

# USING SOCIAL MEDIA IN THE EDUCATIONAL PROCESS

T. R. Fazliakhmetov<sup>1</sup>, A. V. Danilov<sup>1</sup>, G. I. Muhutdinova<sup>1,2</sup>, N. B. Tursunova<sup>1,3</sup>

<sup>1</sup> **Kazan Federal University**

420008, Russia, The Republic of Tatarstan, Kazan, ul. Kremlevskaya, 18

<sup>2</sup> **Burbash Secondary School**

422255, Russia, The Republic of Tatarstan, Baltasinsky District, selo Burbash, ul. F. Shakirova, 41

<sup>3</sup> **Secondary School 5 with Advanced Study of English of Aznakaev**

423330, Russia, The Republic of Tatarstan, Aznakaev, ul. Lenina, 36

## Abstract

The article discusses the features of using distance learning in the modern educational environment of a university. This form of training is becoming more and more popular in modern educational organizations, therefore, it is advisable to adapt the usual, which have become classic teaching methods. The advantage of distance learning is determined by the use of innovative educational technologies, they are the foundation for designing and implementing of distance learning.

Today, the Internet is one of the important channels of information transmission. Social media resources and the so-called social media (Rus. social network) are especially popular among young people and adolescents. In the article we have considered the term "social media", studied the history of social networks, briefly analyzed the degree of effectiveness of the introduction of social networks in the educational process. It can be concluded that each social network has its own audience. In the educational process, they can be used at almost all stages of training.

The article analyzes the possibilities of social networks in detail for implementing them as digital educational products, and also puts forward a number of features in the use of the obtained solutions for the learning process organizing. We came to the conclusion that the use of modern information technologies increases the effectiveness of distance learning.

The study showed that each social network has its own target audience. Social networks can be used at almost all stages of training, because the function of social networks is not only to communicate between users in the form of sending audio, video, and text messages, but also to integrate social networks into the educational process, thereby becoming an educational tool. Social networks are becoming a new learning environment for modern students and offer them new ways of interaction. The positive impact of network technologies is caused by the modernization of traditional education.

**Keywords:** social media, information, educational process, social networks, distance education, Telegram.

**DOI:** 10.32517/0234-0453-2020-35-9-38-42

## For citation:

Fazliakhmetov T. R., Danilov A. V., Muhutdinova G. I., Tursunova N. B. Using social media in the educational process. *Informatika i obrazovanie* — Informatics and Education, 2020, no. 9, p. 38–42.

**Received:** September 28, 2020.

**Accepted:** November 10, 2020.

## About the authors

**Timur R. Fazliakhmetov**, Assistant Professor at the Department of Bilingual and Digital Education, Institute of Philology and Intercultural Communications, Kazan Federal University, The Republic of Tatarstan, Russia; TRFazliakhmetov@kpfu.ru, ORCID: 0000-0003-2737-3408

**Andrew V. Danilov**, Candidate of Sciences (Education), Associate Professor at the Department of Bilingual and Digital Education, Institute of Philology and Intercultural Communications, Kazan Federal University, The Republic of Tatarstan, Russia; AVDanilov@kpfu.ru, ORCID: 0000-0002-2358-1157

**Gul'nur I. Muhutdinova**, master student, the Department of Bilingual and Digital Education, Institute of Philology and Intercultural Communications, Kazan Federal University, The Republic of Tatarstan, Russia; the English Teacher in Burbash Secondary School, Baltasinsky District, The Republic of Tatarstan, Russia; g.ilnurova@mail.ru; ORCID: 0000-0002-7246-5435

**Nigina B. Tursunova**, master student, the Department of Bilingual and Digital Education, Institute of Philology and Intercultural Communications, Kazan Federal University, The Republic of Tatarstan, Russia; the English Teacher in Secondary School 5 with Advanced Study of English of Aznakaev, The Republic of Tatarstan, Russia; nigina.tursunova.95@gmail.com; ORCID: 0000-0003-1658-243

## 1. Introduction

The possibility of obtaining distance education [1, 2] for everyone is one of the most important parts of the internationalization process of higher education, which gives a wide freedom for career choices, accelerates and creates the most comfortable conditions for higher education.

Distance learning is becoming more and more popular in modern higher education that is why it is reasonable to adapt the traditional, classic methods of teaching [3].

Modern information and communication technologies make it possible to intensify traditional forms and

methods of teaching. Multimedia is an equitable source of information, like print media. And the spread of the Internet has influenced the development of innovative forms of education, which are very relevant in modern education.

The regulatory and legal principles of the educational process are gradually changing, and conditions are being created for the realization of dynamic individualized learning. The possibility of organizing such an educational process taking into account the needs of each student is prescribed in article 13 of the Federal Law No. 273-FZ "On Education in the Russian Federation" dated December 29,

2012 (ed. from 24.04.2020) “It is possible to use various educational technologies in the realization of educational programs, including distance learning technologies, e-learning” [4].

Distance or distant education is a form of training in which all or most of the educational processes using modern information and telecommunications technologies with the territorial separation of the teacher and students [5].

There are three main types of distance education platforms — TV technology, case technology, and network technology. These techniques are based on a different degree of interactivity — educational materials are online, and both participants in the educational process (teacher, student) have access to perform appropriate actions with information — processing, monitoring, completing tasks, and communicating.

The classic view of distance education [6–9] means a high percentage of individual student work, rather than collective. Modern realities require new conditions, well-established and effective communication, both in everyday and business activities. Therefore, it is important to develop paired, group and collective forms of communication of students during distance learning. These tasks can be realized through the use of an innovative form of distance learning, including online learning technology through social networks.

## 2. Methods

Today, the Internet is one of the most important ways to transmit information. Social media resources and so-called *social media* are very popular especially among youth and teenagers. Social networks help the user to search for and transmit information easily, its fixation and the process of using social media leads to understanding of the material and generate motivation to study new content. Social media is becoming a powerful educational tool.

In view of the foregoing, the relevance of the chosen topic is revealed: the use of social media not only as an entertainment resource, but also as a form of pedagogical support in the learning process.

The purpose of the study is to analyze the efficiency level of the introduction of social networks in the educational process.

The main objectives of the study are:

- to define the term “social media” and study its origin story;
- to find and analyze scientific literature and works on the use of social networks in the educational process;
- to study the practical use of social networks in Russia and around the world;
- to identify the most effective and popular social media resources and opportunities to use social networks in the learning process.

The object of research is the process of implementing social networks in the learning process, and the subject of research is social media.

As with most new phenomena, it is impossible to provide exhaustive definitions and precise boundaries of social media and social networks. Different scientists have given different meanings to this term based on their experience. For example, Jonathan Obar and Steven Wildman, in their article “Social media definition and the governance challenge: An introduction to the special issue”, say that “social media is an interactive Web 2.0 application” [10]. In the same article, they clarify that this is user-generated content, such as text messages (posts) or comments, digital photos or videos, and data obtained through all online interactions, all these are the lifeblood of social networks. According to O. S. Samsonova, a social network is defined as an online service that allows you to create social connections, build relationships, and distribute different information [11]. Andreas Kaplan and Michael Haenlein define social media as “a group of Internet apps based on a specific ideological and technological base Web 2.0, allowing participants to communicate in social networks to create content in the process of sharing” [12]. According to G. V. Mikhaleva, the spread of virtual educational, training and social networks creates conditions for bringing people together into groups of users by interests in order to satisfy certain needs [13]. The concept of “social network” today is a virtual platform that provides communication between users, including data exchange.

As for the history of social networks, many scientists both in the West and in Russia are involved in its research. It is said that the concept of “social network” appeared in the mid-1950s in England. In the 1930s, several methods were invented to study the relationships between people, based on one of which was created sociometry that is a psychological method for determining the distribution of roles in a team. [14]. In 1951 Ray Solomonoff and Anatol Rapoport launched the modern theory of social networks. The term “social network” was introduced in 1954 by the Manchester school sociologist James Barnes in the work “Class and Committees in a Norwegian Island Parish”, included in the collection “Human Relations” [15]. J. Barnes developed an approach to the study of relationships between people using sociograms, i. e. visual diagrams in which individuals are represented as points, and the connections between them — as lines. In 1959–1968, Hungarian mathematicians Paul Erdos and Alfred Renyi published eight articles describing the principles of forming social networks. Duncan J. Watts and Steven H. Strogatz created the theory of social networks and, among other discoveries, introduced the concept of “clustering coefficient” — the degree of proximity between heterogeneous groups [15].

By the 1970s, the complex of sociological and mathematical research methods that form the scientific basis of modern analysis of social networks was finally formed. The first online social networks appeared in the mid-1990s and gave users minimal opportunities to communicate (like eGroups/OneList, ICQ, Evite).

As a result of studying the work of researchers, we came to the conclusion that we can divide the history of the social network development into four stages:

1. The stage of social network before the Internet. This includes all the classic types of social networks (airplane modeling clubs, motorcycle clubs, etc.).
2. The stage of bulletin board system (BBS) and instant messaging systems. At this stage, social networks already had an electronic form.
3. The stage of early social networks. For example, in 1995 classmate.com ([www.classmate.com](http://www.classmate.com)) is appeared, a network resource that now has 50 million users, in 1999 — LiveJournal. At this stage, computer technology and Internet technologies were rapidly developing.
4. The stage of appearing social networks based on Web 2.0. At this stage, the most unique and largest social networks, such as Facebook, Twitter and “Vkontakte”, appeared and developed. Recently, many narrowly focused social networks have also been created.

In the research process, it was necessary to find out which social networks are most frequently and effectively used in the educational process. It turned out that young people aged 16 and over are especially active in using social networks. According to ROMIR holding data for 2016, the most famous social networks in Russia are “Odnoklassniki”, “Vkontakte”, “My World”, moreover “Vkontakte” has a younger audience: the percentage of respondents from 18 to 24 years old in this network is 85 %. “Vkontakte” is the leader in the activity of the project visiting: 45 % of users registered on this portal visit it daily, and 70 % more than once a day. According to a study by the Massachusetts Institute of technology, one in three participants in 98 % of higher education institutions in the United States has their own personal accounts on Facebook, 84 % on Twitter, 86 % on YouTube. Moreover, more than 90 % of the surveyed educational institutions believe that their experience of using social media is successful.

In addition to successful marketing in the area of professional education, social networks contribute to the development of e-learning and education in general, offering new technical and methodological solutions. For example, in October 2010, the London school of business and finance initiated the transformation of traditional classroom learning into online education through the world-famous social network Facebook [16]. Russian educational institutions also have experience in using social networks in the educational process. For example, the department of philosophy at Tomsk State University has an interesting experience in using social services (social network “Vkontakte” and blog hosting blogspot.com) in teaching students of the Faculty of Humanities [17]. Due to the high degree of activity and involvement of modern students in it, the social network “Vkontakte” was chosen as a platform for organizing educational work using information and communication technologies.

G. V. Mozhaeva, A. V. Feshchenko [18] identified the following ways to use social networks in the educational process:

- social networks as a platform for interaction between teacher and student (the opportunity to ask a question), between students (informal communication, discussions, joint projects), between student and society (for example, communication between a student and people who are not part of the user’s learning group);
- as a learning management space;
- as a place to store information; as a “Bulletin Board” (storing organizational information about events in the educational and extracurricular activities of a group of students).

It should be noted that the educational process can use both free-access social networks (for example, “Vkontakte”, “Odnoklassniki”, etc.) and social networks created by an educational institution (for example, “Campus24 of the VEGU Academy”).

Over the past few years, the number of users of mobile computing devices that are focused on using the Internet has increased sharply. This is due to the fact that the mobile Internet has become more accessible and mobile devices such as smartphones, tablets, phones, have begun to compete with stationary personal computers because they cope no worse than desktops (desktop PCs) with the daily requests of users: searching information on the Internet, sending mail, messages, editing and creating office documents, games, communication in social networks, and more.

Thus, the audience that uses social networks increases in direct proportion to the number of mobile computing devices. Social networks are taking on a new direction in the mobile industry. One of the platforms in this direction is the Telegram messenger.

Telegram is a cloud-based instant messaging service. Users can send messages and share photos, videos, audio, and files of any type. It was developed in 2013 by brothers Nikolai and Pavel Durov. Telegram has 400 million active users per month, with at least 1.5 million new users registered daily for April 2020 [19].

Telegram, as a messenger program originally designed to send messages, does not have an educational direction. However, it has wide opportunities for use in the learning process. First of all, it is the organization of interaction between students during group work, and also during the project creation, where you need to send files and photos, voice notes, create groups and channels. The main forms of organization of the learning process include:

- Groups, group chats. Multi-user groups are suitable for quick association of like-minded people and instant communication between them. By developing the main topic of the chat, you can create common projects, organize cooperation to achieve common goals, ask questions and get answers, conduct conversations and discuss something important.
- Channels in the Telegram. These are channels, as well as the chatbot creation function that is



not common for messengers [20] make Telegram a very functional and attractive program for organizing the learning process. Channels can be used for sharing with many users at once. There are a large number of popular information and educational channels. Also, each teacher (or even student) can create their own channel, which will become an analog of a blog or will be designed to present the progress of project work to all its participants [21].

- Bots in the Telegram. Bots are special Telegram accounts created to automatically process and send messages. Users can interact with bots using messages sent through personal or group chats. The bot's logic is controlled using HTTPS requests to the simplified methods of the Telegram API — an application programming interface that allows services to interact, access, and exchange data [22].

### 3. Results

Let's give as an example of the bot creating process in Telegram in the test form with multiple and single selections of answers on the topic "General and professional pedagogy", for first-year students of the Institute of Philology and Intercultural Communication of Kazan Federal University.

The process of bot creation does not require the programming framework knowledge. After pre-configuring the bot (entering the bot metadata: the name of the bot and the address where users can find it), you need to fill it with content and program it for certain actions: output a test form to the user. In our case, we use a third-party service — Chatforma, which offers advanced functionality for implementing bots. In our case, this is creating a test form with different types of questions and collecting data about the student-respondents.

The results showed that students positively perceived the organization of knowledge control with a chatbot. The usual way of communication for the student has acquired new functions. Also, students do not need to install third-party software.

It should be noted that the use of social networks as a means can also have negative consequences. For example, such as lowering literacy standards, distracting attention from educational activities, waiting for help in work that they can do themselves, plagiarism, and others.

### 4. Conclusions

In this article, was considered the term *social media*, was studied the history of social networks development, and was presented a brief analysis of the effectiveness of social networks implementation in the educational process. We can conclude that each social network has its own audience. In the educational process, they can be used at almost all stages of the learning process. The functionality of the most popular social networks affects the formation of communicative, informational,

procedural and research competencies of students and schoolchildren.

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## ИСПОЛЬЗОВАНИЕ SOCIAL MEDIA В ПРОЦЕССЕ ОБУЧЕНИЯ

Т. Р. Фазлиахметов<sup>1</sup>, А. В. Данилов<sup>1</sup>, Г. И. Мухутдинова<sup>1,2</sup>, Н. Б. Турсунова<sup>1,3</sup>

<sup>1</sup> Казанский федеральный университет

420008, Россия, Республика Татарстан, г. Казань, ул. Кремлевская, д. 18

<sup>2</sup> Бурбашская средняя общеобразовательная школа

422255, Россия, Республика Татарстан, Балтасинский район, с. Бурбаш, ул. Ф. Шакирова, д. 41

<sup>3</sup> Средняя общеобразовательная школа № 5 с углубленным изучением английского языка г. Азнакаево

423330, Россия, Республика Татарстан, г. Азнакаево, ул. Ленина, д. 36

### Аннотация

В статье рассматриваются особенности применения дистанционного обучения в современной образовательной среде вуза. Данная форма обучения становится все более востребованной в современных образовательных организациях, следовательно, целесообразно адаптировать к ней привычные, ставшие классическими методы обучения. Эффективность дистанционного обучения обуславливается использованием инновационных образовательных технологий, которые являются основой проектирования и реализации дистанционной формы обучения.

Интернет является одним из важных каналов передачи информации. Особенно популярны у обучающихся социальные медиаресурсы и так называемые social media (рус. социальные сети). В статье рассмотрены значение и история термина «social media», представлен ретроспективный анализ эволюции социальных сетей, проведен анализ эффективности внедрения социальных сетей в учебный процесс.

В работе подробно анализируются возможности социальных сетей для реализации их в качестве цифровых образовательных продуктов, а также выдвигается ряд особенностей использования полученных решений для организации процесса обучения. Сделан вывод о том, что использование современных информационных технологий повышает эффективность дистанционного типа обучения.

Исследование показало, что каждая социальная сеть имеет собственную целевую аудиторию. Социальные сети можно использовать практически на всех этапах обучения, так как функции социальных сетей заключаются не только в коммуникации между пользователями в виде отправки аудио-, видео- и текстовых сообщений, но и в возможности интеграции социальных сетей в образовательный процесс, в результате чего они превращаются в образовательный инструмент. Социальные сети становятся новой учебной средой для современных обучающихся и предлагают им новые способы взаимодействия, информационные и коммуникационные технологии общения и деятельности. Позитивное воздействие сетевых технологий обуславливается модернизацией традиционного обучения.

**Ключевые слова:** социальные медиа, информация, образовательный процесс, социальные сети, дистанционное образование, Telegram.

DOI: 10.32517/0234-0453-2020-35-9-38-42

### Для цитирования:

Фазлиахметов Т. Р., Данилов А. В., Мухутдинова Г. И., Турсунова Н. Б. Использование social media в процессе обучения // Информатика и образование. 2020. № 9. С. 38–42. (На англ.)

**Статья поступила в редакцию:** 28 сентября 2020 года.

**Статья принята к печати:** 10 ноября 2020 года.

### Сведения об авторах

**Фазлиахметов Тимур Рафикович**, ассистент кафедры билингвального и цифрового образования, Институт филологии и межкультурной коммуникации, Казанский федеральный университет, Республика Татарстан, Россия; TRFazliakhmetov@kpfu.ru; ORCID: 0000-0003-2737-3408

**Данилов Андрей Владимирович**, канд. пед. наук, доцент кафедры билингвального и цифрового образования, Институт филологии и межкультурной коммуникации, Казанский федеральный университет, Республика Татарстан, Россия; AVDAnilov@kpfu.ru; ORCID: 0000-0002-2358-1157

**Мухутдинова Гульнур Ильнуровна**, магистрант, кафедра билингвального и цифрового образования, Институт филологии и межкультурной коммуникации, Казанский федеральный университет, Республика Татарстан, Россия; учитель английского языка, Бурбашская средняя общеобразовательная школа, Балтасинский район, Республика Татарстан, Россия; g.ilnurovna@mail.ru; ORCID: 0000-0002-7246-5435

**Турсунова Нигина Бахромовна**, магистрант, кафедра билингвального и цифрового образования, Институт филологии и межкультурной коммуникации, Казанский федеральный университет, Республика Татарстан, Россия; учитель английского языка, средняя общеобразовательная школа № 5 с углубленным изучением английского языка г. Азнакаево, Республика Татарстан, Россия; nigina.tursunova.95@gmail.com; ORCID: 0000-0003-1658-2431