

Would We Be Able to Absorb the New Normal Brought by COVID-19 as Another Educational Revolution?

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Abstract—As an ever-increasing number of educational organizations overall test with innovation during the COVID-19 pandemic, searching for better approaches to flight themselves from their conventional methods of teaching and cultivating learning, this paper advocates the new normal as one of the key triggers of the new educational revolution. It debates that the COVID-19 crisis has constrained education practicalities to rethink their model for passing on education in a worldwide society where mobility or movements of individuals are sincerely under threat. Past this dispute, the revelations of this paper clarify the concealed factors of an educational revolution since the assertion of the second educational transformation 10 years earlier. With what he calls the "digital educational framework", the author thusly thinks the new normal will force individuals to reconsider as the dangers that control choices have driven a titanic number of students into brief "self-instructing" conditions and other related conditions, which have incorporated the explanation question of this paper.

Keywords—Education systems, new normal, educational revolution, digital education framework

1 Introduction

Ongoing changes in our day-by-day culture brought by COVID-19 have featured numerous inquiries in the conventional apprenticeship model of instruction, and accentuated the requirement for progressively experiential modalities of learning. The educational framework of the traditional, classroom, large, lecture-based course is evolving. Built up encouraging procedures were arriving at their cut-off points in most developed nations before this worldwide pandemic named COVID-19. Trends indicate an increase in the number of large, campus and physical buildings-based courses being offered over the past decade [1], as well as larger enrollments in these courses offered before COVID-19. Today, new prerequisites are required.

The global pandemic has zoomed up the adoption of the web-based instruction, which in the recent past was still battling with the lecture or classroom-based instruction. Should we adopt the theory of hybrid or blended educational framework that existed before the COVID-19 pandemic, where some schools, in conjunction with

the lecture-based instruction, adopted a Learning Management Tool or System (LMT/S) in order to enhance their traditional way of teaching? Alternatively, should we name it “the digital educational framework” in light of numerous tools in use recently (all web-based) to mitigate the risk of having a “white year” for learners and students globally? For the sake of this paper, a “white or blank year” here refers to a school or university year when its teaching and supplementary activities are fully or partially invalidated for many and various reasons.

Education has recorded a hard hit by the COVID-19 pandemic with 1.53 billion students out of school and 184 nationwide school terminations, affecting 87.6 percent of the world's absolute selected students. Drop-out rates over the globe are probably going to ascend because of this enormous interruption to training access [2]. UNESCO is supporting nations in their endeavours to moderate the quick effect of school terminations, especially for increasingly powerless and impeded networks, and to encourage the coherence of training for all through remote learning [3]. This is just to say or underline the fact that innovation has overflowed the gap.

Innovation has filled the gap because we sometimes define innovation as a new method of service delivery or an enhancement of existing methods to achieve a defined goal. With COVID-19, governments worldwide have taken different courses of action to support learners to continue their education remotely. Some governments have incentivised households to share the burden of education, and have passed new laws to accommodate changes. Several countries have revisited their states of emergency laws, as reforms are the constituents of innovation.

In fact, most education frameworks around the globe are decentralized which offers a chance to explore different avenues regarding innovation and find out about various methodologies. It likewise presents the test of designating dynamic position [4]. A core limitation, nonetheless, is the accessibility of local information and data to advise this dynamic. Without a working impression of schools to channel data all over, policymakers must be sensible with the adoption of certain technologies in their education system [5]. It will keep on assuming a key role in teaching people in the future. In our current reality where information is a mouse-click away, the role of the teacher must change as well [6].

While innovation has a significant task to carry out in education [7], many institutions worldwide are additionally centred around fixing a portion of the nuts and bolts, accepting that despite the fact that innovation can help improve education, it is anything but a silver slug in time of COVID-19. It ought to be coordinated with new education procedures embraced in relation with hygiene precautions, which will permit young learners to grow comprehensively and become capable citizens. Moreover, in order to make across-the-board progress, all encouraging methodologies for the educational revolution must be supportable, replicable and versatile.

In schools, colleges and universities around the world, inquiries continue their course about how to make instruction fit reason to relieve the dangers of pollution from COVID-19 just as to regard or watch the cleanliness measures. Previously and past the pandemic, other questions were from both a flexibility and an interest viewpoint. On the flexibility side, the issues were around quality and amount; there was a worldwide lack of qualified instructors and the individuals who are in the

calling are frequently obliged to convey a firm educational program with an over-reliance on tests not fit for reason [8]. On the interest side, students or learners were frequently under-qualified in the centre social abilities required for later life and poorly arranged to adjust to an increasingly adaptable and diagnostic expert condition [9]. The move from truthful figuring out how to take a shot at tasks and better meet the future business condition was and is an issue raised much of the time, giving both a test and an open door for change [10].

In fact, the COVID-19 pandemic is above all else a health emergency. Numerous nations have properly chosen to close schools, universities and colleges. The emergency solidifies the problem policymakers are looking at between shutting schools, decreasing contact and sparing lives, and keeping them open by permitting labourers to work and keep up the economy [11]. These alone constitute the plethora of questions the global pandemic has brought on top of the well-known ones due to societal inequalities and related inquiries. Can these constitute the basis of a new revolution in education at large? The good news is that there was and there is indeed a revolution going on.

In the quest for arrangements, innovation and technology will assume an inexorably noticeable role like it was in the ongoing past taking into consideration new methodologies, for example, the "rearranged study hall," Massive Open Online Courses (MOOCs) and "portable learning" [7]. Today, more than at any other time, we continue to become aware of "educational revolution" — brought by the pandemic but innovation and technology will bring about an extreme change in schools, colleges and institutions of tertiary education.

With the global lockdown of education institutions caused by COVID-19, teaching and learning have moved onto the web on an untested and extraordinary scale. Student or learner appraisals are likewise moving onto the web [12], with a ton of experimentation and vulnerability for everybody. Numerous evaluations dropped off. Significantly, these interferences will not simply be a momentary issue, however they can likewise have long haul ramifications for the influenced companions and are probably going to build disparity [11]. Nevertheless, it is not about disparity here. It is about the whole education framework. It is about individuals and institutions adopting dependable strategies to stay applicable. Another pattern is starting with an entirely different variety of new learning innovation businesses that set out to make instructing and learning simpler for everyone during and after COVID-19.

It is no surprise that getting worldwide education institutions to moderate the dangers of no arrival in 2020 is a prominent desire for some. Regardless of whether by means of innovation firms like Google and Facebook utilising inflatables and different answers to provide connectivity to remote regions especially in Africa [7], or governments putting resources into fixed and versatile broadband foundations, the capacity for each institution to access available data is a crucial and possibly transformational move [11]. Indeed, some will be left behind from the outset like in any transformation or revolution [9], however the computerised separation will, it is contended, be decreased and at some point in the following decade, each school ought to be connected.

For some time now, instructors around the globe have been discussing the need to reconsider how they teach people in the future. This pandemic may very well be the disturbance that the education industry at large expected to get everybody to reconsider what the education of tomorrow will resemble, and question for what the instructive establishments are setting up the student [6]. In this way, as worldwide education thinks about the better approaches for speaking with their students or learners from their study halls and lecture theatres, it is a decent time to consider how this problematic emergency can be deciphered.

The COVID-19 pandemic has brought about educational institutions around the world being constrained to abruptly saddle and use the set-up of accessible technological apparatuses to make content for remote learning for learners in all segments [13]. In addition to the above, this paper draws upon an ongoing worldwide pandemic named COVID-19 to examine various possibilities and difficulties emerging from it as the delivery of education faces changes due to the revolution of the new experience. It reviews the grounds to establish whether the new normal can be the determinant of another educational revolution.

2 Significance of the Study

We frequently imagine that our current educational institutions have consistently been here, and have consistently attempted to adjust to change. Yes! This is true to an extent and false to another. However, the beginning of our current educational framework happened because of a comparative technological and financial tumult – the modern or industrial revolution [10]. This in essence indicates why this paper is trying to advocate COVID-19 as a trigger to another educational revolution.

At no other time has there been a purposeful worldwide exertion to digitise education [14]. It is a precarious expectation to absorb the new normal for us all and nobody can take it easy without tending to the changes. The study assesses the outsets caused by the global effort to define another educational revolution of the century. The author notes how it is a noteworthy moment in education as a worldwide substance to call this new revolution “the digital educational framework”.

Consequently, this global pandemic named COVID-19 coupled with the Fourth Industrial Revolution (4IR) constitute the motive of this paper in describing a new educational revolution. The author is also aware of the reality teachers, guardians and students are going through in order to figure out how to utilise this episode to rethink education, including what and how the children learn. New solutions powered by the 4IR for education could bring much-needed innovation today as well as tomorrow with few enhancements of adopted elucidations.

Despite the fact that going digital is simply a large portion of the fight with COVID-19 now [14], the pandemic has changed how millions of students or learners around the world are instructed. The world was acquainted with the blending educational framework, which in essence was the domination of over 70 percent of traditional classroom-based instruction coupled with some web-based instruction. Very quickly, the world noticed the changes. Those progressions have given the

author a brief look at how education could change for the better - and the worse - in the long term. In addition, they give the author several reasons to believe in another educational revolution. The author provides suggestions as to why he believes in another educational revolution through COVID-19.

3 Theoretical Background – Is There Any Revolution?

The COVID-19 emergency has constrained education institutions to re-examine their model for conveying education in a global society where mobility or movements of people is earnestly under danger. This indicates that the world can no longer afford the luxury of the traditional, large, classroom-based instruction on campuses or structured buildings. Online education is as of now a long-standing component of education [15]; however, one impediment is that not all individuals have satisfactory transmission capacity or home conditions helpful to study. It is for sure a teaching and learning revolution - but not for everyone?

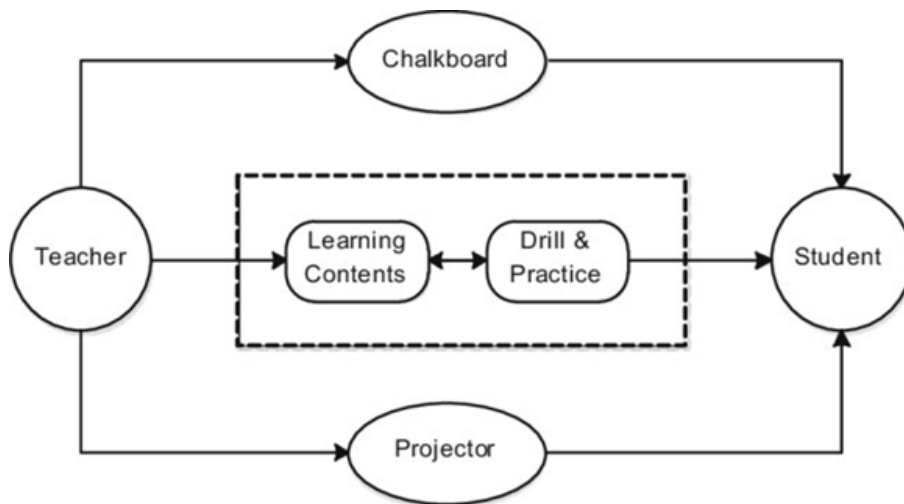


Fig. 1. Framework of the traditional lecture-based instructional approach, source: [16]

As revolution occurs, not everyone benefits from it. This has been part of our unequal society as a whole for centuries and neither COVID-19 nor the digital educational framework will ever change that. On top of this educational framework known as the traditional, large and lecture-based instruction, there is an accreditation body. This special body has been at the centre of many controversies in the recent past emerging from online degree and diploma graduates as to the recognition of their qualifications worldwide. This was not a serious engagement in the eyes of stakeholders because of the domination of the existing educational framework before COVID-19.

The author notes that the moderate pace of progress in educational institutions globally is heartbreaking, with hundreds of years-old, address-based ways to deal with educating, dug-in institutional predispositions, and old-fashioned study halls. Notwithstanding, COVID-19 has become an impetus for educational institutions worldwide to look for imaginative arrangements in a generally brief timeframe [17]. A decade ago to date, [10] stated that the world of education was undergoing a second revolution. Stakeholders never questioned this declaration at the time until the 4IR came into the picture and today COVID-19.

These two prominent advocates of the second educational revolution named [10] argue on the fact that technology at large was changing how society or the world consider teaching and learning. They highlighted among them computerised technologies such as personal computers (PCs), cell phones (mobile and smartphones), advanced media creation devices and infrastructures as well as circulation instruments, computer games and long range of interpersonal communication tools including social media platforms. In any event, while students have workstations or tablets, the social and information relations of learning have not changed a lot [18]. What has changed is the delivery of content, which has migrated from physical face-to-face to online and pre-recorded content to date.

Is there any revolution? Education is thought of as an inexorably non-direct procedure, as we entered a reality where education for some did not stop on graduation yet was a deep-rooted movement where abilities and information were refreshed and overhauled both officially and casually all through a working life. Today, with COVID-19, we are presently compelled to break with many years of convention on the other hand, we likewise get the opportunity to rethink what we need to realise and reconsider what education could be. However, [17] are asking what amount of that would we say we are doing? The problem is no longer on the amount but on the efficiency of adopted digital methods.

Through controls of the spread of the infection, schools and colleges have made adaptability for students essentially unthinkable a couple of years ago. The known halls and classrooms in conventional schools are changing to create social distancing clusters as a response to prevention and spread of the virus. With these new game plans, institutions would be able to accommodate more students than before because of a contention with a fluctuating and in some cases self-assertive timetable of classes instructed at a particular time in a particular venue. The facts demonstrate that new technologies made and keep on making learning openings that challenge the conventional acts of schools and universities [10].

Today, with no doubt, COVID-19 has made more open doors that challenge the entire educational system. It has since constrained the global education framework, the educational framework of the traditional, large, lecture-based course, to rethink every one of its protections. Today more than at any other time, all ventures over the global economy are adjusting with the quick pace of progress. Given the above-mentioned evidence, the focal point through which the author glances in this paper is a shady, best-case scenario.

The pandemic that has covered economies around the globe has likewise battered education frameworks in emerging and industrialised nations. Some 1.5 billion

students, near 90 percent of all primary, secondary and tertiary students on the planet are not at this point ready to physically go to class [19]. This is the reason, in numerous regards, the momentary widespread change to internet or online teaching and picking up during the COVID-19 emergency has been so excruciating. Since when instructors attempt to do the regular old things on the web, the outcome of a great part of the time is a stage back. Most schools and most instructors are badly arranged for the certifiable and positive changes that are conceivable in the move on the web [18].

Albeit such an extensive amount the world's educational frameworks have been intended for the first industrial revolution time in several places [14], the effect has been emotional and transformative like in the four industrial revolutions recorded to date. If the dictionary defines a revolution as a fundamental change in the way of thinking about or visualising something; or a sudden, radical, or complete change [20], in the current event, this paper confirms an existence of another educational revolution. In other terms, there is a change of paradigm from the second educational revolution announced by [10] to date. The identity of the educational revolution brought by COVID-19 is that, with the new normal, instructors have mixed to set up serviceable transient answers for remote teaching and learning, especially in developing markets, where students and schools face extra provocation identified with financing and accessible framework [19].

Uninvolved learning, direct reasoning, early specialisation, one-size-fits-all teaching such as all outfitted towards building a work power capable at adhering to guidelines and being acceptable at doing explicit things are all moving to a different stage due to COVID-19 [14]. Quite a bit of what we see online is recognisable, just more regrettable. We have agonising Zoom meetings where the instructor talks at the students and just the typical suspects get an opportunity to talk. Instructors email worksheets or filtered sections from the course reading to the students and request that the guardians or parents watch their children do them. Or on the other hand, they quickly space students into "learning the board frameworks" like Canvas and Google Study hall, an unholy blend of the lock-step schedule and advanced substance transmission [18].

The author concurs with [21] that interruptions and changes are not the typical partners of rationale and reason. Furthermore, the dull speculative chemistry of dread and unconventionality walk the lobbies of companies and worldwide education in the same approach, making it troublesome, not impossible to anticipate with exactness that what remains in education is another revolution.

3.1 Is there any educational revolution on the global scale?

While each degree of education faces its own kind of difficulties, over a billion students overall cannot go to class or college because of measures to stop the spread of COVID-19. It is therefore critical to take a gander at what each continent of the globe is caught up with doing in light of COVID-19 so as to give unmistakable realities to showcase that the new normal brought about by this pandemic is for sure another educational revolution. The revolution has started in our homes and the author

is proud to call it “the digital educational framework”. What we know today is that global education, all levels inclusive, has taken a slap.

To control the spread of the infection, the hazard control choices have driven millions of students into impermanent 'self-teaching' circumstances, particularly in the absolute most vigorously affected nations, similar to China, South Korea, Italy, and Iran [17]. Conventional buildings known as schools with many halls and theatres known as classrooms have become ghost entities, too big for essential services of janitors. In tertiary education, numerous colleges and schools are supplanting customary tests with online appraisal apparatuses [11]. This is another era for several parties inclusive of local governments, United Nations organisations, lecturers, students as well as parents who have to supply infrastructure at their homes to suit these new auras.

With some random examples, in South Korea, with in excess of 160,000 worldwide students concentrating in the country and a huge number of foreign students from abroad coming in on a yearly premise, the Ministry of Education rushed to act by giving an exacting 14-day isolation arrangement on all approaching universal students. This approach limits students to their quarters and frameworks firm measures to forestall the spread among nearby students [22]. The current COVID-19 pandemic is representing a few difficulties to worldwide education. To help moderate the spread of the virus, in February 2020, students in Hong Kong began learning at home by means of intelligent applications. In China, 120 million Chinese gain admittance to learning material through live transmissions [17].

In Italy, the European nation hit first by the pandemic, schools shut on March 5, 2020. Albania, Greece, Czechia and Romania before long followed this choice. Most European education frameworks shut their schools by March 16, 2020 [23, p. 19]. TV and radio diverts in certain nations are communicating educational substance to help with distance teaching and learning. Numerous educators and education workforces are trying different things on the web and with computerised devices. In any case, network issues and specialised disappointments of online study hall programming have been accounted for, including the natural educational troubles of suddenly changing to remote instructing techniques [24].

In the midst of the COVID-19 pandemic, schools and colleges in America have worked steadily and imaginatively to take students back to the United States to finish their academic projects on the web. By teaming up intimately with education abroad program suppliers and global college accomplices, educational institutions have adjusted scholarly principles and practices to oblige an uncommon number of students whose spring and scholastic year education abroad projects were cut short [25].

Likewise, students at one school in Lebanon started utilising web-based learning, in any event, for subjects such as physical education. Students shot and sent over their own recordings of athletic preparing and sports to their educators as "schoolwork," pushing students to learn new computerised abilities [17]. In South Africa, the most affected nation on the African continent, parent and teacher associations were grasped with dread and vulnerability following the choice by the division of fundamental education to close schools inconclusively. In addition, the danger presented by COVID-19 has unexpectedly made another feeling of solidarity among learners of

primary and secondary schools, domestic and global students, university administrations and local business networks.

Be that as it may, the pace and extent of terminations of the global education framework has shifted enormously with certain nations favouring local responses [26]. Educators, academics and other education faculty members in several nations worldwide were encouraged to telecommute, while few others had to be in school, colleges or universities genuinely proceeded with tasks. The above confirmations constitute the proof to ascertain that pandemics trigger radical change in customer conduct. Yet, COVID-19 is extraordinary. The pandemic will leave enduring changes to the way that institutions consider and practice education abroad. What we watch currently is a genuine worldwide emergency. Past the dread of its negative financial effect later on, the writer is sure to portray it as another educational transformation.

3.2 The educational revolution is taking place at home

While many people were using new technologies for self-teaching in the recent past, COVID-19 is upending global education. The call to shut down everything was effective, from elementary, primary and secondary schools to universities and colleges. Teaching was cancelled or put online, forcing learners to study from home and complete assessments online. This alone is a clear indication of why there is a digital educational framework today in lieu and in place of blended educational framework.

Closer to home, the educational achievement of children is positively correlated with their parents' education or with other indicators of their parents' socioeconomic status [27]. My kids have been on home-based learning for more than four weeks now. Every day, my wife and I are flooded with emails from their teachers on the status of their homework submissions: reminders for them to submit assessments, attend to reading materials, monitoring of their numerous projects and all related inquiries, and reminders for a little brother to participate in a Skype call with peers at a particular time of the day.

While there has been a spotlight on going advanced this home-established learning season, the greater issue is that education needs to modernise and turn out to be progressively applicable. Digitalisation is both the arrangement and the test [14]. Numerous educational institutions are presently teaching their students through distance education since educational buildings in numerous spots are closed and much achievement has been accounted anecdotally [28]. It is in fact great that the worldwide education framework has been rapidly moving all, or a considerable piece of their courses, to the web.

COVID-19 has forced everyone to work from home: the new place where people create magic now. However, the big issue is that most educational employees are not prepared to offer online courses; they do not have the modern innovation fundamental for top notch teaching and learning and have not adjusted their educational plans to the web. Educational institutions are probably going to be careful about restarting education abroad in the manner that it has been drilled up to now [25]. In fact, at this time, institutions are making the enchantment in each family where both their

educators and additionally their students are working. They have an open door currently to comprehend and imagine the new educational revolution.

Amidst COVID-19, technology is not generally creating new interest, yet makes more things conceivable. Email, cameras in cell phones and Wikipedia are only a few instances of how this functions. Every one of these models "supplants" more seasoned innovations — but then they open up very new spaces [7]. Because the magic is taking place at home, the experience transcends known or established norms to force a revolution [29]. The COVID-19 pandemic is seemingly as exogenous a stun as it gets, however it will presumably not be close to as diligent as the lodging breakdown, innovative change, or globalization but will certainly force an educational revolution. In this manner, closings and lasting partitions are not inevitable [30].

4 COVID-19 – A Trigger To A New Educational Revolution

Recent media reports have drawn attention to COVID-19 and the challenges facing education on the global scale. A multibillion dollar business is taking a hit and the concerns of all parties are beyond any expectations. The forecast of the expenditure by 2030 with the growing demography of the emerging markets is now questionable. COVID-19 is driving an unprecedented time in education with the last revolution in the sector a decade old to date. The revolution is second according to the literature and it was a fruit of some technology adoption in education [10].

As things happen today, the outcomes could be stunning. The author, in comparison with the Long-Term Educational Returns of 1968 to the Angry Students in France by [26], anticipates ordinary assessment methods to be surrendered and the pass rate for different qualifications to increment tremendously on the global scale without any distinction. COVID-19 is making a huge difference in the sector; the author believes the revolution is taking shape and it is definitely here. The shape of this revolution is nothing but a digital educational framework. The manner in which instruction of students is playing out, their collaborations, their evaluations or examinations and every single related request to their education venture should change to oblige the new normal.

With the online fragment despite everything containing a little part of the \$2.2 trillion worldwide advanced education showcase — under 2 percent, as indicated by advertising knowledge firm HolonIQ — the market is ready for interruption [31]. The craving from students for online contributions will probably develop in view of COVID-19 [14]. Indeed, even before the pandemic, numerous colleges were seeing decreases in enrollment for grounds-based projects and equal increments in take-up of their online courses [32], [33]. With COVID-19, we perceive how yesterday's disruptors can turn out to be the present lifeguards. While conventional institutions once saw online education as a danger, it has acted the hero.

In the ongoing past, as the revolution was dormant, individuals and some education institutions in organisation with their respective administrative institutions chose for themselves whether the online product encouraged them toward their objectives and merited their cash [34]. Massive Open Online Courses (MOOCs) are the latest and

profoundly promoted contestant to a quickly extending universe of the COVID-19 educational revolution [35]. The appropriation of online arrangements as of late has been remarkable. Temporarily, instructors are applying a 'first aid' arrangement by exchanging completely from face-to-face to remote guidance, a move that has been constrained upon them by abrupt compulsory grounds terminations [31].

In relation to a revolution as suggested in this paper, the author recognises that many questions require answers; however, he is also cognizant of the fact that this time is different. A forceful general health effort, an advancement in treatment, a change of the infection, social distancing, self-isolation, quarantine, or the hotter season would all be able to add to manage the pandemic inside a couple of months [30]. The intelligence and need of expanded on the internet mobile applications and MOOC learning choices can never again be denied. The revolution is dictating methodologies. Change is pressurising like never before. The digital educational framework is now in our homes and schools, breaking the walls of traditional or classroom-based framework. Principals, teachers, presidents, university vice-chancellors, executives and senior faculty members are totally compelled to rethink what portion of their educational conveyance will be offered face to face and what part will be offered through the medium of the internet [21].

This new educational revolution starts with a recognition among all educators that the world is changing [11]. The future of education beyond the era of the Fourth Industrial Revolution (4IR) requires the review and adoption of the digital educational framework brought by the new normal created by COVID-19. For individuals to plan for the new revolution, an education framework ought to be forward-looking and not looking in reverse [14]. At this time, our society is the consequence of excessive artificial intelligence, machine learning, mechanical autonomy, 4IR and COVID-19 jargons, education needed to get individuals ready for vulnerability and promote agility and versatility.

The education revolution overcomes any barrier between neuroscience, brain science, and educational practice. It conveys what teachers need: solid uses of the most momentum and significant research that they can use in their study halls and schools [36]. The difference with this new revolution stated by the author as the digital educational framework in this paper resides in the delivery and segregation of content, collaboration of parties and choices of mediums. In addition to the above, research in learning science reveals to us that the human mind needs exceptional consideration in computerised conditions to keep away from the enticement of interruptions and boost the learning experience. Instructors need preparing in how to educate diversely on these stages, when this old strategy for instructing by teaching, asking and investigating is smothering commitment [14].

As declared in the second educational revolution by [10], this time around, individuals around the globe are being compelled to remove their education from school in order to take it into their homes and in particular arrangements due to COVID-19. The alternative places such as libraries, internet cafes and workplaces where they could choose what they needed to study, when they needed to learn and how they needed to learn are briefly closed. The possibility of returning to that luxury life announced in the second educational revolution is minimal while the probability

of enhancing the current arrangement is high. This is just one step along the road to a new educational paradigm [31].

Considering the abovementioned, the author in supporting the new educational revolution agrees with [30] to underscore the lack of arrangements that will encourage both brief reallocation and a brief comeback to the status quo of all industries in general and the one of education in particular. The floods of another revolution in education are obvious. These waves have directed our education frameworks to bounce onto computerised stages and should now concentrate on the most proficient method to make the most of advanced learning [14]. This brings up the crucial question: what will a 'new normal' in education look like?

As agonising and upsetting as this period seems to be, it might form a long late and welcome resurrection of the global education frameworks. The pandemic has been an extraordinary leveler as it were, giving all partners such as instructors, students, policymakers and society everywhere in emerging and industrialised nations a superior comprehension of the vulnerabilities and weaknesses of our present education frameworks [31]. It has underscored how irreplaceable it is for our populaces to be carefully educated to capacity and progress in a world where social distancing, self-isolation, quarantine, more noteworthy digitalisation of administrations and all the more carefully focused interchanges may progressively turn into the standard [14], [21], [25].

Evidenced by this unprecedented time of our century, it is without any additional argument that the author believes in this new educational revolution. While he remains cautious about framing it as “the digital educational framework” at this stage, the underlying factors that characterise a revolution are therefore palpable, from up-skilling, re-skilling to an aggressive adoption of third and fourth industrial revolutions as well as the new normal of the global pandemic. Without COVID-19, the new educational revolution could have been a latent dream shaped by the resistance of some parties versus others following the technology adoption curve. The author argues and declares boldly, **“Without COVID-19, there is no other educational revolution”**.

Perceiving that it is rash to make forecasts about the future, the author however, accepts there are in any event scarcely any residuals that will stay after COVID-19 is not, at this point, a significant danger to human life and education disruptor. The accompanying segment will raise numerous significant issues.

5 Discussion

“Without education, there is no development” [37]. There has been substantial conjecture and foretelling around COVID-19 and its consequences in the global economy; few people predicted its damages on global education. The status of COVID-19 has forced education to meet cloud computing and the 4IR, waiting for global players to embrace them. The new face of an estimated \$300 billion business is making countries obsolete and this may result in something like a new educational

revolution, and as reflecting the mouth-watering growth of the Fourth Industrial Revolution.

The world has changed due to COVID-19. The challenge of old practices to evolve in order to keep pace with global needs has become perceptible. The educational world has reached a stage of a big dilemma of reconciliation. Despite the fact that some part of the planet was ahead of others, the question of the educational revolution remained crucial then; today, the demand of the current pandemic constitutes both an opportunity and a curse: an opportunity for countries where blended learning and online degrees and certificates were established and recognised by the accreditation body; a curse for several countries, especially in the emerging markets where traditional education formats or contact learning was a norm. This frames somehow the basis of the argument suggested in this paper.

Recognising how COVID-19 might affect education on the global scale and its practice involves a number of factors including a sudden formula we all had to find in a new normal. Like in the demonstration of a common world educational culture [15], COVID-19 requires a review of several existing frameworks in light of the new normal. It suggests the specifications of what it is that may be affected, in this context “education” and what forms these changes may take in order to substantiate the position of a new educational revolution, here the digital educational framework. However, literature is silent on this crucial question. It does not provide proper indication to call one or another an educational revolution with tangible reasons despite the waves of changes recorded in the education lately through different industrial revolutions.

On the other hand, an educational revolution was in the making as far as 2001 when Apple launched the first handheld digital audio player – the iPod [38] and a few years down the line from its making, the second educational revolution was announced. This in essence adds materials to the argument in this paper and indicates the contrast of arguments where some advocates stated that the genesis of the current education realm occurred in response to a similar technological and economic tumult – the Industrial Revolution [10]. In addition, the main component of the second educational revolution was alphanumeric technologies, and the iPod was one of them.

Surprisingly, in relation with the Fourth Industrial Revolution as announced a couple of years ago, this paper notes the existence of education 4.0 as the response to the needs of the 4IR because of the interaction of humans and technology through unlimited possibilities [39]. The paper also underlines the lack of literature in relation to the third educational revolution with risk avoidance as some third educational revolution was announced in Cuba years before the announcement of the second educational revolution [40].

It is important to note that the incredible economic revolutions in history happen when new correspondence technologies merge with new energy systems [41]. Authors at that time noted pressures between accustomed models of education and the affordances of advanced or digital media in the second educational revolution, while they checked the guarantee of these technologies for shaping another making ready of education. It was contended that innovation brings radical chances yet in addition

noteworthy difficulties. The direness of looking for a sound model for the eventual fate of education was the focus in an innovative age the authors stressed [10].

Yet, the main characteristic of the Third Industrial Revolution was the democratisation of information while the fusion of the digital, biological, and physical worlds, as well as the growing operation of new technologies such as artificial intelligence, cloud computing, robotics, 3D printing, the Internet of Things, and advanced wireless technologies, among others, describes the 4IR [42]. Can one safely call the democratisation of education the third educational revolution; alternatively, the accreditation of degrees conferred by a cloud university, online institutions or education 4.0 to be the fourth educational revolution?

Despite the fact that these questions do not form the core of the discussion in this paper, they lead the author to the factors of consideration when promoting a new educational revolution in the current situation. In regards to the question of democratisation of education as a third educational revolution; literature supports the issues of social justice and the voice of the learners on one hand [43], and the possibilities and limits as well as the inequalities of opportunities in education on the other hand [44], [45], nothing related to a revolution. Last but not least, in relation to the 4IR, literature advocates the possibility to provide smart education by utilising various new technologies [46], yet another confusion to the usage of technology at large.

Still, in light of the above, the world inclusive of all its industries and all related constituents of the global economy was still in the transition of the Third to the Fourth Industrial Revolution. This transition has registered a storm caused by a global pandemic named COVID-19. This pandemic in return has created profound disruptions in our economies and societies globally, forcing educational institutions to move from traditional education to web-based teaching – even more precisely characterised as crisis remote teaching and learning in order to save the scholar year while forestalling the spread of the infection. Does the author support the series of these unprecedented events to be a third educational revolution? Definitely not.

Whereas the transition noted above is undeniable, the hypothesis of education to be responding to technological and economic stimulus falls apart. The education system globally was resistant in many fronts, including a simple accreditation of degrees conferred by online or cloud institutions. The debate was intense and never reached any global consensus. Like the revolution, some regions accepted the shift while some completely distanced themselves from recognising or accrediting these institutions. Nevertheless, the reasons of those refusals have become obsolete because the negative effect of COVID-19 on the drivers of global education can, and most likely will be extreme. Having the option to reskill and upskill in this quickly changing world is not just a need yet an economic goal [31].

Although people are reluctant, and do not want to admit the new educational revolution, COVID-19 has struck our education framework like a lightning bolt and shaken it to its centre. Similarly, as the First and Second Industrial Revolutions produced the present arrangement of education, the world can expect nothing but an alternate sort of educational model to rise up out of COVID-19. The new normal is here to stay and the world has the obligation to leverage and learn to live with its

regulations. In such manner, it would be significant for educational institutions to perform current situation analysis by anticipating the drawn out effect of COVID-19 and to modify their key plans likewise.

In wrapping up this section, this paper anticipates a convinced somewhat. The COVID-19 pandemic has not stopped at national fringes, and it influences individuals paying little heed to nationality, level of education, pay or sexual orientation. Despite the fact that this may not be genuine after its outcomes, they are probably going to hit the most defenceless tougher. A limited perspective on these results has shown that this emergency uncovered the numerous disparities in our education frameworks and the world was not bold enough to announce any revolution after the second by [10]. This could be due to the lack of global consensus or a result of a blind spot supported by rigid national education systems.

Moreover, the disparities that this paper refers to, start from the broadband and PCs required for online education, through the steady situations expected to concentrate on learning, up to the inability to draw in gifted instructors to the study halls and educational institutions at large. It is a pity to notice that, even with these highlighted disparities, no recognition of any educational revolution was taking shape globally. Yes, this can be debatable on some regional stances, but the question remains on the making of any educational revolution given the plethora of facts. The educational realm had to wait for 10 good years to consider looking at the possibility of having a revolution while the 4IR had already rooted the global economy.

Nevertheless, as much as the world addresses and enhances the disparities noted above in this season of emergency, this moment or crisis registered with COVID-19 additionally describes the likelihood that the global education framework will not come back to the biased business as usual when things come back under the "new normal". Reality without question is that our conduct changes the framework; and our conduct faces new challenges now. Since the changes announced have adopted new guidelines under the new normal, only objective minds can acknowledge the blend of occasions coupled to COVID-19 as a new educational revolution.

6 Limitations and Recommendations

As COVID-19 is spreading out the education sector just as other economic activities globally under the new normal, it continues also to change news and the course of a few conversations. In fact, the degree of the assessment of this inquiry was on the recognition and point of view of the author. Since a puzzled researcher will scrutinise the new normal forced by COVID-19 in the global society, and for our situation, "education", the author takes full responsibility of the viewpoints and suppositions imparted in the article.

Even though the perspectives communicated in this paper may be easy to refute considering a new educational revolution triggered by COVID-19, under the mark of the "new normal", they remain the position of the author, not necessarily the one of policymakers, advocates and a few governments in connection with the global education framework. The author, however, agrees in part with past authors who had

the opportunity to report the second educational revolution overwhelmed by innovation as referenced in this paper; he does not become tied up with the perspective on our education framework to be the reaction to technological and financial tumult yesterday characterised by the 4IR and today by the new normal.

Past his debate, the author endorses the paper to each energetic character to interface with and chitchat on his points of view, that, yet to try their own, to voice out their unassuming and genuine assumption around the new normal at one hand and the new educational revolution and the digital educational framework then again. He immovably endorses the paper to researchers and leaders in the education field to evaluate its benefits.

7 Conclusion

This paper has planned to look at whether the global society would have the option to ingest the new normal brought by COVID-19 as another educational revolution. The author thinks it will force individuals to re-evaluate as the risks that control choices have driven a huge number of learners into brief "self-teaching" circumstances and other related situations, as well as institutions with the digital educational framework, which have comprised the premise contention of this paper.

The education sector of the world keeps on experiencing enormous imbalances and we definitely realise that there is a learning emergency on top of the healthcare crisis recorded later in 2019. This paper has additionally stressed why leaders of education frameworks and organisations ought to assimilate the new normal result of the worldwide pandemic distinctively considering the magnitude of precedented events to date.

Taking into account that we are gradually moving into the new normal, the paper has noticed the congruity of focusing on circumstances related with the worldwide infection pandemic. COVID-19 has constrained the recognisable proof and acquaintance of novel arrangements with change in the educational scene, especially as to the direction of advanced or digital learning. The author is resolute and bolsters a new educational revolution under the label of new normal.

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9 References

- [1] Ellis, M. "Changing the Face of Traditional Education," *elead*, vol. 3, no. 1, May 2007, Accessed: Oct. 07, 2020. [Online]. Available: <https://elead.campussource.de/archive/3/1081/index.html>.
- [2] Welsh, T. "Coronavirus school closures: The challenge of reaching 1.5 billion children," *Devex*, Apr. 13, 2020. <https://www.devex.com/news/sponsored/coronavirus-school-closures-the-challenge-of-reaching-1-5-billion-children-96968>(accessed May 27, 2020).
- [3] UNESCO, "COVID-19 Educational Disruption and Response," UNESCO, Mar. 04, 2020. <https://en.unesco.org/covid19/educationresponse>(accessed May 18, 2020).
- [4] Washington, L. "Using Technology to Change Education: Blended Learning in the Science Classroom," 2020.
- [5] Wood-Harper, T. "Emerging EdTechs Amidst the COVID-19 Pandemic: Cases in Higher Education Institutions," in *Fostering Communication and Learning With Underutilized Technologies in Higher Education*, IGI Global, pp. 93–107. <https://doi.org/10.4018/978-1-7998-4846-2.ch007>
- [6] Luthra, P. and Mackenzie, S. "4 ways COVID-19 could change how we educate future generations," *World Economic Forum*, Mar. 30, 2020. <https://www.weforum.org/agenda/2020/03/4-ways-covid-19-education-future-generations/>(accessed May 18, 2020). <https://doi.org/10.1080/0144929x.2011.563794>
- [7] Witte, M. "The Learning Revolution: It's Not About Education | WIRED," 2014. <https://www.wired.com/insights/2014/01/learning-revolution-education/>(accessed May 18, 2020).
- [8] Fiala, R. and Lanford, A.G. "Educational ideology and the world educational revolution, 1950-1970," *Comp. Educ. Rev.*, vol. 31, no. 3, pp. 315–332, 1987. <https://doi.org/10.1086/446694>
- [9] Stone, L. "The educational revolution in England, 1560-1640," *Past Present*, no. 28, pp. 41–80, 1964. <https://doi.org/10.1093/past/28.1.41>
- [10] Collins, A. and Halverson, R. "The second educational revolution: Rethinking education in the age of technology," *J. Comput. Assist. Learn.*, vol. 26, no. 1, pp. 18–27, 2010.
- [11] Burgess, S. and Sievertsen, H.H. "Schools, skills, and learning: The impact of COVID-19 on education," *VoxEU.org*, Apr. 01, 2020. <https://voxeu.org/article/impact-covid-19-education> (accessed May 18, 2020).
- [12] Andersen, S.C. and Nielsen, H.S. "Learning from Performance Information," *J. Public Adm. Res. Theory*, 2019.
- [13] "World Bank Education and COVID-19," *World Bank*, Mar. 24, 2020. <https://www.worldbank.org/en/data/interactive/2020/03/24/world-bank-education-and-covid-19>(accessed May 18, 2020). <https://doi.org/10.1596/33738>
- [14] Lim-Lange, C. "Commentary: COVID-19's education revolution - where going digital is just half the battle," *CNA*, Apr. 19, 2020. <https://www.channelnewsasia.com/news/commentary/covid-19-coronavirus-education-digital-revolution-transformation-12650974>(accessed May 19, 2020). <https://doi.org/10.20944/preprints202004.0290.v1>
- [15] Dale, R. "Globalization and Education: Demonstrating a 'Common World Educational Culture' or locating a 'Globally Structured Educational Agenda'?" *Educ. Theory*, vol. 50, no. 4, pp. 427–448, Dec. 2000 <https://doi.org/10.1111/j.1741-5446.2000.00427.x>
- [16] Shi, Y., Peng, C., Zhang, X. and Yang, H.H. "Interactive Whiteboard-Based Instruction Versus Lecture-Based Instruction: A Study on College Students' Academic Self-efficacy and Academic Press," in *Blended Learning. New Challenges and Innovative Practices*, vol. 10309, S. K. S. Cheung, L. Kwok, W. W. K. Ma, L.-K. Lee, and H. Yang, Eds. Cham: Springer International Publishing, 2017, pp. 319–328. https://doi.org/10.1007/978-3-319-59360-9_28

- [17] Tam, G. and El-Azar, D. “3 ways the coronavirus pandemic could reshape education,” World Economic Forum, Mar. 13, 2020. <https://www.weforum.org/agenda/2020/03/3-ways-coronavirus-is-reshaping-education-and-what-changes-might-be-here-to-stay/> (accessed May 19, 2020).
- [18] Cope, B. and Kalantzis, M. “Schools after COVID-19: Seven Steps Towards a Productive Learning Revolution,” Schools after COVID-19: Seven Steps Towards a Productive Learning Revolution, Apr. 24, 2020. <https://education.illinois.edu/about/news-events/news/article/2020/04/24/schools-after-covid-19-seven-steps-towards-a-productive-learning-revolution> (accessed May 19, 2020). <https://doi.org/10.26524/royal.37.25>
- [19] Kandri, S.-E. “How COVID-19 is driving a long-overdue revolution in education,” The European Sting - Critical News & Insights on European Politics, Economy, Foreign Affairs, Business & Technology - europeansting.com, May 12, 2020. <https://europeansting.com/2020/05/12/how-covid-19-is-driving-a-long-overdue-revolution-in-education/> (accessed May 19, 2020). <https://doi.org/10.2139/ssrn.3625502>
- [20] “Definition of Revolution.” <https://www.merriam-webster.com/dictionary/revolution> (accessed May 19, 2020).
- [21] Dennis, M. “How will higher education have changed after COVID-19?” University World News, Mar. 28, 2020. <https://www.universityworldnews.com/post.php?story=20200324065639773> (accessed May 19, 2020).
- [22] Hong, B. “A threat with a silver lining for higher education?” University World News, Apr. 11, 2020. <https://www.universityworldnews.com/post.php?story=20200410105633663> (accessed May 20, 2020).
- [23] Motiejūnaitė-Schulmeister, A. and Crosier, D. “How is Covid-19 affecting schools in Europe?” Eurydice - European Commission, Apr. 02, 2020. https://eacea.ec.europa.eu/national-policies/eurydice/content/how-covid-19-affecting-schools-europe_en (accessed May 20, 2020).
- [24] ETUCE, “What does COVID-19 mean for education personnel in Europe?” European Trade Union Committee for Education, 2020. <https://www.csee-etu.org/en/policy-issues/covid-19/3631-general-information> (accessed May 20, 2020).
- [25] Whalen, B. “How COVID-19 will change education abroad for American students (opinion) | Inside Higher Ed,” Apr. 14, 2020. <https://www.insidehighered.com/views/2020/04/14/how-covid-19-will-change-education-abroad-american-students-opinion> (accessed May 20, 2020).
- [26] Maurin, E. and McNally, S. “Vive la Révolution! Long-Term Educational Returns of 1968 to the Angry Students,” J. Labor Econ., vol. 26, no. 1, pp. 1–33, Jan. 2008, <https://doi.org/10.1086/522071>
- [27] Salvanes, K.G. and Bjorklund, A. “Education and Family Background: Mechanisms and Policies,” SSRN Electron. J., 2010 <https://doi.org/10.2139/ssrn.1620398>
- [28] Arthur, G. “Beyond the non-formal fashion: towards educational revolution in Tanzania,” p. 345, 2014.
- [29] Peksen, S. and Zeeman, N. “Higher Education System Reform in Germany,” in Higher Education System Reform, B. Broucker, K. De Wit, J. C. Verhoeven, and L. Leišytė, Eds. Brill | Sense, 2019, pp. 37–52. <https://doi.org/10.1163/9789004400115>
- [30] Fujita, S., Moscarini, G. and Postel-Vinay, F. “The labour market policy response to COVID-19 must save aggregate matching capital,” VoxEU.org, Mar. 30, 2020. <https://voxeu.org/article/labour-market-policy-response-covid-19-must-save-aggregate-matching-capital> (accessed May 20, 2020). <https://doi.org/10.1111/1475-5890.12233>
- [31] Kandri, S.-E. “COVID-19 is sparking a revolution in higher education,” World Economic Forum, May 12, 2020. <https://www.weforum.org/agenda/2020/05/how-covid-19-is-sparking-a-revolution-in-higher-education/> (accessed May 22, 2020).

- [32] Kitsantas, A. and Chow, A. “College students’ perceived threat and preference for seeking help in traditional, distributed, and distance learning environments,” *Comput. Educ.*, vol. 48, no. 3, pp. 383–395, Apr. 2007, <https://doi.org/10.1016/j.compedu.2005.01.008>
- [33] Schroeder, A. Minocha, S. and Schneider, C. “The strengths, weaknesses, opportunities and threats of using social software in higher and further education teaching and learning: Implications of social software use,” *J. Comput. Assist. Learn.*, vol. 26, no. 3, pp. 159–174, May 2010, <https://doi.org/10.1111/j.1365-2729.2010.00347.x>
- [34] Literat, I. “Implications of massive open online courses for higher education: mitigating or reifying educational inequities?” *High. Educ. Res. Dev.*, vol. 34, no. 6, pp. 1164–1177, 2015. <https://doi.org/10.1080/07294360.2015.1024624>
- [35] Kizilcec, R.F., Piech, C., and Schneider, E. “Deconstructing disengagement: analyzing learner subpopulations in massive open online courses,” in *Proceedings of the third international conference on learning analytics and knowledge*, 2013, pp. 170–179. <https://doi.org/10.1145/2460296.2460330>
- [36] Sánchez, H. *The education revolution: how to apply brain science to improve instruction and school climate*. Thousand Oaks, California: Corwin, a Sage Company, 2017.
- [37] Roberts, J. “Why Africa needs an education revolution,” *World Economic Forum*, May 05, 2014. <https://www.weforum.org/agenda/2014/05/forum-africa-2014-education-revolution/> (accessed May 25, 2020).
- [38] Rainsbury, J.W. and McDonnell, S.M. “Podcasts: an educational revolution in the making?” *J. R. Soc. Med.*, vol. 99, no. 9, pp. 481–482, Sep. 2006, <https://doi.org/10.1177/014107680609900924>
- [39] Aziz Hussin, A. “Education 4.0 Made Simple: Ideas For Teaching,” *Int. J. Educ. Lit. Stud.*, vol. 6, no. 3, pp. 92–98, Jul. 2018, <https://doi.org/10.7575/aiac.ijels.v.6n.3p.92>
- [40] Kapcia, A. “Educational revolution and revolutionary morality in Cuba: The ‘New Man’, youth and the new ‘Battle of Ideas,’” *J. Moral Educ.*, vol. 34, no. 4, pp. 399–412, 2005. <https://doi.org/10.1080/03057240500410129>
- [41] Rifkin, J. “The Third Industrial Revolution: How the Internet, Green Electricity, and 3-D Printing are Ushering in a Sustainable Era of Distributed Capitalism | *The World Financial Review*,” Mar. 03, 2012. <https://worldfinancialreview.com/the-third-industrial-revolution-how-the-internet-green-electricity-and-3-d-printing-are-ushering-in-a-sustainable-era-of-distributed-capitalism/> (accessed May 25, 2020).
- [42] Ndung’u N. and Signé, L. “The Fourth Industrial Revolution and digitization will transform Africa into a global powerhouse,” *Brookings*, Jan. 08, 2020. <https://www.brookings.edu/research/the-fourth-industrial-revolution-and-digitization-will-transform-africa-into-a-global-powerhouse/> (accessed May 25, 2020).
- [43] Mncube, V. “Democratisation of education in South Africa: issues of social justice and the voice of learners?” *South Afr. J. Educ.*, vol. 28, no. 1, pp. 77–90, 2008.
- [44] Davies, L. “Possibilities and limits for democratisation in education,” *Comp. Educ.*, vol. 38, no. 3, pp. 251–266, 2002.
- [45] Thaler, A. “Informal learning with social media and its potential for a democratisation of education,” 2011.
- [46] Xing, B. and Marwala, T. “Implications of The Fourth Industrial Age on Higher Education,” *Tap Chí Nghiên Cứu Dân Tộc*, no. 23, Sep. 2018, <https://doi.org/10.25073/0866-773x/87>

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