

Conference Paper

Internet Information and Academic Literacy in the Digital Age

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Abstract

The paper aims to analyze positive and negative characteristics of Internet information, consider the peculiarities of social and historical change of knowledge, and identify the specifics of the phenomenon of human academic literacy. In the modern information and digital age, the role and importance of information is increasing at a rate that has allowed scientists to describe the situation as the information explosion. The dramatic increase in the volume of information was made possible by the fact that a wide range of users with their personal information materials have gained access to the Internet. The speed of obtaining information has also increased; it is transmitted in real-life mode. These and many other characteristics of modern information flows can undoubtedly be assessed as positive trends, but the negative aspects of information processes are also increasing. The abundance of information gives rise to its excess and the problem of its selection. The availability of information does not guarantee its reliability; there is a lot of false, distorted information in the Internet. Analyzing whether the wide access and abundance of Internet information implies increasing academic literacy, the author concludes that people tend to become much more informed, but the path to academic literacy is becoming longer. Academic literacy is what a person learned in the course of education and what became the basis for his/her daily life and self-awareness. The excess of information creates a problem of qualitative selection, which requires additional time. The abundance of unreliable, fake information requires its careful verification. Public morals are the most important element of academic literacy, but there are virtually no filters in the Internet that block immoral information, cruelty, Internet trolling. As a result, learning by processing Internet information makes the process of creating academic literacy much more challenging and complex.

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1. Introduction

The modern era is not by chance called the information age: today the role and importance of information has increased dramatically both in the life of the country and the individual. Information in the form of knowledge is at the heart of modern technological processes, it has given rise to computer technologies, which are firmly embedded in the life of most Russians. The Internet has become the main source of information, ahead of once-leading television and print media.

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Today we live in the era of “information boom”, the volume of information is growing every day. To a large extent, this growth is due to the fact that wide popular masses have entered the network with their photos, posts, comments, while this body of information is not actually subject to any strict control and selection, and the illusion of anonymity leads to greater, sometimes excessive frankness. In addition, many books have been digitized and posted in the Network; electronic magazines and newspapers have been published. Educational institutions also tend to actively use the Internet, for example, distance education, based on the transfer of knowledge through the Internet, is being widely introduced into the higher education system. Almost any information can be detected in the Internet and the population spends many hours online absorbing Internet information.

At the same time, Internet information is up-to-date, it immediately covers events, often in real-time mode. New historical processes also pose new research challenges. No doubt, the population is becoming more informed, but does that mean it is becoming more educated? In order to answer this question, it is essential to look at the structural components of the phenomenon of “academic literacy”, identify ways of its formation and the role in human life. It is necessary to trace the historical change in the forms of knowledge and academic literacy, to identify its modern specificity. It is also necessary to analyze modern Internet information, identify its positive and negative features and combine the results of the analysis with the phenomenon of “academic literacy”.

This paper deals with some aspects of the big scientific issue of Internet Information and academic literacy.

2. Methodology and Methods

At present, a huge number of scientific works is devoted to information as a fundamental characteristic of the modern era. Since the 1970s, it has been studied by famous scientists such as A. Mol, M. McLuen, N. Luman, and it figures in all theories devoted to the information society (J. Masuda, W. Rostow, D. Bell, M. Castels, etc.).

If education is a social institute, uniform purposeful process of education and training as well as a set of the acquired knowledge, abilities, skills, value system, experience and competence, then academic literacy is a result of education, the characteristic of the personality (or social group) characterizing the extent to which the knowledge and norms offered by modern education are assimilated. Like any social phenomenon, academic literacy can be defined as a process that unfolds as individuals socialize, which means different levels of human academic literacy. Academic literacy is based on

human knowledge. It is not an encyclopedic memory, but awareness, ability to analyze and apply the available special and cultural information in the life's activities. In addition to knowledge, academic literacy includes skills (competencies), which today are also given by the education system [2]. Academic literacy always carries a charge of morality, it has an educational function. Hence, most researchers argue that academic literacy also includes a moral component.

A well-educated person is capable of self-esteem, he or she is able to make a choice of directions and ways to realize their capabilities and abilities, he/she is a self-actualizing person [8]. Academic literacy is always a qualitative indicator of self-identification [11]. It is safe to imagine human academic literacy as a result, a synthesis of natural inclinations and consequences of the information exchange in the relevant educational relations with oneself and the environment [12].

The phenomenon of academic literacy changes from era to era. The conceptual approach to the problem of knowledge historical modification is stated in the works by N. Berdyaev [1], Y. Ezrakhi [6]. Y. Ezrakhi creates the theory of step-by-step development of cognitive forms — from wisdom to knowledge, information and further to 'outformations'. Archaic societies are dominated by the ideal of the wise man [1: 60]. "Wisdom is characterized by informality, it is rich in contextual connections and associations, and is usually typical of individuals with special abilities" [10]. Knowledge is a modern form dominated by logic, clarity, rigor, a clear distinction between truth and delusion, its top being scientific knowledge. The information does not imply an in-depth immersion in the subject under study; it is superficial, used for practical tasks. "Outformation" — fragmented patterns of stimuli [10: 57], chaotic movement of frames, sounds, narratives, etc., it mixes elements of reality and fiction. It resembles wisdom, but is devoid of its depth. We find this approach interesting, as it records the process of changes in the dominant types of academic literacy in its historical section.

The empirical basis of the research is higher school students who are taking a distance degree course. The sociological survey was conducted by the team of scientists with the participation of the author. The first study was carried out in autumn 2015 (N = 703) and early 2016 (N = 830). The general population was made up of students of the Ural State Economic University (USUE) and the Ural Federal University (UrFU), the second (repeated survey) — in spring-summer of 2009 (N = 571).

3. Results and Discussion

Currently, Russians have a wide access to information. Information about objects and phenomena of the surrounding world reduces the degree of uncertainty of knowledge about these objects or phenomena. The modern era is characterized by the information explosion — a dramatic increase in the volume of information. In the previous five years, the mankind has produced more information than in the previous history. The volume of information in the world increases annually by 30%.

At the same time, the availability of information has created a problem of its redundancy: it takes a large amount of time to select information, compare many publications and identify, find the information that is necessary. This, in turn, requires time, self-organization, and perseverance. As our research has shown, not all students have such a set of qualities: among the main difficulties students face when studying online, they pointed out “a high degree of independent work” (56.6%), “the need for self-organization of the learning process” (34.2%), “lack of constant control by the teacher” (22%).

In addition to selecting the necessary information, there are required skills of its analysis, selection, synthesis, identification of the main and essential information. However, a broad audience does not have special analytical skills [10], which make it difficult to gain knowledge and increase academic literacy.

In the Internet you can find any information, obtain answers to any questions. But it is too naive to trust everything that has been written in the Web, because the Internet is a zone of free access where everyone can put any information that he or she wants. A huge array of distorted information is spread in the Internet: from simply distorted information — through false information — to staged video materials originally aimed at introducing glaring falsehood. The photo posted online does not yet give confidence that the person looks like this, as modern technical means allow to significantly adjust the image. “After all, not only the virtual image, but also the manner of behavior or way of life can differ between the real person and his/her digital version” [13: 436]. The availability of information has created a problem with its credibility. Now, the obtained information must be checked before it can be used as a brick in the foundation of one’s academic literacy.

The information space is filled with ‘simulators’ — signs simulating reality, but in fact having no connection with it [3]. Thanks to the Internet, there has emerged ‘real virtuality’ [4] — such a symbolic environment in which reality itself, people and events in their material existence are included in the virtual context. Today, for man, disaster films are no different from disaster itself. The result is the spread of visibility beyond a

TV screen or computer display to a person's actual experience, which he is no longer able to distinguish from a virtual one [4]. The criteria of the validity tend to change. The fundamental repeatability of the experiment is becoming the criterion of truth in science. The information and digital space is replacing the real-life experience with the virtual experience, which then has to be checked by the person in practice.

Another feature of information disseminated through the Internet is the feature of information supply: a cascade of paints, images, sounds, superposition of these elements on each other and their simultaneous supply. All this makes the perception of information alive, more dynamic, but at the same time it is known that the mosaic perception of information does not turn the latter into knowledge, but makes this process difficult. According to modern teaching data, people remember 10% of the information that they read, 20% of the information they heard, 30% of the information that they saw, 50% — if they heard and saw, 70% of the oral or written message, 90% of the oral or written message related to their action [5]. Learning through online services leads to the loss or lack of many skills — the ability to count in the mind, navigate the terrain, remember phones and addresses, etc.

Russians have not only access to information, but also to education: Currently, more than half of Russians (54%) between the ages of 25 and 64 have university diplomas (in Canada — 51%, in Israel — 46%, in Japan — 45%, in Great Britain, Finland, Australia — 38%) [14]. A large proportion of students earn their degree by doing a distance education course, based on independent work and work in the Internet. There is no guarantee that the information they receive during their own search in the Internet is credible and reliable, so it is essential to make additional efforts to turn it into knowledge and competence, and create the basis of human academic literacy.

S.N. Golubchikov states: "From one's long-term pedagogical experience, the author concluded: despite the growing informatization, computer ownership, Internet technologies, students have not learned to think, reflect, and draw conclusions from the previously read materials. Hardly ever is the undergraduate student (master student, and also mastery scientist) able to defend one's diploma without reading their notes or the presentation screen. Researchers increasingly feel concerns that students tend to fail to formulate their ideas in clear, understandable, simple language..." [7: 24].

We believe that the most valuable, reliable, verified source of information is the book in its printed version, as it allows not only to receive information, but also to think calmly about what has been read. Today 37% of the Russians do not read books, 40% — read from time to time. Only 23% read books regularly, 4% have their home libraries [7: 24].

4. Conclusions

Undoubtedly, the very possibility of using the Internet already testifies to the level of human academic literacy. According to foreign researchers, such areas of Internet activity as sending electronic messages, searching for financial, political or government information, online banking, job search and booking tours are more typical of people with higher education [9]. Experienced users use the Internet for professional purposes, inexperienced — for entertainment. The search and learning of information through the Internet are one of the options of self-education, that is so important in the information era.

However, increasing the level of academic literacy through the Internet extends the chain, as it is necessary to ensure that the information is authentic and consistent with practice. “In the way of so-called ‘progress’, we have lost wisdom for the sake of knowledge, now we are losing knowledge for the sake of information, and classical fundamental education is being replaced by superficial Internet education” [7: 25].

Internet information must be a source of knowledge and one of the channels of growing academic literacy. However, this channel should be used very carefully. Online education needs to be combined with classical face-to-face classroom instruction, which allows obtaining education of high quality and training educated people, who are able not only to select and reproduce information, but also to think logically, synthesizing information and drawing the right conclusions, learning moral values and culture.

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