# Art and Rationale State of the Educational Transformation in Bulgaria

One of the most important things that distance digital education will give to the current generation is the ability to work and learn in a digital environment. A skill that may be much more valuable in the future than we think today. The COVID pandemic has changed the world forever, and it is more than clear that even after that, distance work and learning will become much more prevalent than they are now. Although even for us, the people who grew up at the dawn of the mass Internet, it is still difficult to accept the idea that one can get a functional higher education on the Internet and work a high-paying responsible job from home, for the current young generation these ideas will not are unnatural. Students today will be the teachers and drivers of the economy tomorrow. And they will be much better prepared for the future dominated by new technologies. What seems like a minus to us at the moment may soon turn out to be a plus. Bulgarian schools have also taken a proactive approach to the new reality, adopting possible distance learning tools. After the measures for social distancing were announced and the possibility to move was limited, in just a few days the Ministry of Education and Science (MES) in cooperation with Microsoft Bulgaria and Google Workspace managed to ensure the smooth start of distance learning and recommended Microsoft Teams as a platform for digital education nationwide.

# a) Learning environment and learning spaces

## School in the cloud

"School in the cloud" is a designed learning platform for the shareable learning environment, aiming at integrating cloud-based platforms for education in Bulgaria. Google Workspace for Education Fundamentals is a free cloud platform used by over 600 schools and kindergartens in Bulgaria. The resources and tools of the platform are widely applicable and can be used to organize the learning and learning processes, supported by digital technologies. Google Workspace for Education Fundamentals enables synchronous/asynchronous distance learning through:

creating virtual classrooms with the ability to share content;

possibility to make a video connection;

online knowledge testing system;

system for generating reports for daily activity;

e-mail/chat communication system;

Google Workspace for Education Fundamentals for Education is officially recognized and fully meets the requirements of the Ministry of Education and Science!

Source: <a href="https://cct.bg/google-workspace/">https://cct.bg/google-workspace/</a>

**Publication** 

## Microsoft Teams

"Microsoft Teams is easy to use and combines all the other tools that are in the cloud, so we focused on it. "Both in reality and in the digital world, we have to choose the most secure environment," she said.

The decision of which educational distance learning platform to use was left to the teachers because they know their graduates better than anyone else.

Students and teachers can use Office 365 Education for free, including Word, Excel, PowerPoint, OneNote, and now Microsoft Teams, plus additional classroom tools. All you have to do is have a valid school email address. This is not a trial period - so start today.

https://education.microsoft.com/en-us

# School software SHKOLO

One platform with many integrated modules.

It offers the follow-up functionalities:

E-Journal

Allow parents to monitor their children's achievements (grades, absences, feedback, program, homework) on a daily basis.

**NEA** and State Matriculation

All results of national assessments and matriculation examinations in one place with the diary and other administrative information.

Statistics

This module answers many questions - in what place a student is successful in his class, at school, in the city, in the country.

#### Extracurricular activities

Parents and students have information about all extracurricular activities and activities approved by the school.

## Fees and obligations

Secure and secure opportunity for parents to transfer money to the school account with a few clicks.

## Composition

All school assets managed from one place. Tracking the movements of assets and the change in their condition.

# Competitions

Tracking participation and results of domestic and national competitions and Olympiads.

#### 5 years storage

All data from previous years (estimates, absences, etc.) are stored, and you can refer to them at any time.

## Study materials

Teachers and students are free to exchange and evaluate digital learning content (tests, essays, presentations, projects, etc.)

### Communication

Convenient tool for direct communication with parents, students, and teachers (emails, SMS, Facebook notifications, mobile notifications).

## **Badges**

Allows teachers to encourage students for good behavior by handing out virtual badges (Bulgarian version of ClassDojo).

#### CDO

The system also maintains a diary for the all-day organization of the learning process (self-preparation, activities, and sports).

#### Events and calendar

Automatic notification of parents and students about upcoming events (classwork, parenting, excursion, State Matriculation, etc.).

#### Teacher absences

Administration of all teacher absences. In the absence of a teacher, the program may be changed or an alternate may be appointed.

Exercises, homework and tests

Creating, sharing, evaluating and tracking homework, tests and exercises.

Mobile app

iOS and Android. The parent receives real-time event notifications (new rating, new absence, new badge, etc.).

https://www.shkolo.bg/#sectionid-26

# Zoom

In the last two years, Zoom has become the preferred platform for online communication, due to the easy-to-use interface and the support of video conferencing with up to 100 people at a time. This allows remote users to share information for free in the battle against Covid-19. The application can be used free of charge by any user. Here's how to start an account and start working with Zoom from your computer:

https://www.digital.bg/kak-da-izpolzvame-prilozhenieto-zoom-na-kompyutara-article932246.html

# Ucha.se

Ucha.se is the most awarded educational platform in Bulgaria, with all lessons for school from 1st to 12th grade in an understandable and interesting language.

Ucha.se is an online platform with school lessons, which strives to present them in understandable and interesting language. The site covers 97% of the teaching material for students from 1st to 12th grade. The materials follow the official school curriculum of the Ministry of Education and Science and comply with the State Educational Standards. Ucha.se received the award for the best educational site in Bulgaria for 3 consecutive years (2012 - 2014), and in 2018 it became the site of the year in the categories "Service site" and "Product site".

Source: <a href="https://ucha.se/">https://ucha.se/</a>

# b) Contribution of the education for changing the social context

Achieving equal access of children and students to quality preschool and school
education and increasing the opportunities for their personal and professional
realization;
Reducing social exclusion and improving the quality of life and the well-being of citizens;
Providing conditions for qualification and career development of teachers specialists;
Increased social status of the Bulgarian teacher and motivated pedagogical specialists;
Increased educational results of students;
Reducing social exclusion and improving the quality of life and the well-being of citizens;
Supporting the preservation and expansion of the Bulgarian ethnocultural and
educational space;
Providing an opportunity for training in Bulgarian language and literature, history of
Bulgaria, and geography of Bulgaria for students from families of Bulgarian emigrants;
Ensuring coherence and effectiveness of vocational education policy and training at
national, regional, and local levels;
Creation and implementation of mechanisms for quality assurance of the professional
education and training and its orientation towards the labor market;
Providing conditions for raising the qualification and career development of experts
from the Ministry of Education and Science, RWU, vocational training teachers, and
mentors in enterprises;
Creating conditions and environment for the implementation of the National Strategy
for Learning throughout life for the period 2014-2020.

Source: https://www.mon.bg/upload/18498/1700\_Pril-3-Prog-format-MON-2019.pdf

# c) Education and the role of the development of the social (and soft) skills

Gradually new ones appear in the various classifications of educational concepts - competencies, competencies, life skills, key competencies... In the last few years, a number of thorough discussions have taken place on the basic (basic) competencies that each person must own. The results of these discussions outline complexes of competencies that are considered to be particularly important, significant for the implementation of the person - personal and professional. Competence is most often associated with an ability understood as something that can be done, ie. knowledge-based skill. The competencies are abilities, but not innate, but

"those that are developed through quality learning, in an appropriate pedagogical environment and by acquiring a serious practical experience".



Gradually, as a result of the search for a "conceptual basis for school-based comparisons of achievements in international and national systems" the notion of key competencies is imposed.

These competencies are defined as a key because:

- are applicable for all ages and for all forms of education;
- make lifelong learning real;
- provide a link to the labor market;
- are a tool for measuring quality, but also for measuring

educational systems;

create opportunities for mobility, credit transfer, and certification;

- ensure the successful expression and social well-being of people through improving the quality of life.

The topic of competencies and in particular key competencies is not new to education. It was formally launched in December 2006 with the adoption of the Recommendation of the Council of the European Union and of the European Union Parliament for a Framework on Key Competences for Lifelong Learning, although its production is the result of a long process, which is based on it the concept of the set of competencies necessary for personal development, active citizenship, social inclusion and employability in 21st Century.

Source: https://www.mon.bg/upload/21560/l-book.pdf

# a) Learning environment and learning spaces

1. Topic: "Transforming the learning process in the Bulgarian school."

Title of the document: **The 1: 1 model - a device for each student** 

Author(s) or origin: Prof. Dr. Galin Tsokov & Creative Learning Center

1: 1 (One to One) is a model of the organization of the learning process, in which each student and teacher has their own electronic device and a personal profile (account) connected to it. The model assumes the use of digital technologies as a resource and platform, not as an end in itself. Laptops or tablets are most commonly used to implement 1: 1, and it is assumed that the devices have a permanent connection to the Internet. The 1: 1 model assumes that teachers and students have access to all the content that the Internet offers (or another large set of content). This is a prerequisite for significant changes in the course of the lesson, the objectives of the lesson, and the processes of teaching and learning in general.

Source: https://chromebook.bg/model-1-1/

2. Topic: "The creation of new school centers"

Title of the document: "BUILDING A SCHOOL STEM ENVIRONMENT"

Author(s) or origin: Ministry of Education and Science

The national program is aimed at creating new school centers -

integrated set of specially created and equipped learning spaces with

focus on the study and application of competencies in the field of natural sciences in the state and municipal schools in the country. Every school

The center will include a change in the following elements: physical environment (improvement of interior architecture and furnishing of existing spaces), technologies, learning content, teaching methods, and management of the educational process. The program is aimed at schools with innovative practices and those with the potential for development of innovations in the field of natural sciences, digital technologies, engineering thinking and mathematics (STEM).

Source: <a href="https://www.stemcoalition.eu/programmes/building-school-stem-environment-stem-pr">https://www.stemcoalition.eu/programmes/building-school-stem-environment-stem-pr</a> ogramme-government-bulgaria

 Topic: "Improving the conditions for experimental work in Bulgarian schools in order to formation of students' practical knowledge and skills."

Title of the document: "PROVIDING A MODERN EDUCATIONAL ENVIRONMENT"

Author(s) or origin: Ministry of Education and Science

The current national program is a continuation of the ones implemented since 2007 national programs with various modules aimed at enriching and optimizing activities in the school education system. It is mainly aimed at the renewal of the specialized equipment of classrooms, laboratories, and workshops in

compliance with the developing modern new technologies, to conduct practical training in a real work environment, modernization of laboratory conditions and experimental work in the natural sciences.

The module "Libraries as an educational environment" was introduced for the first time in 2020 year and was developed in the implementation of the Agreement between the Ministry of Education and Science and the Ministry of Culture for cooperation for implementation of initiatives, programs and projects between public libraries in the country and the institutions in the school education system.

Source: https://www.moe.gov.ae/En/MediaCenter/News/Pages/Upgradedschools1.aspx

# b) Contribution of the education for changing the social context

1. Topic: "Awareness raising and training on the growing role of online information for young people - users of the online environment."

Title: "NEMO - use of new media in education to overcome discrimination against migrants."

Authors: Center for Development of Sustainable Communities and Council of Refugee Women from Bulgaria

The handbook is developed using factual data and research based on real models of discrimination and was created in collaboration with key figures for the growth of children (peers, family, school), including stakeholders, both migrant and non-migrant origin. In the handbook you will find:

- Curricula for teachers/educators/youth workers working with young people from 11 to 14 years and for activities in schools/youth centers
- Additional and preparatory materials (infographics, video tutorials, photos, comparative report, collection of historical figures, glossary of terms)
- A list of tips for adults and children for more awareness use of the online world
- Good practices from other projects
- Video from the project and other communication materials

#### Source:

https://cscd-bg.org/images/stories/docs/Nemo/NEMO Toolkit(BG)%20final%20version.pdf

2. Topic: "Important questions about children at school"

Title: "Children at school. 48 unasked questions"

Author: Professional community for inclusive education

The questions were selected by members of the school community. They aim to advise students in different social situations at school. The answers to these questions favor the social environment at school.

Source: https://www.ngobg.info/uf/documents/5/2363children\_at\_school48\_guestions.pdf

3. Topic: "Education and the pandemic."

Title: "Educational inequalities in time of the pandemic."

Authors: Asenka Hristova; Research Institute in education.

The restoration of the present learning process is critical, but not enough. Customize learning - quick identification and adapting to the individual needs of students, their motivation, skills, and interests. Application of flexible cooperative models of learning (as a prerequisite for increasing intrinsic motivation and commitment). Effective use of technology, creation of the opportunity to learn anywhere and anytime. Improving the quality of school life. Development of skills for self-regulated learning.

Source: http://ire-bg.org/wpsite/wp-content/uploads/2021/03/%D0%9E%D0%B1%D1%80%D0%B0%D0%B7%D0%BE%D0%B2%D0%B0%D1%82%D0%B5%D0%BB%D0%BD%D0%B8-%D0%BD%D0%B5%D1%80%D0%B2%D0%B2%D0%B5%D0%BD%D1%81%D1%82%D0%B2%D0%B0-%D0%BF%D0%BE-%D0%B2%D1%80%D0%B5%D0%BC%D0%B5-%D0%BD%D0%B0-%D0%BF%D0%B0%D0%B0%D0%B4%D0%B5%D0%BC%D0%B8%D1%8F.pdf

# c) Education and the role of the development of the social (and soft) skills

1. Topic: "Professional development of school teams".

Title: "Model Schools".

Author: Teach for Bulgaria

"Model schools" of "Teach for Bulgaria" is a two-year program for professional development of school teams. Its focus is on developing and implementing sustainable and effective school teaching and management practices that contribute to the success of each student.

Source: https://zaednovchas.bg/model-schools/

2. Topic: "Creating school groups to overcome school difficulties."

Title: "Your class"

Author: Primary school "St. St. Cyril and Methodius", Shumen municipality

From October 2017 in the primary school "St. St. Cyril and Methodius "launched the project" Your Hour "under the Operational Program" Science and Education for Smart Growth ", 2014-2020. The project is co-financed by the European Union through the European Structural and Investment Funds. Four groups have been formed at the school to overcome learning difficulties. The main goal of the project is to create conditions for increasing the potential of

students and their opportunities for successful education by supplementing, developing and upgrading their knowledge, skills and competencies.

Source: <a href="https://ou-tsarev-brod.com/%d0%bf%d1%80%d0%be%d0%b5%d0%ba%d1%82-%d1%8">https://ou-tsarev-brod.com/%d0%bf%d1%80%d0%be%d0%b5%d0%ba%d1%82-%d1%8</a> 2%d0%b2%d0%be%d1%8f%d1%82-%d1%87%d0%b0%d1%81/#more-6210

Topic: "Social skills. Self-management and self-control."

Title: "Competencies and education".

Theoretical articles and practical tips for creating an environment in which students can train the expression of civic position in a school environment. The publication can be used by any teacher with respect to student self-government.

Source: https://www.mon.bg/upload/21560/I-book.pdf

# a) Learning environment and learning spaces

# National Reforms in School Education

The April-September period was marked by the COVID-19 pandemic. Some of the legislative changes that have been made and those that are forthcoming are related to the creation of rules for education and training in a pandemic situation. In mid-March, The Act on the Measures and Actions During The State of Emergency was declared with the Decision of the National Asembly of march 13th, 2020, and on overcoming the consequences (title suppl. – SG 44/20, in force from 14.05.2020). According to the provisions of this Act until the end of the second academic term of the school year 2019 - 2020 the education of students enrolled in daytime, evening, the part-time, individual and combined forms of education and those in a dual system of education, as well as the personal development support, was organized, if and as much as possible remotely, in an electronic environment through the use of the means of information and communication technology. The training include remote teaching hours, self-preparation, ongoing feedback on learning results, and assessment.

## Source:

https://eacea.ec.europa.eu/national-policies/eurydice/content/national-reforms-school-education-9\_en

# b) Contribution of the education for changing the social context

NATIONAL DEVELOPMENT PROGRAMME: BULGARIA 2020.

Topic: NATIONAL DEVELOPMENT PROGRAMME: BULGARIA 2020.

The National Development Program: Bulgaria 2020 (NDP BG2020) is the leading strategic and programming document detailing the objectives of the development policies of the country to

2020. The vision, objectives, and priorities of NDP BG2020 are defined on the basis of a socioeconomic analysis drawn up for this purpose as well as on the submissions received as a result of the public discussions of each stage of the drafting of the document. The formulated objectives of the government policies will ensure the achievement of accelerated economic growth and raise the standard of living of the Bulgarian citizens in the medium and long term.

Source: https://www.eufunds.bg/archive/documents/1357828564.pdf

# c) Education and the role of the development of the social (and soft) skills

National Development Programme Bulgaria 2030 was approved by Decision № 33 of the Council of Ministers of 20 January 2020. As a priority, No1 is "Education and Skills". According to the Programme the main objective of the priority will be to increase the quality of human capital through the formation of highly educated, innovative, and active individuals, who are able to successfully become accomplished professionals and citizens, and thus contribute to their own well-being and the sustainable development of all social spheres. Education and training policy will cover each of the stages of personal development, following the principles of lifelong learning (LLL). They will be oriented towards increasing the scope and quality of education and training, with an emphasis on acquiring analytical skills and developing creative thought, enhancing people's ability to adapt to the technological transformation in time and the resulting changes in the labor market.

Source: https://eacea.ec.europa.eu/national-policies/eurydice/bulgaria/bibliography\_en

# a) Learning spaces (are there any other spaces besides classroom, circle time, open-air classrooms, etc.)

There are already schools in Bulgaria that are confident in the future. Principals and teachers in these schools have realized that for today's students, dictating terms from the board is tantamount to wasting time.

The statistics are official - 90 schools from 103 settlements, 90 municipalities and 28 districts are included in the List of innovative schools for the 2018/2019 school year. Each school relies on a different method to make the training of its graduates more interesting.

What we see - whatever. We all know that students need an innovative education. Sometimes even the students themselves are much more "in class" with the new methods than their teachers. This should keep teachers 'awake' at all times and keep their attention throughout the lesson.

However, most schools know. They know that they will gain the trust of students by breaking the outdated classroom system, start using cleverly new teaching methods and school management, and bring real life into the classrooms.

For innovative education, teachers must look for the new, use modern teaching methods and share their experiences. They need to foster creativity and expand the learning environment outside the classroom. The goal is clear - teachers need to prepare students for the future.

"The innovative school is not a certificate of quality, but rather a sign of the difference in the organization of curricula, programs, and plans," explained Asen Alexandrov, director of the 51st Sofia High School "Elisaveta Bagryana" at a conference on innovative education. He lists several key changes that school teams can make. The first is in pedagogical approaches, with Alexandrov setting an example with integrated lessons and an emphasis on important skills such as communication. Another element is the organization of the learning process, including different duration of school hours, use of technologies for easier management, communication with parents and external organizations. "The third thing that must exist in a plan for an innovative school is a change in the learning environment," added Asen Alexandrov. This means going out of the classroom as well as desks and tables arranged in different ways. "We must have a clear goal of what we want to achieve - whether to reduce dropouts or, for example, higher results," summarizes the director of 51 high schools. "But the ultimate goal is to get the most out of each student."



#### Source:

# b) Methods (learning by doing, cooperative learning, dialogic learning)

Examples of innovative approaches in the Bulgarian educational system in the last 5 years

## "Interactive education in 360 °"

A project aimed at promoting the learning process and contributing to the consolidation of the material taught received Erasmus + funding. "Interactive education in 360°" is an idea of Georgi Palpurin, a father who finds a way to make negotiating lessons interesting. The project offers innovative visual web additions to the study material.

75% of human perception is realized through the visual analyzer. Guided by this fact, "Interactive education in 360°" aims to facilitate and support the learning process for pupils and students. This will make it easier for them to understand the material being taught.

Thanks to the latest massive 360-degree virtual technologies, landmarks across the country will be available online in the form of virtual tours. In this way, children with disabilities or those deprived of the physical ability to visit the destinations in question will also have the opportunity to examine them in detail.

In the age of digital technology, the adaptation of society is a necessary step. This project can be an important part of this change in the right direction. The project is expected to be finalized in less than a year.

#### JUMP Math

JUMP Math is a mathematics teaching system dedicated to developing the potential of each child. It achieves its goals by promoting an understanding of and love for mathematics, both among students and their teachers. JUMP Math is a complete system - it contains materials for students and detailed guides for teachers. It began its development in 1998 and was founded by John Maiton, a mathematician and playwright who taught at the University of Toronto.

JUMP Math does not change the learning content or the class structure of learning. It changes the ways and steps of explanation, the teacher's attitude towards children, as well as the children's attitude towards the teacher and mathematics. The result of this change is phenomenal! All children in an average class become excellent in mathematics and study with great desire.

# Robopartans

Robopartans School of Robotics aims to awaken and strengthen students' interest in physics, information and communication technology, mathematics and technical sciences in general. Their mission is to improve children's learning and real encounters with robotics. At school, they enable students to think, make mistakes, create and be original. Teachers organize demonstrations, workshops, courses and robotics classes with students from all schools. With the help of real robots they provide a more practical view of science.

## EasyArt art classes

The main actor behind the various and inspiring initiatives of the Easyart Foundation is the artist Stanka Jeleva.

The idea of the initiative is through free art studios and an improvised museum to acquaint children with the main periods in the history of Bulgarian art - Prehistory, Thracian Art, Roman era, Bulgarian state, Golden Age, Middle Ages, Revival, Copies of iconic Bulgarian paintings.

Leading the workshops are students and graduates of the National Academy of Arts with experience in working with children, as well as volunteers from Societe Generale Expressbank and the Bulgarian Red Cross.

#### Fortissimo Class

Fortissimo Class is an innovative music education program. Traditional music lessons are diversified in a modern way and are dedicated to each of the nine main musical instruments of the symphony orchestra - violin, horn, cello, trumpet, double bass, guitar, percussion, flute and clarinet. The children's attention is focused in a modern way on the device, history and the most characteristic features of the instrument, as well as its numerous applications in various musical genres.

The creative imagination of each child and his active participation in the music class is stimulated - with educational and at the same time entertaining games, as each participant can truly touch the instrument and experience for the first time how music is born.

The lecturers are young musicians-enthusiasts who with a lot of love and dedication help the mission to give a chance to form a musical taste for the future among young people. The classes pass imperceptibly and fascinatingly, and according to the organizers, in anticipation of the next time, the children's eyes always ask "When will you come again?"

## Zograf project

Searching for an opera phantom behind the stage, in the sewing room, in the hall and behind the scenes is part of the innovative project "Zograf", which was realized by teachers and students in Stara Zagora's Second Primary "Petko Slaveykov". This practice has long been imposed by the drawing teacher Gergana Valkova, explained the director Milena Zhelyazkova. Some of the lessons are held outside the school: in the art gallery, in the regional library, in the museum, and recently in the opera house, wherewith the help of the director Ognyan Draganov and his employees under f

Source: Innovative education in Bulgaria

https://studyabroad.bg/%D0%B1%D1%8A%D0%BB%D0%B3%D0%B0%D1%80%D0%B8%D1%8F/%D0%B8%D0%BD%D0%BE%D0%B2%D0%B0%D1%82%D0%B8%D0%B2%D0%BD%D0%BE-%D0%BE%D0%B1%D1%80%D0%B0%D0%B7%D0%BE%D0%B2%D0%B0%D0%BD%D0%B8%D0%B5-%D0%B2-%D0%B1%D1%8A%D0%BB%D0%B3%D0%B0%D1%80%D1%81%D0%BA%D0%BE%D1%82/



THE MINISTER OF EDUCATION KRASIMIR VALCHEV OFFERS 113 INNOVATIVE SCHOOLS

Source: https://www.standartnews.com

# c) Social and soft skills

Learning is a social process that is largely lost in distance learning. Currently in Bulgaria, much of children's time is lost in schools because skills and knowledge are not related to life and reality. Teachers do not only influence the learning process. Researchers in the field of education have long noted the fact that the most successful teachers develop the overall personality of their students. They contribute to the building of social and emotional skills, which are key to successful performance not only in the university, but also in professional realization. Socio-emotional skills are basic for dealing with all life challenges.

As teachers, we influence our students - the quality of their learning and progress, but also their development. We have a key role in shaping the personality of the students we work with. Teachers combine traditional education with models for the development of social competencies or so-called "soft skills".

The challenges of the 21st century place new demands on generations and hence on education systems, whose task is now to educate a generation facing an unprecedented pace of social, environmental, economic and technological change. The goal is to build socially active individuals, leaders of a sustainable society, able to effectively adapt to rapid change. The emphasis in education is shifting from learning, conveying facts that can quickly become obsolete and irrelevant, to a model focused on developing social, "soft" skills.

The Organization for Economic Co-operation and Development has identified a set of 12 21st century skills, divided conditionally into three groups:

The first examines the learning skills that are key to adapting to the modern labor market and making children leaders and global, active, socially responsible individuals: Critical Thinking (Creating Solutions to Complex Problems), Creativity, Teamwork and Communication Skills - effective communication with people of different languages and cultures.

The second group covers several types of literacy. It examines the acceptance, interpretation and understanding of the flow of information that floods us on a daily basis, reading facts and figures. A key factor is the screening of reliable sources and facts from the general misinformation and the growing volume of fake news. These include: Information, Media and Technology Literacy.

There are five life skills that combine personal and professional qualities: Flexibility (adaptation to changing conditions), Leadership, Initiative, Productivity (maintaining productivity and completing on time, despite distractions) and Social skills.

Developing social and emotional skills in school will certainly increase the quality of learning and the success of the children we work with. But perhaps the most important consequence for us would be the joy of seeing how these children become competent, aware and effective individuals who successfully cope with the challenges of life and contribute greatly to the development of our society as a whole.



Source: Success in the 21st Century: Social Skills

https://ues.bg/bg/blog/516-uspehat-prez-21vi-vek:-socialnite-umeniya

## Learning model 1: 1

1. 7 schools launched a pilot project to study the 1: 1 learning model The study will include 230 students and 40 teachers who apply a competence approach supported by digital technologies.

Seven schools have launched a pilot project to study the One-to-One model of learning and teaching (1: 1). Applying a competency-based approach supported by digital technologies ", which is officially supported by the Ministry of Education and Science.

In the conditions of introduction of distance learning in the whole country, five Plovdiv schools - Ivan Vazov Language High School, Vocational School of Food Technology and Technology, Sofia University "Chernorizets Hrabar", "Exarch Antim I" Primary School, "Yane Sandanski" Primary School, together with the Burgas School of Commerce and 2 AEG "Thomas Jefferson" and 51 SU "Elisaveta Bagryan" in the capital, will participate in the study, which will describe their experience in applying the model "1: 1" and will support schools with specific pedagogical, methodological and organizational guidelines.

The study will include 9 classes, 230 students and 40 teachers, which are already organized according to the model, providing that each student and teacher to have their own electronic device and a personal profile (account) connected to it.

In the seven schools at the end of March there are the following achievements: 100% of students and teachers have personal electronic profiles, at least in one class 100% of students have school or personal laptops; project-based training has been introduced for these classes; 100% traceability of students' tasks and achievements is available; Pedagogical teams have been set up to plan the lessons, which are carried out as a team and at any time, and the learning process does not depend on the physical presence of all at the same time.

Based on the research, real data on the learning process, methodology, attitudes and competencies of students and teachers will be collected. The study was supported by an academic team led by Prof. Galin Tsokov - Deputy Dean of the Faculty of Pedagogy at Plovdiv University, the Center for Creative Learning and representatives of the seven schools.

The aim is to study the model of organization 1: 1, to reveal its advantages and limitations and to outline opportunities to implement the application of competence approach in Bulgarian schools, including in the period of distance learning and absenteeism. As a result of the study, methodological and organizational guidelines for mass application of the model will be prepared.



source:https://chromebook.bg/model-1-1/ https://cct.bg/

## 2. GIS in Bulgaria

## Title: GIS in School

Free GIS software for your school. Designed for teachers who want to add interactive tools to improve the teaching and learning of the curriculum.

Context of implementation: Free GIS software for your school.

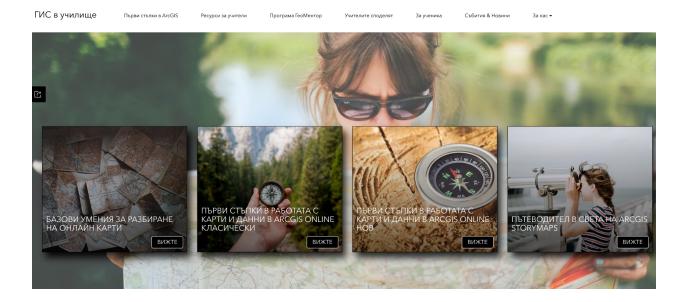
Target: Designed for teachers who want to add interactive tools to improve the teaching and learning of the curriculum.

Needs addressed: New skills for perceiving geographical information.

Description of the practice:Geographic information systems can make it visible and easy to perceive information, which is otherwise structured in tables and complex databases, using its location and presenting it as a map.

Pedagogical approach used: GeoMentor is a volunteer program in which professionals in the field of geospatial systems and technologies help teachers in Bulgarian schools to use the full potential of GIS technology in the classroom.

Impact: Thanks to the established connection between components, GIS integrate the location of objects (phenomena) with their description, revealing new ones spatial relationships and models.



## Useful links (good practice and any results):

https://teach-with-gis-bulgaria-esribulgaria.hub.arcgis.com/#lessons https://teach-with-gis-bulgaria-esribulgaria.hub.arcgis.com/#tools?share=link

51 High Innovative School "Elisaveta Bagryana" has been an innovative school since 2018. Innovation of 51.High School "Elisaveta Bagryana" is proposed in the context of the EU's goals of achieving sustainable, smart and inclusive growth, and in response to one of the main priorities of NDP BG2020, related to improving access and improving the quality of education. The innovation is directly related to the strategic goals of 51 Sofia University for student preparation to understand, contribute to and succeed in a rapidly changing society through the development of 21st century life skills. Our innovation offers the use of problem-based learning through solution on specific issues and focusing on specific global topics. The name of the project "GLOBAL" is an abbreviation of Civil, Personal, Public, Business, Analytical, Logical and Innovative Training. Global education will cover all subject areas and will be divided into 6 weekly cycles with set global topics:

- civic education
- personal development / development of social qualities and emotional intelligence /
- development of mathematical-logical thinking
- critical thinking
- foreign language and language training
- natural sciences and ecology
- digital competencies / art /

The school year is divided into 6 cycles. Each cycle focuses on one of the topics by defining a key question for the respective class. Subject teachers formulate appropriate sub-questions of the key, in accordance with the currently studied learning material, and coordinate the possibilities for interdisciplinary lessons and interdisciplinary links. Each cycle will last for 4-5 weeks, and the representative performances are below form of an open lesson and are realized in the presentation sixth week. The reporting of the process is in the cloud platform, where materials from the preparation are uploaded: presentations, video films, projects, drawings, photos from visited sites and video tutorial from the representative occupation.

During the last 6 weeks of each cycle, students complete a self-assessment form of their progress, which they discuss with parents, classmates and teachers and on the basis of which receive points (grade) according to the evaluation criteria of the respective teacher. The first year will include all students from the second, fifth and eighth grades. The students in the second grade have acquired basic knowledge of Bulgarian language and mathematics. Already can be involved in problem-based learning that will develop their functional literacy. Fifth grade is a very important transition period for students. Including them will increase interest to school and will reduce the stress of change. Our eighth graders are intensively studying English. Their inclusion is contributed to faster adaptation in the new school, increased interest in learning English and help them not to lose touch with other subjects by getting involved in project activity of interdisciplinary nature. In the second year, the new second, fifth and eighth grades will be gradually included. In the third year, second, fifth and eighth grades will be included again. This is how they are covered all students from second to tenth grades. During the three years of applying the innovative teaching method, everyone is involved in teachers teaching from second to tenth grades.

Letterhead: Questionnaire for self-analysis of a project task for a student from junior high school and high school stage

Source: https://51sou.info/

**51 High School "Elisaveta Bagryana"** is a school in the CLOUD! In 2018 the school implements the cloud platform Workspace for education, where all teachers and students have their own personal, secure profiles in the domain of the school. The school integrated the model 1:1 that is approved as a standard for co-creation initiatives, and it was established a local education agreement with Center for Creative Training.

In the last 5 years, the "one student - one device" is established as successful for lowering the learning process, built on meaningful use of information technology in education calling organizations. From this point of view 1: 1 is defines as a model for the organization of training, in which "every student in school is provided a laptop, tablet or other mobile device. Yes

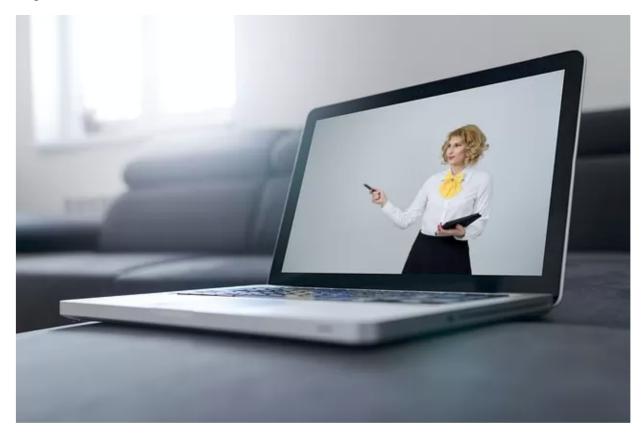
the student works with his individual device in and out of the classroom "(according to Glossary for Education Reform). The 1: 1 model is also associated with the construction of special physical educational environment that enables to "transform the experience of students in the classroom room, personalizing their training and, together but with this, expands their joint activity, through meaningful integration of information technology gee "(Burns, 2016). Within this educational environment, "skills for the 21st century are being successfully developed and improve students' academic performance mostly in language, writing, mathematics and science. Scientists-and teachers are moving away from the behavior of consumers of services that digital technology and the Internet provide, and begin to use to create real products and electronically content "(Zheng, Warschauer, Lin, 2016). The educational environment of the 1: 1 model suggests the implementation of 'hybrid training, which reads the benefits of direct training "eyes in eyes', with group activities and self-preparation, through free content and information technology" (Schaffhauser, 2014).



Source: https://sites.google.com/51school.bg/51school/%D1%81%D1%8A%D0%BE%D0%B1%D1%89%D0%B5%D0%BD%D0%B8%D1%8F-51/%D0%B8%D0%BD%D1%84%D0%BE%D1%80%D0%BC%D0%B0%D1%86%D0%B8%D1%8F-%D0%B7%D0%B0-chromebook

# "Distance schools might be created"

The principal of 51 High Schol Asen Alexandrov, who is the chairman of the Association of Directors in Secondary Education, proposes to create distance schools. A new educational institution, called a "Distance school", should be established in our country in order to meet the challenges facing education during a pandemic. Just as evening schools are separate institutions, so these can be a new kind of structure. In his opinion, there should be a distance school institution in the law and this should be included as a recommendation in the analysis of the Ministry of Education and Science. According to the popular director, there are already ready with staff, equipment and knowledge about this thing. If it starts now, maybe by the end of the first term of the new school year everything can be organized for the first such school. In this type of school teachers will teach only remotely. Classes should be small, from 15-20 students. These can be children whose schools cannot create quality distance learning, sick students or quarantined people from all over the country. Initially, only compulsory subjects can be taught in distance schools. These schools can then be used to educate children abroad.



By this idea, 51 High Schol offer an opportunity to reform the educational system and implement new learning methods, paths using both analogic and digital features. Here is the idea of reform:

The distance school can be opened as a center for personal development by the order of art. 49 para 1 / new item 7 / of PSEA:

P.7 For distance learning of students from 1st to 10th grade with physical disabilities, gifted or for social reasons

1. Which students will study in the distance school?

Students with physical disabilities, with outstanding gifts or for social reasons / on the recommendation of the Ministry of Interior, in circumstances that require distance learning for a period of more than 2 months / from 1st to 10th grade, for which the school, cannot provide LOE.

For children and students with physical disabilities, e-learning compensates for the insufficient physical access to the buildings, and for gifted students compensates for the insufficient opportunity for their participation in face-to-face training due to absences related to their participation in various competitions, contests, Olympiads, etc.

Here are the data for the 2020/2021 school year:

Total number of children with physical disabilities in kindergartens - 310, of which in CSES - 12. Total number of children with physical disabilities in school - 1067, of them in CSES - 157. Gifted students with scholarships:

- 1. Public schools 90.
- 2. Private schools 13.
- 3. Municipal schools 273.
- 2. For what period will they be trained?

From 2 months to one school year

- 3. What will be taught in the distance school?
- 3.1 Compulsory classes only, which are about 90% of all classes for the respective classes.
- 3.2 Elective classes are taken in the school in which they are enrolled, due to their specificity and great variety in different schools.
- 4. How will they train?
- 4.1 It will be taught at a basic level of difficulty due to the diversity of students with different levels of educational achievement

- 4.2 One of the two most popular educational platforms in Bulgaria will be used Teams Microsoft or Google Classroom
- / Google is recommended, because it is more intuitive, it can be worked from any device, including tablets, and accounts can be created and removed very easily at the school level by the school administrator./
- 4.3. In compliance with the requirements for the duration of the study hour in LOE.
- / 20 minutes for the initial stage, 30 minutes for the junior high school stage, 40 minutes for the high school stage /.
- 4.4. Students will be organized in classes and classes between 10-16 students in primary school,
- 12-18 students in junior high school, 16-22 students in high school.
- 4.5 They will have a regular curriculum with alternating distance learning hours and breaks
- 4.6. They will have a class teacher with a commitment of 4 hours per week for class hours and individual consultations with students and parents
- 4.7. If necessary and possible, personal meetings with students and parents will be organized by the principal, psychologist, class teacher, teacher
- 4.8. It may not be appropriate to admit 8th grade students (with extended and intensive study of different languages) due to the difference in compulsory school hours. It is not recommended to educate 1st grade students due to the much greater need for live contact.
- 5. Where will they study and what should be the equipment for such a school? In a separate building / floor / with specially equipped for the purpose. Rooms between 10 and 20 sq.m. are required, in each of which there should be a minimum:
- 5.1. computer with wired internet at speeds over 50 megabits per second
- 5.2. camera
- 5.3. microphone
- 5.4. a whiteboard
- 5.5. projector
- 5.6. desk
- 5.7. other teaching aids that can be visualized digitally
- 5.8. It would be good to have about 100 laptops available to hand out to students in need during the training.
- 5.9. Each of these rooms is a teacher's office or a primary school teacher.
- 5.10. At least 4 more rooms are needed for a director, a psychologist, an administrator of the training platform, an office.
- / At the moment I can think of at least 2 such suitable buildings in Sofia the former rubber and plastic technical school in Nadezhda and 141 primary schools in Nadezhda, in which separate floors can be converted. /

- 6. How will the application be applied and how will the term / annual grades be formed for the respective school year?
- 6.1. Parents apply for LOE at their child's school. If they are unable to comply with their request, the school authorities apply for admission of the child to the distance school to which they send:
- 6.1.1. Information about the student's grades during the past school year and the current grades so far.
- 6.1.2. Pedagogical and psychological profile of the student.
- 6.1.3. 75% of the ELR for the relevant period.
- 6.2. If the student is enrolled for an entire school year, his / her annual grades in compulsory education subjects are formed by the digital school, otherwise by the school he / she comes from, based on the current grades he / she has received in both schools. The term grades in the subjects of compulsory preparation for 1 term are formed where the student graduates. The annual grades in the subjects of the elective training are formed by the student's school.
- 7. Forming a team for the distance school and its preparation

Source: https://danybon.com/coronavirus/da-se-suzdadat-distancionni-uchilista/

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<sup>&</sup>lt;sup>1</sup> PSEA/ PRESCHOOL AND SCHOOL EDUCATION ACT

<sup>&</sup>lt;sup>2</sup> LOE/Learning in online environment

<sup>&</sup>lt;sup>3</sup> CSES/Center for special educational support

<sup>&</sup>lt;sup>4</sup> ELR/<u>E-learning resources</u>