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IMPROVING THE QUALITY OF RESEARCH WITH THE HELP OF NEW EDUCATIONAL PLATFORMS

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ABSTRACT

This article examines the significance of contemporary information and communication technologies in the era of digitalization, facilitating the process of doing research. The study elucidates the manner in which contemporary information and communication technology enhances the research aptitude of students, professors, and researchers. This study investigates the fundamental characteristics of information and communications technologies, and also explores many widely used platforms such as Web of Science, ORCID, Springer Nature, Elsevier, and Academia.edu. The study aims to analyze the potential influence of these platforms on research competency.

Keywords: information and communications technologies, competence, Web of Science, ORCID, Springer Nature, Elsevier, and Academia.edu.

ПОВЫШЕНИЕ КАЧЕСТВА ИССЛЕДОВАНИЙ С ПОМОЩЬЮ НОВЫХ ОБРАЗОВАТЕЛЬНЫХ ПЛАТФОРМ

АБСТРАКТНЫЙ

В данной статье рассматривается значение современных информационных и коммуникационных технологий в эпоху цифровизации, облегчающих процесс проведения исследований. Исследование выясняет, каким образом современные информационные и коммуникационные технологии повышают исследовательские способности студентов, профессоров и исследователей. В этом исследовании изучаются фундаментальные характеристики информационных и коммуникационных технологий, а также изучаются многие широко используемые платформы, такие как Web of Science, ORCID, Springer Nature, Elsevier и Academia.edu. Целью исследования является анализ потенциального влияния этих платформ на исследовательскую компетентность.

Ключевые слова: информационные и коммуникационные технологии, компетентность, Web of Science, ORCID, Springer Nature, Elsevier и Academia.edu.

Introduction. The term “ICT” is an abbreviation for "Information and Communication Technology." It consists of a wide range of technologies that enable the modification and distribution of data. ICT encompasses a variety of interconnected systems, equipment, programs, and support that are essential in the information-based civilization of the 21st century. Information and Communication Technologies (ICT) have become essential in many areas of our life. Colleges and universities must meet the needs of students and help them overcome challenges in order to provide them with the essential abilities to adapt to technological changes.

Literature review. Within contemporary higher education institutions, the complex network of information and communication learning resources is evolving into what is known as an “electronic learning environment” [1]. The system, comprising hardware, software, and

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telecommunications, aims to streamline the educational process and offer a comprehensive and realistic overview of the academic and professional endeavors of aspiring experts. In higher education institutions, the concept of the learning environment includes interactive network collaboration tools, modern computer devices, and information and communication technologies (ICT) to combine methodological, educational, and informational resources [2].

Information and computer technologies have the potential to be valuable learning tools in formal education. They can facilitate interaction between students and instructors, store information, and provide administrative pedagogical resources. This makes them particularly susceptible to cultural changes within the education system [3]. The presence of ICT in higher education institutions does not automatically guarantee its enhanced and more effective application. According to literature review, the evaluation of the efficacy of ICT integration in the educational environment relies on the discoveries made some authors [4], [5].

The primary barriers to achieving proficiency in ICT include a deficiency in digital literacy, specifically a lack of factual knowledge and practical experience in utilizing digital technologies as data storage devices. Additionally, there is a lack of consistent support from the country to enable teachers to develop innovative approaches in ICT [6]. When discussing Uzbekistan, it is important to note the insufficient technological infrastructure for integrating ICT into the educational process. The absence of classrooms equipped with digital technology prevents the implementation of the teacher's information and communication skills, as well as their ongoing growth, which is closely linked to practical experience. Hence, a contemporary educator must embrace ICT and develop information and communication skills to be effective [7].

The issue of establishing suitable settings for the development of information and communication skills in prospective teachers necessitates the continuous enhancement of educational programs. The research reveals that even in industrialized nations, instructors are not consistently content with the extent of their own digital abilities acquired throughout their university education [8], [9].

It is essential for educators to improve their digital skills to set a positive example for students. Students are encouraged to actively participate in learning new technologies with their teachers and support them in expanding their knowledge. Today's generation excels in technology and can often grasp and adjust to new technologies more easily than their professors. This does not suggest that teachers are not effectively educating students. Contrary to traditional teaching methods, in the current educational model, professors act as facilitators, allowing students to engage actively in learning and share innovative ideas with the class. As a result, this could be extremely important for people as they progress through their academic path.

Today, in this article, we will examine a number of globally utilized platforms, including Web of Science, ORCID, Springer Nature, Elsevier, Academia.

The initial platform, Web of Science, is a thorough research database and citation index that grants access to a vast collection of scientific literature. Clarivate Analytics has created a highly regarded tool for analyzing bibliometrics, monitoring citations, and finding scholarly publications. It is commonly utilized by researchers, academics, and institutions. We will delve into the key features and details of Web of Science. Web of Science covers a wide range of academic disciplines, including science, technology, medicine, social sciences, and arts and humanities. It provides a thorough and multidisciplinary approach to academic study. Web of Science stands out for its citation indexing feature, making it one of a kind. Individuals can utilize

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this feature to track citations in both the forward direction (identifying articles that have referenced a specific article) and the backward direction (examining the references cited by a particular article).

Moreover, the Web of Science Core Collection is a carefully curated selection of impactful publications and conference proceedings. This collection includes the Science Citation Index Expanded (SCI-EXPANDED), Social Sciences Citation Index (SSCI), Arts & Humanities Citation Index (AHCI), and additional indices. In addition, Web of Science provides Journal Impact Factors, calculated based on the number of citations received by the average article in a journal for a specific year. This metric is commonly employed to assess the relative importance of journals within a specific field. Researchers can create profiles on Web of Science to showcase their publications, citation metrics, and h-index. Institutional profiles offer a thorough overview of an institution's research productivity and impact.

Researchers can perform cited reference searches to find papers that have referenced a specific publication. Web of Science indexes journals and conference proceedings, offering academics access to intellectual information shared at conferences. Moreover, Web of Science provides tools for bibliometric analysis and study evaluation. This program is compatible with EndNote, a software commonly used for reference management. EndNote libraries can be easily filled with references from Web of Science by users. Web of Science is an essential tool for scholars looking to discover and evaluate scholarly literature, track citations, and assess research impact across various academic disciplines. Commonly utilized for conducting literature reviews, analyzing citations, and staying updated on the latest advancements in a specific field [8].

The second platform, ORCID (Open Researcher and Contributor ID), is provided by a non-profit organization to give researchers a unique and lasting identity. An ORCID ID is a distinctive identifier comprising a 16-digit alphanumeric code assigned to individual researchers. The purpose is to distinguish them from other researchers and guarantee precise acknowledgment of their academic contributions. An exclusive and long-lasting identification that sets researchers apart from each other. It helps to clarify any confusion that may arise from differences in names, connections, and research findings.

ORCID partners with numerous research systems, publications, funding organizations, and institutions. Researchers can link their ORCID iD with different platforms to ensure precise recognition and credit for their work. ORCID operates as a system that follows international standards with full transparency. It facilitates compatibility with different research infrastructure, resulting in extensive adoption and acknowledgment as an identifier in the academic community. Researchers have complete control over their ORCID records, allowing them to easily manage and update their profile information, research outputs, and affiliations. People can choose whether to share specific details with the public or keep them private.

ORCID provides scholars with a publicly available profile showcasing their research outputs, connections, and contributions. ORCID is utilized in various academic fields to help connect researchers across a wide range of disciplines including science, technology, engineering, mathematics, humanities, and social sciences. ORCID facilitates the seamless transfer of researcher data across multiple platforms. This streamlines the processes for researchers, publications, institutions, and funders, reducing the requirement for manual data entry and ensuring accuracy.

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Researchers should consider registering for an ORCID ID and keeping their ORCID profile up to date to enhance the visibility and discoverability of their research findings. ORCID is widely utilized throughout the research ecosystem, encompassing academic institutions, publishers, and funding organizations, making it an essential tool for researchers looking for a standardized and recognized intellectual identity [9].

Springer Nature is a multinational academic publishing corporation that focuses on publishing scholarly publications, journals, and online platforms in many academic fields. Springer Nature is a publisher that specializes in academic and scientific literature across several fields including science, technology, medicine, social sciences, and the humanities. In addition, it releases a multitude of scholarly publications, a significant portion of which undergo rigorous evaluation by experts in the area and are highly esteemed within their respective domains. Journals include a broad range of subjects, such as scientific inquiry, technology, medicine, and social sciences.

Springer Nature is a prominent publisher of scholarly literature, including textbooks, monographs, reference works, and professional titles. The organization produces both physical and digital versions to meet the requirements of researchers, students, and professionals. It participates in the open access publishing paradigm by providing a range of open access journals and making some research publications accessible to the public free of charge. Springer Nature works under many imprints, such as Springer, Nature Research, BioMed Central, Palgrave Macmillan, etc.

Springer Nature offers digital tools that facilitate the access and distribution of scholarly information. SpringerLink is a portal that provides access to journals, books, and reference materials. Additionally, it provides author services to assist researchers throughout the publishing process. This encompasses the process of submitting a work, revising it, and receiving advise on various publication possibilities. Springer Nature publishes conference proceedings, so increasing the accessibility of research presented at academic conferences to a wider audience. Finally, Springer Nature is dedicated to furthering the progress of knowledge and facilitating the dissemination of information via the publication of exceptional scholarly material. It has a substantial impact on the academic communication environment and contributes to the progress of science and research [10].

Elsevier is a multinational information analytics firm that focuses in delivering academic, scientific, technical, and medical material. It is the next platform. It is a prominent publisher of scholarly journals, books, and online databases, particularly serving the academic and research sectors. It is a prominent worldwide academic publisher that produces a multitude of peer-reviewed journals spanning several areas, such as science, technology, medicine, and social sciences.

Elsevier is renowned for its vast collection of scientific, technical, and medical (STM) literature. It is responsible for the publication of a substantial amount of the global scientific literature, which includes research articles, reviews, and conference papers. ScienceDirect is an online portal owned by Elsevier that provides users access to a vast collection of scientific and technical knowledge. The collection encompasses a wide array of periodicals, books, and reference publications. Scopus is a database that contains abstracts and citations, and it is owned by Elsevier. It encompasses a wide array of fields and is extensively used by scholars to monitor citations,

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explore scholarly literature, and evaluate the influence of research. Elsevier Health Sciences: Besides STM material, Elsevier has a significant presence in the publication of health sciences.

Mendeley is a platform for managing references and an academic social network that was purchased by Elsevier. Researchers may use this platform to efficiently arrange and distribute their research papers, explore pertinent publications, and engage in collaborative work with other researchers. Elsevier offers publications that are available via both subscription-based and open access models. Open access journals provide unrestricted access to their material, often necessitating authors to pay publishing fees. Although Elsevier has a significant position in the academic publishing sector, ongoing debates around research accessibility, publication costs, and open access are influencing the field of scholarly communication. The company has actively participated in initiatives focused on tackling these challenges and advancing the scholarly publishing model [11].

Academia.edu is the last site in the list, specifically designed for academics and researchers to exchange and retrieve intellectual material. This platform enables academics to establish personal profiles to exhibit their academic credentials, research areas of interest, published works, and institutional associations. The profile functions as a publicly accessible documentation of a researcher's accomplishments and specialized knowledge. Academia.edu allows researchers to post and distribute their publications, which might include preprints, conference papers, and journal articles. This platform facilitates the widespread distribution of research to a larger audience.

Users have the ability to track and monitor the latest papers and activity of other scholars by following them. This feature promotes cooperation and the establishment of professional connections within the academic community. Researchers have the ability to get metrics on the exposure and influence of their articles, such as the quantity of views, downloads, and citations. These indicators provide valuable information on the extent and impact of their activity. Academia.edu has a Q&A part that enables scholars to inquire and respond to inquiries pertaining to their specific area of expertise. Users have the option to either join existing groups or establish new ones on Academia.edu in order to interact with others who have similar academic interests. In addition, the platform is capable of facilitating virtual conferences and events.

Academia.edu has premium membership options that include advanced analytics, improved exposure for profiles and publications, and the capability to send private messages to researchers. Academia.edu may be accessed via web browsers and also offers specialized mobile applications for iOS and Android smartphones. This enables users to remain connected and actively participate in research [12].

This article ended by examining the impact of information and communication technology (ICT) on research, specifically emphasizing the importance of incorporating advanced ICT services within the context of Uzbekistan. The article provided a succinct summary of the approaches used in doing research and obtaining information via the utilization of platforms such as Web of Science, ORCID, Springer Nature, Elsevier, and Academia.edu. The article emphasized the importance of the listed platforms in enabling appropriate research and emphasized numerous of their distinguishing features. The use of these platforms enhances the overall quality of education and research, while also enhancing the adaptability and proficiency of researchers in conducting research, cooperating with others, and engaging in local and worldwide research.

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