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## THE USE OF GOOGLE EARTH PLATFORM BY THE ENGLISH LANGUAGE TEACHER DURING TEACHING GRAMMAR

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*The article describes the possibilities of using Google Earth in teaching English grammar to education seekers. To achieve this goal, the following methods were used: theoretical – analysis, synthesis of personal and domestic scientists' pedagogical experience regarding the Google Earth usage in teaching English; statistical – analysis of students' survey results. The author highlights the main online platforms of the Google Company for teaching English to students, among which Google Earth, a free platform for the satellite displaying planets Earth, Mars and the Moon virtually, is considered to be promising for it. A survey has been conducted (104 students of the Faculty of Ukrainian and Foreign Philology of Hryhorii Skovoroda University in Pereiaslav, Ukraine, aged 17 to 19, both sexes), containing 5 main questions ("Do you know the Google Earth platform?", "Do you know how to use Google Earth?", "Have you already used Google Earth?", "Do you know how to use Google Earth to teach English vocabulary to school students?", "Do you know how to use Google Earth to teach English grammar to school students?", "Are you interested in learning about the possibilities of using Google Earth to teach English to students?"). The results of the survey show that the Google Earth platform is well-known only to 19% of future English teachers, but is interesting to all of them in terms of future usage in teaching English, including grammar; only 7% of respondents know how to use it in teaching English vocabulary and 4% know how to use it in teaching English grammar to school students. The article describes the advantages of the Google Earth platform over Google Maps, names the possibilities of using this platform by an English teacher to teach English grammar, which could allow students to improve skills in morphology and syntax, develop creativity and intercultural competence, providing intercultural dialogue. The prospect of further research is a detailed study of the platform advantages and disadvantages for the formation of the future English teacher's foreign language competence.*

**Keywords:** Google Earth, platform, English teacher, student, virtual trip, virtual route, English grammar, morphology, syntax.

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## ВИКОРИСТАННЯ ПЛАТФОРМИ GOOGLE EARTH ВЧИТЕЛЕМ АНГЛІЙСЬКОЇ МОВИ В ПРОЦЕСІ НАВЧАННЯ ГРАМАТИКИ

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Стаття охарактеризовує можливості використання Google Earth у навчанні граматики англійської мови здобувачів освіти. Для їх реалізації використано такі методи: теоретичні: аналіз, синтез педагогічного досвіду власного та вітчизняних науковців стосовно використання Google Earth у навчанні англійської мови; статистичні: аналіз результатів опитування студентів. Автор зазначив основні онлайн-платформи компанії Google, серед яких перспективною для навчання англійської мови вважає саме Google Earth, безкоштовну платформу з супутниковим зображенням планет Земля, Марс і Місяця віртуально. Було здійснене опитування 104 студентів факультету української та іноземної філології Університету Григорія Сковороди в Переяславі (віком від 17 до 19, обох статей), яке містило 5 питань: "Чи відома Вам платформа Google Earth?", "Чи знаєте Ви як використовувати Google Earth?", "Чи Ви вже використовували Google Earth?", "Чи знаєте Ви як використовувати Google Earth для навчання лексики англійської мови учнів базової школи?", "Чи знаєте Ви як використовувати Google Earth для навчання граматики англійської мови учнів базової школи?", "Чи цікаво Вам дізнатися про можливості використання Google Earth для навчання учнів англійської мови?". Результати засвідчили, що загалом платформа Google Earth є гарно відомою лише для 19% майбутніх учителів англійської мови, але у плані майбутнього використання у навчанні мови, зокрема граматики, є цікавою для всіх; лише 7% респондентів знають як використовувати її для навчання англійської лексики та 4% знають як можна використовувати для навчання граматики англійської мови учнів ЗЗСО. У статті названі переваги платформи Google Earth над Google Maps, охарактеризовані можливості у використанні цієї платформи вчителем англійської мови для навчання англійської граматики, які дозволять здобувачу освіти підвищити рівень умінь оперування морфологією та синтаксисом англійської мови, розвивати креативність та міжкультурну компетенцію, забезпечуючи діалог культур. Перспективною подальших досліджень є детальне вивчення переваг і недоліків зазначеної платформи для формування іншомовної компетентності майбутніх вчителів іноземних мов.

**Ключові слова:** Google Earth, платформа, вчитель англійської мови, студент, віртуальна подорож, віртуальний маршрут, англійська граматика, морфологія, синтаксис.

**Introduction of the issue.** In the context of the COVID-19 pandemic, it is important for education to use such forms, methods and means of work that would be more universal, i.e. that could be used in any type of training (traditional, distance or mixed). This problem is especially acute in the field of mastering the foreign languages knowledge and skills, because for the growing generation it is a foreign language competence that is one of the most valuable, useful and can be implemented in many areas and spheres of life. Modern foreign language learning is increasingly characterized by the implementation of new tools and technologies, including online platforms. Among popular services as Moodle, Microsoft Teams, and other excessively

used in the education of Ukraine, there are the Google platforms, which are relevant, constantly updating and expanding geographically. Due to the need to improve the foreign languages teaching to students of general secondary and higher education and the need to update English teaching methods by implementing the latest learning technologies, including online platforms, Internet services, mobile applications, we consider teaching English grammar using Google platforms, including Google Earth, to be relevant and timely.

**Current state of the issue.** Today, methodological support for teaching foreign languages should be developed on the basis of a combination of perspective methods, approaches and

appropriate tools so that education institutions in Ukraine can successfully achieve their goals at forming the education seekers' foreign language competence, even under the conditions of countrywide quarantine. Hence, we emphasize the need for the predominance of modern methods and tools in teaching foreign languages over traditional ones and their complete dominance during distance teaching.

The analysis of the problem showed that its various aspects have been the subject of many scientific investigations, in particular: distance learning of foreign languages – D. Ilmiani, E. Malushko, N. Martyushev, Z. Nikonova, A. Nugroho, O. Oliinyk, I. Postolenko, A. Rekha, S. Romanyuk, A. Shutaleva, I. Savchenko; teaching foreign languages during quarantine – S. Horbuniova, O. Kononenko, S. Sergina, N. Shalova, etc.; the importance of electronic educational resources for teaching English in higher education institutions – T. Chaiuk, O. Zhigadlo; modern trends in methods of foreign language training at the institutions of higher education in Ukraine – N. Serdiuk, etc.; use of multimedia, computers in teaching foreign languages – M. Iliushkina, A. Luchko and others.

Among the trends in foreign language teaching methods it is identified the widespread use of technical means [10], along with a variety of online platforms, mobile applications and programmes that provide learning to be creative, interesting, fun, easier and more efficient. The wide range and functionality of such tools increases the need to study the possibilities of their use in teaching, including foreign languages, especially when only virtual teacher-student cooperation remains possible, for example during a pandemic, affected many countries and deprived a tete-a-tete communication as the most valuable thing for people. Thanks to foreign experience and innovations, the Ukrainian pedagogical community has the opportunity of effective implementing

various trendy online platforms as promising assistants. Such assistance is useful primarily for effective foreign language learning, including English grammar, as well as for teacher's personal and professional development, that is very important nowadays, because "ignoring it leads to loss of skills, a rapid professional "aging"" [2: 43].

Hence, despite the relevance of the topic and the study of its various aspects by many scholars, we find that it's not given enough attention to the use of the Google Earth platform by English teachers in teaching grammar.

**Aim of research** is to describe the possibilities of using the Google Earth platform in teaching English grammar to general secondary education seekers.

The material for the study was personal observations, the results of the pedagogical literature and students' surveys analysis. To achieve this goal, the following **methods** were used: theoretical – analysis, synthesis of personal and domestic scientists' pedagogical experience regarding the Google Earth usage in teaching English; statistical – analysis of students' survey results.

**Results and discussion.** The analysis of domestic and foreign practice revealed that there is a number of modern online technologies that could be useful for improving the learning process of English, especially during distance learning, as well as in unforeseen emergencies such as countrywide quarantine or other important reasons. Such online technologies could be also useful during mixed or full-time study, including curricular and extracurricular school processes. It was identified some trending online services in the formation of foreign language competence of future foreign language teachers [10], namely platforms (Google Classroom, Skype, Nz.ua, ClassDojo, Moodle), services (Google Drive, Padlet, Google Forms, Microsoft Forms, Kahoot!, Grammarly, Quizlet, Quizizz, Plickers, Socrative, Hot

Potatoes, LinguaLeo, ToonDoo, Classtime, Lang-8, Coursera, LearnEnglish, BBC Learning English, British Council LearnEnglish, Tandem, Enpodcast, Bussu), mobile applications (Memrise, Rosetta Stone, Babbel, FluentU, MindSnacks, Open Language, Mosalingua, Messenger, Telegram, Viber, WhatsApp) etc. As shown on the list, there is a number of Google services there.

For teaching English to students, including of elementary school, we highlight the main online platforms of the Google Company as Google Classroom, Google Meet, Google Slides, Google Forms, Google Earth. In order to create interesting English lessons, it will be appropriate and unusual to use the Google Earth platform.

Of course, the use of Google Earth is appropriate for the formation of cognitive skills of general secondary and higher education students in the study of primarily geography, ecology, tourism, history, and possible for the study of other disciplines such as biology, Ukrainian and foreign literature etc. However, we believe that the use of Google Earth by a teacher to learn a foreign language can be effective, interesting and useful for all participants in the learning process.

It was necessary for the research to conduct a survey of 104 students of the 1st and 3rd year of study at the Faculty of Ukrainian and Foreign Philology, Hryhorii Skovoroda University in Pereiaslav, Ukraine, (17-19-year-olds, both sexes).

The survey was conducted through the Google form and contained 5 main questions: "Do you know the Google Earth platform?", "Do you know how to use Google Earth?", "Have you already used Google Earth?", "Do you know how to use Google Earth to teach English vocabulary to school students?", "Do you know how to use Google Earth to teach English grammar to school students?", "Are you interested in learning about the possibilities of using Google Earth to

teach English to students?". The following answer options were offered for each question: "Yes", "So-so/indirectly", "No".

We have determined that:

1) almost 19% of students are familiar with the Google Earth platform, 54% are unfamiliar with it at all, 27% are indirectly familiar;

2) more than 10% of students know how to use Google Earth, almost 12% know indirectly how to use it, and 77% do not know how to use it at all;

3) 11% of students used it more than 3 times, 11% used it less than three times, and 88% did not use it once;

4) 7% know how to use Google Earth to teach English vocabulary to school students, 4% know indirectly, and 88% do not know at all;

5) 4% know how to use Google Earth to teach English grammar to school students, 4% know indirectly, and 92% do not know at all;

6) 52% of students would like to learn about the possibilities of using Google Earth to learn English grammar, 48% – indirectly, 0% of students who are not interested in learning about it.

The survey results showed that the Google Earth platform is generally unknown to future English teachers, mostly students don't know how to use it, but at the same time expressed great interest in this knowledge. The survey also showed that it is necessary to acquaint students with this platform and its capabilities, in particular for distance learning of English grammar.

First of all, it should be noted that Google Earth is a free platform from the Google Company that displays the virtual planet Earth, as well as Mars and the Moon, the sky, the satellite views of which allow a wide range of people to travel around the planets virtually, expanding their areas of thought. It is characterized by accessibility, prevalence, functionality and clear interface. The most popular version of the platform is Google Earth itself, but there are others as Google Earth Plus,

Google Earth Pro, Google Earth Engine etc.

The Google Earth platform is somewhat similar to Google Maps, but has the following main advantages:

- the ability to download to any device (computer, laptop, tablet); you do not need to log in every time through a browser, as for Google maps, but Internet access is still required;

- the availability of the Google Earth APP mobile application;

- the ability to view the 3D image of the Earth's surface not from a bird's eye view, but at eye level as if in real terms;

- the accuracy and high reality of the image (reliefs, cities, streets, houses, monuments etc.) are impressive;

- on the program control panel there are hints that help to use the necessary information without problems;

- all objects on the globe are signed in English;

- information is entered into the software through research of various international organizations;

- the ability to route, save and send smb an e-mail (promising in all content modules of the grammar course, as the teacher can communicate with students not only during the lesson, but also before or after it, for surveys, tests, etc.).

Using Google Earth in foreign language classes in general secondary education allows you to perform many different tasks, creative in particular, which contribute to the formation of cognitive skills valuable for foreign language communication. Successful implementation of these tasks in the educational process requires appropriate methodological developments.

The prospects of using the Google Earth platform by an English teacher while teaching grammar at lessons are defined as:

1. Creating English-language virtual tours to anywhere on Earth with the opportunity to see interesting places in 3D, look around, for example, when studying topics about Ukraine or English-speaking countries, their cities

and attractions, events, etc., when pupils can not only practice some vocabulary on the topic (such as in the 5th grade "Great Britain", "Ukraine", "My native town", 6th grade – "A tour of London"; 7th grade – "A day around London", 8th grade – "Adventure travel "; 9th grade – "Northern Ireland", "Scotland", "Four nations"), but also to practice grammar, namely:

- use the correct word order in an English sentence (for example, a teacher can give the words (*the largest / London / city of / is / the / England*) from which the student or a group of students should make a sentence about what they could see on the screen (*London is the largest city of England*);

- formation of interrogative sentences (according to the tasks as "Guess where we are", "Ask about this city / building / tower", or the student's will to ask a teacher and get some information, etc.);

- formation of short or complete answers to certain types of questions;

- use of sentences with a formal subject demonstrative It in sentences like: *It is London. It's the main square of the town. It is the Palace of Westminster. It's Big Ben.*

2. Implementation of virtual trips to Ukraine or an English-speaking country, when the teacher gives control of the class's view to a particular student (i.e. when the whole class will see every his/her virtual "turn" of a direction), can help to practice:

- understanding of imperative sentences (for example, the teacher tells the tour direction instructions and the student must fulfill requests such as to turn right, left, cross the road, approach the monument, etc.);

- using imperative sentences by students for the purpose of prompting or helping a classmate to cope with the task to follow the instructions;

- using grammatical structures such as "There is / are..." and "It is... that...", etc.

3. Creating your own virtual route by a student or a group of students, (6th

grade topics "Mingling: Terry's trip", "Holiday destination travel review", "Trains and travel", "Let's plan a trip") for example to develop skills of correct grammar speech, practicing;

- modal verbs (students' sentences can be like "*We can go there to see the tower*", "*You can see the striking clock at the Elizabeth Tower*", "*We may visit the city next year*", etc.);

- tense forms (especially Present Simple, Present Continuous, Future Simple, Past Simple etc.);

- sequence of tenses in a complex sentence etc.

4. Watching photos and reading cards posted in the system with additional information about a particular place of the planet can help to develop skills of understanding, translation, use of certain lexical units and grammatical constructions, for example when studying tense forms and passive voice of verbs (task example: *Read and answer when it was built/whether it was renamed, etc.*).

5. Virtual taking view of monuments, describing and discussing them by students in order to practice skills in using not only lexical units of transmission the person's/object's appearance, but also certain grammatical constructions or parts of speech, such as:

- the degrees of comparison of adjectives or adverbs (studying London you can take and compare Big Ben and Little Ben, or different towers, bridges, buildings, etc.);

- prepositions (task example: *Describe the location of the object, and what is next / behind / in front / between / above / below, etc.*);

6. Creating micro-dialogues in a particular virtual place for forming grammatical competence, performing formal communicative tasks. If a class level allows, the teacher can ask students to make more detailed dialogues, such as "How can I get to the Tower of London?" and the like, the main condition of the task is the use of

knowledge of a certain grammatical topic (interrogative sentences; emphatic sentences; exclamatory sentences; infinitive, participle constructions; certain tense form or voices, etc.).

7. Virtual visit to the planet Mars and the Moon, watching the stars in the sky can help to practice conditional sentences, Oblique Mood, namely Conditional Mood, Subjunctive I, Subjunctive II, Suppositional (for example, when performing task to form or continue conditional sentences such as: *If I had an opportunity, I would visit Mars. If I was a cosmonaut, I could fly to the Moon. If we have learned constellations at school, I would guess the Great Bear now. If I was fond of stars, I could have named the constellation at once.*

Thus, using the Google Earth platform will not only help to consolidate knowledge of the vocabulary on certain topics, but also improve knowledge of English grammar, morphology and syntax, and the ability to build grammatically correct foreign language speech.

We consider it appropriate to use the Google Earth platform both in the form of the whole lesson and in the form of only part of it, as well as extracurricular activities in English, because they are of great educational importance in the aspect of intercultural dialogue.

Of course, there are also benefits of distance learning English grammar using the Google Earth platform while training future English teachers at universities, because in a relatively short time, through their own distance learning, students learn how to teach modern English grammar remotely to their future pupils. Minding the fact that "in the countries of the European Union the goal of foreign language teaching is intercultural (social) competence; that is the process of foreign language mastering based on the competent volume of intercultural study" [1: 445], the use of this platform can increase the level of knowledge and skills of students

in the lexical and grammatical structure of the English language, promote dialogue between cultures, and the development of intercultural competence of future teachers.

**Conclusions and research perspectives.** The results of the survey showed that the Google Earth platform is generally unknown to future English teachers, but interesting in terms of future use in teaching English, including grammar. The author has described the possibilities for an English teacher to use the Google Earth platform for teaching English grammar: 1) creating English-language virtual tours can help pupils to study a word order, interrogative sentences, answers to questions, use of sentences with a formal subject demonstrative It; 2) virtual trips to Ukraine or an English-speaking country – to understand and use imperative sentences, to study grammatical structures "There is / are..." and "It is... that..."; 3) creating virtual routes – to study modal verbs, tense forms, sequence of tenses in a complex

sentence; 4) work with photos and information cards – to study tense forms and passive voice of verbs; 5) virtual taking view of monuments – to study the degrees of comparison of adjectives or adverbs, prepositions; 6) creating micro-dialogues in a virtual place – to train questions, emphatic and exclamatory sentences formation, infinitival and participle constructions, certain tense form or voice, etc.; 7) virtual visits to the Mars and the Moon, watching the stars in the sky can help to practice conditional sentences, Oblique Mood. So, the use of the Google Earth platform for teaching English grammar could allow pupils to improve the skills of morphology and syntax of English, develop their own creativity and intercultural competence, providing intercultural dialogue. The prospect of further research is a detailed study of the platform advantages and disadvantages for the formation of the future English teacher's foreign language competence.

#### REFERENCES (TRANSLATED & TRANSLITERATED)

1. Begeka, D.A. (2019). Linguo-social and cultural competence as a factor of professional training of future foreign philology teacher. *Astra Salvensis-revista de istorie si cultura*, 7(13), 441-455 [in English].
2. Biruk, N.P. (2021). *Profesiyno-tvorchyy rozvytok osobystosti pedahoha-doslidnyka v umovakh diyal'nosti naukovo-pedahohichnoyi shkoly [Professional and creative development of the personality of the teacher-researcher in the conditions of activity of the scientific and pedagogical school]*. Candidate's thesis. Zhytomyr: Zhytomyr. derzh. un-t im. Ivana Franka. Retrieved from: <http://eprints.zu.edu.ua/32583/1/dys-Biruk.pdf> [in Ukrainian].
3. Chayuk, T., & Zhyhadlo, O. (2021). Znachennya elektronnykh osvitnikh resursiv dlya vykladannya anhliys'koyi movy u zakladakh vyshchoyi osvity [The importance of electronic educational resources for teaching English in higher education institutions]. *InterConf*, (90), 132-138. DOI: 10.51582/interconf.7-8.12.2021.016 [in Ukrainian].
4. Martyushev, N., Shutaleva, A., Malushko, E., Nikonova, Z., & Savchenko, I. (2021). Online Communication Tools in Teaching Foreign Languages for Education Sustainability. *Sustainability*, 13, 11127. DOI: 10.3390/su131911127 [in English].
5. Nugroho, A., Ilmiani, D., & Rekha, A. (2021). EFL Teachers' Challenges and Insights of Online Teaching amidst Global Pandemic. *Metathesis: Journal of English Language, Literature, and Teaching*, 4(3). DOI: 10.31002/metathesis.v4i3.3195 [in English].
6. Oliynyk, O.V. (2014). Innovatsiyni tekhnolohiyi dystantsiynoho navchannya inozemnoyi movy dlyastudentiv nemovnykh VNZ [Innovative technologies of distance

learning of a foreign language for students of non-language universities]. *Linhvistychni doslidzhennya – Linguistic research: zb. nauk. prats' KHNPУ imeni H.S. Skovorody*, vyp. 38, 238-246 [in Ukrainian].

7. Onyshchenko, N., Serdiuk, N., & Krykun, V. (2021). Pre-service teachers' training for the innovative extracurricular work. *Advanced Education*, 8(19), 20-32. DOI: 10.20535/2410-8286.225789 [in English].

8. Postolenko, I.S. (2014). Navchannya inozemnykh mov dystantsiyno: intehratsiynyy aspekt [Teaching foreign languages remotely: integration aspect]. *Problemy pidhotovky suchasnoho vchytelya – Problems of modern teacher training*, № 9(2), 54-60. Retrieved from: [http://nbuv.gov.ua/UJRN/ppsv\\_2014\\_9\(2\)\\_9](http://nbuv.gov.ua/UJRN/ppsv_2014_9(2)_9) [in Ukrainian].

9. Romanyuk, S.M. (2016). Dystantsiynе navchannya inozemnoyi movy: porivnyal'nyy analiz suchasnykh platform ta onlayn-servisiv [Distance learning of a foreign language: a comparative analysis of modern platforms and online services]. *Visnyk Dnipropetrovs'koho universytetu imeni Al'freda Nobelya. Seriya: Pedagogika i psykholohiya – Bulletin of the Alfred Nobel University of Dnepropetrovsk. Series: Pedagogy and Psychology*, (1), 318-325 [in Ukrainian].

10. Serdiuk, N. (2017). Modern trends in methods of foreign language training at the institutions of higher education in Ukraine. *Theoretical and Didactic Philology*, (26), 101-109. Retrieved from: <https://tdp-journal.com/index.php/journal/article/view/57> [in English].

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