

# Comparative Analysis of Face-To-Face and Distance Education

Lab ICT Heron

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**Abstract:** *Nowadays, distance education, as an alternative form of learning with the use of new technologies, plays a very important role in the educational and learning process, having already replaced for a long time the traditional teaching, due to the coronavirus pandemic and the consequent suspension of the operation of educational institutions of each field. The topic of this work "comparative analysis of distance and face-to-face learning" was chosen due to its very topical nature and the need to identify any problems that exist in order to take measures for improvements and corrections in the implementation of distance learning. An attempt is made through a bibliographic review to clarify the concepts related to the two forms of learning, to briefly mention the educational tools of the internet, the teaching methods as well as their disadvantages and advantages in order to make a comparison between them.*

**Keywords:** Distance education, face to face education, new technologies, educational platforms, modern and asynchronous education

## 1. Prologue

The choice of this topic was purposefully made, since we all experienced the era of the pandemic, the time when the dominant motto was "Μένουμεσπίτι" (we stay home) and this applied to all our professional, educational and other activities. Educational activities require two parts, the instructor and the learner. E-learning has dynamically consolidated its presence, with the consequence that both students and trainees in general, as well as teachers, have to adapt to the new data.

The task was not easy and often encountered many and varied difficulties, both practical (technical knowledge and / or lack thereof, equipment and internet connection, adaptation of the educational process to e-learning as well as the efficient interaction of the participants).

The present work will theoretically compare the two forms of education and will evaluate the respective conclusions.

### 1.1 Introduction

The concept of education is directly intertwined with the face-to-face contact and interaction between teachers and students, the exchange of views on a variety of topics, social culture and socialization. In general, educational institutions as a whole have always been, besides uncompounded places of teaching and promotion of learning, places of socialization, interaction of different personalities, age and social groups, and generally places where the youngest part of the population spends a large part of its life, which is shared mainly between family and education.

During the coronavirus pandemic, education was greatly tested. For the first time, in times of peace, educational institutions of all levels remained closed, suspending their operations by state order. Gradually, distance education

began to be established as the only effective way of teaching modernly. Of course, such a change was not easy for everyone, as there are difficulties that must be overcome, as not all things are implied for everyone: internet connection, one or more computers, basic technological knowledge, familiarity. However, after some time, the new treaty seems to have worked.

Through this work we will briefly refer to the characteristics, content, necessity and importance of the concept of education and then, we will attempt a comparative analysis of the characteristics, advantages and disadvantages of the two forms of education (face-to-face and distance).

### 1.2 The concept of education

The meaning of education is in fact the formation, meaning the formation of a person's character from childhood, which arises from the influence of different factors, which are not limited to the purely educational process (school, university, etc.), but include and occupy every knowledge that people gain, either from their personal experiences or from older generations and in general interaction with other people.

The aim of education is to create citizens capable of facing the challenges of modern society, with knowledge, technical expertise and general supplies, so that both they can benefit from society, and society can benefit and evolve from them. (Fotopoulos, 2003). The ways in which knowledge is transmitted are constantly evolving, so that the learning process becomes easier for both learners and teachers (Daniel Reed 2019).

Admittedly today is characterized by rapid developments at all levels. Such levels are the social, the cultural, the political, the economic and the technological. All sectors and fields of society must adapt to these new developments in order to achieve a balance and a common course of

development and growth. The educational system, and in particular the teaching methods, is one of those disciplines that must follow these changes imposed by the modern era.

By the term modern teaching methods we can refer to various new practices in the field of education. These can be related both to the adoption of new technological tools and means in distance education and to the general changes that need to be made in the way of teaching and in the efficiency of lifelong learning. (<https://entre.gr/sygxrones-methodoididaskalias>)

## 2. Face-to-face education

The main feature of face-to-face learning is the live-presence communication between the instructor and the learner, which reinforces the view of the multilevel nature of education through wider discussions, socialization, recognition and imitation of gestures and expressions. Lifelong learning is distinguished in

- Formal, which is institutionalized, is provided to schools and universities and leads to the acquisition of recognized certificates (diploma, degree).
- Non-formal, resulting from planned activities such as camps and summer schools
- Informal, which stems from a person's daily activity (e. g. sports, artistic activities, reading books, theater).

Lifelong learning is provided through different teaching models. In the teacher-centered ones, as they are called, the teacher has a dominant position, he designs and implements the teaching and the students adapt to his rhythm and follow. Students are less creative and learning is largely based on memorization and repetition.

In the three-part teaching, the main feature is the universal application of the three-stage technique: a) presentation, where each learning unit is presented as a continuation of the previous one, b) processing, where the elements of the newly taught material and c) expression, which summarizes what has been taught and gives examples for better comprehension by students.

On the other hand, we have the student-centered methods, the main feature of which is "the absolute and conscious participation of the student in the whole learning process". The teaching takes into account not only what the students should learn, but also what they are interested in and what they can learn. Finally, there are the participatory methods, which are based on the cooperation of students on the one hand with the teacher, on the other hand with each other. Teaching is not strictly predetermined, but is the result of interaction and collaboration. (<http://www.unipi.gr/faculty/dghinis/ts/diaf14.pdf>)

Face-to-face learning is considered the most appropriate and effective way of education, especially for minor students, since the teacher undertakes the overall education and training of young students, as another parent and guardian. Furthermore, the physical presence and the deviation from the strict lesson through the discussion, in order to discuss important social, political and psychological issues,

effectively contribute to a more thoroughgoing education of the students and to the formation of their character. ([https://www.alfavita.gr/ekpaideysi/320253\\_diazosisdidaskalia-sti-sholiki-monada-kai-ex-apostaseos-ekpaideysi-stin](https://www.alfavita.gr/ekpaideysi/320253_diazosisdidaskalia-sti-sholiki-monada-kai-ex-apostaseos-ekpaideysi-stin)).

Furthermore, the interaction with the teachers is not the only one that matters, but also the interaction with the other classmates. Social interaction, discussion, sharing, exchange of views contribute irreplaceably to the formation of young people and prepare them for their further development in society. Finally, it seems that face-to-face learning is more likely to lead to the completion of the learning process. The questions are solved on the spot while at the same time, a more capable motivation is created for a more lively participation in the course. (<https://kedivim.panteion.gr/index.php/component/content/article/2-education/33-5-advantages-of-face-to-face-education>).

On the other hand, we could say that the limited use of educational tools which make the learning process more active, the difficulty of accessing of students living in more remote areas, the lack of flexibility in the scheduling of lessons, the possibility of a student being distracted in the classroom and of course, especially in times of the pandemic, the risk of spreading the virus, are some of the major disadvantages of face-to-face learning.

## 3. Distance Education

Distance education, in the sense that instructor and trainee are in a separate space and / or time, is not a recent discovery. It started with correspondence through conventional mail, using conventional books and then with the advancement of technology, adopted the use of radio, television, telephone to then proceed to the use of computers via the internet, mobile phones and other devices. (Gelameris, 2015). In our country, the most typical example of distance education is the Hellenic Open University (HOU).

Distance education is distinguished in synchronous, where teaching and learning take place at the same time, as the instructor delivers the lesson and the trainee attends it at the same time, although located in another place, and in asynchronous, where the trainee learns not only in a different place from the instructor but also at a different time from the process of delivery or creation of the course and according to his own personal rhythm. (Lionarakis 2001).

The evolution of technology has led to a variety of tools and platforms for the delivery of distance learning, such as Zoom, Webex, Skype, Microsoft Teams, Google Hangouts, email, e-class, viber, blogs, digital structures of the Ministry of Education such as interactive textbooks in digital format (eBooks), digital educational material (Photodentro) and digital teaching scenarios ("Aesop" Platform), which are already classified by educational level and are for use by both students and teachers. (<https://dschool.edu.gr>).

It is palatable to say that the advantages of distance education include the modernization and "renewal" of the

educational process, as the tools of distance learning makes it more attractive. This increases the motivation and willingness of students to participate in the lesson, while the interactivity and use of images leads to easier understanding of difficult concepts and thus to achieve meaningful learning, without the need for sterile memorization (Zogopoulos 2009).

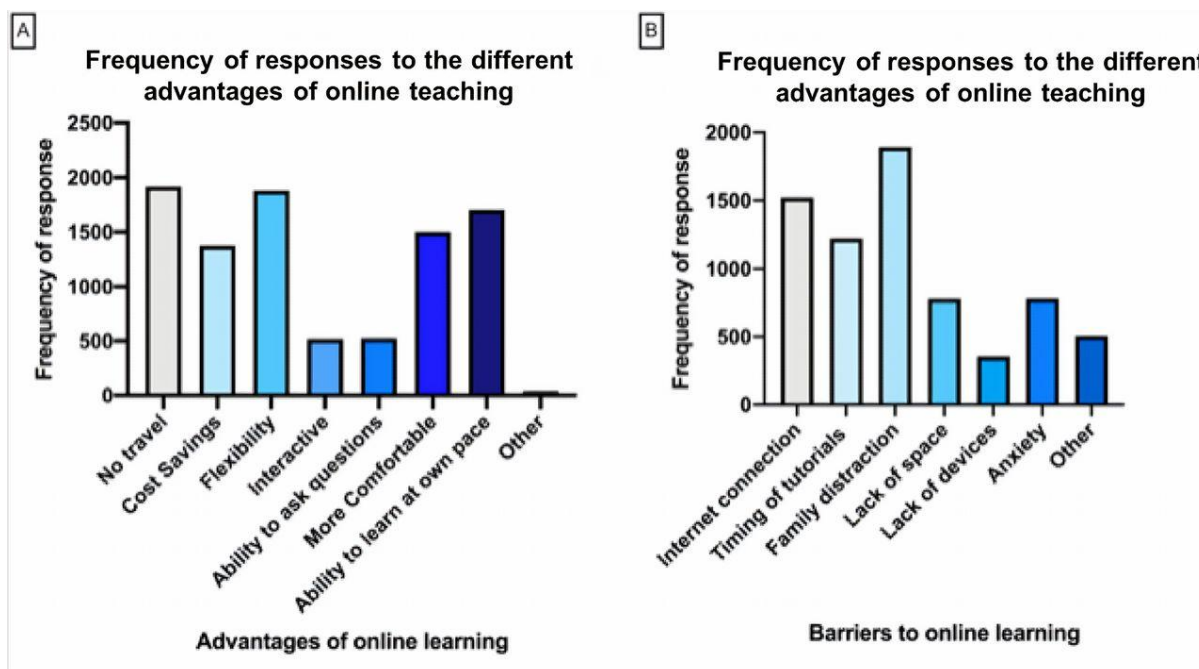
At a more practical level, distance learning reduces the operating costs of teaching, as using a laptop and connecting to the internet are sufficient, without requiring further materials and objects or other educational props. Furthermore, the digitization of notes has a positive effect on the environment as well, as multiple printing of books, booklets and notes is not necessary.

Distance education is especially friendly to learners with special needs. Using supervising means, visually impaired students can benefit from the audio media provided by an interactive system, and accordingly, hearing-impaired students can learn about a specific subject using visual stimuli, while students with mobility difficulties do not need to be moved from their own accessible personal space (Meimaris, 1997).

One of the disadvantages of distance education is that it lacks the essential interpersonal communication that exists

in lifelong learning, with dialogue and the expression of thoughts and feelings being much more direct and meaningful. This can lead to discouragement of the degree of participation and involvement of learners in the educational content and intensify the feeling of isolation and alienation from the educational process (Evans and Nation, 1989).

At the same time, many teachers, parents and students, do not have much familiarity and knowledge of the functionalities and the use of new e-learning environments and technologies, which contributes to the creation of stress, which diverts participants from the main goal of learning. Also, learners may find that distance learning is less demanding, so they participate less and make less effort, often failing to reach their full potential. Similarly, educators do not have a direct understanding and knowledge of whether their students have understood their lectures and material, and there is no flow and immediate feedback. Inequality in the educational community is further underpinned, as not all participants in the educational process have the same opportunities to access the internet and purchase computers. Finally, especially in exams, the absence of face-to-face contact and identification can lead to misdirections.



Graph 1: Advantages and Disadvantages of Distance Education

Source: <https://bmjopen.bmj.com/content/10/11/e042378>

#### 4. Epilogue

The systematic use of distance education in the recent two years of the coronavirus pandemic, combined with its rapid introduction, implementation and expansion, can lead to some fairly safe conclusions about its advantages and disadvantages compared to traditional face-to-face learning.

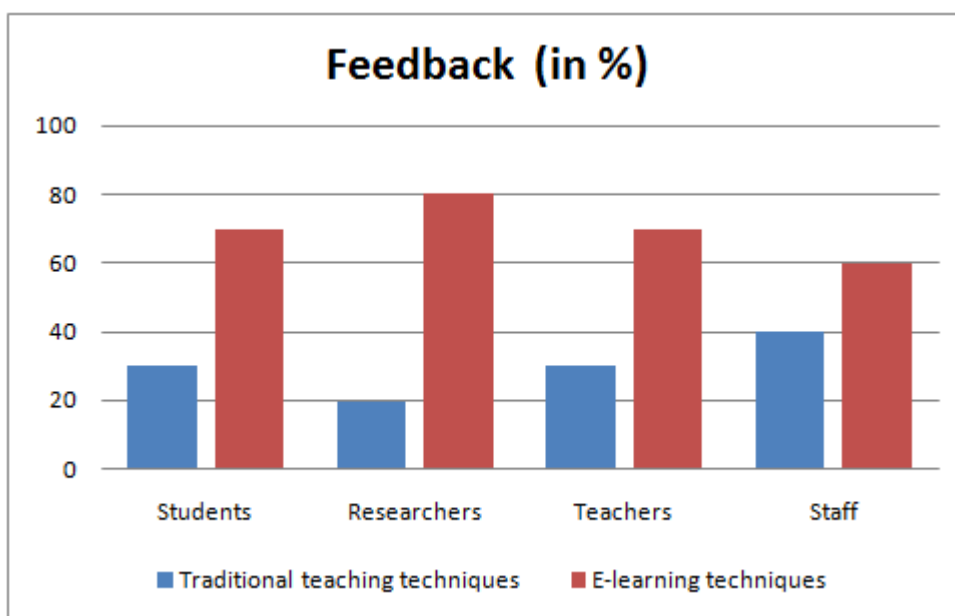
From the teachers' point of view, face-to-face learning is considered more complete and more efficient than distance

learning, as it sufficiently covers the emotional and psychosocial development needs that students have in the first and second decade of their lives, in addition to the strong interaction of the parties in the teaching process.

On the other hand, since distance learning as an innovative teaching method has proven its capabilities, the two teaching methods could be used in combination, so that one reinforces and complements the other. For example, it would be interesting if face-to-face teaching would be supported

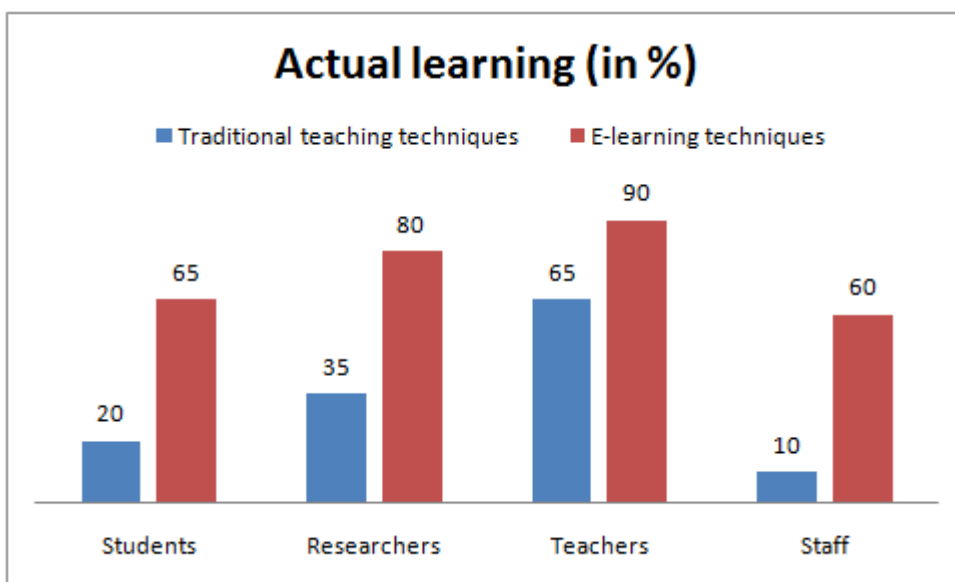
and enriched with interactive material, tables, pictures and graphs. In order to do this, of course, practical issues related to distance education must be resolved, such as ensuring a quality and seamless internet connection for all and, in general, upgrading the educational process for the benefit of young people and society in general. It is also necessary to (re) train teachers in new technologies, in order to be able to satisfactorily meet the requirements of modern times. Especially at the present time and due to the circumstances, teachers may now use face-to-face learning, however in the past couple of years they were obliged to teach remotely, as this had been imposed as a necessity by the state, but without having the time to train sufficiently to meet the requirements of distance education.

It is, after all, understandable that distance education on a fixed basis is an emerging component of modern social data, which was established suddenly, without any absolute preparation and readiness for it. For this reason, adapting to it is not easy for everyone, especially as the ages at which it is applied increase. However, there are educators who have been implementing distance education successfully for many years. At the same time, they adopt and implement other innovative ideas, which promote the quality of the provided education. It would be very useful if the practices and actions of such institutions would be communicated to other educational institutions, so that there is an upgrade of their own curriculum and their general mode of operation, with the ultimate goal of modernizing education without losing its quality and its effectiveness.



Graph 2: Feedback

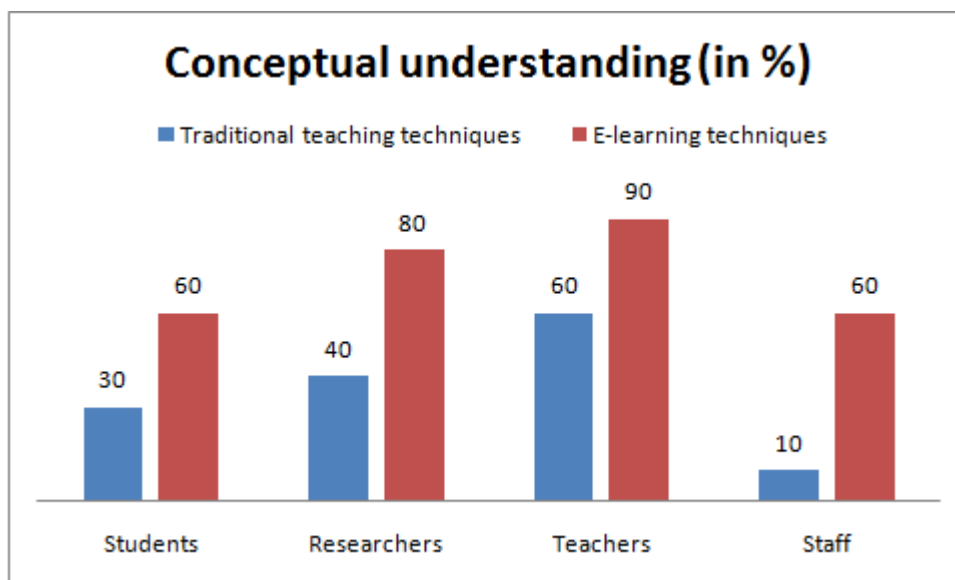
Source: [https://www.researchgate.net/figure/Graph-showing-actual-learning-ability-with-Elearning-techniques-and-traditional-teaching\\_fig2\\_294721233](https://www.researchgate.net/figure/Graph-showing-actual-learning-ability-with-Elearning-techniques-and-traditional-teaching_fig2_294721233)



Graph 3: Actual learning

Source: [https://www.researchgate.net/figure/Graph-showing-actual-learning-ability-with-Elearning-techniques-and-traditional-teaching\\_fig2\\_294721233](https://www.researchgate.net/figure/Graph-showing-actual-learning-ability-with-Elearning-techniques-and-traditional-teaching_fig2_294721233)





**Graph 4:** Conceptual understanding

Source: [https://www.researchgate.net/figure/Graph-showing-actual-learning-ability-with-Elearning-techniques-and-traditional-teaching\\_fig2\\_294721233](https://www.researchgate.net/figure/Graph-showing-actual-learning-ability-with-Elearning-techniques-and-traditional-teaching_fig2_294721233)

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