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E-LEARNING WEB APPLICATION FOR TEACHING ENGLISH FOR SPECIFIC PURPOSES - "ENGLISH AT A CLICK"

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Abstract. *The web application "English at a Click", presented in this paper is used for learning specialized English. The application can be integrated into a part of a larger distance learning system, used as a supplement to traditional learning or as an independent web application. The current version of the application is implemented as an independent web application. The basic goal is to show the different contexts in which an English word can be used, which helps the user to choose the most appropriate term when translating a text from English into Serbian language and inversely. The application is in the prototype phase and it's being tested. The tool presented in this paper was created on a free workspace on Oracle Cloud that the author uses for teaching purposes. The application was created with the idea to facilitate the learning of specialized English using modern technologies. The main advantage of the application compared to similar solutions is that it allows automatic text editing. The words from the text are replaced by the selected synonym only in the sentences that the user marks, very simply, with just a few clicks.*

Key words: *E-learning, Language learning, Web application, Synonyms, ESP*

1. INTRODUCTION

The way that knowledge is transferred has changed over time, and the development of technology plays a significant role in this process (Radenković 2015). The process of acquiring knowledge, today, can take place without a physical presence in the classroom, so in addition to traditional learning methods, there are e-learning, distance learning (e-learning and traditional learning in one) and a mixture of these (Schertler-Rock and Bodendorf 2006) called "blended learning". The term "blended learning" describes an approach to education that combines traditional education approaches when the teacher meets with students (either in school or through modern technologies) and e-learning approaches. In practice, electronic and traditional education methods are often combined.

Accelerated way of life and work, fast exchange of information and communication on a global level have led to an increased need for learning foreign languages. Whether it is a general language, the language of the profession or a business foreign language, there is a need to learn the language over the Internet, using computers or other technological

advances (Radić Branisavljević and Milovanović 2014). With the development of technologies, especially computers and the Internet, and now more and more mobile telephony, the ways in which modern technologies have been applied in language teaching have changed. The traditional way of learning a language through direct communication between teachers and students should not be changed, but it can certainly be supplemented and improved by using translation tools and applications on the network and mobile devices(Medvedev 2016).

One of the illustrations of machine translation, Google Translator, quickly gained popularity and, with incredible technological progress, made numerous changes in the process of learning foreign languages.

Machine translation quickly gained popularity and, with incredible technological advances, introduced numerous changes in the process of learning foreign languages. It is free technology that is increasingly attracting the attention of students(Tuzcu 2021). Research on the application of machine translation in language learning (Kumar 2013) shows that students use machine translation to learn foreign words (Chandra and Yuyun 2018), they conclude that students use the Google Translate application while learning a language, mostly for finding and translating words, and to a lesser extent for translating full sentences or texts. One of the reasons is that machine translation very often providing a literal translation, especially with a longer sentence, inaccurate grammatical output, and inequivalent translation of cultural references. Because of these downsides, all respondents tend to minimize their GT use to be only in consulting word level, while fewer respondents in both word and phrase level (Chandra and Yuyun 2018). The results of the study (Lee 2020) show that the use of machine translator as a language learning tool reduces the level of lexical and grammatical errors.

Google Translate is one of the most popular translation applications. Google developed this application in April 2006 to translate words, sentences, paragraphs, and web pages from one language to another. Google Translate offers text input, voice mode, and mobile scanning. Using this application is very simple, after entering a word or sentence, the user only needs to select the language, word or sentence to be translated (Ying, Theresia, and Febriana 2021). Data obtained from a survey among students, in a study (Habeeb 2020), show that survey participants were satisfied with the simple use of the application. Easy access and fast translation are positive sides, while grammatical errors and deficiency of proofreading tools have been identified as basic deficiency (Fahim 2021). Recently, the application has been enhanced with new functionalities. When the user enters a word, synonyms are displayed on the screen, as well as sentences (definitions, contexts) in which the term can be used. Definitions refer to only one expression, one word. The application "English at a Click", which is presented in this paper, is based on a similar principle. The main difference is that in the presented application, the text in English is entered or the texts that exist in the database, which were previously entered by other users, are used. All words from the text, which are in the dictionary, are links to a web page with their synonyms. After selecting the synonym, the application changes the originally entered word directly in the text, and only in the sentences that the user chooses.

The first part of this paper presents an overview of the research on the use of the technologies in English language learning. The second part of the paper presents the web application "English at a Click", which provides assistance to the users in translating text

and learning specialized English. The third part presents the results of the research on the use of web applications, in which students and educators participated.

2. THE CONCEPT AND DEVELOPMENT OF E-LEARNING

During the 20th and 21st centuries, there is an accelerated development of technology, which has led to major changes in the way the educational process takes place. New teaching and learning methods rely on a range of technological innovations to enable participants in the process to fully commit to their roles and the goal of the educational process: knowledge transfer and acquisition.

Distance education is a way of realization of the educational process in which the performance and monitoring of teaching can take place in different places and at different times. Distance education developed in parallel with the development of information and communication technologies(Radenković 2015). Modern distance education is based on multimedia and internet technologies, so it is more often called e-learning (Schertler-Rock and Bodendorf 2006).

The term e-learning describes education that takes place exclusively over the Internet and it does not contain any face-to-face contact between lecturers and students. The term "blended learning" describes an approach to the education that combines traditional education approaches when the teacher meets with students (either in school or through modern technologies) and e-learning approaches. In practice, electronic and traditional education methods are often combined.

E-learning applications include the storage and distribution of digital materials (presentation) and synchronous and asynchronous communication, simulations, interactivity, the use of multimedia and other content that can be easily modified and improved (Pain and Le Heron 2003).

2.1. Pedagogical aspects of e-learning

In addition to knowing the different ICT tools, it is important for every teacher to know how to integrate technology into pedagogy and use it to promote student-centered learning. At the process of creating teaching materials or designing electronic courses to supplement teaching in the classroom, the teacher will be helped by the recommendations of traditional learning theories that apply to the conditions of e-learning.

Behavioral theory defines learning as a process that takes place when there is an external force, such as reward or punishment. Some authors are of the opinion that this theory is directly related to the traditional way of teaching, but it can also be successfully applied in the context of e-learning. Online learning courses have a methodically structured content of lessons, where teaching topics are formed from easy to difficult, from known to unknown. Online testing allows the teacher to measure student achievement and achievement of learning outcomes.

Cognitivist theory emphasizes that the most important thing in the learning process is how students remember certain contents, how they notice, interpret, understand, remember, connect, analyze and evaluate. Learning is considered a process of organizing, storing and retrieving data and information and is associated with the acquisition of new models and ways of solving problems of existing knowledge. Typical teaching methods, according to cognitive theory, include the use of examples and models for acquiring

knowledge and concepts, categorization and comparison exercises, making diagrams and schemes, relying on previously learned in acquiring new knowledge (Nejković and Tošić 2014). When we talk about e-learning, this approach can be applied keeping in mind that students in the e-learning process connect numerous data collected from different sources on the Internet.

Constructivist pedagogy sees the student as an active subject who acquires knowledge through conscious processing of information and personal interpretation of what has been learned. This theory of learning shifts the learning paradigm from the student-centered teacher, enabling the student to construct knowledge through active research, experimentation, collaboration, and the use of their existing knowledge. To achieve this, the student must be presented with sources of knowledge, as well as appropriate challenges and tools for cooperation with peers, while the teacher takes on the role of facilitator(Jovanovic, Stankovic, and Todosijevic 2015). The purpose is to teach students how to get on with new situations, and the use of e-learning definitely represents a new situation that requires independence, self-responsibility and activity of students in shaping their own knowledge and competencies (Bulić 2018).

Connectivism, developed by George Siemens (Siemens 2005), emphasizes the importance of digital devices, hardware, software, and network connections in the learning process. The theory emphasizes the development of "meta-skills" for evaluating and directing information and network connections, and emphasizes the importance of recognizing learning models as learning strategies. Connectivists recognize the impact that new technologies have on human knowledge and argue that technology is reshaping the ways in which people create, store, and distribute knowledge. This idea is being demonstrated through increasingly powerful initiatives to create free, open source software. This also includes free access to scientific and other works. Sharing content is no longer considered an unethical act but it is the essence of creation in terms of creating learning networks (Bulatović, Bulatović, and Arsenijević 2012).

3. E-LEARNING IN FOREIGN LANGUAGE LEARNING

There are four language skills that need to be mastered when learning a foreign language: speaking and writing, which are active language skills, and listening and reading, which are passive language skills (Radić Branisavljević and Milovanović 2014). All of these skills can be developed using a variety of applications available online. It is possible to practice and improve them, depending on or independently of the teacher, thanks to technology. There are numerous materials available to students on the Internet, so they can choose the method and the way in which they will use modern technologies.

The traditional way of learning often lacks communication with other users, so that young people can practice conversation better. Technology has the potential to overcome this limitation and provide students with the opportunity to communicate with others, often with English-speaking people or students from other countries with whom they can communicate exclusively using English. (Laborda 2014). Synchronous solutions, such as video conferencing (Phillips 2010) and face-to-face interactions are becoming increasingly popular as language learning tools.

The development of multimedia, the Internet, as well as the application of information and communication technologies in everyday life, are a condition for the increasing use

of computers in teaching foreign languages (Computer-Assisted Language Learning, CALL). The development of CALL began in the late 1950s with simple repetition exercises, and today it has evolved into interactive multimedia packages and online applications that enable personalized learning with the aim of developing "intelligent" language learning systems. (Seljan 2019). CALL can be performed in different places, whether it is a classroom, computer lab with or without the presence of lecturers, offices, houses, or any other place (Knežević 2017). The computer can have a dual role in learning foreign languages: it can be a tutor or a learning tool. Authors who see the computer as a tutor see the computer as a device that provides interactive material for learning and practicing language (replaces learning with the teacher, as in traditional learning), and is a tool for those who use it as a tool for learning and communication. improve language skills (replaces textbooks, dictionaries, books …) (Knežević 2017).

The application of technology has significantly changed the teaching methods of the English language. In traditional classrooms, teachers and students communicate together in the classroom, and teachers explain the teaching material on the board. The use of multimedia texts in the classroom helps students to become better acquainted with vocabulary and language structures. Research authors (Dawson, Cavanaugh, and Ritzhaupt 2008) and (Pourhosein Gilakjani 2013) in their works, they talk about the fact that the use of technology can create an atmosphere for learning that is focused on the student and not on the teacher, which leads to positive changes in the process of language learning. They also add that with the use of computer technology, language classes become interactive, with a lot of meaningful learning tasks. Technology encourages students to learn individually and acquire responsible behavior (Gangaiamaran and Pasupathi 2017). According to (Ahmadi 2018), the use of the Internet increases student motivation.

In recent years, the widespread use of mobile devices has led to the new term MALL (Mobile-Assisted Language Learning), which differs from CALL in that personal, portable devices are used in language learning to enable new ways of learning. (Kukulska-Hulme and Shield 2008). One of the disadvantages of CALL is that some teachers do not have enough knowledge to use a desktop computer, or do not have them, and as a solution to this shortcoming (Kukulska-Hulme 2009) suggests the use of MALL. Important features of mobile devices are portability and mobility, as well as individuality. Desktop computers cannot offer these features (Ahmadi 2018).

As mobile technologies have evolved over time, so have advanced language learning applications. In addition to the already traditional purpose of communication, smart mobile devices are used to access the Internet to search for information, send e-mails, read e-books, and even make purchases. Mobile devices have also enabled location-independent learning at any time and outside the classroom (Yang 2013).

3.1. Advantages of using modern technologies in language learning

Greater students' interest in learning - Today, classical traditional teaching methods and environment are less and less popular, especially with children and youth, while multimedia technologies with sound and visual effects, animations are becoming more common in the language learning process. Their advantage is that they provide a large amount of different information. Multimedia technology transcends time and space, creating a more vivid, visual and authentic environment for learning English, which

increases students' interest and motivation for learning and their involvement in teaching activities (Shyamlee and Phil 2012).

Students are not passive recipients of knowledge - In traditional teaching, students are sometimes less able to understand a certain language, because it is usually frontal type teaching and there is no great communication and interactivity, especially if a large group of students is in class. Students are often passive recipients of knowledge, so it is difficult to achieve the goal of communication. The use of modern internet technologies requires the integration of teaching and learning and provides students with greater incentives to think. Class activities such as group discussion and debate also provide more opportunities for communication between students and between teachers and students.

Better interaction between teachers and students - Teaching that uses modern technologies emphasizes the role of students and increases the importance of interaction between teachers and students. The main feature of such teaching is the improvement of students' ability to listen and speak and develop their communicative competence. The use of modern technologies creates a good platform for the exchange of information between teachers and students, while providing a language environment that improves the traditional model of teaching in the classroom. In this way, teachers in the classroom no longer enter only the information that students receive in a passive way (Shyamlee and Phil 2012).

3.2. Disadvantages of using modern technologies in language learning

The teacher does not have a leading role in the teaching process - The application of modern technologies should be an auxiliary instrument in the teaching process, because if teaching is completely dependent on ICT technologies, teachers cannot play a leading role in teaching. In practice, many teachers use multimedia technologies, but many of them are not skilled enough to handle and use them. When students are focused only on the screen, there is not enough direct contact between students and teachers.

Limiting students' opinions - It is clear that language teaching differs from scientific subjects, because language teaching does not require e.g. demonstration of different steps in solving a problem, teaching and learning take place through questions and answers of teachers and students. Teachers ask questions in real time and make students think. In this way, students develop the ability to detect and solve problems. However, if communication does not take place in real time, students cannot give immediate feedback. Nurturing students' thinking skills should be one of the main goals in teaching and using multimedia technology.

Reduced speech communication - The introduction of modern technologies with audio, visual and textual effects fully satisfies students 'audio and visual requirements and increases their interest, but also leads to a lack of communication between teachers and students and the replacement of teachers' voices with digital sound.

The use of modern technologies has led to a decrease in students' reading competence. Text words are often replaced by sound and image, and handwriting by keyboard. All in all, multimedia as an auxiliary instrument cannot replace the dominant role of teachers and is part of the entire teaching process. In addition, it integrates visual and textual demonstration with the teacher's experience to jointly contribute to increasing students' attention, speaking, reading and writing.

3.3. Classification of language learning applications

Foreign language learning applications, especially mobile applications have been developing rapidly in recent years and have recorded a large number of downloads by users around the world. It is a problem for students how to choose the right application that they need and that is adapted to the level of knowledge of the language that the student (user of the application) has. According to a study on the use of mobile applications for learning foreign languages (Gangaiamaran and Pasupathi 2017) we can define the following three types of applications: applications for primary school students (Primary Learners), for secondary school students (Secondary Learners) and for students and adults (Tertiary Learners).

Primary Learners - Recent research shows a significant increase in the use of mobile devices in young children (Gangaiamaran and Pasupathi 2017). Children like to use mobile devices most often for play. However, preschool children do not have the ability to assess what is good and what is bad for them, especially in the use of mobile devices. It is the duty of parents and teachers to guide children and select appropriate teaching content that can help children learn a foreign language. (Kim and Smith 2017).

Primary Learners include children belonging to the age group of 3 to 10 years. Children of this age group learn English, which begins with the alphabet and learning the letters, then spelling, and then writing words. At that age, children often listen to songs and animated stories. Learning the colors, shapes, names of animals, fruits, vegetables and more can improve their learning of words. Mobile applications have been developed to meet the needs of children in this age group. Some of the well-known applications are: *Pogg — Spelling & Verbs, Speech with Milo Apps, Phonetics Focus, MindSnacks* and others.

Secondary Learners - Students aged 12 to 17 belong to the group of secondary learners. Research conducted (Liu et al. 2014) show that the use of computers increases students' motivation and interest in learning. Jennifer Betsy Redd in her experiment (Redd 2012) comes to the conclusion that the use of language learning applications in high school students increases the vocabulary of foreign language words that they learn, for a period of three weeks. Elementary school students learn the basics of the language, while high school students move to a higher level and learn speech, grammar, spelling, pronunciation. Some of the well-known mobile applications for learning secondary learners are: *Rosetta Stone, Memrise, Open Language, Duolingo*.

Tertiary Learners - Tertiary-level students include students and adults. With the accelerated development of applications for learning English and the popularization of mobile devices, it has led to the fact that students are becoming more and more interested in learning foreign languages using modern technologies. According to relevant research (Gangaiamaran and Pasupathi 2017), learning a language with the help of a mobile phone (MALL) can not only improve students' knowledge but also increase their motivation to learn. The rapid development of technologies enables the integration of different media, for example, text, images, animations, audio and video within one application. There are many applications related to learning English for students and adults, but sometimes it is difficult to choose the right application from the large number offered. Some of the well-known mobile applications for language learning tertiary learners are: *Sounds Right, Speech Tutor, Voxy, English Listening and Speaking, Exam Vocabulary Builder, Sentence Builder for iPad*.

English for specific purposes - ESP (English for specific purposes) is an approach to English language teaching in which all decisions are made regarding both the content and the methods to be used, based on the reasons why students learn English. (Dabić 2015).

Linguists have noticed a difference between, for example, English, which is present in trade, and English in engineering, which has naturally led to the development of English language courses for specially formed groups. It is very difficult to give a clear division of the English language of the profession (Dabić 2015). Regardless of how they divided the development of ESP, some theorists agree that research in ESP was initially related to the field of English for Science and Technology (EST), so EST was initially synonymous for ESP (Knežević 2017). The ESP can be divided into three categories: English for Science and Technology (EST), English for Business and Economics (EBE) and English for Social Sciences (ESS).

The number of foreign students graduating from universities in English-speaking countries has been steadily rising in the last few years before the Covid pandemic19. Universities in English-speaking countries, in order to attract as many foreign students as possible, are creating English language courses for academic purposes (EAP), which aim to bridge the perceived gap between language knowledge and academic skills that foreign students possess before studying(Fedorova 2021).

Because specific student needs and authentic assignments are paramount in business English and other ESP courses, many language teachers integrate modern technology into their courses that students use such as using the Internet as a source of authentic material, virtual conference platforms, simulation software, or recent years. mobile technologies (Laborda 2014).
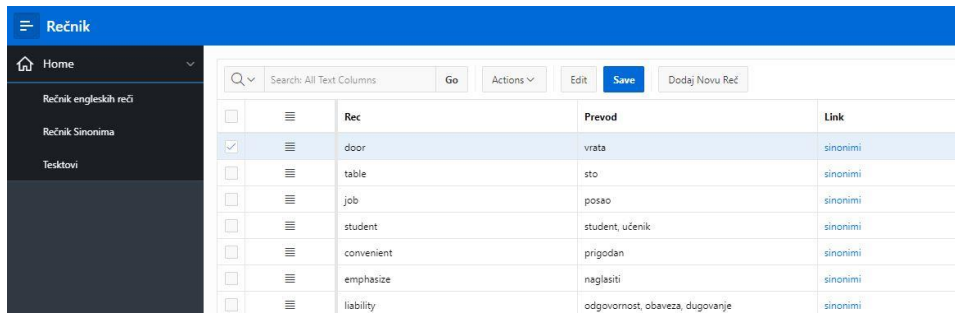
3. ENGLISH AT A CLICK

The web application "English at a Click" was created using Oracle's Oracle APEX web application development tool. The data is stored in an Oracle database. Application functions and procedures are written in Oracle PL/SQL language.

Oracle database is one of the most commonly used databases, characterized by high performance, security, scalability and ease of use.

The APEX environment enables rapid development of web applications by focusing on simplifying the development cycle (Zaharieva and Billen 2009). The tool provides the ability to use additional components and libraries, so that applications have an intuitive user interface, easy to use, on the one hand, but also all the necessary functionality to run the application. The use of APEX allows full use of all database objects, complex queries to call PL/SQL packages and procedures. APEX is a very stable and reliable technology for web application development. Web applications created using the APEX platform are accessed using a web browser. The platform is independent of the operating system, and users of APEX web applications can, from different operating systems, access the application with any web browser.
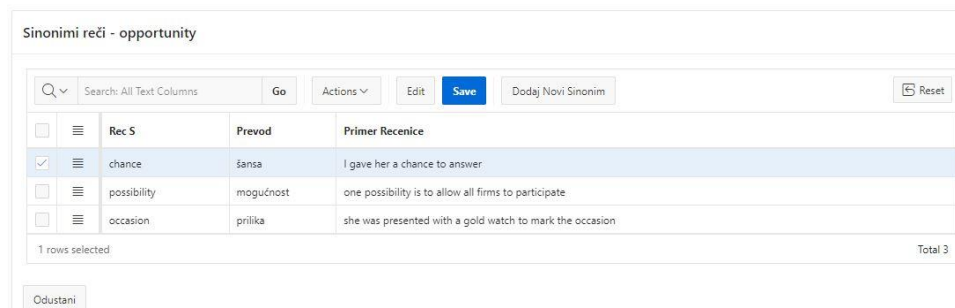
The web application "English at a Click" presented in this paper is used to learn specialized English. The application can be integrated into a part of a larger distance learning system, used as a supplement to traditional learning or as a stand-alone web application. The tool is in the testing phase, and is located on the Oracle APEX server that the author uses for teaching purposes. A demo version of the application will be shown later in this paper. The current version of the application is implemented as a standalone web application. Figure 1 shows the appearance of the home screen after logging on to the administrator.

Fig. 1 The home screen after logging in to the administrator

When logging in to the system, the application administrator enters English words into the dictionary and their translation into Serbian. Every word can have synonyms. The administrator enters synonyms and links them to selected words from the dictionary. For each synonym in the database, the translation into Serbian and examples of sentences in which it is used is remembered. The idea is to show the different contexts in which an English word can be used, which will help the user to choose the term that is best used when translating the text. Figure 2 shows the form for entering and changing synonym data.

Fig. 2 Form for entering and changing synonym data - administrator

The user can access the application without logging in to the system. The current version of the application is open to all users. Depending on further development, there is a possibility to restrict access only to users with access parameters.

After launching the application, the main menu displays links to the *Dictionary of English Words, Dictionary of Synonyms and Texts* pages. The user and the administrator have the ability to sort words and synonyms, as well as filter them by different criteria. Figure 3 shows the layout of the Dictionary of English Words page. Figure 4 shows the procedure for filtering words from the dictionary, and Figure 5 shows the layout of the *Dictionary of Synonyms* page.

Fig. 3 Page layout *Dictionary of English words*-user

Fig. 4 Words filtering

Fig. 5 Page Dictionary of Synonyms

The user has the option to enter the desired text himself. After entering the text, it can be edited, ie there is an option to delete parts of the text, add new words, sentences, etc. When the text editing is finished, by clicking the *Finish Text Editing* button, the program divides the edited text into sentences and finds the words that are in the text and in the

dictionary of English words. Those words become links to a new page that contains their synonyms. Figure 6 shows the text editing page.

Fig. 6 Text editing page

Each word from the text that is in the dictionary of English words and has synonyms is linked, and by clicking on the link the user opens a new page showing all the synonyms of the selected word, with translation and sentences in which the synonym can be used. The dictionary of English words is stored in the Oracle database. On the same page, the user can see all the sentences, from the entered text which contains the selected word. The user has the option to select one synonym by which he wants to change the selected word, by simply checking the box in front of the synonym. Also, by checking the box in front of the sentences from the text that contain the selected word, the user marks the sentences in which he wants to replace the selected English word with the previously selected synonym. The application was created with the idea to facilitate the learning of specialized languages. Figure 7 shows the layout of the text with linked words that are in the dictionary and have synonyms. Figure 8 shows a page with synonyms of the word that the user opens by clicking on the word. Figure 9 shows the appearance of the text after replacing it with the selected synonym.

In the example shown, the word "meeting" was chosen, which was replaced by the synonym "conference" and only in the first sentence, although the word "meeting" appears in two sentences in the text.

Fig. 7 Text layout with linked words

Fig. 8 Page with synonyms of the selected word

Fig. 9 The appearance of the text after replacing it with the selected synonym

The application is adapted to different types of screens, so it can be used on desktop computers, but also on mobile devices. To run the application, the device must have one of the well-known web browsers, GoogleChrome, MozillaFirefox, Opera, etc. installed.

4. RESULTS OF THE RESEARCH

The research on the use of the "English at a Click" application was conducted on a sample of 43 respondents. The participants in the survey are students of the faculties of natural and social sciences, as well as educators. The layout of the questionnaire is shown in Annex 1 of this paper. The research measured the following four parameters: ease of use of the application, usefulness of the application, attitude towards use and satisfaction with the application. When asked about the general impression of the application, which the respondents rated with grades from 1 to 5, the average grade is 4.51, which leads to the conclusion that the survey participants have a very positive attitude towards the application. The second, third and fourth questions concern the ease of use. Respondents rated simplicity with an average score of 3.96. Based on this, somewhat lower assessment, we can conclude that the further development of the application should be

directed towards making its use simpler and the degree of interaction greater. The fifth, sixth and seventh questions refer to the perceived usefulness of the application. Survey participants rated the usefulness with an average score of 4.27. Questions eight, nine and ten refer to the user's attitude towards the use of the application. The average score is 4.84. Such a high average score indicates that respondents have a positive attitude towards the use of the application and that applications of this type can be very useful when translating and learning English. Questions eleven and twelve relate to user satisfaction with the application. The average rating is 4.79. The total average score is 4.48. Figure 10 shows a graphical presentation of the research results, the average assessment of the general impression of the application and the average assessment of four parameters measured by the research: ease of use of the application, usefulness of the application, attitude towards use and satisfaction with the application.
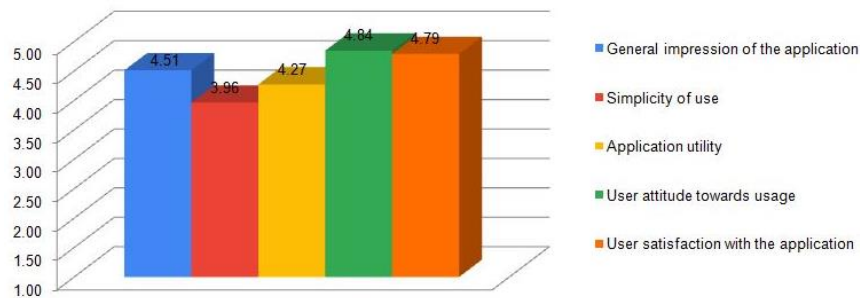
Fig. 10 Graphic presentation of research results

Based on the respondents' comments, we can conclude that, according to them, the application is interesting, that it is useful, and there were a couple of suggestions regarding the application upgrade. Respondents' observation is that the dictionary should be supplemented with new words and synonyms. One suggestion refers to the number of steps in the word processing process, which, according to the answers of the respondents, should be reduced.

Based on the analysis of the results, we can conclude that the application "English at a Click" is useful, that respondents are satisfied with its use and believe that applications of this type are needed in the language learning process, but also as an aid in translating, learning and using specialized English. On the other hand, there are certain shortcomings, mostly of a technical nature, which will be the subject of further research by the authors. The implementation of the new version of the application should eliminate the observed shortcomings, and the plan for upgrading and improving the application is presented in the next chapter of this paper.

Questionnaire layout

"We would like to ask you to participate in the research that analyzes the work of the web application "English at a Click". Participation in the research will help us determine the usefulness of the application and the ease of its use. You are expected to complete a questionnaire that will take you about 5 minutes. Participation in the research is voluntary

and you can cancel at any time. The data will be collected and stored anonymously and will be used exclusively for scientific purposes".

I completely disagree	1
I partially disagree	2
I'm not sure	3
I partially agree	4
I totally agree	5

1. On a scale of 1 to 5, rate your general impression of the application (1-negative, 5-positive)	1	2	3	4	5
2. On a scale of 1 to 5, rate your impression of the user interface (1-negative, 5-positive)	1	2	3	4	5
3. It was easy for me to use the application	1	2	3	4	5
4. I was able to find the information I wanted	1	2	3	4	5
5. The application was useful to me when translating the text into English / from English to Serbian	1	2	3	4	5
6. The application made it easier for me to understand the meaning of synonyms of different English words	1	2	3	4	5
7. If I continued to use the application I would learn new words in English	1	2	3	4	5
8. I think it is good to use applications like this because I can translate texts that use specialized English in a simpler way	1	2	3	4	5
9. I think it is wise to use similar applications because you can learn a lot of new terms and synonyms for specialized English	1	2	3	4	5
10. I like the idea of continuing to use the application in my work/language learning	1	2	3	4	5
11. While using the application, it was interesting to me that I could choose sentences from the text in which I want to replace the English word with a synonym	1	2	3	4	5
12. I am pleased to have used the application	1	2	3	4	5
13. Comments and recommendations for improvement	/	/	/	/	/

5. CONCLUSION AND FUTURE WORK

The English e-learning tool presented in this paper is currently implemented as a standalone web application that provides a new way of learning specialized English and translating texts. The application is easy to use and can help the user when learning a language or translating text. There are also some limitations, which can be improved or removed in the further development of the application. The first noticed shortcoming is that the dictionary has a modest number of English words and synonyms, but since the application is in a demo version, in further development, the fund of words, synonyms, as well as sentences in which synonyms can be used will increase. One way to do this is to automatically retrieve words from some available databases. The new version of the application could contain the mentioned upgrade. This would facilitate the administration of the application, and users would have at their disposal a large fund of English words and synonyms, which would increase the efficiency of the application. Also, testing

showed that there is a bug when replacing the selected English word with a synonym, if the word is at the beginning of the sentence. In that case, the first letter of the synonym that replaces the word remains small, even though the first word is in the sentence. The author plans to identify the words that are changing in the next version of the application, using the ascii character code, and they are at the beginning of the sentence, ie they have the first capital letter, and correct the observed shortcoming. One of the topics of future research and improvement of the functionality of the presented application will be greater automation and a greater degree of interactivity. The author plans to reduce the number of steps in the text entry process, so that users can display the linked words in the text faster and with fewer interactions. Further development of the application could also refer to the introduction of restrictions on access to the application only for registered users. In that case, it would be necessary to store access parameters in the database, as well as user data. Further development of the tool goes in the direction of eliminating the identified shortcomings, as well as more intensive testing.

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