ANNEX 19

Research on Pupils' Use of Internet and Digital Skills in Azerbaijan

Baku, 2021

Contents

Summary

The aim of this study is collecting and analyzing data on the use of the Internet and digital technologies by children and youth aged 9-17 studying in secondary schools in different regions of Azerbaijan. The research was conducted in the first half of the 2020-2021 academic year and it involved 5,815 pupils from different regions of Azerbaijan. Parents, teachers, principal and deputy principals showed necessary support to engage pupils in conducting the survey online. In the study, 27 different questions were asked to determine the students' demographic information such as gender, age, class, location of the school as well as their internet and digital skills and how to use these skills. The responses of the pupils to the relevant question were indicated in graphs and later explained. The recommendations presented at the end were based on the results obtained from this study.

Keywords: *digital skills, pupil, secondary school, Azerbaijan*

INTRODUCTION

Towards the end of 2020, Azerbaijani schoolchildren had to undergo digital transformation due to COVID-19, which was first encountered in China and soon turned to be a global pandemic. After the discovery of the first COVID-19 case in Azerbaijan on February 28, 2020, the educational process was temporarily suspended after all educational institutions operating in the country were closed by the decision of the Cabinet of Ministers. Although educational institutions were scheduled to open in the coming days, the spread of the infection has hampered this process. Statistics presented by UNESCO (2020a) show that the disruption of the educational process in Azerbaijan due to COVID-19 infection has affected 1,983,999 pupils and students in the country. Temporary suspension of the activities of educational institutions and further arrangement of the educational process in distance mode affected 203,011 pupils at the preschool level, 635,153 pupils at the primary education level, 945,226 pupils at the general secondary and full secondary educational level, and 200,609 pupils and students at the higher levels (tertiary education).

In the 21st century, which is often described as a digital age, the development and application of digital technologies has affected, like in all areas, the field of education too. However, particularly with the onset of the pandemic, notebooks, pens, and books have been gradually replaced by computers, information technologies, and other Web 2.0 tools. The pandemic period rendered the utilization of digital technologies mandatory and necessary in all areas of education. Subsequently, educational activities in the schools and the universities were pursued online. During the pandemic-related emergency situation, children and adolescents at all levels of education have been participating in the online learning process.

Under the pandemic conditions, the situation of children and adolescents continuing their educational activities online in secondary schools in all regions of Azerbaijan has yielded multiple questions. Thus, there is an utmost need for comprehensive research to analyse the current situation and to find answers to the questions arisen. Therefore, this study sought to determine the use of Internet and digital skills by pupils aged 9-17 studying in secondary schools in different regions of Azerbaijan during the academic year of 2020-2021. In order to achieve this goal, the pupils were asked questions of different categories (see APPENDIX). The frequencies of the pupils' answers to the relevant questions were analysed and plotted with graphs in the findings section. In the end, the findings of this study were explained, and then those findings were translated into the final recommendations.

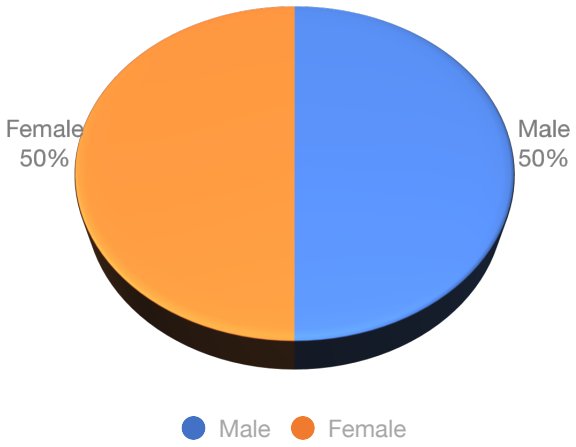
METHODOLOGY

This study used quantitative methods in order to determine the use of Internet and digital skills by pupils aged 9-17 studying in secondary schools in different regions of Azerbaijan.

Study Group

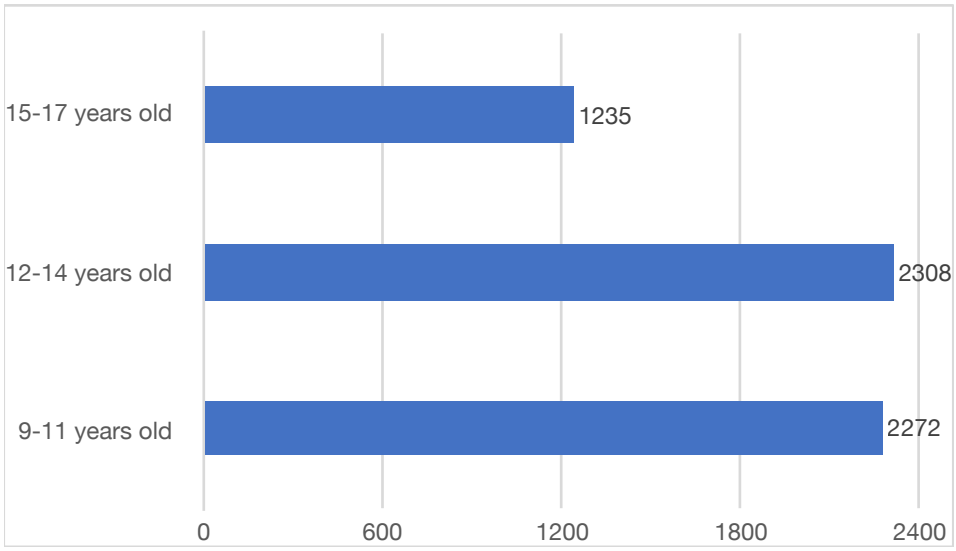
Study group of the research consist of 9-17-year-old schoolchildren studying in secondary schools in the first half of the 2020-2021 academic year. 5,815 pupils from different regions participated in the study. The distribution of students according to gender, age, grade, and region of the school where they studied was analyzed and plotted in graphs.

The distribution of the students participating in the study by gender variable is shown in Graph 1.



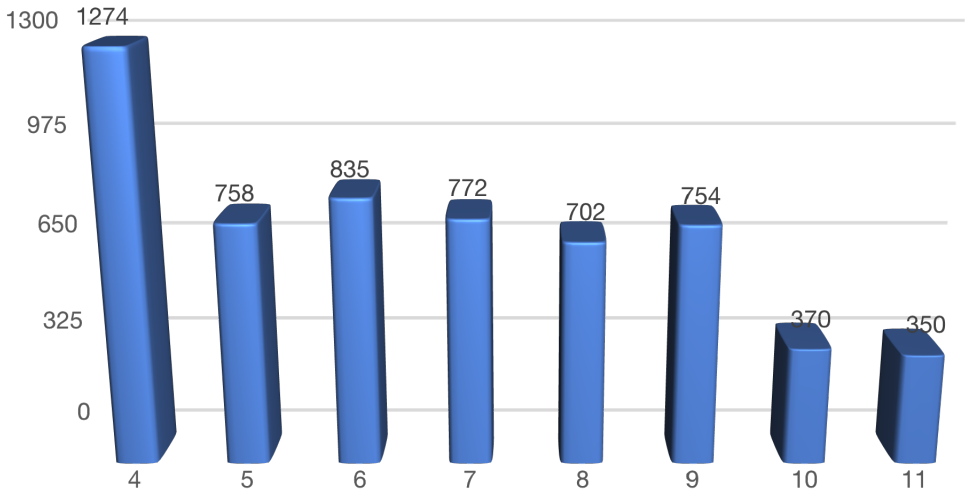
Graph 1. Distribution of students by gender

The distribution of students by age was shown in Graph 2.



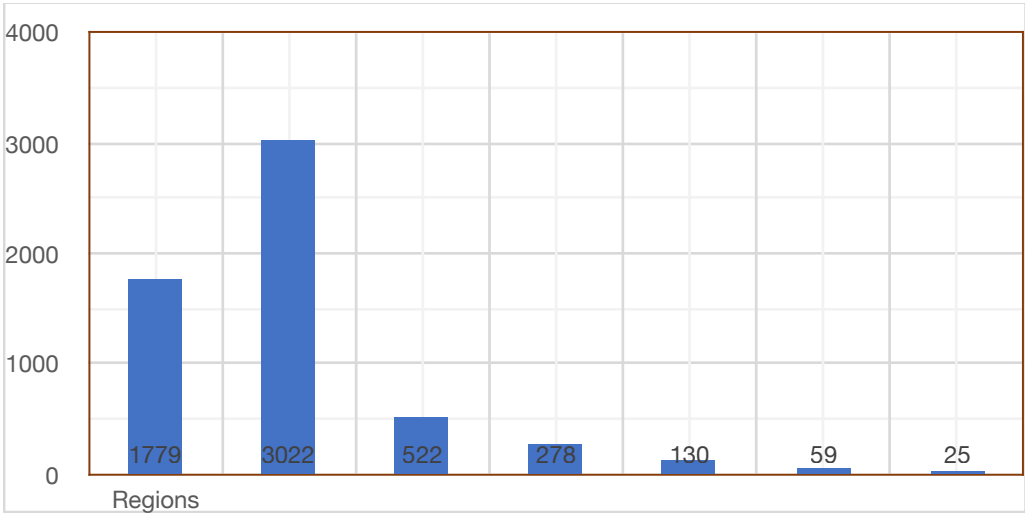
Graph 2. Distribution of students by age

The distribution of students by class was analysed and shown in Graph 3.



Graph 3. Distribution of students by class

The distribution of students according to the regions where the schools are located was analyzed and shown in Graph 4.



Graph 4. Distribution of students by regions where their schools are located

As mentioned in Figure 4, 3,022 (52%) of the pupils surveyed during the study reported attending the secondary schools in Lankaran region; 1779 pupils (30.6%) in those of Baku and Absheron region, 522 pupils (9%) in that of Aran region, 278 pupils (4.8%) in Ganja-Gazakh region, 130 pupils (2.2%) in Mountainous Shirvan region, 59 pupils (1%) in Sheki-Zagatala region and 31 pupils (0.4%) in Guba-Khachmaz region. Since the study was conducted online in accordance with the conditions of the pandemic period, it was not possible to fully ensure the balance by region. Although more than 500 initially-targeted pupils attended the survey, the final analysis covered all participants' responses.

Data collection tool

Various questions were addressed to the pupils to collect data for the study.

Pupils were asked a total of 27 questions in 10 different categories (*Internet access and its availability in Azerbaijan; Situation with the availability of digital devices in families; State of pupils' digital skills; Situation with school's experience in the application of digital technologies; Situation related to parent-teacher mediation in digital use; State of digital use of children and youth during the COVID-19 pandemic; Situation related to excessive internet use; Situation with pupils' relationships with peers and friends on online platforms; Situation with the use of social networks and video game platforms; Situation with cyber bullying*; See APPENDIX).

During the preparation of the questions, other scientific researches conducted through the international literature review in the field of each category of question were analyzed and a question pool was formed.

Data collection and analysis

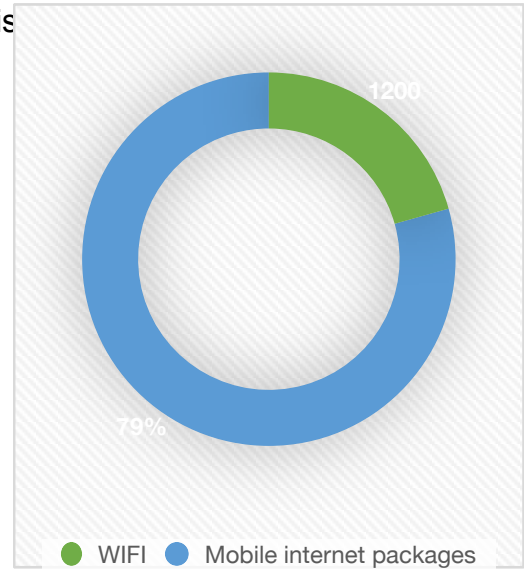
The data for this study were collected during the first half of 2020-2021 academic year. The COVID-19 pandemic and the consequent closure of all educational institutions in the country have necessitated conducting an online data collection for this research. For this reason, the questions used in the study were developed on a Google Form and sent to the pupils through online platforms with the support of teachers, school principals and District/City Education Departments. The data collection period lasted approximately 2 weeks. The data obtained via the Google Form were transferred to an Excel file and made ready for analysis. Each of 27 questions in 10 categories was analyzed, the frequencies of the responses to the questions were calculated as well, and later explained in detail.

FINDINGS

A total of 27 questions in 10 categories were posed to the pupils participating in the study. During the survey, pupils aged 9-17 were asked a variety of questions to determine their possibilities of accessing to and using of the Internet, as well as the availability of digital devices in their families. Also, various topic-related questions were addressed to identify the level of pupils' digital skills. The study also sought to define the situation in the schools, where surveyed pupils study, and the level of parent-teacher mediation on the application of digital technologies. In addition, pupils were asked a variety of questions to find out if there was any variation in their digital use during the COVID-19 pandemic. The study also investigated the pupils' problems related to excessive Internet use, the state on the use of social networks and video game platforms, the extent to which pupils interacted with peers and friends on online platforms, and the cyber bullying during period of the COVID-19 pandemic. Various questions were addressed to the pupils on the above-mentioned topics and their responses were analyzed afterwards.

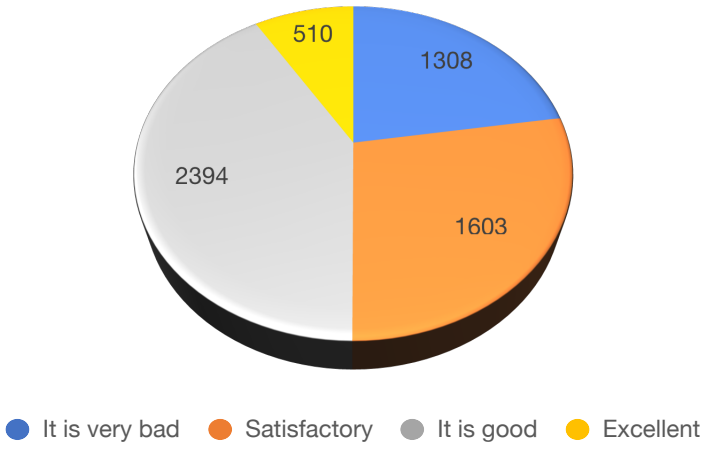
Questions to the students and their answers to these questions are shown in graphs below:

1. What kind of internet is



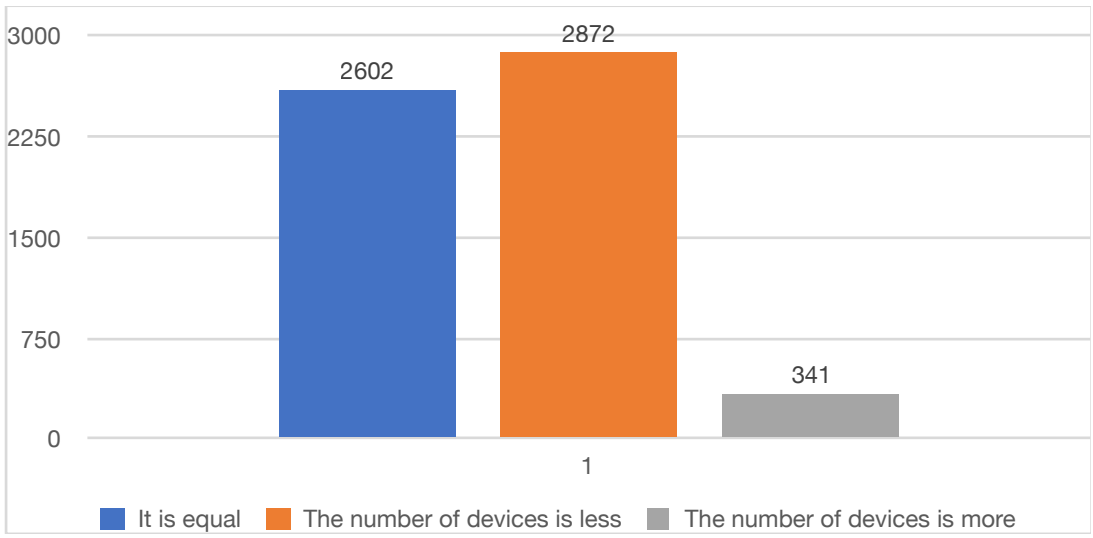
Graph 5. Type of internet used at home.

2. What is the quality of the internet used?



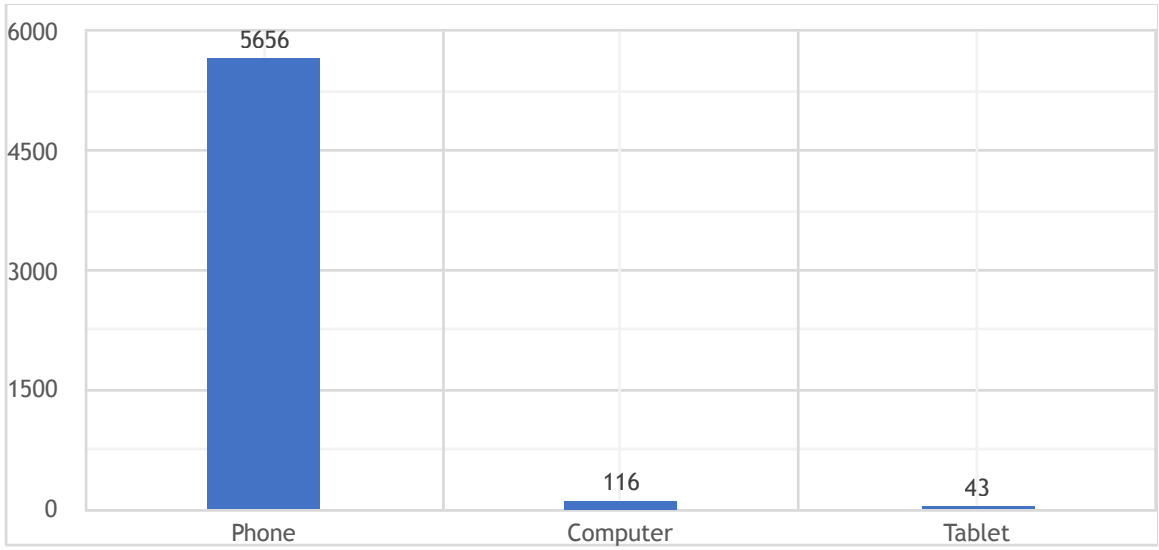
Graph 6. The quality of the internet used

3. What is the condition of electronic devices in the family?



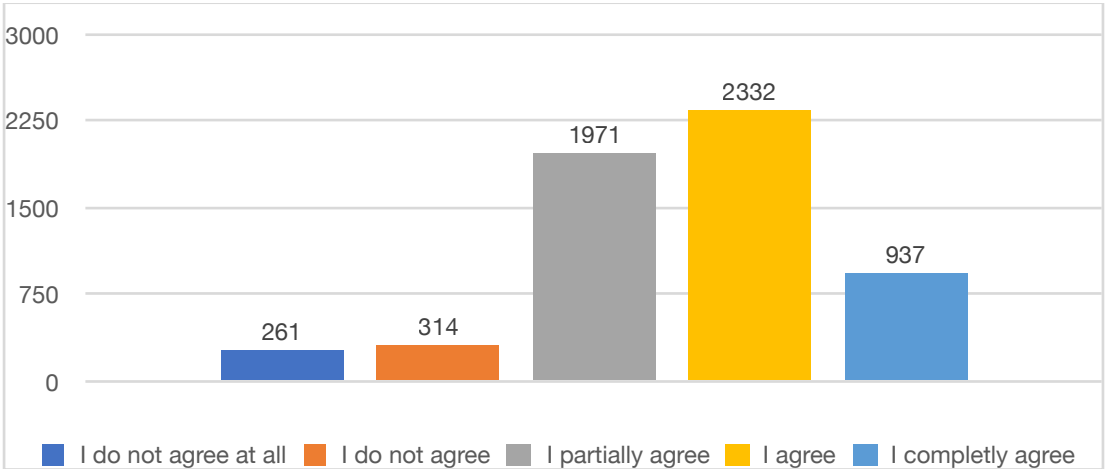
Graph 7. Status of electronic devices in the family

4. What is the most used electronic device in the family?



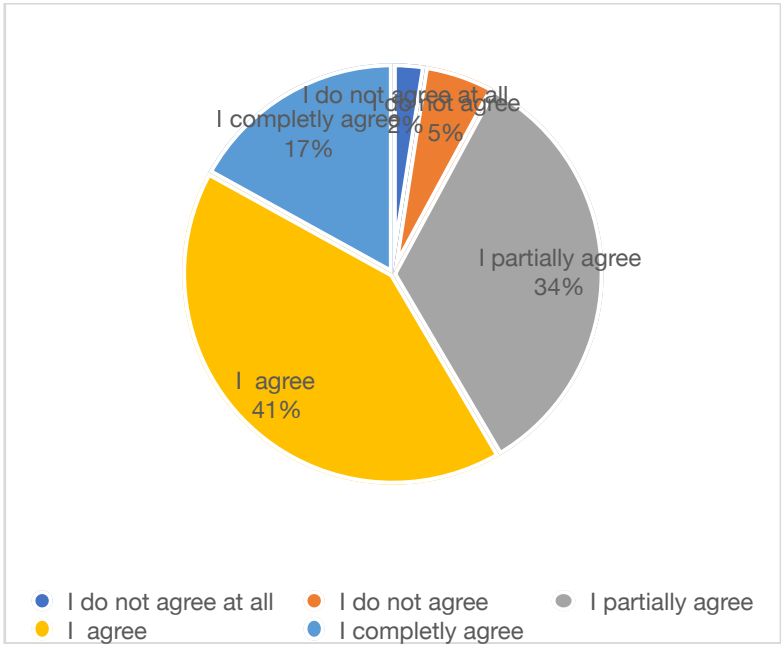
Graph 8. The most widely used electronic device in the family

5. I can get all kinds of information through the Internet.



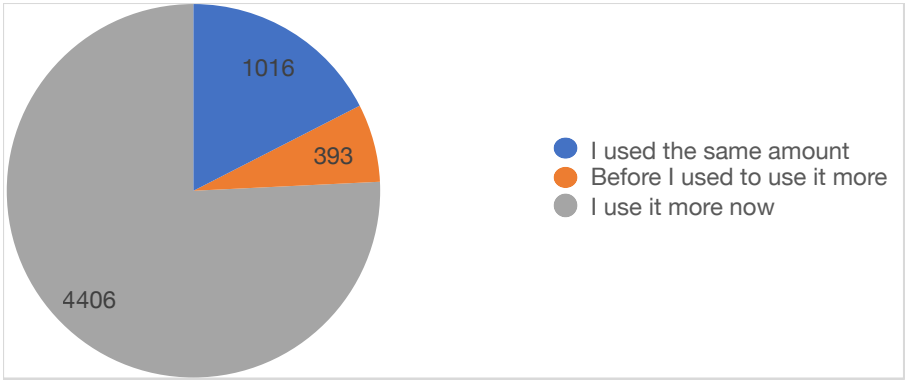
Graph 9. Digital skills of students

6. I have enough skills to use digital technology.



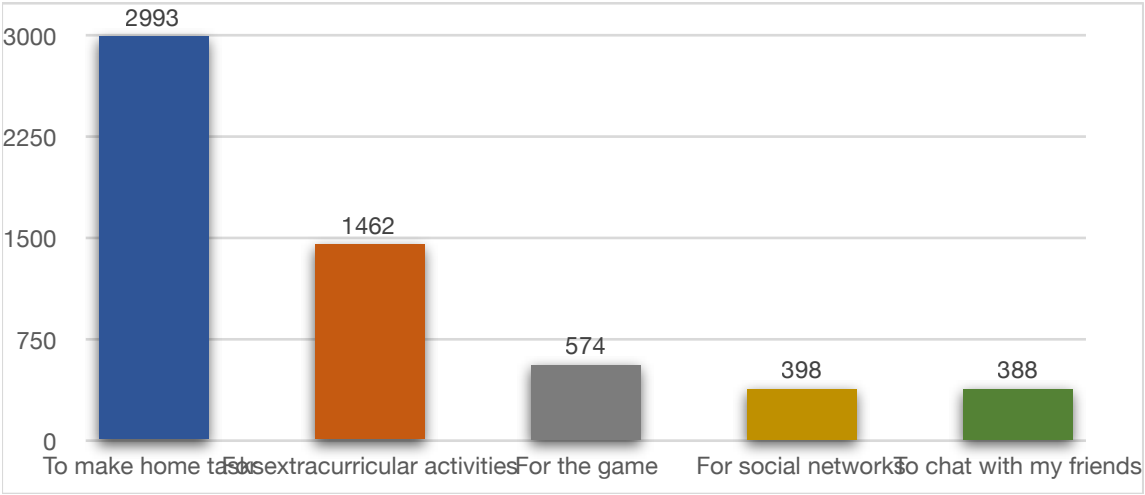
Graph 10. Digital skills of students

7. How has the use of electronic devices and the Internet changed during the pandemic compared to the period before the COVID- 19 pandemic?



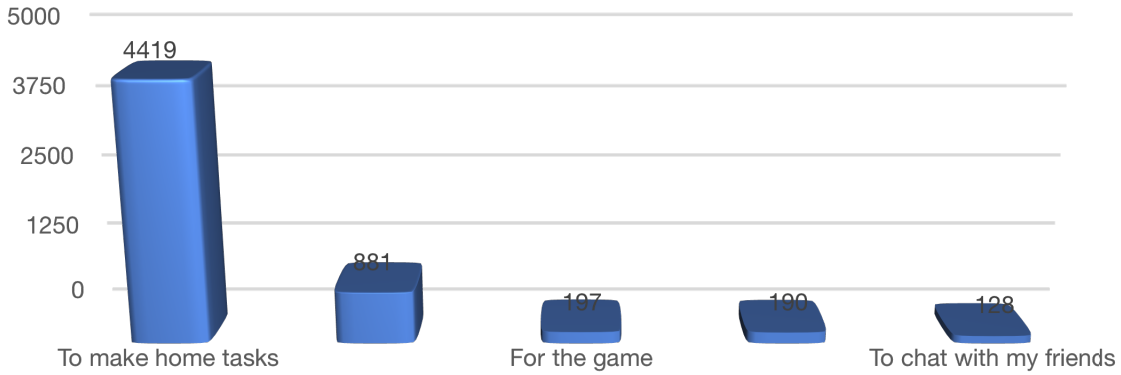
Graph 11. Situation before and after COVID-19

8. What was the main purpose of using digital technology before COVID-19?



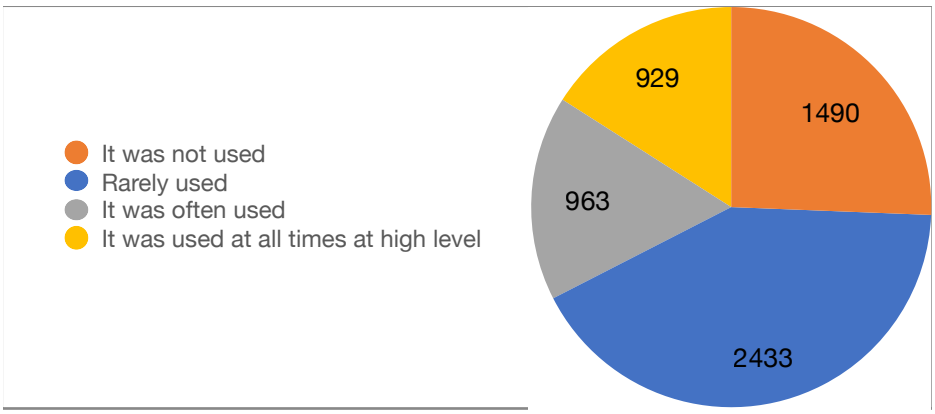
Graph 12. Status of use of digital technologies before the COVID-19 period

9. For what purpose do you use digital technologies more after COVID-19?



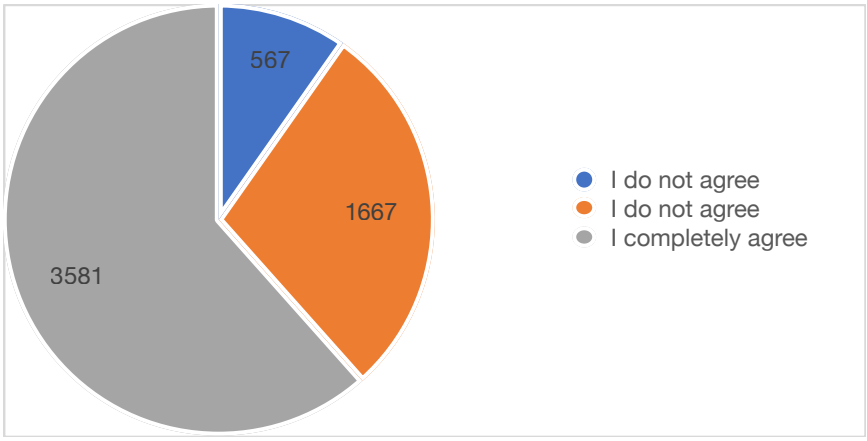
Graph 13. Status of digital use after COVID-19

10. How was digital technology used in your school before the pandemic?



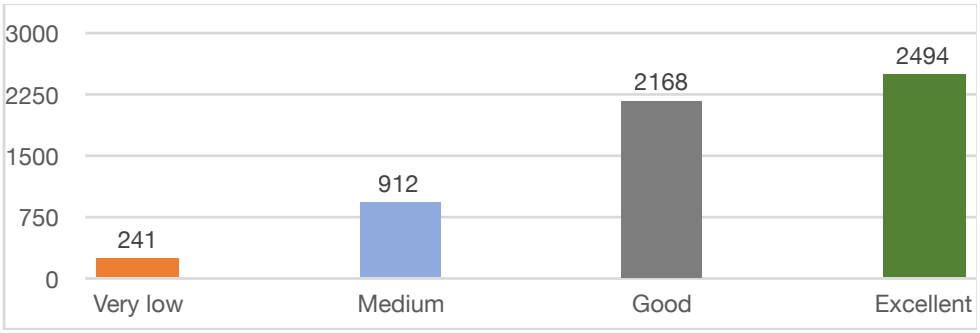
Graph 14. Level of school use of digital technologies in the period before COVID-19

11. The school creates all conditions for organizing online classes.



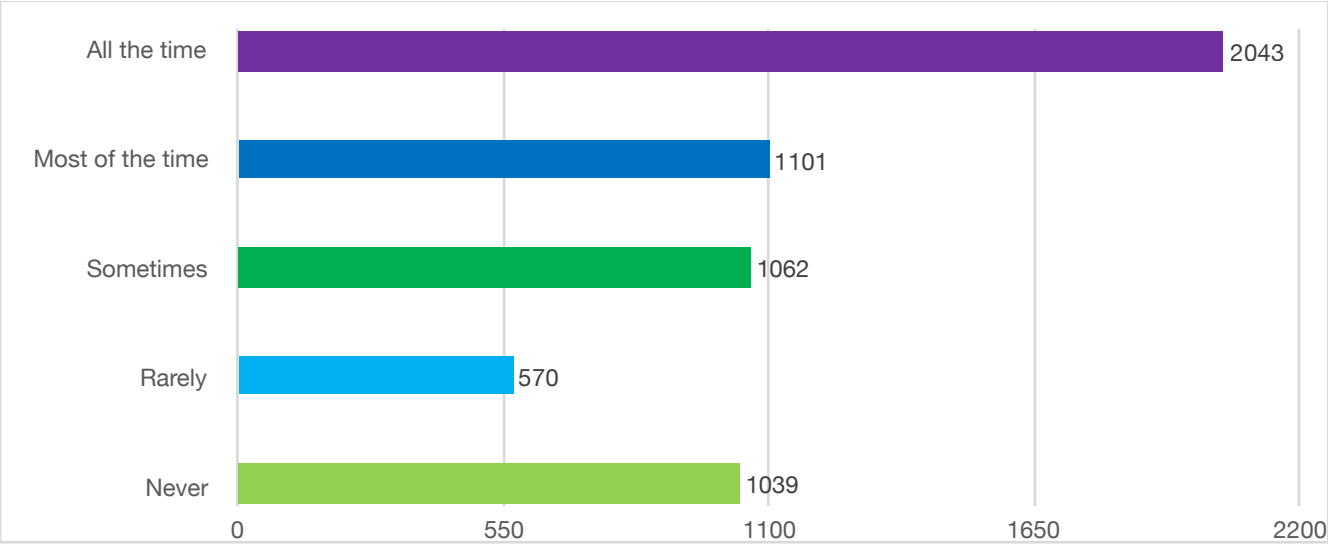
Graph 15. Status of online lessons at school

12. What is your teachers' ability to use digital technology?



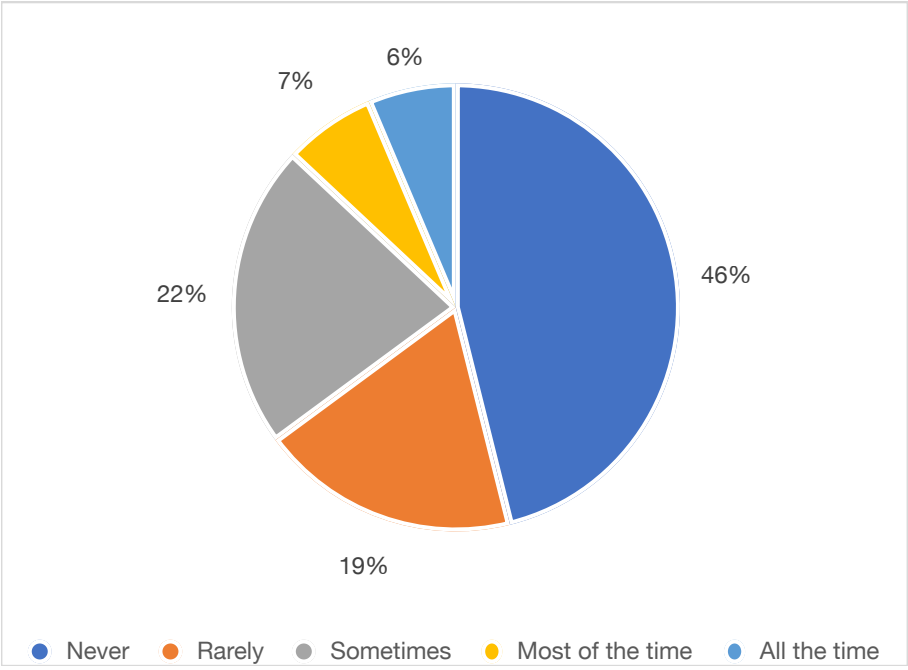
Graph 16. Level of digital skills of teachers

13. My parents and teachers encourage and guide me in the use of digital technologies.



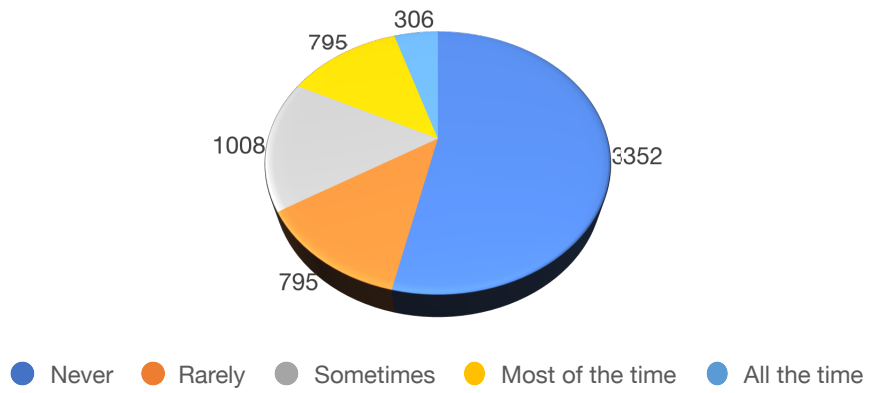
Graph 17. Motivation of students by teachers and parents regarding the use of digital technologies

14. I feel bad when I don't have electronic devices (phone, tablet, computer, etc.) with me.



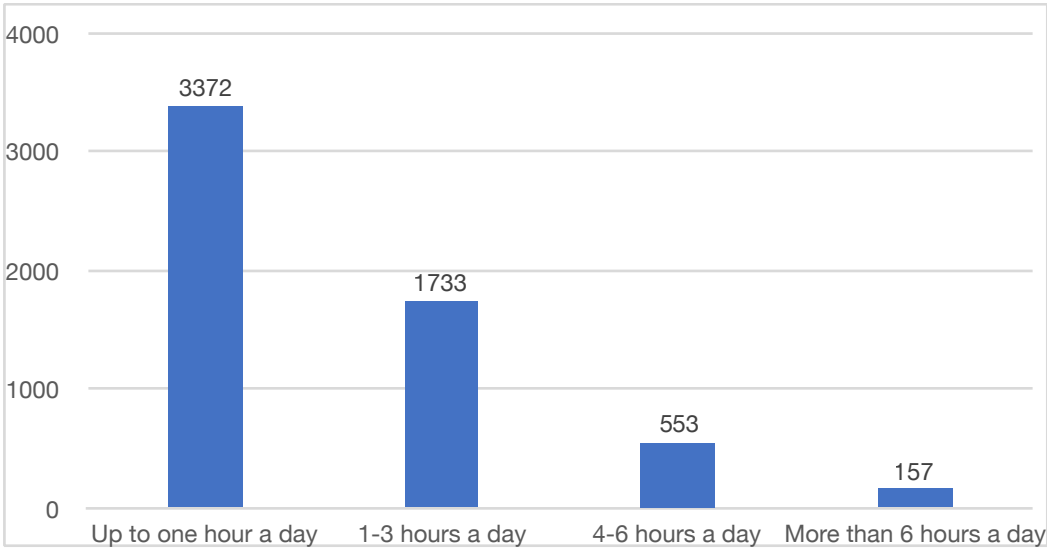
Graph 18. Status of Internet use

15. I feel powerless when I am offline.



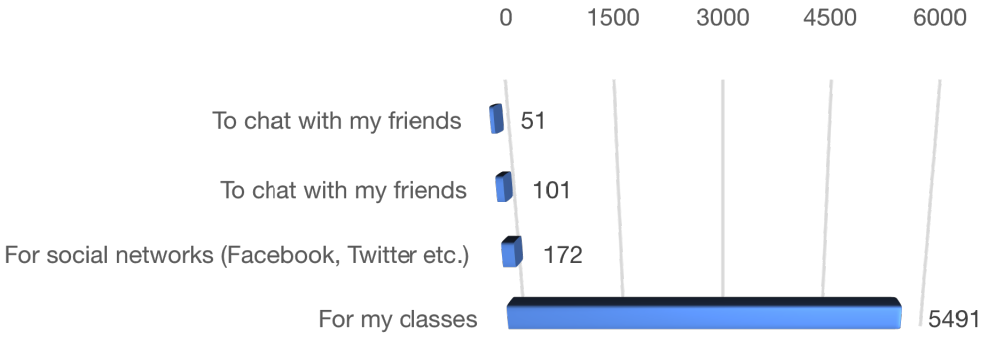
Graph 19. Status of Internet use

16. How much time do you spend in the virtual world with your peers and friends?



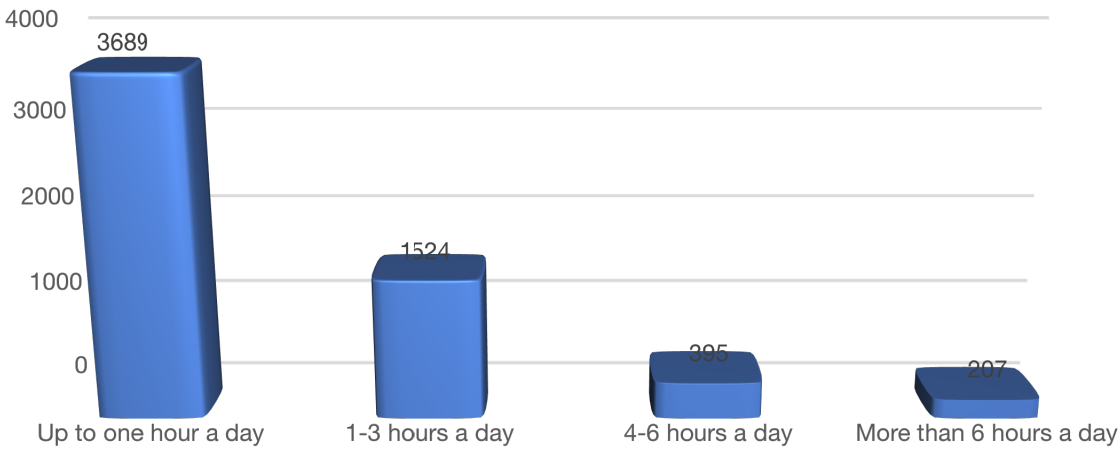
Graph 20. Relationships with peers / friends based on online platforms

17. Why do you use digital technologies (computers, smartphones) more?



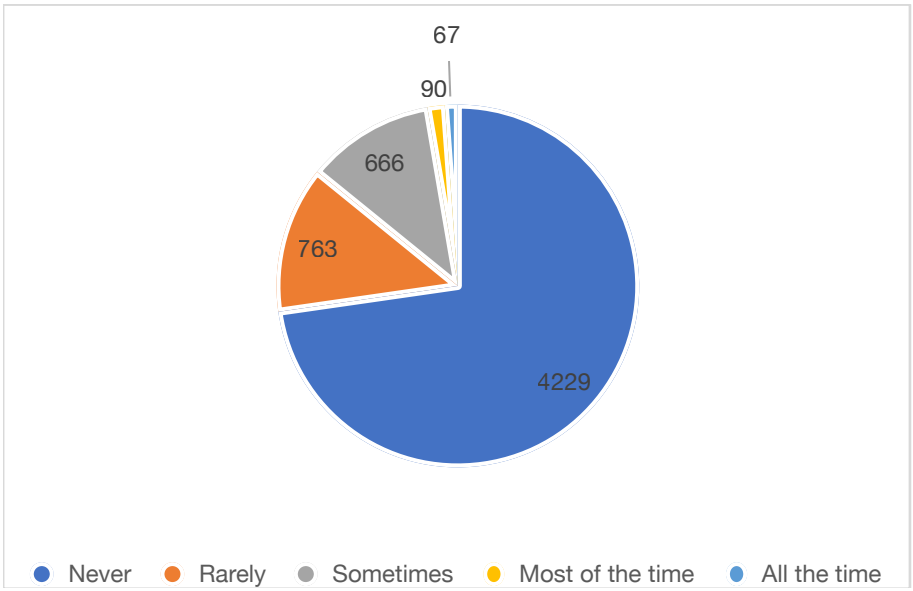
Graph 21. Purposes of using digital technologies

18. How much time do you spend on social networks and gaming platforms during the day?



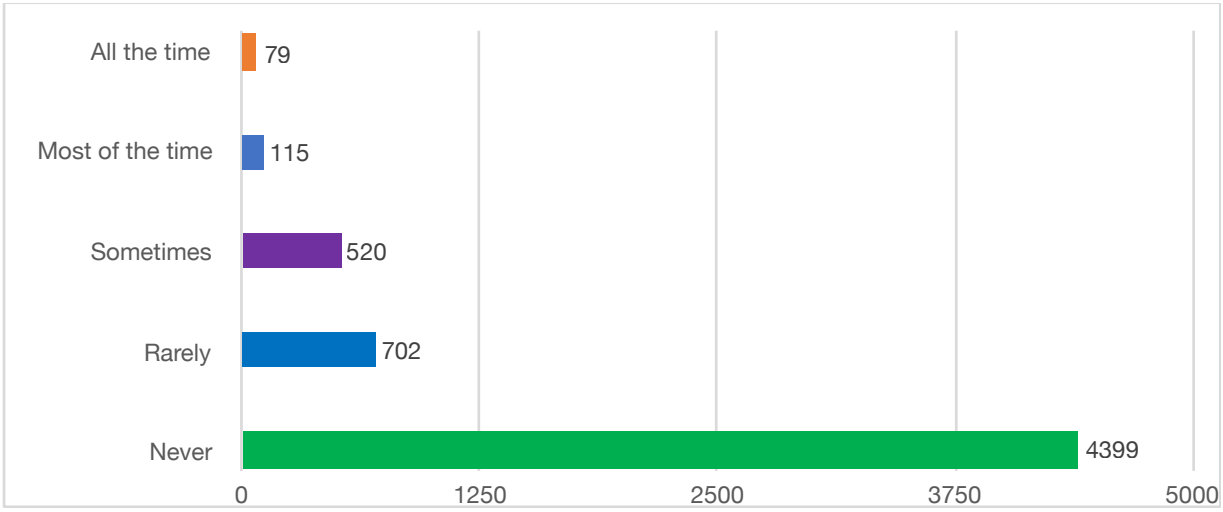
Graph 22. The amount of time spent on social networks and gaming platforms during the day

19. Is stranger child being rude to you online?



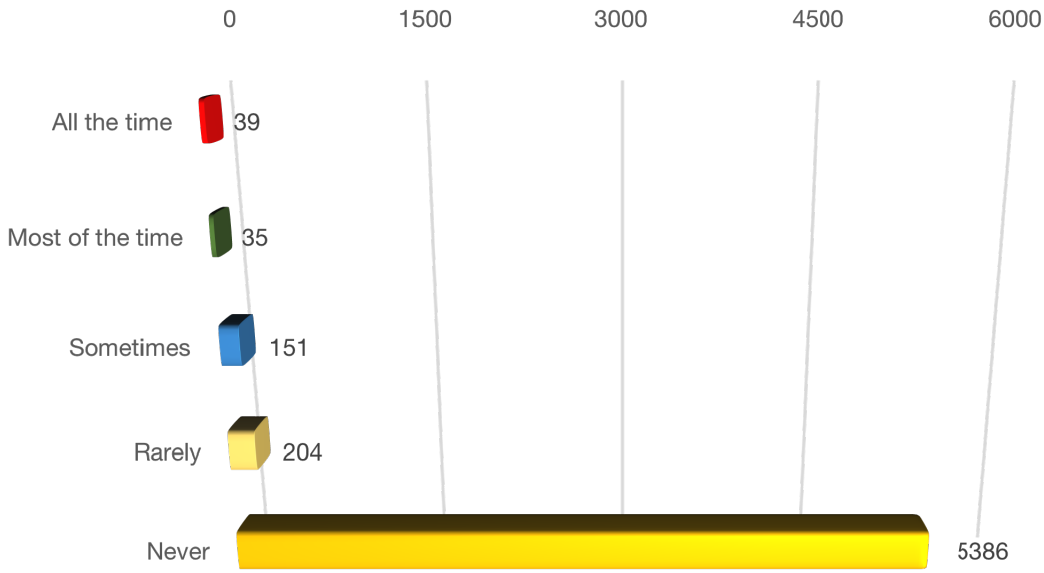
Graph 23. The situation of cyber bullying

20. Other people or my friends on the Internet send me messages I don't like



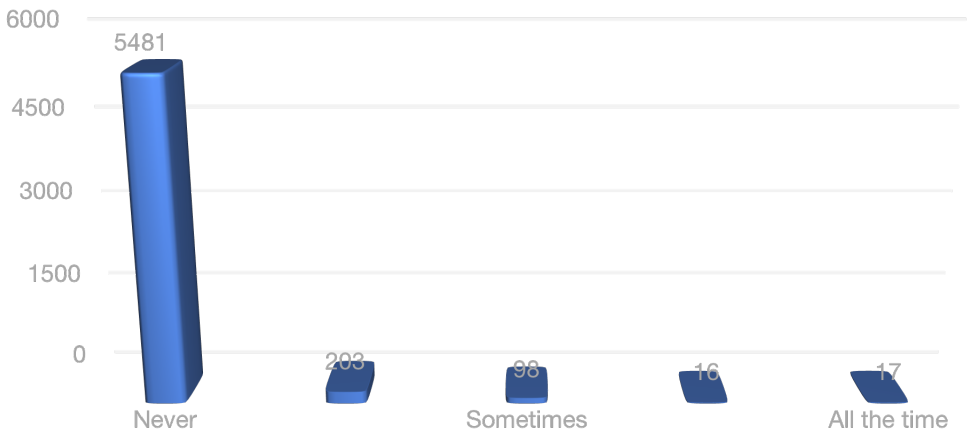
Graph 24. The situation of cyber bullying

21. Other people or friends share to different sites the photos that I upload to the Internet without my permission/notification.



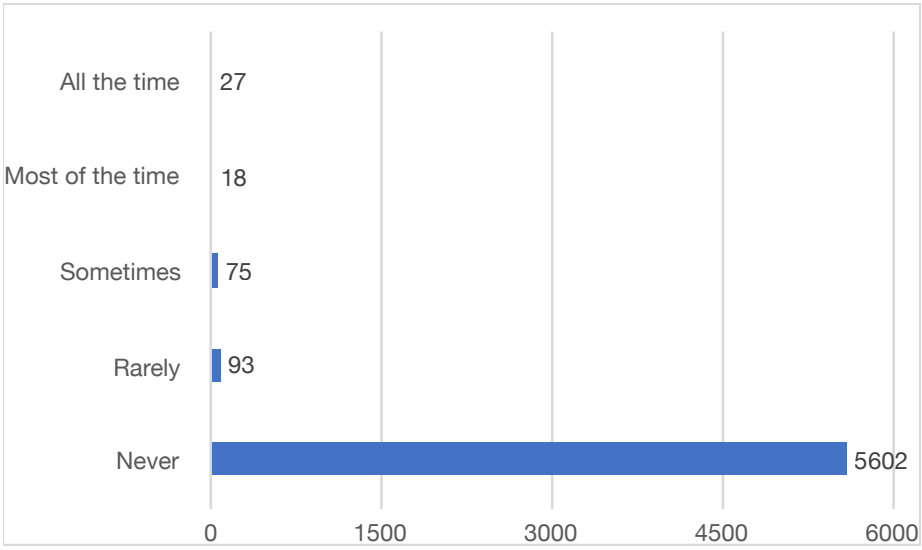
Graph 25. The situation of cyber bullying

22. Are you being rude in relation to others when online?



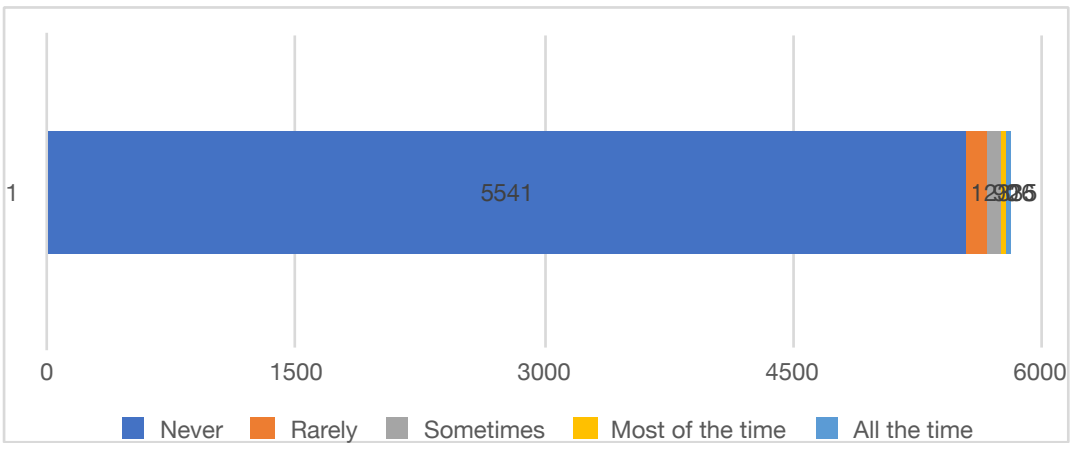
Graph 26. Predisposition to cyber bullying

23. I use my friends' passwords and their personal information on the Internet without their notification



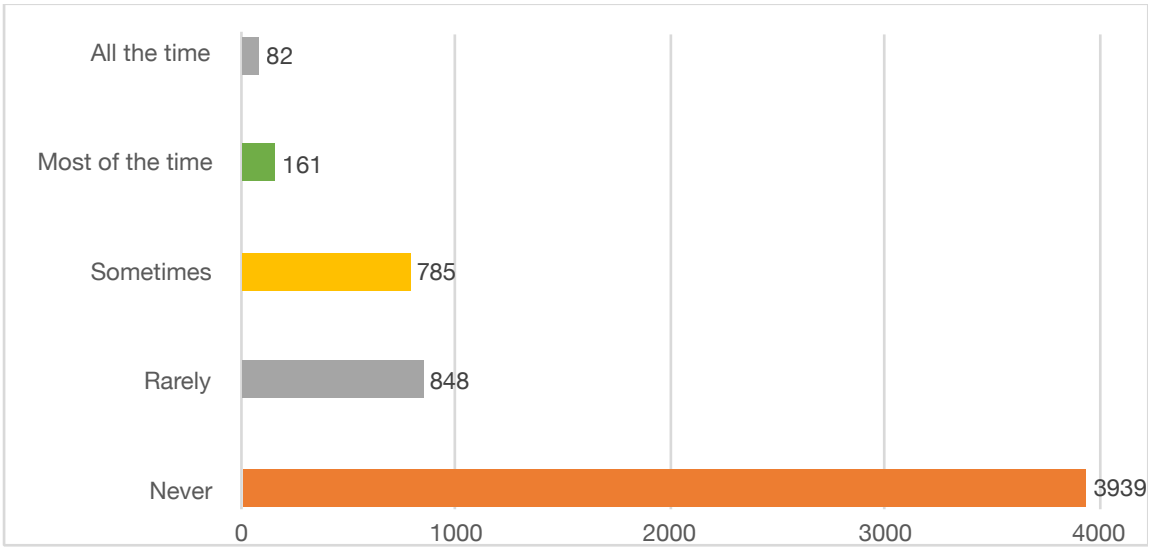
Graph 27. Predisposition to cyber bullying

24. I use the personal information of people I do not know personally on the Internet.



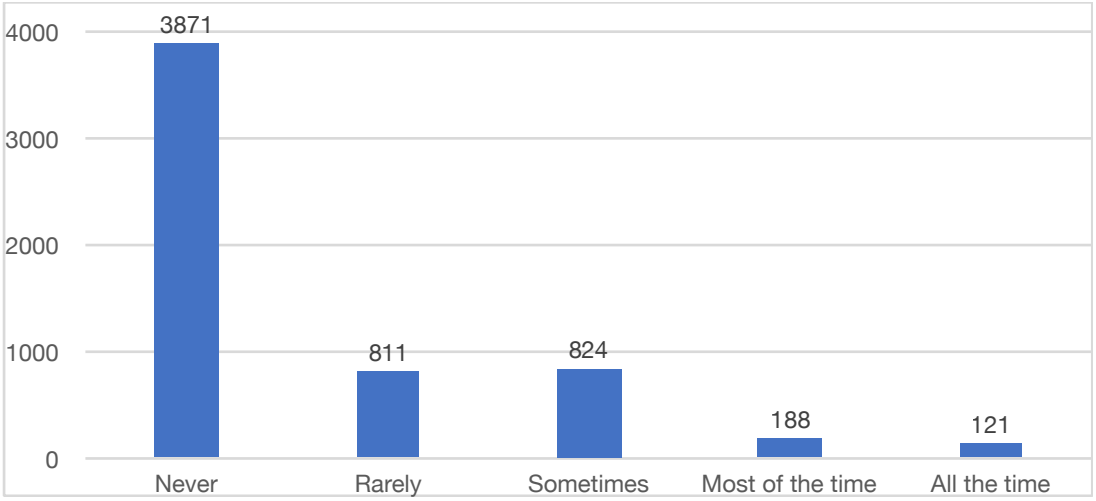
Graph 28. Predisposition to cyber bullying

25. Do you chat with people you don't know on the Internet/virtual world?



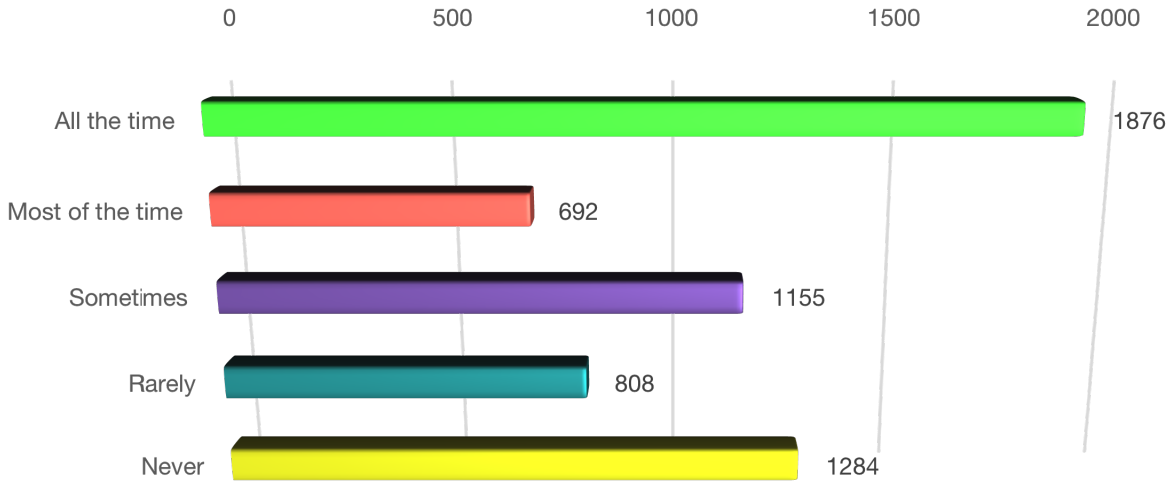
Graph 29. Cyber bullying situation

26. Do you make friendships in the virtual world with people you don't know in real life?



Graph 30. Cyber bullying situation

27. When I encounter a disturbing situation on the internet, I share it with my family members/friends.



Graph 31. Cyber bullying situation

CONCLUSIONS AND RECOMMENDATIONS

The study that conducted with the involvement of 5815 pupils aged 9-17 studying in secondary schools in different regions of Azerbaijan addressed a total of 27 questions in 10 different categories. Each response of the pupils to the relevant questions were analyzed and explained afterward. This section provides recommendations, as presented below, based on the results achieved at the end of this study.

According to the study, 4615 (79.4%) out of 5815 pupils participating in the survey used broadband internet at home, whereas 1200 pupils (20.6%) joined the online education process by using the internet packages offered for mobile phones. Pupils, in general, use a variety of platforms to join the online learning process. For example, the Microsoft Teams platform states that approximately 2.7 GB of internet spent for video-calls and -meetings while using video/audio in one hour (Griffith University, 2020). Given the fees required and internet limits set for the use of mobile internet packages, more socio-economically disadvantaged families or families with many children will more likely have serious restrictions on Internet use. In this context, free internet services need to be provided to ensure that all pupils, especially those belonging to disadvantaged groups, have sustainable access to education.

22.5% of the surveyed pupils expressed their total dissatisfaction with the quality of the internet. The speed of both broadband and mobile internet in Azerbaijan have been found to be lower than the standards of global internet speeds. Thus, when looking at the statistics on global internet speeds for November 2020, Azerbaijan's mobile (31.45 mbps) and fixed broadband (23.04 mbps) internet connection speeds is lower than the world average (45.69/91.96 mbps) (OOKLA, 2020). Since this was assessed as a restrictive factor on Internet access, a lot of works need to be done to improve the internet infrastructure.

The most commonly used device in the families of 5656 pupils (97.3%) participating in the study was identified as being a mobile phone. The study also discovered that the number of electronic devices in the families of about half of the pupils was less than the number of people working or pupils/students. In this context, it would be helpful to implement a public policy (e.g. “one pupil, one computer”) to identify particular families living in disadvantaged social-economic conditions and having a large number of schoolchildren/students, and provide electronic devices to them.

The study found that about 56% of pupils possess the ability to access the information they needed online. 10% of pupils did not have at all or satisfactory digital skills to find the needed information. In general, digital literacy is defined as the ability to use different technologies properly in order to access, produce and share accurate information in the learning process (Hamutoglu et al., 2017). In other words, digital literacy includes features such as obtaining and organizing accurate information in an online environment, evaluating it critically, and presenting it effectively. In this context, children should not only understand the technology they use, but also be able to exercise it reliably and effectively. That is, they must master the details of this technology used. Eshet-Alkalai (2004: 93) describes digital literacy as “the ability to survive in the digital age.” This thinking expressing digital literacy shows how important the concept is in modern times. With this in mind, it is recommended to implement programs to boost pupils’ digital literacy both within the family and in educational institutions.

When comparing the pupils’ responses to the questions about the purpose of employing digital technologies before and during COVID-19, it was observed that the use of digital technologies in the performance of homework significantly increased. Although 2993 (51.5%) pupils reported using digital technology to prepare their homework prior to the COVID-19 pandemic, this number increased to 4,419 (76%) pupils doing so during the pandemic period. The achieved result can be considered natural considering that all educational activities were carried out by using digital technologies.

In addition, compared to the figures before COVID-19, during the pandemic period, there was a decline in the number of pupils utilizing digital technologies for the purpose of playing games and chatting with friends in social networks. Various factors may possibly influence this result. For example, restrictions on the Internet access in the families where access to broadband internet is not available, or restrictions imposed by parents over the amount of time spent for digital technologies by especially younger pupils, online exhaustion stemming from pupils’ overuse of digital technologies for educational activities more than before, etc. might be reasons for the decline in the amount of time spent for games, social networking, or socializing in the virtual space.

Approximately 66% of the surveyed pupils reported that digital technology was never or rarely used in their schools during pre-pandemic period. This result testifies the fact that digital technology is not widely used in the schools of those pupils, except for the teaching of computer science. Considering that about 31% of the surveyed pupils live in the capital Baku and Absheron, the schools from other regions with more outdated technological infrastructure will have more restrictions on the use of digital technologies.

It is therefore important to provide state support to strengthen infrastructure capacity of those regions.

About 62% of the surveyed pupils notified that they were satisfied with the conditions created by their schools in organization of online classes, while 10% of pupils complained about their school's impotence in creating necessary conditions for online teaching. The factors such as socio-economic situation of the regions (where these schools located), the poor infrastructure in these regions, as well as the insufficient management skills of school leaders to handle the crisis situation, etc. can negatively affect the organization of online classes. In this context, the improvement of relevant infrastructures and the development of the education managers' crisis management skills and knowledges would be useful.

According to the responses of the surveyed pupils, the majority of teachers, or more precisely 80% of them, in their schools are mastering either good or excellent digital skills. This situation can be evaluated as a positive one. At the same time, approximately 4% of the students stated that their teachers' digital skills were at a very low level.

The pupils from younger generation can easily make use of digital technology when searching, communicating, or learning any information in their daily lives, and meanwhile they need the right form of support to obtain all the skills and insights needed. Teachers play an invaluable role in providing the necessary support to pupils in this work. Therefore, teachers must assist pupils not only in accessing information in digital space, but also in identifying the quality and reliability of the information obtained therefrom. The rapid advancement of science and technology has changed the conventional paradigm of teachers being as "specialists" only. Today, in addition to schooling, teachers must be also involved as "learners". It might be difficult for many educators to accept this idea, but it is important to keep in mind that digital literacy is a skill that every educator needs to know in the 21st century. It would, therefore, be useful to involve teachers in subject-specific specialization courses/seminars/trainings in order to improve their digital literacy.

Approximately 54% of the surveyed pupils said they were encouraged by teachers or parents to use digital technology, while 28% of them were not sufficiently endorsed in this direction by either teachers or parents. Various factors can affect this result, such as the unsatisfactory level of digital skills of parents or teachers, the lack of motivation to motivate pupils, especially the time constraints of parents. Therefore, it is necessary to investigate the factors that do not underpin pupils or prevent their encouragement in using digital technologies and to find proper solutions to the problem according to the results obtained.

Approximately 46% of the surveyed pupils were not feeling bad at all when they did not carry electronic devices, while 58% were not feeling psychologically bad (weak) when they did not check the Internet. Although the high percentage of pupils reporting that they do not experience a negative psychological condition without using the Internet is considered a positive thing, the existence of pupils who are addicted to digital technologies is undeniable. Technology is an attractive and easy-to-use field for people

of all ages, and it has countless benefits to human life. However, excessive use of the Internet and digital technologies can lead to addiction. Internet addiction is categorized as being a behavioral addiction. Excessive use of the Internet is the most defining indicator in the classification of Internet addiction. In this sense, Internet addiction is the inability of an individual to control his/her use of the Internet and, as a result, face problems in his/her psychological, social, and academic life (Yengin, 2019). With this in mind, the excessive and unlimited use or the loss of self-control over the use of the Internet and digital technologies can lead to very serious emotional and physical harm. In addition, other factors such as anxiety, depression, lack of social support, stress, etc. are also risk factors for digital addiction (Rugai & Ekeke, 2016).

Parents, in particular, bear a great responsibility to prevent the harm caused by excessive use of the Internet and digital technologies. Meanwhile, parents themselves should first reconsider their habits in using these technologies. Because, the children in families with technology addiction are more likely to have similar problems. In addition, given the risk factors, such as lockdowns during the pandemic, distance learning, restrictions on pupils' socialization activities with peers and friends and the consequent anxiety problem, stress, weak family ties, and lack or absence of social support, for technology addiction of the children, it is important for parents to manage this process properly. It might be totally a wrong step to completely restrict children's access to the Internet or to ban the use of technological devices. Instead, it may be more effective for parents to create a tracking mechanism to manage the appropriate content for their children's age and the duration of Internet use.

58% of the surveyed pupils noted that they spent "up to 1 hour" a day with peers and friends, 29.8% spent "1-3 hours", 9.5% spent "4-6 hours", and 2.7% spent more than "6 hours" a day. This means that more than 12% of the surveyed pupils spend more than 4 hours a day in the virtual space with peers and friends. As part of measures to prevent the rapid spread of the COVID-19 virus, home lockdowns have enabled schoolchildren to meet almost all of their needs via digital technology. Thus, through digital technologies, pupils both continued the education process by participating in a virtual classroom environment and used online platforms to socialize and maintain friendly relationships. While it is natural for pupils to continue their relationships with other peers and friends through online platforms, the sheer number of these interactions can be identified as a defining factor in pupils' technological addiction. Therefore, it is especially important for parents to take such issues seriously and monitor the duration and purpose of Internet use.

Among the responses of the surveyed pupils on the purpose for which digital technologies are mostly used, the answer of "for my lessons" was in the first place with the highest percentage (94.4%). It is quite natural for a large number of pupils to employ digital technologies for their lessons at the time when the educational process is organized at a distance. At the same time, when analyzing the answers to the question of how much time they spend on social networks and game platforms, 63% of pupils said that this time is up to an hour, 26.2% said they spent between 1-3 hours, 6.8 % reported spending "4-6 hours" and 3.6% of them more than "6 hours" per day. This

means that about 10% of pupils spend more than four hours a day on social networks and game platforms. While it is normal to meet pupils' needs through digital technology during the COVID-19 pandemic, whereas overmuch socializing through digital technologies, chatting with friends/peers in social networks and spending too much time on video game platforms can lead to technology addiction.

The World Health Organization (WHO) has included computer game addiction to the category of "mental health problems". As being classified as a "game disorder", the disease has been described as "a pattern of severe addiction and violent behaviour that causes problems in determining the individual's interests and day-to-day activities" and is listed in the 11th edition of The International Classification of Diseases (WHO, 2018). Parents bears the greatest responsibility to eliminate such emerging problems emanating from pupils' excessive use of computer games as a result of lockdown during a pandemic. In this context, the establishment and application of tracking mechanisms will be important for parents to effectively implement the control process when pupils use digital technologies, especially for computer games.

The summary of the responses to the questions related to cyber bullying posed during the study is as followings:

- At least 17% of pupils surveyed experienced, albeit rarely, cyber bullying;
- At least 24% of pupils said that their friends or strangers sent them unpleasant messages;
- At least 7% of pupils reported that other people or friends shared at least once their photos uploaded to the Internet on different online platforms without the pupils' permission/notification;
- At least 7% of pupils admitted that they performed at least once a cyber bullying against others in a virtual environment;
- About 4% of pupils surveyed said they used their friends' passwords or personal information on the Internet without their notification;
- 5% of pupils surveyed reported using at least once the personal information of strangers;
- 32% of pupils reported at least once talking/discussing with strangers on the internet/virtual space;
- At least 33% of pupils said that they made friends in the virtual space with the people they did not know in real life;
- At least 22% of pupils said they did not share their situation with anyone when they encountered a disturbing situation, i.e. cyber bullying on the Internet.

Looking at these statistics, it can be said that the surveyed pupils both were subjected cyber bullying to some extent and conducted cyber bullying themselves. In general, cyber bullying is a new type of violence, especially in the Internet age. Cyber bullying or electronic bullying is defined as bullying carried out electronically, such as via the cell phones or the Internet (Olweus, 2012). UNICEF (2020) describes cyber bullying as act

of violence carried out through the use of digital technologies, but also emphasizes that this type of bullying can also occur on social media, messaging and gaming platforms. According to UNICEF, cyber bullying is a repetitive behavior that aims to intimidate, irritate or embarrass the target. Cyber bullying is usually a form of deliberate aggression against peers who are unable to defend themselves (Kowalski, Limber & Agatston, 2012). During the COVID-19 pandemic, pupils considered the Internet as an integral part of their daily lives for chatting and spending time with friends/peers, as well as using various types of games. UNESCO (2020b) noted that increased internet use could put children at a greater risk for causing online harm. In this context, the increasing use of the Internet during the COVID-19 period as a main part of pupils' daily lives can lead to potential hazards such as cyber bullying, sexual abuse and online sexual exploitation. The boundaries of Internet use, as an area of social interaction, are large enough that cannot be fully controlled.

A new study by L1GHT (2020) analyzed millions of websites and social platforms during the outbreak of the COVID-19 pandemic. The results of the study showed a noticeable increase in the level of bullying and abusive language among children. Thus, the analysis of the study concludes that there was a 70% increment in bullying and abusive language use among children and youth on social media and conversation forums, and a 40% increase in hate speech on gaming platforms. This has led to a multiplication of cyber bullying, especially among children and young people who had to use the Internet for many activities during the pandemic.

According to UNESCO (2020b), cyber bullying will scale up when children suddenly spend a long and unplanned time online and struggle with stressing factors therein. Continued and remotely operation of the educational institutions during the pandemic, as well as the stress and anxiety stemming from this situation may contribute to the augmenting the cyber bullying and digital addiction too. On the other hand, pupils with a high level of digital literacy have an ethic of Internet security, cyber bullying, and the use of online resources. However, one cannot deny the fact that not all pupils have the same level of knowledge on this subject. Pupils should be taught about what is a cyber bullying and how they figure out if they are being subjected to cyber bullying on online channels. In addition, it is also important to inform pupils about what they can do to protect themselves from any cyber bullying and to cope with the cyber bullying they face, and who they can ask a help for. In this case, the main responsibility falls on parents and teachers. An effective fight against cyber bullying can be conducted in the school-pupils-family triangle. For that reason, communication and coordination between family and school is very important. Teachers and parents have an important role to play in providing the knowledge and skills for their children's need to navigate the online world safely. Ensuring proper parental control and engaging in open dialogue with children and setting aside time for offline activities with them can help parents to prevent online harm. However, for this to happen, both parents and teachers must be aware of the risks and have a sufficient level of digital skills to guide pupils.

REFERENCES

Eshet-Alkalai, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia*, 93-106.

Griffith University (2020). https://www.griffith.edu.au/staff/working-remotely/data-usage 12.01.2021

Kowalski, R. M., Limber, S. P., & Agatston, P. W. (2012). *Cyberbullying: Bullying in the digital age* (2nd ed.). N.J: Riley–Blackwell.

L1ght (2020). L1ght Releases Groundbreaking Report on Corona-Related Hate Speech and Online Toxicity. https://l1ght.com/l1ght-releases-groundbreaking-report-on-corona-related-hate-speech-and-online-toxicity/ 02.02.2021

OOKLA (2020). Speed test global index. https://www.speedtest.net/global-index 13.10.2021.

Rugai, J. & Hamiliton-Ekeke, J. (2016). A Review of Digital Addiction: A Call for Safety Education. *Journal of Education and e-Learning Research, 3*(1), 17-22.

UNESCO (2020a). COVID-19 impact on Education https://en.unesco.org/COVID-19/educationresponse/countries . https://en.unesco.org/COVID-19/educationresponse 02.01.2021

UNESCO (2020b). Cyberbullying: What is it and how to stop it. 10 things teens want to know about cyberbullying. https://www.unicef.org/end-violence/how-to-stop-cyberbullying 02.01.2021

WHO (2018). Addictive behaviours: Gaming disorder. https://www.who.int/news-room/q-a-detail/addictive-behaviours-gaming-disorder 01.02.2021

APPENDIX. Questions used in the research

Category	N	Question	Options
Internet access and usage opportunities in Azerbaijan	1	What kind of internet is used at home?	a) WIFI b) Mobile internet packages
	2	What is the quality of the internet used?	a) It is very bad b) Satisfactory c) It is good d) Excellent
Availability of digital devices in families	3	What is the condition of electronic devices in the family?	a) It is equal b) The number of devices is less c) The number of devices is more
	4	What is the most used electronic device in the family?	a) Phone b) Computer c) Tablet

The state of pupils' digital skills	5	I can get all kinds of information through the Internet.	a) I do not agree at all b) I do not agree c) I partially agree d) I agree e) I completely agree
	6	I have enough skills to use digital technology	a) I do not agree at all b) I do not agree c) I partially agree d) I agree e) I completely agree
Digital use of children and youth during the COVID-19 pandemic	7	How has the use of electronic devices and the Internet changed during the pandemic compared to the period before the COVID-19 pandemic?	a) I used the same amount b) Before I used to use it more c) I use it more now
	8	What was the main purpose of using digital technology before COVID-19?	a) To make home tasks b) For extracurricular activities c) For the game d) For social networks e) To chat with my friends
	9	For what purpose do you use digital technologies more after COVID-19?	a) To make home tasks b) For extracurricular activities c) For the game d) For social networks e) To chat with my friends
School experience in the use of digital technologies	10	How was digital technology used in your school before the pandemic?	a) It was not used b) Rarely used c) It was often used d) It was used at all times at high level
	11	The school creates all conditions for organizing online classes	a) I do not agree b) I partially agree c) I completely agree
Parent and teacher mediation in digital use	12	What is your teacher's ability to use digital technology?	a) Very low b) Medium c) Good d) Excellent
	13	My parents and teachers encourage and guide me in the use of digital technologies.	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time
The problem of excessive internet use	14	I feel bad when I don't have electronic devices (phone, tablet, computer, etc.) with me.	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time
	15	I feel powerless when I'm offline	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time
Relationships built on online platforms with peers and friends	16	How much time do you spend in the virtual world with your peers and friends?	a) Up to one hour a day b) 1-3 hours a day c) 4-6 hours a day d) More than 6 hours a day
Status of use of social network sites and video game	17	Why do you use digital technologies (computers, smartphones) more?	a) For my classes b) For social networks c) For the game d) To chat with my friends

and video game platforms	18	How much time do you spend on social networks and gaming platforms during the day?	a) Up to one hour a day b) 1-3 hours a day c) 4-6 hours a day d) More than 6 hours a day
Cyber bullying	19	Is stranger child being rude to you online?	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time
	20	Other people or my friends on the Internet send me messages I don't like	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time
	21	Other people or friends share to different sites the photos that I upload to the Internet without my permission/ notification.	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time
	22	Are you being rude in relation to others when online?	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time
	23	I use my friends' passwords and their personal information on the Internet without their notification	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time
	24	I use the personal information of people I do not know personally on the Internet	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time
	25	Do you chat with people you don't know on the Internet/virtual space?	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time
	26	Do you make friendships in the virtual world with people you don't know in real life?	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time
	27	When I encounter a disturbing situation on the internet, I share it with my family members/friends	a) Never b) Rarely c) Sometimes d) Most of the time e) All the time