The development of a culture of digital relations in the educational environment

Nugumanova L.N.
State Autonomous Educational Institution of further vocational education "Institute for the Development of Education of the Republic of Tatarstan"
Kazan, Russia
lyudmila.nugumanova@tatar.ru

Shaukhutdinova G.A.
State Autonomous Educational Institution of further vocational education "Institute for the Development of Education of the Republic of Tatarstan"
Kazan, Russia
us-ipppo-rao@mail.ru

Yakovenko T.V.
State Autonomous Educational Institution of further vocational education "Institute for the Development of Education of the Republic of Tatarstan"
Kazan, Russia
yttv@list.ru

Abstract — In the article, the authors address one of the most urgent issues in the upbringing of the younger generation: the digital homelessness of students. It can be stated that children's love for gadgets was considered harmless for a long time, before the appearance of extremely disturbing and dangerous symptoms, one of which is associated with the lack of control over the life of a child in the virtual world, which can have bad effects. The authors consider the possibility of solving the problem through training a teacher and a form master in the education of the younger generation in refresher trainings, through their self-education and self-development. The authors believe that the more organized and interesting the child’s leisure time is, the less opportunities and desire to dive into the virtual world will appear.

Keywords — education, digital culture, digital homelessness, teacher, student.

I. INTRODUCTION

Ensuring favorable living conditions, development, upbringing, and education along with their protection from digital homelessness, violence, and abuse for all children is one of the main tasks of any educational organization [8].

The concept of digital culture appeared almost simultaneously with the emergence of information technology. Any area of knowledge of a technical or socio-humanitarian orientation is associated with the digital world, which has led to the emergence and development of digital culture.

Digital culture is primarily an understanding of modern information technologies, their functionality, the ability to correctly apply them in any field: educational, professional, personal, domestic, etc. We cannot imagine the modern world without smartphones, computers and other digital technology. There is a need to work with huge data files, with information models, graphic editors, social networks and much more. All of the above tools are actively involved in the educational environment. A modern teacher should not only be able to work with information tools at the highest possible level, but also observe digital ethics and instill it in students. This means that a teacher must teach a student to present information about himself in the digital world, understanding well what data can be made public and which not, to communicate virtually, to know and understand modern legislation in the field of information security. All this together is one of the most important levels of digital culture.

Why do we need knowledge in the field of digital culture? Information technology has penetrated into all spheres of life, without exception. The future belongs to the Internet of things, blockchain and other distributed networks, automation and the economy of robots [4,5]. In general, there is more and more information, and data processing can help in creating the best social services, introducing innovations in the industry, in management. A large part of communication, both business and personal, occurs on the network, which determines the characteristics of thinking and behavior of the generation. Thus, we are faced with the need to store, search and analyze large volumes of information in almost all areas of activity. And this trend is only growing in its development, more and more time people spend in the virtual world, which is very dangerous for the younger generation.

II. METHODOLOGY

The solution of research issues was carried out by analyzing the psychological, pedagogical, sociological, scientific and methodological literature, and the experience of the Institute for the Development of Education of the Republic of Tatarstan in the field of advanced training of teachers and managers was used. In the process of the study, the authors relied on the principle of relevance, the principle of information advance, the principle of information security, the
principle of an optimistic nature, which consists in the formation of students' confidence in the possibility of preventing dangerous situations; the principle of activity and independence of students.

III. RESULTS OF THE RESEARCH

The digital culture for the education system is associated with a change in the nature of communications and behavior patterns. In pedagogical science, the development of computer technology, especially in connection with the dynamic cyber-evolution of the Internet, has led to the emergence of a new phenomenon — digital homelessness, which sometimes takes on ugly, aggressive, provocative forms that generate cyber-bullying, school shooting, columbine, Werther syndrome, the growth of destructive groups in social networks (the well-known Whales, Wake Me Up at 4.20, Nikomunenzhenkaya, Sect of Dreams, Hello from the Bottom, Rina, NyaPoka, etc.). Digital homeless children vividly demonstrate dysgenic behavior leading to degeneration, to a deterioration in the psychophysical, social and other characteristics of a person. The only difference from ordinary homeless children is that, being unsupervised, they are not on the street, but at a computer, gadget, etc.

The escape of children into the digital world forms a vicious cycle: acts as a cause and effect of a rejection of the traditional culture and values of human relations, a movement of a person into a specific environment of “digital natives”, joining a new community, where there are values and mores, customs and norms that lead to general desocialization of an individual. Since the Internet and other media is disorganized, it is simply dangerous to leave a child alone with a “digital” and other entities and institutions that promote lack of culture and form a state of digital homelessness [7, 9].

Parents and teachers, especially form masters, have the leading role in the formation and development of a culture of digital relations.

Understanding the seriousness of the current situation in society, the State Educational Institution of Higher Education “Institute for the Development of Education of the Republic of Tatarstan” directs its activities to creating conditions for informational, scientific and methodological support of the activities of a form master. It is a form master who plays a key role in the fulfilment of educational functions in the educational organization, and it is a form master who acts as an information agent between the institute and parents. In addition, digital security and the formation of a culture of digital relations in an educational organization of students also depends on:

- whether an educational organization creates and distributes brochures, campaign materials, information sheets covering possible threats and consequences of digital homelessness.

The Institute's activities to develop and improve the professional competencies of a form master are carried out in the following areas:

- The implementation of programs and modules of further vocational education.
- Scientific and methodological support of educational issues both in the class and outside normal hours.
- Demonstrating and integrating best practices.

The institute annually implements more than 90 programs of further vocational education (advanced training) aimed at improving the professional competencies of teachers in accordance with the requirements of a teacher’s occupational standard.

When developing programs, we are guided by the following principles:

- the principle of relevance, consisting in the study of issues related to the emergence of potential threats and dangers of digital homelessness of students;
- the principle of information advance, involving training in the rules of personal security, which includes the information security of all students in an educational organization: from primary school to final years and in professional educational organizations;
- the principle of information security, which consists in a clear selection of information so that prevention remains prevention, and does not motivate students to search for certain forbidden sites and groups;
- the optimistic principle, which consists in the formation of students' confidence in the possibility of preventing dangerous situations [3];
- the principle of activity and independence of students. The student is considered by us not only as an object, but, first of all, as a subject of educational relations, which is why we offer various methods of organizing the leisure of students in refresher trainings: from involvement in research work on relevant topics, conducting joint scientific conferences with teachers; use of creative tasks (competition of posters, essays, presentations); conducting olympiads on life safety before inclusion in the system of prevention of physical education and health activities, application of the system of business games in the field of digital security and their testing in the course of teaching practice.

Among the programs developed at the institute there are programs for form masters, deputy directors for educational work. Any program of further vocational education for both teachers and managers (professional educational organizations, schools, kindergartens, organizations of vocational education for children)
contains two clusters: theoretical and methodological and practical. Questions of the theory and methods of education are revealed in the psychological and pedagogical cluster. Practical aspects — as part of an internship based on the best educational organizations of our republic. Scientific and methodological support of educational organizations on education is carried out by the institute both in the traditional form (scientific and methodological seminars, consultations, preparation of methodological recommendations, etc.) and with the use of digital technologies. Today, each of us is aware that the traditional forms of obtaining information, consultations, and methodological assistance are inferior to the electronic ones working in the 365/24 format (daily and round-the-clock).

Undoubtedly, the innovative project “Regional system for organizing mentoring of pedagogical and managerial personnel on the basis of network interaction”, implemented by the Institute in conjunction with the Russian Academy of Education, plays a significant role in advancing in the skill of teaching staff.

It was determined that mentoring is an effective technology in advancing in skill of all categories of teachers and management personnel, including in the field of education[1,2,6].

Within the framework of the School of Mentoring electronic platform, professionally oriented discussions and other forms of interaction have already been launched on the institute’s website, which are aimed at the constant development of teachers, communication with like-minded people on relevant professional topics, as well as interaction with project managers to receive comprehensive support.

**Discussing the Results.** The results of the study showed that the problem of developing a culture of digital relations should be solved at different levels, including in the education system. We believe that the subjects of education should pay attention to the formation of a digital culture. This problem is solved by including questions on the theory and methodology of educating students in the modern digital world in the refresher training modules of subject teachers, form masters, and deputies for educational work. Information on the problem of digital security is available on the institute’s website, and scientific and methodological materials for the practical work of teachers are also presented there.

Digital culture, the development of digital relations in education need to justify the theory and practice of this process [10]. The conceptual development of issues of the modern model of digital relations in an educational organization is necessary at a theoretical level. At a methodological level: the development of requirements for content design, selection and development of new tools for the development of digital culture in the educational environment; the creation of teaching aids and guidelines. The developed teaching and methodological complexes make it possible to increase the efficiency and reliability of educational activities of pedagogical and managerial personnel in the digitalization era.

### IV. CONCLUSIONS

Thus, the institute is currently developing a set of educational programs, modules for advanced training of heads, deputies for educational work, teaching staff, and form masters to educate the younger generation, including taking into account the digitalization of the student’s modern life. The task of the institute’s digital environment (it includes network social and pedagogical communities, online repositories of electronic educational resources, online lectures, distance learning courses, a website) is the accumulation, ordering and provision of the necessary information to all categories of subjects of education. The digital environment is aimed at introducing teachers to the advanced achievements of modern science and technology, innovative educational technologies; network connectivity; scientific and methodological support of the educational process.

Taking into account current trends and principles of open education, the information that is most often requested by pedagogical workers is available on the institute’s website for free access - first of all, methodological recommendations, information and analytical materials, video lecture and conversation series with students and teachers, and also relevant materials from organizations partners (National Anti-Terrorism Committee, Institute of Information Technologies in Education of UNESCO, etc.), webinars.

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