European Journal of Pedagogical Initiatives and Educational Practices
ISSN (E): 2938-3625
Volume 2, Issue 6, June - 2024

THE LATEST SCIENTIFIC APPROACHES IN THE FIELD OF DIGITAL EDUCATION AND PEDAGOGY

Khasanov Abdushokhid Abdurashidovich
University of Science and Technology “Exact Sciences”
Head of Department, (PhD), Associate Professor

Yuldashev Umidjon Sharifboy o‘g‘li
Khojayeva Gulyora Atabek qizi
University of Science and Technology
Senior Teachers of the "Exact Sciences" Department

Abstract
This article discusses the changing impact of the latest scientific approaches in the field of digital education and pedagogy on teaching methods and the increase of interactivity in educational processes, the formation, interest and mastery of students, and the application of information in practice. information about.

Keywords: Digital education, pedagogy, approaches, developments, distance learning, interactivity and personalization, virtual environment, textbooks, e-books.

Introduction

The latest scientific approaches and developments in the field of digital education and pedagogy are focused on the latest innovations and trends in the field of internet technology. It is important in terms of the latest scientific approaches in the field, the digital format of education, the expansion of distance education, the formation of education and new images and experiences in the outside world.

Some recent scientific approaches in digital education and pedagogy:

the changing effects of digital education on teaching methods include increased interactivity in educational processes, changing effects of digital education on teaching methods, and increased interactivity in educational processes.

It is leading to many interesting and important changes in the educational systems of the present time. The increase in interactivity promotes the formation of educational processes, the interest and appropriation of students, the application of their data in practice and facilitates learning processes

This changing effect is somehow:

Interactive textbooks and lesson materials: with the development of digital education, interactive textbooks and lesson materials provide many opportunities for teachers. These textbooks give students the opportunity to learn issues, take tests, and master them through interactive tasks.

Virtual education environments: the Internet has a large place in providing virtual education environments to students. Through these environments, students can learn and attend classes during their time.
Changes in the formation and methodologies of Education: an increase in interactivity changes the formation of Education. Teachers can build classes through interactive textbooks, databases, and interactive tasks.
Personal education: with the development of digital education, the possibilities of providing personal education for each student are expanding. Interactive textbooks, distance learning platforms and personalization of lesson materials are important in providing personal education for students.
This changing effect leads to the development of successful educational processes, increased motivation of students and a high level of educational quality.
The expansion of application-based education and the validity of the school in a virtual environment is one of the important triumphant challenges of today's digital education and plays an important role in creating a very wide range of educational opportunities for students.
The validity of education in a Virtual environment leads to the following changes:
The expansion of distance learning: the expansion of application-based learning, provides students with a wide range of educational opportunities around the world. Schools limit geographic boundaries for students by mastering classes in a virtual environment.
Increasing the lightness of education: the practice of education in a Virtual environment allows you to increase the lightness of students. In this environment, students can learn in their own time, at their own pace, and use the data in practice.
School freedom and accessibility: education in a Virtual environment plays an important role in providing comfort and freedom for students. Through this method, students can complete lessons and tasks at their own convenient time.
Integration of Education: provides awareness of innovations in education, the use of various external resources and other areas in a Virtual environment. This allows students to refer to information about the outside world and apply them in the educational process.
Individualization of learning experience: education in a Virtual environment, each student's individual learning experience is based on individual and personal characteristics. It helps to increase the success of students in mastering, mastering and mastering.
Education in a Virtual environment ensures the use of various external resources and awareness of innovations in other areas. This allows students to refer to information about the outside world and apply them in the educational process.
Moving information technologies (HMTS) and their application to educational processes make a big difference in education and provide students with a very wide range of educational opportunities.
1. Interactivity and personality: HMT provides students with an interactive educational experience. They have the opportunity to choose their own direction of learning and create a personal educational program. This ensures that each student has a different level of mastery and learning.
2. Visualization and illustration: through HMT, problems and concepts are explained on a visual level. This helps to make subjects that are difficult for students easy and imaginative.

Graphics, animations, and multimedia tools are of great importance in showing educational materials.

3. Adapted education programs: HMT offers students the opportunity to organize integrated education programs. It is based on the personal skills, abilities and requirements of students. They will have freedom in their choice of Educational Directions.

4. Practitioner: HMT allows the practitioner to successfully perform training techniques. Virtual labs, simulations, and interactive curricula allow students to master the practitioner experience rather than theory.

5. Multidirectional learning technology: HMT is the learning processes of distance learning on different platforms and the latest rapid approaches.

Mobility information technology (HMT) occupies a large place in the development of educational processes of distance education and the latest rapid approaches. The following important points indicate HMT rapid approaches in distance learning processes.

1. Interactive virtual communication: HMT allows for interactive communication between students and teachers. It enhances communication between teachers and students through technologies, video conferencing, useful data sharing platforms, and online chat.

2. Online resources and support: HMT provides opportunities for students to approach online classes, e-books, video lessons, programs, and other resources. This helps students learn to provide them with the necessary information and learn, depending on their acquisition.

3. Personalization: HMT helps create personal education systems for students. It allows you to provide personal approaches to the level of knowledge of students, the individualized needs and documentation of Education.

4. Educational analytics and monitoring: HMT helps control the educational process of students. Teachers and editors use automated tools to analyze information related to student practice, information, and outcomes. It helps to improve individual study areas and learning for students.

Formation and pedagogical features of digital education.

The formation and pedagogical characteristics of digital education are reflected in the following points:

1. Interactivity and correctness: allows students to be more assertive through digital learning, interactive lessons, interactive educational games, and online hands-on activities. This method allows students to control their own interests and concepts.

2. Compliance: Digital Education allows for better use in accordance with the subject of each student's management and learning. This helps to specialise the way students manage and learn.

3. Compliance and training: digital education improves the ability for students to structure activities and perform practical activities. This allows students to practically consolidate their knowledge.

4. Personal education: digital education plays a major role in enhancing personal education. This allows the individual orientation of education in accordance with the goals, abilities and needs of the students themselves.

5. Cooperative education: digital education allows students to collaborate with other students. This increases the execution of a number of classes and other collective programs.

6. Learning experience and testing: digital learning, provides students with effective ways to learn through hands-on learning activities. It helps develop students ' patience, discussion, and discussion skills.

References

1. Khojayeva, G. (2023). o‘Quvchilarning mustaqil fikrlash qobiliyatlarini rivojlantirish. Educational Research in Universal Sciences, 2(14), 879–882. Retrieved from http://erus.uz/index.php/er/article/view/454
2. Khojayeva, G. (2023). Development of heurstic ability. Educational Research in Universal Sciences, 2(16), 441–443. Retrieved from http://erus.uz/index.php/ er/article/view/5005
3. Asadullayeva M.A. Oliy ta’lim muassasalarida ta’lim sifatini baholash mexanizmlari // (2024) Educational Research in Universal Sciences, 3(2), 35-38 b.
4. J.M. Toshtemirov, M.A. Asadullayeva The effect of the heat source on the ambient density in the processes of non-linear heat propagation in multidimensional fields // International scientific journal «Modern science and research» VOLUME 2 / ISSUE 10 / ISSN: 2181-3906 2023, p. 892-899
5. Asadullayeva M.A. Bilimlarga asoslangan menejmentning ishlab chiqarishni boshqarishdagi ahamiyati // «Ta’lim sifatini oshirishni tashkil etish va uni boshqarish texnologiyalari» mavzusida xorijiy mutaxassislar ishtirokidagi Respublika ilmiy-amaliy konferensiyasi 2023 yil, dekabr maqolalar to‘plami 312-315 b.
6. Asadullayeva M.A. Pedagogik oliy ta’lim muassalarida ta’lim sifatini baholash metodlari // «Raqamli texnologiyalar asosida ta’lim jarayonini takomillashtirish» mavzusidagi xalqaro ilmiy-amaliy konferensiyasi USAT 2024 yil 28-mart, Ilm-fan T.-2024, 186-189 b.
7. Asadullayeva M.A. O‘qitish metodikasini raqamli darajada texnik va texnologik jihatdan amalga oshirish // «Raqamli texnologiyalar asosida ta’lim jarayonini takomillashtirish» mavzusidagi xalqaro ilmiy-amaliy konferensiyasi USAT 2024 yil 28-mart, Ilm-fan T.-2024, 204-205 b.
8. Asadullayeva M.A. Pedagogik oliy ta’lim muassalarida ta’lim sifatini baholash metodlari // «Raqamli texnologiyalar asosida ta’lim jarayonini takomillashtirish» mavzusidagi xalqaro ilmiy-amaliy konferensiyasi USAT 2024 yil 28-mart, Ilm-fan T.-2024, 186-189 b.
9. Asadullayeva M.A. O‘qitish metodikasini raqamli darajada texnik va texnologik jihatdan amalga oshirish // «Raqamli texnologiyalar asosida ta’lim jarayonini takomillashtirish» mavzusidagi xalqaro ilmiy-amaliy konferensiyasi USAT 2024 yil 28-mart, Ilm-fan T.-2024, 204-205 b.
10. Khasanov, A. A. (2017). Methods and methods of forming economic education through interdisciplinary communication through information technology. Journal, (3), 38.
11. Sharipov, D., Abdukadirov, A., Khasanov, A., & Khafizov, O. (2020, November). Mathematical model for optimal siting of the industrial plants. In 2020 International Conference on Information Science and Communications Technologies (ICISCT) (pp. 1-3). IEEE
12. Abdurashidovich, X. A., & Nigmanovna, M. F. (2019). Access to electronic educational resources in the education system. European Journal of Research and Reflection in Educational Sciences Vol, 7(12).

13. Hasanov, A. A. (2020). Peculiarities of preparing teachers for the development and use of e-learning resources. Theoretical & Applied Science, (9), 15-17.
14. Khasanov, A. A. (2018). Didactic Foundations of Interdisciplinary Connections at Subject Teaching. Eastern European Scientific Journal, (6).
15. Hasanov, A. A., & Gatiyatulina, R. M. (2017). Interdisciplinary Communication as a Didactic Condition of Increasing the Efficiency of Educational Process. Eastern European Scientific Journal
16. Ravshanovna, P. N., &Abdurashidovich, K. A. (2019). Role of innovation in school development. European Journal of Research and Reflection in Educational Sciences Vol, 7(12).
17. Хасанов А.А. Современная теория обучения на межпредметной основе // Scince and world. – Volgograd, 2016. -№8 (36), vol II. – С. 76-78
18. Khasanov A.A., Khasanova S.S. Theoretical approaches to the creation of pedagogical concepts // American Journal of Pedagogical and Educational Research 10 (2023): 185-190.
19. Khasanova, S. S. D., & Khasanov, A. A. (2023). Theoretical approaches to creation of pedagogical concepts. Innovative Development in Educational Activities, 2(6), 16-22.
20. Abdurashidovich, K. A. (2023). Methodological foundations of understanding the essence of e-learning. theory and analytical aspects of recent research, 2(13), 90-96.
21. Nazarov, I., Hasanov, A., Mirjamolova, F., Khaldarov, H., & Alibekov, S. (2021). Modern educational technologies. Revista geintec-gestao inovacao e tecnologias, 11(3), 245-252.
22. Хасанов А.А., Хасанова С.С. Теоретические основы создания педагогической консепсии в электпонном обпазовании // O‘zbekistonda fanlararo innovatsiyalar va ilmiy tadqiqotlar jurnali ISSN: 2181-3302 SJIF (2023): 5.963 22-son O‘zbekiston 20.09.2023 161-171 betlar Index Copernicus (OAK-12) ResearchBible (OAK-14) SJIFactor (OAK-23)
23. Khasanov A. A Elektron ta’lim tushunchasining uslubiy asoslari // (2024) Educational Research in Universal Sciences, 3(2), 559–562. Retrieved from http: // erus.uz/index.php/er/article/ view/5844
24. Khasanov A. A., Asadullayeva M.A. Using the digital learning environment in professional education // International journal of european research output SSN: 2053-3578 (IF: 9.1) Britaniya – 2024. P.72-77 http://ijero.co.uk/index.php/ijero/article/view/199/181
25. Khasanov A.A., Primkulov A.A., Khojayeva G. A. Strategic development and improvement of educational activities in the practical activities of professional education // Multidisciplinary and Multidimensional Journal. ISSN: 2775-5118 (IF: 9.1) Indaneziya. Iyun 2024, P.48-53 http://multidiciplinaryjournal.com/index.php/mm/article/view/260
26. Khojayeva, G. O‘quvchilarning mustaqil fikrlash qobiliyatlarini rivojlantirish. Educational Research in Universal Sciences, (2023/11), 879–882. Retrieved from http://erus.uz/index.php/er/article/view/454
27. Khojayeva, G. Development of euristic ability. Educational Research in Universal Sciences, 2023. 441–443. Retrieved from http://erus.uz/index.php/ er/article/view/5005.