MODELS OF INTERNET BEHAVIOR OF "DIGITAL NATIVES" IN CONTEMPORARY RUSSIA: OPPORTUNITIES AND RISKS FOR THE EDUCATION SYSTEM

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Abstract

This paper is devoted to the analysis of basic models of Internet behavior of contemporary students and to the evaluation of influence of these models on the process of education. The importance of the analysis in this area appears because of complicated contradiction, thar can be traced in contemporary social science. On the one hand, there idea about the influence of digitalization on the culture of contemporary students is quite popular in social science: many researchers describe them as so called "digital natives", accustomed to life in the information society and spending a significant part of their lives in a virtual space. But on the other hand, there is not clear and common opinion about the influence of these habits of contemporary student on the function of educational system. What opportunities for the education system appear because of the specific of the Internet behavior of "digital natives"? Are these opportunities used properly or not? Are there any risks for the quality of education process? The author uses the data of his own research among Russian students for clarification of these questions.

Key words: students, education system, social media, digital natives

JEL Code: I12; I18; J13;

Introduction

The main goal of this paper is to identify and analyze the key features of the Internet behavior of contemporary students and assess the specific effects of the influence of these features on the learning process. Even a rather cursory analysis of the titles of current articles in the field of sociology of education demonstrates that the rapid digitalization of society has led to the emergence of a completely new generation of students, whose habits of thinking and behavior are fundamentally different from those of past generations. Gradually, it has become fashionable scientific thesis, that growing up in the conditions of the total spread of information technologies has prepared contemporary students to actively use such technologies to solve almost any everyday tasks. A natural consequence of the popularity of this thesis was the spread of

calls for the digitalization of the learning process in schools and universities, which should make this process more familiar and accessible for students. Such calls have become popular in science even before the Covid-19 pandemic, which took out schools and universities around the world for a long time to transfer the learning process to a remote digital format. And there is no serious doubt that now, after being in the distance learning format for a long time, schools and universities will begin to show an even stronger interest in the digitalization of education. At the same time, there is no clear understanding of the possible effects and risks of such digitalization in science. Both the correspondence of this digitalization to the real needs of the students themselves and the long-term effects and risks that it can create remain unclear. This paper is devoted to searching for answers to these complicated questions.

Literature review

The idea that a person growing up in the conditions of the total spread of information technologies has specific habits of consciousness and behavior has arisen in social science for a long time. Probably the first (or one of the first) scientists to suggest such a possibility was the American sociologist M. Prensky, who introduced the popular term "digital natives" (Prensky, 2001). Actually, he used this term for description of people who grow up in the conditions of the total spread of information technologies in society and become accustomed to constant presence of such technologies in their lives. According to M. Prensky's theory, this is precisely the difference between "digital natives" and "digital migrants", who can also actively use information technologies, but also have a clear understanding of life without such technologies. It should be noted that despite certain vulnerabilities of M. Prensky's theory, which were noted by his opponents (Sanches et all, 2011) and by himself (Prensky, 2013), these ideas turned out to be quite popular in science, and the conviction that that people who grew up in the conditions of the total spread of information technologies, inclined to think and behave in a specific way, have since often formed the basis of specific scientific developments.

An analysis of the current scientific literature shows that the specific features of consciousness and behavior of "digital natives" were considered as an important stimulus for the transformation of social processes in many areas. Judging by current scientific sources, the question of adaptation to the needs of digital natives arose in the context of the transformation of the employment process (Kesharwani, 2020), media consumption (Ohme, 2019), consumer behavior (Radin, 2017) and a number of other spheres of society. An in-depth analysis of the relevant papers shows that it is most likely that there is no clear idea of how exactly these areas

should adapt to the demands of digital natives. The existing proposals contain little specificity and rather indicate the idea of the importance of such adaptation, than suggest a specific mechanism for its implementation. Nevertheless, the existence of numerous scientific papers in this area is indicative and important fact. In fact, the large number of such papers demonstrates that the general idea of the importance of adapting habitual social processes to the specifics of the request "digital natives" is not only familiar to science, but also quite widespread. It is possible that researchers have only made few concrete proposals on how exactly such an adaptation should be carried out. However, its necessity does not cause any serious doubts.

Discussions about the need for changes in the education system in this context are also expressed regularly. An analysis of recent scientific papers shows that the idea of the need to adapt the education system to the needs of "digital natives" is quite widespread and ubiquitous in science: in recent years, appeared a number of articles, devoted to the analysis of transformations of the educational system in the Middle East (Moustafa 2017), Eastern Europe (Jabłońska & Zajdel, 2019), Southeast Asia (Huang & Wang, 2021) and other regions of the world. Nevertheless, despite the ubiquity and popularity of the corresponding papers, according to our observations, the potential adaptation of the education system to the demands of "digital natives" still evokes less unambiguous assessments in the scientific community than similar processes in other areas. Some researchers are optimistic in their assessments and believe that adapting the education system to the habits of "digital natives" can open up many opportunities and make the learning process itself more effective (Haddad, 2016; Sugadev & Santhosh, 2019). However, recent scientific papers also contain more skeptical opinion about such a transformation and mentions, that such adaptation can negatively affect learning outcomes and do not correspond with actual needs of "digital natives" (Støle, 2018; Scolari, 2019). In fact, it can be recognized that in science at the present time there is no clear idea not only about how exactly it is possible to adapt the education system to the needs of "digital natives", but also about whether such adaptation is necessary at all.

We would venture to suggest that the reason for this contradictory position lies in the lack of clarity of the very idea of what specific features of consciousness and behavior are characteristic of those people whom scientists are used to calling "digital natives". The original definition, which was formulated by M. Prensky, contained quite a bit of specificity in this area: the initial logic of his reasoning was aimed more at substantiating the basic possibility of the existence of the specificity of consciousness and behavior of people who were accustomed to the realities of the information society since childhood, and not to describe the specific manifestations of this specificity (Judd, 2018). Therefore, the followers and opponents of his theory

were engaged in actual conjecture and interpretation of the provisions laid down by it, sometimes formulating contradictory or too abstract ideas about exactly what features of consciousness and behavior the representatives of "digital natives" possess (Evans & Robertson, 2020). We believe that due to the contradictions and ambiguities that have developed in this area, there has been a reassessment of the real needs of the representatives of "digital natives" in the digitalization of the educational process. Although the exact idea of the peculiarities of their consciousness and behavior in science has not been developed, the very idea of digitalization of the educational process organically fit into the logic of the development of schools and universities, and therefore the assumption of the need to adapt the educational process to the needs of "digital natives" turned out to be popular. If this assumption is correct, then the outlined skepticism, which was discussed above, may turn out to be an organic reaction of analysts to correlating theoretical assumptions with facts: it is quite possible that in reality the representatives of "digital natives" simply turned out to be not so interested in transformations of the educational process.

Thus, based on the analysis of the current scientific literature, we can formulate the initial hypothesis of our research. Our assumption is that growing up in the conditions of the total spread of information technologies forms among the representatives of "digital natives" the habit of actively and constantly using such technologies for solving everyday problems, but at the same time does not lead them to have any special request to the education system. In other words, we assume that "digital natives" get used to actively use information technologies, but in general are not interested in global adaptations of the education system to their habits. Below we will describe the results of a sociological study that we conducted on the materials of Russian students to test this hypothesis.

Methodology

Our research was conducted in Yekaterinburg, Russian in the begining of 2020. The key goal of the researc was a comprehensive analysis of models of Internet behaviour of "digital natives" and evaluation of risks and opportunities, created by these models. The focus on the analysis of students in Russia was made for a reason. Researchers often note that the penetration of the Internet into the life of Russian society was much sharper and faster than in Europe and the United States. Therefore, the contrast between "digital natives" and previous generations in Russian society can be more pronounced than in other countries (Radaev, 2018; Yegorov, 2020).

The research was conducted even before the outbreak of the COVID-19 pandemic, which forced educational institutions to move the learning process to a virtual space and significantly stimulated the growth of the importance of Internet technologies in the learning process. Therefore, the data obtained reflect precisely the most natural features of the Internet behavior of student youth, formed by evolution, and not caused by artificial stimulation in emergency circumstances. Accordingly, there is reason to believe that the patterns identified during the analysis will be stable and will persist after the complex consequences of the pandemic are overcome.

The research was carried out in the form of a questionnaire survey. The survey participants were 317 representatives of the city's student youth aged 18-24 from five major educational institutions: Ural Federal University, Ural State Economic University, Ural State Pedagogical University, Ural State Mining University and Ural State Transport University. The recruiting of respondents was based on a quota model of sampling by gender, age and educational institution.

Results

In general, the analysis of the data allowed us to make some noteworthy conclusions

First conclusion. The Internet itself is a comfortable and familiar communication medium for "digital natives". 98% of the respondents consider themselves to be active Internet users. 72% of them spend at least 3 hours daily using the Internet, and many spend much more time there. The versatility of the use of the Internet is also indicative: on average, each of the respondents named at least 3 key goals for which he goes to the Internet, naming in this list both entertainment and the solution of some utilitarian tasks. In other words, the general habit of using the Internet in everyday life among students has developed, so the use of the virtual space for educational tasks will correspond to their natural behavioral practices.

Second conclusion. The possibilities of using the Internet for the learning process with "digital natives" are significantly limited by the massive habit to use the Internet through mobile devices, which have objectively less functionality than stationary computers. 80% of the respondents answered that they regularly use the Internet precisely through a mobile phone or tablet, while the habit of using a computer or laptop for these purposes is characteristic of only 17%. Thus, most of them are active, but limited in their ability to use. Despite the habit of spending a lot of time on the Internet, they are accustomed to perceiving it as a resource

available precisely through mobile devices that cannot provide the same functionality as desktop computers.

Third conclusion. Many respondents also developed a habit of using the Internet for learning. Among the main purposes of using the Internet, which were named by the respondents, study was not in the first place, but it was still included in the number of the most popular answers. The first three most popular answers are not related to the learning process (at least not directly): search for information (94%), communication (89%) and watching videos (85%) came out on top. But in fourth place was just study: 85% of the respondents named it. That is, the very idea that on the Internet you can not only have fun and communicate, but also learn, most of the respondents turned out to be familiar.

Fourth conclusion. Websites with educational content are in demand among the respondents, but they usually do not spend a lot of time on them. Despite the fact that the very habit of using the Internet for study was indeed widespread among the respondents, they spend a rather limited time on the corresponding sites. On average, each respondent spends 1 hour a day on educational and scientific sites. The same amount is spent on watching video blogs. And on social networks, each of them spends an average of at least 3 hours daily. These results indicate that at the time of the study, the surveyed students had a habit of using the Internet for learning regularly, but not intensively.

Conclusion

Summarizing these disparate conclusions, we can note that the habits of using the Internet that have developed among Russian "digital natives" turn it into a promising, but specific and limited in its potential resource for supporting the educational process. The potential for using the Internet in this direction is created both by the habit of students to regularly and actively use the Internet, and by the habit of using it periodically for educational purposes. But the realization of this potential is hampered by the use of mobile devices with limited functionality to access the Internet, which is typical of student youth, and the habit of many students to spend only a little time on visiting educational resources.

Acknowledgment

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