

# **"Oh, and Now Who Can Help Us?" COVID-19 and Higher Education in El Salvador**

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*To flatten the COVID-19 mortality curve in El Salvador, borders were closed, mandatory quarantine was implemented, and face-to-face classes were suspended at all levels of education. With the rapid implementation of these measures, higher education institutions (HEIs) had very little time to prepare different support strategies to keep going with the development of the classes. The greatest challenges were evidenced by the face-to-face career subjects since faculty and students did not have any previous experience or training in virtual education.*

*This qualitative study identifies some demands and difficulties expressed by university students during this period. Contingency strategies are being shared, which the Salvadoran HEIs have implemented to support the faculty and the students of the different careers of the university. They pose challenges to rethink both virtual education at the higher level and teacher training and to acknowledge both the contributions of media literacy and the maintenance of an educational gaze, during and after the pandemic. This is not a bet to implement a distance education program, but a closer virtual education program.*

*Keywords: higher education, virtual education, media literacy, teacher training, COVID-19, pandemic, El Salvador*

The human being remains the essential foundation of learning and training in the digital and global era.”

(Ramírez, 2014, p. 125)

## **INTRODUCTION**

"Oh, now who can help us?" is an expression that might initially be exclaimed in a moment of desperation and a search for help in the face of an emergency. Subsequently, with a cool head, one usually finds the appropriate alternatives to address and overcome an emergency situation. In an official memorandum from the Ministry of Education, Science and Technology (Mineducyt in Spanish) of El

Salvador, entitled *Suspensión de clases por emergencia COVID-19* ("Suspension of classes due to emergency"), No. 7, year 2020, dated March 11, it was indicated that all Higher Education Institutions (HEI) should offer strategies for the assurance of the educational process in all careers of their current offerings. Overnight, HEIs sought, designed and implemented strategies to maintain the development of classes in all modalities. Most HEIs opted to continue their classes from various learning platforms in virtual environments (Moodle, Sakai, Claroline, etc.). Although several HEIs had teacher training programs in virtual environments before the suspension of classes, the immediate and widespread implementation of the strategy of continuing classes of face-to-face subjects in virtual environments showed the need to offer additional spaces.

The methodology applied in this study is qualitative, with questionnaires for HEIs and content analysis of student demands expressed on the Facebook pages of HEIs, during the period of mandatory quarantine; as well as content analysis of a meeting of student members of the University Student Movement with authorities of the Mineducyt in a Facebook Live. In this qualitative study, we move from the most descriptive to the most reflective and propositional aspects of this experience. From a descriptive approach, we share how the implementation of contingency strategies for teacher and student support by HEIs developed during this emergency period, as well as identifying some demands and difficulties expressed by university students. From a more reflective approach, we analyze (think and rethink), in the light of this experience, which factors should be considered in university virtual education, and the contributions of educommunication and media literacy. In addition, as part of the conclusions, a proposal is offered not to implement, during and after the pandemic, a virtual distance education, but a virtual education with proximity, and to address this approach in teacher training programs, where educommunication and media literacy have their space and meaning.

## **OBJECTIVES**

- To present the current context of higher education in El Salvador and its teacher training.
- To present the strategies implemented by HEIs and student demands during the COVID-19 pandemic in El Salvador.
- To analyze and propose some contributions of educommunication and media literacy during and after the pandemic.

## **APPROACH**

### **Context of Higher Education in El Salvador**

The legal framework governing higher education in El Salvador, both for public and private institutions, consists mainly of the Higher Education Law (2004), abbreviated as HEL, and the General Regulations of the Higher Education Law (2009). Within the framework of distance education, there is a Special Regulation for Distance Education in Higher Education (2012).

The Ministry of Education, Science and Technology (Mineducyt) is the government agency responsible for education at all levels. For higher education, Mineducyt has the National Directorate of Higher Education (NDHE), which is responsible for executing the mandates of the Higher Education Law. In El Salvador, higher education includes both university and technological education and is offered by three types of HEI: universities (24), technological institutes (6) and specialized institutes of higher education (10). With respect to universities, El Salvador has only one public university, the Universidad de El Salvador, and 23 private universities. Article 28 of the LES establishes the legal nature of private universities as non-profit public utility corporations.

According to official data updated by Mineducyt, in 2018, 190,519 students were enrolled in higher education; of these, 176,268 enrolled in universities; 12,813, in specialized institutes; and 1,438 in technological institutes (Mineducyt, 2019). The following table shows the offer of higher education careers in 2020:

**TABLE 1**  
**DATA ON THE OFFER OF HIGHER EDUCATION CAREERS IN SALVADORAN HIGHER EDUCATION 2020**

Description	Total	Percentage
Higher education careers offered in 2020 by 40 HEIs	947	100%
Distribution by academic degree		
Technical careers and professorships	251	26%
Bachelor's degrees, architecture and engineering, and university medical training	485	51%
Medical and dental specialization careers	24	3%
Postgraduate Careers	187	20%
Master's degree programs (176- 19%)		
Doctorate degrees (11-1%)		
Total	947	100%
Distribution by modality		
Presential careers	800	85%
Semi-presential careers	107	11%
Distance and virtual careers	40	4%
Total	947	100%

Source: Table prepared by the authors with 2020 data provided by the National Directorate of Higher Education

The majority of programs with blended and virtual modalities are master's and doctoral programs. As part of their strategic lines, some HEIs implement actions for the incorporation of Information and Communication Technology (ICT) in face-to-face courses, however, these experiences are not generalized in all the courses of the career, nor in all HEIs; therefore, the implementation of virtuality for the development of face-to-face careers, during the Covid-19 pandemic, did not always have previous experiences to guarantee some level of media literacy on the part of faculty and students.

According to the HEI, teaching is one of the three functions of higher education, together with research and social projection. With respect to teaching, the HEI establishes in Art. 3: "Teaching seeks to teach how to learn, guide the acquisition of knowledge, cultivate values and develop research and interpretation skills in students, for their integral formation as professionals" (p.2). According to the HEI, in order to work as a teacher in higher education, a person must fulfill two main characteristics: 1) have the academic degree of the career they teach and 2) have specific knowledge of the area and the subject taught. Previous pedagogical training at the higher education level is not a requirement. Each HEI is responsible for establishing the additional requirements for hiring and for offering the teaching training it deems appropriate. Without ignoring the responsibilities of HEIs to promote, offer and encourage the training of their teaching staff, it is relevant to highlight that, currently, with a greater training offer available, it makes sense the initiative, willingness and motivation of a teacher to learn to learn and keep themselves in a permanent and autonomous updating, without expecting all updating training to be offered only by the HEIs.

Art. 22 of the Special Regulations for Distance Education in Higher Education (2012) states that teachers of distance education programs must have knowledge and experience in the following aspects: course design, didactic resources, development of teaching and learning strategies; use of educational and information technologies; counseling; tutoring and learning assessment; and teacher training in quality management for program accreditation. It is worth mentioning that currently in El Salvador, there are no models of state education quality assurance agencies for self-evaluation or quality assessment of distance learning programs.

## Virtual Education: Key Factors

This study proposes four key factors for a good development of virtual education in higher education: communicative, pedagogical, technological and institutional. First, communication is an inherent process in education and is an essentially human process (Ramírez, 2014; Prieto, 2006), regardless of the modality in which it is developed. Therefore, communication in education is essential, as stated by Prieto and van de Pol (2006): "Educational communication means the fundamental concern to educate, always from the task of promoting and accompanying learning with adequate instrumental, linguistic and, above all, human mediations" (p. 94). This approach moves away from a transmissive educational approach to a participatory approach in which communicative effectiveness and interaction in educational processes must be ensured, the latter being understood as "the cognitive and social actions between the actors of the educational process (student-teacher, student-student) in the development of learning activities" (Osorio & Duarte, p. 66). Mainly, in virtual environments, the participants must take care of their communication and quality of interaction, paying attention to how these processes of human approach are developed. In this sense, educommunication recognizes some "educational values" that should also be considered in virtual environments, such as participatory management, teamwork, recognition of error in the learning process, the sense of social transformation (de Oliveira, 2009). Both teachers and students should be aware of these values. Media literacy is key for both teachers and students, developing the dimensions proposed by Ferrés and Piscitelli (2016): language, technology, interaction processes, production and distribution processes, ideology and values and aesthetics.

Secondly, pedagogical factors must be taken into account in virtual environments. It is not a matter of pedagogically applying the face-to-face experience in virtual environments. A different pedagogical mediation is required. Nor is it just a matter of concentrating on ICTs. The focus should be more on "the educator's conceptions, intentions and decisions" (Baelo, 2009, p.88). New didactics, new conceptions of the teaching function, as a good companion, guide and orientator of the learning process, must be accepted, known and implemented. Teachers of virtual environments, in addition to mastering their disciplinary area, must be aware of their pedagogical actions, develop methodological, communicative, knowledge management, research and ICT mastery skills (Bautista et al, 2016). They must present themselves as a teacher willing to design "authentic or alternative evaluations" -to the traditional model-, oriented to e-learning, in which the student plays an active and collaborative role (Rodríguez and Ibarra, 2011). Learning in virtual environments should enable the active involvement of students (Alonzo and Blázquez, 2012). It should develop their autonomy, self-organization, self-regulation and discipline. (Torres Tovar, 2013).

Thirdly, the more technological aspects should be considered, understood as the equipment, tools and technological infrastructure that enable safe and efficient educational (or educommunicative) activity in virtual environments. Finally, it is proposed to consider the institutional aspects as a key factor, understood as the framework of decisions, criteria and guidelines offered by the HEI, considering the spatial and temporal flexibility of the virtual setting, in order to contribute to the generation of an environment that generates certainties and clarities for the proper development of higher education in virtual environments.

## RESULTS

On April 12, a questionnaire was sent by e-mail to representatives of 10 of the 40 Higher Education Institutions (HEIs) in El Salvador and the National Directorate of Higher Education (NDHE) of the Ministry of Education, Science and Technology, asking the following questions:

- What strategies did your HEI implement to make an emergent incursion from face-to-face classes to virtuality?
- What are three challenges that your HEI has faced in its emergent incursion from face-to-face classes to virtuality?

Six questionnaires and a report were received from the NDHE which included the strategies and contingency measures for the COVID-19 pandemic implemented by 34 of the 40 HEIs, in the period from March 17 to 27. From this report, for this study, a content analysis was performed and only those measures related to the teaching staff, student body and class development were identified. These measures were

classified into the four categories, which are considered as key factors in virtual education, as can be seen in the following table.

**TABLE 2**  
**STRATEGIES IMPLEMENTED AND REPORTED BY SOME HEIs**

Categories	Detail of strategic actions
Communicative	<ul style="list-style-type: none"> <li>✓ Expansion of diverse communication mechanisms with students, teachers and academic administrative personnel</li> <li>✓ Interaction with students and teachers</li> <li>✓ Manuals and guides for platform use</li> </ul>
Pedagogical	Teacher training in: <ul style="list-style-type: none"> <li>✓ Use of platforms and other virtual education tools</li> <li>✓ Education in virtual environments</li> <li>✓ Content generation for virtual environments</li> <li>✓ Design of materials for innovative learning environments</li> <li>✓ Consulting in virtual environments</li> </ul>
Technological	<ul style="list-style-type: none"> <li>✓ Availability of platforms for communication with students and class sessions</li> <li>✓ Platform support for increased demand</li> <li>✓ Increased equipment capacity to support demand</li> <li>✓ Simulators for some laboratory practices</li> <li>✓ Alliances with companies offering internet services to offer promotions to students</li> </ul>
Institutional	<ul style="list-style-type: none"> <li>✓ Working guidelines on multimedia content, evaluations, development guides, feedback and interaction.</li> <li>✓ Information materials for students</li> <li>✓ Support units available (Virtual Education Center (VEC); Directorate of Distance Education)</li> </ul>

Note: Table prepared by the authors with information provided by HEIs and NDHE.

Regarding the student body, although the HEI social networks show favorable comments from students who recognize the effort of HEIs and their teachers to maintain the development of classes, the purpose of this study is to identify areas for improvement in HEI virtual education, during and after the pandemic. Therefore, this part focuses on highlighting student demands. As a result of the content analysis, 100 students' comments expressed on the official HEI Facebook pages during the period of mandatory quarantine were classified into the four categories mentioned above (pedagogical, communicative, technological and institutional). The students are identified with code "STUNo.year". In addition, the demands of representatives of the University Student Movement expressed publicly to the Minister of Education, Science and Technology and her work team, in a session broadcast via Facebook Live, in May 2020, were analyzed and classified (duration 1h 09min 12s). As in the previous table, only those measures related to the teaching staff, student body and class development were identified.

**TABLE 3**  
**CLASSIFICATION OF DEMANDS AND COMMENTS FROM SOME HEI STUDENTS ON**  
**FACEBOOK AND FACEBOOK LIVE (UNIVERSITY STUDENT MOVEMENT)**

Categories	Detail of demands
Communicative	<ul style="list-style-type: none"> <li>✓ Inefficient communication. When faced with questions and doubts, some teachers take a long time to respond or respond in an unfriendly manner.</li> <li>✓ Some teachers who do not report in a timely manner to students in the subject, only share materials with them and then do not communicate with them.</li> </ul>
Pedagogical	<ul style="list-style-type: none"> <li>✓ In some subjects, the quality of classes is not guaranteed, linked to the materials and the way classes are offered.</li> <li>✓ Some teachers offer only Google YouTube links, PDF and PowerPoint materials as class materials. These can be searched by students on their own.</li> <li>✓ In some subjects, activities are designed that are not congruent with the virtual modality and imply the search for materials away from home.</li> <li>✓ Failure to develop adequate materials for classes (guides, notebook photographs, etc.)</li> <li>✓ Classes are not adequately taught on the platforms.</li> <li>✓ Some subjects are still not offered because some teachers do not know how to use platforms.</li> <li>✓ Excessive load of activities and evaluations in a subject (saturation).</li> <li>✓ Lack of preparation of some teachers to offer online classes.</li> <li>✓ Unwillingness of some teachers to teach online classes well</li> </ul>
Technological	<ul style="list-style-type: none"> <li>✓ Platform failures (loss of information and signal, screen freezing, etc).</li> <li>✓ Changes of platforms when a previous one is already known.</li> <li>✓ Low server capacity to support demand.</li> <li>✓ Lack of computers and internet for some students to receive classes.</li> </ul>
Institutional	<ul style="list-style-type: none"> <li>✓ Possibility of conducting practical training in the careers that require it (health, engineering and agronomy).</li> <li>✓ Necessary guidelines from governmental agencies to ensure student health in clinical practices.</li> <li>✓ Synchronous activities at times inaccessible to students.</li> <li>✓ Class attendance is taken in synchronous activities at times inaccessible to students.</li> </ul>

Note: Table prepared by authors

Although demands were identified for all four categories, those that stood out the most were pedagogical and communicative. Some of the messages analyzed by category are presented below:

Pedagogical/communicative:

How cool is that, they simply upload the slides, because they don't want to do the work for an online class. Because they just want to assign us jobs, plus they don't know how everything has accumulated, then there's that forum of "doubts" that they know very well that not everyone responds, because they are not even paying attention and only respond after hours of waiting. Ah but they are charging for "working" 😊 and they are charging for services they are obviously not providing. (STU502020)

#### Technological:

I must complain about all the internet service at the university. Even when there are few people connected to the routers there is always a dismal service. They should improve the internet capacity, change the routers for more modern and efficient ones, put functional servers and make a real use of the internet fee that they charge to all the students. (STU82020)

#### Institutional:

The university should think about having different schedules, since not all of us have the availability to do the mid-term exams at that time, due to the COVID-19 emergency, many of us work in that time and we do not have any time left due to rotational work roles. (STU252020).

### CONCLUSIONS AND RECOMMENDATIONS FOR TEACHER TRAINING

In virtual education, as in any educational process, the relevance of the interactive quality and communicative approach between teacher-student/student-student/teacher-students-HEI should not be overlooked. In the student demands analyzed in this study, the communicative and pedagogical categories are the most relevant and significant. As Bautista et al. (2016) point out, "What is important is not the means of communication, but the willingness to communicate and relate" (p.25). In this sense, HEIs should prioritize teacher training in these aspects, just as teachers themselves should seek continuous training in these areas - living the experience as virtual students - in order to perform adequately in the important roles demanded by virtual education: tutor, mediator, counselor, companion... How to maintain quality communication in virtual environments? What pedagogical elements should be considered in the design, implementation and evaluation of higher education in virtual environments? In order to answer these questions, educommunication and media literacy must occupy a space in these formative actions. We must take advantage of the experiences in virtual environments and share them. Learning collaboratively also as teachers. Thinking and rethinking virtual education is a responsibility of all people and organizations involved in virtual higher education: teachers, students, HEI, government agencies, private companies, social organizations... We must assume co-responsibility for this task. And in the face of a new cry for help "Oh, and now who can help us?", let us respond with several voices "all of us!".

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