

By this short-term research was proved that the CLIL method is able to make teaching Mathematics attractive even for those who disliked it in the past. It produces more efficient teaching results and draws higher attention of all pupils in the class. They became more motivated to learn something new and even difficult because they found this new method attractive. This was the result of the combination of interactive educational tools and foreign languages teaching.

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FEATURES OF THE SMART BOARD IN INTERNET

Abstract. Smart technologies and interactive white boards become very popular tool in education last years. There are many advantages of using such device in the teaching, since it is more interesting for the students, helps to save the time and make the educational process more effective. One of the most important facilities of the interactive whiteboards is an immediate access to internet. In other words, the teacher get access to the huge base of knowledge, educational materials, movies and resources. In this article main facilities of using internet in interactive whiteboards are discussed. Special attention is paid to so-called virtual whiteboards that have been created for the distance education.

In addition, on a virtual board, as well as on its real counterpart, there is a possibility to write formulas, build various geometric shapes. With the help of special services, you can transfer graphic images and text files. Interactive

whiteboard is indispensable for conducting webinars, conferences, trainings, as well as meetings of the teacher with several students.

Key words: Interactive whiteboard, smart board, internet, educational resources, distance education.

Андатпа. Интеллектуалды технологиялар және интерактивті тақта соңғы жылдары білім беру саласында өте танымал құрал болуда. Ол уақытты үнемдеуге және оқыту процесін неғұрлым тиімді жүргізуге көмектеседі. Осындай құрылғылар оқушылардың қызығушылығын тудыратындықтан, сабақ беру барысында оларды пайдаланудың көптеген артықшылықтары бар. Интерактивті тақталармен ең маңызды артықшылықтарының бірі Интернетке тікелей қол жетімділік болып табылады. Басқаша айтқанда, мұғалім үлкен білімнің дереккөзіне, оқу материалдарына, фильмдерге және басқа да дереккөздерге қол жеткізе алады. Бұл мақалада интерактивті тақталармен Интернетті пайдаланудың негізгі ерекшеліктерін талқылайды. Қашықтықтан білім беру арналған виртуалды тақталарға ерекше назар аударылады.

Сонымен қатар, виртуалды тақтаның геометриялық фигуралар салу, формуланы жазу сияқты мүмкіндіктері бар. Арнайы қызметтер көмегімен, суреттерді және мәтіндік файлдарды жіберуге болады. Тақтада бірнеше оқушылармен вебинарлар, конференциялар, тренингтер, бірнеше оқушы мен мұғалім арасында кездесулер жүргізуге болады.

Кілт сөздер: интерактивті тақта, SMART Board, онлайн, білім беру ресурстары, қашықтықтан білім беру.

Аннотация. Интеллектуальные технологии и интерактивные белые доски становятся очень популярным инструментом в образовании в последние годы. В преподавании есть много преимуществ использования интерактивных досок, поскольку это вызывает большой интерес у учеников, помогает сэкономить время и сделать учебный процесс более эффективным. Одним из наиболее важных особенностей и преимуществ интерактивных досок является немедленный доступ к Интернету. Другими словами, учитель получает доступ к огромной базе знаний, учебных материалов, фильмов и ресурсов. В этой статье обсуждаются основные возможности использования Интернета в интерактивных досках. Особое внимание уделяется так называемым виртуальным доскам, которые были созданы для дистанционного обучения.

Кроме того, на виртуальной плате, а также на ее реальном аналоге, есть возможность писать формулы, строить различные геометрические фигуры. С помощью специальных сервисов вы можете передавать графические изображения и текстовые файлы. Интерактивная доска

необходима для проведения вебинаров, конференций, тренингов, а также встреч преподавателя с несколькими учениками.

Ключевые слова: Интерактивная доска, интеллектуальная доска, интернет, образовательные ресурсы, дистанционное образование.

Introduction

Education is evolving fast. Just as technology plays a key role in our everyday lives, it's now transforming how students learn in the classroom. In today's digitally driven world, it is quite usual that students become familiar with technology from a young age. By incorporating technology into every aspect of school life, children will learn the skills and knowledge that they need to thrive in our fast-moving society. In present paper, we will look at how technology in the classroom could change, and, moreover, is already changing education.

One of the most important tool in teaching, and explanation any idea, was for a long time the black boards. And now, the main change in presenting the information is implantation of the screens. Then, the teacher could connect the computer and translate any visual information to the screen. The next generation of the screen is interactive whiteboard, or smart board. Now the teacher can manipulate the objects using special devices. Thus, the smart board changes the old blackboard paradigm of teaching into an updated and interactive system. It can accommodate different learning styles by adding color, sound, video and the specialized features of the computer to assist the training and teaching process.

From the point of view of students, there is so much that they can do with the Internet. Not only can they communicate with international students, they can gain from others' knowledge and experiences, participate in chatrooms, share ideas and solutions and learn about the many diverse cultures out there. The educational process becomes more attractive for them.

While the Internet does a lot for students, there are also benefits for parents and teachers. Parents can become more involved in their children's education by connecting the school with homes, libraries or other access ports. Teachers can adjust to the different learning styles and in the classroom. They can also set their own pace of teaching. Individual teaching techniques can become more available, which has been proven to be a factor in student achievement. Teachers have the chance to be able to teach at more than one place simultaneously [1]. They may be in a small town but through the Internet, they can be linked to students in more populated areas. Also, the Internet enables administrators and teachers to spend less time on administration and recordkeeping. This would also give them more time to spend with their students.

All these examples motivate us to study how internet and interactive whiteboards improve the educational process. The main aim of this research is

to discuss main features of the innovative technologies. The special attention is paid to the distance education, since these technologies used for distance learning are aimed at ensuring that the interaction between the teacher and the student is maximally informative and productive.

Smart Boards and internet

Advances in technology are changing the way that students learn. It's now standard practice to take a course online, and the advent of the digital age has made it much easier for students to take courses through distance learning. Technology has enabled students from different colleges to share information through creating online learning communities where they can enjoy debates and discussions on the same specialist topic. One of the biggest transformations for learning is, of course, the internet. Students can now find any necessary information, encouraging them to delve deeper into their chosen topic and challenge their points of view. The Smart Board also allows students to present their work from text and other media formats such as DVD, CD ROM, and Internet. In general, the interactive board turns a typical classroom into a fun learning environment. It promotes deeper understanding of material due to its transparency and visibility.

With smart notebook collaborative learning software, which is included with all SMART Board interactive whiteboards, you can capture all your notes, screenshots, images and videos to a single file that can be opened in both Windows and Macintosh operating systems. Notes and multimedia can be saved as objects that can be manipulated, reorganized and reused. You can also save digital notes directly into several software applications including Microsoft Windows versions of PowerPoint, Word and Excel, Adobe Acrobat and AutoCAD software. SMART Notebook software also enables you to e-mail saved files to students or colleagues at any time during your presentation. The Smart boards allow to explore a website or watch an educational video without ever leaving the screen. With the ability to interact with a variety of multimedia content and file types, the smart board can help the teacher enliven the material and capture students' interest. The connection to internet from the smart board is very important, since in that case the teacher and his audience get an acces to planty educational resources. That leads to appearance of the phenomenon, so-called open educational resources (OER). The development and promotion of open educational resources is often motivated by a desire to provide an alternate or enhanced educational paradigm.

Open educational resources often involve issues relating to intellectual property rights. Traditional educational materials, such as textbooks, are protected under conventional copyright terms. However, alternative and more flexible licensing options have become available as a result of the work of Creative Commons, an organization that provides ready-made licensing agreements that are less restrictive than the «all rights reserved» terms of standard international copyright. These new options have become a «critical

infrastructure service for the OER movement» [2]. Another license, typically used by developers of OER software, is the GNU General Public License from the free and open-source software (FOSS) community. Open licensing allows uses of the materials that would not be easily permitted under copyright alone [3].

Types of open educational resources include: full courses, course materials, modules, learning objects, open textbooks, openly licensed (often streamed) videos, tests, software, and other tools, materials, or techniques used to support access to knowledge. OER may be freely and openly available static resources, dynamic resources which change over time in the course of having knowledge seekers interacting with and updating them (such as this Wikipedia article), or a course or module with a combination of these resources.

However, there is some criticism of the open educational resources. For instance, some researchers claim, that The OER movement has been accused of insularity and failure to connect globally: «OERs will not be able to help countries reach their educational goals unless awareness of their power and potential can rapidly be expanded beyond the communities of interest that they have already attracted» [4]. Another weak point that some courses may charge for end-of-course awards or course verification certificates from commercial entities. Nevertheless, we can not deny that open educational resources, as a part of the new interactive educational paradigm, including interactive whiteboards, internet and other new devices, allow to develop a new more effective level of educational standart.

In addition, an interactive whiteboard is a screen that can be viewed and used by more than one person at more that one computer. The tools available differs by the provider of the whiteboard, but most include drawing tools, text tools, and color palettes. Additional tools may include pre-written equations, shapes, the ability to copy and paste text and pictures, and the ability to view websites as a group. The interactive whiteboard in distance education uses multimedia as a way of communication and as a learning tool.

Smart Boards and distance education

In the educational market, access to tutoring services can be obtained in various ways. According to the conducted researches, more and more people prefer to use the Internet as the main communication channel. This directly applies to raising the level of education [4]. One of the most effective methods is recognized as the use of whiteboard interactive whiteboard. What is the innovation of this unique technology ?

Unlike online learning by Skype, which is quite common in many educational projects, the virtual smart board allows the teacher and student not only to communicate online, but also to record the session. This point is very important in order to conduct a comprehensive analysis of the lesson later. And the record can be implemented by both the teacher and the student. This unique service allows you to use the voice menu and video chat online [5].

In addition, on a virtual board, as well as on its real counterpart, there is a possibility to write formulas, build various geometric shapes. With the help of special services, you can transfer graphic images and text files. Interactive whiteboard is indispensable for conducting webinars, conferences, trainings, as well as meetings of the teacher with several students.

Especially important the interactive whiteboard technology in mathematics teaching [6]. Math can be difficult to explain on the computer without specialized programs, but an interactive whiteboard solves this problem. It can be used to easily communicate equations or to draw visual aids when solving word problems.

There are many resources in internet that provide interactive whiteboard service, for instance, Twiddla, Realtimeboard.com, WikiWall and many others. Almost all of them have the same functional — the user can create one (or several) whiteboards, write there text, include formulas and geometrical objects. The board can be saved or shared. Some of these services supports the integration with Google Docs and Google Drive, that also could be useful for teachers and students. There also common for many services to create templates of the board.

Thus, distance education could be effective, in the case of well-prepared teachers or tutors. Therefore, the American Mathematical Association of Two-Year Colleges has described several recommendations for the practitioners of the distance education. They claim, that «Regardless of the method of distance education delivery, institutions must ensure a sound learning environment when implementing distance education strategies». The following recommendations could be established.

Mathematics, more than any other, distance education programs must be carefully and strongly planned. Special attention must be directed to the needs and abilities of students. In other words, teacher has no visual feedback from the students, if the material is clear, or additional explanation is necessary. Distance education courses provide students with learning opportunities that may not have previously existed but these courses are not appropriate for all students or all instructors. It is recommended to prepare some useful links to the «background» material.

Mathematics faculty should make clear the expectation that students enrolled in distance education mathematics classes must be active learners who are strongly motivated and self-disciplined, and it is crucial for distance education, participate and interact in class activities regularly, and turn in course assignments on time, just as would be expected of students who attend on-campus classes. It means, that since there is almost not possible to control the learning process by the teacher, the student should be responsible for his tasks and works.

Access and equity must be considered when providing opportunities for distance education. Mathematics is an integral part of all programs of study and

so it is especially important that all students who could benefit from distance education opportunities in mathematics have access to them. The technology selected for a distance education course should be fully accessible and understandable to students enrolled in the course. Efforts should be made to maximize student access to the technology and appropriate support services. Training and support for mathematics distance education providers must be part of any distance education program. Colleges should provide continuous and relevant training and ongoing support as an integral part of their distance education program. In other words, since distance education has its own singularities, the teacher should be well-prepared and professional.

Distance education programs must maintain high standards. Mathematics courses provide a large part of the basis for learning in many other courses and disciplines. Therefore, students should be encouraged to justify their answers and explain their thinking. Additionally, if exams are used in a course, measures such as proctoring should be taken to ensure that the student taking the exam is the student who is receiving the grade and that the integrity of the exam is maintained.

Moreover, special attention should be paid to the control over the assimilation of knowledge by teacher's wards. This is a fundamentally important point: unlike face-to-face meetings, when practicing Skype, the tutor can not observe non-verbal reactions to his actions and explanations, because of which dialogue in the study of a new topic often turns into a monologue, when a large amount of new information is «laid out» without all understanding.

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INTERACTIVE WHITEBOARDS IN MATHEMATICS TEACHING

Abstract. An interactive whiteboard (IWB) is a large interactive display, it can either be a standalone touchscreen computer used independently to perform tasks and operations, or a connectable device used as a touchpad to control computers from a projector. It has provided interesting affordances in the classroom environment, such as multiple visualization and multimedia presentation and ability for animation and interaction. In this paper, some aspects of comparison of the classical and the new IWB- technology classes are presented in order to find out advantages of this new device. It is shown that capabilities of IWBs to enhance the quality of interaction, and better and deeper mathematical understanding.

In this article also says, that IWB reduces the psychological barrier, allowing the student overcome the fear and start using modern technologies. It should be mentioned here, that in these lessons even lagging students change their behavior, they follow the course with interest, raise their hand to go to the board and solve the tasks. Here, the factors associated with increasing motivation students and visual presentation of the material are working.

Key words: interactive whiteboard, mathematics teaching, Smartboard.

Аннотация. Интерактивті тақта үлкен интерактивті дисплейден тұрады. Олар түрлі операциялар мен тапсырмалар орындауға арналған автономды сенсорлы компьютер немесе проекторға қосылатын компьютерді басқаратын сенсорлы панель болуы да мүмкін. Бұл құрылғы көптеген көрнекіліктерді көрсетуге және мультимедиялық презентация, анимацияларды өзара байланыстыратын қызықты мүмкіндіктер ұсынады. Бұл мақалада осы жаңа құрылғының артықшылықтарын анықтау үшін интерактивті тақта технологиялары қолданылатын жаңа сыныптар мен классикалық сыныптарды салыстырудың кейбір аспектілері көрсетілген. Интерактивті тақталардың ұсынатын мүмкіндіктері оқушылармен байланысты арттыратыны және математикалық түсінікті тереңдетініне баса назар аударылған.