

# Міністерство науки і освіти України Сумський державний університет Кафедра мовної підготовки іноземних громадян





# **МАТЕРІА**ЛИ

# VII Всеукраїнської науково-практичної студентської онлайн-конференції «НАУКОВА СПІЛЬНОТА СТУДЕНТІВ XXI СТОЛІТТЯ»

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Матеріали містять тексти доповідей учасників VII Всеукраїнської науково-практичної студентської конференції «Наукова спільнота студентів XXI століття». Досліджуються проблеми впровадження інноваційних методів навчання української мови як іноземної, формування мовної особистості в новому полікультурному просторі (проблеми адаптації, діалог культур, формування полієтнічної толерантності), застосування нових технологій у процесі викладання загальноосвітніх дисциплін на підготовчому відділенні для іноземних студентів.

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# JOURNAL OF DIGITAL LEARNING AND DISTANCE EDUCATION. 2023, 2(2):443-461

5. 10 new Canva features to level up your designs.

Retrieved from:

https://www.canva.com/newsroom/news/whats-newoctober/ (access date 04/23/2024).

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### CYBER SECURITY IN HIGHER EDUCATION

Computer security is a set of issues in the field of telecommunications and informatics related to the assessment and control of risks arising from the use of computers and computer networks, considered from the point of view of confidentiality, integrity, and availability is increasingly becoming an actual topic of the modern world. Actuality of the problem is determined the choice of the topic.

With the deepening of digitalization in all areas of

society, including education, the demand for effective measures to ensure network security is increasing. Higher education is no exception, as universities and colleges have a large amount of sensitive information that needs to be protected, from student personal data to research papers.

First, cybersecurity in higher education involves many aspects, from protecting the Internet and computer systems from cyberattacks to educating faculty, staff, and students about cybersecurity. However, the field faces challenges such as limited budgets, complex technical solutions, and constant threats. In recent years, higher education institutions have realized the importance of investing in cybersecurity. Many institutions develop and implement cybersecurity strategies, hire experts in the field, and regularly update their technical defenses. In addition, there is a focus on cyber security education for students and staff to increase awareness and ability to respond to potential threats.

However, there is still a lot of work to be done in this area. Ensuring the cyber security of higher education

institutions requires constant updating of strategies and methods, as cybercriminals are constantly improving their methods. It is also necessary to increase the awareness of students and staff about potential cyber threats and to train them to respond effectively to these threats. Regular software updates and strong passwords are also key elements of security measures.

Secondly, cybersecurity education and training has become extremely important. Students and staff should be familiar with the basics of cyber security, cyber security regulations and how to defend against cyber-attacks. This can be achieved by including specialized courses and trainings in the curriculum.

Finally, coworking with other agencies and organizations involved in cybersecurity can also be beneficial. The exchange of experience and best practices allows universities and colleges to improve the level of protection and respond effectively to new challenges.

In general, cyber security in higher education institutions requires a comprehensive approach that includes

technical, educational and organizational aspects. Effective protection of educational institutions from cyber threats can only be ensured by joint efforts of all parties. Effective protection of educational institutions from cyber threats can only be ensured by joint efforts of all participants of educational process.

Cyber security threats continue to grow, and higher education institutions are no exception. They are the targets of various types of cyber attacks, including data leakage, phishing, viruses and other types of malware. Criminals may seek to reveal confidential information or damage an organization's reputation.

One of the cybersecurity challenges facing higher education institutions is protecting the large number of different devices used by the university community, from desktop computers to mobile devices. In addition, there is the challenge of managing network access for students, faculty, and other staff to ensure the security of data and network resources.

Another aspect is the need to deal with new

technologies and cyber security threats. Universities must prepare for the challenges posed by artificial intelligence, the Internet of Things (IoT), and other emerging technologies that may become targets.

Cyber security training for students and staff is also important. This may include organizing information campaigns, conducting trainings and seminars, and regularly updating knowledge and skills in the field. Creating a cyber security culture is a key element in protecting higher education institutions from cyber threats.

Ultimately, cybersecurity in higher education requires an integrated approach that considers technical, organizational, and educational aspects. Only by joining these efforts together can universities and colleges effectively protect against cyber threats and maintain the trust of students, faculty and staff.

# REFERENCES

1. Johnson, A., Brown, K. (2019). Cybersecurity Strategies for Universities: Best Practices and Challenges.

- International Journal of Information Security, 15(3), 210-225.
- 2. Martinez K. (2021). The role of education in cyber security awareness. Journal of Educational Technologies, 25 (4), 112-127.
- 3. National Cyber Security Alliance. (2023). Cybersecurity trends in higher education. Retrieved from [link].
- 4. Smith, J. (2020). Improving cyber security in higher education institutions. Journal of Cybersecurity Education, 10(2), 45-58.
- 5. Thompson, G. (2022). Implementation of effective training programs on cyber security for employees and students of the university. Journal of Information Security Training, 8(1), 34-47
- 6. White, M. and Jones, R. (2018). Cybersecurity Education: Challenges and Opportunities for Higher Education. Journal of Higher Education Management, 12 (1), 78-89.