

**International Research Journal of Engineering, IT & Scientific Research**Available online at <https://sloap.org/journals/index.php/irjeis/>

Vol. 6 No. 6, November 2020, pages: 37-44

ISSN: 2454-2261

<https://doi.org/10.21744/irjeis.v6n6.1014>

Role of the professor in times of COVID-19



Israel David Carofilis Mendoza ^a
Marcos Alejandro Yáñez Rodríguez ^b

Article history:**Submitted:** 27 September 2020**Revised:** 18 October 2020**Accepted:** 09 November 2020

Keywords:

COVID-19;
online classes;
online education;
teacher role;
teachers;

Abstract

This scientific article argues how confinement due to the health crisis of COVID-19 has changed the modality of classes, showing that teachers have not been prepared for this change so suddenly. In this way, they do not know what an online class is and the benefits provided by the implementation of various technologies in the role of the teacher who is focused on the well-being of the student, both emotionally and academically. The methodology that was implemented was documentary research considering reliable and current scientific sources. The approach used was the qualitative one for the synthesis of the information. The development of the text has a deductive approach, allowing from the general to the specific. The results show the resolution of the hypothesis raised about the role of the teacher in online classes due to the pandemic. It is concluded that, if the role in class is not changed, the learning process of the students will be difficult, generating a tense class environment.

International research journal of engineering, IT & scientific research © 2020.

This is an open access article under the CC BY-NC-ND license

(<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

Corresponding author:

Israel David Carofilis Mendoza,
Pontificia Universidad Católica del Ecuador Sede Manabí, Portoviejo, Manabí, Ecuador.
Email address: icarofilis9669@pucems.edu.ec

^a Pontificia Universidad Católica del Ecuador Sede Manabí, Portoviejo, Manabí, Ecuador

^b Pontificia Universidad Católica del Ecuador Sede Manabí, Portoviejo, Manabí, Ecuador

1 Introduction

At the end of 2019, in Wuhan, China, an outbreak of unidentified pneumonia began to occur, which could not be eradicated by the various treatments. In a short time, this virus was spreading in the world due to its high degree of contagion. Once the agent was identified, it was classified as SARS-Cov2, responsible for the COVID-19 disease (Koury & Hirschhaut, 2020). On March 11, 2020, the World Health Organization characterized COVID-19 as an international pandemic. Several countries took precautionary measures to prevent its spread. Being the most practical quarantine, isolating people in their homes to minimize an outbreak of the virus (Fernandez, 2020).

In Spain, as in many countries, due to the health crisis caused by COVID-19, suspension of face-to-face classes in schools and universities was decreed. Forcing educational institutions to teach virtual classes, which is a challenge for teachers who teach face-to-face classes in educational centers (Lema et al., 2020). With the closure of educational institutions to prevent the spread of COVID-19, the number of students who could not continue with their studies increased notably in Latin America, due to the limited supply of non-contact classes (UNESCO, 2020). Table 1 shows the number of students who saw their face-to-face classes suspended.

Table 1
Students affected by the closure of classes in Latin America

Country	Pre Primary	Primary	Secondary	Tertiary	Total affected
Argentina	1,694,680	4,573,843	4,612,663	3,140,963	14,202,149
Bolivia	353,898	1,379,099	1,233,738	n.a.	2,966,735
Brazil	5,101,935	16,106,812	23,118,179	8,571,423	53,898,349
Chile	616,615	1,514,761	1,520,724	1,238,992	4,891,092
Colombia	1,309,386	4,303,833	4,821,029	2,408,041	12,842,289
Ecuador	638,551	1,932,261	1,891,648	669,437	5,131,897
Guyana	27,872	94,488	85,934	8,857	217,151
Paraguay	181,007	727,363	611,308	225,211	1,744,889
Peru	1,642,768	3,592,865	2,779,973	1,895,907	9,911,513
Surinam	18,150	67,690	58,408	5,186	72,684
Venezuela	1,190,349	3,285,299	2,391,174	2,123,041	8,989,863
Total	12,775,511	37,578,314	43,124,775	20,287,058	100,281,433

Source: (UNESCO, 2020)

In the case of Ecuador, the total reported number of affected student's amounts to 5,131,897. In pre-primary there are 638,551 students, in primary, there is the highest number of affected with 1,932,261 students, the secondary has 1,891,648 students, and, finally, in tertiary, there are 669,437 students. All of them have to take classes online. The UNESCO International Institute for Higher Education in Latin America and the Caribbean, or better known as IESALEC, in the face of the global crisis, proposes a three-phase frame of reference for the strengthening of educational institutions in the new study modality (Giannini, 2020).

In figure 1, the phases are shown from the institutional perception.

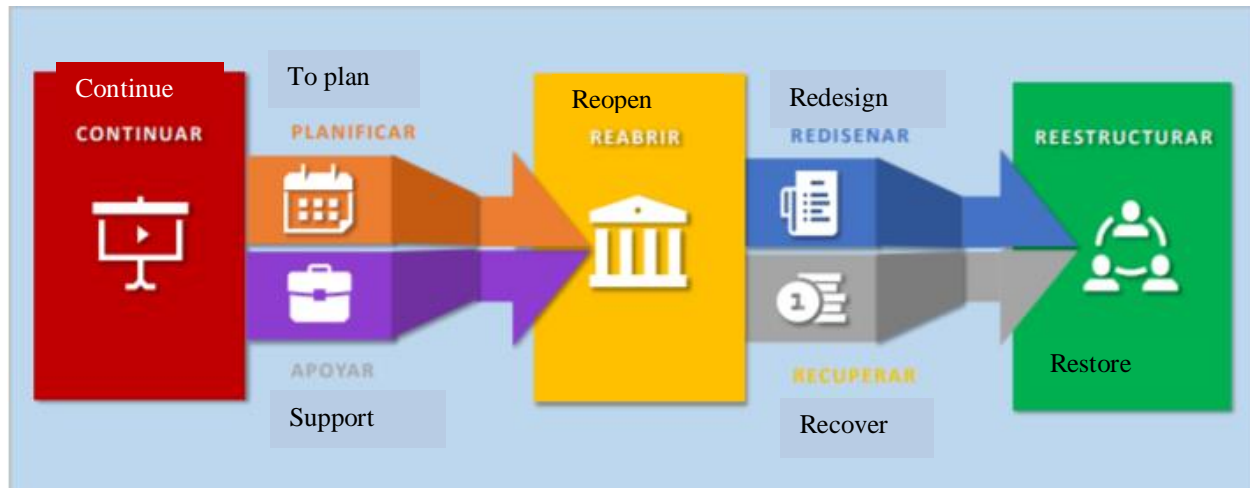


Figure 1. Reference framework for overcoming the global crisis: phases and priorities (Giannini, 2020)

The suggested phases to follow are: continue, reopen, and restructure. Phase 1 refers to continuing distance education in the face of the impediment of face-to-face possibility, supporting teachers and students in studies with equality and a high level, and planning with various alternative environments. Phase 2 deals with the reopening of the institutions, with the instructions imposed by the health authorities, recovering with various strategies to compensate for the loss in learning, and redesigning the teaching methodologies, combining face-to-face classes with virtual classes. Finally, phase 3 refers to the restructuring of the pedagogical processes with the previous experiences that they have had in the previous phases.

It must be taken into account that the number of students of all levels of education, for economic, family, and personal reasons, will not be able to participate in the adaptation of face-to-face classes to the online mode. This will be reflected in a lower number of students per classroom, generating a feeling of insecurity in the population (Burgos et al., 2021). The teaching staff is one of the important pillars of the education system, both face-to-face, blended, and non-face-to-face. Through the use of optimal methodologies, they facilitate student learning, creating opportunities in decision-making, and train reflective thinking (García-Planas & Torres, 2020). Teachers who exclusively teach face-to-face classes, given the urgency of the health crisis, present difficulties when teaching in their non-face-to-face classes, due to ignorance of the management of institutional platforms and the applications of ICT as academic reinforcement (De Luca, 2020).

In Spain, university careers in medicine and nursing, almost all of the teaching staff are doctors or health workers, who impart their knowledge to their future colleagues. They lack learning methodologies because they are not specialized in teaching. This makes online learning difficult because most of the classes are practical (Casademont, 2020). In Ecuador, the Organic Law of Ecuadorian Intercultural Education, states in article 6, literal j, digital literacy and the use of ICT in educational processes, therefore, Ecuadorian teachers would not find it difficult to adapt an online class (Zavala et al., 2016; Nagel & Kotzé, 2010).

Distance or virtual education dates from the nineteenth century, its improvement in the framework appears in the middle of the twentieth century, thanks to the new non-face-to-face academic offers this modality has been promoted (Tellería, 2004). Online classes are a digital environment where teachers and students are the protagonists of the teaching-learning process, in this virtual space they argue, debate, interact, analyze, investigate various topics either in synchronous or asynchronous classes (Picón, 2020).

A virtual classroom is a learning community, where not only materials, tasks, videos but experiences are shared. The enriching is raised in the discussion forum, a virtual place where individual experiences become social (Vigilante, 2020). Online education is a more inclusive class because it breaks geographical barriers, the student body studies in privacy, although it also socializes, encourage group work, learns from the other, and, above all, favors multiculturalism (García Aretio, 2017; Armstrong et al., 2011; Petrakou, 2010). The strength in online learning environments is the combination of synchronous and asynchronous training instances- With correct management of ICT, online classes are well viewed by students, making them engage and strengthen the learning process (Godoy-Orellana, 2020).

Representing reality in an immersive virtual environment by creating a 3d learning space makes participants feel that they are in a different environment from the classic computer desk, with the use of avatars, communication becomes more personal and assertive (Comas Gonzales et al., 2017). In figure 2, a virtual environment using avatars is shown.



Figure 2. Users Participating through Avatars in a 3D Virtual Space (Comas Gonzales et al., 2017)

The 3D environment created simulates a virtual education space, where students use avatars that represent them symbolically. They can move within the virtual space as if they were in the same classroom and have information to discuss plastered on the walls. The role of teachers in the current pandemic goes beyond a knowledgeable trainer, it implies admitting that being a teacher, like any activity based on people's relationships, has a close emotional and affective bond (Tarabini, 2020).

An investigation carried out at the Eloy Alfaro Secular University of Manabí, on the role of teachers in the face of the COVID-19 crisis, from a human perspective points out that the main function of teachers in a pandemic is to be the guardians of the hope of the improvement of education, keeping the flame of knowledge alive (Villafuerte et al., 2020). An empathic teacher is one who achieves a stable relationship between teacher-student, allowing a fluid, enriching dialogue, where learning is worked harmoniously. Having empathy enhances emotional intelligence, which makes the student motivated and manages to break academic obstacles (Camacho, 2018; Trickett et al., 2012; Xu et al., 2020; Hepsiba et al., 2016).

In the 21st century, you live in a postmodern society, where needs have changed. The teachers of this century know that both knowledge and students are constantly changing, therefore, they must acquire new capacities that strengthen theories, practices, methodologies, and techniques to satisfy student learning (Sánchez-Sánchez & Jara-Amigo, 2019). Teachers become emblematic figures in the life of students. It is important to follow educational protocols that guarantee to learn, without forgetting that they are also biopsychosocial beings, who have various characteristics and personal capacities, including resilience. This influences the relationship that exists with the students, focusing more on facing and overcoming life's adversities without leaving academic activity aside (Oviedo et al., 2020).

Having digital competencies today allows teachers to achieve better results in the teaching-learning process, not only does it lead to the use of ICT, its implementation must be justified through a methodology. Show students the benefits that they should know and use these skills that will allow them to develop these digital skills (Varela & Valenzuela, 2020).

2 Materials and Methods

In this article, a documentary investigation has been used, which consists of storing data and scientific articles to build coherent apprehension processes (Hoyos, 2000). The information collected is from reliable and updated sources, with a qualitative approach in the synthesis of the information, as well as the methodology used in the document is deductive, which is based on theoretical foundations, to get to contextualize particular practical facts (Castellanos, 2017).

3 Results and Discussions

What are the online classes?

With technological advances, the modality of face-to-face classes has been better adapted to a distance modality, in both modalities the same aim is sought, to train students to learn. The difference is where they are run. Online classes are learning spaces that, through the use of technology as a means of communication between the teacher and the student, allows dialogue, reflection, training, and interaction of the participants. Reconstructs the concept of learning spaces. The great advantage that these classes have is the inclusion of ICT as academic support based on a methodology, emphasizing that the fact of only using ICT is not innovation. Thanks to them, it is possible to better understand certain topics, by the implementation of multimedia elements that reinforce the content of the classes.

What is the role of the teacher in online COVID-19 classes?

From the analysis of scientific documents, the roles that teachers need to teach online classes in times of COVID-19 were raised. In figure 3, the six roles that must be fulfilled are evidenced.

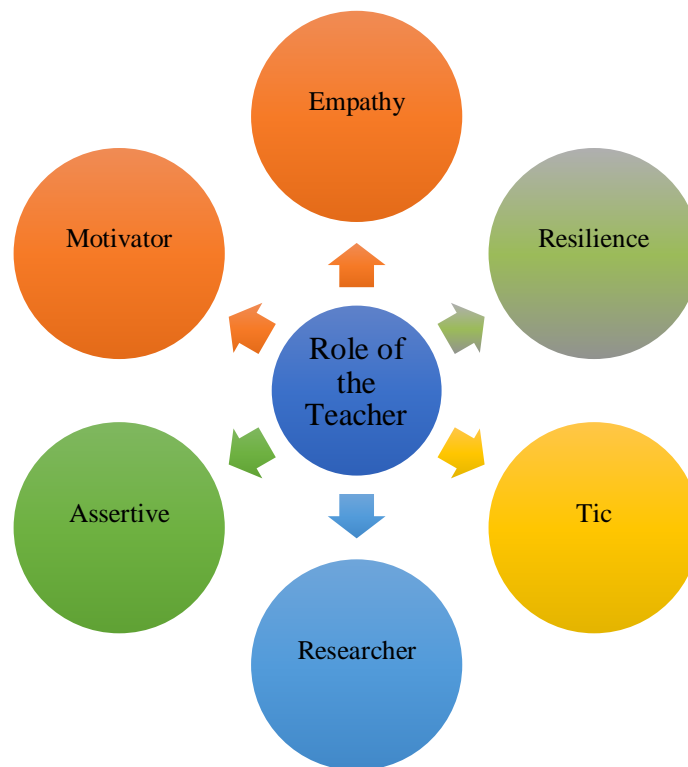


Figure 3. Role of the Teacher in Online Classes (own elaboration)

- 1) Empathy: Putting oneself in the position of the other allows a more personal approach and understanding the reason for the problems or difficulties that the student experiences. By generating this empathy, a bond of trust is formed, improving academic performance.
- 2) Resilience: Overcoming critical moments until reaching normality, leads to fostering resilience in the classroom, in the face of adversity, adapting to improve, spreading this quality, generates a more equitable academic society.
- 3) ICT: Acquiring this digital competence facilitates and improves the classroom environment, teaching that technologies have improved and facilitated the execution of tasks, communication processes, evaluations. Technology will never outperform a teacher, but a teacher who does not master technology can be replaced.
- 4) Researcher: Science is the language of truth, being a researcher in the search for knowledge and facts. The advances that are given in society are by leaps and bounds, this point is critical for teachers, investigating new methodologies to improve learning in the classroom.
- 5) Assertive: The communication tone that must be handled should be assertive, be frank in the objectives of the class, maintain high self-esteem, argue, and avoid being distant, cutting. Accepting the opinion of students, as online classes are a new modality, can generate confusion in students.
- 6) Motivator: Generate expectations in the student that the learning that is going to be generated is of the utmost importance for their academic and personal training, a motivated person is more willing to acquire, learn and understand new knowledge.

4 Conclusion

The confinement due to the global crisis has changed the modality from face-to-face classes to online classes, being forced, educational institutions have had difficulties in its execution. Online classes have existed before the pandemic, but they have not been practiced by face-to-face teachers. In online classes, technological innovation is evidenced in the implementation of the classes, the objective is to form learning in the student by the teacher. It allows more student participation due to the level of interaction. Teachers have to change their roles in online mode, using face-to-face methods makes it difficult to perform in the virtual classroom, they have to be focused on making the student feel comfortable in class and see that they can learn without attending a classroom, maintaining and respecting the position of the teacher regarding the learning methodology. If they do not change their approaches, teaching in the virtual classroom becomes difficult.

Conflict of interest statement

The authors declared that they have no competing interests.

Statement of authorship

The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

Acknowledgments

We are grateful to two anonymous reviewers for their valuable comments on the earlier version of this paper.

References

- Armstrong, A. W., Idriss, N. Z., & Kim, R. H. (2011). Effects of video-based, online education on behavioral and knowledge outcomes in sunscreen use: a randomized controlled trial. *Patient education and counseling*, 83(2), 273-277. <https://doi.org/10.1016/j.pec.2010.04.033>
- Burgos, C., Vásquez, E., López, E., & Adaos, R. (2021). Difprore Project Analysis of the difficulties, proposals and educational challenges facing COVID-19. *IJERI: International journal of Educational Research and Innovation* (15), 17-34.
- Camacho Guerrero, GA (2018). *Capacity for empathy in teachers of the Faculty of Medicine of the Pontificia Universidad Católica del Ecuador-Quito, from October 2017 to December 2017* (Bachelor's thesis, PUCE).
- Casademont, J. (2020). Reflections of a teacher in the face of the COVID-19 pandemic situation. *FEM. Journal of the Medical Education Foundation*, 23(3), 107-109.
- Castellanos, BJP (2017). The use of deductive and inductive methods to increase the efficiency of digital evidence acquisition processing. *Accounting notebooks*, 18 (46).
- Comas-González, Z., Echeverri-Ocampo, I., Zamora-Musa, R., Velez, J., Sarmiento, R., & Orellana, M. (2017). Recent Trends In Virtual Education And Its Strong Connection With The Immersive Environments. *ESPACIOS*, 38(15), 4.
- De Luca, MP (2020). Virtual classrooms in teacher training as a strategy for pedagogical continuity in times of pandemic. Uses and paradoxes. *Carolina analysis*, (33), 1.
- Fernandez, C. (2020). Incapacidad temporal y COVID-19. *Actualidad jurídica iberoamericana*, 12(2), 744-753.
- García Aretío, L. (2017). Distance and virtual education: quality, disruption, adaptive learning and mobile learning.
- García-Planas, M. I., & Torres, J. T. (2020). Transición de la docencia presencial a la no presencial en la UPC durante la pandemia del COVID-19. *IJERI: International Journal of Educational Research and Innovation*, (15), 177-187.
- Giannini, S. (2020). COVID-19 and higher education of the immediate effects the day after. *Latin American Journal of Comparative Education*, 11(17), 1-57.
- Godoy-Orellana, C. (2020). Five keys for the implementation of virtual training programs: a proposal from the tutoring experience. *Educational Knowledge Magazine* , (5), 22-36.
- Hepsiba, N., Subhashini, A., Raju, M. V. R., & Rao, Y. P. (2016). Changing role of teachers in the present society. *International research journal of engineering, IT & scientific research*, 2(9), 67-72.
- Hoyos, C. (2000). *A model for documentary research: theoretical-practical guide on the construction of states of the art with important reflections on the research*. Medellín: Publishing Sign.
- Koury, M., & Hirschhaut, M. (2020). Historical overview of COVID-19 How and why did we get to this pandemic? *Venezuelan dental record*, 58(1), 3-4.
- Lema, VG, García, DB, Martín, RB, & Calvo, GG (2020). Learning to be a teacher without being in the classroom: Covid-19 as a threat to the professional development of future teachers. *RIMCIS: International and Multidisciplinary Journal in Social Sciences* , 9 (1), 152-177.
- Nagel, L., & Kotzé, T. G. (2010). Supersizing e-learning: What a CoI survey reveals about teaching presence in a large online class. *The Internet and Higher Education*, 13(1-2), 45-51. <https://doi.org/10.1016/j.iheduc.2009.12.001>
- Oviedo, AD, Meza, KT, & Ramírez, AL (2020). Resilient capacities in teachers in cases of intrafamily violence. *Science and Education* , 4 (1), 21-31.
- Petrakou, A. (2010). Interacting through avatars: Virtual worlds as a context for online education. *Computers & Education*, 54(4), 1020-1027. <https://doi.org/10.1016/j.compedu.2009.10.007>
- Picón, ML (2020). Is virtual teaching possible ?. *Educational Forum* , (34), 11-34.
- Sánchez-Sánchez, GI, & Jara-Amigo, XE (2019). Students, teachers and educational context in the representation of teachers in training. *Educare Electronic Magazine* , 23 (3), 161-181.
- Tarabini, A. (2020). What is the purpose of the school? Sociological reflections in times of global pandemic. *Revista de Sociología de la Educación-RASE* , 13 (2), 145-155.
- Tellería, MB (2004). Education and new technologies. Distance Education and Virtual Education. *Journal of Theory and Didactics of Social Sciences* , (9), 209-222.
- Trickett, E. J., Rukhotskiy, E., Jeong, A., Genkova, A., Oberoi, A., Weinstein, T., & Delgado, Y. (2012). “The kids are terrific: It’s the job that’s tough”: The ELL teacher role in an urban context. *Teaching and Teacher Education*, 28(2), 283-292. <https://doi.org/10.1016/j.tate.2011.10.005>
- UNESCO. (2020). Impact of Covid-19 on education.

- Varela-Ordorica, SA, & Valenzuela-González, JR (2020). Use of information and communication technologies as a transversal competence in teacher training. *Educare Electronic Magazine* , 24 (1), 172-191.
- Vigilante, A. (2020). Cos'è Una Classe Virtuale (E Perché Dev'essere Libera).
- Villafuerte, J., Bello, J., Pantaleón, Y ., & Bermello, J. (2020). Teachers 'Role In The Covid-19 Crisis, A Look. *REFCalE: Electronic Magazine Training and Educational Quality*, 8(1), 134-150.
- Xu, B., Chen, N. S., & Chen, G. (2020). Effects of teacher role on student engagement in WeChat-Based online discussion learning. *Computers & Education*, 157, 103956. <https://doi.org/10.1016/j.compedu.2020.103956>
- Zavala, D., Muñoz, K., & Lozano, E. (2016). An approach to the digital competences of teachers. *Publishing Magazine* , 3 (9), 330-340.