Actuality. We live in the time when we are surrounded by a lot of useful devices. The most popular of them is a mobile phone.

Modern mobile phones are rather compact, handy and easy to carry around. They may support many additional services, such as SMS, email, packet switching for access to the Internet, gaming, Bluetooth, personal organizer, MMS for sending and receiving photos and video, radio, GPS navigation, etc. Nowadays mobile phones even replace personal computers, MP3-players and cameras.

Many people cannot imagine their lives without using them. I can say that my classmates and I are not an exception. Maybe 10 years ago mobile phones were not so popular. My parents even say that they did not have phones and their life was very interesting without them. For example, my mum got her first mobile phone only when she was 30 years old. But nowadays mobile phones play a vital role in our life. Many children ask their parents to buy them mobile devices, saying that everybody in their classes has a mobile phone.

As for me, I like to listen to music, watch videos, and communicate with my friends. And social networks like vKontakte, YouTube and Telegram help me with that.

What would you rather go a week without: your cellphone or your toothbrush? Forty percent of iPhone users answered «toothbrush» to this question. Our mobile phones are always with us: at home, at different activities and, of course, at school.

Many research and projects connected with the use of mobile technology in education have been carried out in the USA and Europe since 1980s when hand-held devices were first tested in a few schools.

A lot of European countries launched some mobile learning projects.

One of the themes of United Nations Educational Scientific and Cultural Organization is connected with mobile-learning. In «UNESCO Working Paper Series on Mobile learning» they claim that «mobile technologies can be used to improve educational access, equity and quality around the world»1.

They hold UNESCO Mobile Learning Weeks in different countries from 2011, where experts discuss the questions of m-learning, its importance for today and future generations.

In our country schools have been facing with the problems of m-learning only over the last 5 years.

As Diana Koroleva, the analyst of Center for Leadership in Education, Institute of Education, National Research University Higher School of Economics in one of her articles writes, «today the average class of school students is a community of advanced Internet users» who are «always online and switch easily among studies, communication, and entertainment». But «schools…create an alien environment for students by denying them opportunities to use mobile technologies»2.

At the same time, today a lot of schools all over the world have banned mobile phones in schools. In our lyceum students have to hold their cell phones in their schoolbags during the lessons and they can use them only during the breaks. But I don’t think it is right. So I asked myself a question if our mobile phones could be beneficially used in our studying hours too.

Problem. Cell phones are fun to have. However, there are many people in the world who are against mobiles. Doctors claim that this device has a bad effect on people’s health. It can damage our eyes and immune system. The signals that are sent from mobiles can be harmful. Some people also believe that phones prevent live communication. And, it is true. With the appearance of mobile phones and computers people meet up with friends less often.

But in my opinion, a mobile phone is a very useful and important device. We simply cannot live without it in the modern world, even though it is not safe for our health.

Elaboration of the problem. During my research I learnt the history of creating cell phones, examined two different points of view on using cell phones in school which exist nowadays. While researching I tried to answer the question if cell phones should be banned in

schools or not. I also tried to find out the way how we can use them in our school studying process.

Object and subject of the research. A mobile phone as one of the most useful modern gadgets and its using in educational process as a learning tool.

Hypothesis. We can have some benefits from using our cell phones in school and we can make them a part of our classroom activities if we get creative.

Objectives. To find out in what way the problem of using cell phones in schools which is now very important can be solved.

Tasks:
To study the history of creating cell phones and their abilities, which can be very useful for students.
To study benefits and disadvantages of using them in schools. To find out what students, their parents and teachers think about it.
To create some «Cell Phone Learning Strategies» which can help students and teachers in solving this problem.

Methods. When studying different points of view on the problem of using cell phones in school I tried to analyze their advantages which can be helpful for students and teachers in educational process. In the main part of this work there are some facts which illustrate outcomes of the research.
Next, in order to understand the importance of the problem I made a survey. I asked my classmates, teachers, parents and students from 6-8 forms of our lyceum some questions about it and examined their answers. Some results of this survey can be seen in the supplementary.

Main part

History of Cell Phones

Mobile phones have changed the way we live. As we all know, mobile phones didn’t just happen overnight. They grew up, just like us. The modern phone that we use today is the result of work of many people.
The first person to have the patented telephone in 1876 was Alexander Graham Bell. He is considered to be an inventor of this practical device.
Other scientists who also worked on telephone invention were Elisha Gray, Antonio Meucci, Thomas Edison and some others.
The 20th century was the era of phone development and modernization. Modern phones are presented mostly by mobiles, which support IP telephony and wi-fi. Mobile phones passed through five different generations. Now we’ll come into the past and briefly examine the history of mobile phones.
The World’s First Cell Phone

The world’s first cell phone was launched in 1983. It was the Motorola DynaTAC 800x. It was priced at around $4,000 and lasted for 30 minutes of talk time before «dying». It was also very large. Despite the phone’s large size, it was still considered to be the most portable telephone ever made.
In 1973 the first cell phone call was made by Motorola researcher and executive Martin Cooper. Cooper, from Motorola, placed a call to Dr. Joel Engel of Bell Labs.
1G was first deployed in Tokyo in 1979. People didn’t care about security at this point: they just thought it was really cool they could own a mobile phone and call people across the nation.
2G cellular networks started to emerge in the 1990s along with the second generation of mobile devices. 2G also allowed for basic SMS communication. The world’s first SMS text message was sent in Finland in 1993.
The first smartphone was probably released earlier than you expected: many call 1993’s IBM Simon the world’s first smartphone.
Compared to today’s standards, the world’s first smartphone looked pretty stupid: it was a calendar, address book, clock, notepad, email service, QWERTY keyboard, and touchscreen all rolled into one. It also featured a stylus and predictive typing. It even had apps! The Simon Personal Communicator cost about $1000.
2G introduced cellphone networks to people around the world. Suddenly, everyone needed a mobile phone in their daily lives. People wanted to do more than just call: they wanted to browse the internet at faster and faster speeds.

It became clear that 2G technology was not able to keep up. Thus, 3G started to roll out around the world. Once again, the world’s first 3G network was launched in Tokyo in May 2001. This opened the door for media streaming over mobile networks. For the first time, mobile devices were fast enough to support online video and music streaming.
By 2007, the first iPhone was presented. It was the first phone, where you could easily do a lot of things very fast and without any problems.
Before the end of the first decade of the 21st century, it was clear that it was time to bump up to 4G, which promises to offer speeds up to 10 times faster than existing 3G technologies. Two different 4G technologies were developed, including the WiMAX standard and the more popular LTE standard.
Briefly tapping such a rich history of mobile phones is difficult, but I think we have covered the major events in the world of cellular communication.
During developing mobile technologies a new, «digital generation» of people appeared.
Generation Z children

In the modern world talks about «Generation Z» or «Digital generation» are common. According to a theory of generations, which first was introduced in the USA in 1923 by Karl Mannheim in his essay «The Problems of Generations», Gen-Z kids (those who were born after 2000) never knew the world before the advent of the Internet and mobile technology.

The relationship between generation Z and technology is more like that of fish and the water. They just cannot live without it.

I was born in 2004, I am 13 years old and I am a typical representative of Generation Z. So, the question is who we are, «digital children». Here are some tips:

– We are the first truly «mobile» generation;
– We prefer social networks (like Snapchat, Instagram, VK etc.) and online rather than in person communication;
– Most of the Gen Zs watch Youtube on a regular basis and some of them have their own Youtube channels;
– Most of us prefer mobile devices rather than television;
– 33% of Gen Zs watch lessons online;
– 32% work with classmates online;
– 79% of Gen Z children displays symptoms of emotional distress when kept away from their personal electronic devices.

So, I can say, that a mobile phone is not only a gadget for us, which we use to connect with our parents or friends, but it’s a great part of our life.

Today some psychologists claim that if parents and teachers want to bridge the gap between them and their Gen Z children, they should not take their kids’ gadgets away! Because social media is one of the best ways to connect with them.

Cell Phones in School – «Yes» or «No»?

Today there are some arguments about whether or not students should use cell phones in schools. Parents, students, and teachers all have different points of view. Some say that to ban them completely is to ignore some of the educational advantages of having cell phones in the classroom. On the other hand, cell phones can interrupt classroom activities.

While studying this problem I made a survey and asked some teachers, students and their parents what their opinion on it is. 56 students, 30 parents and 12 teachers took part in my survey. Here are some results of it.

50% of parents and teachers think that mobile phones should be banned. On the contrary, 95% of students are for using them in school.

While answering the question if students should be allowed to use their phones for educational purposes or not, 50% of teachers voted for using them and even gave some examples of doing it. At the same time 100% of parents were against this idea. But 88% of students are interested in using cell phones during school hours. Moreover, 79% of students said that they would rather go a week without their toothbrush, but they can’t live a week without their mobile phone.

To sum up, most parents and 50% of teachers can’t imagine how to use cell phones in educational process. But a lot of children believe that it’s possible and they can be more motivated and interested in learning with the help of their mobiles.

As a result, I consider that parents, students, and teachers need to think carefully about the effects of having cell phones in school.

Some of the reasons to support cell phones in school are as follows:

• Students can take pictures of class projects to e-mail or show to parents.
• Many cell phones have calculators or Internet access that could be used for assignments.
• If students are slow to copy notes from the board, they can take pictures of the missed notes and view them later.
• During study halls and on music lessons, students can listen to music through cell phones.
• Parents can get in touch with their children and know where they are at all times.
• Students can contact parents in case of emergencies.
• Students can use a lot of useful apps to make better progress in studying with the help of them.
• Students can download texts and student books and read from there.

Some of the reasons to ban cell phones in school are as follows:

• Students might send test answers to friends or use the Internet to cheat during an exam.
• Students might record teachers or other students without their knowledge. No one wants to be recorded without giving consent.
• Cell phones can interrupt classroom activities.
• Cell phones can be used to text during class as a way of passing notes and wasting time. As a result, children don’t pay attention to the studying process.
• Students are continually playing with their mobiles in class, during the breaks.

Some schools in the UK already have strict policies about phone using in schools. They say that allowing cell phones in school is a danger to the health and education of students. Banning cell phones is in the best interest of everyone. Schools that ban students from car-
rying phones see a clear improvement in their test scores, according to a study by the London School of Economics.

So, they think that for the good of the students cell phones need to be banned from schools.

**Cell Phone Learning Strategies**

Some people may want to ban cell phones from classrooms, but I disagree. We did not ban pens in our schools because students can pass notes during class. The pencils have also survived even though you could poke someone in the eye. This is a new time in education. These mini computers are walking through the doors of schools each day in our pockets. Let’s just put them to work. Teachers and students can use mobiles as a creative learning and teaching tool.

I think, that cell phones can be used in the classroom if the students use them for educational purposes.

Cameras on phones, for example, can have educational benefits, giving students the ability to record school events, to make reports with visuals, and to develop photo essays.

Smart phones also give students easy access to the internet, which can be a benefit for research (replacing the use of a computer within the school, because usually there is only one computer in the classroom. And only teachers can use it).

It’s very important to explore all positive possibilities of cell phones. Here are some strategies to use cell phones in the classrooms as learning tools. The list of useful educational Apps and web-platforms you can find in the supplementary.

**Recording Lectures: The «Flipped» Classroom**

Many teachers can structure their lessons in so called «Flipped Classroom». These teachers are recording their «lectures» using video or audio and students are listening to that outside of class as the homework and in class they are completing the practice and the teacher serves as a guide, re-teaching as needed. On most cell phones students can watch a video of a previous lesson on YouTube.

**Delivering Materials**

A lot of materials can be sent digitally directly to students on their personal cellphones. Different learning platform can be created to make it possible for teachers and students to take part in discussion areas and chat with each other making blended learning a real possibility.

**Awesome Apps to use**

Dropbox is one of my most beloved apps. Dropbox allows all my computers and my phone to interact together. So the photo I take on my cell phone can be put in my Dropbox app and now it is available on all my devices, I love it!

Evernote is the next in line of cool apps for the classroom. This handy app lets you type a text note, or clip a web page. If your phone has a camera you can snap a photo, and now you can also grab a screenshot. Like dropbox it doesn’t matter what device you are on, they all sync together.

iBooks is a program, where you can keep your electronic library and read books from it. This program can be used in literature lessons, or you can even download student books there!

Google Translate is a program where you can easily translate words or even some word combinations. You can also listen to the right pronunciation of the words.

GarageBand is a program, where you can play musical instruments. Maybe you won’t believe me, but absolutely everyone, even people, who have never used a real musical instrument can play some music in this app. I think the easiest instrument there is the guitar.

KeyNote is a program, where you can make presentations. Yes, you heart it rightly. You can make presentations on your phone. There are a lot of animations, prints, types of slides.

Numbers is a program for making tables, timetables and different diagrams. There are a lot of templates there, so it won’t be a problem to make your own table in this app.

We can continue this list. These are only some examples.

**Solving Common Problems Using Cell Phones in Class**

Of course, we can have some problems while using mobile phones in school. But it seems to me, if we get creative, any problem can be solved.

**Students without Cell Phones / Smart Phones**

Not every student has a cell phone. The easiest way to work around this is to have students working in groups, discussing and solving problems together. Now we only need one cell phone to report out the group work.

**Wireless Access**

Wireless access might be another problem. Smart phone users will usually try and find a wireless network instead of going through the provider signal. If this is the case, you may want to focus more on the group work or homework-related cell phone strategies.

**Keeping Cell Phone Use Appropriate**
Thinking about using cell phone in the classroom teachers need to make sure they involve their students in the conversation. Every student should be reminded every day about appropriate technology use, and what to do if the rules are broken.

**Help manage the use of devices in the classroom**

Teachers can help manage the use of devices in the classroom, for example, with the posters «Devices in use!» and «Devices off and away!». The variant of such posters you can find in the supplementary.

**«Contracts» between all members of educational process**

«Contracts» can become a good way of involving all school members in the process of using mobile phones in school. What would a contract for the use of mobiles in school look like?

The elements of a school cell phones contract are:

- In which school situations should mobiles be permitted or prohibited? E.g. calls during lessons are prohibited; calls at lunch time and breaks are allowed etc.
- Where should a mobile be kept during class? E.g. on the desk, in a school bag etc.
- Where should mobiles be left during PE classes? E.g. in the changing room, in the gym itself, with the teacher etc.
- How should mobile use be regulated during school events? E.g. mobiles may be used during the meal break, during school trips, otherwise they must be turned off etc.
- What rules should be laid down on use of mobiles to photograph and film in school? ¼ Under what conditions might photographs/videos taken in school be published? E.g. only with the consent of subjects of the photo or film, given verbally; only within school and class projects; not at all etc.
- Which mobile applications may be permitted in school, and which prohibited? E.g. Bluetooth (data transfer) and mobile cameras may only be used in the context of class work, SMS permitted only during breaks etc.
- How will any rules be monitored? E.g. by the school forum, regular joint evaluation etc.

The points of the contract can be a part of class rules. Once this contract has been finally agreed, it should be signed by teachers, parents and pupils.

**Conclusion**

In conclusion, I believe that there was a time when «not in school!» was an important rule set for teenagers or children and their cell phones. Things have changed and cell phones are now should be welcomed in schools... with some guidelines, of course.

I have to say, that my hypothesis has been proved. We can have some benefits from using our cell phones in school.

All the goals of my research work have been achieved.

I have studied the history of creating cell phones, their advantages and disadvantages and have found out what students, their parents and teachers think about using them in school. I have created some «Cell Phone Learning Strategies» which can help students and teachers in solving this problem.

The question is no longer whether to allow smartphones in the classroom or not, but how to most effectively integrate and support them. In increasing situations where all pupils do have a mobile or a smartphone with multiple functions, it is worth thinking about the positive potential of this technology.

Generation Z children will live in the world of mobile devices and use them whether we want this or not. If we are prepared for life after school, we should be allowed to use the tools we will be using when we get there.

Moreover, it is more important nowadays not to ban mobile phones in schools but to teach kids responsible ways of using technology, teach them to be safe in the Internet, etc.

It should be mentioned that the results of the research can be used by both teachers and students in order to make the educational process more interesting and exciting with the help of modern cell phones.

I also would like to continue the research of this topic. On the next stage I am going to create some «Lists of rules» for Students, their Parents and Teachers, some useful safety tips for the cell phone generation.

**References**

6. https://www.youtube.com/watch?v=p656FvLHuBY.
7. https://www.youtube.com/watch?v=TgUVQMirzfs.
Supplementary 1

Theory of Generations

ONE POLICY
FIVE GENERATIONS

Five generations will be working side-by-side in 2020. Here we look at the most effective ways to communicate a data privacy policy with each.

GENERATION Z

Digital natives
Fast decision makers
Highly connected
Survey Results

Should cell phones be banned in schools?

Should students be allowed to use their cell phones for educational purposes during school hours?
Have you got a mobile phone or a smartphone?

What would you rather go a week without?
## Supplementary 3

### List of useful educational Awesome Apps and web-platforms

<table>
<thead>
<tr>
<th>The name of the App</th>
<th>Description</th>
</tr>
</thead>
<tbody>
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</tr>
<tr>
<td>LearningApps.org</td>
<td>LearningApps.org is a Web 2.0 application, to support learning and teaching processes with small interactive modules. Those modules can be used directly in learning materials, but also for selfstudying.</td>
</tr>
<tr>
<td>Google Street View</td>
<td>Google Street View is an app, that provides panoramic views from the positions along nearly every street in the world.</td>
</tr>
<tr>
<td>Google Classroom</td>
<td>Google Classroom is a free web service for schools that aims to simplify creating, distributing and grading assignments in a paperless way.</td>
</tr>
</tbody>
</table>
Supplementary 4

Devices
In Use

Devices
Off & Away