

Научная статья

УДК 37.013

DOI: 10.57769/2227-8591.12.4.06

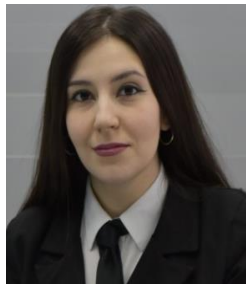
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ИНТЕРНЕТ-ТЕХНОЛОГИИ В ОБУЧЕНИИ ГРАММАТИКЕ АНГЛИЙСКОГО ЯЗЫКА СТУДЕНТОВ АВИАЦИОННОГО УНИВЕРСИТЕТА



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Аннотация. Статья посвящена проблеме формирования грамматических навыков с применением современных интернет-технологий в процессе обучения английскому языку студентов авиационного университета. Задачами исследования являются: проанализировать онлайн-ресурсы, посвященные обучению грамматике английского языка, дать рекомендации по их применению и доказать эффективность обучения грамматике используя ресурсы Интернета. Авторы статьи представляют краткий обзор исследований, предназначенных для обучения грамматике английского языка с использованием ресурсов Интернета. Дано описание различных сайтов, направленных на обучение грамматике английского языка, и рассмотрены преимущества их применения. В статье представлены рекомендации по использованию ресурсов Интернета в сочетании с традиционными методами обучения. Интернет рассматривается авторами как один из эффективных дидактических инструментов формирования грамматических навыков как на занятиях по английскому языку, так и во время самостоятельной работы студентов.

Исследование проводилось на базе Санкт-Петербургского университета гражданской авиации. В исследовании приняли участие 52 студента первого и второго курса. Проведенный эксперимент показал, что у студентов экспериментальной группы повысилась мотивация к обучению грамматике английского языка; улучшился уровень их знаний по грамматике. Таким образом, было доказано, что обучение грамматике английского языка с применением интернет-технологий является более эффективным по сравнению с традиционным обучением.

Ключевые слова: ОБУЧЕНИЕ НА ОСНОВЕ ИНТЕРНЕТ-ТЕХНОЛОГИЙ, ИНТЕРНЕТ РЕСУРСЫ, ОБУЧЕНИЕ ГРАММАТИКЕ, АНГЛИЙСКИЙ ЯЗЫК, ГРАММАТИЧЕСКИЕ НАВЫКИ

Для цитирования: Глазун М. А., Яхьяева К. М., Лебедева Н. А. Интернет-технологии в обучении грамматике английского языка студентов авиационного университета // Вопросы методики преподавания в вузе. 2023. Т. 12. № 4. С. 73–82. DOI: 10.57769/2227-8591.12.4.06

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Research article

DOI: 10.57769/2227-8591.12.4.06

INTERNET-BASED TECHNOLOGIES IN ENGLISH LANGUAGE GRAMMAR TRAINING OF AVIATION UNIVERSITY STUDENTS

Abstract: The paper focuses on the problems of grammatical skill formation using modern Internet-based technologies in English language training of aviation university students. The aim of the study is to examine online resources for English grammar training and give recommendations on their application. A brief overview of research designed to teach English grammar using Internet resources is presented. A description of various sites aimed at teaching English grammar is given, and the advantages of their use are considered. The paper provides guidelines on using Internet resources in combination with traditional teaching methods, with the advantages of their usage being also described. Internet is considered as a training tool of various grammar aspects at foreign language classes. It is proved that Internet-based English grammar training in correspondence with grammar-translation approach is more effective compared to the traditional one. The study was conducted at the St. Petersburg University of Civil Aviation, with 52 first and second year students taking part in the experiment. The experiment showed that students in the experimental group had increased motivation to learn English grammar; their level of grammar knowledge has improved. Thus, it has been shown that teaching English grammar using Internet technologies is more effective than traditional teaching.

Keywords: INTERNET-BASED TRAINING, INTERNET RESOURCES, ENGLISH LANGUAGE GRAMMAR TRAINING, ENGLISH LANGUAGE, GRAMMATICAL SKILLS

For citation: Glazun M. A., Yakhyaeva C. M., Lebedeva T. A. Internet-based technologies in English language grammar training of aviation university students. *Teaching Methodology in Higher Education*. 2023. Vol. 12. No 4. P. 73–82. DOI: 10.57769/2227-8591.12.4.06

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1. Introduction. English is a mandatory subject in aviation educational institutions. High level of English language proficiency offers prospects in a professional career for all graduates of aviation universities. The goal of the discipline «Aviation English» in the University of Civil aviation is the formation of stable English language skills in the framework of professional communication. Understanding the seriousness of the potential consequences of misunderstandings between communicants and the impact on aviation safety, it is necessary to select an appropriate teaching methodology (or combinations of methods) for the formation of English language competence of aviation specialists. The main purpose of grammar training in technological universities is to develop students' grammatical skills as one of the most important components of skills in speaking, listening, reading and writing [1].

Thanks to the development of Internet technologies, the efficiency of English language training (ELT) is being improved because they open up new opportunities for it. A lot of researches devoted to the application of Internet technologies in the process of ELT have been already conducted.

Comparing the process of teaching languages using the possibilities of the Internet with traditional teaching methods, some advantages of Internet-based English language grammar training can be determined. To the opinion of the authors [2], Internet-based ELT promote in solving a number of didactic tasks effectively:

- increases students' motivation to ELT;
- develops communication skills;
- individualizes and differentiates the learning process;
- forms the intellectual skills of students;
- gives opportunities to determine level of EL knowledge according to international standards;
- provides online games, simulations, applications, etc;
- offers educational materials and pedagogical ideas for their implementation in the educational process.

It is known that grammar turns language into speech. It is considered to be the most difficult aspect of ELT. Mastering the grammar of foreign language causes many difficulties, which are exacerbated by grammatical terms and rules and an infinite number of exceptions. All this usually causes a negative attitude towards the subject by the majority of students. (100)

The 'traditional grammar teaching' is explained as grammar-translation method including a focus on rules, patterns and grammatical forms. It is the method where the language is studied as a product, with no focus on communication at all [3]. The grammar-translation method remains the basic one of training specialists in language universities in our country. Thus, the course of study includes grammar topics, the corresponding texts and exercises.

The authors [4] studied the effects of Internet instruction in grammar learning. 77 students of MARA University of Technology took part in the experiment. Three experimental groups were made: full-Internet instruction group (28 students), partial-Internet instruction group (23 students) and non-Internet instruction group (26 students). The results demonstrated that the students from full-Internet instruction group got higher scores passing a multiple-choice grammar test than the students who received non-Internet grammar instruction. The results of the experiment have proved that the Internet can be an effective tool in ELGT (English language grammar training).

The study [5] explored the effectiveness of using online resources and Internet-based teaching the second conditional in English. Twenty-seven students were randomly divided into two groups: the treatment group and the control group. The following data were collected: information of the background questionnaire, the scores of the pretest, immediate posttest and two delayed posttests, and the qualitative answers from the evaluation sheet. The results of the research showed that the application of Internet resources was beneficial for students having problems with grammar and those who were not motivated to learn it.

M. Kumar Agarwal [6] considered the advantages and disadvantages of Internet-based ELGT. To the opinion of the authors, students work better and more efficiently when modern technologies are applied in the classroom. However, they suppose that Internet can't replace language teachers, but it can make the ELT more interesting and fruitful.

Sri Arianil and Ardian Nuri [7] made the experiment in two groups of students concerning ELGT. Web-based articles and videos were introduced in the experimental group of students. The goal of their study was to determine if there was any impact of using web-based articles and videos towards students' grammar training. Pretest, posttest and questionnaire were conducted. The results of the experimental work showed that the application of the above-mentioned technology improved students' grammar achievements and motivation to grammar training.

The authors of the paper [8] made the questionnaire to define if bachelor degree students of Esfahan University used Internet in English language learning. 100 participants answered the questionnaire which results were analyzed. The results of the experiment showed that half of respondents didn't use Internet for the purpose of language learning. 93% of students indicated that their teachers had never encouraged them to apply Internet as a foreign language training tool. The study proved the importance of students' encouragement to apply Internet resources to foreign language learning by the instructors. It is also mentioned that Internet is a good tool in enhancing vocabulary, training grammar and solve a lot of foreign language training tasks.

The review of the papers devoted to Internet-based ELT allows making the following conclusions.

Application of Internet resources in ELT has the following advantages:

- increasing students' motivation;
- enhancing independent activity of students;
- providing a high level of implementation of visibility principle;
- offering new opportunities and flexibility not only for students, but also for teachers;
- engagement of students in EL training process.

2.1 Application of Internet resources in English language grammar training. Knowledge of grammar is considered to be the foundation of effective communication and foreign language proficiency. When teaching foreign languages, it is very important to develop the so-called grammatical competence. Grammatical competence is defined as knowledge of grammatical means of a language and the ability to use them in practice. To the opinion of the author [9], grammatical competence is a set of rules and language skills that are necessary to make correct sentences, analyze and find grammatical errors. It is known, that Internet websites contain a great variety of resources devoted to ELGT such as systematizing schemes and tables, video explanations of grammatical rules, various games, great amount of grammar tests. Our task is to identify how the use of Internet resources contributes to the formation of grammatical skills of Aviation University students. There is a great variety of Internet sites devoted to ELGT. Some of them were selected and offered to students.

One of the most popular sites is «The British Council». The site offers a lot of relevant material designed for an adult audience, including grammar section. The section allows students determining the level of grammar knowledge, contains grammar reference. So, the appropriate section is selected according to a grammar knowledge level of a student, so the topic of study is chosen. Students are suggested to study grammar rules and do interactive exercises; they are able to see how well they have done them. By revising and practicing their grammar, students will increase confidence in English and improve their language level.

Nearly all sites offering grammar section have similar structures but possess their own advantages.

«Oxford Practice Grammar Online» website offers English grammar exercises in three levels: basic, intermediate and advanced.

«Perfect English Grammar» offers such sections as explanations of grammar topics, exercises and tests. Moreover, the site gives advices how to master EG effectively.

«English Grammar Online» presents an overview of English tenses with examples, a lot of English grammar lessons and exercises, the conditionals and

English subjunctive. Moreover, you can find free grammar quizzes to practice various grammar issues and vocabulary.

«Usingenglish.com» — English-language training site with free registration and access to grammar exercises and tests. This resource is of practical interest to educators, as it contains numerous lesson plans, practice exercises, and tests.

You cannot also ignore the online English grammar site «Grammar Bytes» with exercises, quizzes, presentations, handouts, rules and videos. It is suitable as for independent work of students so for classroom work.

A large number of grammar tests on various topics are presented at «testyourenglish.org». Despite the fact that its interface is completely in English, the site is very easy to use even for beginners to learn the language.

To diversify the process of learning grammar, increase motivation for grammar training and give communicative significance to grammar structures, it is very useful to apply the site «Movie Segments to Assess Grammar Goals». This resource contains parts of famous films and cartoons with exercises to practice grammar structures contained in them.

«English club» is a website presenting grammar games, theoretical explanations, quizzes, video and listening resources and some other sections.

«Alison English Grammar Courses» offers free on-line grammar courses. They include watching videos and then doing assignments. Also, students can interact with the other students and the teacher.

It is not possible to describe all existing sites devoted to English grammar training, but they can be named: «FluentU», «Oxford Practice Grammar Online», «Passport To English», «EnglishGrammar», «GrammarBook», «Daily Grammar», «Perfect English Grammar», «Grammar girl». Besides, it should be marked that all Internet websites providing ELGT are made for different levels of English proficiency (beginner, pre-intermediate, intermediate, and advanced) [10].

Having analyzed the above-mentioned websites devoted to ELGT, the following conclusions can be made. The application of Internet resources in ELGT contributes not only to the formation of grammatical skills, but also immerses students in the linguistic and social and cultural environment of the country of the language being studied. We would like to note that the use of authentic materials, the analysis of grammar errors when working with Internet resources foster the increase in students' motivation, their independence, enhance self-control and enlarge the amount of time spent on preparing homework. The use of Internet resources in the ELGT process allows projecting the teaching system on specific students according to their age and psychological features.

3. Methods and Results

3.1 Participants. The goal of the experimental work was to confirm the essential role of using Internet technologies in ELGT. The research has to answer the following questions:

- Does the introduction of Internet-based ELGT impact on students' test scores?

- Which training method produces the best results: the traditional grammar training or Internet-based ELGT?

The research was held on the basis of Saint-Petersburg Civil Aviation University. Students of 1-2 courses took part in the experiment. 26 students were placed in an experimental group and the other 26 students were in a control group, where the traditional face-to-face grammar class was conducted.

In total, 52 students were the participants of the experiment. The experiment was carried out for two terms. Students of the control group were taught using traditional methods of training. Students of the experimental group got grammar training with application of Internet resources.

The experiment included application of such Internet resources in ELGT as:

1. grammar training platforms;
2. corpuses and libraries;
3. blogs, video and audio resources;
4. on-line tests and quizzes.

3.2 Procedure and results. The experiment included tests determining the level of students' knowledge of English grammar and the survey determining their attitude towards grammar training and application of Internet resources in ELGT. Tests and surveys were conducted at the initial and final stage of the experiment. The survey contained 9 questions and two variants of answers (true, false). Each 'true' answer was given one point and consequently, they were summarized. The two tests consisted of the same questions.

The survey revealed that 90% of respondents consider that it is necessary to improve their knowledge of English grammar, as they do not always use grammar constructions in communication correctly. Students also noted that they practically did not utilize Internet resources in studying English grammar; they use various textbooks and manuals.

The survey contained the following statements:

1. I want to know English grammar very well.
2. I usually learn all grammar rules.
3. Training grammar is very interesting and useful.
4. I understand that knowledge of grammar is necessary for a successful communication.
5. I enjoy learning grammar.
6. I make grammar tests in Internet sites.
7. I do grammar exercises regularly.
8. Internet websites help to train grammar.
9. I think that every person should know grammar if they learn foreign language.

The answers were analyzed according to the following scale:

0–3 points – a low level of motivation to GT;

4–6 points - an average level of motivation to GT;

7–9 points - a high level of motivation to GT.

The comparative analysis results of students' attitude towards ELGT in experimental and control groups before and after the experiment are presented in table 1.

Table 1.

Comparative results of students' attitude towards ELGT (in %)

Таблица 1

Сравнительные результаты отношения студентов к тесту по грамматике английского языка (в процентах)

Motivation levels	Initial survey, control group	Initial survey, experimental group	Final survey, control group	Final survey, experimental group
high	10	12	15	61
average	46	43	50	27
low	44	45	35	12

The data shown in the table proves the positive dynamics of the improvement of the attitude of the experimental group students towards ELGT at the final stage of the experiment in comparison with the results obtained at the initial stage. It can be seen from the final survey that the proportion of students of the experimental group with high motivation towards ELGT increased up to 60 %. Low motivation level was equal to 44% in comparison with 12 % correspondingly. The students of the experimental group who demonstrated a high level of motivation at the final experiment stage indicated that they learnt English grammar using Internet websites with great interest. It should be marked that they coped with grammar tests more quickly and showed better results compared to the students of the control group.

The final diagnostic survey of the students of the control group showed very insignificant increase in motivation to ELGT in comparison with the beginning of the experiment. Motivation level of students at the final stage was equal to 15 % compared to 11 % at the beginning of the experiment.

The tests consisted of general grammar tasks including tenses and other grammar aspects. The results of the test before the experiment showed that there were no significant differences between two groups of students in their knowledge of English grammar. After the experiment, students of both groups passed the test including the tasks which they were mastering during two terms.

The results of the tests were processed and tabulated. The mean of students' score was calculated. The scores are presented in table 2.

Table 2.

Comparative results of EL grammar knowledge (in %)

Таблица 2.

Сравнительные результаты по грамматике английского языка (в процентах)

	Initial survey, control group	Initial survey, experimental group	Final survey, control group	Final survey, experimental group
EL grammar knowledge	34	36	46	73

The mean score of the results of grammar tests shown by the students of the experimental group was equal to 36 % at the initial stage and 73 % at the final one. The levels of students' EL grammar knowledge in the control group were equal to 34 % and 46 % correspondingly. The results of the final test indicated a high level of EL grammar knowledge in the experimental and lower level in the control group at both stages of the research. Evaluating the results of the tests, it can be stated that a positive dynamics of training process after the application of Internet resources is observed.

At the final stage of the experiment the students of experimental group were given the questionnaire defining the effectiveness of the proposed technology.

The questionnaire «What I like about grammar training using Internet technologies» contained the following points:

1. Training English grammar with the help of websites makes the process more interesting and funnier;
2. Internet websites make me possible to learn grammar anytime and anywhere;
3. Web-based technologies offer more flexibility in learning English grammar;
4. Watching videos devoted to grammar rules' explanations;
5. Playing grammar games;
6. Doing quizzes and checking mistakes.

The analysis of the questionnaire determined a positive attitude of the students of the experimental group to Internet-based ELGT. For example, students indicated that they knew a lot of new information performing Internet-based tasks, improved their abilities to analyze and generalize information. The analysis of students' answers was made and the following results were obtained. Students of the experimental group expressed their interest in the most Internet-based tasks: Internet websites make me possible to learn grammar anytime and anywhere (98 %) watching videos (90%), doing quizzes (85%), playing grammar games (75 %), Web-based technologies offer more flexibility in learning English grammar (82 %), training English grammar with the help of websites makes the process more interesting and funnier (76%).

Moreover, it should be noted that Internet-based tasks influenced positively on the emotional sphere of students, and contributed to the development of self-organization and self-learning skills.

4. Conclusion. In the paper, Internet-based English language grammar training was considered; the number of websites devoted to ELGT were analyzed and offered for students' training: «Oxford Practice Grammar Online», «Perfect English Grammar», «English Grammar Online», «Movie Segments to Assess Grammar Goals», «English club», «Alison English Grammar Courses».

The experimental work was being carried out for two terms. Having conducted the experimental ELG training, it can be noted that motivation of experimental group students' increased from % to %. The results of the experiment were evaluated and gave possibility to make the conclusion of the effectiveness of introduction of Internet resources in ELGT. Thus, the validity of Internet-based ELGT was substantiated.

СПИСОК ИСТОЧНИКОВ/REFERENCES

1. **Mustayeva Guldora, Kushakov Yusup.** Features of the Formation of the Grammatical Skills in Teaching Foreign Languages to Students of the Technical Universities. *Texas Journal of Multidisciplinary Studies*. 2022. Vol. 14, P. 30–32. eISSN: 2770-0003.
2. **Glazun M. A., Sukhova N. A., Yakhyaeva C. M.** Internet-based Foreign Language Vocabulary Training of Non-linguistic University // *Сибирский учитель*. 2022. Vol. 5. No 3(142). P. 81–86. – ISSN: 1817-6488 eISSN: 1817-6496 – EDN BSCFBO.
3. **Donna R. Long, James F. Lee, Bill Vanpatten.** Making Communicative Language Teaching Happen. *The Modern Language Journal*. 2003. 80(2):236. DOI:10.2307/328644.
4. **Faizah Mohamad, Muthusamy Chitra.** Internet instruction in improving students' grammar learning. *International Conference on Science and Social Research*. Kuala Lumpur, Malaysia. – 2010. pp. 122–126. DOI:10.1109/CSSR.2010.5773724.
5. **Kruk M.** The use of Internet resources and browser-based virtual worlds in teaching grammar. *Teaching English with Technology*. 2014. Vol. 14 No 2. 52–67. – eISSN: 1642-1027– DOI: 10.4018/978-1-5225-5140-9.ch023.
6. **Agarwal M. K.** Models of Language learning and teaching with internet resources // *ISMA scientific proceedings*. 2009. Riga, Latvia.
7. **Ariani Sri, Nuru Ariani.** The Influence of Using Web-Based Articles and Videos towards Students' Grammar Mastery. *Formosa Journal of Sustainable Research*, 2023. Vol. 2 No 1. P. 195–216. DOI:10.55927/fjsr.v2i1.2804.
8. **Millrood R.** Cognitive Models of Grammatical Competence of Students. *Procedia – Social and Behavioral Sciences*. 2014. Vol. 154. P. 259–262. DOI: 10.1016/j.sbspro.2014.10.147.
9. **Jamalifar Golnaz, Chalak Azizeh.** The Use of Internet In English Language. *Learning Practices, Attitudes and Challenges of The Learners*. *Advances in English language and literature*. 2014. Vol. 1 No 2.P. 1–6.
10. **Kobzhanova A. E.** From the experience of using educational internet resources in teaching English // *Pedagogicheskaya nauka i praktika [Педагогическая наука и практика]*. 2020. Vol.3. No 29. P. 95–99. – EDN RPRRPE.

Статья поступила в редакцию 02.10.2023. Одобрена 18.12.2023. Принята 28.12.2023.

Received 02.10.2023. Approved 18.12.2023. Accepted 28.12.2023.

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