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NEGATIVE FACTORS WHEN HIGHER EDUCATION INSTITUTIONS STUDENTS WORK WITH COMPUTERS

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Abstract:

The means of modern information technology include: computer, scanner, video camera, interactive whiteboard, fax modem, telephone, e-mail, multimedia, Internet and intranet networks, mobile communication systems, database management systems, artificial intelligence systems. Modern information technology tools are mastered in the conscious and planned implementation of certain actions.

Keywords: Computer, scanner, video camera, interactive whiteboard, fax modem, telephone, e-mail, multimedia, internet

The growth rate of economic development of our country is highly recognized by the world community. At the same time, it is the result of large-scale reforms aimed at the development of science, education reform, and the full support of scientific and innovative activities.

As one of the priorities in the development of the country's economy, the transition to a path of development based on innovation and integration is underway.

As one of the priorities in the development of the country's economy, the transition to a path of development based on innovation and integration is underway.

In particular, the purpose of today's scientific conference is the Resolution of the President of the Republic of Uzbekistan dated July 27, 2017 No PP-3151 "On measures to further expand the participation of industries and sectors in improving the quality of higher education" and the Ministry of Higher and Secondary Special Education 2017 No. 704 of September 28, 2008 "Involvement of doctoral students and gifted students conducting research in higher education institutions in research work, Priorities include the implementation of the order "On improving the conditions for experimental work in manufacturing enterprises, research and design institutes."

The conference "Intellectual youth in the integration of education, science and industry - an important factor in the development of the country" is one of the efforts to bring up a harmoniously developed generation through the innovative development of science and education.

On the basis of the new post-independence curriculum in all higher education institutions of the Republic of Uzbekistan in the field of pedagogy, 4-5 blocks of subjects include "Fundamentals of Medical Knowledge", "Civil Protection in Emergency Situations", "Labor Protection", "Human Security", "Life". "Safety of activities" are taught to students.

In order to increase the effectiveness of education, to further develop students' theoretical knowledge and practical skills, the use of new pedagogical technologies in the educational process, the use of modern information technology is widely promoted. All opportunities are created for students to acquire knowledge independently, to think independently, to study, to use popular science, scientific literature, as well as the Internet.

Today, with the development of information technology, the presence of a single computer is enough to teach using hardware and software. Previously, the computer performed the functions of a television, VCR, movie projector, slide projector, etc.successfully assumed. In addition, the quality of information transmission, storage, processing, and display has increased significantly, and computer literacy has become an important feature of the culture. In the future, computer literacy should become a key tool in everyone's lifestyle and work process. So, computer work, teaching how to use a computer will undoubtedly become a common task in the near future. The means of modern information technology include: computer, scanner, video camera, interactive whiteboard, fax modem, telephone, e-mail, multimedia, Internet and intranet networks, mobile communication systems, database management systems, artificial intelligence systems. Modern information technology tools are mastered in the conscious and planned implementation of certain actions.

However, we must not overlook the fact that working with a personal computer can lead to a number of dangerous and harmful consequences.

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ELECTROMAGNETIC RADIATION.

Electromagnetic radiation is a very dangerous factor, and in terms of its distribution, it has a negative impact not only on a person working with a computer, but also on the environment. Therefore, radiation detection is performed according to the standards from the center of the screen, from the sides and back of the monitor.

Radiation in two different ranges is allowed, namely 20 Gts- 2 kGts and 2 kGts- 400 kGts. In most cases, the violation of the established standards falls in the range of 2 kHz - 400 kHz. (Table 1)

The results of tests of monitors of different brands show that when sitting close to the monitor, the low-frequency electric field voltage reaches 5 V | m. Currently, the permissible value according to the standard is 1 to 2.5 V | m.

It was found that the death of chicken embryos under the influence of low-frequency electromagnetic radiation at a distance of 50-80 cm from a computer monitor increases by 5-7 times in the first two weeks. The high-frequency (10-300mGts) electromagnetic voltage in the environment in which the monitor is operating shall not exceed 0.01 V | m.

In many cases, computer companies claim that they are adapting their products to world standards. However, the results of the examination show that computers meet these standards only from the center of the screen. Radiation from the sides and walls is several times higher than the established norm.

Therefore, it is advisable to carry out radiation testing at a distance of 50 cm from the computer screen and walls. In the TSO92 standard (Swedish Conference of Professional Employees) the requirements for computers are relatively strict. The standards of the Russian Federation have relatively light requirements.

CLASSIFICATION OF DANGEROUS AND HARMFUL FACTORS WHEN WORKING WITH COMPUTER

Table 1

№	**Physical factors**
1.	Electromagnetic radiation from the monitor
2.	Electrostatic discharge
3.	Ultraviolet radiation
4.	Infrared radiation
5.	X-ray radiation
6.	The brightness of color images
7.	The pulsation rate of the color flow
8.	Improper distribution of light within the field of view
9.	High level of direct proximity
10.	High or low brightness
11.	Dust in the air
12.	Changes in the ionization rate of air
13.	Changes in humidity
14.	Disorders of air circulation in the workplace
	Chemical factors Air content: - carbon monoxide; - ozone; - ammonia; - phenol; - formaldehyde; - biphenyl polychlorides;
	Psychophysiological and microbiological factors
1.	Increased vision and attention
2.	Intellectual and emotional exhaustion
3.	Long static voltage
4.	Uniformity of labor
5.	Excess of information per unit of time
6.	Irrational organization of the workplace
7.	Reproduction of microorganisms in the air

It is recommended to take the following measures when exceeding the safety standards:

- It is recommended to use monitors with protective elements (LR-Low radiation marking). If such a monitor is not available, it is recommended to install a protection filter on the monitor screen, resulting in electric and electrostatic field attenuation.
- in the location of adjacent workplaces should be placed at a distance of 1.5 m from the back and 1.2 m from the side of the monitor, if there are many monitors in the room, then the distance between them should not

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be less than 2 m and the area of one workplace not less than 6m2;
- pay attention to the correct connection of monitors to the three-contact sockets (otherwise the electric field voltage will exceed the specified norm).

HARMFUL EFFECTS OF EMN MONITORS:
- The possibility of skin diseases (acne, eczema, ringworm, etc.)
- Biochemical changes in blood cells, decreased immunity;
- Disorders of potency in men, the menstrual cycle in women and the negative impact on the state of pregnancy.

Because the sensitivity of the embryo is higher than that of the mother, exposure of pregnant women to electromagnetic radiation can lead to premature tearing of the eyes or disability of the unborn child.
- Disorders of the central nervous system (headache, dizziness, nausea, insomnia, anorexia, decreased ability to remember and read);
- Causes an increase in depression due to disruption of serotonin production in the brain. As a result, it has been proven that suicides make up the majority among those who regularly work with computers and programming professionals;
- The frequencies of radiation emitted from the monitor resonate with the operating frequency of the brain, resulting in the possibility of epileptic seizures.

REFERENCES:

1. Law of the Republic of Uzbekistan "On Education" No. ZRU-637. www. lex. en.
2. Decree of the President of the Republic of Uzbekistan No. PF-947 "On the Action Strategy for further development of the Republic of Uzbekistan". www. lex. en.
3. Resolution of the President of the Republic of Uzbekistan No. PP-1761 "On measures to further improve the system of training qualified teachers and the provision of secondary special, vocational education institutions with such personnel." www. lex. en.
4. Resolution of the President of the Republic of Uzbekistan dated April 20, 2017 No PP-2909 "On measures to further develop the system of higher education." www. lex. en.
5. Alekseev V.E., Usmanov V.V., Frolov V.M. Rekomendatsii po razrabotke uchebnyx posobi dlya distantsionnogo obucheniya. - Penza .: PGTI, 1998. - 256 p.
6. Arkhangelskiy S.I. Uchebnыy protsess v vysshey shkole, egozakonomernыe osnovy i metody. - M., 1980. - 53 p.
7. Shomirzayev M. X. Developing educational technologiesin school technology education //Asian Journal of Multidimensional Research. – 2021. – T. 10. – №. 5. – C. 73-79.
8. Shomirzayev M.X. Education is personally focused technology //European Journal of Research and Reflection in Educational Sciences Vol. – 2020. – T. 8. – №. 8.
9. Shomirzayev M.X. et al. National handicrafts of Uzbekistan and its social–economic significance //European Journal of Research and Reflection in Educational Sciences. – 2020. – T. 8. – №. 8. – C. 129-138.
10. Shomirzayev M.X., Yuldashov K. K. The Educational Importance of Teaching Knowledge to Secondary School Students //CURRENT RESEARCH JOURNAL OF PEDAGOGICS. – 2021. – T. 2. – №. 08. – C. 132-142.
11. Shomirzayev M.X. Practical lessons in technology: Characteristics of organization and conduct //Asian Journal of Multidimensional Research. – 2021. – T. 10. – №. 4. – C. 991-1001.
12. Shomirzayev M.X. The concept of pedagogical technology and basic principles //ACADEMICIA: An International Multidisciplinary Research Journal. – 2020. – T. 10. – №. 11. – C. 1551-1560.
13. Shomirzayev M.X. The Concept of Pedagogical Technology and Basic Principles. Academicia: An International Multidisciplinary Research Journal.(Affiliated to Kurukshetra University, Kurukshetra, India), Vol. 10, Issue 11, November 2020 Scientific Journal Impact Factor (Sjif 2020-7.13). Part 1554-1563.
14. Shomirzayev M.X. The Ethical Characteristics of Traditional Embroidery of Fergana Valley People //European Journal of Research and Reflection in Educational Sciences Vol. – 2019. – T. 7. – №. 12.
15. Shomirzayev M.X. Technology of Educational Process in School Technology Education //The American Journal of Social Science and Education Innovations. Impact Factor. – T. 5. – №. 02. – C. 212-223.
16. Shomirzayev M.X. Ethnic characteristics of national traditional crafts //European Journal of Research and Reflection in Educational Sciences Vol. – 2020. – T. 8. – №. 12. – C. 216-225.
17. Shomirzayev M.X. Combined In Technology Courses Use Of Technologies //The American Journal of Social Science and Education Innovations. – 2021. – T. 3. – №. 05. – C. 389-396.
18. Shomirzayev M.X. Local features of the traditional embroidery of the Ferghana valley //European Journal of Research and Reflection

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ISSN: 2749-361X

in Educational Sciences Vol. – 2019. – T. 7. – №. 12.
19. Shomirzayev M. X., Karimov I. I. Innovative pedagogical technologies in teaching technology //T.:"Universitet. – 2020. – C. 125.
20. Shomirzayev M.X. Innovative processes in Uzbek national handicrafts //T.:"New edition. – 2019.
21. Shomirzayev M.X. The Concept of Pedagogical Technology and Basic Principles. Academicia: An International Multidisciplinary Research Journal.(Affiliated to Kurukshetra University, Kurukshetra, India), Vol. 10, Issue 11, November 2020 Scientific Journal Impact Factor (Sjif 2020-7.13). Part 1554-1563.
22. Shomirzayev M.X. Ways to increase the effectiveness of teaching technology //Methodological manual. – 2019.
23. Shomirzayev M.X., Yuldashov K. K. Use of Some Historical Materials in Technology Education Classes //International Journal of Multicultural and Multireligious Understanding. – 2021. – T. 8. – №. 11. – C. 184-195.
24. Shomirzayev M.X., Yuldashov K. K. Student-Folk Craft for Young People Teaching History as a Factor of National Education //International Journal of Multicultural and Multireligious Understanding. – 2021. – T. 8. – №. 8. – C. 475-486.
25. Shomirzayev M.X. Pedagogical technologies-as a factor to increase student knowledge in school technology classes //current research journal of pedagogics. – 2021. – T. 2. – №. 05. – C. 84-96.
26. Shomirzayev M.X.Young People from" Technology" to Profession Training as a Factor of Competitive Personnel Training //International Journal of Multicultural and Multireligious Understanding. – 2021. – T. 8. – №. 4. – C. 580-591.
27. Shomirzayev M.X., Yuldashov K. K. Carpenter, jewelery, knifecourse development of application methods //Asian Journal of Multidimensional Research. – 2021. – T. 10. – №. 8. – C. 302-308.
28. Shomirzayev M.X., Pakhratdinova R. O. Characteristics of Organization and Conduct of Practical Courses on National Crafts in Technology //Asian Journal of Research in Social Sciences and Humanities. – 2021. – T. 11. – №. 9. – C. 182-192.