Technology and Virtual Reality in Teaching - The Challenge of the New Century

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Abstract

The COVID-19 pandemic has changed the education way of function for millions of people around the globe. Isolation measures because of the Covid-19 pandemic, brought, among other things, new and previously unexplored challenges in the teaching process. Teachers, pupils, students, and parents faced the need to align learning needs with technological innovations, turning their homes into a separate school for all. They had to adapt a physical environment to their homes, to avoid distraction. Moreover, they had to better manage their computer time, as well as use new ways of communication with teachers or educators, especially when they needed help. On the other hand, the pandemic served as a reflection period for all individuals and researchers in the field of education, to understand how much youth and education systems must cope with to encourage the application of online educational assessment of learning instead of classroom traditional assessment. In the framework of pedagogical methodology that offers a study, we have tried to show the importance of adapting the subject to online teaching (ratio of theoretical and practical part within the subject), curriculum design and development and teacher profile. Valuable information is also provided on how these challenges can bring much-needed innovation to education, given the digital approach and new online methods used in response to the crisis, best practices from Member States, including new and existing teaching resources, etc., that address current challenges and to be used by teachers, other education professionals and the public. Albanian schools joined this initiative and shared their valuable experiences with European colleagues. Adapting to online teaching tools, the Council of Europe joined the efforts of the Albanian authorities by preparing the Albanian version of the manuals for teachers, who should be provided with knowledge of the use of ICT equipment, to manage any situation, adaptation to the changes of time and threats of nowadays.

Keywords: Online teaching, digital technology, internet, pedagogical method, pupils / students, educational system.

1. Introduction

Development of teaching technology during the didactic processing of knowledge in radical changes in the process of contemporary teaching and learning. The level and quality of knowledge acquisitiondepends very much on the efficient use of technology in learning, which creates opportunities for students to discover and judge new learning information. Given this assertion, the impact of technology on the development of critical thinking and other logical skills, has scientific support and is of particular interest in the field of education.

The application of teaching technology, as important factors in the modernization of the learning process, puts students, teachers, and all participants in the lesson, in the situation and in new relationships. The teacher is increasingly obliged to know the student's personality, his reactions to the new working conditions and affirms him as an active object in the learning process. Meanwhile, learning, becoming clearer and more engaging, mobilizes and activates all the

student's intellectual and working power.

The use of teaching technology creates conditions for students to imagine, analyse, evaluate, and not just reflect on the thoughts and ideas of others. It is known from the school practice in Albania that only a small number of teachers stimulate students to analyse the teaching content from perspectives and changes and to use the knowledge creatively. This is because it is easier to teach students to remember and memorize knowledge and then to evaluate it. However, if during the learning process we aim to develop high-level thinking, then the objectives should include the analysis, synthesis, and evaluation of knowledge. It is also a fact that some teachers want to have obedient students in the classroom and give only correct answers. But naturally the question arises: Should they continue to overestimate the intellectual dimension of teaching work by promoting only mechanical reproduction of knowledge?

The transformation of society that is taking place today is accompanied by rapid changes in the field of education. In the learning process, among the new teaching trends that try to change the traditional teaching is the focus on the development of students' critical thinking, starting from the lower grades of basic education.

Today, augmented reality technology has become widespread in various fields: internet, marketing, tourism, multimedia, science, and technology. Despite the unusual wording of the definition, "virtual reality" as augmented reality has long entered our lives. The story of virtual reality "has continued for about 20 years now, from the moment it was described as a sequel by Paul Milgrom and Fumio Cushino"[1]. Virtual reality technology consists of "superimposing virtual objects onto a real image taken via a video or webcam"[2]. For example, during a television broadcast of athletics competitions, spectators are presented with a photographic conclusion - a striped photograph that defines the athletes' positions. These lines are objects of augmented reality, as they provide additional information, making the real image more informative.

Virtual reality technology does not bypass the field of education and nowadays used by superficially in the process of studying natural and mathematical cycle disciplines, which is an objective necessity and need for the development of cognitive processes of modern pupils and students. The introduction of modern virtual teaching tools in the education system is the most important condition for increasing the learning effect, which consists in the interaction of 3D modelling and the use of the augmented reality effect. Having at hand a set of paper markers, we can at any time present the educational object not only in volume, but also do a series of manipulations with it, look at it "from the inside" or in section.

The importance of introducing virtual reality technology in the educational process lies in the fact that the use of such an innovative tool will undoubtedly increase the motivation of students to study computer science and other disciplines, as well as increase the level of information assimilation, synthesizing various forms of its presentation. A great advantage of using augmented reality technology is its clarity, completeness of information and its interaction. However, with proper development, this virtual technology can meet a wide range of educational and cognitive needs of pupils and students.

Also, the extensive functionality offered by virtual reality technology is available to teachers. Despite its great functionality, virtual reality technology is generally easy to use and available to an audience of age groups, especially students, but it requires new developments and in-depth study of new problems. Using this technology, the teacher can provide the necessary study material in a more interesting and accessible form for pupils / students, building a lesson based on exciting games, demonstrations, and laboratory work. The ease of use of virtual 3D objects technology simplifies the process of explaining new learning material. At the same time, by mastering augmented reality technology, the level of information education of teachers and pupils / students is increasing.

One example of the use of information technology was learning at home through online learning during the Covid-19 pandemic, which has changed the way millions of people around the globe are educated. The distancing measures forced families to teach their three children at home, turning them into a separate school for everyone. To develop this form of learning, pupils and students must have access to the appropriate computer equipment, internet access, and the ability to use them. They had to adapt the physical environment in the house to their homes, to avoid distraction. Moreover, they had to better manage the time on the computer, as well as use new ways of communicating with teachers

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[1] Butov Roman Alexandrovich dhe Grigoriev Igor Sergeevich, "Përdorimi i teknologjisë "shtuar realiteti "në arsimin modern", në: Dwax, f.1. Material i publikuar web site: *https://dwax.ru/sq/sovremennye-problemy-nauki-i-obrazovaniya-dopolnennaya/*
[Butov Roman Alexandrovich and Grigoriev Igor Sergeevich, "The Use of Technology" Augmented Reality " in Modern Education", in: Dwax, p.1. Material published on web site: https://dwax.ru/sq/sovremennye-problemy-nauki-i-obrazovaniya-dopolnennaya/]
[2] Po aty.
[Ibid.]

or pedagogues, especially when help was needed.

Albania in terms of time was luckier, if you can say so, because it had more time to better design distance or online learning. Of course, it is not easy to reprogram and acquire new methodologies in a few days, make them your own and discover the advantages and limitations. This experience will help us better understand the potentials of this method so that we can use it in the future (not only in times of emergency), along with the traditional methodology.

2. Challenges and Benefits of Online Learning. The Case of Albania

The COVID-19 pandemic worldwide has affected the development of many sectors, such as health, economy, free movement of people, education at all its levels. Suddenly from one day to the next, we woke up amid a pandemic we had never experienced.

Given the pandemic situation created in 2020, many governments were forced to make total closures, which brought about changes in the way universities work and learn. First China, then Italy and so on until it reached Albania.

This state of emergency when schools were closed in every country, forced us to quickly rethink and design the best possible strategies on how to develop learning without students in school. Italy initially had some schools that were more organized and others less organized. But with the passing of days and with the help of technology it became possible to solve most of the problems in this aspect. UNESCO estimates that schools in 177 countries have been closed as a precautionary measure against COVID-19, affecting some 1.3 billion students across the globe[3].

Meanwhile, referring to the UNESCO 2020 report, "the COVID-19 pandemic has caused the largest disruption of the education system in history, affecting an estimated 1.6 billion students in more than 190 countries worldwide[4]. "School closures have affected 94% of students worldwide and 99% of students in middle- and low-income countries"[5].

The ability to respond to school closures was heavily influenced by the level of development of the country: in the second quarter of 2020, 86% of primary school students in countries with low human development were left out of the education system compared with only 20% in countries with very high human development[6]. According to a report by the International Labour Organization (ILO) in 2020 on the impact of Covid-19 youth on the labour market, education, rights, and mental health, which included 12,605 young people aged 18-34, from 112 countries around the world, over 73% of young people were affected by the closure of schools, universities or training centres[7]. This effect was slightly higher in those who only studied (74%)[8], compared to those who studied and worked.

As part of the measures to prevent the spread of the global pandemic COVID-19, the Government of Albania decided to close all educational institutions on March 9, 2020, for a period of two weeks[9]. This decision was renewed on March 23 and currently the education system in Albania due to the high level of quarantine and forced social distancing will remain closed until the end of the pandemic situation or the government's decision to reopen the education system in the country[10]. Immediately after the announcement MoESY on March 21, 2020, publishes a Guide and on March 30 the

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[3] United Nations Educational, Scientific and Cultural Organization (UNESCO), Global Education Monitoring Report, 2020: Inclusion and Education: All Means All, Paris, 2020, p.6. Material published on the web site: https://unesdoc.unesco.org/ark:/48223/pf0000373724

[4] Ibid.

[5] Ibid., p. 7.

[6] Ibid., pp. 8-10.

[7] Intrenational Labour Organization (ILO), World Employment and Social Outlook - Trends 2020, Genève, Switzerland, 2020, p. 3. Material published on the web site: https://www.ilo.org/global/research/global-reports/weso/2020/lang--en/index.htm

[8] Ibid., pp. 4-5.

[9] Ministria e Arsimit, Sporteve dhe Rinisë (MASR), Urdhëri Nr, 19, "Për ndërprerjen e procesit mësimor në të gjitha institucionet arsimore publike dhe jo publike", *datë 9.3.2020.*
[Ministry of Education, Sports and Youth (MoeSY), Order No. 19, "On the Interruption of the Teaching Process in All Public and Non-public Educational Institutions", dated 9.3.2020.]

[10] *Pursuant to Article 102 of the Constitution of the Republic of Albania, Article 26 of Law No. 69/2012, dated 21.06.2012, "On the Pre-University Education System in the Republic of Albania", of DCM No. 243, dated 24.03.2020 "On the Declaration of the State of Natural Disaster", of the MASR Order, No. 591, dated 09.03.2020, "On the Interruption of the Teaching Process in All Public and Non-public Educational Institutions", of the Order of the Ministry of Health and Social Protection, No. 190, dated 19.03.2020, "On Closing the Activity of Public and Non-public Educational Institutions and Kindergartens to Limit the Spread of COVID-2019 Infection".*

updated Guide "On learning at home, due to the situation created by the spread of COVID-19".

According to MoESY "home learning aims to keep students engaged with the subject content and reinforce the knowledge gained not to be detached from the learning process, until the resumption of the regular learning process"[11]. After two announcements from MASR, the country was involved in a big debate where the most involved were the implementers: student-teacher-parent and student-lecturer-parent. But were the students, teachers, and parents ready for home schooling?

The closure was unexpected, due to the problems that occurred immediately Albania was not prepared for cases with diseases to be so frequent and as a result a closure was made that put teachers and students in a very difficult situation so how much can i remember an expression that says that if you are going to prove yourself, govern in a special or interesting year and if we were to consider it that way either the school year 2019-2020 that closed or the one that followed later, we can say that it is an interesting or special year. We found unprepared not only teachers, pupils, and students but also special institutions such as education directorates, higher education institutions (HEIs) or the Ministry of Education that did not have previous experience to do an online lesson, especially since there was no relevant instruction or work plan on how teaching would take place by closing schools.

This situation of immediate isolation in the home environment harmed, in the first place, the main beneficiaries of the education system, pupils and students, but also challenged the leaders of this field in Albania and the pedagogical and governing bodies in education. In these circumstances, consequently, the creation of virtual ecosystems that enabled distance learning took on a primary role[12], as a response to overcome the obstacle of physical attendance of studies in educational institutions due to quarantine[13]. These developments were reflected in the pre-university education in the university, which during the last decade has undergone qualitative developments that have led to an increase in the number of students who attend vocational education.

The initial MoESY guidelines required the entire system to go online, but still lack the specifications of comprehensive digital platforms that can guarantee quality teaching in this situation[14].

Finding was made fast by switching to online learning by acquiring the experience of foreign educational institutions with early history in online learning. In Albania, online learning was conducted in two ways:

➢ First, are the materials made available through lectures filmed and broadcast on Albanian Radio Television (RTA)

➢ Second, the work between students and teachers through social networks or various platforms that enable the creation of virtual classrooms (such as google classroom, zoom, edomondo, etc.)[15].

Many questions have been raised about the continuity of online learning, such as: Will online teaching be as

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11 Ministria e Arsimit, Sporteve dhe Rinisë (MASR), "Mësimi Online gjatë pandemisë COVID-19", në: Wordpress.com, f. 1. Material i publikuar në web site: https://mesimionlinecovid19.wordpress.com/
[Ministry of Education, Sports and Youth (MoESY), "Online Learning During the COVID-19 Pandemic", in: Wordpress.com, p. 1. Material published on the web site: https://mesimionlinecovid19.wordpress.com/]

12 Editor , "Sfidat dhe e ardhmja e mësimit online/ Sirika për ATSH-në: Koha e duhur për mësim të kombinuar në shkolla, edhe pas pandemisë", në Agjencia Telegrafike Shqiptare (ATSH), Tiranë, 20 Mars 2020, f. 1. Material i publikuar në web site: https://ata.gov.al/2021/03/20/sfidat-dhe-e-ardhmja-e-mesimit-online-sirika-per-atsh-ne-koha-e-duhur-per-mesim-te-kombinuar-ne-shkolla-edhe-pas-pandemise/
[Editor, "Challenges and the future of online learning / Syria for ATSH: The Right Time for Combined Learning in Schools, Even After the Pandemic", in: Albanian Telegraphic Agency (ATSH), Tirana, March 20, 2020. Material published in web site: https://ata.gov.al/2021/03/20/sfidat-dhe-e-ardhmja-e-mesimit-online-sirika-per-atsh-ne-koha-e-duhur-per-mesim -combined-in-schools-even-after-pandemic /]

13 Po aty.
[Ibid.]

14 Migena Kapllanaj dhe Bernard Zeneli, Sa funksionon mësimi në distancë (më tej: Sa funksion ...), raport i projektit "Aftësi për Punë" (S4J) i Agjencisë Zvicerane për Zhvillim dhe Bashkëpunim (SDC), i cili zbatohet në Shqipëri nga organizata "Swisscontact", Tiranë, 2020, f. 7.
Migena Kapllanaj and Bernard Zeneli, How Far is Distance Learning Working? (hereinafter: How Fra is ...), report of the project "Skills for Work" (S4J) of the Swiss Agency for Development and Cooperation (SDC), which is implemented in Albania by "Swisscontact" organization, Tirana, 2020, p. 7.

15 Agjencinë e Sigurimit të Cilësisë së Arsimit Parauniversitar (ASCAP), Sondazhi i mësimit online. Perceptime të nxënësve, prindërve dhe mësuesve (më tej: Sondazhi i mësimit online ...), Tiranë, 20 mars 2020, f. 5.
[Pre-University Quality Assurance Agency (ASCAP), Online Learning Survey. Perceptions of Students, Parents and Teachers (hereinafter: Online Learning Survey ...), Tirana, March 20, 2020, p. 5.]

effective as classroom or auditorium? Is this situation paving the way for the wider impact of technology and its influence? How accessible are teachers to the teaching process through electronic devices? How difficult is distance education?

However, this pandemic highlighted three main obstacles: first, long-term or part-time closure stress; second, the inability to go out and contact with society are very limited; finally, the fear of being left behind with lessons because of not taking subjects seriously or lacking an online presence.

> "According to many empirical studies, the ban on activities and the reduction of social contacts, the isolation and closure of many public places such as restaurants, libraries and educational institutions, have affected the mental health of people, especially young people. Such manifestations are stress and reactions to it, depression, post-traumatic stress symptoms, negative emotions (anger, fear, confusion) and insomnia"[16].

Also, the COVID-19 pandemic period, showed that a good part of the teachers and especially the older ones, as the technology for them is a little more difficult than for the younger generations, had extraordinary difficulties and maybe even enough to do a simple teaching via WhatsApp which is the simple giving and receiving of a task or the electronic posting of a video"[17].

In addition to the difficulties and barriers, current studies show that these challenges could bring much-needed innovation to education, given the digital approach and the new methods used. Some of the advantages of online learning are:

- The ability for the contents of these materials to be available and used at any time or place.
- Communication can be "one on one", "one on many" or "many more".
- In terms of time, students can communicate with teachers or peers in real time, such as by text or audio / video via Skype, for example. In this case the communication is synchronous. While in the case when students communicate with the teacher, among themselves or in a differentiated way, through emails or in groups, forums, etc., it is asynchronous.
- It not only overcomes the barriers of time and space, but also enables greater flexibility in ways and styles of learning. This brings personalization of this process with specific objectives for everyone, especially for those who start from unfavourable situations, not caused by this situation.

But we think that everything has its limits, and especially with the conditions of political-economic and cultural development of a country. Thus, there has long been talk of the need for radical changes in the education system, not only in Albania, but in most western countries. The pandemic period showed the importance of changing education and brought to the fore adaptation to the changes of time and virtual reality. Needed independent learning, the ability to solve problems as creatively as possible, informed, and autonomous decision-making, as well as the ability to adapt to rapid changes in technology[18]. As a result, teachers became the strongest link between students and success. But how could they be as efficient as possible in these times?

Keeping in mind the specific needs of teachers and pupils and students regarding internet access and available technological equipment was a necessity. Despite the challenges, all public and private educational institutions in cooperation with political actors and donors have reacted quickly to cope with this situation.

The problems started with the "ringing of the bell" for the start of the lesson. If at school on the premises of an institution there is a schedule, there is a bell to start teaching, with online learning this thing was missing. To get out of this situation teachers and education offices instructed to form groups and with the creation of them, students found it easier than those with technology have time to deal with daily use and consequently with the use and operation of

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16 Aida Zhupa, "Sidat dhe përfitime të mësimit online" (më tej: "Sidat dhe përfitime ..."), në: Dita, e përditshme e pavarur", Tiranë, 27 gusht 2021, f. 9.
[Aida Zhupa, "Aids and Benefits of Online Learning" (hereinafter: "Aids and Benefits ..."), in: Day, Independent Daily ", Tirana, 27 August 2021, p. 9.]
17 Erlinda Ziko, "Të rimendojmë sistemin e edukimit në kohën e koronavirusit - pro dhe kundër efikasitetit të programeve të mësimit në distancë" (më tej: "Të rimendojmë sistemin e edukimit ..."), në: Heda, Material i publikuar web site: https://www.heda.al/artikuj/pro-dhe-kunder-efikasitetit-te-programeve-te-mesimit-ne-distance (I aksesuar më 05/05/2020)
[Erlinda Ziko, "To Rethink the Education System in the Time of Coronavirus - Pros and Cons of the Effectiveness of Distance Learning Programs" (hereinafter: "To Rethink the Rducation System ..."), in: Heda, Material published web site: https://www.heda.al/artikuj/pro-dhe-kunder-efikasetit-te-programeve-te-mesimit-ne-distance (Accessed 05/05/2020)]
18 A. Zhupa, "Sidat dhe përfitime ..., f. 9.
[A. Zhupa, "Aids and benefits ...", p. 9.]

technology they have no problem. Difficulties could be zoom or other programs.

Being part of the teaching process, we think is a constant journey of self-knowledge and students. The pandemic brought about the urgent need for teacher training so that they would be able to impart that knowledge to students. This training included knowledge of online teaching, integration of specific curricula, based on current conditions and rigorous planning of topics and schedules. The methodology also had to be reconceptualized emphasizing the importance of leaving enough space for teachers and students to support each other in adapting to the new conditions.

Also very important is the content of the classes developed online, which should focus on various activities based on support and learning through interactivity with each other. This should include group work, educational games and the freedom of students to engage in these activities.

The remodelling of teaching during the COVID-19 pandemic has also led to the use of digital platforms in order not to close schools. In such situations, internet technology was used to communicate via emails and other forms also developed on communication platforms. Some of the most used platforms during this period are those based on Google technologies, such as: Classroom, Meet, Forms, etc. The NetAcad platform part of the CISCO network is also used.

> "Organization of distance learning process, based on the instruction of MoESY and Order No. 826 of the National Employment and Skills Agency (KPA), each school, including vocational ones, has drafted a work plan for distance learning with segregation of duties and organizing online distance learning delivery using digital communication technology. Internal orders of school directorates have recommended the coordination of work through the organization of groups on the platform for social communication with WhatsApp. The groups are built by the caretakers who also determine the form of communication to enable further steps of subject development based on the official teaching schedule"[19].

Another key factor is the fair and more efficient management of time, for both parties, for pupils and students as well as for teachers and professors. Through online methods, learning requires about 40-60% less time than in the traditional classroom environment[20]. This allows them to follow the lessons rigorously and seriously, but also not to have to give up their daily routine, nor to be forced to stay still and in the same place for a long time. This increases their learning confidence, performance, and efficiency.

Monitoring of the learning process is carried out mainly through electronic exchanges. Teachers report using a pre-agreed format. Formats or platforms were also used to allow the school board to participate in an online lesson. Student assessment is done through easily documented forms that include:

✓ Tasks sent on WhatsApp or e-mail/
✓ Mini tests via platform.
✓ Quizzes with multiple answers.
✓ Tests in Google Forms etc.[21]

In contrast to classroom and laboratory learning, online learning on the one hand gave students greater autonomy regarding the place and time of study, but on the other hand put to the test the digital reporting and evaluation processes in the school.

> "The reporting process for teaching is daily and for each class is done by the tutor who reports in writing via email sent to the principal and deputy principal. The Deputy Director prepares a summary daily report, which with Instruction no. 9, dated 23.03.2020 has been consolidated in the form and sent to the structures of the Regional Directorate of Pre RDPE regarding the progress of the learning process as a whole and with detailed information on the degree of implementation of the curriculum"[22].

Various researchers claim that the integration of information technology in online learning are: recording the lesson

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[19] Ministria e Arsimit, Sporteve dhe Rinisë (MASR), Udhëzues "Për mësimin në kushtet e shtëpisë, për shkak të situatës së krijuar nga përhapja e COVID-19" (më tej: Udhëzues "Për mësimin ...), Tiranë, 2020, f. 4.
[Ministry of Education, Sports and Youth (MoESY), Guide "For Home Teaching, Due to the Situation Created by the Spread of COVID-19" (hereinafter: Guide "For Home ...), Tirana, 2020, p. 4.]

[20] A. Zhupa, "Sidat dhe përfitime ..., f. 9.
[A. Zhupa, "Aids and Benefits ...", p. 9.]

[21] MASR, Udhëzues "Për mësimin ..., f. 4.
[MoESY, Guide "For Home ..., p. 4.]

[22] M. Kapllanaj dhe B. Zeneli, Sa funksion ... , f. 14.
[M. Kapllanaj and B.Zeneli, How Fra is ..., p. 14.]

and storing it in order to use it at any time; teaching is interactive in groups or individually; the possibility of real-time and synchronous conversation; high flexibility leading to personalization of the learning process with detailed objectives based on requirements or need; etc.[23] Many of the well-known university lecturers point to the benefits that some of the most important elements of this new teaching method have brought, including: motivation, content stimulation, quick and real-time assessment, and so on. These elements and others are just some of the benefits that receive not only students but also school students.

Moreover, the COVID-19 pandemic served as a period of reflection for all individuals and researchers in the field of education, to understand how capable young people and education systems are to face such challenges. At a time when quality education is undoubtedly important to everyone's life chances, young people believe that schools and universities are preparing them for job shows as well as teaching them to become successful entrepreneurs.

"What survives, - said Charles Darwin, - is not the strongest or most intelligent being, but the one that has the ability to adapt to change"[24].

In Albania, "the current education system is based on pupil and student intelligence (IQ), which includes memorization and standardization, skills which are easily and efficiently replaced by artificial intelligence, neglecting emotional intelligence (EQ) and other skills. interactive, collaborative, critical spirit and desire to seek out new ones, which are necessary to unleash the potential of every pupil or student"[25].

To this end, the Albanian state must build the necessary capacity to provide cross-cutting learning models for the future. Could online learning and the digital book be a norm for students? There are differing opinions among researchers, some of whom think that the rapid transition of learning with the book may hinder this goal, while others plan to make e-book learning part of a normalcy.

3. Online Learning And Digital Books - A Normality For Students

The situation created by the COVID-19 pandemic has forced the Ministry of Education, Sports and Youth (MoESY) to close all educational institutions from March 9, 2020[26], to prevent further spread of the virus and to protect the health of all citizens. Initially the educational institutions were closed for a period of two weeks, then this period was extended by two additional weeks. At the time of writing, it was not known when the schools would reopen or remain closed for an extended period.

For students not to be left behind with lessons and to create the opportunity for the end of the school year, MoESY in cooperation with the Agency for Quality Assurance of Pre-University Education (AQAPE) and the General Directorate of Pre-University Education (GDPE), have passed all the learning process from school to home teaching. Two main forms of teaching that were applied:

➢ First, are the materials made available for an individual lesson or accompanied by an adult.
➢ Second, the direct way, that which allows a collaborative learning using the working group, dealing with others of the teacher. The most important element of this model is the idea of communication and learning as social processes[27].

To assess the involvement of the parties in this process, its effectiveness, as well as ways to improve its implementation, AQAPE has designed and through GDPE has administered a survey with teachers, students, and parents, for online learning. The survey was administered online and has been open for a period of four days.

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23 Anxhela Ruçi , "Mësimi "online", sfida e përbashkët nxënës-prindër-mësues", në: Faktoje.al, f. 1. Materila i publikuar në web site: https://faktoje.al/mesimi-online-sfida-e-perbashket-nxenes-prinder-mesues/ (I aksesuar: 02/04/2020)
[Anxhela Ruçi, "Online Learning", the Common Challenge Student-Parent-Teacher", in: Faktoje.al, p. 1. Material published on the web site: https://faktoje.al/mesimi-online-sfida-e-perbashket-nxenes-prinder-mesues/ (Accessed: 02/04/2020)]
24 Jerry A. Coyne, Why Evolution is True, Oxford: "Oxford University Press", London, 2009, p. 17.
25 A. Zhupa, "Sidat dhe përfitime ..., f. 9.
[A. Zhupa, "Aids and Benefits ...", p. 9.]
26 Ministria e Shëndetësisë dhe Mbrojtjes Sociale, Urdhri Nr. 190, "Për mbylljen e veprimtarisë së institucioneve arsimore publike dhe jopublike dhe çerdheve për kufizimin e përhapjes së infeksionit COVID-2019", datë 19.03.2020.
[Ministry of Health and Social Protection, Order No. 190, "On Closing the Activity of Public and Non-public Educational Institutions and Kindergartens to Limit the Spread of COVID-2019 Infection", dated 19.03.2020.]
27 E. Ziko, "Të rimendojmë sistemin e edukimit ..., f. 1.
[E. Ziko, "To Rethink the Education System ...", p. 1.]

Many students, parents and teachers participated in this survey. Based on the data of the questionnaires, it results that in the survey participated: 178,096 students; 118,376 parents and 25,439 teachers[28].

A total of 321,911 people were involved in all three instruments. To the study, it is important to note that the "Online Learning Survey" was administered to teachers, students and parents of students in grades 1-12, mainly in public education (with some responses from teachers and students of private pre-university education). Also, the survey was not applied to preschool and vocational education[29].

From the analysis of the main findings, what is noticed and consistent with the information that MoESY receives daily from the GDPR, on the involvement of teachers and students in the learning process, is that a significant number of students, parents and teachers are engaged in online lessons: 96.8% of students, 95.3% of parents and 98.7% of teachers[30].

The lessons broadcast on the TV program "RTSH Shkolla" are attended by most students, parents, and teachers: 84.1% of students, 85% of parents and 96.5% of teachers[31]. Those who have not been able to watch the broadcasts, access the videos on the YouTube channel of the Ministry of Education and Sports (54.2% of students) or on the akademi.al platform (64.2% of students)[32].

The transition from school to home schooling during the first two weeks has been well received by students and parents. About 86.4% of students say they agree and strongly agree to take lessons through online communication and 90.2% of parents agree and strongly agree that they are part of online communication groups with teachers[33]. Online home schooling, despite the overload of parents, has further strengthened the student-parent-teacher partnership by giving parents more opportunities to participate in their children's learning process.

Online home learning, although it cannot replace classroom learning, has created opportunities for students to work and create independently at home using alternative digital resources. Today students grow up with technology and this resource is easily usable for them. About 77.4% of parents claim that their children are developing digital competence by applying online learning[34].

During this period, most students not only repeated and reinforced the concepts learned, but also learned new concepts (84.7% of teachers and 81.5% of students affirm this)[35], which shows that the great commitment of teachers, parents and students has managed to somewhat replace the teaching that takes place in schools. About 43.6% of parents state that this type of learning has the same quality as the classroom learning process, while 32.2% partially agree and 14.4% disagree[36]. On the other hand, teachers 'perception of the effectiveness of online learning turns out to be approximately in line with parents' perception, as 37.8% of teachers say that online learning is of the same quality as

[28] ASCAP, Sondazhi i mësimit online ..., f. 6.
[ASCAP, Online Learning Survey ..., p. 6.]
[29] Po aty.
[Ibid.]
[30] Po aty.
[Ibid.]
[31] Po aty.
[Ibid.]
[32] Po aty.
[Ibid.]
[33] Po aty, f. 7.
[Ibid., p. 7.]
[34] Po aty.
[Ibid.]
[34] Po aty.
[35] Po aty.
[Ibid.]
[35] Po aty.
[Ibid.]
[36] Po aty.
[Ibid.]

school teaching, while 36% of teachers partially agree with this assertion[37].

Also, part of online learning at home has been student assessment, as one of the most important components of the curriculum. From the collected data it results that 91.4% of the students strongly agree and agree that they are evaluated by the teachers for the tasks and exercises performed[38]. On the other hand, 91.2 of teachers say that they have made assessments of students for homework, independent work, etc.[39]

Regarding the realization of the tasks, it results that 83.6% of the students state that they can complete the tasks during the lessons developed through online communication and that 74.5% of the students have more opportunities to work independently[40].

In this situation the teacher-parent-student partnership takes on a very special importance to make this process as effective as possible. They have established communications and this is evidenced by the data collected. On the one hand about 93.9% of parents receive any information coming from the school administration and their child's teachers and support them by facilitating the receipt of information, on the other hand 95.7% of teachers say they communicate regularly with parents and students about distribution of information[41].

Interaction between teachers and students is very important in the learning process as it encourages learning. This has been achieved to a large extent during online learning: 89.8% of students and 93.7% of teachers claim that during the online workday questions are asked and answers are obtained from teacher-student interaction due to ambiguity and difficulty in learning topics[42].

Online learning at home, despite the difficulties, has created opportunities for teachers to use more alternative digital resources to develop the knowledge and skills required by the competency curriculum. 74.1% of teachers agree that they like interaction in electronic form, even 88.7% of teachers use video-selfie to determine the teaching content[43]. From the collected results, 84.1% of the teachers state that they have shared videos, PowerPoint, etc. with the students and their colleagues.

Despite exploring the virtual classroom platforms that teachers are doing now (68.1% claim to use different online platforms), WhatsApp remains the most used online communication by teachers, with 96.4% of them[44].

Online home learning has led teachers to pursue more online training platforms by developing their professional capacities in this field. Teacher training in the development of digital competencies on the one hand has been one of the most priority areas to develop 21st century schools, but on the other hand is the most difficult part for teachers.

At the end, we can say that digital learning is the future for 21st century schools and despite the immediate confrontation of teachers with this type of learning, it will serve in the future as an important resource of the learning process.

4. Conclusion

Today in Albania, in the reality of pre-university and university education, it is not difficult to imagine the use of virtual reality technologies. Although the issue is closely related to the financial component - we know many examples of the

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[37] Po aty.
[Ibid.]
[38] Po aty, f. 8.
[Ibid., p. 8.]
[39] Po aty.
[Ibid.]
[40] Po aty.
[Ibid.]
[41] Po aty.
[Ibid.]
[42] Po aty, f. 9.
[Ibid., p. 9.]
[43] Po aty.
[Ibid.]
[44] Po aty.
[Ibid.]

development of appropriate curricula, but that virtual technology is used to a certain extent. In our opinion, the main difficulties are related to:

- The rigidity of the program, which must be successfully assimilated by students within the general education. While virtual and augmented reality technologies have great potential to improve student learning, they can be a significant distraction. Examples of the use of technology speak to increased engagement and increased interest in the learning process. Some researchers conclude that these factors lead to improved student achievement. However, in the case of excessive enthusiasm for the form to the detriment of the content, the effect may be opposite.

- The use of such technologies can probably have a great effect, but its use in the context of a standard 45-minute school lesson will lead to a significant interruption of the program, as the time spent working with materials using these technologies will change the curriculum somewhat.

- The introduction of such technologies is associated with several difficulties, which are of a financial nature: the high cost of equipment, the lack of many high-quality applications and, consequently, the need to develop them, little experience in use of this. technology from teachers who need additional training.

- The modest number and variety of existing virtual applications, especially those created specifically for education, is another drawback. To change the situation, of course, requires state support for such projects, a state order. Creating a small virtual reality application, for example, in the field of history, requires the work of many specialists: historians, teachers, programmers, cultural experts, etc. Such resources can be found either with the availability of serious resources from the Albanian state or big business, or in the case when the interests of different parties in the field of education overlap.

Naturally, each of us can ask: What are the ways to overcome these difficulties? We think that the key is now the use of virtual reality technologies is more adequate in the field of education, which can serve as a channel for new ideas, which is structured according to the school categories of basic education, secondary education, and institutions. of higher education (HEIs).

Education in Albania can overcome the difficulties by going through the points described above about the possible problems of technology adoption. University education has a much more flexible apparatus system compared to general pre-university education. Programs of different levels, different duration of classes, involvement of teachers from specialized organizations for part-time employment. Opportunities for collaboration with specialized industrial enterprises, universities allow us to attract competent specialists, and potentially offer an opportunity to find ways to solve problems with the necessary equipment. Particularly interesting is the opportunity to collaborate with other organizations, for example, museums that may be interested in such technologies. There are already specially created excursions and exhibitions where the skills to use Information and Communication Technology (ICT) equipment to actively manage any situation are actively used. This can be achieved through virtual reality, which allows to use the latest technology, creating a unique mixed interactive experience.

> "Skills that employees must possess in the future, - writes a report from the World Economic Forum, - include creativity, reliability, emotional intelligence and leadership, which continue to focus on traditional academic skills and reproductive learning"[45].

Although reality technology and virtual reality are still rarely used in Albanian education, more and more teachers, pedagogues, researchers, and developers have begun to move towards more interactive teaching methods. Many of these techniques grow into interesting and creative projects, offering a more individualized teaching for each of them.

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