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**МЕКТЕПТЕ ОНЛАЙН БИЛИМ БЕРҮҮДӨ ВИРТУАЛДЫК МЕКТЕП
ПЛАТФОРМАСЫН КОЛДОНУУНУН ЭФФЕКЦИЯЛАРЫ**

**ЭФФЕКТЫ ИСПОЛЬЗОВАНИЯ ВИРТУАЛЬНОЙ ШКОЛЬНОЙ ПЛАТФОРМЫ В
ШКОЛЬНОМ ОНЛАЙН-ОБРАЗОВАНИИ**

**EFFECTS OF USING A VIRTUAL SCHOOL PLATFORM AT SCHOOL ONLINE
EDUCATION**

Аннотация: Бүгүнкү күндө технологиянын ылдам өнүгүүсү менен билим берүүнүн сапатына болгон талаптар да күч алууда, башкача айтканда технология билим берүү тармагында түп-тамырынан бери өзгөрүүгө алып келүүдө. Виртуалдык окутуу аркылуу студенттер мугалимдер менен студенттердин өз ара иштешүүсү үчүн ыңгайлуу шарттарды түзүшөт. Пандемия учурунда ар бир предмет үчүн башка платформаны колдонуунун ордуна, бардык инструменттерди бир системага киргизүү студенттердин билим сапатын жогорулатат. Бул макаланын максаты виртуалдык мектепти колдонгон окуучулар менен виртуалдык мектепти колдонбогон студенттерди салыштыруу аркылуу LMSтин студенттердин катышуусуна, мотивациясына жана билим сапатына тийгизген таасирин изилдөө.

Негизги сөздөр: LMS Moodle, Билим берүүнүн сапаты, технология, виртуалдык мектеп, билим берүү.

Аннотация: В настоящее время, по мере интенсивного развития технологий, повышаются требования к качеству образования, что приводит к кардинальным изменениям в образовании. Посредством виртуального обучения учащиеся создают благоприятные условия для взаимодействия с учителями и учащимися. В условиях пандемии для каждого

предмета необходимо использовать разные платформы, чтобы систематизировать все инструменты и повысить качество знаний учащихся. Цель данной работы направлена на изучение влияния LMS на посещаемость, мотивацию и качество знаний учащихся путем сравнения учащихся, которые не использовали виртуальную школу, с учащимися, которые использовали виртуальную школу.

Ключевые слова: LMS Moodle, качество образования, технологии, виртуальная школа, образование.

Annotation: Today, with the rapid development of technology, the requirements for the quality of education are increasing, that is, technology is leading to radical changes in education. Through virtual learning, students create a conducive environment for teachers and students to interact. Rather than using a different platform for each subject during a pandemic, bringing all the tools into one system will improve the quality of students' knowledge. The purpose of this paper is to examine the effect of LMS on student attendance, motivation, and quality of education by comparing students who have used a virtual school with those who have not used a virtual school.

Keywords: LMS Moodle, Quality of education, technology, virtual school, education.

Introduction

Due to the digital transformation of education, educational platforms are actively developing. In a developing country like Kazakhstan, it is important to educate students in a well-organized way. However, in difficult situations such as pandemics, classroom education is limited. There are conditions for the use of online platforms. The systems used to teach students and interact with teachers in a virtual environment are called learning management systems (LMS). LMS is a good tool to help students get quality education and increase teacher competence. This is an experience transfer between LMS teachers and so on. reduces the total time spent on factors.

In this regard, learning management systems (LMS) provide interaction between teachers and students in the virtual space. Jamal Hala in his Role of Learning Management Systems in Educational Environments: An Exploratory Case Study proved that learning in this perspective is the formation, strengthening and regulation of associations, especially through the strengthening of certain connections through feedback [1].

In the system of learning management, different approaches to education can be used, chat, discussion through conferences, and forums all increase the interaction and activity between teachers and students. Many software programs provide a Virtual Learning Environment. This software is available in both commercial and open-source software (OSS) [2].

The main thing in creating courses is to analyze the system of learning management, review the relevant scientific literature and consider the introduction of course content. then the learning management system should be combined with the theoretical approaches often used in face-to-face lessons. Finally, it is important to address gaps in practice in the training management system. Moodle is the most convenient and popular e-learning system with a multilingual interface. It is a learning platform designed to provide a single, reliable, secure, and integrated system for teachers, administrators, and students to create a personalized learning space [3]. Using this system, a virtual school platform was developed. The introductory page of e-learning materials in the virtual school contains basic information about this course, the objectives of this course, and other information necessary to complete the course. The purpose of this paper is to examine the effect of LMS on student attendance, motivation, and quality of education by comparing students who have used a virtual school with those who have not used a virtual school.

Methodological bases of research

Moodle system is one of the innovative information and communication technologies (ICT) that creates a modern educational environment in which students can freely access the content of education anytime and anywhere [4].

One of the most pressing pedagogical issues in the training of future professionals in the digital world is the introduction of cloud technologies necessary for the digitization of education [5]. LMS Moodle tools allow you to create a comprehensive and professional learning product, virtualization is becoming an integral part of distance learning, as it allows you to implement complex informal and formal learning scenarios [6].

Effective synchronous learning using the Internet has long been in the spotlight of educators. As technology continues to evolve and today's students' computer literacy increases, virtual learning environments are becoming an important tool for online learning. Synchronous learning environments allow you to create a learning community, and virtual learning environments give students a sense of belonging in their classrooms.

Defining the conditions for LMS data in the assessment of requirements and the development of training materials for the objectives. During the design and development of the platform was the creation of media content for e-learning based on LMS. The final stage is the development of educational documents until the virtual school platform is fully formed. Needs to develop a methodology as a guide to improving the problems of the developed virtual school platform. The development of the virtual school platform was carried out in several programming languages, and due to the complexity of the work, the process of evaluation and revision was carried out to improve the quality and functionality of the virtual school platform.

Research results and discussion

In the field of education, to develop students' critical thinking skills, it is necessary to develop an open approach to knowledge, avoid the development of a general view of that knowledge, and explore and use other opportunities and alternatives. It is difficult to form such a productive relationship between teacher and students during a one-sided lecture focused on a traditional lesson.

One of the advantages of an online learning system is that students can interact when they have a problem. In online learning, real-time interaction should be active to ensure communication between teachers and students, not just by downloading bulletin boards and learning materials. Message functionality allows students to freely express their opinions about the content of lessons and other opinions related to reading. And now the priority is to increase the effectiveness of independent work of schoolchildren in the context of the use of virtual learning [7].

Modern innovative learning technologies can ensure a high level of quality of education and guaranteed achievement of learning objectives [8]. The assessment of the needs of the above stages is aimed at determining the requirements for training until the completion of the virtual school platform. Virtual school platform improves the quality of teaching. This platform has opportunities for continuing education, and further development of the features of virtual learning. Because you can add more interactive content to the virtual school platform.

It is difficult for teachers to teach all topics in a short period, and the use of new technologies in teaching creates a favorable environment for students to use educational resources independently. Helps to solve problems in the educational content of interactive multimedia teaching. H5P is a tool used to design interactive educational content. It allows teachers to create content such as presentations, games, and interactive books. H5P is a reliable and convenient tool for teachers to engage students and provide quick feedback.

E-learning has been expanded, with a focus on innovation in education. To expand the technical capabilities of the specialized onlineedu.goweb.kz portal, a multifunctional e-learning system <https://onlineedu.goweb.kz/> was developed and posted on the portal. This system has been tested in the school learning process. For the convenience of using the platform in the educational process, «Guidelines for the use of the online platform for virtual learning» have been developed and posted on the website for the organization and conduct of conferences. Starting from the 2021/2022 academic year, e-learning resources for use in the educational process have been developed. The system is used when conducting online lessons «Computer Science» at school.

According to our research, we conducted an experimental experiment at a school in Almaty. The experiment was conducted in the 9th A and Θ classes of the same school, the A-class used the

virtual school platform we created, and the Θ -class used the Whatsapp, Email, and Zoom platforms. The activity of students on the virtual school platform is shown in the following figure, Figure 1.

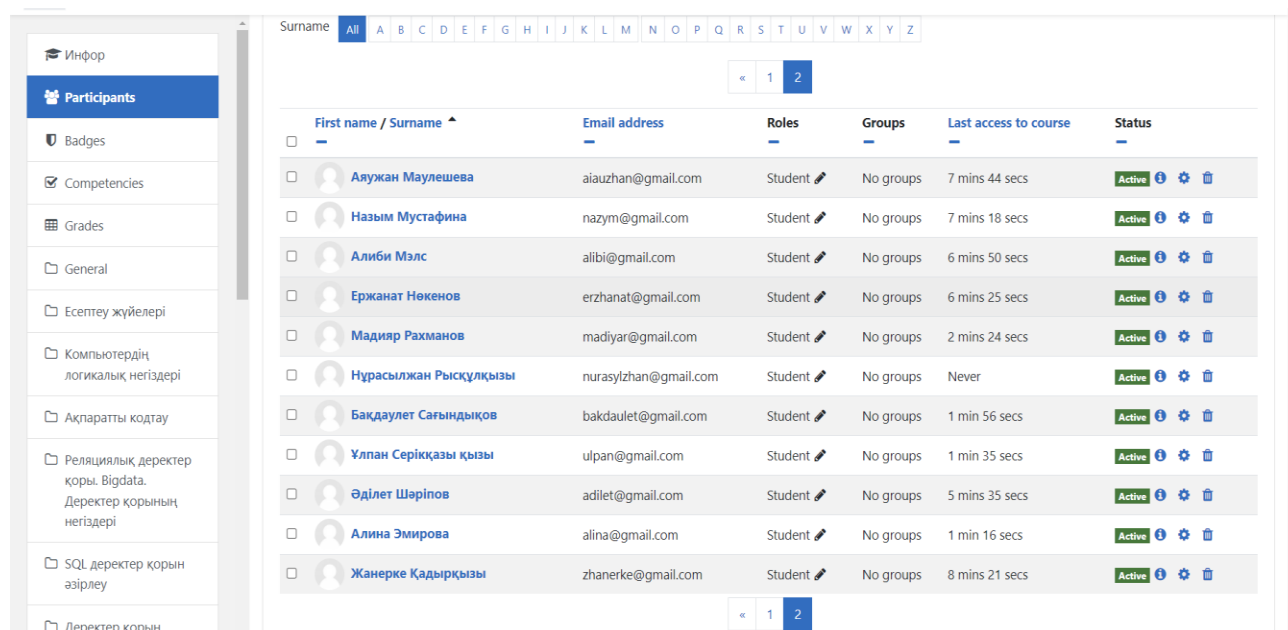


Figure 1. Student activity on the virtual school platform

Access to the platform was paid for by students, and then a notification was sent to the students' mail. After logging in, you can analyze the course. After entering the course, there are video lessons, interactive content, tests, theoretical content, assignments, chats, and feedback on various topics. One of the ways to effectively use information technology is to provide students with virtual feedback during the lesson [9]. Through chat, students can discuss the issue among students. Students complete tasks online. The tests are related to the topics of the video lessons and theoretical content, the results of which can be found after passing the tests.

Before the use of the virtual school platform in the experimental classroom, student achievement was moderate, with Figure 2 showing the results for the classroom that used the virtual school platform and the classroom that did not. The use of the virtual school platform has improved the quality of students' education. Teachers can use the platform to organize traditional, distance, mixed and adaptive learning using elements of artificial intelligence [10].

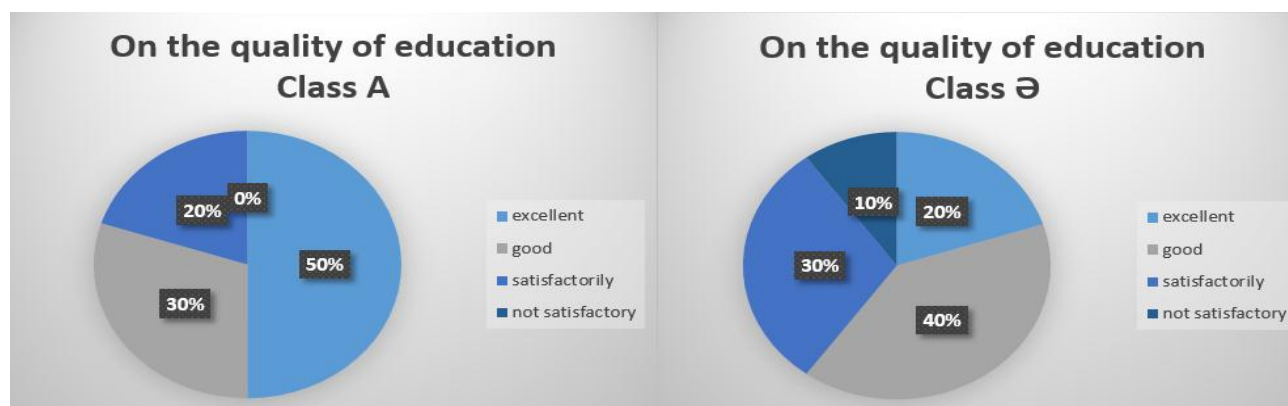


Figure 2. Comparison of class A and class Θ on the quality of education

Conclusion

In conclusion, the issue of digital education is very relevant today, and changes characterized by the abundance and diversity of information will help to improve the quality of education. This study provides a detailed analysis and a comprehensive review of the experience of using LMS Moodle in the distance learning process. Thus, online education using a virtual school platform has become a tool to improve the quality of general education. Distance or mixed learning can be organized using the elements of the interactive environment of this platform.

According to our research, the virtual school platform solves several problems, including improving the quality of education, improving the professional skills of teachers, as well as meeting the interests and needs of students.

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