selection of basic grammar rules that

give students the opportunity to systematize their knowledge in the process of constructing sentences; in the effective use of time in practical classes; in the application of economical and effective methods of explaining grammar, including the use of models; in the use of exercises on a specific topic of the curriculum in the educational process; in the application of modern teaching technologies and programmed educational materials [10].

The main goal of teaching the basics of grammar to non-linguistic university students is to teach them how to construct sentences in a foreign language correctly, write without mistakes, and express their thoughts logically and consistently, as well as to develop their critical thinking. By mastering grammar, students can not only speak the language they are learning, but also read, understand foreign speech, and correctly construct sentences in a foreign language [3].

The purpose of this scientific article is to justify the use of information and communication technologies in the educational process to improve the quality of students' English grammar understanding.

The subject of the study is the experience of using digital platforms in teaching English grammar.

The object of the study is the process of forming non-linguistic university students' grammatical skills.

Methodology

The article deals with the research of the methodological basis for digital platforms application in foreign language teaching process. The research methods applied by the authors include analytical and descriptive methods, the method of analyzing and summarizing the experience of using different digital platforms to form and develop students' grammatical skills.

Results

Teaching foreign language grammar implies the application of innovative methods and approaches allowing students to use their grammatical knowledge in practice. Hence the learning process should be organized providing that theoretical knowledge becomes practical and can be applied in actual communication situations.

Teaching foreign language grammar process supposes the combination of three main aspects:

1. Language.

This aspect constitutes a set of passive and active grammatical minimums. The active minimum can include grammar rules that students use in both their spoken and written language.

The passive minimum, from the point of view of grammar, is most often found in printed texts – in textbooks, in handouts. The passive grammatical minimum is understood as a set of grammatical knowledge necessary for a basic level of language proficiency. It includes the understanding and use of basic tenses (Present Simple, Past Simple, Present Continuous, Future Simple), articles, possessive pronouns, prepositions and other basic grammatical constructions. The mastering of the passive grammatical minimum allows students to build basic sentences, understand the main content of texts in the language being studied.

The passive minimum includes structures that are important to recognize and interpret correctly:

- grammatical difficulties that include morphological and syntactic aspects;
- grammatical phenomena that are not used in the native language and cause difficulties for students [14; 5].

2. Psychological.

This aspect includes the motivation of students to learn the grammar of a foreign language. It contributes to a more qualitative and effective process of learning grammar. Also, motivation will make the learning process more interesting for students [12].

3. The combination of the didactic and methodological aspect.

This aspect implies the extracurricular work of students in order to fully and qualitatively master the grammatical theme of the working program of the discipline, to

develop the ability to search and analyze new information, the skill of independent use of various sources and reference books on the grammar of the studied language [20]. Summing up the above, it can be concluded that knowledge of students' grammatical skills forming aspects contributes to the development of correct oral and written speech skill in terms of grammar. This skill is the basis for the competent use of a foreign language in various communicative situations [16; 7; 17].

With the development of the information society, where knowledge and its processing play a dominant role, technical tools, new approaches, and methods of teaching English grammar have become widely used in higher education institutions. To implement innovative approaches in the educational process, it is necessary to use information and communication technologies (ICT) [11; 2].

Information and communication technology is a pedagogical technology based on personal computers, computer networks, and communication tools. The main characteristics of pedagogical technology using ICT are:

1. mediation – interaction takes place through computer-based learning tools;
2. efficiency – the ability to complete tasks in online and offline formats, saving time when receiving a response or assessment;
3. individuality – the ability to make personal choices;
4. corporate character – the ability to communicate in groups;
5. mass coverage – the ability to connect an unlimited number of learners;
6. accessibility – the ability to discuss any topics or issues of interest;
7. virtuality – a special environment for communication and discussion.
8. aesthetics – the ability to express one's thoughts concisely and clearly;
9. multidimensionality – the involvement of interdisciplinary connections in the learning process;
10. versatility – communication with a wide audience, allowing everyone to express their opinions and discuss them with others;
11. technological diversity – a variety of programs that allow students to complete grammar tasks of any level of complexity [1; 13; 4].

Computer-based learning tools are a key element of modern educational information technologies and involve the use of computer-based grammar training programs in practical English classes on digital platforms [18].

The application of digital platforms in teaching English grammar allows students to access interactive learning materials that include visual content and audio recordings, which promotes better understanding of the grammar rules of the language being learnt [6; 15].

Discussion

For example, using the Duolingo digital platform, students can progress through the levels as they master the grammar material of the course curriculum and earn rewards for their achievements. The user is presented with a series of thematic lessons that can be divided into two main categories: vocabulary and grammar (verbs in the present, past, and future tenses, plural nouns, conjunctions, prepositions, declension of pronouns, types of interrogative sentences, relative pronouns, infinitives, and gerunds) [9].

Depending on the test results, the teacher may offer students exercises of varying difficulty levels based on their grammar proficiency.

The Puzzle English is the platform offering a structured approach to grammar learning. The materials are presented in a coherent manner, starting from easy material and finishing with the most complicated rules. This approach helps students to develop their skills in mastering the English language grammar.

The advantages of applying Puzzle English are, first of all, high-quality materials, as the present digital platform provides a wide range of texts, video lessons, audio recordings, and exercises covering various aspects of grammar.

Puzzle English offers tasks enabling students to practice English grammar in interactive forms. This encourages students to be involved in the learning process and improves grammar rules understanding.

When applying this platform, one can complete grammar puzzles by choosing the correct verb form or tense from a list of options.

Another advantage is individual approach to teaching grammar, which grants the opportunity to adapt the English grammar learning program according to each student's knowledge level. Students earn points for regularly visiting the website and completing the learning program, which can serve as additional motivation for users of this platform.

Overall, Puzzle English is a useful tool for learning English grammar, offering high-quality materials and an individualized approach to teaching. However, like any other educational resource, its effectiveness depends on its regular use in the learning process [9; 8].

The next digital platform applied in the study of English grammar is called Lingualeo. Lingualeo is a platform that is widely used by teachers of the Foreign Languages and World Languages and Cultures Departments to develop the grammatical skills of students. The tasks presented on this platform in the interactive form help students to understand the grammar of English better and to learn how to apply their skills in practice [19].

Thus, by analyzing the experience of information and communication technologies (ICT) application in the study of grammatical material, we can conclude that the use of ICT allows for positive learning motivation, rational organization of the educational process, student’s knowledge control improvement, and students' cognitive abilities development [2; 12; 16; 18].

Conclusions

Grammatical skills forming is one of the priorities at the university at all stages of foreign language learning, so it is important to use innovative approaches to make the learning process more effective and interesting for students. To implement these conditions, the improvement of practical classes in English is being introduced, namely the study of grammar using information and communication technologies (ICT). The ICT application provides the learning material on English grammar with such qualities as visibility, systematic presentation, accessibility, and mobility.

Due to various computer-based educational programs and digital platforms, students get the opportunity to work at their own pace and choose tasks and materials corresponding to their interests and needs. As a result, a more flexible and adaptive learning environment promoting better grammar material mastering can be created.

ICT is of great importance for teachers in optimizing their teaching activities, improving their quality, individualizing learning process, and in enhancing students' knowledge of the target language grammar.

Список источников

1. *Газиева М.Т.* The use of ICT in teaching and learning the foreign language to prevail the problems in mixed ability groups // Молодой ученый. 2017. № 51 (185). С. 269–270. – URL: https://moluch.ru/archive/185/46778
2. *Думброва А.А.* ИКТ как средство формирования и совершенствования грамматических навыков английского языка // Вестник науки. 2023. Вып. 5 (62). Т. 4. С. 258–266. – URL: https://www.вестник-науки.рф/article/8395 (дата обращения 29.12.2025).
3. *Зиннатова Д.М.* Особенности организации обучения иностранному языку в техническом вузе // Международный научно-исследовательский журнал. 2022. № 8 (122). – URL: https://research-journal.org/archive/8-122-2022
4. *Игнаткова С.В.* Применение информационно-коммуникационных технологий при развитии иноязычной грамматической компетенции у будущих лингвистов-переводчиков // Педагогическое образование в России. 2024. Вып. 4. С. 186–197.

5. *Кулухова Е.А.* Актуальные проблемы изучения иностранного языка в образовательных учреждениях // Гуманитарные научные исследования. 2022. № 7. – URL: https://human.snauka.ru//2022/07/50940
6. *Лобанова Т.Е.* Организация самостоятельной работы студентов в процессе обучения иностранному языку в техническом вузе // Современные проблемы науки и образования. 2022. № 4. – URL: https://science-education.ru/ru/article/view?id=31914
7. *Сайдалиева Г.А.* The use of computer technologies in learning foreign languages // Молодой ученый. 2017. № 1 (135). С. 537–540. – URL: https://moluch.ru/archive/135/37872
8. *Солдатов Б.Г., Солдатова Н.В.* Метод проектов как педагогическая технология при дифференцированном обучении английскому языку студентов неязыкового вуза // Академический Вестник Ростовского филиала Российской таможенной академии. 2023. № 1 (50). С. 113–118.
9. *Солдатов Б.Г., Солдатова Н.В.* Методические требования к организации самостоятельной работы студентов при применении цифровых инструментов Flipp и Quizziz как средств интерактивного обучения английскому языку // Академический Вестник Ростовского филиала Российской таможенной академии. 2024. № 2 (55). С. 128–133.
10. *Bilyalova A.* ICT in Teaching a Foreign Language in High School // Procedia – Social and Behavioral Sciences 237. 2017. P. 175–181.
11. *Demirkan O.* Pre-service Teachers' Views about Digital Teaching Materials // Educational Policy Analysis and Strategic Research. 2019. Vol. 14. No. 1. P. 40–60. DOI: 10.29329/epasr.2019.186.3
12. *Gabdreeva N., Yakhina R., Salekhova L., Grigorieva K.* Motivation and ICT in English Teaching // Proceedings of INTED 2018 Conference, 5th–7th March 2018, Valencia, Spain. P. 4458–4462.
13. *Grigorieva K., Salekhova L.* Social networks in teaching English for Specific Purposes //11th International Technology, Education and Development Conference, Valencia, Spain, 6–8 March, 2017. P. 0500–0502.
14. *Khodabandeh F., Alian J., Soleimani H.* The Effect of MALL-based Tasks on EFL Learners' Grammar Learning // Teaching with Technology, ERIC. 2017. Vol. 17. No. 2. P. 29–41.
15. *Mai L.T.* Benefits and Challenges to Integrate ICT in EFL Teaching and Learning Activities // IOSR Journal of Research & Method in Education. Volume 10. Issue 3 Ser. IV (May – June 2020). P. 46–50.
16. *Novikova S.V., Sosnovsky S.A., Yakhina R.R., Valitova N.L., Kremleva E.Sh.* The specific aspects of designing computer-based tutors for future engineers in numerical methods studying // Integratsiya obrazovania. 2017. T. 21. № 2 (87). P. 322–343.
17. *Shkitina A.* Google Forms Questionnaire: a survey depicting the efficacy of practical English grammar classes from the perspective of the experimental group. – URL: https://forms.gle/yVsad1yy26rejJyd6 (accessed 13.03.2021).
18. *Shoimqulova M.S.* The Use of ICT in English Lessons // Eurasian Research Bulletin. Vol. 5. February 2022. Pp. 71–79.
19. *Soldatov B., Soldatova N.* Distance education didactic principles application in teaching // E3S Web of Conferences 273, 12031(2021). INTERAGROMASH 2021. – URL: https://doi.org/10.1051/e3sconf/202127312031
20. *Usmanova F.M.* Enhancing Language Learner's Grammar Skills Using ICT Technologies // Science and Innovation. International Scientific Journal. Vol. 3. Issue 3. March 2024. P. 239–245.

References

1. *Gaziyeva M.T.* The use of ICT in teaching and learning the foreign language to prevail the problems in mixed ability groups // Young Scientist. 2017. Issue 51 (185). P. 269–270. – URL: https://moluch.ru/archive/185/46778
2. *Dumbrova A.A.* ICT as a means of forming and perfection of English language grammar skills // Science Bulletin. 2023. Issue 5 (62). Vol. 4. P. 258–266. – URL: https://www.вестник-науки.рф/article/8395 (accessed 29.12.2025).
3. *Zinnatova D.M.* Foreign language teaching organization peculiarities at a technical university // International Research Journal. 2022. Issue 8(122). – URL: https://research-journal.org/archive/8-122-2022
4. *Ignatkova S.V.* Information communication technologies application in the process of future linguists-translators' foreign language grammar competence development // Pedagogical Education in Russia. 2024. Issue 4. P. 186–197.
5. *Kulukhova E.A.* Topical problems of foreign language learning at educational establishments // Humanitarian Scientific Research. 2022. Issue 7. – URL: https://human.snauka.ru//2022/07/50940
6. *Lobanova T.Ye.* Students' independent activities organization in the process of foreign language teaching at a technical university // Modern Science and Education Problems. 2022. Issue 4. – URL: https://science-education.ru/ru/article/view?id=31914
7. *Saidaliyeva G.A.* The use of computer technologies in learning foreign languages // Young Scientist. 2017. Issue 1 (135). Pp. 537–540. – URL: https://moluch.ru/archive/135/37872
8. *Soldatov B.G., Soldatova N.V.* Projects method as a pedagogical technology in differentiated teaching English to non-linguistic university students // Academic Bulletin of Russian Customs Academy Rostov Branch. 2023. Issue 1 (50). P. 113–118.
9. *Soldatov B.G., Soldatova N.V.* Methodical requirements to students' independent work organization via application of Flipp and Quizziz digital tools as means of interactive English teaching // Academic Bulletin of Russian Customs Academy Rostov Branch. 2024. Issue 2 (55). P. 128–133.
10. *Bilyalova A.* ICT in Teaching a Foreign Language in High School // Procedia – Social and Behavioral Sciences 237. 2017. P. 175–181.
11. *Demirkan O.* Pre-service Teachers' Views about Digital Teaching Materials // Educational Policy Analysis and Strategic Research. 2019. Vol. 14. No. 1. P. 40–60. DOI: 10.29329/epasr.2019.186.3
12. *Gabdreeva N., Yakhina R., Salekhova L., Grigorieva K.* Motivation and ICT in English Teaching // Proceedings of INTED 2018 Conference, 5th–7th March 2018, Valencia, Spain. P. 4458–4462.
13. *Grigorieva K., Salekhova L.* Social networks in teaching English for Specific Purposes // 11th International Technology, Education and Development Conference, Valencia, Spain, 6–8 March, 2017. Pp. 0500–0502.
14. *Khodabandeh F., Alian J., Soleimani H.* The Effect of MALL-based Tasks on EFL Learners' Grammar Learning // Teaching with Technology, ERIC. 2017. Vol. 17. No. 2. P. 29–41.
15. *Mai L.T.* Benefits and Challenges to Integrate ICT in EFL Teaching and Learning Activities // IOSR Journal of Research & Method in Education. Volume 10. Issue 3 Ser. IV (May – June 2020). P. 46–50.
16. *Novikova S.V., Sosnovsky S.A., Yakhina R.R., Valitova N.L., Kremleva E.Sh.* The specific aspects of designing computer-based tutors for future engineers in numerical methods studying // Integratsiya obrazovania. 2017. T. 21. № 2 (87). P. 322–343.

17. *Shkitina A.* Google Forms Questionnaire: a survey depicting the efficacy of practical English grammar classes from the perspective of the experimental group. – URL: https://forms.gle/yVsad1yy26rejJyd6 (accessed 13.03.2021).
18. *Shoimqulova M.S.* The Use of ICT in English Lessons // Eurasian Research Bulletin. Vol. 5. February 2022. P. 71–79.
19. *Soldatov B., Soldatova N.* Distance education didactic principles application in teaching // E3S Web of Conferences 273, 12031(2021). INTERAGROMASH 2021. – URL: https://doi.org/10.1051/e3sconf/202127312031
20. *Usmanova F.M.* Enhancing Language Learner's Grammar Skills Using ICT Technologies // Science and Innovation. International Scientific Journal. Vol. 3. Issue 3. March 2024. P. 239–245.

Статья поступила в редакцию 12.02.2026; одобрена после рецензирования 25.02.2026; принята к публикации 25.02.2026.
The article was submitted 12.02.2026; approved after reviewing 25.02.2026; accepted for publication 25.02.2026..