Social Media as a Strategic Tool in School Management: Experience of Ukraine and USA

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Abstract: The article presents the results of the analysis of using of social media in school management in Ukraine and United States of America. Social media is broadly defined as a lot of relatively inexpensive and widely available electronic instruments that allow any person to publish and receive information, collaborate and build relationships with other people. The authors of the article break up social media into social networks, blogs, content hosting. There are some constructive conclusions made in the article. The educational opportunities of social media among Ukrainian specialists are very underestimated. The value of social media as an instrument of the educational process is undeservedly belittled. Many educators treat them with neglect and skepticism, considering social media exclusively as an entertaining resource. Using of social media for educational purposes is perceived by American students, teachers, researchers as self-evident and inalienable function. The American didactic experience reveals that social media can be successfully used to arrange the work of the teaching staff and students, hold individual and collective consultations enhancing intellectual and creative potential of students. The data reports "Global Guide 2020", "90 days that changed K-12 teaching & learning: strengthening the bonds of communications", "2019 Social Media Trends in Education Report", "Digital learning during the pandemic: Emerging Evidence of an Education Transformation" and the Ukrainian State Education Quality Service for 2020 are analyzed in the article. The authors had a content analysis on the massive open online courses (MOOC) by the Ukrainian platforms EdEra, Prometheus and VUM online and the English ones such as edX, Udemy, FutureLearn, XuetangX and Coursera, whose self-study contributes to the readiness for the effective using of social media in school management.

1 INTRODUCTION

The modern period of development of school management is characterized by the active and comprehensive implementation of information and communication technologies. The main goal of their implementation is the improving the quality of training and the interaction of all participants in the educational process.

The social media grows in popularity all over the world. According to a new research by GlobalWebIndex (www.gwi.com, 2021), people expend a third of their network time in social media. Comscore data also shows that percentage of time spent on social media and messengers accounts for more than a quarter of time spent on their mobile devices.

Social media is growing rapidly and becoming a social force with a life of its own, offering us the immediacy and availability of information and data and the immediacy of people, conversing and working together in areas of common interest.

1.1 Related Works

Kaplan and Haenlein (Kaplan and Haenlein, 2010) gave a definition to social media as "a group of In-

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ternet applications basing on the ideological and technological foundations of Web 2.0 that allow to create and share user content". Web 2.0 is a tendency to develop websites on the similar principles stemming from the focus on the project and service socialization, its improvement by users (O'Reilly, 2005). Social media is fundamentally different from traditional types of media by implementing a bidirectional information transfer strategy meaning "many sources and many recipients" (Scott, 2017). Traditional media, in its turn, uses a unidirectional strategy meaning one source and many recipients.

There is no generally accepted definition of the term "social media". In our opinion, the most concise, simple and relevant definition of this phenomenon is: "Social media is broadly defined as a lot of relatively inexpensive and widely available electronic instruments that allow any person to publish and receive information, collaborate and build relationships with other people" (Education World, 2012).

Social media is an online communication in Thornley (Thornley, 2008) terms with express understanding that a person can smoothly and flexibly change their role, to appear either as an audience or participant. Social software is used for this purpose which makes it possible anyone (without specific coding expertise) to post, comment, move, edit information, create communities on their interests.

Stephens (Stephens, 2011) defines social media as "forms of communication either Internet or text-based that support social interactions of individuals".

Azhnyuk (Azhnyuk, 2012) defines social media as an online service intended for the mass distribution of user-generated content, wherein anyone could be an author as opposed to traditional media wherein authors are pre-selected and limited audience.

Some researchers consider the concepts of "social media" and "social network" as synonymous. However, we feel that this is incorrect. We are on board with the statement of Scott (Scott, 2017) that "social media is a superset and social network is a subset". Thus, social networks are just a specific instance of social media albeit the most popular one.

Azhnyuk (Azhnyuk, 2012) breaks up social media into 3 categories: 1) social networks; 2) blogs (including standalone, blog hosting, microblogging, etc.); 3) content hosting (photo services like Instagram and Flickr, video hosting services like YouTube, hosting for slides, documents, music like Slideshare, Scribd, Soundloud, etc.). However, he notes that online media intended for personal contact or group communication, rather than for mass publication should not be relegated to social media, in particular, e-mail, messengers, online games.

Zhdanova (Zhdanova, 2019) identifies 7 types of social media:

1. Social networks are online services that prompt you to make new acquaintances and form interest communities. A user has an online profile and several ways to interact with others (through groups, events, polls, games, etc.) on such sites. Facebook and LinkedIn are the most famous examples of social networks.

2. Messengers are online messaging services where users interact through personal correspondence. Messenger applications are available on mobile devices such as Telegram, Viber, WhatsApp.

3. Social bookmarking sites help users save and share interesting information as a link to other resources. For example, the Pinterest network allows you to store a large number of images in different categories in order to facilitate the search later.

4. Blogsand forums offer comments to many users at the same time. Medium, Blogger and WordPress are well-known blogging platforms.

5. Microblogging lets you send short updates (140 characters) to everybody subscribed to such updates. The most outstanding microblogging, Twitter, has gained a lot of attention among journalists, as it allows you to quickly track developments and get information on what's happening on the spot.

6. Social news services allow users to create or publish links to news from other sources. The main element is voting, the community chooses this way which news will become the most important and visible to the rest of the users. The most famous example is Reddit.

7. Multimedia hosting is services possessing most of the social network peculiarities (user profile, circle of friends, opportunities to ditribute and comment on information), but it is primarily focused on the ability to download video, photo and audio files. Examples include YouTube, Vimeo, Flikr.

1.2 Social Media in Educational Management

One key task of the educational management is to ensure the development of the educational institution as an independent organization through establishing interaction with all participants of the educational process, partnership with public organizations and support of local business. Relationship networks take a position of one effective interaction model for all participants of the educational process. Skills of active

communication through social networks are currently necessary for everyone. Facebook, Twitter, YouTube and other networks have moved beyond a framework of face-to-face interaction and it is powerful communication platforms facilitating both to build your brand and be a virtual representation for government, business, and public organizations.

Unlike the official websites of general secondary educational institutions requiring training in a more professional way for updating information and establishing feedback, the pages of institutions in social media have their own characteristics determined by the properties of electronic communication as prompt dissemination of information, accessibility, simplified search the target audience, ease of the feedback set up and so forth. It has own structure, organizational and technological parameters affecting the nature of social connections and being an element of the constructing mechanism for the communicative space within modern society, performing several functions while creating a value basis of its existence.

Primbs (Primbs, 2016) identifies key needs for users in social media:

- managing relationships from Facebook dating as a replacement for exchanging visiting cards to close contacts in the family or community of friends;

- managing information by filtering news and relevant information based on user preferences through friends and subscriptions;

- managing one's identity by forming a personal brand.

For the foregoing reasons a follower of the website of the educational institution or school principal having independently joined a school community on social media is in position to:

- establish contacts between the participants of the educational process and to terminate communication without explanations at any moment;

- set up constant access to information on news of the educational institution activity due to the operational aspects of search algorithms of social media;

- develop own attitude to certain events in the educational field relying upon an opinion of the experts of the ultimate educational brands. It means that actual attitude of the experts to a particular educational institution and a vision for the further developments is relevant for the followers rather than the information in itself under the context of big data on educational reforms reported by thousands of sources.

Thus, for the head of an educational institution, the presence on the social network personally or through the institution's page allows to promptly inform the participants of the educational process with the life of the organization, purposefully manage the flows of various information, influence their consciousness and worldview transforming parents from "readers/observers" to active coexperiencers/fans or vice versa, however, awareness ensures that the negative developments of individual autonomy are reduced.

Returning to the (Primbs, 2016), the role of fans should be emphasized: "Real fans are much more than mere readers/listeners/viewers/target group, fans interact. Fans are ready to do something for the object of their worship. Fans are the first to submit photos when you are announcing a photo contest. Fans write the first comments under your posts breaking the ice. Fans cut trolls down to size excusing from a nasty work. Fans will also stand with you when you get a shitstorm. They provide entertainment for regular visitors of your community. And they give you stuff you can work with again".

The communication efficiency on the network is manifested by a high level of trust within the network, as opposed to distrust of external persons; existence of a unifying ideology/religion/lifestyle that allows to act together; targeted message delivery, which make possible it to be received precisely by the person who really needs it, as opposed to communication with a mass but passive audience in the case of traditional media (Pocheptsov, 2012). These are mechanisms for the group functioning that ensure the integration of individual actions in joint group activity and communication.

One of the crucial components of the management process in an educational institution is to inform participants of the educational process and communities on its activity in open public resources (Bobrovskyy et al., 2019).

2 RESEARCH METHODOLOGY

The pedagogical research under consideration has been carried out as part of the research work "Training of competitive specialists in the context of educational changes" (RK 0117U002378) to be conducted in 2017-2021 by the Department of Pedagogy, Administration and Social Work of the Educational and Scientific Institute of Management and Psychology of the University of Educational Management of the National Academy of Educational Sciences of Ukraine.

The aim of the article is the comparative analysis

of features of using of social media in school management: experience of Ukraine and United States of America.

We monitored 120 sites of Ukrainian middle schools and 123 sites of American schools (several sites from each state).

The monitoring parameters are:

- which social media do principals use in managing of the schools, teams of teachers and students?

- what are the purposes of using social media?

Also we monitored the pages of Ukrainian and U.S. principals in social networks.

We conducted a survey of 138 school principals of Ukraine. The key survey questions were:

- do you have a personal page in social networks?

- does your school have its own page in social networks?

- what social networks do you use in your managerial activities?

- are there any barriers to school communication in social networks?

- which information in social networks is the most interesting for participants of the educational process?

We had a content analysis on the massive open online courses (MOOC) by the Ukrainian platforms EdEra, Prometheus and VUM online and the English ones such as edX, Udemy, FutureLearn, XuetangX and Coursera, whose self-study contributes to the readiness for the effective using of social media in school management.

We have also used the online survey results of 3,9 thousand principals of general secondary educational institutions, educators, parents and the students from 9–11 grades on the distance learning in schools of Ukraine that was conducted by the State Education Inspectorate of Ukraine in the period from April 8 to 15, 2020.

For comparison we took the results of a survey of American school principals from the report at the official website of U.S. Department of Education "Social media in school emergency management: Using new media technology to improve emergency management communications" (Stephens, 2011), the report of Pew Research Center "Social networking fact sheet" (Pew Research Center, 2018), reports "Global Guide 2020" (EducationUSA, 2020), "90 days that changed K-12 teaching & learning: strengthening the bonds of communications" (tomorrow.org, 2020), "2019 Social Media Trends in Education Report" (classintercom.com, 2019).

3 RESULTS AND DISCUSSION

Using social media, the schools can:

- quickly respond to the needs of the audience: hear the parent, student and the public community (highlight the main topics for discussion, get feedback);

- prevent conflicts due to operational coverage of problems in the activities of the school;

- through social networks learn more about the activities of other schools and build own strategy for activities in social networks;

- fill vacancies and provide the school with highly qualified personnel by searching for personnel in social networks. For example, the group "Jobs for educators" on Facebook. The goal is to post messages about available vacancies in schools and for teachers which find work.

In the school social media are primarily an external communication tool. For large schools with a large number of participants in the educational process, social media can be a tool for interaction between participants in the educational process among themselves (for example, quickly obtain the necessary information and provide mutual assistance). The social media allow to the teaching staff, and especially to the director, to quickly resolve issues related to the adaptation and rotation of personnel.

We obtained the following experimental results (table 1).

Most principals avoid committing to the professional use of social media because it's completely overwhelming. Between Instagram, Twitter, YouTube, and Facebook etc., it is hard to know what will yield the best results. It's important to consider the best social media for purposes.

Every principal tries to choose the best way to promote wonderful school community. For learning and interacting, the American principals of middle schools use Twitter. It is the gold standard for them. For documenting and sharing the cool work happening in school, Instagram and YouTube are the best and most popular tools. Flickr is useful for sharing pictures. American principals of middle schools use Facebook for calendar reminders and getting the word out quickly about calendar changes and events planning.

For example, the school principal Eric Sheninger, 2013 American "Best Director Award" winner, best-selling author of "Digital Leadership: Changing Paradigms for Changing Times" (Sheninger, 2014), allowed his teachers to submit their daily reports using blog. Sheninger's blog was viewed by 6,500 peo-

Table 1: The results of monitoring of the use by school principals of social media in school management (2019 year).

Social media	The results of monitoring of Ukraine	The results of monitoring of the USA
Facebook	96 %	98 %
Instagram	33 %	87 %
Twitter	1 %	99 %
Telegram	10 %	-
WhatsApp	4 %	76 %
Viber	36 %	11 %
Youtube	25 %	84 %
LinkedIn	-	28 %
Google Blogger	5 %	87 %
Google+	5 %	89 %
Pinterest	7 %	56 %
Skype	12 %	42 %
Flickr	-	63 %

ple worldwide and over 600 are constantly following the life of the principal and his school in September 2019. It is interesting that it was an incentive not only to report to the administration on their work for teachers, but also to share with others the experience they have gained by introducing gadgets into teaching, as well as the success stories achieved by the students in these lessons. The topics of blog posts began gradually to expand, teachers shared the system of grades in school, their rubrics, how they interact with children outside of school, how the use of gadgets improves academic performance, and so on. A new perspective on education and blog creation has transformed the lives of teachers and students. Firstly, the US government purchased the latest equipment at the school Eric Sheninger writes proudly about on his blog (Sheninger, 2014). Secondly, teachers from all over the world came to the school in New Jersey to learn about the experience. In addition, the virtual reality company provided a program that allowed New Milford school students and their teachers to attend virtual space meetings where children could ask questions, and virtual training courses were provided.

The principal of Renner Elementary School Teresa Tulipana embraces the social media as a communication tool. Facebook and Twitter accounts keep families abreast of school events and happenings. She envisioned them as systems to provide calendar reminders. She thinks the Facebook is also a great tool for sharing our school's academic and behavioral focus areas in an efficient, fun and engaging manner. Recently a kindergarten teacher posted an Animoto highlighting pictures from Writer's Workshop, which communicated the importance of writing at our school. When the fourth grade completed Famous Missourian research projects, these were posted so parents were able to understand the value and im-

Table 2: Comparative analysis of the goals of using social media in school management in the USA and Ukraine (2019 year).

The goals of using social media in school management	The purpose rating of Ukraine	The purpose rating of the USA
Simplified search for the target audience allowing to expand personal and professional contacts between participants of the educational process	1 (90 %)	3 (87 %)
Demonstration of educational measures	2 (70 %)	4 (85 %)
Public disclosure of successes of students, teachers and school classes	3 (62 %)	1 (99 %)
Public disclosure of urgent announcement	4 (57 %)	2 (98 %)
Demonstration of various forms of training	5 (49 %)	6 (76 %)
Project and competition reporting where both students and teachers can participate	6 (43 %)	7 (62 %)
Clarification on the issues of the educational process (school enrollment, standardized external testing, state final examination, etc.)	7 (41 %)	8 (39 %)
Explanation of educational reforms and innovations	8 (33 %)	9 (11 %)
Challenges of participants of educational process consolidation concerning engagement in socially important projects	9 (17 %)	5 (81 %)

portance of their research. Social media has also allowed to deploy important professional development content in Renner Elementary School. Recently they used Blackboard, an educational social media tool, to host a virtual faculty meeting. Through Blackboard, staff watched a short Rick Wormeli video on defining mastery, and then responded to reflection questions on a discussion board. This flexible format allowed staff members to learn at a time that was convenient to their own personal calendars and increased engagement by assuring that every voice was heard (Education World, 2012).

The principal of Tomahawk Creek Middle School says that the teachers of her school utilize social media whenever they can. They currently have a Facebook page for school and PTA. She have found that this was a great way to get messages out to parents and students. There are several teachers who use Edmodo to post discussions and assignments for their students, and they have reported remarkable success using this tool. For example, one teacher had 25 kids on Edmodo the day he started using it. They are looking at implementing a Twitter account next year to help get information out to the community. Although this is not a replacement for standard means of communication (Web sites, letters home, etc.), it is a great additional way to share information with community. As far as discipline issues go, they attempt to address those who cause the issues. The technology is here to stay, so they try to implement it where they can and deal with the trouble issues when they arise. Thus far, they have had no problems using these means of communication (Education World, 2012).

Principal of South Side Elementary School in Bristol, Connecticut, David Huber thinks that Twitter is more than just a social media platform. It's also a professional learning resource, a tool to communicate with students' families, and a way showcase student achievements (Friedman, 2019).

One area of the social network usage being actually the origin for its popularity in Ukraine was the involvement to solve socially important issues of participants of the educational process. In particular, Facebook has been used to inform, mobilize and raise funds for volunteers during the Revolution of Dignity since November 2013. Therefore, the school administration resorts to this tool in order to continue this work to assist and support the ATO warriors and report on the done work. In addition, content analysis of the pages of the administration and teachers of educational institutions of Ukraine shows the effectiveness of similar charitable work in collecting assistance among participants in the educational process supporting socially disadvantaged sections of the pop-

ulation or volunteers as orphanages, elderly people, rural libraries, hospitals, etc.

In addition to it, not only prompt information but also targeted support directly to the participants of the educational process are provided through the Facebook network and messengers, among which Viber is the most popular for the management of the educational institution. It is about involving a large number of indifferent people to help the participants of the educational process who were in an emergency like fire, accident, surgical treatment, etc. Such assistance massively reduces fraud and disillusionment with charities through direct personal contacts.

Another example of the social networks usage in the school management is the establishment of successful cooperation and communication between educational institutions of municipal ownership and its public within the framework of project activities aimed at repairing or arranging the territory and premises of educational institutions, as well as build-out of a creative, development or inclusive environment. The key to the success of such projects is the proper organization of its advertising on social networks by the author of the project, in particular, the administration of the educational institution, as well as high activity of participants in the educational process to support projects in social networks. 663 educational projects have particularly won according to the results of the "Public Budget 2020" project out of 1564 projects in 13 categories having passed the stage of planning and implementation in Kyiv that, which is 42 % of all projects (gb.kyivcity.gov.ua, 2019).

Nevertheless, social networks are equally threatening. The freedom of the information distribution through social networks and communities regardless of its content and quality particularly transforms the virtual Internet space into a risk zone for the spiritual and moral sphere of the individual shifting classical values and developing a new virtual culture.

An interesting transformation was occurred to Facebook community "Parents SOS" founded in June 2014 due to the initiative "talk on the social network" in order to discuss problems related to education, assistance to parents in the case of mistreatment of their children in school or kindergarten and initiate systemic changes in education.

The community works according to a simple plan:

1) the situation is announced (at school or in education in general);

2) it is discovered how this situation complies with the law;

3) the conclusion what should be changed whether the situation or the legislation, and they change it together.

Despite the fact that the public organization initiated many changes in the education system through civic initiatives during the its existence, its members often resorted to systematic violation of netiquette, resorting to rude, obscene, evaluative expressions and personal affront in the beginning. Instead of solving a problem, sometimes it was possible to be sunk in the information rain of value judgments supporting a particular message have not received a solution to the problem in the real world.

It should be noted that the group's administrators are currently working hard to address these shortcomings, as evidenced by the article's content analysis of the group's 2019 publications. In particular, publications are increasingly focusing on situations of success as systemic changes, concrete victories over bureaucracy in education and extortion; legal clarification of the rights and freedoms of participants in the educational process; clear algorithms for solving the most common educational problems for all participants.

So we have determined grounding on our analysis that the following types of social media are the most popular for USA and Ukrainian school:

1. *Blogs.*

   A blog is a 21st century newsletter. Blogs provide a two-way interaction and allow the school administration to integrate multimedia content in order to make the school popular. There is no better way to share strategies, ideas and success stories. Teaching blogs are no less popular, with the help of which teachers can effectively manage the independent extracurricular work of students, as well as create tasks aimed at improving the skills of speech activity. Learning different types of letters (search, viewing, familiarization and studying) is facilitated by the unlimited ability to post links in any quantity to materials different from each other. Also, blogs are in no way inferior in the possibility of acquiring speaking and listening skills. This happens through the use of podcasts, through educational texts of radio programs, and videos that are freely available on the Internet. Integration of all the listed training methods into a blog allows you to listen to files repeatedly, and if necessary, stop and revise files. American Schools use Google Blogger, Wordpress, Edutopia (San Rafael, California), FreeTech4Teachers (Maine), Rubicon (Portland, Oregon), Hands On As We Grow (Iowa), Class Tech Tips Blog (New Jersey), The Applicious Teacher (Orlando, Florida), Teaching Heart Blog (Pittsburgh, Pennsylvania) and other platforms. For example, Eric Sheninger in addition to his official blog as Principal of New

Milford (Sheninger, 2021), has created a professional blog to tell the story of the digital transformation of the school and learn from others interested in digital leadership.

There are a number of impressive blogs by heads of schools in Ukraine on the Internet, the number of which is impressive. In particular, the Google request "blog of a school principal" represents 19 million search results. However, it should be understood that the use of blogs in the management of general secondary education is often due to external circumstances as a requirement for certification. For this reason, the Internet is full of blogs formally created with the glut of popular articles, elements of plagiarism or unstructured content. Quality content could only be seen by those executives who are passionate about this type of work and update the materials systematically. However, interviews with more than 400 education executives show that blogs in Ukraine are currently an outdated tool and can be completely replaced by social networks. Therefore, a mere 5 % of heads of our online respondents use blogs in their management activities.

2. *Digital photo sharing.*

   Photos can quickly depict and share student work, improvements and achievements. American and Ukrainian school principals and teachers take pictures of student projects and then post it on Instagram. American teachers also use Pics4Learning during classroom observations. They share photos with other accounts such as Twitter from their Instagram account.

3. *Video platform.*

   Creating a YouTube, TeacherTube, SchoolTube channels or Vine account for school allows you to record and share educational and social processes. Teachers and administration of American schools share live events such as school concerts in real time using such tools like Ustream, ClassVR etc. In Ukraine the principals use YouTube.

4. *Twitter.*

   Twitter, the best-known free microblogging application, is particularly useful for fast exchanges of thoughts, ideas, and information. American scientists were among the first users of the social network Twitter. During the first years of existence, it was dominated by reports of scientific conferences, symposiums, research citations, etc. 140-character tweets are a dynamic combination of text, images, videos, and website links. Having created a hashtag for the school you could share a conversation with related parties with the

ability to search for any problematic topic identified through Twitter. At the beginning of each school year American school leaders send parents a letter describing, how to create a Twitter account and to set up options for receiving text messages. Ability to receive Twitter updates on its own terms makes it unlike any traditional communication tool (Scott, 2017).

5. *Facebook.*

World famous resource Facebook has emerged as an academic social network. Initially the website was available only for students at Harvard University. Then registration was opened to other universities in Boston, and later for students of all educational institutions in the USA. All the above tools could be integrated or published on the Facebook page (Thornley, 2008). It is the favorite social media among Ukrainian and American school principals and teachers.

It is impossible to create and maintain confidence in the operation of the institution being a mandatory. It is impossible to create requirement for effective educational activities without prompt and complete information. That is why the administration should organize the activity of the educational institution under the conditions of information openness and communication with the participants of the educational process and the community.

Information transparency is ensured by the availability of educational facilities including social networks Information transparency in the educational institution to inform the participants of the educational process. The educational institution decides itself what to inform of and how to do it additionally. The primary principle of information distribution is to report important data for parents who are the most concerned and critical audience.

It is for the purpose of enabling local educational managers to communicate quickly, correctly and clearly, not to be afraid of criticism and be able to turn to crisis situations, an online course "Effective Communications for Educational Managers" has been developed by the public organization "Smart Education" powered by the EdEra online platform (EdEra, 2019) and viewed by 4,400 people during 10 months of 2019.

In order to be successful communicators in the modern information space, its developers offer:

- be persistent and consistent in sending a message, ideas and facts, the audience will be grateful for accurate navigation in the chaos of educational information;
- repeat the message many times in different for-

mats through interviews, events, photos, infographic, etc aiming to be heard;

- know what bothers and what interests your audiences, and build your business and communication against this background;
- always keep efforts and resources on the mission of the institution;
- focus on the simplicity and clearness of messages;
- have unique inspirational stories;
- get your audiences as close as possible.

Much attention is paid to anti-crisis communications, which goal is to immediately and firmly abandon attempts concealing any unpredictable or even unpleasant event in the educational institution. The overall penetration of modern communications into the public life makes it absolutely impossible to conceal any information. One of the primary principles of public communication should be remembered: a person first reported the event largely determines the further development of its media coverage.

The unpredictable event message should consist of three required components answering the following questions:

- "what happened?" – provide full information on the event, immediately blocking or at least substantially reducing the possibility of misinformation on it;
- "what are we doing?" – the school demonstrates its proactive stance in addressing the problem, what has been taken to remedy the problem, who have been further involved and informed;
- "what to expect?" – an uncomfortable state of uncertainty is removed or at least significantly reduced for the person, the most probable developments are shown.

Lastly you should always report how the problem is resolved. Given that, you also should be frank, and if the problem cannot be finally resolved for some reason at the school level, then it should be obligatory revealed and reported on further steps to resolve it (Kobernik and Krasnova, 2019).

Since information distribution and communication are grounded on the processes of dissemination and exchange of information, it is important to know how these processes are implemented and how they can be effectively organized. Building quality information distribution by the head to the participants of the educational process and the community can contribute in many ways to improving the level of media literacy of the administration and teaching staff of the institution.

The characteristic of social networks particularly has the underside in the rapid and prompt dissemination of information. A prime example is sharing of "innocent" fakes at the request of the school administration with good intention of preventing the consequences of participation in the games "Blue Cat", "Run or Die", "Momo", "Candy" and a new game "Bounce!" through social networks by parents. Low media literacy of participants of the educational process, lack of ability to recognize the signs of fake news, poor orientation of critical perception of information contributes to the testing parents of various technologies of measuring the status of the audience and channels of information dissemination on social networks.

Information security should start with every participant in the educational process, especially with the school administration, and it should become a daily habit for us not to become the object of fake dissemination, a tool for the introduction of dirty technologies, a convenient toy in the game of manipulators. Such results are summed up in their posts by Ukrainian media educators Inna Ivanova (review of the "Candy" fakes, September 2018) and Svitlana Izbash (review of the "Bounce!" fakes, February 2020) hereby preventing parents from "advertising" such games.

The school principal should also consider other types of danger that students may encounter using any network and that should be taken into account in the institution policy:

- content (access to information not intended for children of appropriate age);

- behavior (offering actions that could endanger child safety, fraud);

- dangerous contacts (chatting, file sharing, messengers).

In order to avoid such risks, a school principal should develop his own policy on the safe use of the Internet, which provides:

- content filters;

- availability of antivirus programs and its timely updating;

- use of Internet resources during training sessions under the teacher control;

- monitoring the page on social networks with respect to placing unauthorized information on it;

- providing educators and students with training on safe use of the Internet and development of end-to-end information and digital competence;

- online culture enhancement of the communication participants of the educational process;

- preservation of personal data of participants of the educational process (Bobrovskyy et al., 2019).

4 CHALLENGES THAT SCHOOL LEADERS FACED DURING THE PANDEMIC

School leaders' roles have been unexpectedly and dramatically changed by the COVID-19 crisis. The unprecedented nature of this situation means there is no set direction for them to follow. School leaders are like actors in a play where the story, the script and costumes have all changed mid-performance, and they are on stage improvising to adjust to their new role (Sampat and Oommen, 2020).

The forced mass introduction of distance learning technologies during the pandemic (Polhun et al., 2021) has exacerbated the issue of using of social media in school management.

In the period from April 8 to 15, 2020, the State Education Quality Service of Ukraine conducted an anonymous online survey of 3.9 thousand school principals, 43.4 thousand teachers, 120.5 thousand parents and 44.1 thousand students of 9-11th grades (sqe.gov.ua, 2020).

From the point of view of our research, we were interested in the results of a survey of principals, who make up more than 25% of school principals in Ukraine. 49.95% of them work in rural areas, 41.98% – in cities and 8.07% – in urban settlements.

Most parents and students in grades 9–11 who participated in the survey confirmed that for the period of quarantine there is distance learning in all subjects of the invariant component:

- 102,380 parents (85%);

- 36,425 students (83%).

The directors of general secondary educational institutions also assured that 97% of educational institutions for the period of quarantine teach students using distance learning technologies. The preference for distance learning is divided in half:

- 55% of surveyed students (24,087 people) and 50% of parents (60,569 people) were positive;

- 45% of students (20,001 people) and 48% of parents (57,858 people) gave a negative response.

After completing the quarantine, 41% of the surveyed teachers (17,872 people) indicated their desire to use distance learning technologies, including social media, and 54% (23,397 people) would use them partially. Only 5% of teachers (2,096 people) stated that

they would not turn to distance learning technologies in the future.

The results of the survey of principals also confirmed that almost 96.9% of general secondary educational institutions (GSEI) during the quarantine period students are taught using distance learning technologies. The majority of leaders (75.9%) noted that the entire teaching staff was involved. However, in almost 20.1% of schools, distance learning is provided only by teachers who are provided with computer equipment and Internet access. At the same time, 3.12% of the surveyed (GSEI) leaders stated that their school did not switch to remote work mode.

Under quarantine, educational institutions use different modes of distance learning, programs and digital services. GSEI leaders noted that online learning is mainly used for distance work. The most effective are services with the ability to assess the level of assimilation of the material – they are used by 44.88%, without the possibility of evaluation – 20.27%. Asynchronous learning with the ability to assess the level of assimilation of the material is carried out by 20.55% of GSEI.

According to the report, the issue of establishing effective interaction with participants in the educational process is identified as one of the most difficult in the implementation of distance learning along with technical support, methodological training and organizational issues (Pavlik and McIntosh, 2016).

As noted in the "Global Guide 2020", in the USA Facebook, Instagram, and LinkedIn are the dominant social media platforms for education, where available. Twitter and YouTube are also popular social platforms for education. There were used virtual meeting platforms such as Zoom and Google Meet to expand and enhance outreach (EducationUSA, 2020).

We analysed the results of Project Tomorrow, an education nonprofit that runs the on-going Speak Up Research Project (Evans, 2020). The latest data gives responses from 110,467 K-12 students, 11,731 teachers and librarians, 1,128 school and district level administrators, 11,749 parents and 1,532 community members collected between March 16 2020 and June 30, 2020 (tomorrow.org, 2020).

The situation in which schools found themselves in connection with the pandemic, opened new opportunities for more students to regularly communicate with their teachers using email. Email communications with teachers and students in middle school, for example, increased 33% during school closures: The percentage of students in grades 3–5 who regularly email their teachers also increased from 8% to 16%. Over three-quarters of students in grades 6–12 (77%) report that personal emails are now a standard mode

of communications with their teachers. Students are reporting that this new communications avenue provided more efficient and effective ways for them to get feedback from their teachers and to help them solve learning challenges with just-in-time support.

The new environment has also accelerated the adoption of text messaging between students and teachers as a communications modality. In 2015, only 14% of teachers said that they were using texting to communicate with students. Though teachers regularly report using text messages and other forms of social media to communicate with colleagues (57%) and even parents (28%), their adoption of this tool to communicate directly with students, either individually or as a class, has not increased in the past five years.

Relative to teacher communications, middle school students are united in their preference for three types of digital tools, personal emails (56%), text messages (55%) and auto phone messages (49%).

The sudden shift to digital learning as a result of the pandemic-induced school closures required many school and district leaders to think differently about the purpose of school, new modalities for instruction, and how to effectively harness a wide range of digital tools to support learning continuity. In some cases, administrators relaxed district rules about the use of personal devices, mobile apps and social media accounts to help facilitate efficiency and effectiveness in this unprecedented time. For example, while most districts did not encourage teachers to text message with students prior to the school closures, the use of texting increased significantly during the school closure period as both students and teachers (as well as parents) found the usage to be highly effective. Given both the value of those enhanced communications channels, and the continued uncertainty in school formats during pandemic, it is most likely that more digital tools, even including new social media platforms, will emerge to support student-teacher communications.

District technology leaders (54%) say they understand the importance of putting in place safeguards to protect student data when instituting a new digital initiative or adopting new technologies to support instruction. However, only 17% of school districts are currently using a risk dashboard to identify students in trouble or in need of adult intervention based upon their communications messages over the school network.

This issue of communications over the school or district network versus a student or teacher using a personal smartphone and their own data plan to transmit messages is also an important consideration. Ef-

ficiency of communications was a chief concern during the school closures, and thus as documented many students and teachers gravitated easily to their own personal accounts to help facilitate those interactions. However, 52% of district technology leaders say they encourage teachers and students not to mix personal and school accounts and applications in their communications.

The school principals say that they would like new teachers to learn how to effectively leverage social media tools for student engagement and communications within their teacher preparation programs. With a new mindset about the value of technology to support enhanced student-teacher communications, the opportunity for effectively leveraging new tools in the classroom, whether that is an online classroom facilitated through Google or the physics lab on the second floor, appears promising.

For the dissemination of school information American school principals use such social media: 58% – Instagram, 58% – YouTube videos, 53% – Snapchat, 58% – Twitter, 47% – Text messages (tomorrow.org, 2020).

In another survey "2019 Social Media Trends in Education Report" (classintercom.com, 2019) developed by Class Intercom we observe that 95% of schools use social media to communicate during the pandemic. 85% of schools report using photos to share the virtual, in-person, and hybrid learning taking place. Another 79% use video to share what is happening in their schools and district. 37% of schools are allowing students to contribute to their social content. 40% of districts have up to 10 users with administrator access to social accounts. Nearly 20% of schools are investing in paid social.

But school and district leaders need to be cognizant of protecting student data and student safety when using these new online tools for communications, with peers and teachers. Additionally, as these tools become more pervasive, districts will want to fully understand their legal obligations in terms of retaining messages and their responsibility and accountability for staff usage of these tools.

5 WAYS TO PREPARE SCHOOL LEADERS FOR USING OF SOCIAL MEDIA IN SCHOOL MANAGEMENT IN A PANDEMIC

According to a survey conducted by the State Education Inspectorate of Ukraine, the lack of support

and understanding of the situation from parents is recognized as a problem by 28.2% of respondents from 3.9 thousand school principals (Pavlik and McIntosh, 2016).

The things that can contribute to this:

1. **Professional training of school leaders in the master's degree "Management of the educational institution" and "Educational Administration"**

Training of future managers of educational institutions is carried out according to the educational-professional program "Management of educational institution" specialty 073 "Management" in the field of knowledge 07 "Management and Administration", approved by the Academic Council of the University of Educational Management of the NAES of Ukraine taking into account the Standard of Higher Education for the second (master's) level of higher education(MON, 2019).

The purpose of this program is to train new generation of education managers who are able to identify and solve complex specialized problems and practical problems in the management of educational institutions, their units, subsystems to meet the educational needs of the state, society, educational institutions and students.

Normative content of training of higher education, formulated in terms of learning outcomes in higher education in the field 073 "Management" for the second (master's) level of higher education specified in the disciplines of general training and free choice of curriculum for candidates educational program "Management of educational institution" of the second (master's) level of higher education (MON, 2019).

In the context of our study, the educational program provides for the acquisition of general competencies, including: the ability to think abstractly, analyze, synthesize and establish relationships between phenomena and processes (general competence 1); ability to communicate with representatives of various professional groups and in the international context (general competence 3); skills of using information and communication technologies for search, processing, analysis of information from various sources and decision making (general competence 4) and acquisition of professional (special-professional) competencies of the specialty (professional competence 6), including the ability to create and organize effective communications in the management process) (Makhynia, 2018).

In the United States, future school principals are trained in the Master in Educational Administration program, because in order to become a high school

principal, you must have a master's degree in school administration and become certified as a school administrator or principal. In the learning process, future education managers trains educators to become school principals and administrators, with a focus on serving diverse educational communities and fostering student achievement (thebestschools.org, 2021). A school administrator or principal must be certified. For example, The Principals' Training Center for Practicing and Aspiring Principals in International Schools offers a course "Technology Leadership", in the process of studying which students should know how does a principal juggle the demands of digital communication, social media and digital environments in a school setting, how can digital tools and environments be utilized to create sustainable and vibrant learning communities etc (thebestschools.org, 2021).

2. **Introduction of school principals with the topics and opportunities of massive open online courses (MOOC)**

The opportunity to study at a convenient time, free access to the latest information, teaching materials, modern technologies and practical cases, the opportunity to learn from the best universities and teachers in the world have led to the widespread popularity of the MOOC among its students.

Among the proposed MOOC, we have selected courses in three areas, which, in our opinion, contribute to the readiness of school principals in the United States and Ukraine to using social media in school management. These include media literacy and critical thinking; cybersecurity and establishing effective online communications.

Critical thinking and the educational process built on its foundations have become the basis of educational reforms in the world's leading countries over the last 10 years (Abdula et al., 2020; Konoval et al., 2021; Prykhodkina, 2020). The World Economic Forum in Davos regularly lists the relevant skills needed for a successful career. In recent years, critical thinking has risen in the ranking of these skills from the 4th place (skills for 2015) to the 2nd place (skills that will be important in 2020). The ability to think critically ensures scientific, technological and social progress and is the key to democracy, and education plays a key role in its development. Critical thinking provides independent and responsible action, as well as self-improvement (table 3).

Information and its timely access provides the maximum competitive advantages. However, it is equally important to be able to protect this information. Our MOOC content analysis showed a number of courses aimed at learning exactly how and why a

person can be attacked in the information space, as well as how to improve their own information security, which will further develop an effective program to protect personal information resources (table 4).

During the pandemic conditions, the issues of fast and consistent information reporting about the peculiarities of the educational process by means of various media became especially relevant. The principals have to be ready to convey information accurately, to focus on the main thing, to focus on the simplicity and accessibility of messages through those social media that are most adequate to the audience. A number of MOOCs are dedicated to this topic (table 5).

3. **Certification training of school principals according to the relevant programs**

In particular, a number of media literacy training programs developed by the Academy of Ukrainian Press are actively implemented by the Institutes of Professional Development of Teachers, including school principals (www.aup.com.ua, 2020).

In addition, 11 special courses for training school principals at working in the digital society, aimed at establishing effective online and Cybersecurity communications, have been developed since the beginning of the pandemic by the Ukrainian Open University of Postgraduate Education (uvu.org.ua, 2020).

Duration of such courses 1 ECTS credit / 30 hours. Based on the results of the training, a certificate is issued under the license of the University of Education Management.

In the United States, Media Management and Leadership is offered in higher education institutions. The course is designed for 3 ECTS credits (90 hours). This course aims to give students a survey of some of the latest management and leadership theories, including those encouraging a new sense of social responsibility. It also gives students the opportunity to apply these theories to a number of different competitive, structural, motivational, strategic, and organizational issues in the media world, by writing original case studies and solving problems in existing case studies (The New School, 2020).

6 CONCLUSIONS

So, in 2019 the educational opportunities of social media among Ukrainian specialists are very underestimated. The value of social media as an instrument of the educational process is undeservedly belittled. Many educators treat them with neglect and skepticism, considering social media exclusively as an entertaining resource. Using of social media for educational purposes is perceived by American students,

Table 3: MOOC, represented at English and Ukrainian platforms, aimed at developing media literacy and critical thinking for school principals.

The results of monitoring of Ukraine	The results of monitoring of the USA
(1) "Critical Thinking for Educators" on the platform Prometheus	(1) Media LIT: Overcoming Information Overload (Arizona State University) on edX
(2)"Educational tools of critical thinking" on the platform Prometheus	(2) Sorting Truth From Fiction: Civic Online Reasoning (Massachusetts Institute of Technology) on edX
(3) "The science of everyday thinking" on the platform Prometheus	(3) Making Sense of News (University of Hong Kong) on edX
(4) "English for media literacy" on the platform Prometheus	(4) Fake News, Facts, and Alternative Facts (The University of Michigan) on edX
(5)"Media literacy" on the platform Prometheus	(5) Fake News (Davidson College) on edX
(6) "Media literacy: practical skills" on the platform Prometheus	(6) Critical Thinking: Fundamentals of Good Reasoning (IsraelX) on edX
(7) "Factcheck: trust-check" on the platform EdEra	(7) Problem Solving and Critical Thinking Skills (Fullbridge) on edX
(8) "Internet Verification" by VUM online	(8) Global Media, War, and Technology (The University of Queensland) on edX
(9) "Media Literacy for Citizens" from IREX in partnership with the Academy of Ukrainian Press and StopFake	(9) Understanding Media: Introduction to Media Literacy and Representation (The University of Newcastle Australia) on FutureLearn
(10) "News Literacy" by Media Detector	(10) Disinformation, Misinformation, and Fake News Teach-Out (University of Michigan) on FutureLearn
(11) "Very Verified: an online media literacy course" on the platform EdEra	(11) Developing Literacy: A Journey from Still Image to Film (Into Film) on FutureLearn
	(12) Making Sense of Data in the Media (The University of Sheffield) on FutureLearn
	(13) Making Sense of the News: News Literacy Lessons for Digital Citizens by Coursera

Table 4: MOOC, represented on English and Ukrainian platforms, aimed at the development of Cybersecurity for school principals.

The results of monitoring of Ukraine	The results of monitoring of the USA
(1) "Digital Security and Online Communications" by VUM online	(1) Introduction to Cybersecurity (University of Washington) on edX
(2) "Information security in the digital world" by VUM online	(2) Information Security – Introduction to Information Security (New York University) on edX
(3) "Media literacy for educators" by Prometheus	(3) Introduction to Cyber Security (The Open University)

teachers, researchers as self-evident and inalienable function. The American didactic experience reveals that social media can be successfully used to arrange the work of the teaching staff and students, hold individual and collective consultations enhancing intellectual and creative potential of students.

In 2020, the pandemic became a catalyst for rapid change in the use of social media in educational process at schools. Heads of education in Ukraine and in the United States almost simultaneously found themselves in the same conditions: the management of

secondary education, the organization of training, the transfer of educational content using online educational platforms, social media. We analyzed the data reports "Global Guide 2020", "90 days that changed K-12 teaching & learning: strengthening the bonds of communications", "2019 Social Media Trends in Education Report", "Digital learning during the pandemic: Emerging Evidence of an Education Transformation" and the Ukrainian State Education Quality Service for 2020. The results showed that in Ukraine as well as in the United States, social me-

Table 5: MOOC, represented on English and Ukrainian platforms, aimed at establishing effective online communication among school principals.

The results of monitoring of Ukraine	The results of monitoring of the USA
(1) "Communication tools for reputation building" by Prometheus	(1) From Digital Technologies to Social Media (Curtin University) on edX
(2) "Digital communications in the global space" by Prometheus	(2) Understanding Media: Introduction to Media Literacy and Representation (The University of Newcastle Australia) on FutureLearn
(3) "How to understand social networks. Course for journalists" by VUM online	(3) Developing Literacy: A Journey from Still Image to Film (Into Film) on FutureLearn
(4)"Effective communications for educational managers" by EdEra	(4) Respecting Our Differences Online (Samsung) on FutureLearn
(5) "Media literacy for educators" by Prometheus	(5) Smart Media Communication by XuetangX
	(6) Ethical Social Media by COURSERA

dia became the most important communication tool during the pandemic. In the United States, there is a greater variety of types of social media for use in school education. The reason is that the United States is a leading country in the field of digitalization of the economy and the creation of innovative learning technologies. But the most popular social media in school management is Instagram, YouTube videos, Facebook, Snapchat, Twitter, Text messages (WhatsApp).

As our research shows, despite a wide range of available technologies, the United States is experiencing significant difficulties in organizing online education. In order to teach how to build effective communications for education managers, how to develop their media literacy, critical thinking, and knowledge in the field of cybersecurity, a lot of massive online courses have been created in the United States (edX, Udemy, FutureLearn, XuetangX platforms). With the support of international organizations (UNICEF, IREX, DW) such courses have also been created in Ukraine (platforms EdEra, Prometheus, VUM online).

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