

**TECHNOLOGIES FOR SHAPING THE DIGITAL CULTURE OF
UNDERGRADUATE STUDENTS IN THE INFORMATION-EDUCATIONAL
ENVIRONMENT**

Maxmudov Abrorjon Zakirovich

Teacher of Namangan State University

E-mail: yangilik2019@gmail.com

Article history:

Received: 14th February., 2022

Accepted: 16th February., 2022

Published: 18th February., 2022

Abstract: *This article describes in detail the technologies used in the formation of the digital culture of undergraduate students, as well as the processes of rational use of available resources in the rapidly evolving information age.*

Keywords: *digitalization, information technology, digital technology, digital culture, digital fluency.*

Today, modern society is developing rapidly all over the world and its information resources are constantly replenished. Today, the role of students as subjects of professional development, which effectively interact with the content of education, and the role of teachers as mediators and "navigators" in this interaction is significantly increasing. In this regard, there is the problem of readiness of students to form their own educational content through the selection and use of resources of the information learning environment. The urgency of the problem increases in the context of the integration of formal and non-formal education, its personalization in an open information environment and the individualization of education through the practice of individual educational trajectories. The aim of this study was to determine the current state of the interaction of university students with the content of cultural orientation in the digital learning environment. In our research, methodology and research methods, questionnaire method is the main tool of empirical research. Based on the analyzes, the authorship questionnaire was used to identify students' preferences in the selection and use of educational content and to link the results to teachers' opinions. The K-means method was used to analyze the data, systematize them, and cluster the respondents. The results and scientific novelty identified the types of digital educational culture content that are most often and least used by students.

The relevance of each type of different educational content is assessed. The choice of content for students is determined by their educational profile (humanities and specialties). In addition, the typological heterogeneity of students in the information learning environment has been proven based on a comprehensive analysis of qualitative and quantitative data. Based on the established indicators of the level of involvement of respondents in educational resources, the data cluster allows the authors to classify typological groups among students ("passive", "active", "advanced", "professional-oriented" and "humanitarian").

It is observed that these typological groups are manifested at different stages of university education (bachelor's degree in IT and pedagogical specialties). Effective and flexible motivation of students to use the educational content was identified. It is noted that students evaluate their

performance in relation to the culture of digital education, and the effectiveness of motivation is much higher than that assessed by teachers. The results allow us to say that the personalization of the digital learning culture environment should be structured taking into account the needs of student groups with different interests and motivations to use educational content. The use and use of modern Big Data tools in the organization of vocational training to gather the necessary information about the specific culture and characteristics of the activities of future professionals under the guise of using and communicating content in a digital learning environment 'additional methodological resources should be sought. Research materials and results can serve as a basis for developing recommendations to support and develop students 'interactions with the content of the digital learning culture. In addition, research materials can contribute to changing the meaning of this interaction, which should consist of students understanding their education as an individual professional self-development.

We need to shed more light on how the use of digital technologies can support the transformation of cultural practices in education and teaching to better meet the needs of 21st century higher education students. A brief discussion of the changing needs of students is followed by a review of the overall impact of digital technologies on teaching and learning. Digital technologies are proposed as a way to provide a more active and flexible learning experience by applying a participatory pedagogical approach and mixing formal education with non-formal education. By combining theory and practice, we must achieve high efficiency.

Digital culture refers to the behavior, ethics, and participation of students to engage in Internet technology and communication as part of the learning process and environment. Students are friendly to digital learning materials or mobile devices that change their learning at the same time. The existence of a digital culture can be seen in the use of digital learning resources and mobile devices in the learning process.

As mentioned above, one aspect of digital culture in the learning process of students is the digital fluency of students.

The term digital fluency can be understood from M. Reznik's argument. Recognizing the situation in the United States at the beginning of the 21st century, Reznik predicted the impact of technology and digitalization on the educational revolution. Reznik highlighted the digital fluency - the revision of teachers and students about technology as two important issues of the digital learning revolution, emphasizing the use of digital technology by teachers and students in the teaching process.

Since the advent of the Internet, the use of ICT in higher education has been expanding, but the level of its use varies from one context to another. Numerous studies suggest that digital technology not only meets the changing needs of higher education students, but it also improves learning and shapes digital culture (Alzahrani & Seth, 2021; Becker, 2017; Du Toit & Verhoef) , 2018; Lai, 2011; Laudari and Maher, 2019; Underwood, 2009; Vaghid and Vaghid, 2016). For example, Lai (2011) and Underwood (2009) point out that technology is used to varying degrees in all higher education institutions to support traditional, distance, mixed forms of learning.

It emphasizes that technology is used to varying degrees in all higher education institutions to support traditional forms of teaching. Similarly, Becker (2017) and Waghid and Waghid (2016) confirm that flexi-learning, e-learning and blended-learning have now become the norm and alternative to traditional teaching and learning in higher education.

Although digital technologies such as the use of digital artifacts, web resources and platforms have been in place for some time, its application in higher education and its impact on education remains largely unexplored.

Ga Lai (2011) points out that little information has been studied about how university teachers use digital technology in teaching and learning and how it is integrated into pedagogy, and its

potential impact on students (Mohammadi et al. (2021)) . Digital innovation and technology are often described as transformative and disruptive [Serdyukov 2017]. To move beyond the superficial integration of technology, researchers and practitioners are calling for students to organize education in a technology-based environment, supporting new student-oriented and pedagogically based learning paradigms [Lai 2011; Serdyukov 2017].

In other words, because technology is central, we need to determine that digital technology is associated with “the ability to support a more interactive and communicative process” [Lai 2011] p. 1269, which is indeed the case. “pedagogically, psychologically and socially meaningful and effective” [Serdyukov 2017] p.15.

The easiest element is to explain that students are well versed in digital elements and how this can improve the quality of their work. Lai (2011) suggests the use of digital technologies in response to these changes. When digital technology is used as a communication tool to support the construction and acquisition of knowledge, it can improve the quality of the learning experience. In terms of creativity, our findings support the study of Lai (2011) and Mynbayeva et al. (2017) emphasizes this creativity as a method of learning in the twenty-first century. Lai (2011) suggests combining formal and non-formal education to nurture creative and innovative cadres through the use of digital technologies in teaching and learning cultural practices.

Most digital teacher training programs in developing countries do not have a solid theoretical basis (Ottoman, 2010). Therefore, pedagogical methods should be included in ICT curricula to achieve the expected results (Lay, 2011). In order to achieve learning outcomes, it is important to adapt quality methods of teaching and teacher training to international quality standards.

According to MOE (2009), the ICT curriculum was released by the NIE and some institutions started ICT in the 2009 academic year as a subject for GCE (A / L). The quality of any ICT program depends on infrastructure facilities, computers and related equipment, qualified, pedagogical information, experience and skills of teachers, well-designed and constantly updated curricula, teachers, administrative bodies and student attitudes depend on good maintenance and monitoring (Lai, 2011). These analyzes and studies will determine how the above factors contribute to achieving quality education in ICT. In this regard, a number of barriers have been identified as to why the use of information and communication technologies (ICT) in teaching and learning in some higher education institutions is not significantly affected. University teachers 'lack of understanding of why and how technology should be incorporated into pedagogy has been acknowledged as one of the main reasons, and lack of professional development opportunities has often been cited as the reason for this lack of understanding. As a result, higher education institutions need to be more efficient, have more transparent responsibilities, and excel in both teaching and research. In an educational environment, this integration should be continuous and smooth, regardless of their type (tablet, smartboard, mobile device, etc.) focusing on devices. This is very important to contribute to the learning and development of students (Lai, 2011). While technology has provided opportunities to differentiate education, engage and address different students, its use as an architecture for predicting students 'learning needs and developing individual curricula is limited. Teachers and students Even in this digital age, globalization, internationalization, and the need for all traditional education have led to a shift in the priorities of education systems, both in the teaching and learning process and in technology. requires more flexibility in use (Lai, 2011). The inter-nationalization of students, the need for intensive pedagogical support, the integration of teaching technology, and the ability to access information from anywhere at any time have increased the demand for new roles and competencies among academics.

Influences the formation of community commitment and ensuring that students progress progressively through different stages of research (Garrison and Vogan, 2008). That is, community-based surveys provide an opportunity to combine physical and online learning spaces to build knowledge and develop a meaningful and dynamic exchange of experiences between student cohorts. In this way, students can be more willing to increase their interest and share knowledge.

In recent decades, the abundance of information and its dissemination through the network and other electronic means has led to the activation of educational programs, which has made the task of teachers more complex and arduous (Para Skevopoulou-Kollia 2006). In a society that has undergone many changes and is specific to an industry-based network (Castells 2010; Riele and Crump 2003), teaching in a variety of settings from institutions to universities has led to many structural changes in daily interactions with students. encountered, students prefer social networks to communicate even for institutional or departmental needs (Greenhow et al. 2009; Márquez-Ramos and Mourelle 2018).

REFERENCES:

1. Mamatov D.N, Bekchanova Sh.B, Xo'jaev A.A. Elektron platforma tizimi va undan foydalanishni o'rganish. Metodik qo'llanma. – Toshkent, 2020. B.35.
2. Соколова Н.А. Цифровая культура или культура в цифровую эпоху? Международный журнал исследований культуры. 2012; № 3 (8): 6 – 9.
3. Сергеева И.Л. Трансформация массовой культуры в цифровой среде. Культура и цивилизация. 2016; Т. 6, № 6: 55 – 65.
4. Галкин Д.В. Digital Culture: методологические вопросы исследования культурной динамики от цифровых автоматов до техно-био-тварей. Международный журнал исследований культуры. 2012; № 3: 11 – 12.
5. Петров А.А. Цифровизация экономики: проблемы, вызовы, риски. Торговая политика. 2018; № 3 (15): 9 – 31.
6. Загарских Е.Ю., Загарских Ю.А. Применение кибербезопасности и использование искусственного интеллекта в медицине. Системный анализ в проектировании и управлении. 2019:425 – 429.
7. Mamatov D.N., Bekchanova Sh.B., Saidova B.N., Abdullaeva D.N., Fayzieva G.U. Enhancing the participation of students and faculty in distance learning using blender learning and flipped classroom technologies in the development of pedagogy through digital technology // PSYCHOLOGY AND EDUCATION (2021) 58(2): 4910-4917. Америка. P 4910-4917.
8. Минасян Н.А. ИКТ как средство повышения мотивации учащихся на уроках иностранного языка. Научно-методический электронный журнал «Концепт». 2017; № S8: 34 – 38. Available at: <http://e-koncept.ru/2017/470104.htm>
9. Ильясов Д.Ф., Селиванова Е.А. Популяризация научных психолого-педагогических знаний среди педагогов общеобразовательных организаций с использованием метода кинопедагогики. Научное обеспечение системы повышения квалификации кадров. 2018; № 2 (35): 5 – 15.
10. Гнатышина Е.В., Саламатов А.А. Цифровизация и формирование цифровой культуры: социальные и образовательные аспекты. Вестник Челябинского государственного педагогического университета. 2017; № 8: 19 – 24.
11. Maxmudov A.Z., Bakalavr talabalarining raqamli madaniyati asosida raqobatbardoshlik sifatining afzalliklari. NamDU ilmiy axborotnomasi. 2021; №11:418-423.
12. Maxmudov A.Z., Raqamli jamiyat va raqamli madaniyat. NamDU ilmiy axborotnomasi. 2021; №12:549-552.

33	ISSN 2349-7793 (online), Published by INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT, ENGINEERING AND SOCIAL SCIENCES, under Volume: 16 Issue: 02 in February-2022 https://www.gejournal.net/index.php/IJRCEISS
	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/