## INFORMATION SECURITY AND CYBERSECURITY TRAINING IN THE HIGHER EDUCATION SYSTEM

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## ANNOTATION

this article provides scientific grounds for ensuring information security and cybersecurity in the system of continuing education, as well as its activation and protection of youth from information attacks.

Keywords: Information Security, Hacker, cybersecurity, cybercrime, Case-study.

Today, digital technologies are rapidly developing in such a way that a person simply has the opportunity to transmit or receive, delete any information through one button, but he has not thought about the extent to which information is being exchanged safely or how safely information reaches another person. And at the core of this lies information and cyber security. Currently, the internet is the fastest growing infrastructure of everyday life. In the current digital world, the latest technologies are changing the way a person lives. But thanks to the emerging technologies, we cannot keep our information safe even in the most effective way, and therefore cyber crimes are increasing day by day. Currently, more than 60% of financial agreements are made over the internet, so this area requires the best quality security for large amounts of agreements. The scope of cyber security is not only information protection in the information technology industry, but is also divided into many other types, such as cyberspace. Using computer viruses, hackers can take possession of millions of computers around the world. They can then be used in the form of a digital military force "Botnet", attack various sites and have their own control. This type of attack is called a service (Distributed Denial Off Service), the distribution of which is rejected. Hakkers fill the site with the help of a large number of requests, and the site error, with which work and hardening begin. Requests are made million-millionths at a time as a result of which the servers may not be able to respond.

Such requests and automatic operation of all kinds of programs(icebreaker and intruder)can be observed in mobile phones, PCs and laptops. A case that many encounter in cybercrime is that of people having personal and plastic card information. To do this, they send spam messages in the form of messages, sms to their email or mobile phones. It attracts attention with fake news such as big cash advances, low interest loans, cheap home car sales, fast enrichment at low time while sitting at home. When an application is made to the link in the incoming message, it will take you to the fake website. At this point, the user's account information will be stolen if the site is accessed through xavola. Now they will be able to use the account and steal calligraphic money, manage mobile phones and personal computers through the account. In order to prevent information security and cybercrime when using the internet, many companies, centers, laws and government organizations are working. These actions are not enough today. It can be thought of as a security system or a software problem if a computer or sites suffer from a hacking attack. 90% of computer systems are hacked by hackers, but this is not the only drawback of the security system or ximoya programs. This creates the basis for the greatest mistakes that users neglect, lack of sufficient knowledge and skills in Information Security, Cybersecurity, media literacy. In addition to the development of information technologies in the Republic, special attention is paid to the direction of eliminating the security problems associated with computers in the economic and public administration bodies. In 2017-2021, tasks were set in the strategy of actions for the further development of the Republic of Uzbekistan, among them "...particular attention is paid to the issues of ensuring information security and improving the information protection system, timely and appropriate

## NOVATEUR PUBLICATIONS INTERNATIONAL JOURNAL OF INNOVATIONS IN ENGINEERING RESEARCH AND TECHNOLOGY [IJIERT] ISSN: 2394-3696 Website: ijiert.org VOLUME 9, ISSUE 12, Dec. -2022

resistance to threats in the information sphere" and the disclosure of cybercrime. In addition, the decree of the president of Uzbekistan on the state program on the implementation of the "year of development of Science, enlightenment and digital economy" defines the tasks of development of the national strategy and draft law on cybersecurity by September 1, 2020

An informed society is rapidly forming through the network. When traveling to the world of information, the concept of state borders is disappearing. The world computer network is radically changing public administration, which means that the state remains unable to control the mechanism of information distribution. That is why problems such as illegal access to existing information, their use and loss have become relevant. All this leads to a decrease in the level of information security of the individual, society and the state [4,5]. It has been a long time since cybercrime, which is being mentioned among the global problems of our century with new types. We cannot ignore the fact that it poses a great threat to the life of mankind by distributing viral programs known to us, hacking passwords, looting funds on credit cards and other bank details, as well as spreading information that is contrary to the law through the internet, in particular, slander and morally corrupt information. - The concept of" cybercrime " is explained by the use of information and communication technology tools, horror on the virtual network, virus and other malicious programs, preparation and distribution of information contrary to the law, mass distribution of e-mails (spam), hacking, illegal access to websites, fraud, data integrity and copyright infringement, theft of credit card numbers and bank details (phishing and farming) and various other offenses. At this point, it is worth noting that the scale of cyberterrorism and its risks to the life of society is also increasing. Cyberterroristic action (cyberbullying) is a political cause carried out with the help of computers and information communication tools, which poses a direct threat to the life and health of people or can pose a potential danger, causing great damage to material objects or causing it, which is the beginning or goal of socially dangerous consequences. The attractiveness of the use of cyberspace for modern terrorists is due to the fact that the implementation of cybersecurity does not require large financial costs. According to the conclusion of experts, this is done by promoting the development of developing countries, influencing the minds of citizens under the guise of finding decisions on universal democratic principles, subordinating them in different ways to their goals. At the same time, information protection is being studied as an urgent problem of our present day, and various effective measures are being implemented in our state in this regard. In particular, young researchers in this area are working on foreign practices. PF —5349 of the president of the Republic of Uzbekistan on February 19, 2018-"measures to further improve the sphere of Information Technologies and communications- Decree No. 7 of February 2017 —on the strategy of actions for the further development of the Republic of Uzbekistan" PF-4947, dated April 20, 2017-on measures for the further development of the higher education system"PP - 2909 provides methodological and practical assistance for teachers of educational institutions to implement advanced pedagogical technologies (- Case-study) style, project style, collaborative learning, interactive learning style, etc.) and modern information technologies in the educational process. We can see that all this gives special importance to education and education by our state, as well as the training of personnel that meet the requirements of the time through the use of advanced pedagogical and information technologies in them, including pedagogical ones

It can be seen that the impact on the minds of young people through information would be appropriate to increase classes in secondary and secondary special education in Information Security and cyber security in order to prevent measures, to prevent cybercrime, and in higher education to the goal if all areas were taught the subjects "Information Security", "Cyber Security Fundamentals", "Media literacy". After All, Our President Sh.M.As Mirziyoyev noted- ... the risk of threats such as cybercrime, human trafficking, drug trafficking is increasing. In such a threatening situation, it is necessary to live sober and alert, thinking about the peace of our people and the interests of Uzbekistan

## REFERENCES

- 1. O'zbekiston Respublikasi Prezidentining Farmoni —Raqamli O'zbekiston 2030 strategiyasini tasdiqlash va uni samarali amalga oshirish chora-tadbirlari to'g'risida T., 2020 yil 5 oktabr, PF-6079-son
- O'zbekiston Respublikasi Prezidentining PF-4947-sonli —2017-2021 yillarda O'zbekistonni rivojlantirish bo'yicha Harakat strategiyasi to'g'risidalgi Farmoni // O'zbekiston Respublikasi Qonun xujjatlar to'plami.- T., 2017.- B.37
- 3. S.K. Ganiyev, A.A. Ganiyev, Z.T. Xudoyqulov. Kiberxavfsizlik asoslari. Oʻquv qoʻllanma. Toshkent-2020. 303 b.
- 4. Ganiev S.K., Karimov M.M., Tashev K.A. Axborot xavfsizligi. Darslik (Professor S.K.Ganiev tahriri ostida) Toshkent-2016 366 b.
- 5. Mavlonov, S. X., & Abdullayev, B. B. O. G. L. (2021). TA'LIM JARAYONIDA CROCODILE ICT DASTURIDAN FOYDALANISH. Science and Education, 2(3), 323- 327.
- Toshtemirov D.E., Niyozov M.B., Yuldashev U.A., Irsaliev F.Sh. Resource support of distance course information educational environment // Journal of Critical Reviews ISSN2394-5125 Vol 7, Issue 5, 2020, pp. 399-400
- Жумакулов, Х., & Жаров, В. К. (2019). О статистической безграмотности выпускников педагогических вузов и не только. In Международный гуманитарный научный форум" Гуманитарные чтения РГГУ-2019" Непрерывность и разрывы: социально-гуманитарные измерения" (pp. 119-123).
- 8. Хусанбаев, Я. М., & Жумакулов, Х. К. (2017). О сходимости почти критических ветвящихся процессов с иммиграцией к детерминированному процессу. О 'ZBEKISTON MATEMATIKA JURNALI, 142.
- 9. Жумакулов, Х. К., & Салимов, М. (2016). О МЕТОДАХ ПРОВЕДЕНИЯ И СТРУКТУРЕ ПЕДАГОГИЧЕСКОГО ЭКСПЕРИМЕНТА. Главный редактор, 80.
- Soboleva, E. V., Zhumakulov, K. K., Umurkulov, K. P., Ibragimov, G. I., Kochneva, L. V., & Timofeeva, M. O. (2022). Developing a personalised learning model based on interactive novels to improve the quality of mathematics education. Eurasia Journal of Mathematics, Science and Technology Education, 18(2), em2078.
- 11. Ummatovich, K. M., Erkinjonovich, O. S., & Rahimovna, S. F. (2019). The Role Of Small Business And Private Entrepreneurship In Civil Society. Frontiers in Finance & Economics, 16(2).
- 12. Xalmatjanova, G., & Sadikova, F. (2022). The Importance of the Cluster Method of Production in Agriculture. Texas Journal of Agriculture and Biological Sciences, 5, 10-13.
- 13. Jakbarovich, S. B., & Rahimovna, S. F. (2020). SMALL BUSINESS AND PRIVATE ENTREPRENEURS AS THE SOCIO-ECONOMIC BASIS OF CIVIL SOCIETY. MODERN VIEWS AND RESEARCH, 1, 36.
- 14. Садыкова, Ф. (2022). ҚИШЛОҚ ХЎЖАЛИГИ МУАММОЛАРИНИ ҲАЛ ҚИЛИШГА<br/>ЙЎНАЛТИРИЛГАНИНВЕСТИЦИЯЛАРСАМАРАДОРЛИГИ:<br/>https://doi.<br/>org/10.55439/ECED/vol23\_iss3/a18. Экономика и образование, 23(3), 120-126.