DISTANCE TEACHING OF PHYSICAL EDUCATION IN GREECE DURING THE PANDEMIC: THE CASE OF ANCIENT OLYMPIC GAMES

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ABSTRACT

The COVID-19 pandemic evoked the greatest disruption in education in the history, affecting both students and teachers around the world, from kindergarten to secondary and higher education, institutions, universities, and adult education organizations. In order to support education pioneering approaches appeared and teaching moves from in class to on line education within a few days for the most of the countries. In Greece, the government planned and implemented distance education in 3 axes: asynchronous, modern and Educational Television. This article presents a proposal for the distance teaching of Physical Education, specifically the subject of the Ancient Olympic Games.

Keywords: Distance learning, Physical education, Ancient Olympic Games

1.0 INTRODUCTION

The World Health Organization (WHO) declares on January 30, 2020 that SARS-COV2 is a public health hazard and declares it a pandemic (WHO, 2020). The pandemic created fear, stress and a quite amount of worry around the globe and has affected every aspect of human life including education.

COVID-19 evoked the greatest disruption in education in the history, affecting both students and teachers around the world, from kindergarten to secondary and higher education, institutions, universities, and adult education organizations. According to relevant data from mid-April 2020, 94% of students worldwide were affected by the pandemic. This is almost 1,58 billion kids and youth from preschool to higher education in 200 countries (United Nations, 2020).

In order to support education pioneering approaches appeared and teaching moves from in class to on line education within a few days for the most of the countries (Paudel, 2021). According to studies, the interaction between students and between teachers and students within an online environment offers emotional support. Online teaching becomes efficient and successful when teachers and students really participate (Lorenzo, 2008).

In order to achieve online teaching, it is necessary to develop the appropriate multifunctional educational material that determines the educational process (Lionarakis, 2001a• Spanaka &

Lionarakis, 2017). Being the most basic methodology tool, educational material should be simple (but not simplistic), easy to use and accessible in order for the student to be able to study systematically and repetitively as well as to be able to use it independently in any place and any time (Barbour&Reeves, 2009• Wicksetal, 2010• Psallidas & Manousou, 2011). It should be adaptable for individual educational purposes and should enhance personal learning by developing an investigative spirit. The contribution of the inclusion of software in many thematic fields depending of the level of education is decisive for the building of knowledge (Liakeas & Golikidou, 2013), with online, flexible and interacting programs that improve learning and cognitive student ability (Ismail, Hussin, & Darus, 2012• Keegan, 2001).

The situation in Greece

On March 11, 2020 the Ministry of Education announces the closure of all schools. The Government's plan for primary and secondary education aimed to enhance technological infrastructure on a national level (environments live and non-live education) while at the same time offered free access from mobile devices to services and applications of the Panhellenic School Network (Anastasiadis, 2020).

Covid created new needs and new challenges and opportunities in education. Due to this new situation, teachers on the one hand were called upon to readjust teaching practices in order to address a new reality, while students are called upon to participate in learning within a virtual classroom. This led Governments around the world to organize online education for all educational levels using in such a way the opportunity for further cultivating and deepening digital abilities for the whole of educational community.

The Ministry planned and implemented online education in three axes:

- Live education in real time through an educational platform (Webex) for students who participate live through a computer, tablet or mobile phone,
- Non-Live education where the student meets with the teacher outside the time of live education or uses material created by the teacher through the use of teaching materials and a timetable of learning through the internet on specific web pages or platforms offered by the Ministry (open e-class, e-me, Panhellenic School Network (PSN))
- Educational TV (Ministry of Education, 2020)

From the above-mentioned axes, the first to operate was the non-Live one through the suggested by the Ministry platforms. On March 16, the Ministry of Education announced the beginning of distant non-live learning aiming mainly to maintain the relationship between students and teachers through the educational process and not through the coverage of the curriculum. The guidelines from the Ministry included: a) autonomy and flexibility in the formation of the program, b) implementation of the process by every teacher) use of the existing digital sources of the Ministry of Education such are; interactive books, digital repositories "Photodentro", educational scenarios "Aesop" and finally d) the ability given to teachers to create digital classrooms within the e-class or e-me platforms under the condition that teachers and students own an account on the Panhellenic School Network (Liakopoulou, 2020). The increase of participation of both students and teachers from even the first days of its operation was quite impressive. The statistical data given by the Ministry show that:

a) Regarding the Panhellenic School Network (PSN): Up until 14/3/20 the subscribed users-students were 101.403 and users-teachers were 158.404, on 25/3/20 students increased to 664.841 and teachers to 166.949. Diagram I shows this increase in the number of users of the Panhellenic School Network during the first 12 days:
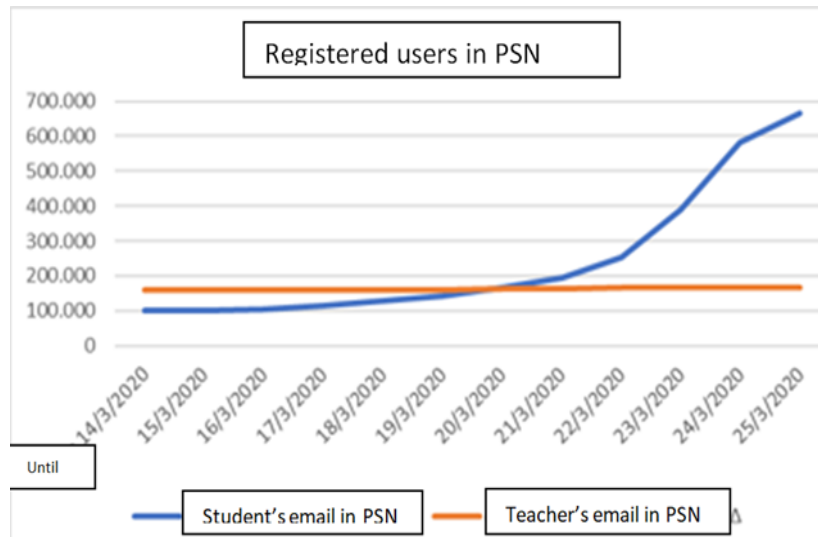
b) Accordingly on e-me the subscribed students on 14/3/2020 were 4.459 in 1560 classrooms-hives created by 9.049 teachers, while on 25/3/20 the subscribed students were 70.989 in 49.263 classrooms-hives created by 48.936 subscribed teachers. Diagram II shows the relevant increase:
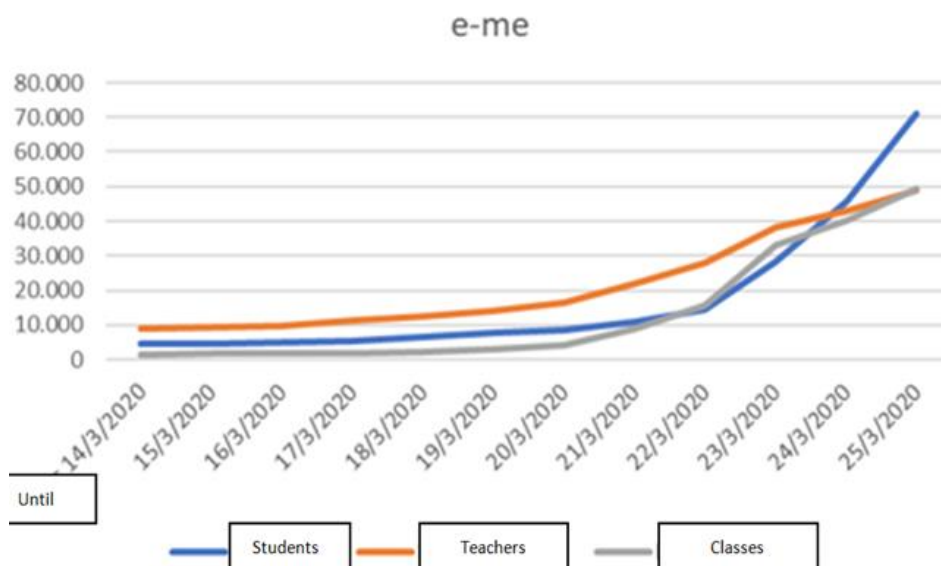
c) Similar increase was found for e-class platform. On 14/3/20 the number of subscribed students and teachers were less than 10.000 while on 25/3/20 the participation of students increased to 118.245 in 109.856 classes created by 57.942 teachers. Diagram III shows exactly that increase:
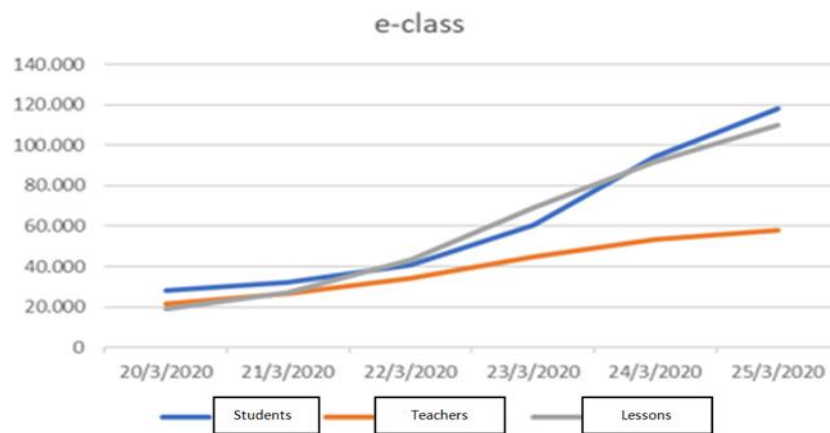
Evaluating the above-mentioned data, the Ministry estimated that there will be an even further increase of users on all these platforms with teachers supporting the effort and use more and more all digital tools along with their students contributing in this way to the maintenance of educational process and school reality (Ministry of Education, 2020).

2.0 DISTANT PHYSICAL EDUCATION

Webex Platform

Webex, is an application for web meetings include phone and video calls that offers the opportunity for many people to communicate simultaneously on real time, to see and talk to each other.

Its difference from other known applications such is Skype, is that a personal account is not necessary as long as the one organizes the meeting sends a link to the other participants. The only requirements are a camera and a microphone.

According to a decision of the Ministry of Education, Webexis one of the suggested platforms to be used by all public schools of primary and secondary education in our country for distant learning. Its digital classroom offers apart from picture and sound, additional abilities such are split content and digital board.
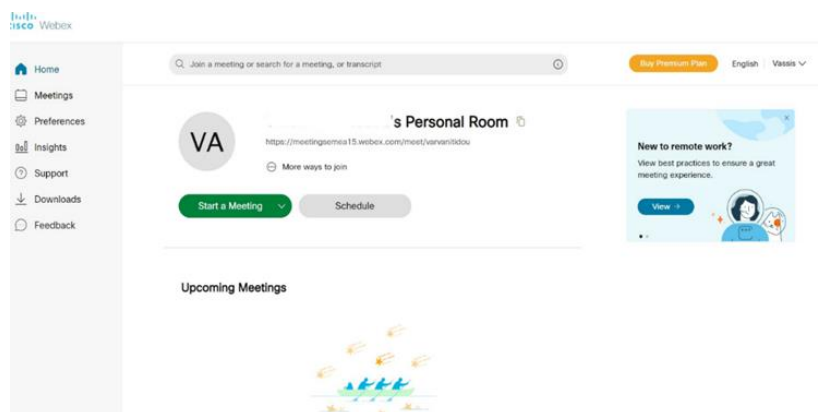
Picture I. Webex Digital Platform

As already mentioned, e-me is one of the suggested by the Ministry of Education platforms for distant teaching during the pandemic. This digital educational platform is an open PLE (Personal Learning Environments) platform aiming to promote the role of the student and to enhance an equal teacher-student relation. It is a complete safe digital environment for students and teachers, while at the same time is open for learning, communicating, cooperating, and networking among the members of the school community. It is for all students and teachers, and it is actually a digital space where teachers can upload digital material for their students and for other teachers. It offers the opportunity to create space for cooperation among both students and teachers (hives).
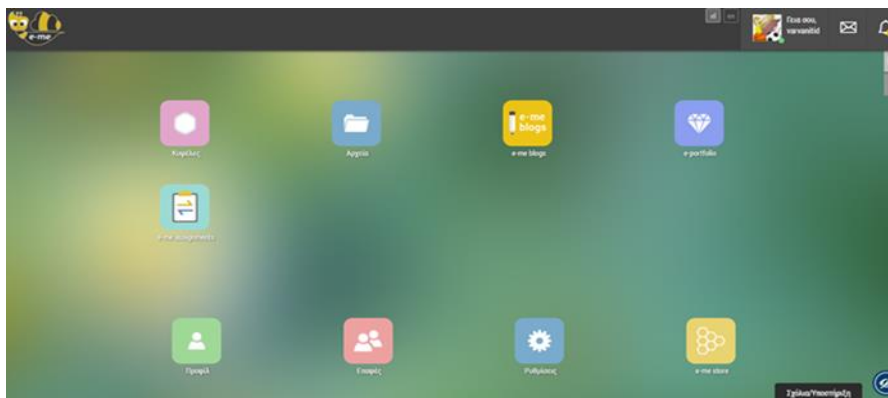

Picture II. Initial page of e-me

On the initial page of e-me we find:

1. Hives–digital classrooms
2. Documents–where teachers can save their educational material
3. E-me blogs–offers personal blog space for each platform user and a blog for each hive with the participation of all its members
4. E-portfolio
5. Profile–personal details of the teacher
6. Contacts-members
7. Settings
8. E-me store
9. E-me assignments

e-me store includes:
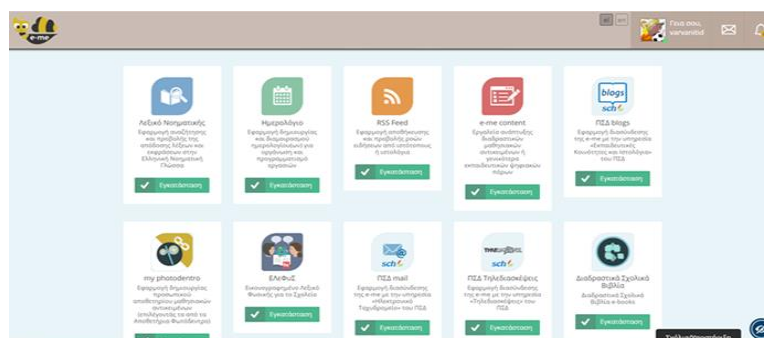
1. E-portfolio
2. My Photodentro
3. Search and view words in Greek Sign Language
4. Create and Share Calendar for planning and organizing work
5. Watch and Save News stream from sites or blogs – RSS
6. Content Development - e-me content
7. Blog Creation - e-me blogs and
8. E-books.

It also offers social networking services for the connection of students and teachers, blogs, wiki, messaging and a variety of tools and applications for the support of typical and atypical learning experience (Megalou, et al., 2015).

The platform also offers a system for follow up on assignments for students and teachers (e-me assignments). E-assignments is an e-me application for the creation, organization, and assignment of tasks to students. This is the place to submit students' answers/assignments and for teachers to offer feedback, assessment, and comments. This application is where the general follows up of the course of assignments takes place.
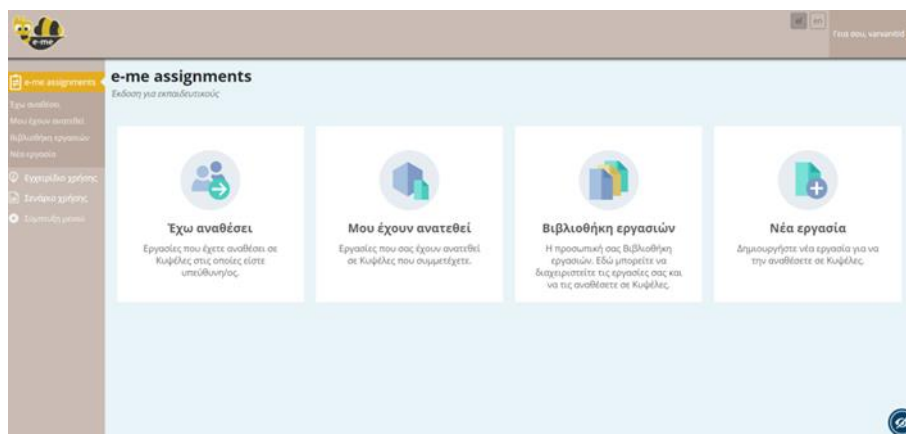
Picture IV. E-me assignments

The basic space ine-meare the classrooms-hives where members have access to the existing material and can upload their own. Each hive has:

An admin: The member who creates the hive and has full management rights

Assistants: Members of the hive that are determined by the admin to assist in its management. They have certain management rights on the Wall and Documents of the hive

Members: Those participating in the hive. They are subscribed users of the platform and are either invited by the admin to become members or they apply and are accepted by the admin

Follower: Members of e-mewho are not members of the hive and do not need approval by the admin. Their profile and main hive page show a list of the hives they are following for easier access

Environment: The Desktop view of the hive as formed by the admin. It includes the background of the desktop, the hive picture, the hive title, its description, tags and its definition as public or private.

Wall: The main channel of communication among the hive members. It is open to all and each member can read or write on it.

Applications: Applications that are open to all members.

Storage: The space where public hive documents and personal data of the members are stored (Tzortzoglou, 2017)

Photodentro

Phodentro (http://Phodentro.edu.gr/aggregator/?lang=en) is the National Accumulator of Educational Content for Primary and Secondary Education. It is the central e-service of the Ministry of Education for the unified search and provision of digital educational content in schools. It is open to everyone, students, teachers, parents and anyone interested.

In Phodentro - Accumulator of Educational Content the user can search in a unified way and from a central point, digital educational material for school education, located either in the "Phodentro" repositories of the Ministry of Education or in other, "external" repositories or educational portals. In other words, it provides a central "catalogue" of the Ministry of Education's digital educational material for school education.

Phodentro promotes the use of open educational resources (OER) for schools, implementing the national strategy for digital educational content. All material available through the Phodentro National Educational Content Repository is freely available under the Creative Commons CC BY-NC-SA or similar, more open license. The PHODENTRO National Educational Content Repository collects descriptions (metadata) of digital educational material from various Repositories and Providers and unifies them semantically, thus allowing a single search of the digital educational material and a homogenized display of its elements.

That is, it hosts only the descriptions of the digital material and does not contain the physical resources (digital files of the material) which remain in the original repositories or on the providers' websites.

In the new version Phodentro 4.0, teachers and students now have the possibility to "log in" to PHODENTRO, using the account they have in the Panhellenic School Network (PSD), and take advantage of all the new functions of the system. Specifically:

- To create their personal public profile
- To comment and evaluate the Open Educational Resources of Photodentro, submitting their own opinion and opinion on their quality, ease of use or usefulness
- To select Open Educational Resources of Photodentro and organize them into their own collections
- To "subscribe" to specific Photodentro "topics" that interest them, so that they receive updates via messages when a new item is added to Photodentro that is part of that topic

- To "report" to the Open Educational Resources of Photodentro, if they judge that their content does not comply with the specifications, requirements or conditions of acceptable use that have been set
- To have their own space, where they can see organized the evaluations or comments they have made, their collections, etc.
- To exchange messages with other connected teachers or students
- In addition, all users are now able to:
- To select the "quality seal" that each Photodentro Open Educational Resource has received and to see in detail the quality control process it has "passed", by going directly to the Quality Seal Repository
- Search for Open Educational Resources based on the quality seal they have received, but also with other new filters, such as funding context, video analysis, etc.
- To see the comments and evaluations of teachers and students in Open Educational Resources
- To "download" the new, detailed user manual of the National Accumulator of Educational Content Photodentro

Didactic proposal

Title

A hint from the past

Object

Physical Education

Grade

6th grade Elementary School

Goal

- Acquire knowledge drawn from physical education and apply it for the efficient participation in present and future physical activities in various conditions

Learning Goals

Following the end of the lesson students should be able to:

Knowledge

- To explain and be related to Ancient Olympic Games
- Distinguish ancient Olympic sports
- Understand the way Ancient Olympic Games were organized
- Discover the idea of Olympic truce
- Enhance their already acquired knowledge

Learning

- To be more responsible for their learning
- To include games within the learning process

Additional Goals:

- To develop abilities and discover knowledge through playful digital activities
- Acquire knowledge on the proper use of internet as a research source

Duration

2 school hours (80-90 minutes approx.)

Logistics

Teaching takes place live through Webex and not live through a digital classroom created in e-meplatform for distant learning.

3.0 SHORT DESCRIPTION

Teaching Method

Teaching in online live education is more teacher centered. The role of the teacher in non-live teaching is more coordinative, organizational, and guiding, while through proper guidelines to students is supportive to learning. Student-centered method is also used.

Classroom organizations

The teacher ensures the operation of the Webex platform for live education and e-me for non-live education and controls the videos he/she abouts to show. Just before the beginning of the class the teacher calls the students to log in in order to check their connection. Students work from home.

**Additional Educational value of Digital tools**

The inclusion of digital tools and internet applications in educational processes may be extremely sufficient for the student since teaching may be interactive. The use of video for educational purposes helps students to remain active, creative and operate within a team, through discussions. Using digital tools students are led to a guided revelation. The digital platform e-me is a complete digital environment for learning, cooperation, communication, and networking of all members of the school community.

Activities/Teaching phases

Phase 1 (1st teaching hour)

1st Activity

The teacher through Webex, begins with a short introduction of the class and then asks the students to carefully watch the YouTube videos titled: "The Olympic Games in Ancient Olympia- parts 1, 2, and 3" (duration 25:09´).
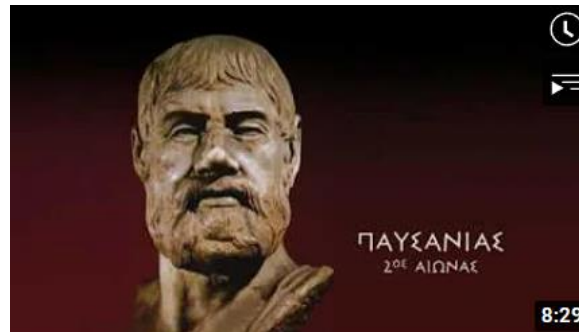
https://www.youtube.com/watch?v=alO7A4ygd0s&ab_channel=IoannicGiannopouloc, Part 1

https://www.youtube.com/watch?v=h0a4Ed2-hEk&ab_channel=IoannicGiannopouloc, Part 2

https://www.youtube.com/watch?v=tGeK4ryOu14&ab_channel=IoannicGiannopouloc Part 3

After watching the videos, students start a discussion with the teacher on what they watched.

On the Hive Wall all activities for the students are uploaded. For Activity 2 the teacher announces the work teams.

2nd Activity

Teacher: The teacher uploads on e-assignmentsthe subject of the assignment for each team. Students make 6 teams of 4. Each team must gather information and pictures for an ancient Olympic using the internet. Students are given a list of websites to assist them to their research.
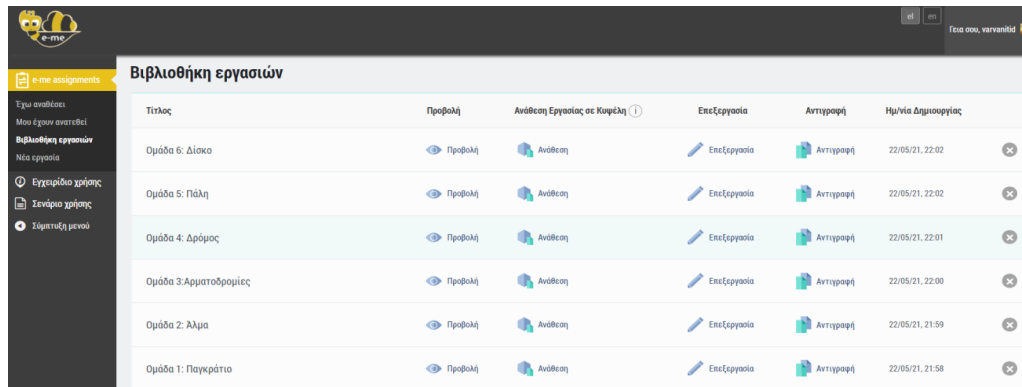
Picture V. Task library

Students: Students according to the subject-sport they have to research on, they cooperate to complete the assignment and upload it on the platform in order to get feedback from the teacher.

3rd Activity

Teacher: The Teacher asks the students to go to e-me content – all subjects and select the Memory Game titled "Ancient Olympic Games". Following the completion of the activity by the students, the teacher may see who and how many students completed it from "Users' Activity".
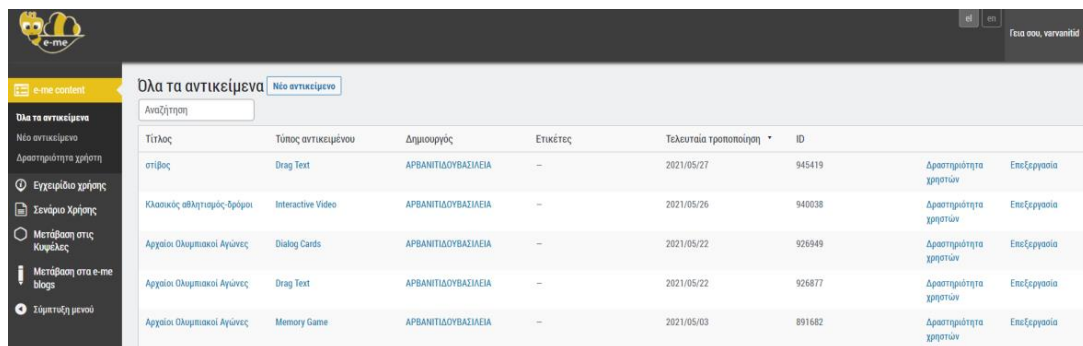
Picture VI. Objects
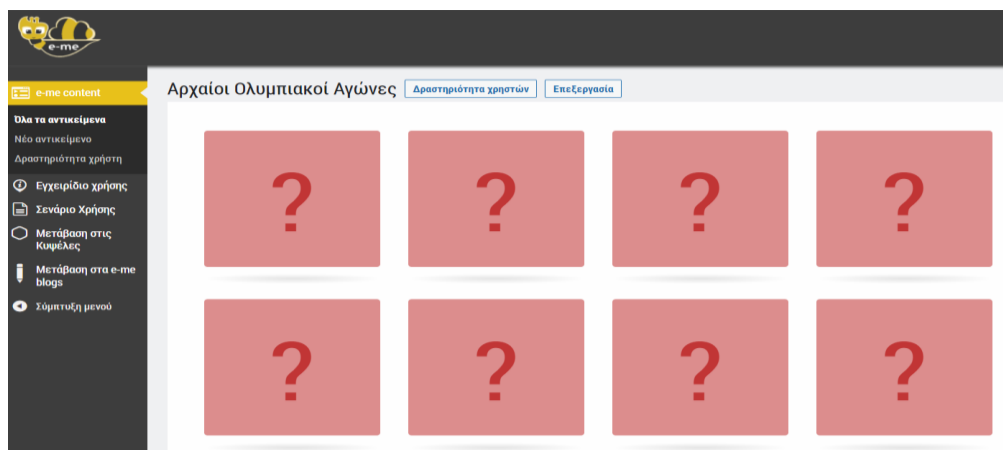
Picture VII. Object – Memory cards

Students: Students go on the application and complete the assignment.

4th Activity

Teacher: The teacher asks the students to select the application "Photodentro-Ancient Olympic Games" and to do an interactive digital walk in Ancient Olympia the way it was during Hellenistic and Roman years. The goal of the activity is for the students to get acquainted with the place where Ancient Olympic Games took place, the conditions in which athletes practiced, the variety of sports as well as the symbolical and honoring awarding of the winners with a simple olive wreath. The teacher creates and assigns the assignment on e-me assignments and asks the students to put down their impressions and/or questions they may have.


Picture VIII. Photodentro – Ancient Olympic Games

Students: Students go on "Photodentro" and according to the guidelines gather information for Ancient Olympic Games. Students gather their impressions and/or questions on what they have watched and upload them on e-me assignments for discussion at the next class.

Phase 2 (2nd teaching hour)

1st Activity

The teacher gives a short report on the material covered the previous week and discusses with the students, questions, impressions, or difficulties they may have faced on the activities and assignments. Discussion follows. Students watch with the teacher the interactive video "An Ancient Olympic Tournament" (duration 7:41′) that was created in e-me content – interactive video. Discussion follows.
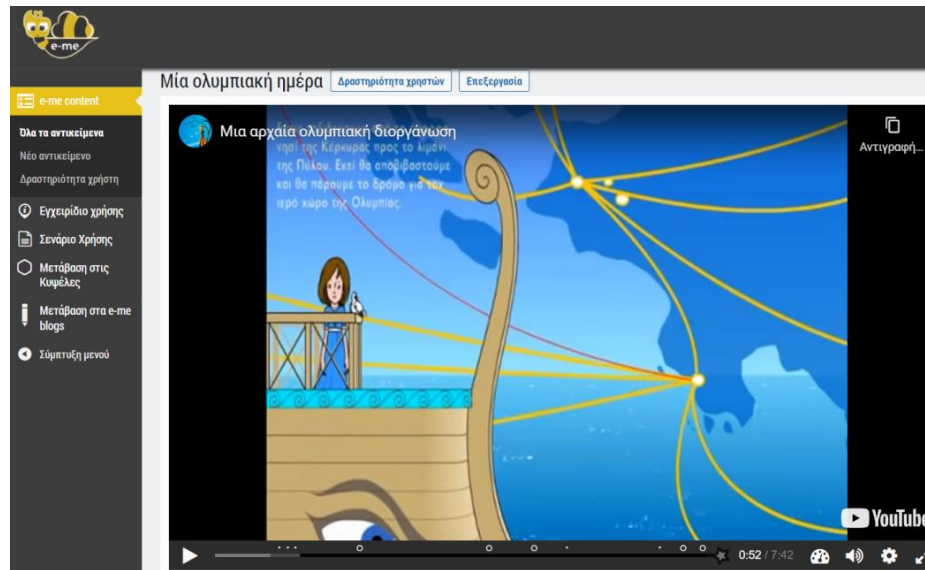
Picture IX. E-me content – interactive video

Activities for students that can be done in a non-live way are uploaded on the Hive's Wall.

2nd Activity

Teacher: The teacher asks the students to go to e-content – All subjects, and to select the digital Drag the words quiz titled "How well do I know Ancient Olympic Games". For more information student are advised to visit Wikipedia "Ancient Olympic Games". Following the completion of the activity, the teacher can see who and how many students completed it.
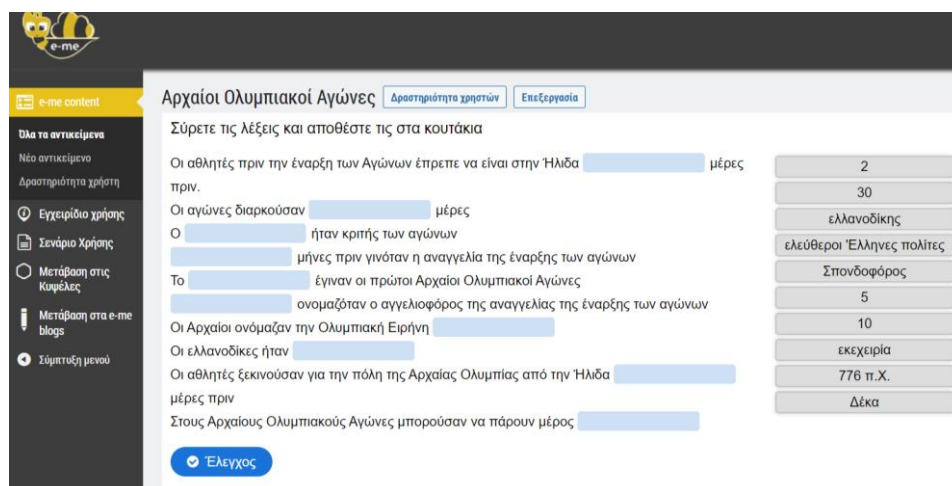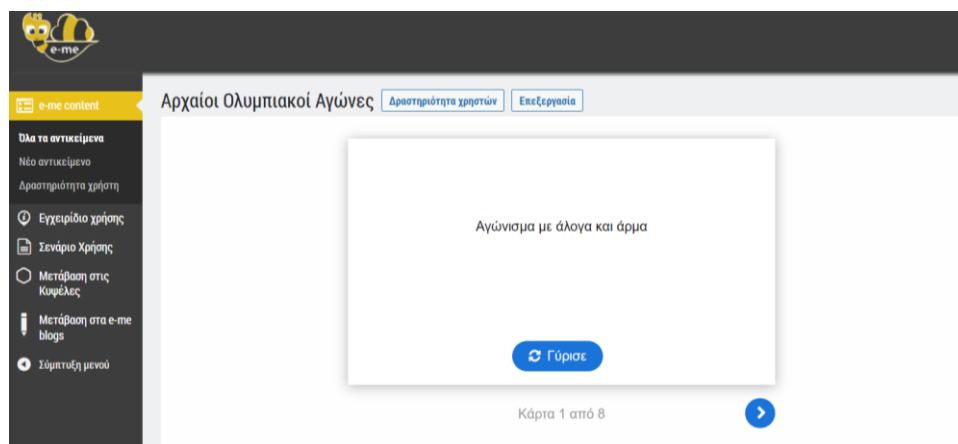

Picture X. E-me content – Drag the words

Students: Students go to the application and complete the activity.

3rd Activity

Teacher: The teacher asks the students to go to e-me content and complete the Dialog Cards titled "What have I learnt for Ancient Olympic Games". The questions to be answered are the following:

1. Sport with Horse and Carriage
2. The title of judges of the Ancient Olympic Games
3. This is how the Ancients named the Olympic Peace
4. Sport that combined wrestling and fist
5. Endurance run 7-24 stadiums
6. The number of the days of the Games
7. Includes five sports
8. The number of the years from Olympic Games to the next
9. Run where athletes wore a helmet and held shield and spear
10. Run of 192,28m distance
11. God honored with the Olympic Games

Picture XI. E-me content – Dialog cards

Students: Students go to the application and complete the activity.

Sources

For the completion of the scenario the following sources were used:

➢ Internet
➢ Webex
➢ E-me Platform: Hive Wall
➢ E-me Platform: e-assignments
➢ E-me Platform: e-content –Interactive Video
➢ E-me Platform: e-content – Drag the Words
➢ E-me Platform: e-content - Dialog Cards
➢ E-me Platform: Photodentro
➢ YouTube Video: "The Olympic Games in Ancient Olympia- parts 1, 2, and 3"
➢ Wikipedia (Ancient Olympic Games) shorturl.at/ahZ59 https://tinyurl.com/yc2bezen

Expansions

The present educational scenario can be expanded to high school with the relevant changes depending on the age of the students. It can also be combined with educational visits to Sport Museums and sport events. Finally, it can be expanded to and be combined with other subjects such is History.

4.0 CONCLUSION

The process of distant education-live and non-live- was something new to the students who had never participated in such teamwork environments. Despite all that, students adapted easily and quickly by following and respecting the rules. Students developed metacognitive abilities, critical thought, and their ability to research for information, they got acquainted with the way to learn. The result was to create reflective mechanisms enhancing in this way their autonomy. The participation of students at the activities were relatively satisfying since about half of them completed them. Some limitations were observed regarding the electronic devices (one per family) as well as issues with the internet connection.

The appearance of digital technology in education, learning and interaction between teachers and students is reflected on the design of digital scenarios. One educational-teaching scenario combined with the use of digital technological tools may improve and promote new alternative teaching methods that are more compatible with the modern pedagogical and teaching theories, enhancing the change of educational process. During the implementation of the scenarios, teachers can adjust their content to the needs and demands of their classroom, trying each time different ways of implementation. In teaching roles are changing. The teacher coordinates, leads, encourages and facilitates the discovering, while the student from passive receiver of knowledge, acts, discovers and cooperates.

REFERENCES

Anastasiadis, P. (2020). School Distant Education in the time of COVID-19: the example of Greece and the challenge of the transition to "Open School of the Investigative Learning, Cooperative Creativity and Social Solidarity'…Open Education: the magazine for Open and Distant Education and Educational Technology, 16(2), 20-48. doi: https://doi.org/10.12681/jode.25506

Barbour, M. & Reeves, T. (2009). The reality of virtual schools: A review of the literature. Computers & Education, 54(2), 402-416.

Christ, T., Arya, P., & Chiu, M. M. (2017). Video use in teacher education: An international survey of practices. Teaching and Teacher Education, 63, 22-35. https://doi.org/10.1016/j.tate.2016.12.005

Herault, R. C., Lincke, A., Milrad, M., Forsgärde, E. S., &Elmqvist, C. (2018). Using 360-degrees interactive videos in patient trauma treatment education: Design, development and evaluation aspects. Smart Learning Environments, 5(26). https://doi.org/10.1186/s40561-018-0074-x

Ismail, N., Hussin, S., &Darus, S. (2012). ESL Students attitude, learning problems, and needs for online writing. GEMA Online Journal o fLanguage Studies. 12(4), 1089-1107.

Keegan, D. (2001). The European University distant education in the beginning of the third millennium.D. Keegan (επιμ.) Reviews and discussion on open and distant education, 15-31. Athens: Propompos.

Liakeas, P. & Golikidou, L. (2013). Design and Implementation of a Program for Additional distant Education in Secondary Education for Math class. International Convention for Open &Distant Education, 7, 74-81

Liakopoulou, E. (2020) Distant school education in the era of COVID: guidelines and support for the teachers, Scientific Teachers' Register of Elementary Education of Corint, 6(11), 8-17

Lionarakis, A. (2001α). Qualitative approaches to the design and production of distant multiform educational material. B., Makrakis (review) Minutes of the Panhellenic Convention with International Participation for New Technologies in Education and distant education. Athes: Atrapos

Megalou, E., Koutoumanos, A., Tsilivigos, Y., Kaklamanis, C. (2015). Introducing "e-me", the Hellenic Digital Educational Platform for Pupils and Teachers. Proceedings of the EDULEARN15 Conference (pp. 4858-4868). Barcelona: IATED.

Megalou, E. & Kaklamanis, X. (2018) Digital School II: Expansion and use of the digital educational platform «e-me», interactive school books, digital repositories and the national accumulator of educational material "Photodentro", Minutes of the 11th Panhellenic and International Convention "Digital Tools in Education", 15-23

Ministry of Education (2020) We stay home – We learn at home. https://www.minedu.gov.gr/rss/44639-13-04-20-menoume-spiti-mathainoume-spiti-13-martiou-13-apriliou-enas-minas-eks-apostaseos-ekpaidefsis

Ministry of Education (2020). https://www.alfavita.gr/ekpaideysi/ypoyrgeio-paideias/316749_664841-mathites-kai-166949-ekpaideytikoi-ehoyn-eggrafei-sto

Nacak, A., Bağlama, B., & Demir, B. (2020). Teacher candidate views on the use of YouTube for educational purposes. Online Journal of Communication and Media Technologies, 10(2), e202003. https://doi.org/10.29333/ojcmt/7827

Pal, S., Pramanik, P.K., Choudhury, P. (2019). A step towards smart learning: Designing an interactive video-based M-Learning system for Educational Institutes, International Journal of Web-Based Learning and Teaching Technologies, 14 (4), pp 26-48

Paudel, P. (2021). Online education: Benefits, challenges and strategies during and after COVID-19 in higher education. International Journal on Studies in Education (IJonSE), 3(2), 70-85.

Psallidas, B. & Manousou, E. (2011). "The use of web 2.0 tools on distant education in Secondary education. Case Study: The planning and organization of the class of Biology in 3rd Grade of high school, the programs of Environmental Education and the programs for Sustainable Development at the 2nd High School of Voula". 6th International Convention for Open and Distant Education "Alternative forms of Education". Retrievedfrom: http://dx.doi.org/10.12681/icodl.703.

Spanaka, A. & Lionarakis, A. (2017). The Seven Principles for the Creation of Educational Material. International Convention for Open &Distant Education, 9, 121-123. doi: 10.12681/icodl.1363

Tzortzoglou, (2017). Digital Platforme-me: a digital place for cooperation of teachers and students. Available onhttps://edtech.gr/e-me-platform/

Whitton, N., & Maclure, M. (2017). Video game discourses and implications for game-based education. Discourse: Studies in the Cultural Politics of Education, 38(4), 561-572, https://doi.org/10.1080/01596306.2015.1123222

United Nations (2020) Policy Brief: Education during COVID-19 and beyond. https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf

WHO, 2020 https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

Wicks, M. et al. (2010). A National Primer on K-12 Online Learning. International Association for K12 Online Learning. USA: INACOL. Retrieved from http://qa.inacol.org/wp-content/uploads/2015/02/iNCL_NationalPrimerv22010web1.pdf