EDUCATION OF THE DIGITAL GENERATION IN UNIVERSITIES – PROBLEMS AND SOLUTIONS

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Abstract: This article sets out the main essential features of the digital generation that influence the motivation, methods and means for education, the possibilities for education are explored and new forms and means of education are proposed through the use of innovative educational technologies and the transformation of the education system for the purpose of increasing the educational-disciplinary quality.

KEY WORDS: DECISIONS, DIGITAL GENERATION, HIGHER EDUCATION, STRATEGIES DOCUMENTS.

1. Introduction.
The extremely fast development of information and communication technologies and their implementation in practice have set new requirements for the education of students in universities. The generation that grew in the years of dynamically changing computer systems and means of communication has proved to be largely dependent on them and the ways in which they are used in everyday life. Current and future students are typical representatives of the digital generation and have all the features that have a significant impact on their motivation for self-improvement, which directly affects the quality of education.

2. Discussion and results.
The analysis of the education environment shows that a substantial change is needed in the education system and in the traditional approaches that are being applied at the present stage. Taking into account that the most active and productive work activity of a person, which combines the accumulated theoretical knowledge and practical experience to the maximum extent is 60-65 percent of their productive activity of a person, which combines the accumulated theoretical knowledge and practical experience to the maximum extent is 60-65 years then without claims of exhaustiveness and completeness, depending on age and the use of modern technologies the following classification can be made:

- First group – born from 1955 to 1965 – about 59 years old. Characteristic for this group is that a relatively small part of them knows and uses modern computer and communication tools. These are primarily people who have participated or are involved in the education of the younger generation, such as teachers, lecturers, and successful managers, representatives of the governmental and local authorities.
- Second group – born from 1980 to 1990 – about 35 years old. This group, for the most part, knows and uses the achievements of communication and computer technology and is constantly seeking self-improvement. These are the people who grew up with color TVs, mobile phones, computer systems using Microsoft office packages, digital cameras and others. For them, the TV and the personal computer is a must. Some authors call this generation "generation X" [5].
- Third group – born from 1990 to 2000 година – around 25 years old. These are people who are witnesses of the quality leap in computer and communication technology. They mostly know the modern means of communication, the computer industry’s achievements, such as 3D images, the creation and use of virtual environments, on-line connections using various applications such as Facebook, Viber, Messenger, Twitter and others. For this group, the availability of a laptop, mobile phone, Internet, intranet, and the ability to communicate with anyone, anywhere, anytime, is a must for existence. According to a group of authors, these are the representatives of "generation Y" [5].
- Fourth group – born from 2000 to 2005 – around 18 years old. These young people are our current and future students. These are the people who grew up with digital technologies, they are direct witnesses and users of the rapidly evolving communication systems. For them, the world is a smartphone, tablet, laptop, computer games, web players and PlayStations; on-line communication and conferencing. They are born in the digital world and are unable to be without the digital toys they grew up with. For them, the TV is rather a screen where it is possible to project a video or computer game. This group of society is both a child and a "prisoner" of the digital world because they are emotionally tied to modern computers and communication systems. Called by modern authors “generation Z”.
- Fifth group – born after 2015 – around 3 years old. These are children from “generation α”. According to Mark Prensky generations Y, Z and α are “digital natives” – they live entirely surrounded and highly dependent on digital technologies. They are current and future participants in the technological boom of the communication era. These are the children of our time, children who do not know a world without digital technology, no internet and intranet and no mobile communications.

Which are the main characteristics of the digital generation?

Firstly, they gain their knowledge about their surrounding world from their tablet and mobile phone and not from nature. The great dynamics of modern life force them to get the information they need in the fastest way, and modern technologies provide them with the convenient means for such a realization. They can gain information about any part of the world, download existing information about any question they are interested in after a brief "surfing". They are able to keep track of events from the most distant points on the planet, in real time, if they have an internet connection. Modern computer and communication tools provide the opportunity to receive a huge amount of information and the digital generation as users of its content. The bulk of this generation does not like to read books, even their electronic counterparts and prefer to receive information as quickly as possible but with the use of films and video products.

Secondly, due to the fact that the digital generation was born and raised with digital technologies, it is very well acquainted with their emergence, development and improvement, which creates a prerequisite for extremely quick mastering the novelties in the technical solutions and their application. They are able to easily pass from one device to another, from one application to another and have the knowledge and practical skills to use different types of mobile devices and applications that significantly outperform those qualities of their parents’ generation, giving them a sense of superiority and disparagement towards parenting advice.

Thirdly, they want to get knowledge when they decide, regardless of time and place, and not during the regulated school time. They would rather listen to music and watch video films instead of using their resources to receive educational content. They gather knowledge and experience from the results of their own actions. They exhibit a readiness to work in a team but are looking for a place to express themselves by using the capabilities of modern computer and communication systems.

Fourth, they actively participate in social networks, show their identity without worries, openly state their opinions on the issues discussed and like to show the digital content they have created. They greatly appreciate the opportunities for fast communications and Internet access and mobile applications that can be switched according to their wishes and the specific circumstances of the environment.

Fifth, they prefer to communicate through SMS and phone calls, the subjects they discuss are more than superficial and are borderline meaningless with a low level of intellectual content. Expressions have a limited number of words, often using jargon and cynical expressions.
According to a survey conducted on teenagers in the USA during 2012 it was established that 93% of young people prefer to communicate using SMS and calls; 90% prefer to socialize on Facebook; 71% of them prefer text messages over conversations. In the Facebook mobile apps 56% are girls and 35% are boys, while in mobile games 35% are boys and 53% girls [3].

Taking into account the characteristics of the digital generation, we will outline the main issues and challenges facing today's educational society and offer solutions in order to overcome them.

1. Obsolete educational facilities, that do not meet the requirements of the students and creates conditions for developing a sense of disinterest, apathy and alienation in them. Traditional wooden boards (black or green) and chalk (white or colored) from the 80s and 90s do not fit into the ideas of today's students for a full educational service. It is necessary to equip the lecture halls with interactive systems, allowing the development of traditional education using the achievements of the modern technology by introducing a new type of knowledge - digital. The use of laptops, presentations, videos and media in the learning process is very close to the students' natural environment and makes teaching new knowledge interesting and effective.

2. A more widespread introduction of forms of electronic education and their combination with the forms of traditional education. It is necessary to create an electronic education platform; publishing lectures on main subjects in the platform; creation of virtual laboratories in engineering disciplines; creation of electronic multimedia teaching aids. [1]

3. Solving the challenges stated above would make it possible to make full use of the students' potential, their ideas and suggestions. This would make them an active part of the learning process and would provide real feedback and adequate management of decisions to change the environment if that is necessary.

Preserving the teacher’s position as a leader requires the creation of a new type of teacher model – with a new way of thinking, new opportunities of using modern information technologies and communication tools, with the opportunity to create a new type of knowledge – electronic and digital. It is necessary to organize and conduct discussions, seminars, postgraduate courses and other forms of training in innovative technologies. In these forms, lecturers will have the knowledge to create interactive presentations, lectures; tests and how to use multimedia products during teaching. A broad implementation of the research approach is appropriate. The teacher should become a mentor instead of a bearer of knowledge, as the main motive is to create conditions for maximum development of students’ activity, their initiative and creativity. The successful accomplishment of this task would preserve or restore the lost prestige of the teacher and would allow for the full realization of students and a sense of satisfaction from their achievements.

4. It is necessary to apply educational innovations based on digital technologies in order to present the opportunity for every student to study at any time in any place with each teacher using different devices. The use of virtual reality, added reality or distance learning in real time become the basic tools in teaching and learning. An increasing number of student’s especially part-time ones are engaged in job performance, which requires increasingly frequent use of a modular learning structure - lecture, exercise, self-study, and exam.

5. Presenting a broad discussion and explanatory work that the time spend on social networks is a time wasted for unrealized opportunities. Elementary communication, rumbling and idle talks are a waste of time that can be used for more valuable and important things. The current generation knows its legal rights well and is looking for ways of obeying them but often forgets about its own responsibilities and obligations. The development of any democratic society is above all based on the conscious observance of the obligations and rights of its citizens. Students need to create an active civic position, constructive thinking and responsibility.

6. The dynamics of modern day life and the rapid change of circumstances largely demand from the parents to be fully engaged with the working environment. Even so that some parents are in stand-by mode ready at all times and constantly interacting with the employer which in turn causes enormous physical and mental exhaustion and consumes them a lot of time on the phone conducting business. This leads to a lack of real communication with children and to a certain extent causes alienation between the parents and the children. The “child-parent” and “parent-teacher” connection is disturbed which intern disrupts feedback and distorts the actual picture of the pupil's condition - his participation in the educational process, his discipline and his out-of-class forms of training.

In conclusion, I would like to highlight that lecturing students that are from the digital generation is an added challenge. The need for significant changes in the learning environment such as using on-line technologies, cloud technologies, networking, the Internet of Things, the Internet, etc. require new regulatory documents new materials and inventory a new approach by the teaching staff and real decisive actions to be carried out for a complete change in the educational sphere.

4. Literature