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Media literacy of future higher education applicants from theory to practice

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Abstract: In the XXI century it is impossible to organize and provide education bypassing or without using the products of technological progress. The article deals with the problems of media literacy of modern youth and ways to resolve the effects of media and Internet resources on the quality and level of education of future students. The research work aims to investigate the variability of media resources and their influence on schoolchildren and the awareness of future students. The methodological approach to this research represents the search and analysis of theoretical sources of American and Kyrgyz origin, aimed at the study of media literacy among the social stratum of students,

applicants for higher education, and other members of society. Theoretical (analysis, systematization, and synthesis of scientific sources) and empirical (retrospective analysis) research methods were used to examine the issue of media literacy. Using the method of theoretical analysis, the peculiarities of the interpretation of the issues and development of media literacy were studied and using the method of systematization and generalization, the scientific sources devoted to the issue of digital awareness of the population were investigated. In the article, using retrospective analysis, literary sources on media literacy were collected and systematized. The research study analyzed the main issues of media literacy of the population and identified trends of development from theoretical framework to practical application. This article has practical relevance for students and teachers who are faced with the problem of insufficient media literacy and a basis for further research on this issue.

Keywords: media literacy, educational technology, fake news, digital competence, digital media.

Introduction

When researching media literacy among youth, it is important to note that 21st-century algorithms and technologies have moved from supporting people's technological decision-making processes to shaping them by people. This phenomenon worries researchers of this issue and draws attention to the impact of such decisions on people and society. Tamo-Larrieux's (2021) study draws attention to the need to debate the regulation of automated decision-making practices and raise the issue of media literacy among the population. Based on the question posed, the problematic of researching the media literacy of young people and aspirants for the higher education of the future from theory to practice follows.

Research Problem

According to researchers Reese et al. (2019), globalization is not something that happens to people, it is something that shapes humanity because it shapes people. The researchers argue that the globalized world has created a backdrop for people's lives that is constantly changing lives, forming a kind of flow. Such systemic thinking, served by globalization and its phenomena, defines it as a multilevel network of processes interacting with each other and accelerating interdependence between social arenas and geopolitical realities. Because of the need to increase the competence of the population in digital awareness, it is important to examine the impact of globalization and, as a consequence, the levels of media literacy of the population.

Research Focus

Drawing attention to the fact that every Internet user has the ability to publish what he or she desires, without an implicit connection to verified facts, we should pay attention to a large number of risks of misinformation, both at the individual and public level, which may include fraud. On this point, Lee (2018) suggests in his own research that digital media literacy training produces an educated population and reduces the percentage of untruthful information disseminated (p. 460). To explore this phenomenon and find ways to avoid misinformation problems, media literacy should be explored.

Research Aim and Research Questions

Media play an increasingly important role in educating young people, so educators should expand their own awareness of this issue. Teaching critical appraisal and filtering in media and general media literacy has great potential in the field of education. Examining AlNajjar's (2019) study, it should be noted that introductions to critical media literacy enable young people to continue learning and attract the benefits of time because critical media literacy is a necessity in the new media ecosystem. That is why the purpose of the article is to investigate the impact of media resources on the population and ways to improve digital media literacy among future students to increase awareness. The article hypothesizes that improving media literacy in society will increase the level of awareness in the population. The objective of the article is to promote the necessary digital literacy skills and abilities of high school students who plan to pursue higher education.

The research paper investigated the existing problems in the field of media literacy of future students and further trends in the development of their awareness. The paper also analyzed the most common digital platforms. In accordance with the topic of this study, a review of theoretical works of American scholars and researchers that form an overall picture of media literacy in the population in the world was performed. The research paper examined and analyzed studies that raised issues of issues and development of digital media literacy among the population.

Despite the constant progress of digital technology and the continuous improvement of media around the world, the study of media literacy remains a relevant and important issue in the realities of today's media landscape.

Research Methodology

General Background

The methodological basis of the article on the study of media literacy of future applicants for higher education from theory to practice is based on theoretical (analysis, systematization, and synthesis of scientific sources) and empirical (retrospective analysis) methods. Using the method of theoretical analysis, the specifics of the treatment of issues and the development of media literacy in the world and Kyrgyzstan, in particular, were studied. Using the method of systematization and generalization, the scientific sources that were used to clarify the problem of media literacy research were examined. The empirical method, namely retrospective analysis was used to collect and organize the literary sources related to the study of media literacy in society.

Sample / Participants / Group

In the research work, information sources were researched on the topic of media literacy and the importance of finding ways to develop this industry.

Instrument and Procedures

The article on the study of media literacy of future higher education applicants from theory to practice was carried out in three successive stages (Table 1).

Table 1

Stages of work performance

1 stage	2 stage	3 stage
During the work on the first stage of research work, the collection and analysis of literary sources of qualified specialists, who studied the importance of media literacy for youth and adults, which helped in the formation of the main problematic of the study.	Performing the second stage of work, an analysis was carried out, according to which the main emphases of the study were established. Also, in the second stage of the work, the features and characteristics of media literacy of the society were noted.	In the third stage of the scientific work were carried out summaries and results, which were formed when working on the topic of research media literacy of future applicants for higher education from theory to practice, which helped in summarizing the overall results of the study.

Source: (compiled by the authors).

Data Analysis

These stages were chosen taking into account the theme of the study - the study of the level of media literacy among future applicants for higher education, so the chosen research trajectory contributed to the definition of the concept of media literacy, the reasons for this state of digital education of the population. A systematic analysis of the characteristics of media literacy helped to identify trends in the development of this industry in Kyrgyzstan in the future.

Research Results

The age of humanity in the 21st century is provoking the success of commercial social networking platforms such as Twitter, Facebook, YouTube, and valuable resources such as Wikipedia, for example. The practical use of such information sources often requires users to have some programming skills and knowledge of technical network terminology, which in turn makes it difficult for those without such skills (Hansen et al., 2020) to find, differentiate, and understand network data, that is, lack knowledge of media literacy. It is worth noting that media literacy - having the knowledge and skills to analyze media materials, as well as the ability to distinguish between propaganda and advertising (Koichumanova & Kokombaev, 2020). Educators are increasingly using modern digital technologies to supplement traditional means of teaching young people. The dynamic development of technology leads society to attract various online programs, databases, and modern tools to each of the spheres of human activity. Some online services focus on planning and setting up programs, while others simplify learning processes. Online meeting programs have proven effective as far back as the coronavirus pandemic, enabling effective real-time communication without the inconvenience of face-to-face meetings, and mobile apps have enabled lecturers to engage audiences in discussion in a simplified way. As Jalla et al. (2021) rightly point out, unequivocally the technology industry will continue to evolve at a rapid pace and will occupy an almost leading role in people's professional lives, so teachers must understand that every technology must be used as effectively as possible.

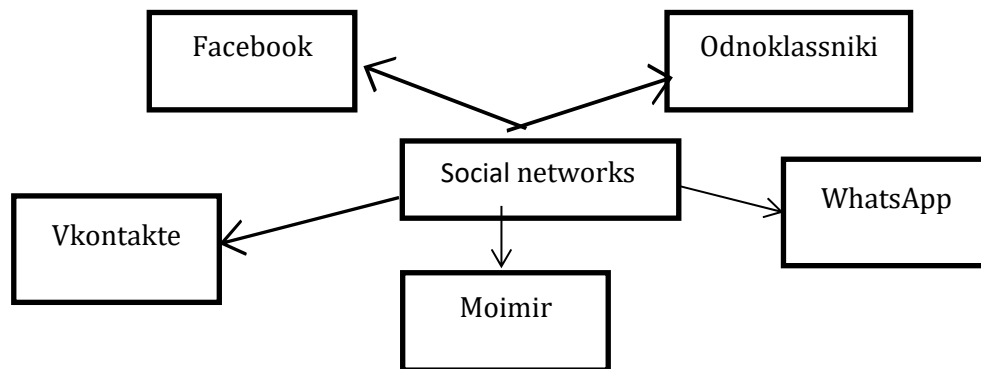
It is important to remember that today's teenagers are surrounded by a lot of uncontrolled information and free access to digital technology allows for unlimited amounts of this information. However, the online environment, in turn, creates serious problems for children, and parents, because a significant amount of potentially dangerous information is not filtered, and children are misinformed based on incorrect facts. Therefore, it is important that children own the available online resources, including games and digital interventions, that contain true facts and sources of knowledge (Mckellar &

Sillence, 2020). In exploring media literacy, it is worth noting that with the 2019 coronavirus pandemic, young people have actively begun to move to online educational platforms, learning from science videos, thereby rethinking traditional views of learning. This industry is evolving and growing exponentially and needs the support and mediation of parents, which includes monitoring and regulating their children's media use, usually with an emphasis on developing media skills. However, such learning environments require appropriate media literacy and direct scientific literacy, after all, in order to ensure that children are not influenced by potentially pernicious viewpoints that are freely available on the Internet. This also creates an increased need for censorship, as reviewing scientific videos on the Internet has increasingly become more of a general social activity than an academic one (Rosenthal, 2020). In addition, students whose families had lower incomes and less access to the technology needed to support learning during the pandemic as early as 2019 felt a particular inequality in society that has often been conducted before with technology and social media through the intersectional. and digital divide (Gandolfi et al., 2021). It should be noted that middle school students are most likely to use social media such as Instagram (27%), SnapChat (25%), and YouTube (25%) to communicate with peers, share photos and videos, and get information (Gaur & Gupta, 2020). And even though social media is a source of positive emotions for children - they receive negative social influences, due to inappropriate postings by both peers and people unknown to them, account hacking, resentment, and lack of privacy, negativity, and stalkers (Martin et al., 2018). If we look at the social networking sites most commonly used in Kyrgyzstan [Figure 1], internet censorship has now eased in the Republic of Kyrgyzstan, which has, in fact, allowed public access to previously blocked websites.

Figure 1

The most commonly used social networks in Kyrgyzstan

The most commonly used social networks in Kyrgyzstan



Source: Gaur and Gupta (2020).

Let us turn our attention to online videos, which have become a relevant tool for disseminating scientific information to the public. First of all, such videos are on the YouTube platform, which has earned incredible popularity worldwide, not only as a website for distributing and sharing video materials but also as a popular tool for finding information sources on scientific topics and not only. With this in mind, it is worth noting the unique ability of online video to reach a fairly wide audience,

making the YouTube platform a powerful tool for communicating science and technology to the general public (Davis & Leon, 2018). Above all, YouTube is an influential social media platform whose wide reach attracts professional and amateur video producers who disseminate information on the platform and at the same time engage the global public (Djerf-Pierre et al., 2019).

Smart devices used by adults and children in their daily lives and learning have a great positive impact on the quality of existence, obtaining necessary knowledge and information every day, but it is important to secure the privacy of users of such gadgets from attacks and hacking attempts. Considering the question posed, it is necessary to secure devices before sending information, to prevent users' confidential information from leaking to third-party servers, as well as to have a scheme to recover their own data in case it is damaged or lost (Yanga et al., 2020). However, due to the constant demand for the use of the latest technologies in the education and life of young people, their accessibility to the public must be balanced, because such technologies on the one hand create new ways of using public space and establishing communication, but one must also pay attention to the risks of losing people's privacy (Costa et al., 2020).

If we pay attention to media literacy in Kyrgyzstan - there are entire programs created in accordance with international standards, which have answers to the problem of global distorted information and "fake news", which allows Kyrgyz people to greatly master the skills of truthful journalism and create a healthy information environment in the country (Posetti et al., 2018). However, to safeguard against fake news and information, it is necessary to ensure media literacy in the country and constantly improve these skills.

It is also important that in Kyrgyzstan, the challenges facing the state are mainly related to the implementation of programs to create a modern digital society (Soltobaev, 2020). The strategy for the development of digital skills of the population and media literacy, in general, is to thoroughly train schoolchildren as future applicants for higher education in the means and skills of filtering information and the Internet space and obtaining sustainable skills in the field of media literacy. The process of teaching media literacy to young people in Kyrgyzstan over the past two decades has been especially active. A series of classes aimed at mastering the basics of media literacy have been introduced into school curricula, an important and serious step toward educating the future in the Kyrgyz Republic. At present, a movement to study and master the branches of media literacy is actively developing in the country. It is important to note that the media schools created in Kyrgyzstan provide their students with a practical and educational experience and train cameramen, directors, film, and photojournalists who are noted for their professionalism (Chelysheva, 2019).

Given Kyrgyzstan's rapid movement toward educating its people in the field of media literacy, it is so important to promote the mastery of this field among future higher education applicants.

Discussion

In studying media literacy, it should be emphasized that critical media literacy is a product of study - the assimilation of this knowledge and the adjustment of the cultural and social codes and norms of educated people. The mass media have great potential in increasing the cultural masses' sensitivity to scientific information and the general awareness of people. It is also important to note the fact that policymakers and the public can mobilize resources to take advantage of the Internet by relying on the media. Online initiatives, platforms, and channels have great relevance for young people, and this should

be considered in building the society of the future (AlNajjar, 2019). The interconnection of society, traditional values, and institutions with media and online platforms, which have significant influence among young people, forms a symbiotic relationship, a strong and promising one that can create an informed generation that knows the value of the past and builds the future in harmony.

A search engine called Google provides results that usually confirm established scientific knowledge, minimizing the possible impact of misinformation on job seekers. However, even though the media predominantly adhere to established scientific knowledge, they still give space to the representation of anti-science sources. Given this trend, this may account for a fraction of the public's contribution to misinformation about certain scientific disciplines (Erviti et al., 2020). Therefore, in today's world, we need to disseminate and educate young people who may encounter untrue sources and scientifically unsupported materials in their search for knowledge more actively.

Nearly one-third of all Internet users have been visitors to YouTube since its inception in 2005, which is more than one billion users from around the world. It is worth noting that it requires a high level of reading to understand textual information on the Internet on science, which is the main reason why a large number of people prefer to use and watch YouTube videos to find information on scientific and other issues that interest them (Allgaier, 2019).

The rapid growth of online news media and the presence of social media in the form of online platforms where society interacts in the digital space largely fragmented news consumption, as evidenced by research on the structure of online news networks and the phenomenon of fragmentation in social media news consumption patterns (Gao et al., 2020). The phenomenon of fragmentation in media space is often compared to the “filter-bubble”, where audiences fuse together by exploring the news sources they have access to, in this case on social networks Facebook, Twitter.

Users of social platforms, paying attention only to news or posts that only confirm readers' views, rather than introducing the fate of objectivism into their news space, form and spread the phenomenon of “confirmation bias” (Ling, 2020). Avoiding cognitive dissonance, social media readers, perhaps without realizing it, become an element of the chain in spreading false news through digital platforms, which becomes a weighty problem in spreading untrue facts from the academic space as well. Given the phenomena described above, it is worth emphasizing the importance of educating the younger generation of people - future applicants for higher education, because in higher education they will continuously encounter the phenomenon of “confirmation bias”, which will lead them astray from the right path of scientific thought.

When investigating the behavior of web users in digital networks during the navigation of news content, we should pay attention to the fact that the audience that has certain interests in information about political events and news does not choose independently which news they want to view but goes according to the algorithm that the networks offer them (Mukerjee et al., 2018). This attitude shows users' loyalty to the algorithms that are embedded in the news sites offered to the audience, but the media literacy and awareness of youth and older Internet users reduces such algorithms of action.

It is important to note that the screening of fake news cannot be transferred to governments, supranational bodies, or companies. However, scholars believe that the co-regulation of fake news by companies and platforms through mechanisms of news correction for their users is an effective and

crucial factor in preventing the spread of untrue information (Marsden et al., 2020). This is why media literacy at all levels of society must produce critical thinking and verified information.

Deepfakes are also common in the media environment, where artificial intelligence is used to create manipulated videos with replaced faces. Keep in mind that while there is software available to detect such fake videos, it is not freely available, which in turn makes it difficult for unverified videos to be recognized by young people (Martínez et al., 2020). The only way to recognize these types of videos is through digital moral education, which plays an important role in today's world of young people. Using digital media literacy skills, it is realistic to track the number of hyper-realistic visual parameters, like frequent blinking, the intermittent effect of an altered face, or obvious unnatural transitions in the skin between the head and neck of an altered character. Therefore, drawing attention to the fact that media literacy provides safety and implements a protective function in media space, it occupies such an important niche in the overall awareness of future higher education aspirants in the world.

Conclusions and Implications

To summarize the research work, attention should be paid to the education of human connection with the world of digital media space, which offers young people great prospects for development and obtaining a large amount of information, but attention should be paid to media literacy of the young segments of the population. Focusing on misinformation and teaching future higher education applicants media literacy is an important element of the education of the future.

According to the research study, it should be noted that identifying untruthful information in the digital media field is a necessary part of protecting the population from misinformation. However, young people in the Kyrgyz Republic continue to gain knowledge about media awareness in educational institutions and through self-education, finding new forms and ways to develop their own media literacy.

As a result of the research work, the following outcomes were formed. The main problem of media literacy in theory is the unstable situation with social media offering users not always verified information. In practice, however, young people who continue to actively use digital technology and media continue to develop and accumulate skills in filtering untrue sources and exercise media literacy.

As the digital world continues to evolve and the algorithms that form the basis of media offerings to its users continually improve, research into media literacy among future higher education aspirants needs to continue. Researchers on this topic should delve deeper into the phenomenon of media literacy, as well as analyze future algorithms and the development of education in digital media in general.

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