



## Research Article

# USING THE DIDACTIC CAPABILITIES OF INTERACTIVE EDUCATIONAL RESOURCES TO IMPROVE THE PRIMARY EDUCATION SYSTEM

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## ABSTRACT

The effectiveness of the digital learning process is determined by the educational resources used. The educational environment, which is implemented in the process of digital learning, and the unity of this process form an ecosystem of digital learning. The article discusses the issues of use of interactive educational resources in improving primary education system.

## KEYWORDS

Digital education, primary education, system, interactive educational resources, electronic resource.

## INTRODUCTION

Digital resources increase the possibility of innovative pedagogical conditions in primary education. The teacher is now required to coordinate the process of assimilation, to constantly improve the subject taught in accordance with novelties and innovations, to

deepen the purview and creative activity. The teacher will be able to adapt learning materials and content depending on the individual characteristics and abilities of each student. This will definitely lead to more effective learning [6]. Modern electronic



resources (special programs for reading, self-study and checking the obtained knowledge) are digital educational resources. Currently, is underway the scientific researches on the creation of the content of modern electronic resources, the use of interactive information educational resources in the development of education [6, 2, 4, 8].

### THE MAIN RESULTS AND FINDINGS

The effectiveness of the digital learning process is determined by the educational resources used. The use of interactive educational resources in digital learning makes it possible: to organize the process at a convenient time for these subjects, regardless of the location of the subjects of the educational process and the difference in distance, including without disruption of the main and non-core activities.

In the process of digitalization of education a number of problems may arise:

- the formation of socially and professionally important competencies required for a digital society;
- linking the means of organizing digital learning with economic issues;
- solving the practical problems associated with the implementation of digital resources;
- lack of scientific and pedagogical basis in the proposed approaches and solutions for the creation or implementation of interactive information educational resources;
- ignoring or underestimating the content-significant indicators of socio-didactic quality of the process of digital learning.

Researches indicate information, electronic and digital resources of educational resources [7].

Digital learning creates the possibility of modulating the learning process: turns into basic didactic units in the conditions of digital transformation from training modules to micromodules [9].

According to the form of information storage and presentation, electronic educational resources can be classified as follows:

- separate files - file equivalents of traditional resources (text documents consisting of tables and graphic illustrations, graphic illustration files, audio-video format files, etc.);
- hypertext materials - texts, graphs;
- electronic educational literature, consisting of elements of electronic educational literature, such as multimedia elements, and the electronic equivalent of certain traditional resources [5].

The educational environment, which is implemented in the process of digital learning, and the unity of this process form an ecosystem of digital learning. This ecosystem can be considered as an educational network, the activity of educational participants, educational cluster in the scale of the educational sphere. At the same time, an individual educational organization, although it has some characteristics of an “ecosystem”, is not considered as a full-fledged educational ecosystem, but only as its element [3].

At the same time, administrative and management processes in education associated with digitalization or resulting from digitalization (automation of admission and enrollment accounting, administrative workflow, external reporting, financial and economic activities of the educational organization; regulatory support of the digitalization process; determination of the



economic efficiency of digitalization, etc.) constitute the ecosystem of digital learning.

The organization of the learning process in the digital learning ecosystem serves to coordinate in the educational process the intended educational goals (expected results), educational content and requirements for its formation in accordance with the requirements of the digital economy and digital society. And also creates an opportunity for the application of organizational forms, technologies and methods of learning, providing the use of didactic possibilities of digital technologies, the development of digital didactic support, the study of the positive impact of education on the development of digital society and the economy.

The effective use of interactive information educational resources in the digital learning process provides answers to the following questions: “Why should we use interactive information educational resources in the educational process?” and “How to use them?”.

The main factors in achieving the goals of digital learning are person-centered educational process and the organization of meta-digital educational complexes.

The process of person-centered learning is achieved, first of all, through individualization of education, a set of individual ways of learning, built to meet the individual educational needs and demands of students, changing the unified and common to all educational process, and on the other hand, by taking into account their individual psychological, physiological characteristics. The process of personality-centered learning serves the construction of individual educational directions, the use of adaptive learning

technologies, the creation of an educational environment for independent learning.

By digitalization of education is meant the use of interactive information educational resources as an auxiliary pedagogical tool or organization of training based on the use of traditional pedagogical technologies that do not significantly modernize education, as well as digital and created in the process of digitalization tools [1].

There are a number of researches on the role and responsibilities of the educator in the digital learning process. Today it is important that the modern teacher is directly involved in the development of didactic tools. The transition to the digital learning process will significantly change the professional activity of the educator in the field of education.

In traditional education in the system "teacher ↔ learner or group of learners", the teacher acts as an organizer and motivator of the lesson, a specialist in project activities, developer of educational trajectory, manager of educational directions, tutor and performs other functions.

The teacher in the system “teacher ↔ digital technologies and tools ↔ learner or group of learners” on the basis of the organization of meta-digital educational complexes in digital learning - as a script creator of online courses, metastylist online courses leads the individual direction of the learner, is involved in solving individual educational tasks with interactive information educational resources, coordinates the activities of teachers working within this individual curriculum, develops recommendations. In addition, the teacher in digital learning as a content creator in the system “teacher ↔ digital technologies and tools” ensures the continuity of the content of



online courses created by different authors and the commonality of approaches, serves as a developer of digital learning tools, educational platforms and digital environment, a specialist in the examination of electronic educational resources, and so on.

Creates new activities required by the digital learning process based on combining different positions in digital learning or expanding and changing the content of traditional pedagogical activities.

In the context of digital learning, the teacher's tasks include:

- designing forms of learning, teaching methods, interactive information educational resources, as well as diagnostic and formative assessment tools and creating on this basis a local educational environment of a particular training course, enriched with developmental opportunities;
- designing scenarios of study sessions based on diverse, dynamic forms of organizing study sessions and optimal sequence of using digital and non-digital technologies;
- organization of individual and collective, independent, project activities of students in a digital educational environment;
- design and organization of interdisciplinary communication of educational significance;
- development of critical thinking in the process of search and selection of information in the digital educational environment;
- management of students' learning motivation through interactive information educational resources;
- integration of virtual learning and the real world;

- organization of constructive cooperation between the subjects of digital learning.

Digital learning reduces to some extent the informative, explanatory, testing functions of the teacher. Despite this, there is a growing need for "convergent" (multidisciplinary) specialists in digital learning. Practitioners with experience in a variety of projects are a basic requirement for digital learning.

In digital resources, hyperlinks to external resources develop the content of interactive information educational resources. This creates an additional opportunity for the teacher to perform their informative function. The instructional strategy for working with the textbook in digital learning will not change, but additional opportunities to work with interactive informational educational resources will be introduced.

Digital learning involves recycling and extending the capabilities, effectiveness of elements of traditional learning.

The goals of digital learning are achieved through a flexible combination of digital, tangible and pedagogical technologies, supporting the processes of knowledge assimilation, personal self-awareness, professional identification, social and professional adaptation. A number of factors play an important role in the creation of interactive information educational resources.

A factor that constantly presents a dynamic nature is society. But the predominance of any of these factors negatively affects the content of created digital educational resources. This is caused by the lack of activity of the subjects of education in the role of the customer of digital learning products.





It is important to produce digital products based on scientific foundations, pedagogical purposes and didactic principles of the organization of the learning process.

The development of interactive information educational resources should be based on a systematic analysis:

- educational needs and goals;
- features of the digital generation, opportunities for the subjects of education;
- didactic features of interactive information educational resources;
- didactic principles and features of digital learning.

To solve this problem it is necessary to define the functions of the moderator of digital educational tools training - a new professional position, which will act as a qualified intermediary between the teaching staff, well acquainted with didactics, and developers of digital products. The main task of the moderator of digital educational tools is to identify relevant gaps in the practice of the educational process and to form a technical task in a language understandable to the developers of digital educational tools, necessary when solving urgent pedagogical problems. Such a specialist should be well versed in didactic theory and educational practice, including a good understanding of the possibilities of the most modern digital technologies, have the skills of systematic analysis and constructive communication.

In the process of digital learning all important aspects of the student's life are monitored. The accuracy of the data obtained by the various actors involved in the learning process is important. Consequently, when developing digital learning platforms and systems, it is

necessary to pay special attention to information security issues, both technically and organizationally and pedagogically.

The rule of adaptivity is expressed in the development of the idea of an individual approach to learning in relation to the conditions of the process of digital learning. The process of adaptive digital learning carries out adaptation to each learner through individual methods, strategies and other psychological and pedagogical features of learning, as well as the system of diagnostics of the current psychophysiological state of learners (for example, by the order, method and pace of presentation of educational material).

As we know, the main goal of education today is to develop students' preparation for life activities. In digital learning, the rule of practice-orientation a link between learning and life.

Formation of practical skills of the learner requires:

- formation of skills to identify problem situations related to learning objectives, tasks and further professional activities;
- extensive use of practical forms of learning methods designed to form the training of the student to perform certain professional functions and aimed at the formation of specific, standard, standardized and adaptive skills and abilities.

When creating or introducing interactive information educational resources it is necessary:

- creation of a network of experimental sites for approbation, creation of digital resources based on the organization of educational clusters;



- organization of scientific research of the process of digital learning on the process of digitalization;
- organization of comprehensive (content, technical, etc.) monitoring of the process of digital learning;
- the formation of a system of competencies, ensuring the readiness of educational participants to work in the conditions of the process of digital learning.

## CONCLUSION

In summary, we can say that the use of interactive educational resources in primary education is the basis for the transfer of material, finding ways to effectively absorb educational material, finding the best ways to organize the learning process, ensuring the cooperation of students, providing them with additional information resources, creating a motivational and local educational environment, designing diagnostic and formative assessment tools, organizing digital learning.

## REFERENCES

1. Аствацатуров, Г. О. Эффективный урок в мультимедийной образовательной среде / Г. О. Аствацатуров, Л. В. Кочегарова. – М.: Национальный книжный центр, ИФ «Сентябрь», 2015. – 176.
2. Ивашко, К.С. Информатизация процесса обучения // Скиф. Вопросы студенческой науки. – 2017. – №6. – С. 4-7.
3. Murakkab jamiyat uchun ta'lim: Global Education Futures / Pod red. P. Lukshi, P. Rabinovicha, A. Asmolova. – M., 2018.. – 52 b.
4. Muratov, X. Elektron ta'lim resurslari va multimediali elektron o'qitish vositalari orqali ta'lim muhitining rivojlanishi. Academic research in educational sciences volume 2 / ISSUE 1/ 2021. ISSN: 2181-1385. Scientific Journal Impact Factor (SJIF) 2021: 5.723. 1130-1136.
5. Raximov, O.D. Elektron ta'lim resurslarini yaratish talablari va texnologiyasi. Zamonaviy ta'lim / Современное образование 2016, 2. 45-50-betlar.
6. Raximov, O.D., Mustafaev Q.O., Zoirov N.I. Masofaviy ta'limning didaktik ta'minoti. O'quv qo'llanma. Qarshi-2012y., 45 bet
7. Сабитова, Д.А. Создание и использование цифровых образовательных ресурсов и интерактивных технологий в учебном процессе. URL: <https://infourok.ru/sozдание-i-ispolzovanie-cifrovih-obrazovatelnih-resursov-i-interaktivnih-tehnologiy-v-uchebnom-processe-3295164.html>
8. Софронова, Н.В. Особенности и основы разработки электронных образовательных ресурсов / ФГБОУ ВПО «Чувашский государственный педагогический университет им. И. Я. Яковлева». URL: [http://aio.cap.ru/UserFiles/orgs/GrvId\\_130/sofronova\\_eor-2013.pdf](http://aio.cap.ru/UserFiles/orgs/GrvId_130/sofronova_eor-2013.pdf)
9. Юцявичене, П. Теория и практика модульного обучения. – Каунас : Швиеса, 1989. – 277 б.; Модульное обучение: теоретические вопросы, опыт, перспективы. / Т.И.Шамова муҳаррирлиги остида . – М., 1994.-134 б.