

Beyond COVID-19 supernova. Is another education coming?

Beyond
COVID-19
supernova

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Abstract

Purpose – This article explores social and educational responses to COVID-19 as seen through the lens of the Spanish education, in which professional capital and community is at the epicenter of the fight against the pandemic.

Design/methodology/approach – This is a reflective and forward-thinking piece in which educators are presented as first responders to the crisis. The article is structured in four parts. First, the opportunities and barriers that COVID-19 is encountering in 21st-century education are commented on. Second, there is recognition of the need to be connected more than ever; and the vital role of networks. Third, the article discusses the effort to realize the maxim “not to leave anyone behind.” Fourth, the last section summarizes the key points related to the aspects to which education should devote its efforts in the coming months and years in Spain.

Findings – There is a set of reasons why the Spanish education system is extremely vulnerable to the consequences caused by COVID-19, and these include, among others: the high rates of socioeconomic segregation, of school dropouts and of academic failure; poor culture of networking and collaboration; overcrowded classrooms that hinders quality education; an obsolete curriculum; the consideration of education as a political currency; the need to strengthen bimodal education; and teachers’ obligation to update their digital competences.

Originality/value – The article questions whether another education is possible beyond the pandemic and promotes a deep reflection in this particular context for practitioners and policymakers on which topics more attention could be focused during this time of turmoil.

Keywords Networks, Collective capacity, Educational change, Community engagement

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A stellar explosion

COVID-19 affords a golden opportunity to rethink what matters most in education. The crisis at this moment is being contained with a response of an adaptive nature, but a transition phase towards *hybrid schooling* (virtual and physical) is yet to come. There are doubts as to whether this will allow for the arrival of a pedagogical renewal movement or whether education will simply return to square one when the de-escalation phase ends.

In other words, the post-pandemic schooling universe has two possibilities open to it: a return to traditional education as usual or a transformation towards another education. As Hargreaves (2020, p. 1) notes:

We’re in a long, dark tunnel at the moment. When we emerge, our challenge will be not to proceed exactly as before, but to reflect deeply on what we have experienced, and take a sharp turn in education and society for the better.

The research led by the scientist Nicholl *et al.* (2020), which is published recently in the prestigious journal *Nature Astronomy*, demonstrates the existence of extremely energetic stellar explosions, which are related to the most brilliant supernova discovery ever made. In the field of education, the COVID-19 challenge represents a supernova of similar caliber to this recent discovery.

A supernova is the explosion that takes place at the end of a star’s life. Like the lifecycle of a star, the educational journey of the previous decades has come to an end. It is a symbolic time where the COVID-19 supernova is heralding the end of a largely obsolete education. The explosion that has taken place offers the possibility of redesigning a better education for all,



where equity, excellence and student well-being will be the foundations on which to build (Fullan and Gallagher, 2020).

Prior to COVID-19, school systems, which have been disconnected from the realities and needs of their students, were already being questioned. For example, the report “Schools of the future: Defining new models of education for the Fourth Industrial Revolution” (World Economic Forum, 2020, p. 5) argues that “many education systems in developed and developing economies alike still rely heavily on passive forms of learning focused on direct instruction and memorization, rather than interactive methods that promote the critical and individual thinking needed in today’s innovation-driven economy.” The current situation has made active forms of education such as deep learning even more essential in these challenging circumstances (Fullan *et al.*, 2018). With the pressures of the pandemic, the education world is being forced to set about an evolution of vast dimensions. A school reconfiguration that is better able to respond and adapt to these complex times is needed.

In his visionary article “The battle of the century: Catastrophe versus evolutionary nirvana,” Fullan (2020, p. 10) states that “evolution could have wonderful things in store for us - but only if we do our part to shape it.” The education that is coming will need allies to support this evolution. Thinking in terms of months, years and probably decades, and appealing to the optimism of the will (Shirley, 2020), the will of educational change, this article looks at the current situation to question whether another education is possible beyond the pandemic. At the same time, this article explores social and educational responses to COVID-19 in Spain (my home country) in which professional capital and community is at the epicenter of the fight against this virus.

The article is structured in four parts: First, the nature of opportunities and barriers that are facing 21st-century education. Second, recognizing the need to be connected, not just in Spain, but around the world, networks are at the front-line of social movements and educational reforms. Third, the article discusses the effort to put into practice the maxim “not to leave anyone behind,” which is the standard of the Agenda 2030 (UNESCO, 2017), in which every person is equally important. Fourth, in a constructive criticism of the Spanish context, the last section summarizes key points about what makes this education system extremely vulnerable to COVID-19.

Non-scheduled fireworks

COVID-19 has caused education, as we conceived it before the pandemic, to blow up in the air like a non-scheduled fireworks display. This unexpected event has surprised a majority of countries affected, and their education systems have had no choice but to accept the digital checkmate imposed, ranging from teleworking measures adopted by their governments to the forced social distancing measures for citizens.

“In this global lockdown, education has been rebooted as a home-based, technology-enabled, remote activity with zero physical contact” (Harris, 2020, p. 1). The massive lockdown has required educators to respond overnight. Data from the World Bank Education (2020, p. 1) indicate that:

With the spread of the Coronavirus disease (COVID-19), among many disruptions to normal life, 160+ countries have mandated temporary school closures, leaving ~1.6bn children and youths out of school. Extended school closures may cause not only loss of learning in the short-term, but also further loss in human capital and diminished economic opportunities in the long-term. To help mitigate the loss of learning, many countries are pursuing options to utilize remote learning to manage and cope with the crisis.

In terms of system transformation, there is no doubt that this is a unique opportunity to test the effectiveness of remote learning on a large scale. However, there are other important

things that need attention. “In many parts of the world, learning is confined to those with direct access to physical school buildings” ([World Economic Forum, 2020](#), p. 5). Today, the lack of access to high-speed broadband or digital devices is increasing the distance between the high, upper-middle, lower middle and low-income countries. The COVID-19 crisis underlines the need to develop networked school communities and create a stronger educational home-school nexus.

The adverse effects of school closures on children’s wellbeing and learning will also have more consequences for the more vulnerable. There are students who have Internet and digital devices to continue with their learning at home, with good levels of connectivity; the support of higher parental education, and the availability of books and knowledge when they are “out of school” ([Mundy and Hares, 2020](#)). But others are literally “out of the system” because they do not have access to the remote learning tools and materials. Many children and young people are falling into a black hole as a consequence of the digital gap, and the number is accelerating at dizzying speed. This is one of the main challenges of the pandemic, which means that education systems must redouble their efforts, and find ways to enable students with fewer resources and other difficulties to continue learning from home.

The next section positions networks at the front-line of the crisis.

Networks at the front-line

One positive lesson, apart from the truce that global lockdown has given to nature, has been the collaborative networks that have appeared during these uncertain times. According to [Azorín \(2020, p. 105\)](#):

Digital technology is the first thing that comes to mind when people think about networks however, it is important to note that networks are not only present in the technology arena; but also have effects in politics, economics, society, culture and, of course, education.

Networks are at the front-line of the resilience action in battling against COVID-19. Since the beginning of the pandemic, formal and informal groups connected by social ties have emerged in force. During this period, the chains of favors has multiplied with initiatives of support and help towards the most vulnerable. An entire army of selfless volunteers have mobilized themselves to meet the basic needs of populations at risk.

The crisis has led to the emergence of networks of collaboration, neighborhood solidarity and an increase in volunteerism, causing a substantial change in people’s behavior (from individuality to collectivity), a splendid example of community engagement and humanity that has proved the power of professional capital.

[Heller \(2020\)](#) argues that there are four reasons why informal networks particularly are essential to enact meaningful change right now:

- (1) Informal networks of social favors provide bridges over systemic gaps that are not filled by other institutions. In response to the coronavirus outbreak, many community organizations have stepped in to deliver food and basic supplies to those who need it.
- (2) They are natural focus groups in which leaders of informal networks concentrate knowledge of their specific groups in order to support them. The understanding of the context matters, as do the socioeconomic conditions of life in communities, cultural nuances and possible partnerships with formal institutions.
- (3) Informal networks have people’s trust because they are often motivated differently than public or private entities. Neighborhood organizations build a microcosm they work hard to preserve.

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- (4) They might be invisible, but they can change the world. A community is forming, right now, singing and clapping from their balconies and drawing rainbows on their windows. Informal networks can change the reality of individuals. In challenging circumstances, history has shown that such impacts can escalate quite rapidly and go as far as to transform the world.

A global solidarity movement led by and for people, and based on the power of collective capacity response has been forged. In different countries, as in Spain since the State of Alarm was declared, thousands of people have shown their solidarity by producing medical equipment in a collaborative way. When the health system was proving to be on the verge of collapse, the network called “Coronavirus Makers” with more than 15,000 volunteers ensured that health workers were protected and could carry out their work safely. The initiative began in the capital city (Madrid) and quickly spread to the rest of the country. People were organized in teams to manage the creation and logistics of useful products for the health services. The lack of medical material in hospitals led by volunteers with knowledge of medicine, biotechnology or 3D printing, as well as designers, teachers and schools, to join together to design masks, respirators and protective visors with the help of companies that donated materials. The impact and benefit of this network was quickly appreciated by all sectors across Spanish society. In the sphere of education, this is linked to the paradigm “engage the world change the world” proposed by Fullan *et al.* (2018).

The education response to COVID-19 includes references to networking as well, and sets out a number of guidelines to be followed in this respect (UNESCO, 2020, p. 28): prioritize collaboration and working in partnerships; stimulate multi-sectoral collaboration (education, health, social and community, among others); facilitate peer-learning (which includes sharing experience, information, challenges, ideas, solutions and lessons learned); and strengthen communities of practice for teachers”.

The OECD framework (Reimers and Schleicher, 2020) recognizes the relevance of: identifying other school networks or systems and creating forms of regular communications with them to share information about needs and approaches, to solve them and to learn from them, which can make a difference in this crisis; promoting teacher professional collaboration and learning, and providing teachers with access to resources and online platforms for collaboration. For example: building partnerships between schools and higher education institutions might be a way to increase the capacity of online learning that allows a greatest interaction, as well as the creation of school networks and professional (teacher and leader) communities across schools.

Consequently, it can be argued that measures for the implementation of networking and teacher collaboration are part of the collective response to present and future education. The next section provides some of the responses to COVID-19 in Spain. From early childhood education to higher education, solutions are being sought and initiatives put in place so that the disruption derived from this situation has the least possible impact on people’s lives, with special attention to children and adolescents.

Leave no one behind

Two plausible example responses to the pandemic in the Spanish education context that try to leave no one behind are presented below.

My university’ response to COVID-19

The Agenda 2030 (UNESCO, 2017) aspires to leave no one behind. My university’s response to COVID-19, which is inspired by this agenda, has not been long in coming. The health crisis

is causing such devastating consequences in social and economic terms that the most disadvantaged students are already suffering. Therefore, the University of Murcia, like many other universities are in Spain and abroad, has led the project “Ningún Estudiante Atrás” which means “Leave No Student Behind,” under which students who are vulnerable as a consequence of the pandemic will be supported by the university to continue their studies the next academic year.

The aim is to raise funds to provide students with severe economic difficulties linked to COVID-19. The social and economic crisis is affecting many students and their families, who will not be able to pay for tuition, housing rent, transports or teaching materials. This solidarity campaign includes voluntary donations by members of the university community of 0.7% of their annual salary, and other sectors and businesses that wish to contribute. This is one of the first initiatives in a package of measures to help ensure that no student has to leave university for economic reasons. Another service that has been introduced is the loan of computers and Internet access cards for students and teachers who need them. This type of response goes beyond institutional borders and aims to provide direct support to students and their families who are worst affected by the consequences of this unexpected virus in their lives.

The story of Los Asperones

The second example is related to the story of Los Asperones, a disadvantaged area of Malaga (south of Spain) where 1,000 people live of which 90% are in extreme poverty. The project “Asperones Avanza” is an example of educational and social networking for the marginalized, see [Azorín \(2019\)](#) and [Herrera-Pastor *et al.* \(2020\)](#) for more details about this specific context.

Recently, the article “A respirator for a neighborhood in the ICU” published by [Sánchez \(2020\)](#) reported the current reality of Los Asperones, which survives thanks to the aid channeled by the school in this place. Just before the COVID-19 supernova exploded, the Special Rapporteur on Extreme Poverty and Human Rights United Nations, Philip Alston, visited this area which he called “a hot spot of extreme poverty.” The situation in this neighborhood was already very worrying before the pandemic, and is now worse because much of the psychological, socio-cultural and educational support has disappeared and fuelled an already raging fire.

Sánchez informs that from the first week of the lockdown, the school in this neighborhood, called “Maria de la O,” distributed pens, notebooks and school materials to families who do not have computers, printers or access to the Internet. Every Monday the monitors hand out, together with the bag of food, the notes and homework (all printed out) to the families. This school has an exciting story to tell behind a large-scale mosaic that covers one of its walls, the “Stars’ Mural” in which each star stands for a student who has passed the certificate of secondary education. This is an initiative promoted by various educational and social agents to recognize the achievements of the students who obtain this certificate and which represents a huge effort in a vulnerable location like this.

However, the consequences of this social and economic supernova will make it even more difficult for students to obtain their star. Asperones survives thanks to a social network that revolves around this neighborhood, but COVID-19 has undoubtedly made the social and exclusion gap even wider.

Lastly, it is not just the poor who have suffered, but middle-class families are also being affected for these tumultuous changes and, as Hargreaves (2020, p. 1) states, families on the edge of poverty may also have to choose between maintaining internet services or putting food on the table. Solidarity, private initiatives or collaborative networks will not be enough to reach everyone. Education is a right that aspires to a quality teaching and

learning process for all, without exceptions or palliative patches. Education systems have to respond and provide the means to ensure that truly no student is left behind. These are two stories, but there are much more.

The next section promotes reflection about what makes the Spanish Education system more vulnerable to COVID-19.

Looking through the Spanish Education window

By mid-March 2020, the Spanish education system had closed schools in response to COVID-19. In the world ranking of this virus, Spain in mid-May has among the world's highest number of confirmed cases (near 230,000). During the seven long weeks of this hard lockdown, "looking through the window" has represented one of the most repeated daily actions of Spanish society, so the heading does seem fitting.

At the time of writing, Spain is in its eighth week of the "State of Alarm" restrictions, but the lockdown measures have begun to be eased. Spaniards have lived through one of the world's toughest lockdowns. Only essential trips to the supermarket, pharmacy or the strictly necessary walks for dogs have been allowed.

This first wave of the pandemic is not yet over, but a new outbreak is expected in autumn. In response to this second wave, action plans are already being prepared with predictions on the scenario at the end of the year. For example, special attention will have to be paid to health and hygiene issues in schools. Among the main priorities for the next academic year is the political debate as to how to prevent schools becoming focuses of contagion and how to protect students, staff and their families. The re-opening of schools will include physical distancing, hand-washing, and other public health protocols will be part of the common school practices.

There is a set of reasons as to why the Spanish education context is more vulnerable to the consequences caused by COVID-19, and these include:

- (1) Socioeconomic segregation. Recent studies have confirmed the existence of high levels socioeconomic segregation in Spain ([Murillo and Martínez-Garrido, 2019](#)), which means that the country is especially fragile in the face of this pandemic. This is aggravated by the lack of resources for home learning from which many students suffer during lockdown. In reply to the unexpected and immediate closure of schools in mid-March which left no time to react, the sights are now set on providing all students with Internet connection and computers in time for the re-opening in September. The aim is for each household to be equipped with the necessary means for the teaching and learning to take place.
- (2) School drop-out. Spain, with almost 17.3%, has the highest school drop-out rate of the European Union ([Eurostat, 2020](#)). During these times some students are losing their study routines and their willingness to study, and this may lead to disenchantment, absenteeism, repeated years or more dropouts. It is, in fact, feared and expected that the latter will increase due to COVID-19, which will only serve to worsen what is already a delicate situation.
- (3) Teacher collaboration. Teachers in Spain do not have a collaborative culture and this is an added handicap to the necessary educational responses to COVID-19. According to the results of the [Talis \(2018\)](#) report, Spanish teachers collaborate the least, working in isolation in their classrooms. Only 24% declare that they participate in a collaboration network to design teaching plans or share teaching material, compared to the average of 40% in OECD countries. In terms of education, this isolation makes the Spanish context even more vulnerable to the collective response that the pandemic requires.

- (4) Lack of networking. Generally speaking, the development of networks in this country is not very advanced, and while there is a consolidated avenue of research, there is not enough policy support to sustain it (Azorín, 2019). Before the COVID-19 supernova exploded, networking was an option; today it is a must. In these times, schools need to take advantage of the possibilities that networks afford if they are to tackle and overcome the challenges of the pandemic. Hence, it is urgent that policies are brought in to favor networking practices.
- (5) Teacher-student ratio. A disproportionate teacher–student ratio will hinder the necessary social distancing in face-to-face classes. Thus, ratios need to be considerably improved in Spain if there is to be compliance with the physical distancing. The Spanish Government is studying the possibility of a maximum of 15 students per teacher per classroom for the coming year. In some autonomous communities of Spain, the figure in primary schools is currently at 28 students, while in secondary education it runs as high as 40. However, the Ministry of Education sees a duplication of the number of groups as economically unviable; the budget simply cannot cover a doubling in the number of teaching staff, nor can the new necessary spaces be financed. The interim solution under study is for education to be blended, with students alternating between morning and afternoon shifts, or attending on alternate days or weeks, and working from home the rest of the time.
- (6) School spaces. Certain school spaces are not sufficient to guarantee compliance with social distancing norms. Many schools are simply not physically prepared for the necessary social distancing in classrooms, corridors and common areas. It is yet another issue that currently remains fraught with uncertainty. In this respect, outdoor learning as a model for reopening schools could help be a good option to consider by the Spanish authorities to optimize physical distancing.
- (7) Curriculum. The Spanish curriculum needs to be reviewed. There is an emphasis on memorizing content instead of applying what is learnt, a feature that is present through all the different stages of education. A curriculum that fosters the development of competencies and a far more pragmatic approach are what is required to cope in these complex times. We need learning that enables students to predict less and experiment more (Fullan, 2019). There has to be a debate in this sense so that the foundations can be laid for a new curriculum that is more in line with the needs of today’s society.
- (8) Constant educational reforms and policy changes. Unfortunately, education is part of the political debate in Spain. In recent decades, there have been many reforms to the Spanish educational legislation by different governments which have served more to generate controversy and uncertainty instead of having any real impact in student outcomes. Indeed, this crisis occurred almost immediately after the announcement of the implementation of yet another political reform. So, COVID-19 has had the effect of enhancing what was already an uncertain atmosphere.
- (9) Reinforcement of bimodal teaching (a hybrid-schooling is coming). One of the consequences of COVID-19 has been the acceleration of the technological transformation which was gradually being undertaken and which has had to be incorporated instantaneously. The bimodal teaching model that is being proposed in Spain alternates personal and online interaction. This is a new way of doing education which, at least in the short to medium term seems to be here to stay. From the next academic year, starting in September, the Ministry of Education and the 17 Autonomous Communities are planning mixed online and face-to-face teaching that

will draw on both physical and virtual spaces. In short, an age of hybrid-schooling is to be ushered in.

- (10) The digital competence of teachers. Remote learning is showing very clearly that a significant number of our teachers do not have adequate digital competencies. A massive training program is needed if we are to ensure that no teacher gets left behind.
- (11) The sense of school belonging is under the spotlight. It is important that students do not lose the link with the school. "When a young person describes connection with their school, it ranges along a continuum from a deep sense of connection and belonging to complete detachment and isolation" (Allen and Kern, 2020, p. 1). In the era of COVID-19, where remote learning and hybrid schooling are part of the new scenario in which education takes place, this sense is clearly at risk. Strategies to support children and young people's school belonging will be more than welcome in the coming months and years.
- (12) And leadership. There is no distributed and networked leadership approach in the schools. The traditional single-school model which characterizes the Spanish educational system has died with COVID-19. This supposes not only a modification of the concept we have of education, which is shifting towards approaches and pedagogies of a collaborative nature, but also alternative models of leadership practice such as distributed leadership (Azorín *et al.*, 2020). Definitely, network leadership (shared, collaborative and distributed) is the new imperative of education.

In conclusion, the Spanish education system, as many other countries, will have to adjust to the requirements the pandemic brings and embrace all the changes necessary to overcome this situation of crisis. According to UNESCO (2020, p. 5):

Despite the great challenges presented by this crisis, the situation also offers the opportunity to rethink the overall purpose, role, content and delivery of education in the long term and prepare education systems to deal with current and future crises through comprehensive and inter-sectoral approaches, by tapping into collective experience and practices from around the world.

In short, if there were ever an opportunity to draw on the talents and strengths of collective capacity, that time is now (Osmond-Johnson *et al.*, 2020). We need to come out of this crisis as a stronger society, with a fairer and more supportive educational system that really can change lives. Otherwise, we will have missed out on an opportunity. Is another education coming? Let us see what is beyond COVID-19 supernova.

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