On distance learning in Italy during the Covid-19 emergency

Paolo Di Sia
Department of Physics and Astronomy, School of Science, University of Padova
Department of Neurosciences, School of Medicine, University of Padova
Via Francesco Marzolo 8, 35131 Padova, Italy
E-mail address: paolo.disia@gmail.com
ORCID: 0000-0002-6405-0483

Abstract

Aim. Due to the Covid-19 (briefly C-19) epidemic, since March 2020 people and institutions have needed to use digital services, i.e. a transfer to life online. This paper analyses the distance learning experiences of children, teenagers and parents during the lockdown in Italy. Reflections are then carried out on the impact of the distance learning at academic level and on the imposed distance mode.

Methods. We consider the distance learning experiences of children, youngsters and parents during the lockdown due to the C-19 epidemic in Italy, considering in particular data collected with a survey on a national sample of 1028 children and youngsters, aged between 10 and 18 who use the Internet.

Results. Society showed unpreparedness for this drastic change, highlighting already pre-existing digital inequalities. The closure of schools has led to over 90% of children and teenagers enrolled in school worldwide to drop out of school. From March 2020 the lockdown measures have been extended to all Italian regions.

Conclusions. Italian students lost regular school days by a factor 2.5 times higher than the average of lost days among high-income world countries. Millions of children and teenagers had difficulties in distance learning activities due to a lack of connectivity and/or inadequate IT tools; many students stopped attending school. Distance learning can be interpreted as an unfortunate piece of this new negative social picture.

Keywords. Covid-19 (C-19), distance learning, emergency, Italy, school, university, human relationship, freedom

Introduction

Due to the Covid-19 epidemic, starting from March 2020, people, businesses and institutions have been forced to use digital services to continue working, studying, maintaining family and social relationships, and this has resulted in a life changing situation in the network.
This change in the daily lives of millions of people has leveraged on everyone’s effective preparation to take this drastic step. But the access to the Internet, the possession of one or more devices already present in the home, and computer skills were certainly not taken for granted. In these months, we have witnessed digital inequalities which already existed before this crisis, but were considerably aggravated with the arrival of the epidemic.

Although the mainstream has used from the beginning the word “pandemic,” I would not use this word considering that the Italian and world data available, compared with the mortality of historical pandemics, suggest that this is not a “pandemic,” but an “epidemic”.

For educational and training organisations, due to the imposed isolation, have worked in digital terms to adapt to the changed conditions. In particular, schools and universities have had to quickly equip themselves with tools to allow for the continuation of teaching activities.

Since March 2020, the closure of schools has led to over 90% of children and youngsters enrolled in school worldwide to drop out of school to at least some extent (UNESCO, 2021). Italy was the first European country to implement a national lockdown. Schools and universities started closing at the end of February 2020; since March 2020, the government has extended the blocking measures to all Italian regions.

Youngsters and their families lived in almost total isolation for about two months, until early May 2020, and schools remained closed until September; Italian students lost 65 days of regular school due to the isolation measures adopted to tackle the epidemic, compared to an average of 27 days lost among higher-income countries around the world (Mascheroni et al., 2021).

This long interruption makes one think seriously, considering that even short school breaks can cause a significant loss of education for children and youngsters. To mitigate the impact of this closure, distance learning and learning solutions were used, delivered through various channels, such as online platforms, television and radio programmes.

Starting from the 2019 data on Internet connectivity in Italian families, it has been estimated that about 3 million children and youngsters between 6 and 17 years old may have had difficulties in distance learning activities due to a lack of connectivity and/or adequate tools in the family (Istat, 2020); moreover, 28% of students between 14 and 18 years old in Italy know at least one classmate who has stopped attending school in this period due to connectivity problems (Maldondao & De Witte, 2020).

In the first part of this work I consider the distance learning experiences of children, youngsters and parents during the lockdown due to the C-19 epidemic in Italy, considering in particular data collected with a survey on a national sample of 1028 children and youngsters aged between 10 and 18 who use the Internet (Mascheroni et al., 2021). The survey investigated the families’ experiences with remote teaching and learning. The sample of parents (N=1028) includes participants from the three Italian macro-regions: north (47%), center (19%), south and islands (34%).
The survey highlighted how the access and use of digital technologies by children and youngsters using the Internet has changed during the period in question, and how existing inequalities could compromise distance learning opportunities even among those who have Internet access.

In the second part of the work, considerations and reflections are carried out on the impact of distance learning at the university level, as well as general considerations on the epidemic in relation to the imposed “distant mode” of human relations in general.

Digital technologies during the lockdown

In order for everyone to benefit distance learning, the following are necessary:

- stable and cost-effective Internet access;
- good quality digital devices, ability to support video conferences and the use of digital platforms for not short periods of time;
- the users of these tools need time to get used to and to ensure continuous commitment and motivation;
- teachers and parents must be able to support children and youngsters during this transition.

According to a 2017 national survey, 88% of children and youngsters in Italy between 9 and 16 years old use the Internet at home every day; however, the lockdown has definitely changed the way they deal with the Internet and digital technologies. In fact, the Internet has become in this period the only way for them to interact with friends and to connect with family members who live outside the family home.

27% of parents reported not having enough digital devices at home for all family members. Many families have purchased new devices to allow more family members to be online and to replace outdated devices. Almost half of families bought at least one new smartphone during the lockdown, and 41% of them bought at least one new computer.

46% of families in the sample received new digital devices from their children’s school and 25% of them made use of an Internet connection paid for by the school for distance learning. The number of devices available per child tends to decrease with the size of the family, representing a potentially serious obstacle to their participation in distance learning.

Telecom Italia (Tim, 2021), one of the largest telecommunications providers in Italy, recorded an increase in traffic of 63% in fixed networks and 36% in mobile networks, with possible consequent connectivity problems for simultaneous use from a single internet connection (OECDiLibrary, 2020).

The effectiveness of distance learning also depends on the digital and transversal skills of children and teenagers, on how they communicate with teachers, on the accessibility of distance learning content, on the home environment conducive to distance learning at home.
Estimates from the Italian National Statistical Institute (ISTAT) (Istat, 2021) indicate that about 33% of Italian students were unable to participate in distance learning activities due to lack of Internet access; 6% of the interviewees declared that they had not been able to participate in distance learning due to poor Internet connection. These are problems that would require additional resources for families and better connectivity throughout Italy (LSE, 2018).

On the involvement of Italian children and youngsters in distance learning

In relation to the types of difficulties and opportunities encountered by children and youngsters at different ages, 93% of them reported a change in the organisation of study as a direct consequence of the lockdown. Higher secondary school students spend almost 7 hours a day online, compared to 5.5 hours a day for primary school students; this indicates a significant increase (in the order of 4-5 hours more) of the time spent facing a screen for children and teenagers, time more than doubled compared to an estimate made in 2017 (Mascheroni et al., 2021).

It is of fundamental importance to remember that, in addition to guaranteeing education, the school is first and foremost the place where children and youngsters interact with their peers and teachers, and can thus develop social and emotional skills that are crucial for a proper human development. All this time spent online argues in favor of a cognitively and emotionally unfavorable situation for everyone, and also cannot replace participation in physical exercise and in real play for children and teenagers.

Videoconferencing (e.g. Zoom, Google Meet, Skype) was the most frequently used digital tool by schools; also online messaging applications (e.g. WhatsApp, Messenger, Telegram, Signal), social media (e.g. Facebook, Instagram), email and virtual learning environments (e.g. Moodle, Microsoft Teams, Google Classroom, Padlet) have been used.

Videoconferences provide interactive synchronous learning through lectures and group activities, together with other tools that can allow targeted and individual interactions between teachers and students (e-mails, SMS, telephone calls), despite half of Italian teachers has not received a formal training on the use of technology for educational purposes (OECD, 2020).

Children and teens of all school levels (89-94%) reported engaging in some form of online activity with their teachers during the lockdown. 70% of countries used a combination of digital and non-digital approaches to reach children and youngsters at all school levels (UNICEF, 2020).

Most of them perceived a considerable decrease in the time devoted in general to school and homework; by rescheduling the typical school day, it was not possible for many schools to maintain the structured learning environment.

From primary school to higher secondary school, around 60% of children and teenagers said they were motivated to participate in online activities; about 68% reported feeling able to learn to participate in online activities, with primary-age
children a little less inclined than older children. However, around 25% of children or teens said they were worried or nervous about participating in online activities or completing school activities online. Such concerns may be related to difficult ability to socialise online; in fact, in addition to educational content, the school offers an important space for social interaction and experiential learning, aspects that are impossible to replicate in a remote learning environment.

This is especially true for the younger ones, considering that:

- they require more attention from teachers;
- they are developing social and emotional skills;
- they have less experience of both the educational system and interaction with others.

Overall, 35% of children and teens reported being worried about not being able to keep up with schoolwork during isolation, the remaining 65% feeling neutral or not worried (Mascheroni et al., 2021; LSE, 2020).

Distance learning and parents

In the current epidemic context, parents play a central role in helping children and teenagers to make the most of online opportunities, for school and other activities. About 60% of parents with a higher level of education said they were worried or very worried about the negative impact that the epidemic could have on their children’s education. 28% said they did not have enough time to support their children in distance learning during isolation; 27% also did not engage in extra educational activities with their children in addition to those provided by the school, also due to work problems related to forced isolation.

These data are in line with the results of a survey by the University of Milan-Bicocca, according to which:

- 66% of working mothers consider distance learning “incompatible with work”;
- 30% took into consideration the possibility of “leaving work” to follow their children in the event that distance learning continues to the bitter end (unimib.it, 2020).

About 82% of the parents in the sample expressed the desire to:

- educational activities allowing interaction among students;
- clearer guidelines on how to support distance learning;
- possible psychological support for the whole family.

This highlights a request to act also on well-being and on mental health as improvement of the overall experience of distance learning for children, teenagers and parents, as a consequence of the strong psycho-physical discomfort caused by the lockdown (Maldondao & De Witte, 2020; nordicom, 2021)
CONSIDERATIONS ON DISTANCE LEARNING IN THE UNIVERSITY

Undergraduates are statistically more willing and equipped for distance learning than primary and secondary school children and teenagers. In Italy, since the start of the lockdown, the following strategies have been adopted for the university:

• face-to-face activities, with a reduced number of students;
• dual activity, i.e. in presence and recording of lessons in real time with a part of students in the classroom and the other at home, and vice versa;
• purely online synchronous or asynchronous activity.

The unclear and not well defined Italian policy from the beginning in relation to the conduct to be followed in relation to the epidemic, has not allowed adequate and reasonably peaceful teaching work for many of the university teachers in these months.

The Italian university has thousands of contract professors, often engaged in teaching activities with ownership in fundamental courses with high numbers of students, who offer the same teaching tasks of structured teachers, despite the fact that remuneration is radically different.

During the confinement connected to the epidemic, contract professors made available own means and additional availability of time to offer the best opportunities to students, without however receiving material recognition (for example for the need to purchase new PCs and computer equipment). The quality education of the 2030 agenda, to which Italian universities refer, requires first of all compliance with the working conditions of those who offer such education (Nazioni Unite, 2021).

Regarding examinations, the remote online mode is not allowing adequate monitoring of students and adequate tracking software has not been offered, despite some universities proposing this method at the beginning of the closing period. This burdens in particular on the exams of disciplines that require a written test (for example mathematics and physics). Even the oral exams in online mode are not of the same level as the equivalents in presence.

GENERAL CONSIDERATIONS RELATED TO DISTANCE LEARNING

Although the main Italian canonical information channels (TV and newspapers) have tried to give different information, it is not excluded that the current crisis may have used the virus (on whose origin there are great doubts) to try to implement a much larger plan behind it (Wall Street Italia, 2021).

A possible interpretation sees in this crisis all the characteristics of the catalyst event that the most influential circles of globalism have been looking at for some time. Its ultimate goal could be to change the world balance of power through the establishment of a totalitarianism that limits personal freedoms. In this sense, the media in no way have the function of informing people, but are the instrument of power to programme them (McLuhan & Powers, 1992). Institutions have long lost their true function of educating and preparing people for life; their task of nourishing people’s critical sense is in fact increasingly weaker.
Unlike an adult, the span of a year for a child or a youngster is a period in which she/he undergoes a significant psychological development, which should take place in dialogue and in relationships with peers. In this period of enforced severe limitations, which violate constitutional laws, children and young people are living this crucial period of mental and existential development in isolation, with macroscopic negative consequences for most of them.

There are many contradictory positions in the lines followed by world politics, in particular in relation to the effectiveness of masks, the effectiveness of the PCR test, the determination of the absolute number of infections. Furthermore, many scientific studies contain unlikely errors, and some have in fact been withdrawn even by prestigious international journals (aeginagreece.com, 2021; Coleman, 2021; NutriTruth, 2021; NewScientist, 2008).

The process of social conditioning is inherently self-destructive; a population affected by this process is capable of great atrocities towards others and also towards itself. When we move away from the narrative of the virus, we discover a pre-totalitarian process, which cuts off all social bonds of the population, and which acts in the private sphere of people (Arendt, 1973).

Within a biological-reductionist virological ideology, there is an insistence on continuous biometric monitoring and people are subjected to continuous preventive medical interventions, such as vaccination campaigns. But people cannot be healthy, neither physically nor mentally, without freedom, privacy and the right to self-determination.

In the current emergency context, a topic that was already much discussed in the past is re-emerging: is distance learning really didactic? Digital teaching is different from traditional “face-to-face” teaching; the attempt to repeat at a distance the didactic and formative interaction models, that we use in presence, is not correct.

Furthermore, digital teaching in some situations is not inclusive; it is problematic to involve students in online work without adequate equipment, with an unstable Internet connection, connected from homes with brothers and sisters who must in turn connect, with parents who must work in smart working.

Furthermore, it should be firmly emphasised that with distance learning and smart working teachers have progressively lost the “right to be disconnected.” Lacking a well-defined work setting, the teacher finds her/himself experiencing a symbiotic dimension with the PC, with a continuous succession of video lessons and institute chats on the most varied e-learning platforms.

As previously stated, the costs that distance learning and smart working entail in terms of enhanced Internet connection, software, antivirus and similar, fell entirely on teachers, who in addition to the psycho-physical cost of the situation also found themselves having to bear the economic one.

The C-19 emergency has therefore opened a new delicate front of discussion and debate, on which union bargaining, at all levels, will have to intervene; the contract for employees in the teaching sector, from primary school to university, must incorporate these changes and think about new protections.
The use of digital media is important, but it must be mediated, reasoned and aimed at inclusion. Technology is important, but it is not all; it is not possible to cancel the daily human relationship.

Conclusion

As Italy was one of the first countries to establish a rigid lockdown with distance learning, the experiences of Italian children, teens, parents and teachers are leading to reflect deeply on this method. The Internet, an important but optional means of learning, socialising and leisure activities in times before the epidemic, has become the primary way of interacting with school, friends and other families.

About 3 million Italian children and young people were unable to take advantage of distance learning, due to the lack of Internet access or adequate digital devices; important inequalities were also found among families using the Internet, which became more evident during isolation. They showed that good quality digital devices together with a stable and fast Internet connection are the necessary prerequisites for distance learning.

Many families have had to purchase new digital devices to support distance learning for their children and also for the parents; another important problem was the lack of devices to simultaneously support distance learning and work needs, with further financial stress in particular for families from lower socio-economic backgrounds.

During isolation, many parents had to take on the role of educational support for their children in addition to carrying out their normal daily responsibilities, despite the fact that almost a third of them found a lack of time to support their children’s school activities.

Many children, especially the younger ones, expressed concern and anxiety about their ability to participate in school activities in the distance mode, despite the efforts made for their regular involvement in distance learning.

It is desirable to continue in the direction of increasing the ability of teachers to use technology and to provide support to parents and children remotely. More attention and research is needed to understand the full impact of distance learning on learning and well-being of children and teenagers. Teacher training should be sensitive to this new reality, with attention to the ways of using blended approaches that combine remote digital technology with face-to-face teaching.

The transition from a regular and structured school experience to distance learning in the home context brings significant changes and upheavals in the lives of children, teenagers, parents and teachers.

The current emergency has forced us to radically change teaching, with effects on all components of the teaching-learning process, strongly modifying them and forcing teachers to review their planned path in a functionalistic and digital key.

Situations and tools have changed; although the actors have remained the same, the reciprocal relationship has profoundly changed. We must be aware that the school set up in these terms will probably never be the same again.
In order to guarantee students the full enjoyment of their right to education, the alternative virtual mode is trying to better compensate for the one in presence, which however remains “the best context for the full expression of the educational relationship.”

In online mode, teaching, at any level, can only approach what the traditional school actually is; “the remote school is not and will never be school in the presence,” but a surrogate that we are trying to use to the maximum of its potential.

If the current emergency is destined not to end or in any case to continue over time, for more or less legitimate and scientifically sensible reasons, the risk is to create an increasingly weak and not highly effective school condition, with inevitable heavy repercussions of social and psychological nature on teachers and students of all ages.

In an interpretation of the current situation as the beginning of a new way of relating between people who are more socially and psychologically detached, i.e. “less globally human,” distance learning can be interpreted as an unfortunate piece of this new negative social picture.

References


