The article deals with the phenomenon of Interactive Whiteboards; their characteristics, possible ways of use and contributions to English lessons. The main aims are to examine the tool from various perspectives, to research the Interactive Whiteboards implementation possibilities in Ukraine and to provide methodological support for teachers of English as a foreign language. The key facts about Interactive Whiteboards on the basis of worldwide research and publications are summarized in the article. The article includes description and analysis of the uses of Interactive Whiteboards in English as a Foreign Language (EFL) classroom. The research aims at investigating the effects of using an Interactive Whiteboard in vocabulary, grammar, reading, writing and speaking teaching. It is emphasized that teaching English as a foreign language in accordance with the recent trends requires equal development of all language skills, regular exposition to natural language by
native speakers and active participation of students. Therefore, Interactive Whiteboards, which support multimodality and learners involvement, have the potential to become one of the tools that can help the English teachers fulfill these aims. The study shows that there is potential in language learning for students with the use of Interactive Whiteboards, due to the teachers’ willingness to integrate new technology and take risks when applying it. This attitude is a positive first step and if the correct measures are taken from policy makers and stakeholders, language teaching may advance in particular ways. Findings show that the use of Interactive Whiteboards increases the students’ English academic success when compared to the use of blackboard and using Interactive Whiteboard in teaching English affects school students’ achievement positively.

Key words: Interactive Whiteboard (IWB); English teaching; methodology; technology; interactive software; English as a Foreign Language (EFL).

1. INTRODUCTION

The urgency of the problem. Since the end of the 20th century, educational system has been experiencing noticeable changes thanks to the worldwide trend of digitalization. According to the framework for the 21st century learning, information, media and technology skills are essentially required for modern people due to the environment of technology and media. Competent people and workers must have critical thinking skills such as information literacy, media literacy and ICT (Information, Communications and Technology) literacy. In a close connection to the immense popularity of computers, a unique tool was designed to meet the specific needs of teachers, students and classrooms. The Interactive Whiteboard (IWB) was born. Initially, it was a device that almost no school or university could afford. However, IWBs gradually found their way into educational institutions and prices started to decline, which caused a rapid increase in the number of IWBs available as well as their fame. The new phenomenon soon gained international interest, many companies were founded, special software was designed, schools and universities were equipped and first articles or books about IWBs published. Nevertheless, it turned out that technology itself cannot change the education. The crucial role plays always the teacher, who is using it.

Analysis of recent research and publications. Research shows that designing lessons with the interactive Whiteboards helps educators streamline
their preparation, be more efficient in their Information and Communication Technology integration and increase their productivity. Research also indicates that notes taken on an interactive Whiteboard can play a key role in the student review process, leading to higher levels of student attendance [1, 3]. Gerard and Widener [4] find that “the Interactive Whiteboard supports interaction and conversation in the classroom; it helps with the presentation of new cultural and linguistic elements.” Solvie [10] investigated the correlation between the use of an Interactive Whiteboard as a delivery tool for literacy instruction in a first-grade classroom and student attention to and participation in the literacy lessons. Her research found: The Interactive Whiteboard was novel and created enthusiasm for learning on the part of the students as evidenced in remarks made during the lessons presented using the Interactive Whiteboard and during individual student interviews. Additional research focusing on middle-school students and teachers, and their attitudes towards Interactive Whiteboards indicates a strong preference for the use of Interactive Whiteboards in the classroom. Li and Cumming [8] studied students’ initial responses to use of an interactive Whiteboard during classes. The immediate advantage of this arrangement compared to seating students at individual workstations has been that websites can be examined as a group activity so that communication between members of the group continues, whether in English or in a foreign language. A further benefit is derived from the fact that several members of the group are not especially computer literate and are daunted by the prospect of seeking out and using websites on their own, particularly interactive sites which require regular responses from them. It allows members of the group to ask and hear others’ questions and reactions before starting tasks individually. Other researchers have also found correlations between interactive Whiteboards and student-teacher engagement. Warschauer [13, 14] details the increased potential for teachers to concentrate on student responses during lessons where an Interactive Whiteboard is used, Sullivan and Pratt [12] point to the benefits of the fast-paced, engaging Interactive Whiteboard classroom. Schut [10] highlights the in-class opportunities that the flexibility of Interactive Whiteboards allows students and teachers.

**The aim of the study.** The article provides a general overview of Interactive Whiteboards based on several research reports and publications and
focuses on the ways IWBs can actually be used by teachers and students in the lessons of English as a second language. This article will specifically address IWB technology in the language learning environment.

2. RESEARCH RESULTS

Over the past twenty years, Interactive Whiteboards have become a leading technology in educational settings as it has the unique ability to transform a classroom from that of a traditional nature to a dynamic and integrative learning environment. The first interactive Whiteboard was released in 1991, and as recently as a few years ago, it appeared that the technology was cementing itself as a permanent mainstay in the classroom – helping teachers to embrace technology and promoting 21st Century skills in students. Consequently, there has been a dramatic rise in the implementation of IWBs within primary, secondary and post-secondary institutions around the world. According to a report issued by SMART Technologies, ‘over 20 million students in more than 900,000 classrooms in more than 175 countries around the world are currently using SMART products. Within the developing countries, as of 2016 with immeasurable government support, the United Kingdom was the leader in its prevalent use as over 80% of classrooms had installed an Interactive Whiteboard. Similarly, the Netherlands and Denmark had reported that 50-52% of its schools were using IWBs, as were just fewer than 40% in Australia, United States, Canada, Ireland, and Mexico. As for third world countries, many initiatives have recently been established to bring Interactive Whiteboards to their classrooms too. The main goal for most of these projects is to improve the education offered to children and youth in poorer countries that are already facing many detrimental problems from poverty to disease and violence.

Technology, ever changing, has become more accessible to teachers in the last few years. Teachers need to be able to use technology to increase their professional development and to have positive contact with students on a regular basis. The Interactive Whiteboard proved to be an exciting and fun bit of technology to integrate. It affects learning in several ways, including raising the level of student engagement in a classroom, motivating students and promoting enthusiasm for learning. Interactive Whiteboards
support many different learning styles and are used in a variety of learning environments. Research shows that designing lessons around interactive Whiteboards helps educators streamline their preparation, be more efficient in their Information and Communication Technology (ICT) integration and increase their productivity overall.

An Interactive Whiteboard, also known as an electronic or digital Whiteboard, is a large touch sensitive display screen that connects to a computer and projector. To operate the IWB, the user controls it directly from the screen in the same way a mouse is used to control a computer. IWBs also have many multimedia functions, such as Internet access, images, sound and video files. Together, these features allow the user to enhance and provide content that is interactive, dynamic and engaging. Consequently, IWBs are commonly used in education within primary, secondary and post-secondary institutions to deliver lessons as well as within businesses and governments for meetings and training. Common brand names of interactive Whiteboards include SMART Board, ActivBoard, eBeam, DualBoard™Mimio and StarBoard; two common software names are SMART Notebook and ActivInspire.

Every Interactive Whiteboard system requires three basic components: a computer, projector and the interactive Whiteboard. To use it, the projector is connected to both the computer and IWB so that the document or media opened on the computer is displayed for the audience on the screen. In contrast to previous conventional computer and projector setups, the user controls the IWB directly from the surface of the screen either by using the special pens accompanied with the board or with the touch of a finger. In this way, the user can interact with the IWB so as to more readily engage the audience. While most IWBs only allow for one input or finger/pen to be used at a time, the new models released in 2012 can allow up to four users to simultaneously select, write or draw on the board.

In terms of ease of use, interactive Whiteboards are designed so that novice users, who are familiar with computer software, can use it with minimal training. Then, as experience grows, the user can utilize the related software, usually offered by the manufacturer of the IWB to carry out more advanced and flexible operations. Most IWB manufacturers also provide the user access to an online community wherein complete lessons, ranging by
grade and subject can be searched and downloaded. Among those lessons, some offer professionally designed content with sophisticated multimedia and interactive capabilities that you can purchase from publishers, magazines and other content providers.

Interactive Whiteboards are an effective way to interact with digital content and multimedia in a multi-person learning environment. Learning activities with an interactive Whiteboard may include, but are not limited to the following: manipulating text and images; making notes in digital ink; saving notes for later review by using e-mail, the Web or print; viewing websites as a group; demonstrating or using software at the front of a room without being tied to a computer; creating digital lesson activities with templates, images and multimedia; writing notes over educational video clips; using presentation tools that are included with the white boarding software to enhance learning materials; showcasing student presentations.

Teaching English as a foreign language in accordance with the recent trends requires equal development of all language skills, regular exposition to natural language by native speakers and active participation of students. Therefore, IWBs, which support multimodality and learners involvement, have the potential to become one of the tools that can help the English teachers fulfill these aims.

In learning foreign languages most people need to reinforce their beliefs and understandings by asking others questions, thereby making learning an inherently social activity. Current education theories are grounded in the notion of the social learner and position student engagement as a key component of knowledge construction. First, Whole-class teaching brings the entire class together, focuses their attention and provides structured, teacher focused group interaction. Second, Constructivism relies on the learner to select and transform information, build hypotheses in order to make decisions and ultimately construct meaning. Third, Active learning learners actively engage in the learning process through reading, writing, discussion, analysis, synthesis and evaluation, rather than passively absorbing instruction (e.g., lecture model of instruction).

A common thread between these three learning theories is the understanding that student engagement is crucial to learning and, as a growing
collection of international research proves, Interactive Whiteboards promote student engagement. Educators can use digital resources while maintaining dynamic interaction with the entire class, provide computer-based learning without isolating students and encourage a higher level of student interaction in both teacher-directed and group-based exchanges. Interactive Whiteboards promote interaction among the students, the learning materials and the teacher, and enrich ICT by providing a large work space for multimedia resources. Having a display surface large enough for everyone to see encourages a high level of student interaction. A teacher and a student can interact with the Interactive Whiteboard at the front of the class and the rest of the students remain involved. As research indicates, the functionality of the Interactive Whiteboard and its accompanying software allows for the development of classroom activities that are engaging for students, so they encourage greater focus, participation and interaction, and improve student learning outcomes as a result.

The easiest way is to use the board as a projector. Anything that you are able to run on your computer can be displayed at the IWB. Movies, music or pictures are shown very often. To avoid the students’ passive watching, it is great to use accessible sources of different exercises and activities, in particular the Internet. On-line materials suitable for English teaching can be divided into these categories: Support for textbooks, Educational sites, On-line courses and Games. Many publishers offer extending materials for textbooks on their web pages. Exercises, which were originally designed for practice on home computers, can often be used with IWBs as well. The advantage is that it is possible to select the specific level or skill. An automatic check and the correct answers are also included. If the teacher wishes to involve all students simultaneously, it is easy to print handouts or to combine it with laptops. The first link for textbooks such as Project and Headway can be really recommended: Oxford University Press: elt.oup.com/learning_resources; Cambridge University Press: www.cambridge.org/elt/teachers; Macmillan: www.macmillan.weby.htm#resourcesites; Longman: www.pearsonelt.com/course-specific-websites.

A projection onto an Interactive Whiteboard is very different from a classic projection of what is found on a computer screen. With an Interac-
tive Whiteboard the user is able to navigate from the board. He does not need to continually go back to the computer and, as a consequence, turn his back to the class. The teacher can spend his time concentrating on the learning process of the student instead of the technology. This is very important when using Interactive Whiteboards to teach and is crucial in the foreign language classroom. All foreign language teachers know how difficult it can be to have a relaxed conversation with the students in the target language.

Perhaps the most interesting function, which interactive Whiteboards offer, is the use of interactive software. It is a program that was specifically designed for creating custom teaching materials. Usually, the companies provide it together with their brand of IWB, but there is also some independent software. They differ mainly in graphics, placement of icons and various enhancements. Popular products are: ActivInspire, Smart Notebook, InterWrite Workspace, eBeam Scrapbook and others.

Interactive software is a great tool especially for practicing. Ideally, the teacher prepares or finds materials in advance and the students then operate the board during lessons: they write, match, move, reveal... In contrast to conventional presentations, they can participate actively. The basis is the creativity of teachers and quality materials that encourage cooperation. They should contain more pages and different types of activities. Basic functions are always similar to Paint (pen, eraser, fill, shapes...). The big difference is that the created objects can further be edited and moved. It is possible to insert texts, images, video and listening into the page. The program also includes a gallery that offers a large stock of images and prepared activities. Have a look at it so that you know what is available. Another option is to use a variety of tools: for example, covering can hide the page, handwriting recognition converts a written text into a typed font, a dice adds an element of random, etc.

The Interactive Whiteboard can facilitate certain types of conversations in that all members of the classroom may concentrate on the same item at the same time and conversation may then spring from that. The merit of the Interactive Whiteboard is that it enhances conversation. When the teacher is navigating from point to point, he/she faces and interacts with the class. The teacher is able to focus on the student’s language production instead of technical issues. It also supports communication when used in combination with
a wireless keyboard. The teacher can sit with the students, reading a text or having a conversation. When new vocabulary is needed or appears, the teacher can enter the new word into the keyboard, and it will then appear on the board. The awkward situation of having to stand up, go to the board, and write the new word on the board does not occur. By simply typing the new word onto the board, the conversation may progress smoothly. The students do not have to write the word immediately. At the end of the activity, the teacher can reinforce the vocabulary by underlining, highlighting or circling. If desired, it can be printed for the student and saved for the teacher.

An important use of the Interactive Whiteboard is its aid in presentation of new linguistic and cultural elements. The teacher can prepare a lesson as usual in a Notebook file or Word Document, and is then able to use the features of the Interactive Whiteboard to his advantage. The instructor can use the Interactive Whiteboard to overwrite, underline, highlight or circle the elements that he wants to emphasize. Because the document is typed, it is very readable, and it – along with changes and new emphases – can be saved and displayed again at any time. The features of the Interactive Whiteboard can also make a big difference when presenting authentic documents such as web sites. They enable the teacher to explore the document at length rather than staying at a simple presentation level. Warschauer [14] suggested in his study the positive influence of authentic documents in language learning. With Interactive Whiteboard the instructor can not only simply project a website; he/she can also overwrite it to emphasize specific linguistic and cultural elements. The Interactive Whiteboard also facilitates navigation of the site because it is finger driven on the board. This, too, facilitates classroom activities.

Sullivan [12] noticed “that the computer can sometimes encourage a form of ‘anti-social’ behavior that amounts to working in isolation from others”. This is a common criticism of computer use and is especially relevant to the foreign language teacher, who is supposed to interact with the class as much as possible. The introduction of the projector associated with the Interactive Whiteboard brings the problem into a new perspective. When presented to the whole class, a web document can enhance oral interaction within the whole class. Opinions and ideas can be exchanged. It is possible to extend this operation of the Interactive Whiteboard in order to let...
the student, instead of the teacher, navigate the board. The other students may guide him by giving directions in the target language. As suggested for group activities using the computer the Interactive Whiteboard brings people together and encourages communication. It is also possible for students to present projects on the Interactive Whiteboard. This enables them to speak without having to worry about the mouse. Pictures and text are shown without delay with the simple touch of a finger. This places the oral production in the target language in the foreground.

Still there can be found some disadvantages of using IWBs. When using a portable IWB unit, the board needs to be oriented often when the board or projector cart is bumped. Reading the board can be difficult if shadows are cast as result of a hand blocking the light on the LCD projector. Since IWBs require a computer, there may be technical difficulties (i.e. internet access). Sun glare can cause difficulties in reading the writing an IWB. IWBs are costly.

3. CONCLUSIONS AND THE PROSPECT OF FURTHER EXPLORATION IN THIS AREA

The analysis of the Interactive Whiteboard in the foreign language classroom has led to the conclusion that the Interactive Whiteboard is an innovative and powerful support for language acquisition. First of all, it provides a bridge that allows using the features of computers without breaking communication – it even supports it. Secondly, it may enhance new kinds of learning processes. Considering the IWBs from different points of view, the aim was to provide a comprehensive overview of the technology, its application and many possibilities, which could serve as a source of inspiration for teachers of English.

References


Оксана Рогульська, Ольга Тарасова. Використання інтерактивних дошок для активізації процесу навчання англійської мови

У статті розглядається феномен інтерактивних дошок; їх характеристики, можливі способи використання на заняттях з англійської мови. Досліджено можливості застосування інтерактивних дошок в Україні та надання методичної підтримки вчителям англійської мови. У статті наведено ключові
факти про інтерактивні дошки на основі зарубіжних досліджень та публікацій. Стаття містить опис та аналіз використання інтерактивних дошок на заняттях з англійської мови. Метою дослідження є вивчення ефективності використання інтерактивної дошки для вивчення лексики, граматики, читання, письма та усного мовлення. Підкреслено, що викладання англійської мови як іноземної, відповідно до останніх тенденцій, вимагає рівномірного розвитку всіх мовних навичок та активної участі студентів. Таким чином, інтерактивні дошки, які підтримують мультимодальність та участь студентів, мають потенціал стати одним з інструментів, які можуть допомогти вчителям англійської мови у процесі викладання. Дослідження доводить, що існує потенціал для вивчення мови для студентів з використанням інтерактивних дошок, завдяки готовності вчителів інтегрувати нові технології, що має стати першим позитивним кроком на шляху до широкого впровадження інтерактивних дошок у навчальний процес. Результати показують, що використання інтерактивних дошок підвищує академічний успіх студентів у порівнянні з використанням звичайної дошки.

Ключові слова: інтерактивна дошка; навчання англійської мови; методологія; технологія; інтерактивне програмне забезпечення; англійська як іноземна мова.