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**THE PROBLEMS, PROSPECTS AND TASKS OF ELECTRONIC LEARNING IN  
EDUCATION**

БИЛИМ БЕРҮҮДӨГҮ ЭЛЕКТРОНДУК ОКУТУУНУН КӨЙГӨЙЛӨРҮ, ПЕРСПЕКТИВАЛАРЫ  
ЖАНА МИЛДЕТТЕРИ

ПРОБЛЕМЫ, ПЕРСПЕКТИВЫ И ЗАДАЧИ ЭЛЕКТРОННОГО ОБУЧЕНИЯ В ОБРАЗОВАНИИ

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## THE PROBLEMS, PROSPECTS AND TASKS OF ELECTRONIC LEARNING IN EDUCATION

### Abstract

The article is devoted to the analysis of the prospects for the use of electronic learning in the higher education system. Technological advancements have simplified the education process. The main research question was ‘How effective is electronic learning for students of our university?’ The finding shows important aspects in the development of electronic learning use that take into account the knowledge of teachers. E-learning has great benefits in education for all parties, both teachers and students. Many university students are using different electronic learning tools and telecommunications for academic and non-academic purposes. The inquiry showed the effectiveness of electronic learning tools in higher education institutions. The analysis uses a quantitative method and survey (online survey) as a research tool and was given to 192 university students. The online survey was returned by 66 students. This study aims to find out the effectiveness of electronic learning and to determine the improvement of students’ knowledge when using electronic learning technologies at the universities. Based on data, the result of this inquiry is that using electronic learning is effective at the universities and gives the students positive assessment when using electronic learning tools. When electronic learning is effective it can upgrade functional learning and positively influence students of English Language. The students’ survey results about their attitude to electronic education are given. Finally, conclusions are drawn about the advantages and disadvantages of electronic learning, and expectations for using the online constituent in the modern education.

**Keywords:** information and communication technologies, distance learning, electronic learning, innovation, digital learning.

**Билим берүүдөгү электрондук окутуунун көйгөйлөрү, перспективалары жана милдеттери**

**Проблемы, перспективы и задачи электронного обучения в образовании**

### Аннотация

Бул макала жогорку окуу жайларындагы билим берүү системасында электрондук окутууну колдонуунун перспективаларын талдоого арналган. Изилдөөнүн негизги суроосу: “Биздин университеттин студенттери үчүн электрондук окутуу канчалык денгээлде эффективдүү?” Жыйынтыгында мугалимдердин билимин эске алуу менен электрондук окутууну колдонууну өнүктүрүүнүн маанилүү аспектилери, электрондук окутуу бардык тараптар үчүн, мугалимдер жана студенттер үчүн да билим берүү процессинде артыкчылыктарга ээ экендиги көрсөтүлгөн. Технологиянын жетишкендиктери окуу процессин жеңилдетти. Көптөгөн студенттер академиялык жана академиялык эмес окуу максаттары үчүн ар кандай электрондук окуу куралдарын жана технологияларын колдонуп жатышат. Бул сурамжылоо жогорку окуу жайларында электрондук окутууну колдонууда студенттердин натыйжалуулугун көрсөттү. Бул изилдөөнүн инструменти катары сандык метод жана анкета (онлайн анкета) колдонулат жана 192 студентке берилди. Анкета 66 студент тарабынан толтурулган жана ал жерде ар кандай электрондук окутуу же платформаларды колдонууда. Бул изилдөө электрондук окутуунун натыйжалуулугун билүү жана жогорку окуу жайларында электрондук окутууну колдонууда студенттердин жакшыруусун аныктоо максатын кездөйт. Берилген маалыматтарга таянсак, бул изилдөөнүн натыйжасы электрондук окутууну колдонуу жогорку окуу жайларында натыйжалуу болуп саналат. Электрондук окутуу натыйжалуу болгондо, ал окуу

### Аннотация

Статья посвящена анализу перспектив использования электронного обучения в системе высшего образования. Развитие технологий упростило процесс обучения. Главный вопрос исследования: «Насколько эффективно электронное обучение для студентов нашего университета?» Вывод показывает важные аспекты в развитии использования электронного обучения, которые учитывают знания учителей. Электронное обучение имеет большие преимущества в образовании для всех сторон, как для преподавателей, так и для студентов. Многие студенты используют различные инструменты и технологии электронного обучения в академических и неакадемических учебных целях. Этот опрос показал эффективность студентов при использовании электронного обучения в высших учебных заведениях. Это исследование использует количественный метод и анкету (онлайн-анкету) в качестве инструмента исследования и было предоставлено 192 студентам. Анкету заполнили 66 студентов, которые используют различные электронные курсы или платформы. Это исследование направлено на то, чтобы узнать эффективность электронного обучения и определить улучшение уровня языка студентов при использовании электронного обучения в высших учебных заведениях. Основываясь на данных, результатом этого исследования является то, что использование электронного обучения эффективно в высшем образовании и дает студентам положительные отзывы при использовании электронного обучения. Когда электронное обучение эффективно, оно может улучшить

процессин жакшыртат жана студенттериге англис тилин үйрөтүүдө оң таасирин тийгизет. Студенттердин электрондук билим берүүгө болгон мамилеси тууралуу сурамжылоонун жыйынтыгы келтирилген. Жыйынтыктап айтканда, дистанттык окутуунун оң жана терс жактары, заманбап билим берүү процессинде онлайн компонентти колдонуунун келечеги жөнүндө жыйынтыктар чыгарылат

полезное обучение и положительно повлиять на студентов, изучающих английский язык. Приведены результаты опросов студентов об их отношении к электронному образованию. В заключение делаются выводы о плюсах и минусах дистанционного обучения, перспективах использования онлайн-составляющей в современном образовательном процессе.

**Ачык сөздөр:** маалыматтык-коммуникациялык технологиялар, дистанттык окутуу, электрондук окутуу, инновациялар, санариптик окутуу.

**Ключевые слова:** информационно-коммуникационные технологии, дистанционное обучение, электронное обучение, инновации, цифровое обучение.

## Introduction

The article discusses the basic concepts, models and characteristic peculiarities of electronic learning. The confirmation of the relevance of the use of electronic learning technologies is carried out. Innovations do not arise by themselves, they are the result of scientific research, advanced pedagogical experience of individual teachers and entire teams. The concept of "innovation" means innovation, novelty, change; innovation as a means and process involves the introduction of something new. In relation to the pedagogical process in vocational education, innovation means the introduction of new things into the goals, content, methods and forms of teaching, the organization of joint activities of teachers and students. One of the types of innovations in the organization of vocational education is the introduction of electronic learning ( Glavatsky, Mikhalev, 2016, pp. 39–44.).

After centuries of small changes, the role of the teacher, as it was traditionally defined and applied in practice, is on the verge of becoming an anachronism. The work is devoted to the evolution and prospects for the development of electronic learning.

Electronic learning is a name used to describe a number of electronic technologies (television, portable devices, cell phones, Internet, etc. d.) used in education, with an emphasis on learning via the Internet. The changes of society's development is provided by the productivity of resource use. Knowledge has become no less dominant economic resource than other resources. Innovations, i.e. implemented new knowledge, contribute to the acceleration of economic growth in Kyrgyzstan and other countries of the world in recent years. And the needs of the development of society have caused the need for effective ways of acquiring knowledge, including through the use of new forms of training organization. The development of information technology has led to the emergence of electronic learning, during which learning takes place at a distance, when there is no direct contact between the teacher and the student, and contact is provided using information and computer technologies.

Not so long ago, the term "Electronic Learning" appeared in the pedagogical environment. Electronic learning is understood as the organization of educational activities using information technologies, technical means, including telecommunication networks that provide the transmission of necessary information through communication channels, the interaction of students and teaching staff (Glavatsky, Mikhalev, 2016a, pp. 39–44.).

1. Electronic learning makes it possible to include in the educational process those categories of the population who, due to age, physical, social, national, regional, geographical characteristics, did not have the opportunity to use traditional educational services.

2. Electronic learning leads to an increase in the economic efficiency of education.

3. Electronic learning makes it possible to realize an individual learning trajectory in accordance with the cognitive characteristics of the student's personality, his knowledge and available training, the availability of time for training, financial opportunities, etc.

4. Electronic learning can contribute to improving the quality of the educational process.

5. Electronic learning promotes the development of new educational concepts and new teaching models.

6. Electronic learning opens up the possibility of switching to an open model education, allows you to implement the concept of continuing education.

7. Electronic learning enables all participants of the educational process to develop in accordance with the requirements of the time. Both teachers and students in the electronic learning system develop their knowledge, skills and abilities in accordance with the latest technologies and standards.

8. Electronic learning provides students with potentially equal learning opportunities. Regardless of the quality of teaching in a particular educational institution, a student can receive educational information and study in almost any equipped place.

### **The main problems of electronic learning development**

The problem of ensuring the quality of electronic learning materials (who and how can evaluate them, by what criteria, standards). Electronic textbooks that fully reveal the potential of electronic learning are still under development.

Currently, the basis of electronic educational materials is information in text format and the simplest graphic objects (drawings, photos), knowledge control blocks in the form of test tasks, often in a special format. Multimedia, the possibilities of electronic learning and their potential interactivity are not sufficiently represented;

- legal problems related both to the general problems of regulatory support for electronic learning (Lapchik, 2014, pp. 100-113) and specific tasks for the protection of intellectual property and copyright in the electronic world, to combat intellectual piracy, to use technical and legal means of copyright protection;
- financial problems related to both the development and application of standards for electronic textbooks and the costs of developing electronic courses and their subsequent update. Nevertheless, we have to state the low quality of electronic learning, especially in terms of practical knowledge. This is a consequence of existing economic priorities - minimizing costs and reducing deadlines.
- personnel problems related to the shortage of qualified personnel.

The online education market is developing rapidly and will increase in the near future. Many universities already offer online training on a commercial basis, offering courses of higher or additional professional education. What is necessary for the improvement and effective development of electronic learning?

1. The most important direction of improving e-education is the development of state standards that will provide a unified national level of requirements for the training of specialists, will form a unified educational space in the country. On the basis of these standards, theoretical and practical tasks of didactic and methodological support of the educational process with the use of electronic learning technologies should be solved ( Satunina, 2006, pp. 89-90).

2. In addition, the effectiveness of electronic learning, its result directly depends on the individual qualities of the student, mainly his independence and consciousness of the student, the ability to strict self-discipline. The lack of systematic control of students relaxes and is not an incentive in learning.

3. The basis of the educational process in electronic learning is creative independent work of the student. He can study according to an individual schedule, in a convenient place for

himself, having a set of educational materials and special technical training tools and the opportunity to contact the teacher and colleagues.

4. Under the influence of information technology, the level of requirements of consumers of educational products is changing, including students, students, teachers and teachers, employers.

Electronic learning is practiced in the world in the form of various models, its main components are virtual learning materials and communications. It is based on interactive multimedia solutions that attract the attention of the student, stimulate his ability to understand and interpret learning outcomes (Glavatsky, Mikhalev, 2016 b, pp. 39–44).

The introduction of electronic learning as the main element of the educational process entails some modification of the overall picture of Kyrgyz education. Like any innovative product, electronic learning has two nuances: advantages and disadvantages, let's consider the main arguments that reflect the positive side of learning on the Internet:

- if you have access to the Internet, then you will easily get access to electronic resources;
- the training is conducted with the participation of a group of competent teachers;
- an economical option, since the training is based on the exchange of information through modern means of telecommunications and gadgets;
- the student chooses the order of study of the material and its duration;
- the student saves a lot of time, also this option is comfortable if you are on the road with mobile Internet;
- at the same time it is possible to conduct classes designed for large groups;
- the opportunity to get additional education, improve their own skills and knowledge in a new field;
- there is an option to save the material for research and rework it in your free time;
- teachers or administrators post and update educational materials in a timely manner. At the moment, electronic learning is equipped with a set of tools:
- electronic textbooks are considered the main means of electronic learning. They are a kind of multimedia object, which in its form and structure differs from an ordinary textbook. It is usually presented as a set of an electronic page with a large number of multimedia inserts cross references;
- another important element is e-books (an analogue of a paper book), which are comfortable when the publication is not available in print;
- testing systems help to control students' knowledge;
- conducting webinars at seminars, used to discuss certain topics.

Along with the undeniable advantages, electronic learning has some disadvantages. The disadvantages of using an electronic learning system can be divided into two categories according to the criterion of which of the subjects of the educational process meets with one or another difficulty. Probable problems for the teacher: Financial costs. At the initial step, the introduction and initial use of an electronic learning system may require large investments.

Scientific and technical barriers. The main role is played by scientific and technical reasons. When studying the course, it is necessary to answer the following questions: what technical characteristics will be suitable for solving the established tasks, whether permanent access to the Internet will become integral to the student, whether instant messaging is needed,

whether access to materials in offline mode, etc. One of the most urgent problems for a teacher is the problem of determining the content of an educational electronic course. In the mode of the classical learning system, the teacher immediately responds to the student's reaction, adjusts the course, means and methods of working in the mode of "live" communication. If the student does not have a high enough degree of these skills, a number of problems may appear. There may be even more distracting reasons compared to the classical form of training. If a student studies via the World Wide Web, he plans the timetable on his own. It is easy to collaborate online education with supplemental components and circles - for example, you do not have to sacrifice a morning workout in the pool for the sake of a lesson at the desk. It is possible to adjust the curriculum to individual ambitions and requests. Another advantage of electronic learning is location independence. All you need for training is a computer or tablet with Internet access. You can study from anywhere in the world, and this makes education accessible. In e-education- you choose your own teachers, textbooks, program.

There are previous studies on the effectiveness of e-learning were organized by some specialists. The research conducted by Valentina Arkorful and Nelly Abaidoo in Ghana, January 2015, titled "The role of e-learning, advantages, and disadvantages of its adoption in higher education." This study investigates the effectiveness of using e-learning in teaching in tertiary institutions. The study reviews literature and gives a scholarly background to the study by checking some contributions made by various researchers and institutions on the concept of electronic learning, particularly its usage in teaching and learning in higher educational institutions. Tuan Nguyen (2015) studied "The Effectiveness of Online Learning: Beyond No Significant Difference and Future Horizons." This study examines the evidence of the effectiveness of online learning by organizing and summarizing the findings and challenges of online learning into positive, negative, mixed, and null findings. The result of this study is there is strong evidence to suggest that online learning is at least as effective as the traditional format, but the evidence is, by no means, conclusive. Online learning is a story that is still being written, and how it progresses will likely depend on those present. These findings from all previous studies above showing that using elearning has a positive impact on their learning. The similarity of our research with previous research is that both use learning media such as e-learning in previous studies and the resulting impact in using electronic media in learning activities, implementation on higher education, and using surveys to find out the results. The difference between my study and previous studies lies in research objectives and research concepts, in our research objective is to find out about the effectiveness of e-learning in higher education.

The survey on topic "The effectiveness of Electronic learning in higher education" was held at Osh state university at the faculty of world languages and cultures among 1st year students of 2022-2023 academic year. The following results were taken from the survey:

**Table 1.** *The effectiveness of electronic learning*

No	Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
	<b>The effectiveness of electronic learning in higher education</b>						
1	I find the electronic learning easy to learn	1	8	26	25	5	3,41

2	Electronic learning has an attractive appearance.	11	9	45	10	10	3,94
3	The design is appropriate for the type of online learning sit	0	5	23	33	5	3,58
4	Electronic learning creates a positive experience for me.	0	6	25	30	5	3,52
5	The feedback given is useful.	0	1	9	38	18	4,11
6	Using Electronic learning service can improve my learning performance.	4	5	36	15	6	3,21
7	Using Electronic learning service can increase my learning effectiveness.	2	8	30	23	3	2,26
8	I find the electronic learning service to be useful to me.	0	2	20	34	8	3,70
9	The objectives and span of electronic learning lessons are clearly defined.	5	33	21	4	3	2,50
10	I am generally satisfied with the quality of the electronic learning in education course.	1	7	37	17	4	3,24
11	I feel I am getting my money's worth from the electronic learning program	0	3	18	39	6	3,73
12	Overall, I am satisfied with using electronic learning.	0	5	30	28	3	3,44
13	Electronic learning provides a satisfactory learning experience.	1	5	28	28	4	3,44
	Average						3,50

According to the table, comprehension will be of superior quality than when studying following imposed standards. Thirteen questions are given as number of tools item of the effectiveness of electronic learning. This form of response information is provided in the scales of SD (strongly disagree), D (disagree), N (neutral), A (agree), and SA (strongly agree).

Table 1 conveyed that the average student's response to the effectiveness of electronic learning was 3,60. Most of the respondents' answers are in A (Agree). It showed that the majority of the participants agreed that the use of electronic learning in higher education was effective. The responses students in SD (strongly disagree) were 3% of the total responses.

The regression coefficient result showed that the usage of electronic learning and its effectiveness at the university was 63%. The use of electronic learning or digital media led to the effective use of electronic learning. An empirical study was organized to ascertain the effectiveness of using electronic learning at the universities. The findings show that electronic



learning has a positive influence on students, such as studying anytime and anywhere. Electronic learning in the Kyrgyz education system will improve and develop both in terms of the development of Internet technologies and through the improvement of electronic learning methods. The participation of students in the formation of knowledge is a new advantage for those who want to stand out in the field of education. Knowledge is easily accessible, and we must allow students to acquire knowledge on their own in order to truly engage and engage them in active learning. Most students will study at foreign universities. There will no longer be a need to study in another country, as you will be able to get the same or even a better level of education through electronic learning. Of course, the experience will be different, but the cost savings will be substantial. All of the above can mean only one thing. The future of electronic learning will be bright. All we have to do is encourage new electronic learning methods to flourish and old electronic learning methods to evolve. Education is no longer about teachers and learning. Social factors currently require more attention to students and learning. It is noteworthy that electronic learning is evolutionary, not revolutionary. Modern students are no different from traditional students.

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