

METHODOLOGY FOR INCREASING THE EFFICIENCY OF USING ELECTRONIC EDUCATIONAL RESOURCES

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Abstract; This article discusses ways to increase the effectiveness of using electronic educational resources. It analyzes the advantages and disadvantages of electronic resources, methods for selecting and using them, the use of such resources in teaching computer network technologies, as well as the roles of teachers and the importance of student engagement.

Keywords: Electronic educational resources, network technologies, methodology, teaching, student, teacher, interactivity, simulation, virtual laboratory.

In a period of rapid development of information technology today, it is necessary that the methods of teaching network technology subjects also correspond to the requirements of the time. Along with traditional teaching methods, the use of e-learning resources makes the educational process more efficient, interesting and interactive. E-learning resources give students the opportunity to harmonize theoretical knowledge in the field of network technologies with practice, learn independently, test their knowledge.

As you know, there are various methods used in the educational process, of which interactive methods are considered more effective. The concept of "Interactive" is expressed in the English style "interact" (Russian for "interactive"), denoting the meanings of reciprocal action ("inter" – reciprocal, "act" – act). Interactive education is an education based on the organization of the student's mutual movement towards the acquisition of knowledge, skills, qualifications and certain moral qualities. Interactive methods, on the other hand, are understood as those that activate and motivate learners to think independently, and are educated at the heart of the educational process. Interactive methods, on the other hand, are understood as those that activate and motivate learners to think independently, and are educated at the heart of the educational process. When these techniques are applied, it encourages the learner to take an active part and he is involved throughout the process.

Interactive techniques include "Keys-stady" ("or" study keys), "Blitz-query", "modeling", "creative work", "problem education" ("or" problem situation), "mental attack", "Boomerang", "Zinama-zina", "FSMU", etc. Interactive techniques include "Keys-stady" ("or" study keys), "Blitz-query", "modeling", "creative work", "problem education" ("or" problem situation), "mental attack", "Boomerang", "Zinama-zina", "FSMU", etc. Interactive techniques include "Keys-stady" ("or" study keys), "Blitz-query", "modeling", "creative work", "problem education" ("or" problem situation), "mental attack", "Boomerang", "Zinama-zina", "FSMU", etc. k. methods as well as interactive graphic organizers such as: "Venn diagram", "fish skeleton",



“cluster”, “lily flower”, “SWOT analysis”, “BBB”, “conceptual table”, “t-table”, “Insert”, “Elpigich”, “why?” , “How?”, etc.k. methods include. In such training, where interactive graphic organizers are used, the main points are based on the fact that they are expressed in writing in different graphic forms.n such training, where interactive graphic organizers are used, the main points are based on the fact that they are expressed in writing in different graphic forms. In fact, working with these graphic organizers is also more concerned with interactive educational methods, among which there are no other differences.

Since the science of network technology is a complex and dynamic field, it is important to use innovative methods in their teaching. E-learning allows the correct use of resources to optimize the educational process, increase students ' interest in learning and prepare them for future professional activities.

In order to improve the methodology of teaching” network technologists“, let us dwell on the use of interactive methods in teaching” Network technologists " and on the aspects of e-learning resusers, the use of visual, multimedia, interactive elements in it.

Pre-Vodcasting (pre-vodcasting) is an educational method that a teacher presents before class by creating a vodcast or video to give students an idea of the subject. The Pre-Vodcasting method is the original name of the inverse class method.re-Vodcasting (pre-vodcasting) is an educational method that a teacher presents before class by creating a vodcast or video to give students an idea of the subject. The Pre-Vodcasting method is the original name of the inverse class method. According to Google's survey analysis, despite the factors hindering its popularity growth, the inverse class method is emerging as a major focus of educational modernization. The teacher must present the available material for the next topic in such a way that part of it is transferred to the vodcast (presented in the video), while part is left to the group's work, in which video footage is created by the teacher.he teacher must present the available material for the next topic in such a way that part of it is transferred to the vodcast (presented in the video), while part is left to the group's work, in which video footage is created by the teacher. To control students, it is necessary to develop tests, develop a system for assessing work as a collective and independent work in the home and group, create vodcasts[1].

In the use of the Pre-Vodcasting method, the teacher is required to: work with the software that creates videodars, create videodars for the subject; prepare a practical task.

The use of the interactive videodars method makes it possible to create a problematic situation in the group with a request to its readers and bring readers to a discussion on the topic.he use of the interactive videodars method makes it possible to create a problematic situation in the group with a request to its readers and bring readers to a discussion on the topic. Using various interactive video instructions, information on specific concepts related to the subject can be linked to questions related to practical dasrs in the video. The teacher can add various questions, questionnaires, tests and links to other external resources to pre-prepared video cards, as a result of which it is possible to create interactive video cards designed to control the knowledge of students and activate them. teacher can add various questions, questionnaires, tests and links to other external resources to pre-prepared video cards, as a result of which it is possible to create interactive video cards designed to control the knowledge of students and activate them.

Main features:

1. Interactivity-during video games, the reader is required to actively participate.
2. Feedback (communication) – teaches through immediate answers and comments.
3. Flexibility-able to adapt to the pace of each student.
4. Multimedia tools-animation, graphics, audio and text explanations.

Cloud computing method



Cloud technology is a service that offers the user data storage space on a remote server. Cloud technology is a service that offers the user data storage space on a remote server. In addition to cloud storage, the user is offered a wide range of options for editing downloaded files, in the educational process, the teacher is able to collaborate on documents, create online survey forms, questionnaires, tests and give assignments on spreadsheet documents; it will be able to conduct and control tasks that are prepared in advance and stored on cloud services, serving to solve issues, along with the group activities of students[3]. It will be able to conduct and control tasks that are prepared in advance and stored on cloud services, serving to solve issues, along with the group activities of students[3].

The methodology of using the Auto Play program in teaching network technology science is mainly focused on creating interactive and repetitive learning processes. This program helps students to effectively assimilate theoretical and practical information[4].

Pages are made up of media resources designed to implement a logical sequence of instructional material. Pages are made up of media resources designed to implement a logical sequence of instructional material. Media resources (multimedia materials) are didactic goal – oriented educational material that aggregates text, images, voice files, videos, presentations, control-analysis, testing, and hakozy into one whole

To ease the complexity of network technologies, the Auto Play program uses a large amount of visual and audio materials. To ease the complexity of network technologies, the Auto Play program uses a large amount of visual and audio materials. For example, animations of network topologies, video lessons showing the work processes of network devices, etc. These multimedia materials help to concentrate the reader's attention and better absorb information. The Auto Play program can be an effective tool in teaching Network Technology Science. It provides students with the opportunity to consolidate theoretical knowledge with practical exercises, as well as personalize the learning process and conduct it in an interactive way. It provides students with the opportunity to consolidate theoretical knowledge with practical exercises, as well as personalize the learning process and conduct it in an interactive way. This methodology helps students to actively participate, strengthen their knowledge and self-assessment[6].

The use of e-learning resources in teaching network technology subjects provides an opportunity to make the educational process more efficient, interesting and interactive. The correct use of e-learning resources increases the interest of students in acquiring knowledge, develops their practical skills and prepares them for future professional activities. Teachers of e-learning should be careful in the selection and application of resources, assist students and encourage their activism. To improve the effectiveness of the use of e-learning resources, it is necessary to follow the above recommendations.

The use of e-learning resources in the teaching of the science of network technologies not only modernizes the course process, but also develops the student's independent learning skills, serves to form his professional competencies. Today, the integration of digital technologies into the educational process is a requirement of the time, which has an incomparable importance in the training of mature specialists, especially in the field of Information Technology.

References:

1. Clark, R. C., & Mayer, R. E. (2016). E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning (4th ed.). John Wiley & Sons.
2. Begbutayev A.E. Methodology of teaching the discipline "Network technologies" based on smart-technologies. European Journal of Research and Reflection in Educational Sciences.



Vol. 7 No. 12, 2019 7 (12), ISSN 2056-5852 Progressive Academic Publishing, UK. Page 741-755

3. Bates, A. W. (2019). Teaching in a digital age: Guidelines for designing teaching and learning. Tony Bates Associates Ltd.
4. Xanbabayev X.I. The role of artificial intelligence in education. //Galaxy international interdisciplinary research journal (giirj). -ISSN (e): 2347-6915, 2022
5. Begbutaev A.E. Tarmoq texnologiyalari fanini o'qitishda imitatsion modellardan foydalanish. "Tafakkur ziyosi". Ilmiy-uslubiy jurnal. №4, Jizzax.-2019. 43-46 b. 62.
6. Mamatov D.N. Elektron axborot ta'lim muhitida kasbiy ta'lim jarayonlarini pedagogik loyihalashtirish. Monografiya. –T: Navro'z, 2017. – 160 b
7. Ravshanova, I. E., Ahmadjanova, M. S., & Shermatova, Y. S. (2020). Role of physiological and psychological characteristics of a person in life safety. *European Journal of Research and Reflection in Educational Sciences Vol*, 8(1).
8. Yokutkhon, S. (2022). Healthy lifestyle. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH* ISSN: 2277-3630 Impact factor: 8.036, 11(12), 254-259.
9. IE, R., Yo S, S., & TT, M. (2022). EMERGENCIES OF A SOCIAL COLOR. *International Journal of Early Childhood Special Education*, 14(7).
10. Sabirovna, S. Y. (2023). HARAKAT-TAYANCH APPARATINING MEXANIK SHIKASTLANISHLARI. *ILMIY TADQIQOTLAR VA JAMIYAT MUAMMOLARI*, 1, 18-22.
11. Равшанова, И. Э., & Шерматова, Ё. С. (2020). Талабаларнинг Психологик Саломатлигини Таъминлашнинг Асосий Мезонлари. *Интернаука*, (3-2), 87-89.
12. Sabirovna, S. Y. (2023). KUYISHDA BIRINCHI TIBBIY YORDAM KO'RSATISH ASOSLARI. *ILMIY TADQIQOTLAR VA JAMIYAT MUAMMOLARI*, 1, 12-17.
13. Sabirovna, S. Y. (2022). Use of Innovations and Foreign Experiences in Education of Students on Life Safety. *Eurasian Research Bulletin*, 7, 58-61.
14. Yoqutxon, S. (2022). THE MAIN LAWS OF THE GROWTH AND DEVELOPMENT OF PRESCHOOL CHILDREN. *Galaxy International Interdisciplinary Research Journal*, 10(12), 194-197.
15. Вахобова, Д. Ш., Ибрагимова, Д. А., & Шерматова, Я. С. (2014). ДЕВИАЦИЯ КАК СОЦИАЛЬНО-ПЕДАГОГИЧЕСКАЯ ПРОБЛЕМА. In *Исследование инновационного потенциала общества и формирование направлений его стратегического развития* (pp. 89-92).
16. SABIROVNA, S. Y. RIVOJLANAYOTGAN ZAMON EKOLOGIK XAVFLARNI BOSHQARISH BO'YICHA TARTIB QOIDALARNI IJTIMOIIY OMILLARI. *KASB-HUNAR TA'LIMI MUHANDARIJA*, 46.

