Media Literacy and Young People's Digital Skills

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Abstract—This paper aims to address the preparation of students for their digital skills in relation to media literacy and information technology. The research was conducted at the country level with 600 respondents aged 11–15 years old from primary and secondary schools in Kosovo. The results show that most of them believe that the inclusion of the subject of "Media and Information Literacy" would help them in developing the necessary skills to properly use the new technology available. A survey was used as a working method, with the aim of obtaining results that tested the main hypothesis of the paper. The main theoretical approaches for media and information literacy are addressed in this paper, in order to contextualize the research and link it with the aspect of scientific theoretical treatments. The case study has extracted data for the first time on this issue in Kosovo, a country where the extent of Internet access is the largest in the Western Balkans region.

Keywords—media literacy, digital skills, students, media, Internet

1 Introduction

The purpose of this paper is to address the research on the use of information technology in Kosovo primary schools, from the fifth grade to the ninth grade, their digital skills, and their preparation in the field of media and information literacy. The combination of these components would highly affect the preparation and development of students' learning skills. This is actually the main hypothesis of the research, that the media and information literacy would affect the development of Internet and digital skills among young people in general for learning purposes.

The first part of this paper contains the theoretical background, which deals with the issue of media and information literacy and the role of information technology skills in the learning process. Further, the paper presents the context of Kosovo and the challenges faced by this country in the field of media and information literacy, as well as in the development of technology in general.

Next, concrete findings of the case study research carried out in schools from six regions of Kosovo, with a distribution sample combined with the number of students are presented. A total of 600 students were included in the research project.

After the presentation of the data, the conclusions are presented, which are new and important findings to address and move these social phenomena to another

scientific level. More than one finding has been presented in the conclusions and the hypotheses or conjectures raised have also been proven. A number of several other conclusions have been drawn, through which it was recommended how to further act in the advancement of young people in the field of media literacy and in the development of their digital skills.

2 The theoretical background

2.1 Media literacy and digital skills

Media literacy is still an important social field to which many media and communication researchers are giving great focus, although the concept of media literacy is not something new being addressed. However, with the development of technology, social problems have also been added to new media and social networks, while media literacy and digital skills remained the main areas that prepare societies to face these problems, especially young people [1].

The term "Media literacy" was used for the first time by Professor Luis Forsdale in 1955 and was intended at that time to encourage students to earn more in the field of multimedia. The term was used in a call for "helping our students gain necessary multi-media literacy" [2]. Many concepts and definitions have been given for media literacy, but they have also changed over the years as a result of media and technological developments, however, all of them revolve around an axis according to which media literacy aims to develop critical judgment and the development of skills to analyze, judge and read media content. The American researcher W. James Potter in [3] points out that many people have written about different concepts of media literacy, and a number of those authors were focused on different kinds of media. According to [3], with the development of technology, there is also a need for people to be able to judge and learn different forms of media and develop different skills for their use. "The most fundamental use of the term literacy applies to a person's ability to read the written word. With the advent of additional technologies to convey messages, people have also written about the need for visual literacy, story literacy, and computer literacy, to name a few areas of media focus" [3]. Among other things, [3] emphasizes that preparation in the field of media literacy will help you to get to the beneficial use of information and skills without being distracted by things that can be harmful. "Becoming more media literate gives you a much clearer perspective to see the border between your real world and the world manufactured by the media. When you are media literate, you have clear maps to help you navigate better in the media world so that you can get to those experiences and information you want without becoming distracted by those things that are harmful to you. You are able to build the life that you want rather than letting the media build the life they want for you. Those who slip into media illiteracy will get swept along in a tide of harmful messages" [3].

Stanley [4] is another researcher who stands almost on the same line of thought, stating that media literacy helps and influences the control of the way media is used. According to [4], this is achieved through the development of skills and learning that must be acquired in this direction. "We end this chapter with a consideration of the

media literacy movement, which asserts that we should learn to assume more control over media so we can avoid problems and make media serve our purposes" [4].

Also, the researchers McDougall and Potter, in their study [5] on the curation of media learning, emphasize that the aim of media education is not merely to enable children to write, but to enable them to reflect systematically on the processes. "The aim of media education is not merely to enable children to 'read' – or make sense of – media texts, or to enable them to 'write' their own: it must also enable them to reflect systematically on the processes of reading and writing themselves, to understand and to analyse their own activity as readers and writers" [5].

Therefore, in the 21st century, training in media literacy should be a priority in every society. This is because, today, the media, in addition to information, has an extraordinary role in the formation of the new generation, their education beyond school, and the development of digital skills, in such a way that the various applications that technology offers today can be put to the service of their professional preparation and development [6][18].

Many researchers who deal with media literacy, with the application of technology in schools and the development of skills in their application in the classroom, have expressed their concerns about the lack of preparation of teachers and students in the application of information technology in schools. According to [7], these new forms of technology related to the preparation in the field of media and information literacy are not part of their university preparation, thus making it difficult their training in practical use. "Several reasons contribute to this disconnect: the university system lags behind and can be disengaged from the new realities of the school system so that teacher training departments remain focused on disciplines, not literacies of a hybrid nature such as MIL; the fields of information and communication sciences and media studies are reluctant to embrace MIL because of the ancillary position of "pedagogy" among many researchers; the non-stabilized evolution of the "information and communication paradigm" can be problematic to establish a lasting curriculum; and finally there can be cultural and professional oppositions between those who prefer pre-digital transmissive teaching and learning strategies and those who incorporate all sorts of digital and pedagogical tools and devices in their classrooms", says a study of the Journalism Department of the University of Gothenburg [8]. In this study, among others, McDougall and Potter are cited, who in [5] concluded that digital media literacy is key for professional development in schools. "MIL requires teachers to adopt a variety of stances, not just the pre-digital top-down role of knowledge transmitter. The communication practices of learners in their online social networking activities matter, as well as real-life situations that involve competencies such as production, collaboration, and participation" [8][9].

In addition to learning about media and information literacy, the development of skills in the use of technology remains another issue. At this point, what many researchers raise as an issue remains the preparation of teachers' competence. In [10], Guzman and Nussbaumt emphasize the need for teacher training on technology integration. "The evidence suggests that technology integration is a complex category configured by multiple factors. Its nature is such that we must treat it as a generic dimension related to a diversity of variables that condition and determine its implementation" [10]. According to [10], the integration of technology should under no circumstances be seen only as

an opportunity and access approach. "Technology integration should be defined not simply as a question of access but rather as a tool both for improving educators' professional productivity and promoting student learning" [10].

Other researchers have similar findings on the use of technology and its application in teaching. Santoso and Lestari, in [11] present their results according to which technology would improve the quality of learning. "When once technology tools are available, faculty will necessarily and integrate them into their classroom instruction to enhance student learning. Consequently, then, the challenge for researchers is to quantify the use of technology to support student learning" [11].

2.2 The context of Kosovo

Kosovo is the youngest country in Europe, whose state-building process began after the declaration of independence in 2008, meanwhile, until now, it continues to go through many internal and international challenges. In Kosovo, a lot of investments have been made in the education and technology sector, however, it remains in the transition phase and in an effort to follow the development path.

Table 1. Percentage of households who have internet access at home (%)

	2013	2014	2015	2016	2017	2018
EU-28	*79*	*81*	*83*	*85*	*87*	*89*
Montenegro	*56*	*64*	*68*	*70*	*71*	*72*
North Macedonia	*65*	*68*	*69*	*75*	*74*	*79*
Albania	*:*	*24*	*25*	*29*	*30*	*:*
Serbia	*56*	*63*	*64*	*65*	*68*	*73*
Turkey	*49*	*60*	*70*	*76*	*81*	*84*
Bosnia and Herzegovina	*:*	*:*	*:*	*62*	*66*	*69*
Kosovo	*:*	*:*	*:*	*:*	*89*	*93*

Media and Information Literacy as a subject is not included in the curricula of pre-university education in Kosovo schools, despite the fact that such a thing has been adopted in many countries of the European Union [12]. However, regarding the development of technology, the distribution of the Internet and its use in households, according to [13], 96% of households have access to the Internet. Also, over 87% of individuals are daily users of the Internet and information technology. European statistics (Eurostat) also show that Kosovo remains one of the countries with high Internet usage. According to the results in Table 1, Kosovo remains the country with the highest usage in the Western Balkans. Moreover, they show that Kosovo has an Internet usage higher than the average of European Union countries [14].

In addition to Internet access, Kosovo citizens are also massive users of the Internet through telephone services. According to official statistics provided by the Regulatory Authority of Electronic and Postal Communications (RAEPC), in 2021 about 1.7 million citizens used 3G and 4G networks, taking into account that Kosovo has less than 2 million residents. "The trend of the number of subscribers of Internet access

through the mobile network since the beginning of the provision of these services in the market has been characterized by a continuous increase. In the reporting period (Q3 2021) a significant increase of Internet penetration according to the mobile approach by 11 percentage points is observed" [15].

Taking into account this trend of the use of information technology and the Internet, especially by young people, the Ministry of Education of Kosovo, through an administrative instruction, has banned the use of mobile phones in schools [16]. According to the instruction, this decision has been taken to improve the quality and the teaching process. This decision was also supported by the Minister of Education: "We have had many suggestions and remarks that have come to us either from parents or from school principals, that mobile phones are often being misused and are becoming an obstacle to the learning process". So, in the absence of learning media and information literacy, education leaders see the solution through arbitrary decisions, and not through a genuine education that would influence the technology and Internet to be used in favor of students and in the development of their skills.

3 Methodology

In order to test the hypotheses and answer the research question of this paper, several combined research methods have been used, which have had an impact on the case study of the research to be as representative as possible, with concrete findings and conclusions. In particular, the content analysis, comparative method, quantitative method, qualitative method, and compilation method were used.

The data of students' answers in relation to the use of technology were collected from a questionnaire, distributed through the clustering method to 600 students of primary and secondary schools in the public education system, in seven main regions of Kosovo, such as Prishtina, Mitrovica, Peja, Prizren, Ferizaj, Gjilan, and Gjakova. The sample represents a number of students in all regions of Kosovo. Among the main reasons for using these forms of methods is the fact that we are dealing with young age of respondents and also to achieve the most concrete results in terms of credibility. The main hypotheses set are:

I. Using technology in the classroom affects the development of learning students' skills
II. Learning about media and information literacy helps students benefit from the use of technology in the classroom
III. Schools do not sufficiently adapt technology in the learning process.

4 Findings

We start the results of the research with the interpretation of the findings related to the question about the responses of young people in regard to learning media literacy, which would affect their ability to use media and technology. From the results, over 94% of the respondents think that they should learn about media and information literacy in their schools, compared to 6% who think that they do not need lessons and

skills development in this field. Most of the feedback is based on the fact that learning about media and information literacy would have a positive effect on them, in enabling the qualitative use of online content and applications, and in developing their skills in acquiring different digital skills and using the applications in the service of learning. So, regardless the development of the technology and various applications, in this case, those related to learning, if the development of skills in their use is not equivalently applied, it would be difficult to achieve results in the practical field.

Table 2. Results of the some of the questions in %

No	Question	Yes	No
1	Do you think there should be media literacy in schools, where you would learn about media, their use, and developing skills in using technology?	94%	6%
2	Do you have a mobile smart phone?	95%	5%
3	Do you use technology in the learning process?	73%	27%
4	Do you think that the use of technology during learning would help you more in your success?	77%	23%
5	Do you use the phone and the Internet to accomplish tasks?	89%	11%

In order to test our hypotheses and see concretely the connection between technology and students, we have asked specific questions in this area, starting with the use of telephones. Despite the fact that the respondents included in this research belong to young ages, specifically from 11 to 15 years old, over 95% of the interviewees answered that they own a mobile smartphone, compared to that 5% who declared that they do not own such a device. When we talk about mobile phones, it is very important to know what kind of devices they possess. According to the data, over 90% of students have a smartphone, while only 10% of them have a simple phone that they use only for communication. So, over 90% of this age group owns a device in which they can use the Internet, various forms of media, and various applications related to technology and information. This high percentage of the use of this device makes it even more important and necessary to learn about media and information literacy, as well as the need to develop skills in the use of different applications that are related to the field of technology.

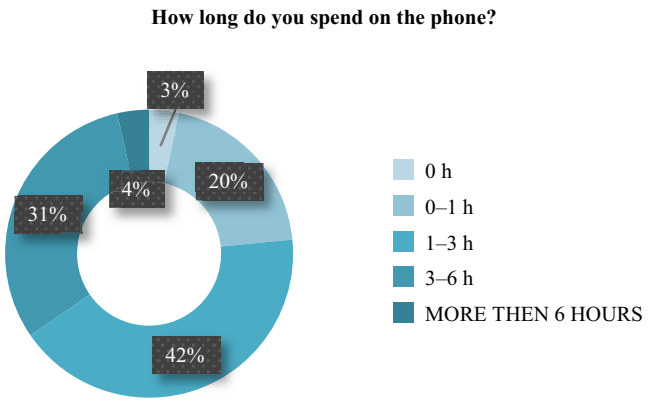

Fig. 1. Responses on phone time spending

Another interesting finding that relates to the continuity of the research and the interrelationship of the preliminary questions, concerns the time this focus group spends on the phone. The results are interesting, but also challenging for those who deal with studies and research in this field. Over 30% of students spend up to 6 hours a day on the phone, while about 4% of them have declared that they spend more than 6 hours. This means that if the subject of Media and Information Literacy would have been part of the teaching curricula, this age group would use this long time more qualitatively. When we say this, we can take into account the next question that this age group was asked, which has to do with whether they use their phone for learning or entertainment, and where about 60% of them said that they use their smartphone mainly for entertainment. However, about 42% of the respondents stated that they use their phone for up to three hours, compared to 20% who stated that they spend only one hour on the phone. Meanwhile, 3% of the sample shows that they are passive in using the phone.

Our focus in this research has also been on the use of technology, applications, and technical devices in the learning process. Therefore, since the use of phones by students is so high, in this research we have obtained concrete results on how much phones and other technological devices are used in the learning process. About 66% of the respondents stated that one of the main reasons why they take the phone to school is to communicate with parents, 23% of them stated that they do so to use it for lessons, and 11% of them stated that they take the phone to communicate with friends. So, based on this finding, it is evident that the majority of the research target group do not use their phone, Internet, and applications during the learning process. This is also related to the fact that the Ministry of Education, through an administrative instruction, has prohibited the use of telephones during the learning process, despite the fact that such a ban could negatively affect the use of the technology offered through phones and the skills that young people could gain from this process. This has also been confirmed by the research target group, where over 85% of them have stated that they do not use their phones at all during the learning process, compared to 15% of those who have declared that they do so. So, about 2 out of 10 students use their phone to achieve the best possible results during the learning process in the classroom, despite the fact that such a thing is not allowed. According to the research, about 42% of teachers do not prevent students from using the phone during the learning process, even though most of them have declared that they use this device more for entertainment than to achieve results during the learning process.

However, in this research that includes all the regions of Kosovo, the students have stated that they use technology during the learning process. About 73% of them said that they use technology during the learning process, compared to 27% of whom emphasized that they do not use technology during the daily learning process.

According to the research, technology is mainly used for the presentation of projects and teaching. The data show that the projector is used in 41% of cases during the learning process, while the laptop is used in 31% of cases. Meanwhile, other technology devices are used much less, including phones by 21%, tablets by 3%, and television sets by 4%. However, based on the research, it can be concluded that despite the use of technological devices, in most cases the ones that are used the most are typical devices of a lesson, which we can already consider as part of a standard lesson, such as the laptop and the projector.

In addition to the use of technological devices, during the research, we also focused on the fact that what types of applications are used on those devices while accomplishing the objectives in a lesson. Powerpoint remains the main application used by students in the classroom, through which most students make their presentations. 51% of the respondents have stated that they usually use this application during the learning process, while excel is used in about 14% of cases, and according to them, this is usually related to the nature of the tasks. About 14% of students have stated that they also use different design programs, Word is used in about 20% of cases and 5% use other combinations of programs and applications. Of course, most of these applications are typical of those used in teaching and learning and are part of the students' daily work.

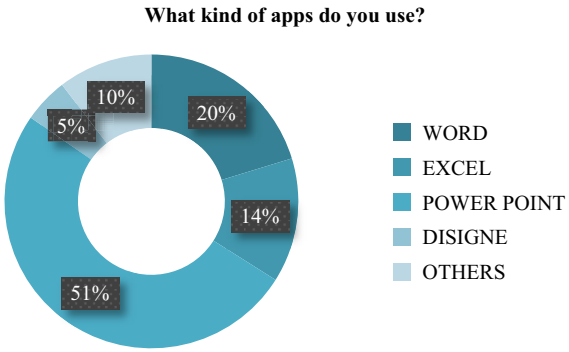

Fig. 2. Responses on most used applications

Besides the technological devices and applications they use, the research is also focused on the use of Internet in the realization of the lesson, and sites they use to accomplish their learning. According to the results, about 46% of the respondents have stated that they refer to the Google platform to find the necessary information they need for learning in the classroom. So, apart from Google, what we should probably focus on at this point is the use of Wikipedia and YouTube by the students to present the findings from there in the classroom, during lessons. Therefore, the need to learn about media and information literacy plays a key role here, because without proper education on media and information and without the development of skills in this field, it remains difficult to select materials used by Google, Wikipedia and YouTube, without prior knowledge and preparation. Therefore, even the researchers in this field, who constantly support the learning on media and information literacy, justify this, precisely based on the fact that young people must have prior knowledge and skills to put the findings and knowledge gained in these platforms to use. So, according to the research, about 95% of the respondents during the learning process use Google, Wikipedia, and YouTube as sources of information, but these sites can also provide us with unsafe, untrue, unconfirmed information or materials if we are not prepared to select them. According to the respondents, only 3% of them use social networks to fulfill their obligations in the classroom. Only 2% of the respondents stated that they use the information they get from documentaries for classroom learning.

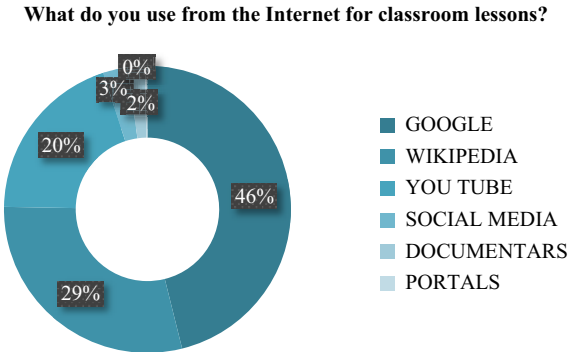

Fig. 3. Responses on platforms used for learning purposes

About 77% of the 600 students involved in this research emphasize that the use of technology increases the quality of their learning. Researchers also support the fact that the use of technology helps and affects the development of skills in young people. So, most of the students support this fact in their teaching-learning experiences. While 23% of them say that the use of technology does not affect the success or failure of students.

Another finding in this research is the fact that about 90% of the respondents stated that they constantly use the Internet to complete the tasks given in class. This also shows the impact that the Internet has on their creative development, but also the impact it has on their professional fulfillment. Therefore, this finding also confirms the need for their preparation in the field of media education and information, because, for such a large use of the Internet in teaching and learning, prior preparation is also needed to find, use and systematize the important information that we can search for on the Internet.

Thus, media and information literacy remain a prerequisite for successful use of technology and teaching-learning in the digital age. Learning in this area, including learning about technology, directly affects the most productive use of technology, information and research on the Internet.

5 Discussions and conclusions

Based on the results and findings presented above, there are various issues for discussion that are related to the field of media and information literacy on the one hand, and those of technology on the other. The first conclusion in this regard would be related to the advancement of technology in schools. This is because technology, according to the concrete results obtained from the survey, in the 21st century directly affects teaching-learning. Technology and its development in the education field help students to develop their knowledge and skills in professional development. Therefore, this, in addition to being a conclusion, also remains a point of reference for discussion in professional, academic, and policy-making circles.

The second discussion and conclusion are related to the preparation of students in the field of media and information literacy. Most of the students who have been part of this research have expressed their beliefs that learning about media and information

would directly affect their advancement in lessons. Of course, it remains imperative for media and information literacy to be part of the curricula in the pre-university cycle. Learning about this field would influence the youth to receive training in two key areas; the first one is developing the skills to use media and technologies, whether in selecting what they consume online in general and the second one about developing the skills to apply and adapt new technologies more easily in their learning process.

And the last discussion and conclusion raised from this paper is related to the context. Given the technological developments and the benefits that they offer, advancements and skills in learning, mechanisms or educational policymakers should do more in this direction, either in normative support or in technological support. In many countries, including the country where this research was carried out, the use of technology in lessons is still prejudiced [17]. This is also related to the fact that, through an administrative instruction, the use of telephones in school by students is prohibited. Likewise, these institutional mechanisms still do not have a clear understanding of the importance of young people learning about media and information literacy. This subject is not yet included in school curricula. Such an action makes it difficult to train and prepare young people or students and develop skills in this regard.

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