Effects Of Covid-19 On Education And Its Shift From Face-To-Face ToVirtual.

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Abstract.

An analysis of the current situation due to the Covid 19 pandemic and its impact on face-to-face education has changed to a virtual education model. Education has shifted to a virtual education model. The planning of a hybrid planning for a hybrid educational model has not been successful and only one educational model should be between the two current models, the face-to-face model and the virtual model.

virtual model. The Covid-19 pandemic has changed the way of educating and has led to a virtual model where the old models no longer have a place in the models no longer have a place in the education of the future. There are controversies about how students should be educated in the future, while the future seems to have arrived with new educational transformed with new educational options that will be around for a long time, and not just for the duration of the and not just for the duration of the pandemic.

 Keywords: educational model, virtual education, higher education, face-to-face education

"Covid-19 stopped the world. Or more accurately, it slowed down human activity. The buds continue to sprout in spring, the whales continue their long migrations, the dry season returns to scorch the earth, and the planet continues its rotation and translation, all
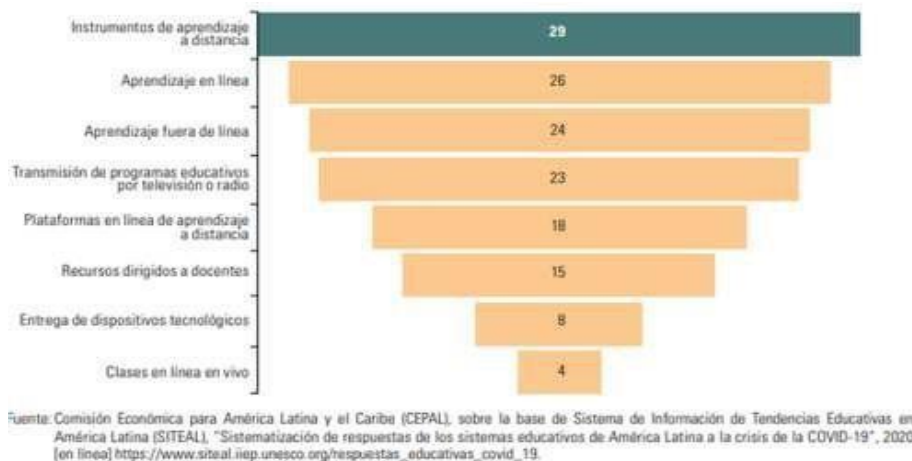
indifferent to us. It is we humans who, terrified by an invisible and viral death, have stopped our relationships, enclosing ourselves in smaller and smaller units: the nation-state, the city, the community, the house, solitude. The use of non-renewable energies, commercial exchanges, collective leisure, dancing and sexuality with lovers have been reduced, almost disappeared. If they return, they will come back changed, fearful, without corporeality. But, in reality, not everything stopped. Garbage collection, food production and sale, politics and various state functions, journalism, financial speculation, crime, patriarchal violence, other types of office work, hospitals and schools continue, some modified, others intact. Other things also remained, such as depression, anguish, inequality and misery. Some are maintained because they are necessary for collective survival, others out of pure greed, some out of simple inertia, and some more out of a kind of mixture of social regulation, history and hope. The latter is the case of the school, or rather, of the school at home, of the school in the family confinement." (Casanova, 2020).

Virtual education is here to stay, some of those who question this educational model are thinking about whether the proposal, just because of pandemic contingencies, will put an end to vaccination. They are also analyzing whether face-to-face education could be rethought as a more favorable option, or whether virtual education is the educational model to be implemented from now on. It has been frequently speculated about the return to classes in a safe environment, where academic activities that have been done for decades, if not centuries, are carried out; however, it must be taken into account that some subjects have less than two centenarians, such as physical education and computer technology. (López & Ochoa- Martínez, 2020). Physical education as an educational discipline was born in the eighteenth century and the term was coined by the Swiss physician Ballexserd, where the purpose of physical education is medical and not as an educational discipline, the books Thomas Henry Huxley, were of great help for children's education at that time. (Rodríguez Yáñez, 2015).

Online studies are given to students to develop communication skills, improve their knowledge in the use of ICT's, learn to self-evaluate, implement collaborative modules, increase their ability to research, discard actions that are no longer necessary and identify in the teacher a role of counselor, while other critics of the current education system, claim that virtual education is not a good education or on the contrary should incorporate nuances of face-to-face education. Countless times it has been published in magazines and web pages regarding the future of education, Reason magazine has published a series of interesting articles where it can be seen that in Maryland it is expected that remote school teachers return to classes before the private ones or their license could be revoked, to achieve this, I created an immunization plan that has aroused the ire of the unions. (Soave, 2021a). Virtual education presents an approach, where the student must be self-taught, not depending exclusively on the teacher's explanation, on the contrary, the student is encouraged and exhorted to research with materials published on websites and learn from what other people have published, this is a modern educational model that allows students to inquire knowledge instead of being indoctrinated and to think critically, opting for more convenient initiatives that lead them to compare their findings with those of others. findings with those of others. others. (Bonilla- Guachamín, 2020).

An exploratory study conducted by Habib Fardoun to measure the proposals, results and other academic aspects in times of pandemic asked the following question: What pedagogical strategies have you used to support the teaching and learning processes? the results obtained are described in the following quote, "Regarding question 2, the results indicate that the most used strategies and activities were blogs (29.41%), portfolios (40.01%), forums (23.53%), collaborative work (18.63%) and to a lesser extent videos made by the students (4.9%)". With that comes the big question and that is how to evaluate.

This educational approach is much more practical and global, taking into account the use of tools such as the Internet, the amount of pedagogical and knowledge resources, as well as the different communication tools that provide privileged platforms, to bring the school closer to the educational processes in homes, and to students in conditions of confinement. Unfortunately this model is not equitable, and of course it opens a gap between the less favored, taking into account that in Colombia it is evident that many students in rural areas do not have the necessary technological elements that allow them to access the content programmed by teachers, and to tell the truth it is no secret that not even the educational institutions have access to the Internet, so they have sought various strategies and after many decades they returned to the unthinkable, trying to fit education through television and radio. (CEPAL, 2020).

Fuente: Comisión Económica para América Latina y el Caribe (CEPAL), sobre la base de Sistema de Información de Tendencias Educativas en América Latina (SITEAL), "Sistematización de respuestas de los sistemas educativos de América Latina a la crisis de la COVID-19", 2020 [en línea] https://www.siteal.iiep.unesco.org/respuestas_educativas_covid_19.

FIGURE 1. Educational trends

The outlook is not more encouraging in Ecuador where in the words of (Bonilla-Guachamín, 2020) "referred that 37.23% of households have a computer on a national scale and that in rural areas the percentage is lower (23.27%)". If this problem is analyzed in terms of Latin America and the Caribbean with respect to their peers in Europe, the statistical figures will be preserved taking for granted that countries with major social problems will lag behind in terms of education, where "the most affected are no longer only children but also young people (young adults) more vulnerable. Among them, those who live in marginal areas (neighborhoods or rural areas), those who have a disability or temporary or permanent incapacity, or those who do not have the support of their family group (economic, emotional). In short, they are the poorest or those marked by inequality, discrimination and injustice accelerated by the pandemic" (Peña, 2020).

"Teachers and educational personnel as a whole have been key actors in the response to the COVID- 19 pandemic and have had to respond to a series of emerging demands of various kinds during the socio-health crisis. Most teachers have not only had to re-plan and adapt educational processes, including adjustments in methodology, curricular reorganization, design of materials and diversification of means, formats and work platforms, among other aspects, but have also had to collaborate in activities aimed at ensuring material security conditions for students and their families, such as the distribution of food, sanitary products and school materials, among others. Teachers and educational personnel have had to face the demands of socioemotional support and mental health of students and their families, a dimension that has become increasingly relevant during the pandemic" (CEPAL, 2020).

The pedagogical change has upset many who came expecting everything to be explained to them instead of being encouraged to investigate, many parents and students are not attracted to virtual education (Martínez-Garcés & Garcés-Fuenmayor, 2020). However, the virtual education model can be implemented through Homeschooling. In Colombia there is a bill where Homeschool is implemented for those students who do not plan to return to the classroom and will be guided by an adult educator who has a bachelor's degree. (Rivera, 2020). Covid-19 has boosted virtual education in a certain way and although many students think that they will return to the classroom, most know that this will not be possible as long as there is a virus that can be easily transmitted and there is no vaccine that is completely effective (Valencia Huaman, 2020). Covid-19 has changed education from face-to-face to virtual education. (Varón, 2011). The systematization of daily life has been achieved

so far with great success, leaving a digital footprint, therefore, now everything can be recorded on the network, from orders placed in online stores to students' homework and grades. (Pachay-López & Rodríguez- Gámez, 2021), very surely this information that with the passing of the days will exceed the exabytes will have to become a big Big Data, which analyzed with data mining and artificial intelligence techniques will be exploited by the industry.

This scenario forced Internet providers to work on improving their infrastructure, and that the services that demand its use not only subscribe to sporadic events but to a permanent use, being confined to homes gave rise to work via the web, social networks were no longer only for a few chats, but on the contrary began to give video calls, social gatherings and family parties transmitted by streaming, events that sometimes occurred with relatives living in other countries and from time to time we wanted to say hello.

Virtual education has become the education of the present and of the future as well, the didactic materials that appear in each platform, blog and web page were designed for that purpose and not for another, the Internet is an educational tool and now will be the most used by all students, of course without thinking that it could replace the teaching work of teachers, even if it is implemented for all students at an early age, since the work of the teacher can never be replaced by the information that appears in the search engines and have hundreds of educational tools, so gather all the topics that can be imagined. The construction of these sites in 1.0 had a purpose, the education of thousands of people who use these educational resources for information and learning, the construction of 2.0 sites has an objective that goes beyond and is education through platforms such as Moodle that have audio and video and allow a wider interaction between teachers and students. (Mendivelso Ojeda, 2020).

In today's teacher "One of the most significant roles is that of TIC and learning environment designer. TIC and learning environment designer is one of the most significant roles. This will imply that the teacher will become a designer of learning situations, which should revolve around the student and his or her acquisition of the expected knowledge and, therefore, learning. In other words, the teacher will become a facilitator of learning from the perspective that the important thing will not be the environment in which it takes place, but that it is available to the student so that he/she can learn. The teacher, in this way, goes from being an expert in content to a facilitator of learning, which will mean that he/she will have to carry out different issues such as: designing learning experiences for students, offering an initial structure for students to begin to interact, encouraging students towards self-study or designing different perspectives on the same topic" (Cabrero & Marin, 2017).

"However, teachers will also play an important role in the design of means, materials and resources adapted to the characteristics of their students, materials that will not only be developed by them independently, but also in collaboration with other colleagues involved in the process, as well as with other experts. From this perspective, the teacher must learn to work in a team and in collaboration with other professionals. It is becoming more and

more usual the formation of consortiums between different groups of teachers for the organization of courses jointly, in which each of them contributes their most relevant knowledge and everyone benefits from the sum of the efforts made" (Cabrero & Marin, 2017).

Here it is important to note that the educational transformation designed to be taught at home in preschool ages, in terms of the UNITED NATIONS, due to the sanitary contingency, there are more than 40 million children without preschool education. For the executive director of UNICEF, this is the age when the foundations that will nurture the development of children are laid, However, this is the least of the problems, the transfer of this work will fall in most Latin American countries in women who per se have been the educators, now also falls on them the role of telework or work at home and as always undisputed mothers of family. (Mendivelso Ojeda, 2020).

It should be noted that virtual education is present in many national and international educational institutions, some of great prestige and others not so much, however, if there is a common component, and is the offer they present, which largely corresponds to careers that in its academic structure are not subjects that require such a high level of attendance, This means that although virtual education has been considered of high quality, it seems that the expected results are not being achieved in those careers that require practices for their development, perhaps because of this, it has been observed that some students are asking for a prompt return to their face-to-face classes.

This is not for less, it is necessary to pay attention to concrete cases of students of Santander where students of programs such as Petroleum Engineering, Geodesy, Civil Metallurgy or Topography among others, do not see feasible a good learning even with the best of their efforts, the reason, it is enough to take a look at the careers that have in their credit subjects such as special surveys, road design or simple planimetry to be able to appreciate that it is not acceptable that subjects that have a theoretical and practical component are reduced to two theoretical modules, The reason is that it is not acceptable that subjects that have a theoretical and a practical component are reduced to two theoretical modules.

Equivalent or even more critical situation is given for trainees in the health sciences, because it is incomprehensible or difficult to imagine the knowledge that must be developed in these areas, in which, perhaps will not be achieved without real practices, laboratories and proper handling of medical equipment, for illustrative purposes is observed a medical student studying surgical specialization, he will be interacting with his teacher and developing skills for minimally invasive surgery, initial and advanced trauma management, vascular accesses and percutaneous tracheotomy, which will not be the same in simulation modules, to acquire the necessary skills that will allow him to develop and be able to develop in his professional life, but this is not so effective and for this reason the possibility that they are structured in an adequate way and that for no reason should be developed in such high quantities, because they should only be a complement is raised. (Figueroa- Gutiérrez, 2020).

"In the university, this transformation must be comprehensive, affecting all its missions, but from a strategic perspective that involves a redefinition of its institutional model. In other words, it is not a matter of introducing technology or digitizing processes to continue doing the same thing, but with a technological layer. True digital transformation requires a reengineering of processes and involves the most critical element of the institution, the people. Therefore, it implies a technological challenge, which must be combined with the challenge of involving people so that these technologies are adopted in the most effective way.

technologies are adopted in the most transparent way and thus achieve process innovation. To achieve this difficult objective, the leadership capacity of the university government teams is essential; only in this way will it be possible to define a top-down strategy that creates the technological and procedural frame of reference for the university community. This framework, in turn, must grant a margin of operational freedom necessary for the university community to exercise its activity with a capacity for innovation and creativity, and even the strategy should have sufficient flexibility to feed off these upward flows and thus create the spirals inherent to knowledge management in a digital context". (Garcia Corel, 2020).

Contemplating that this educational process continues to advance in the virtuality faces one of the most endearing problems for the academic community, the evaluation, since everything is formalized in results, for such reason (García, Corell, & Grande, 2020) state that the most difficult thing is "the need to know and ensure the true identity of the person who is subjected to the test, as well as to control the physical context in which the person is taking the test".

Likewise, (García, Corell, & Grande, 2020) in their article state broadly "One of the risks in any assessment, including online, lies in fraudulent practices such as copying test answers or plagiarism. The use of plagiarism analysis tools (such as Turnitin, Compilatio, Urkund, etc.) and a good test design, focused on competencies in which memorization is not the central focus, are a good starting point, although there are obviously different subjects that may present additional difficulties. Flexibility and creativity must come to the fore at this point, when it is clear that recreating the situation as it is recreating the face-to-face assessment situation in the online context is clearly an invitation to disaster. In this sense, opting for a continuous, varied assessment that reduces or eliminates final tests is highly recommendable".

Similarly, we should not forget what Cabero (Cabero, 2006) stated in his study La calidad educativa en el e.Learning: sus bases pedagógicas, where it is of vital importance to take into account what he defined as critical variables for quality training in new communication environments.

FIGURE 2. Critical variables for e-learning

Each year it is expected to break down barriers in terms of access to education, therefore, each government makes its best effort to achieve the proposed goals, strategies are planned and resources are allocated to help mitigate the impact on a society generated by the ignorance of its inhabitants, so that there are concrete cases such as university scholarships and "at the end of 2012 through resolution 1970, Colombia launched the Youth in action program, a national government program to encourage and strengthen the education of young people between 14 and 28 years of age in conditions of poverty or vulnerability, through the conditional cash transfer model, whose objective is access to and permanence in higher education and strengthening of transversal competencies (Resolution 1970, 2012). 1970, 2012). The purpose of the program is to reduce student dropout, which is a highly complex phenomenon with negative impacts for the agents involved. negative impacts for the agents involved in it (Administrative Department for Social Prosperity, 2020); thus, through the delivery of incentives called R1_enrollment and R2_permanence and excellence, each beneficiary receives a sum of money to guarantee access and permanence in higher education per

semester" (Rincón, Suarez & Suarez, 2020), subsequently "in 2014 the Youth in action program was created and after six years, it is concluded that its impact has been positive, taking into account that the possibility for a young person of stratum one to enter university increased by 182% and 97% for young people of stratum two to enter university" (Rincón, Suarez & Suarez, 2020). 182% and 97% for young people of stratum two and it is necessary to highlight that the dropout rate at national level in the first year was reduced by 18% (Jaramillo, 2020)." And it ends with Generation E, all of the above are tactics and maneuvers that seek to bring more citizens to educational centers, eliminating barriers to professionalize those who are disadvantaged understanding the success that this generates to their economies.

As already mentioned, the challenges in educational issues brought by the pandemic are incalculable, to recall the policies of the national government can be brought up to make what many know as student inclusion, to allow not only that there is recognition for them with special conditions in a successful way in educational institutions, It is also essential to understand that one of the objectives pursued by these rules is that there are no institutions with Special Education in the country, but on the contrary that those students who for decades had been referred there to pursue their studies, are now educated and cared for by the same learning environments such as schools, colleges and universities.

These measures force teachers to restructure, many of them may have to Many may have had to incorporate pedagogical strategies and develop new approaches to bring teaching closer to their students. If analyzed with social thinking and investigative spirit, it is clear that Latin America is still a study area, therefore it should be considered that it is not enough to offer quotas for those who require it, education is not limited to allowing access to young people at all levels, but on the contrary, it should be complemented by improving the quality of education, otherwise there will not be physical desertion but it will develop exclusion from knowledge, which is ultimately more dangerous for a society. As mentioned by (Fanbani, 2008) "the educational debt tends to expand. Societies are increasingly ambitious in terms of schooling, therefore, when a given level is massified, the pressure to extend compulsory education to the next level begins. Everything seems to indicate that the race for the schooling of the population will never end".

In observance of the above, it is worth asking what strategies have been addressed not only in schools but also in universities to develop specific or special content for students with physical or cognitive disabilities, because to tell the truth there are elements of education that are not easy to understand, and that while it is true that technology has developed at a dizzying pace in the last decade, it is not always easy to understand, because it is not always easy to understand, not negligible is the fact that all moved to teaching through platforms such as googlemeet, zoom, teams, cisco webex, to replace face-to-face classes, being the previous applications specially designed for meetings between people with remote presence, in which ideas are exchanged from the transmission and reception of audio and video, which fall short for schoolchildren who lack the sense of vision, hearing or speech. lacking the sense of vision, hearing or speech. Here it is important to note that with the

traditional methods of teaching and evaluation it is not possible to make progress with the population in question, and ifwe do not pay attention to them in this difficult situation, they will increase the dropout rates.

Unfortunately, not even the best intentions seem to cloud the current panorama where in terms of the ASCUN for the year 2020 an academic desertion of only 3 percent was projected and ended the school year with a rate above 12% and it is that university students largely abandoned their studiesto be able to solve the family crises that occurred in the first quarter of 2020, many others preferred to do so when they noticed a low performance of their learning with the new study modalities, even many are still waiting for face-to-face attendance to resume their careers, 2020, many others preferred to do so when they noticed a low performance of their learning with the new study modalities, even many are still waiting for the presentiality to resume the course of their careers.

We cannot ignore the fact that the pandemic did not only affect the academic world, on the contrary, it affected all the sectors that make up the nations, one of the most affected areas was undoubtedly the economic, where many countries had to test their best theories to mitigate the effects that it would bring with it, however countries with large GDP began to show concerns about the consequences of this phenomenon on its inhabitants.

The least favored countries, especially those in South America, faced the pandemic with inordinate bans, freezing more than 80% of commercial activities, as if they wanted to let their lives stand still for weeks and even months, which started to let people change their way of worrying about academic activities over the prevailing necessities of life.

As the months went by, the people who remained confined felt the stress, the micro-entrepreneurs and small cooperatives realized that there was no way to continue maintaining personnel payrolls without invoicing products and services, so that other worrying indicators began to appear for those in power, such as unemployment, which, if reviewed carefully, make up the best cocktail for losing confidence.

We are now talking that, in a society with low levels of education, where more than 25% of its inhabitants are engaged in informality, with great social inequality, people stop thinking about going to college or high school to learn, because what they should do now is to produce and bring sustenance to their homes, or otherwise contribute to the burden of their parents to be borne by at least three members of the family. That is why brilliant entrepreneurial ideas emerge, that is why business warriors without education emerge, but in such a situation it was important to keep the reason.

After several critical months enduring economic, social and health difficulties, where most of the days were lived in fear, the time has come to make decisions, decisions that as always are given to help the less needy or at least that is what is always said. And it is that in a country like Colombia where most of the resources that are distributed from the nation were not being recovered by other sources, anyone can complain from chain stores to the neighborhood store.

The above were a breeding ground to begin to see how many unbridled young people began to seek the vindication of their rights, began to demand guarantees for free and quality education, to mitigate the mood of a youth that demands education, but does not attend classes, the national government chose to provide education subsidies to students of all academic levels in the strata 1, 2 and 3.

To mitigate this need for free education and with the support of the government, the universities have already opted to provide incentives, and in this way make the promised aid a reality, hoping that this will actually be a motivation for the youth.

We are also moving forward in academic spaces with alternation and why not say it in presentiality with those volunteers who wish to experience once again the pleasure that classrooms, friendly environments and face-to-face learning between teachers and students produce.

CONCLUSIONS

The educational model is evolving to a virtual education, higher education was the pioneer in using the internet for distance learning, now due to Covid-19 virtual education should be an achievable goal in the short term instead of improvising in classrooms with secure environments for face-to- face education. (García-Peñalvo, 2020) A century ago something similar happened, the Spanish flu caused classes to be suspended but in the 21st century we already have the appropriate technology to not have to repeat the mistakes of the past and to be able to implement an education that is satisfactory for students, in such education the current educational model will no longer exist, and the number of teachers will be reduced and perhaps legal ways will be sought to be commuted by assistants to help students (Soave, 2021b).

Currently there is the infrastructure to implement virtual education, but there is not a healthy environment in classrooms to return to the traditional education system. In many territories nationwide, internet access is already available, but in times of pandemic, previous studies are being carried out to implement 5G technology, so that learners can access virtual education without having to interrupt their studies because the old schools where they attend do not have the necessary elements to provide a safe environment where transmission and contagion of Covid-19 can be avoided. (Grande de Prado, García Peñalvo, Corell, & Abella-García, 2021).

At this time there are millions of websites that offer high quality educational materials for students, these educational resources are published there so that they can be accessed 24 hours a day, any day of the year. There is no longer any excuse for not learning and there is no need to have to go back to the classroom, technology has made it possible to study from home and that this education is favorable for the student, technology has also made it possible to study higher education careers online, also masters and doctorates (Martínez-Garcés & Garcés-Fuenmayor, (2020).

Virtual education is a challenge for students, a challenge that they must overcome, because technology offers an educational model that is appropriate for these new times, where the role of the teacher has changed, now he is in charge of guiding the educational process and grading, some subjects will no longer be and students must choose to do sports whenever they want and consider necessary, computer and The computer and the internet have replaced the board and the scoreboard, and now the students are responsible for their own education without having to blame their failures on the pedagogues who will be there to accompany them in this journey of knowledge. (Avalos- Obregón, Avalos-Obregón & del Pozo, 2018).

It ends with the underlined by (Quintero, 2020) "The country faces a difficult situation between stopping economic activity or stopping a pandemic. The sooner severe measures are taken to curb the spread of the virus, the more spread, the greater the impact on the economy in the short term, but with health measures and telework can contain the pandemic. The health crisis showed us some of the risks; how to stop an incomplete economic and education, a Colombia insufficiently integrated from the political, health, educational, socio-cultural and economic point of view. During the COVID- 19 crisis, it is important that institutions carefully evaluate their distance learning strategies in all courses. Institutions should consider feedback from students and teachers to improve their contingency plans and thereby have a positive impact on teaching.

Online teaching is the most common form of education today, and we can use it to avoid the spread of COVID-19, get closer to students and meet their needs virtually. The flexibility of time and space for student learning, goes hand in hand with the teacher's methodology and the student's discipline for their training."

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