

Distance Learning: Acritical Approach Challenges — Experiences From the Pandemic Era

Andreas Davalas¹, Eirini Koukidou²,

(1. Aegean University, Greece; 2. Metropolitan College, Greece)

Abstract: This article attempts to describe the experience of the widespread application of distance learning due to the pandemic. Its general characteristics, which had already been preceded by scientific dialogue, were shown to the highest degree, when distance learning became an exclusive means of providing knowledge at all educational levels. Thus the easy accessibility, flexibility, and lower cost of distance learning have come to replace, albeit temporarily, the experiential and participatory learning that traditionally characterizes the educational process through physical presence (Burich, 2004). The all-round approach to this experience has led us to invoke classical theoretical learning models in an attempt to critically re-evaluate the complex process of acquiring knowledge. Recognizing the limits of distance learning is at the same time a challenge for the further methodological exploitation of a tool that, in many ways, is linked to the future of education in all subjects and at all ages.

Key words: education, distance learning, online education, schools & COVID-19

1. Introduction: Purpose

In southern European countries such as Greece, before the pandemic, there was no generalized culture of distance learning in both the student and adult populations. For example, around 20% of the general population did not even have access to the internet, while a significant part of adults, mainly over 50 years old, did not have any digital skills at all. With this in mind, although internet use by young people has dramatically increased by so-called millennials, distance learning was mainly limited to adult students of branches of foreign colleges or to training and certification seminars for private sector executives through unsynchronized education, aimed primarily at reducing the operating costs of companies (Abuhammad, 2020). This picture changed radically when, due to the lockdown that came as a result of the pandemic, schools and universities were closed, resulting in the immediate and pressing need for a completely transformation of the educational process into distance learning.

In this article, we will first try to analyze the experience of distance learning for teachers, learners and other stakeholders, in the light of recent developments, and then to proceed a theoretical assessment of distance learning as a means of acquiring knowledge. This, the opportunities, challenges and limits of the “new” educational practice will emerge.

Andreas Davalas, Ph.D. in Political Sociology, Aegean University; research areas: politics, education, international relations. E-mail: andrewdavalas@yahoo.gr.

Eirini Koukidou, MBA in Hospitality and Tourism, Metropolitan College, research areas: tourism & hospitality, education, human resources. E-mail: ekoukidou@yahoo.gr.

2. Easy Accessibility Consistently Maximizing the Digital Gap

Distance learning, especially in the era of the pandemic, has been shown that helps to overcome barriers to transition to educational units and reduce their operating costs, but removes from the source of knowledge, a part of the student population that does not have the necessary equipment to participate in the process. Several years ago it was found that in this way the obstacle of distance between teacher and student is abolished, by using telematic aids which are now available, and especially when the students can follow their own learning rhythm (Innocenzi, 1993).

Moreover, distance learning globalizes knowledge and democratizes access to sources, but increases the digital gap between those who have and those who lack digital skills. Of course there are equipment subsidy programs, especially for students, but in general, the provision planning for this need is still in transition. In Greece, the Ministry of Education only in December 2020 provided a welfare benefit of 200€ on income criteria, for the purchase of technological equipment for the needs of distance education due to the COVID-19 pandemic. This seems to confirm the view that the illiterates of the future will be those who don't know how to use a computer. And if that sounds a bit too much for the EU or the US, we need to think about the future for the children of the Third World and the poor parts of Asia who have lost the information revolution. Two-thirds of school-age children worldwide do not have access to the Internet at home, at a time when the coronavirus pandemic has made e-learning almost the only way to access school knowledge, according to the UN. A total of 1.3 billion children aged 3 to 17 do not have an Internet connection at home, according to a recent UNICEF report. "The fact that so many children do not have access to the Internet from home is not a digital gap, but a chaos", said Henrietta Fore, head of UNICEF.

Furthermore, the economic crisis caused by COVID-19 is expected to lead to an increase in child labour as families make every effort to survive, according to the International Labour Organization and UNICEF, according to which the increase in poverty leads to an increase in child labour. Moreover, in countries such as Greece with a significant population of economic migrants, distance learning for this part of the student population is almost prohibitive in the framework of intercultural schools, where the lack of understanding the language is the main problem. This reinforces the phenomenon of multi-speed pupils and increases the social inequalities.

3. The Objective Difficulties of the Theoretical Disciplines & the Loss of Direct Contact

Experience gained by the extended application of distance learning has shown that distance learning does not favour all subjects equally. For a range of practical sciences where the visualization of knowledge is possible, this can offer a remarkable level of educational process. However, especially in the humanities where they deal with abstract concepts, distance learning is an a priori methodological compromise as their understanding is difficult to standardize and transmit without direct dialogue and communication. Generally, the process of acquiring knowledge is primarily an ontological experience built by direct interaction. We all know from our student years that charismatic teachers teach even with body language and non-verbal communication. As well as the fact that knowledge is the product of a spiritual fermentation between students and teachers where the former can intervene with questions, objections and observations, while the latter have the opportunity to receive feedback on the degree and the way that students understand what they say (Napp et al., 2020). The experience so far of distance learning has shown that this possibility is particularly lost in groups of more than 10 people, so the student tends

to become an apathetic receiver of a pronunciation, since distance deprives any notion of immediacy and spontaneity in communication. But also from the professor's point of view there is the "anxiety" of publicity that can expose him to an instant stunt or subject him to the torment of public criticism, since all sessions can be recorded and reproduced. Also, we should not overlook the fact that the sudden and prolonged expulsion of students from schools, has acted as a means of inhibiting the socialization of young people, as it is well known that education not only provides knowledge but acts as a catalyst for learning social roles, values and attitudes, according to current standards of social behaviour (Asanov et al., 2021).

As we will analyze in the theoretical part that follows, essential knowledge requires an understanding of a subject, which is achieved by many different educational means and techniques and is usually not an individual achievement. In this respect, distance learning looks like you're trying to see a landscape through a keyhole.

4. Growing Up in a Digital World

Distance learning is the culmination of what Floridi (2001, p. 18) called with the neologism infosphere and includes the entire information environment, which consists of all information entities, their properties, their interactions and their mutual relationships. In essence, this is a situation of informational inflation where the individual finds it difficult to distinguish the important from the insignificant but also the validity of the source that provides information. After all, the flow of information is so stormy that it leaves no room for assimilation and reflection. This image may have been on the mind of the poet T. S. Eliot when he wrote that we had the knowledge and got lost in information. Since this reflection will be analyzed in the next section of the article, at this point we will be content to point out that the establishment of the Internet as the main source of knowledge and information at the expense of traditional media such as books, newspapers, magazines, etc. paves the way for cognitive unilateralism and manipulation of the citizens of the future.

From a psychological point of view, the experience so far confirms to us that the usefulness limits of distance learning reach a point where they do not to affect young people's vital psychological needs such as free time for fun and direct communication with peer groups (Markova et al., 2017). Otherwise we add another brick in the wall to the existing problem of Internet addiction and what it entails for young people (introversion, social phobia, isolation, depression, aggression, etc. behaviors observed in dependent individuals).

In particular, more than six out of ten young people, pupils and students, who participated in a survey conducted in November 2020 by Sentio Solutions, the Greek start-up that focuses on mental health activities, believe that their mental health has been affected for the worse due to of the pandemic. The most common negative emotions mentioned are stress, monotony, pessimism, lack of motivation, loneliness and depression (Summers et al., 2020). The biggest fear of young people in this period is whether their family will become sick, followed by anxiety about the future and their professional rehabilitation and concern that they will have fewer opportunities than before the pandemic.

5. A Theoretical Approach

First of all, we should clarify that in our case, distance learning is not only a teaching tool, complementary to the physical presence in the classroom, but a self-contained teaching environment in which all pedagogical activity takes place. That is why we should try to redefine the concept of education through distance learning.

From a theoretical point of view, education aims to provide knowledge and skills to learners through the science of education which, also empirically, can be defined as deliberately guiding people towards a predetermined goal (Cube, 1960). Learning as a result of the educational process is a holistic process involving various stages, strategies and instruments.

According to Kolb (1984), rapporteur of the widely accepted theory of experiential learning who assimilated the theories of Dewey, Lewin and Piaget, learning is a process in which knowledge is created through the transformation of experience. This functional transformation of the experience is achieved through critical reflection, i.e., through a circular process that includes:

1) Active experimentation: The learner based on his knowledge and experiences and having to face new problems, prepares to make decisions, wishes to act, to implement in practice what he learns.

2) Concrete Experience: At this stage the learner acts, faces new situations, “sinks” into the experience having concentrated his attention, but without pondering. That's how he receives information immediately. His senses are alert and are the route of information intake, while at the same time developing relationships with other people and experiencing emotions.

3) Reflective Observation: Experiences gained are carefully examined from a variety of perspectives before leading to crises. The results of the action are processed, their importance is understood, conclusions drawn.

4) Abstract Conceptualization: Experience gained is classified, linked to scientific data, theoretical approaches, general principles are drawn, rules of action are formed, relations between things are clarified.

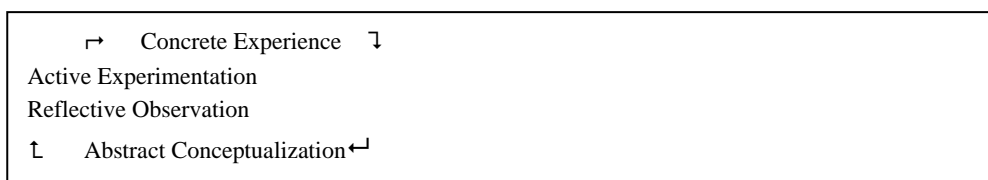


Figure 1 David Kolb's Experiential Learning Model

Based on the theory of experiential learning, distance learning has fundamental weaknesses to support the learning process because, on the one hand, it limits the breadth of experience at the audiovisual level, and on the other hand it deprives the learner of the possibility of direct contact with the other members of the group. And here the next question arises, namely whether the acquisition of knowledge is necessarily a participatory and interactive process (Costa et al., 2020).

The answer was given by the *cognitivism* which came to overturn the one-dimensional approach of *behaviorism* for which “the primary concern is how the association between the stimulus and response is realized, strengthened, and maintained” (Ertmer & Newby, 2013, p. 44). The students according to cognitivism are active participants in the learning process. They use various strategies to process and construct their personal understanding of the content to which they are exposed. They are no longer considered as a black box that teachers are filling with knowledge, but as active participants in the learning (Rhalmi, 2017).

Moreover, according to Bloom (1965) learning is distinguished in knowledge-based and emotion-based. The first includes Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation while the second includes Receiving, Responding, Valuing, Organizing, Characterizing. We easily realize that this is a complex process in which the individual must invest time, mental and psychic energy trying to reach from the source of information, to the conquest of knowledge. This non-linear and automatic process described in the above learning

theories, shows us that the framework for implementing distance learning may be too narrow to fit such an important and complex process as education (Ahmed et al., 2020).

We have already referred to the learning process as an active and participatory activity. In other words, we approached knowledge, also through the theory of communicative action according to Habermas. It is worth mentioning that at Habermas (1984, p. 13) “Communicative competence is not just a matter of being able to produce grammatical sentences. In speaking we relate to the world about us, to other subjects, to our own intentions, feelings, and desires. In each of these dimensions we are constantly making claims, even if usually only implicitly, concerning the validity of what we are saying, implying, or presupposing — claims, for instance, regarding the truth of what we say in relation to the objective world; or claims concerning the rightness, appropriateness, or legitimacy of our speech acts in relation to the shared values and norms of our social life world; or claims to sincerity or authenticity in regard to the manifest expressions of our intentions and feelings.” In other words, the more they broaden the concept of learning, the more we realize that distance learning is unable to influence the sphere of interpersonal understanding and communication, since knowledge is not produced in a social vacuum. On the contrary, knowledge defines the individual’s personality in the social environment and helps it to develop as an active part of that environment.

On the other hand, one could argue that the purpose and nature of this educational tool, does not serve the sociological concept of knowledge, but the practical expediency of getting rid of ignorance and social exclusion. Considering that for many, distance learning provides the opportunity to participate even in advanced academic studies, while remaining fully engaged in work and family, perhaps it prevails the dimension of opportunity and the prospect of integrating entire groups of the population into the educational process (Caspers & Ragan, 2000).

6. Co-existing Ine-class

In addition to theoretical searches, a reference to the specific characteristics of an e-class would be useful. We are referring, of course, to synchronized distance learning, which is comparable to physical presence in the classroom. In fact, we can argue that the digital way of presenting knowledge favours the speed and condensation of information, perhaps at the cost of rational critical thinking. The image that dominates in our case, causes the emotional more than the logical brain processes and thus the message is intense but fleeting (Ertmer & Newby, 2013).

However, it has been observed that if both the visual and auditory channels are presented with information, more knowledge is retained. Furthermore, if too much information is delivered it is inadequately processed, and long-term memory is not acquired. Pedagogical science has empirically found that an efficient knowledge acquisition strategy must go beyond mere fact-reporting (Cube, 1960) and this is certainly true in distance learning. Knowledge multiplies in an encouraging environment that is created when group communication is strengthened (Rogers, 1986). Therefore, the aim is to move from the left to the right communication style, where the dissemination of knowledge is not straightforward from the source to the learners, but interactively between all stakeholders.

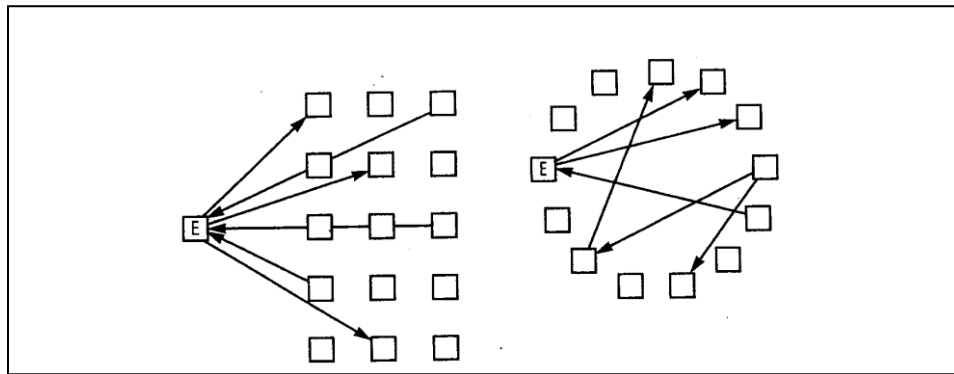


Figure 2 Different Communication Styles

To achieve this, already sophisticated digital platforms should be combined with techniques to maintain students' interest while distance learners must have access to library services and resources equivalent to those provided for students on campus (Caspers & Ragan, 2000) in order to strengthen the creativity and critical thinking. Also, the accumulated know-how leads to the adoption of new techniques and methods of online teaching, creating new paths of educational-interactive methods, which help teachers themselves to teach easily to children with Attention Deficit/Hyperactivity Disorder (ADHD) (Zheng et al., 2020).

7. Summarizing- Conclusions

From the above, can we conclude that distance learning has little to offer? The answer is clearly negative. As an educational tool, it is a modern, cost-effective and user-friendly option. Online courses “provide great flexibility and a variety of ways in which information can be presented. These packages can accommodate multimedia (even holograms), chat and threaded discussions, an online ranking, Internet information links, online reporting service, and databases. This also means that it is easy to present the same information in different ways, taking into account students' various learning styles.” (Burich, 2004, p. 102)

Although school is an integral part of secondary socialization and the process of acquiring social roles and values, so it can only be substituted for a very short period of time. However, in postgraduate programmes or in higher education in general, it is legitimate and feasible to draw on the experience that came from the pandemic (Mishra et al., 2020). We must, of course, first eliminate the digital generation gap and ensure equal access to knowledge even for those who lack access to the Internet world. At the same time, we must invest in the more efficient use of the Internet for teachers and learners, so that the experiential experience of knowledge becomes compatible with the new instruments (Patricia, 2020).

Regardless of which side one supports, it is certain that the perspective of education in the future will have to creatively synthesize the new creative practices of distance learning, with the undoubted pedagogical advantages of the traditional educational process, in order to contribute to its upgrading human capital (Qazi et al., 2020). Finally, we can argue that the traumatic experience of the pandemic, has helped digital convergence worldwide, and with this in mind, the democratization of knowledge is a valuable deposit that must be exploited in the future.

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