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**Editorial** 

## Some Lessons Learned in the Use of Distance Learning with Students with Special Educational Needs during COVID-19 Outbreak

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At the end of 2019, COVID-19 (an infective respiratory disease caused by SARSCoV-2) was discovered in Wuhan, China. It then affected Italy, then elsewhere in Europe, and it began to spread all over the world. On March 11, 2020, the World Health Organization (WHO) declared the COVID-19 outbreak a pandemic. The so-called "not-pharmacological approaches" are widely used to prevent contagion and to limit the outbreak of the disease; they are based on the adherence to the measures such as general lockdown, home quarantine, and school closure and distance learning [1]. These measures influenced children' [2] and adults' lives (both teachers, other school professionals, and family members) [2], and the spread of COVID-19 itself influenced their lives. Some authors described the peculiar features of distance learning during the current pandemic, which is mainly based on the use of e-Learning and some other traditional media (like TV and radio) and they named it "crisis distance education" [3] and they described its positive and negative aspects. From a positive point of view, the spreading of Covid-19 speeded up the use of distance learning by e-Learning platforms, and its use in all the levels of education [3]. But as a consequence of the time pressure due to the healthcare emergency, the use of distance learning has been in some cases unplanned and sudden. In some situations, teachers had not enough time to adapt previous didactic instruments, strategies, and means to the new situation. Moreover, distance learning during lockdown is a "home-based" distance learning, due to the home confinement and it put a huge burden on family members (mainly mothers or other relatives) [2].

In this editorial, we want to discuss the effects of distance learning with students with special educational needs (SEN) and with other students with previous known difficulties and/or and new difficulties developed during the outbreak. Our aim is to increase the positive effects and to avoid the negative ones. SEN are an overarching group of learning problems caused by neurodevelopmental and/or other clinical disorders that affects different domains of child development and that could affect learning [4]. They represent almost 10% of the school population [4]. There are two different shared approaches in the use of e-Learning and ICT in the promotion of learning for students with SEN: the use of ICT as assistive technologies, aiming to increase specific cognitive/academic abilities and to guarantee "reasonable accommodation" according to Convention of the Right of People with Disability (CRPD); the use of e-learning platforms and other tools with the aim to increase accessibility to information and learning materials, and with the aim to promote participation, inclusion and to keep in contact with other students and with teachers [5]. When trying to use e-Learning and ICT with students with SEN, according to both approaches just described, some major difficulties might emerge. There is a great heterogeneity beyond the term "SEN", heterogeneity that is related to individual differences in cognitive and functional profiles, abilities, and competences (but also differences



Citation: Petretto, D.R.; Carta, S.M.; Cataudella, S.; Masala, I.; Mascia, M.L.; Penna, M.P.; Piras, P.; Pistis, I.; Masala, C. Some Lessons Learned in the Use of Distance Learning with Students with Special Educational Needs during COVID-19 Outbreak. *Educ. Sci.* 2021, 11, 108. https://doi.org/10.3390/educsci11030108

Received: 2 March 2021 Accepted: 4 March 2021 Published: 8 March 2021

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in learning path and developmental and clinical history). These individual differences have a great influence both on learning and on the way they access information [6]. Some authors highlight the need to develop a general model, through which it would be possible to consider individual differences in learning and to consider the functional profile of each students with LD when designing and providing tools, learning material, and websites [6]. All these aspects are strictly related to each other and they are based on a trans-disciplinary approach, with cooperation between teachers, educators, psychologists, and other professionals. Time pressure during COVID-19 outbreak and the massive use of e-Learning platforms could have a negative influence on the implementation of this complex approach and on the needed attention on individual differences for at least the following reason: during COVID-19 outbreak, due to the tremendous time pressure during the healthcare emergency, not every teacher had the time to complete her/his e-teaching knowledge and competency, nor did they receive enough training or support during the COVID-19 outbreak [3].

During the first months of the pandemic, to guarantee continuity in learning and schooling for all children were a priority, whereas we believe that after about one year a discussion on some lessons learned is mandatory. That is, to improve the impact of the use of e-Learning, to prevent the risks of obstacles and negative impacts, to promote participation and inclusion, and to avoid school drop-out. As the COVID-19 outbreak is still ongoing all over the world, some countries are choosing to reopen schools with "face to face" lessons, or with blended approaches ("face to face" lessons together with distance learning/e-learning platforms). What lessons have been learned from the last months' experience with "crisis distance learning" and what are new lessons are we learning now?

In the following we report and discuss some main points to be considered in the use of e-Learning and distance learning during the COVID-19 outbreak, within the general population of students and with a focus on students with SEN [5–9]. We start with some general points on the role of distance learning and e-Learning as a way to keep in contact and support students and therefore we propose some general suggestions to guarantee the accessibility and usability of lessons provided by e-Learning platforms.

Some of the main purposes of the e-learning process are to guarantee continuity in learning, to keep in contact with all students, and to guarantee information also about some coping strategies to adapt to the current pandemic emergency and its consequences. In this sphere, great attention is paid to students with SEN and students with newly emerged learning difficulties, due to high levels of stress related to the healthcare emergency and/or social and economic difficulties. For teachers, it is important to maintain contacts with students with various methods (via emails, blogs, the school's online learning platform, video, with a priority in face-to-face online contact). It would be worth risking to overcommunicating rather than under-communicating with all the students, and with a specific focus on students with SEN and on their needs. During the outbreak there is a great risk of school drop-out for students with SEN and for students with newly emerged learning difficulties. An even higher risk emerges for students with social and economic difficulties, where "digital divide" and other difficulties could limit the use e-Learning. The use of other kinds of distance learning (radio, TV, and other traditional media) could be a way to keep in contact with students and to guarantee them the support they need. The cooperation between school professionals and other professionals is mandatory.

With reference to usability and accessibility of lessons provided by e-Learning platforms, it is important to provide clear instructions (explicit and well-organized information) aiming to prevent students' cognitive overload or difficulty in comprehension and to overcome the difficulties of some specific students (mainly students with SEN). During "face to face" lessons, for teachers it is simpler to monitor understanding and to assess the level of the students' engagement. So, keypoints in this issue are to provide first basic information, and then to provide more advanced information. Another keyword is respecting the individual's pace and rhythm (the "gift of time"). It is mandatory to pay great attention to students with SEN and to their individual and specific needs. Another issue is the need to

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provide high quality content and information, with an assessment to its specificity for the learner's level. Again, in this field it is mandatory to pay great attention to students with SEN and to their individual and specific needs. Students' engagement and self-regulation are crucial issues in e-Learning and in learning during learning tasks. There is a list of potential risks (like the ones to go off track, to try to do too many things, or focusing on interesting but irrelevant topics). Once again, the role of teachers and parents or other family members is extremely important in monitoring students' online activities. As for the previously mentioned issues, it is mandatory to pay great attention to students with SEN and their needs.

## **Conclusions**

In this editorial, we addressed some topics related to the changes in schools and learning during the current outbreak of COVID-19. We focused mainly on the use of distance learning and of e-Learning as way to guarantee continuity in school and learning during lockdown. We discussed some hints of analysis that could be useful to increase the advantages in the use of e-environments now and in the future, with a focus on students with SEN. From a general point of view, the current COVID-19 outbreak's experience could also represent an opportunity to schedule specific and deeper training and support for teachers with the aim of increasing their e-teaching competencies and abilities [9] and an opportunity to reflect and re-discuss some aspects of "the traditional educational systems".

We are aware that the use of distance learning and e-Learning is not the only aspect of the complex changes that children are meeting during this pandemic, and we are also aware of the effects that these changes could have on their mental health and development, but we believe that school has a central and crucial role in children's lives and it could also have a central role in preventing these negative effects [2,3]. As dealing with the current pandemic crisis is not an easy task and it needs cooperative efforts at different levels, we believe that a focus on the effects of the current pandemic outbreak on school and on teaching and learning could be a good way to start [10].

**Author Contributions:** All the authors equally contributed to the design of the study. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was done within the ATS Sardinia's project "Profilo Neuro-Psicologico e Problematiche Emotive nei DSA: Una Proposta di Ricerca-Intervento"—"Neuro-Psychological Profile and Emotional Problems in LDs: A Research-Intervention Proposal" (November 2019; June 2021).

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

Ethical Statement: No empirical data were collected to develop this Editorial.

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