

Well-being and impact of educational actors in times of Pandemic

Willian Rodrigo Castro-Avenidaño¹, César Augusto Hernández-Suárez², Raúl Prada-Nuñez³

¹Universidad Francisco de Paula Santander
<https://orcid.org/0000-0002-7510-8222>
williamavendano@ufps.edu.co

²Universidad Francisco de Paula Santander
<https://orcid.org/0000-0002-7974-5560>
cesaraugusto@ufps.edu.co

³Universidad Francisco de Paula Santander
<https://orcid.org/0000-0001-6145-1786>
raulprada@ufps.edu.co

Abstract

The research was carried out under the method of content analysis having the scientific production as units of analysis around the variable *well-being and impact of educational actors in times of pandemic in Latin America*. The objective of the study was to recognize the main divergent and convergent characteristics of the units of analysis located in the Scopus database in the period 2020-2021 in Latin American countries. 94 units of analysis were explored, systematized and interpreted. The data were organized, coded and categorized to be presented using descriptive and correlational statistical procedures. Once these characteristics were described, the position of different authors on the proposed topic was referred to by means of a qualitative analysis. Among the main findings is that Brazil is the Latin American country with the greatest academic work on the subject and that the area of knowledge with greatest contribution is the social sciences in the form of the scientific papers.

Keywords: impact of Covid 19, welfare, education.

Introduction

Education in times of pandemic has undergone many changes in order to comply with the policies established by COVID 19 at the beginning of March due to the health crisis, which seek to preserve public health by avoiding a large number of contagions. This fact caused a change in the educational model, going from traditional education to an emergency remote one in which there were many shortcomings that are much more noticeable in Latin American countries being mostly a vulnerable population where there are large inequality gaps that prevent everyone from accessing online education.

In this transition, several affectations can be identified both in the academic labor area and in the psychological well-being of the educational actors, within which is the lack of instruction about educational platforms in the teaching staff, the difficulties to access ICT by

students and affectations to mental health. The training of teachers in technological platforms plays an important role in distance education since they are the ones in charge of imparting knowledge and leading the class, so if they do not fully know the tool used it is possible that the class given is deficient. This lack of instruction in this area is due to the abrupt transition to these methodologies that did not allow a correct assimilation of these media. This lack of knowledge is also seen in students because although they have grown up in an environment mostly led by technological processes, they do not have deep knowledge about the use of educational virtual platforms.

Also, this pandemic managed to highlight the inequality gaps in Latin America by showing the lack of connectivity in the most vulnerable populations and even the difficult access they have to digital tools (Avenidaño-Castro, Patiño-Villa, & Salamanca Rangel, 2021) so

although mediated education is the ideal method to continue classes in a conjunctural situation like this, it is necessary to implement public policies aimed at reducing these inequalities and therefore more students can access education (Gamboa, 2016).

Finally, there are effects on psychological well-being, which is affected as much as physical health in times of pandemic, forcing scientists to find new ways to communicate and perform essential activities. In the pandemic, feelings of uncertainty and anxiety increased greatly because of the large amount of information to which people were exposed, and of course they were not prepared to digest, so that working at home became one of the ways in which certain habits were changed, causing effects on sleep hours and eating habits that affect health (Vanegas & Gamboa, 2022a and Vanegas & Gamboa, 2022b) (Medina Romero et al, 2021).

Therefore, it is important to know in terms of bibliographic resources, the current state of research related to the well-being and impact of educational actors in times of pandemic in Latin America, so a bibliometric analysis of the scientific production registered in Scopus database during the period 2020-2021 is proposed to answer the question: How has been the production and publication of research papers related to the study of the variable well-being and affectations of educational actors in times of pandemic in Latin America during the period 2020-2021?

2. Methodology

The study is framed in the non-experimental-transversal quantitative approach of relational

level framed in the empirical-analytical rationality. The units of analysis located in Scopus corresponded to research from the Latin American region in the period 2020-2021. In a complementary way, a qualitative analysis is used to recognize theoretical-conceptual elements around the object of study and to raise significantly relevant reflections.

The search, selection and treatment parameters were developed in four phases: In Phase 1, data was collected using the Scopus web page search tool, through which a total of 94 publications were identified. Their classification is based on: Published papers whose study variables are related to the welfare and affectations of educational actors in times of pandemic, research papers published during the Period 2020-2021; limited to Latin American countries; without distinction of area of knowledge and without distinction of type of publication; then, in Phase 2, the information identified in the previous phase was organized. The classification was made by means of figures and tables based on data provided by Scopus, taking into account: Word Co-occurrence; Year of publication, Country of origin of the publication, Area of knowledge and Type of Publication. Finally, in Phase 3, after the analysis carried out in the previous phase, the drafting of the conclusions and preparation of the final document was completed.

3. Results

3.1 Co-occurrence of words

Figure 1 shows the co-occurrence of keywords within the publications identified in the Scopus database.

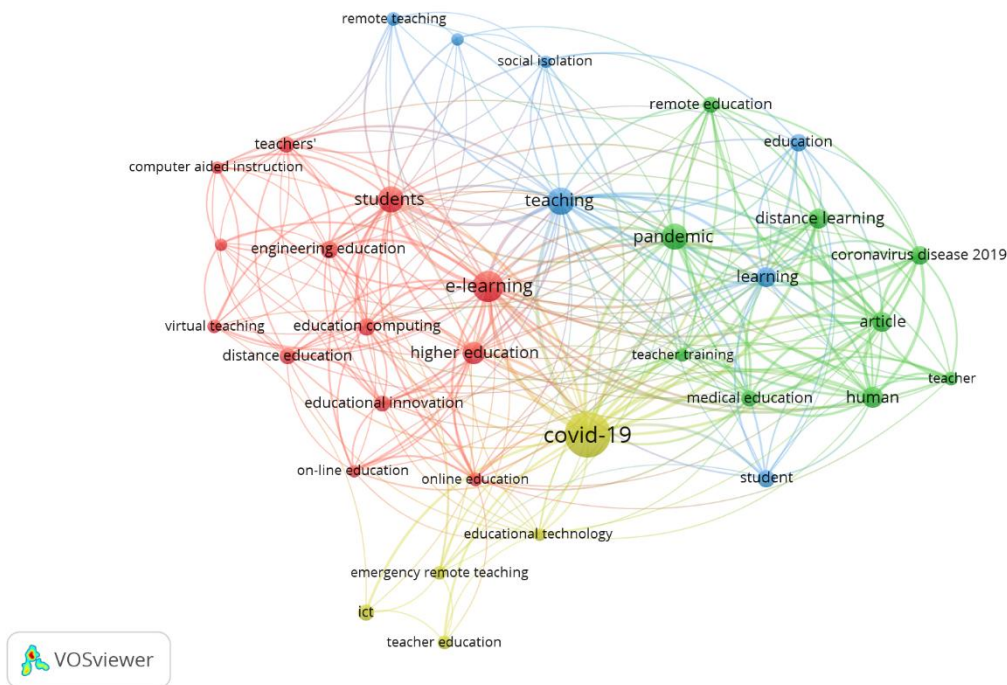


Figure 1. Word co-occurrence

Source: Own elaboration (2022); based on data provided by Scopus.

As shown in Figure 1, the most used keyword is COVID 19, which is the disease for which a health crisis was declared at the beginning of 2020 and which changed the way to relate to each other in society and changed the educational methodologies, causing certain impacts due to the abrupt change in the way of imparting and receiving knowledge. In second place is pandemic, teaching and students and studies the changes in the educational model during the pandemic analyzing it from a humanistic perspective taking into account the social context in which it takes place. Distance education, social distancing, innovation are key words found in publications that study how mediated education is developed by implementing new information and

communication technologies and the difficulties presented by some communities as inequality gaps are more evident. On the other hand, emergency remote teaching is found which was implemented in the first months of the pandemic in order to continue with the educational processes, this process did not have much time to be developed and used, so it had several shortcomings affecting the quality of education provided.

3.2 Distribution of scientific production by year of publication.

Figure 2 shows the distribution of scientific production according to the year of publication, taking into account the period from 2020 to 2021.

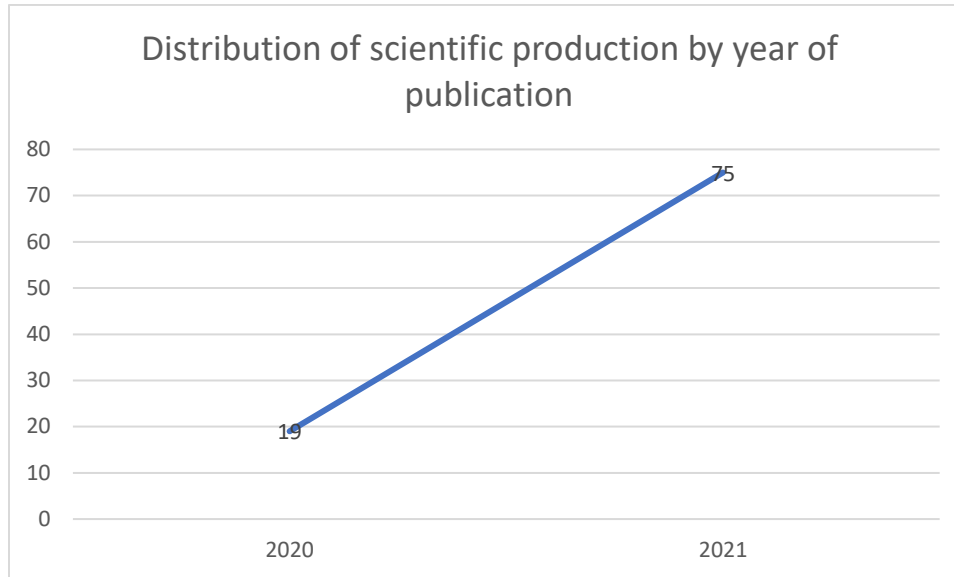


Figure 2. Distribution of scientific production by year of publication.
Source: Own elaboration (2022); based on data provided by Scopus.

2021 is the year with the highest number of publications related to the variables under study with 75 publications within which is “*Teaching and learning process mediated by technology: a conceptual study of the response of educators in the midst of the Covid-19 pandemic*” (Okoye, Rodriguez-Tort, Escamilla, & Hosseini, 2021). This document raises the importance of technology in education in the midst of the pandemic, allowing to continue with the educational processes but also presents a hybrid educational model (HyFlex + Tec) used to enable virtual and face-to-face education in HEIs. This study seeks to determine the overall progress and statistics of students during the pandemic of Covid-19 and how to bring it back to the face-to-face modality. As a conclusion from the results of this study, this project supports the continuity of education/learning for teachers and students during the Covid-19 pandemic.

In second place is 2020, which presents 19 documents related to the impact presented in students, institutions and professors during the

pandemic. Within these documents is the one entitled “*Student Experience and Expectation with E-Learning Modality in Times of Pandemic*” (Ramos & Lavor, 2020). This document shows how educational actors experienced the changes brought about by the pandemic and how this influenced the quality of the education provided, as well as the mental health effects due to the uncertainty of the situation. Through a study, it was found that in virtuality the most recurrent problems were excessive asynchronous activities and short deadlines affecting students by overloading them with activities taking into account that teachers were not familiar with educational platforms, so it is concluded that planning combined with teacher training in E-Learning can contribute to educational processes.

3.3 Distribution of scientific production by country of origin.

Figure 3 shows the distribution of scientific production according to the nationality of the authors.

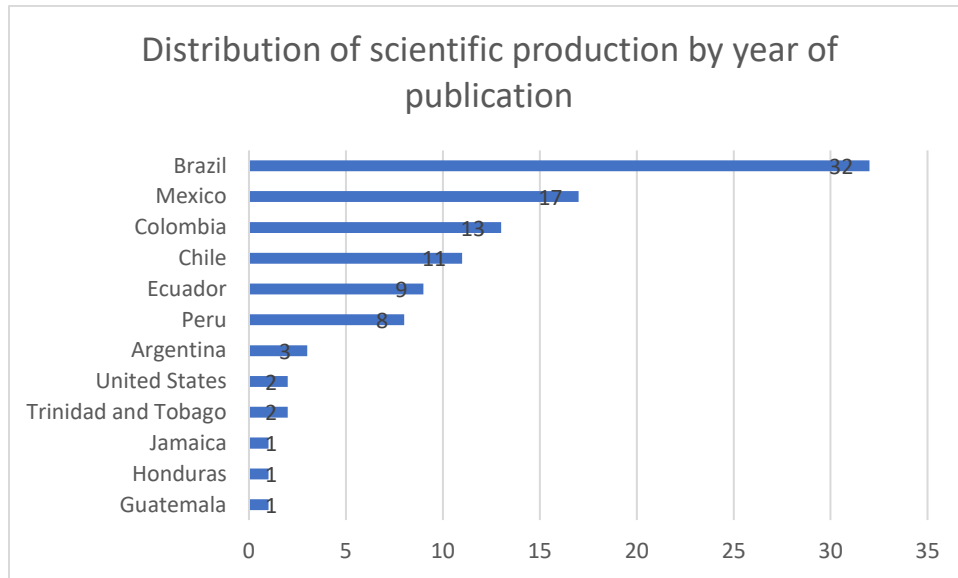


Figure 3. Distribution of scientific production by country of origin.
Source: Own elaboration (2022); based on data provided by Scopus.

Brazil is the Latin American country with the largest number of publications related to the variables under study, with a total of 32 publications registered in Scopus, including “Sleep-related problems and eating habits during COVID-19 confinement in a sample of young people from southern Brazil”. (López-Gil, et al., 2021). The main objective of this document is to determine the prevalence of sleep-related problems and their relationship with eating habits in children in southern Brazil during the pandemic, so a study was conducted through surveys representing children and adolescents between 9 and 17 years in order to obtain their sleep data, a total of 495 participants were surveyed, through this study it was obtained that 48.8% of participants reported sleep-related problems and 12.3% did not comply with sleep patterns.

Therefore, it was concluded with an affirmation in the changes in the sleep schedule and it was found that people who had healthier habits presented fewer alterations.

At this point, it should be noted that the production of scientific publications, when classified by country of origin, presents a special characteristic and that is the collaboration between authors with different affiliations to both public and private institutions, and these institutions can be from the same country or of different nationalities, so that the production of an article co-authored by different authors from different countries of origin allows each of the countries to add up as a unit in the overall publications. This is best explained in Figure 4, which shows the flow of collaborative work from different countries.

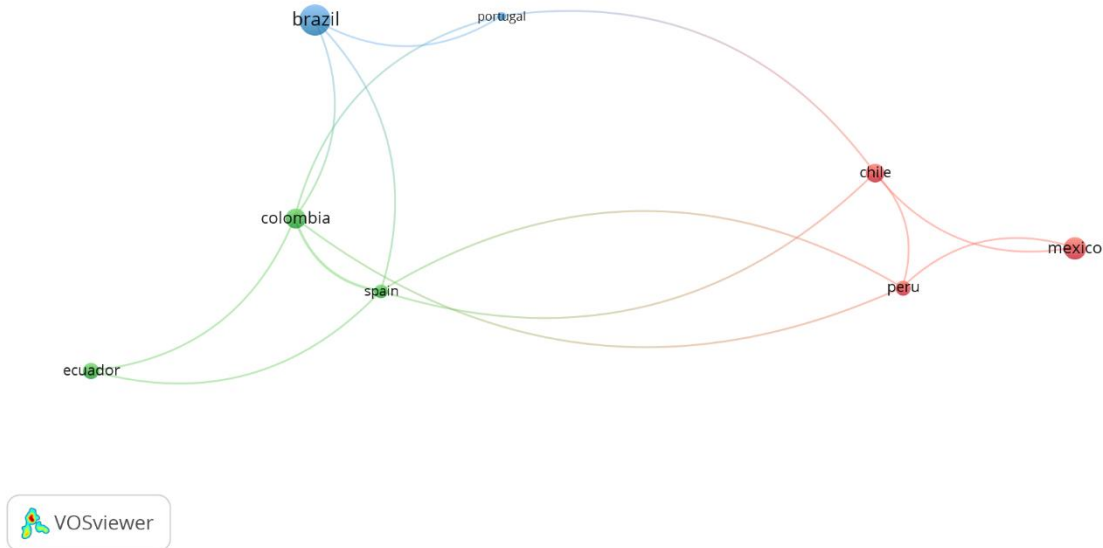


Figure 4. Co-citations between countries.

Source: Own elaboration (2022); based on data provided by Scopus.

As mentioned above, Brazil is the Latin American country with the largest number of publications in Scopus, having also publications in collaboration with authors affiliated to institutions belonging to non-Latin American countries such as Portugal and Spain mainly, thus demonstrating the interest of several countries about how education developed during the pandemic and what it implied for teachers, students and institutions. In second place is Mexico with 17 publications, in these documents some are co-authored with Chile and Peru, among these is *“Teaching challenges in the COVID-19 scenario: student satisfaction approach based on the Teams platform”* (Rodriguez-Segura, et al., 2020). This document aims to analyze the academic environment for these scenario changes considering the evaluation of knowledge and the achievement of

competencies, so he conducted his study at La Universidad del Valle de Mexico and how he used the TEAM platform in the remote emergency system, taking into account that an abrupt transition from traditional methods to virtuality. In this study, 60% of the students surveyed were manifested in the use of equipment and the organization of class sessions by teachers, so it is necessary a training of teachers in order to use this platform in the best way.

3.4 Distribution of scientific production by area of knowledge

Figure 5 shows how the production of scientific publications is distributed according to the area of knowledge through which the different research methodologies are executed.

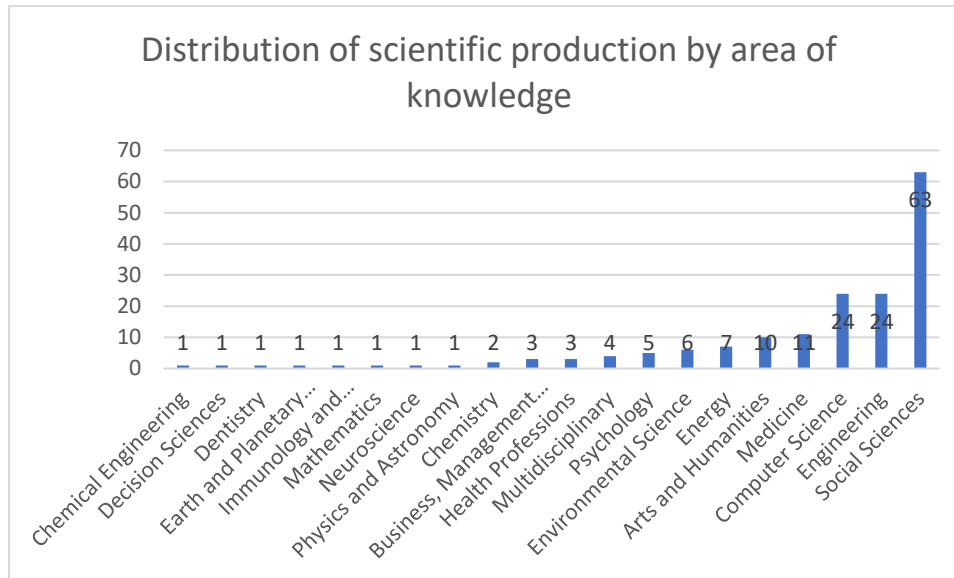


Figure 5. Distribution of scientific production by area of knowledge.

Source: Own elaboration (2022); based on data provided by Scopus.

Social sciences is the area of knowledge with the largest number of contributions through the theories that are framed in it in the search for new knowledge about the welfare and impact of educational actors in times of pandemic with a total of 63 publications registered in Scopus. Within these documents is the title “*The online education system: demands, trends, implications, challenges, lessons, ideas, opportunities, perspectives and directions of Covid-19 in the work from home*” (Dias, Scavarda, Silveira, Scavarda, & Kondamareddy, 2021). This article has as main objective to identify how working from home and the consequent social isolation interfered with teachers' work and students' learning and to identify the challenges, difficulties, advantages, opportunities, demands, trends, implications, insights, lessons and directions of teachers and students, so a literature review and surveys were conducted in educational institutions in Rio de Janeiro in order to determine the impact on psychological well-being. It was found that homework times interfered in the feelings and sensations of students and teachers and the words *frustration*, *hope* and *strangeness* stand out, so it is sought to have more research on this topic.

In second place is engineering and computer sciences with 24 documents in each area of knowledge and in third place is arts and humanities of which 11 documents were written following the guidelines of the topics related to that area. Within these is the paper named “*Emergency distance education in private higher education institutions: Dilemmas and challenges for teachers in times of pandemic*” (Matos & Menezes, 2021). This document sought to present an analysis of the challenges faced by teachers in Higher Education Institutions (HEIs). Therefore, research was conducted with 23 teachers and higher education teachers from 3 institutions in Sao Paulo, where it was found that teachers have limitations due to the rapid transition to mediated education, which presents a greater workload, difficulties with ICT and shortcomings in the use of educational platforms because they do not have training for this. It was found that students faced difficulties in accessing internet communication technologies in the monitoring of classes, so it is of great importance to train teachers on how to use information and communication technologies correctly and for students to have technological tools that allow them to access their classes.

3.5 Type of publication

Figure 6 shows how the bibliographic production is distributed according to the type of publication chosen by the authors.

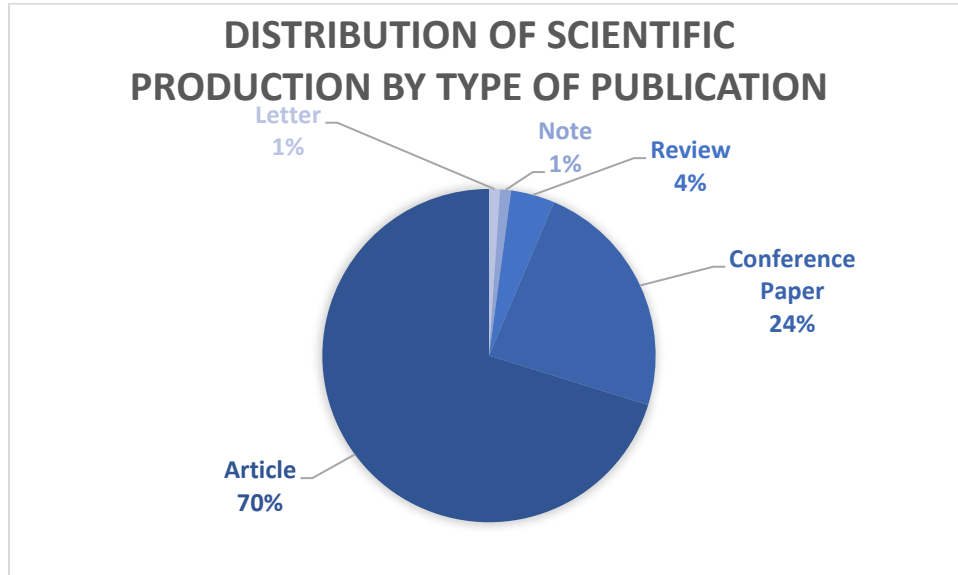


Figure 6. Type of publication

Source: Own elaboration (2022); based on data provided by Scopus.

As shown in Figure 6, within the different types of publications, 70% of the total number of documents identified through Phase 1 of the Methodological Design, correspond to Journal Articles, among which is the one entitled “*The transition to online teaching carried out by teachers in Latin America and the Caribbean during the COVID-19 pandemic: Challenges, changes and lessons learned*” (Gentles & Brown, 2021). The purpose of this publication is to investigate how, why and in what way teachers in Latin America and the Caribbean overcame their previous reluctance and resistance to learn and practice digital literacy. The main problem is the lack of training of teachers in the use of ICT in mediated education, so a study was conducted on how 53 teachers from 15 countries in Latin America and the Caribbean think about and use ICT.

In second place are the conference proceedings which represent 24% of the total number of documents identified in this study.

Within these publications is “*The academic and emotional impact of virtual visits to the construction site on students during a period of pandemic*” (Hernandez-Carrasco, Hernandez-Sanchez, & Rodriguez-Paz, 2021). This paper has as its main objective to analyze the impossibility of civil engineering students to attend construction sites due to pandemic conditions. A study was conducted with 121 undergraduate students from different careers of the Civil Engineering career in order to determine the positive impact of virtual visits to construction sites on students during a period of contingency, both academically and emotionally. Thus, it was shown that the alternative of a virtual site visit did motivate the students and that they value being able to maintain the academic elements of the visit to the construction site.

4. Conclusions

Thanks to the analysis proposed in this research, it was possible to determine that Brazil is the Latin American country with the

largest number of bibliographic records in Scopus database during the period between 2016 and 2021 with a total of 94 documents. The scientific production related to the study of the well-being and affectations of educational actors in times of pandemic, has presented an important growth during the previously mentioned period, going from 19 publications in 2016 to 75 units in 2021, that is, it was possible to increase in a great way the creation of bibliographic records in a period of 2 years, which indicates the importance of knowing the challenges that students, teachers and educational institutions have during the pandemic and the change of educational modality, going from the traditional classroom to an emergency one mediated by ICT.

The pandemic brought with it a host of changes to the education system, involving both opportunities to implement innovations to improve educational processes and shortcomings in the rapid transition between educational models. At the beginning of 2020, classes ceased in general since there was no plan to continue classes in the midst of the health crisis, so the emergency remote education plan was implemented which implemented ICT for mediated classes and to continue with the educational processes,

References

Dias, A., Scavarda, A., Silveira, H., Scavarda, L., & Kondamareddy, K. (2021). The online education system: Covid-19 demands, trends, implications, challenges, lessons, insights, opportunities, outlooks, and directions in the work from home. *Sustainability* (Switzerland).

Gentles, C., & Brown, T. (2021). Latin American and Caribbean teachers' transition to online teaching during the pandemic: Challenges, changes and lessons learned. *Pixel-Bit, Journal of Media and Education* 131 - 163, 131 - 163.

Hernandez-Carrasco, L., Hernandez-Sanchez, M., & Rodriguez-Paz, M. (2021). The Academic and Emotional Impact of Virtual

which presented problems since teachers did not have a good management of educational platforms and some students had limitations to access ICT and technological tools so it was necessary to begin actions by educational institutions to ensure quality education.

This pandemic not only affected physical health, but also mental health, increasing the number of cases of psychological disorders, where anxiety and depression were the most common, thus weakening their wellbeing and mental health. All of the above allows this article to conclude, highlighting the importance of knowing the theory or bibliographic resources that seek to awaken the interest to investigate the effects that the new educational model has on students, teachers and educational institutions in order to implement innovations that allow to have an educational quality in Latin America. That is why the need for studies such as the one presented in this document is highlighted and make a tour of those texts that address the aforementioned topic, in order to give the reader a broad view of the current situation of the literature on the welfare and affectations of educational actors in times of pandemic.

Construction Site Visits on Students during a Pandemic Period. *ASEE Annual Conference and Exposition, Conference Proceedings*. ASEE Virtual Annual Conference, ASEE 2021.

López-Gil, J., R. Gaya, A., Reuter, C., Caetano, C., Gomes Sentone, R., & Silva Caetano, H. (2021). Sleep-related problems and eating habits during COVID-19 lockdown in a southern Brazilian youth sample. *Sleep Medicine*, 150 - 156.

Matos, W., & Menezes, M. (2021). Emergency remote education in private higher education institutions: Dilemmas and teaching

challenges in pandemic times. *Praxis* , 181 - 201.

Okoye, K., Rodriguez-Tort, J., Escamilla, J., & Hosseini, S. (2021). Technology-mediated teaching and learning process: A conceptual study of educators' response amidst the Covid-19 pandemic. *Education and Information Technologies* , 7225 - 7257.

Ramos, M., & Lavor, O. (2020). Student Experience and Expectation with E-Learning Modality in Times of Pandemic. *Advances in Engineering Education* , 107 - 110.

Rodríguez-Segura, L., Zamora-Antuñano, M., Rodríguez-Reséndiz, J., Paredes-García, W., Altamirano-Corro, J., & Cruz-Pérez, M. (2020). Teaching challenges in COVID-19 scenery: Teams platform-based student satisfaction approach. *Sustainability (Switzerland)*.

Glas, K., Catalán, E., Donner, M., & Donoso, C. (2021). Designing and providing inclusive ELT materials in times of the global pandemic: A Chilean experience. *Innovation in Language Learning and Teaching*, doi:10.1080/17501229.2021.1940187.

Gómez-Bayona, L., Moreno-López, G., & Palacio-López, S. M. (2021). Satisfaction level in higher education, amid COVID-19. [RISTI - Revista Iberica De Sistemas e Tecnologias De Informacao, 2021(E43), 127-139. Retrieved from www.scopus.com

González, Á., Fernández, M. B., Pino-Yancovic, M., & Madrid, R. (2020). Teaching in the pandemic: Reconceptualizing Chilean educators' professionalism now and for the future. *Journal of Professional Capital and Community*, 5(3-4), 265-272. doi:10.1108/JPC-06-2020-0043

González-Díaz, R. R., Vásquez Llamas, C. E., Hurtado Tiza, D. R., & Menacho Rivera, A. S. (2020). Interactive platforms and knowledge

management strategies during covid-19. [Revista Venezolana De Gerencia, 25(Special Issue 4), 68-81. Retrieved from www.scopus.com

González-Rivas, R. A., Gastélum-Cuadras, G., Velducea, W. V., Bustos, J. B. G., & Esparza, S. D. (2021). Analysis of teaching experience in physical education classes during COVID-19 confinement in Mexico. [Analysis of teaching experience in physical education classes during COVID-19 confinement in Mexico. doi:10.47197/RETOS.V42I0.86242

Guarnizo Chávez, A. J. (2021). Vicissitudes and pedagogical challenges in the midst of the health emergency. Medical training in the COVID-19 era. [Vicissitudes and pedagogical challenges in the midst of the health emergency. Medical training in times of COVID-19] *Educacion Medica*, 22, S23-S26. doi:10.1016/j.edumed.2021.01.008.

Gamboa, A. (2016). Quality in higher education: institutional pretensions and realities. Bogotá, Colombia: Ecoe Ediciones

Guiñez-Cabrera, N., Jeldes-Delgado, F., Ganga-Contreras, F., & Mansilla-Obando, K. (2021). Satisfaction and dissatisfaction in teachers with management positions in higher education: An exploratory study in times of covid-19. [Satisfaction and dissatisfaction in teachers with management positions in higher education institutions: An exploratory study in times of covid-19] *Interciencia*, 46(7-8), 324-331. Retrieved from www.scopus.com

Changes to social work training and research practices generated by covid-19: Opportunities, dilemmas and challenges for social research. (2021). [Alternativas, 28(2), 325-349. doi:10.14198/ALTERN2021.28.2.08.

Almeida, L. B. C., Mendes, I. A. B., & Araujo, J. M. (2021). Emergency remote teaching: The experiences of a public school and a private

school in campina grande/PB. [Ensino remoto emergencial: as experiencias de uma escola publica e de uma particular em campina grande/PB] *Praksis*, 3, 311-335. doi:10.25112/RPR.V3.2476.

Almonacid-Fierro, A., Vargas-Vitoria, R., Urrutia, J. M., & Sepúlveda-Vallejos, S. (2021). Professional practices in times of covid-19 pandemic: Challenges for physical education initial teaching training. [Retos, 42, 162-171. doi:10.47197/RETOS.V42I0.87353.

Alves, A. C., Fernandes, S., & Uebe-Mansur, A. F. (2021). Online assessment: More student cheating than on-site? Paper presented at the International Symposium on Project Approaches in Engineering Education, , 11 15-22. doi:10.5281/zenodo.5095020 Retrieved from www.scopus.com

Andrade-Vargas, L., Estevao-Romeiro, A., Iriarte-Solano, M., Riofrio-Leiva, V., & Yunga-Godoy, D. (2021). Teacher's perceptions, institutional challenges, and educational sustainability during covid-19 in ecuador. *Heliyon*, 7(12) doi:10.1016/j.heliyon.2021.e08596.

Araujo, M. P. M., & Silva, R. B. (2021). Continuing education and post-modernity education: A theoretical test about the teaching practice in covid-19 pandemic times. [Formacao continuada e ensino na pos-modernidade: um ensaio teorico sobre a prtica docente em tempos de pandemia de covid-19] *Praksis*, 3, 376-391. doi:10.25112/RPR.V3.2509

Arias Velásquez, R. M., & Mejía Lara, J. V. (2021). Knowledge management in two universities before and during the COVID-19 effect in peru. *Technology in Society*, 64 doi:10.1016/j.techsoc.2020.101479.

Armellini, B. R. C., Luna, A. L., Bueris, V., de Almeida, A. P., Tamais, A. M., Krzyzanowski, F., . . . DE Cássia Café Ferreira, R. (2021). Comparison of hybrid learning and remote education in the implementation of the “adopt a microorganism” methodology. *PLoS ONE*, 16(11) November) doi:10.1371/journal.pone.0248906

Vanegas, J., & Gamboa, A. (2022a). El cuerpo que me habita: aproximación histórica a una cognición corporal. Bogotá, Colombia: editorial nueva jurídica

Vanegas, J., & Gamboa, A. (2022a). Experience and body: a phenomenological approach. Bogotá, Colombia: editorial nueva jurídica

Avendaño Castro, W. R., Patiño Villa, C. A., & Salamanca Rangel, J. M. E. (2021). El territorio como recurso de uso común: una exploración a partir de la experiencia de la desterritorialización y reterritorialización. Bogotá, Colombia: Universidad Nacional de Colombia.

Miguel Ángel Medina Romero , Senior-Naveda Alexa, Edgar Salas Luzuriaga, Justina Isabel Prado-Juscamaita, Irene Deza y Falcón, Tomás Aznar Sánchez (2021). REMOTE WORK IN THE COVID-19 ERA: A HOLISTIC APPROACH, *Journal of Language and Linguistic Studies*, 17(4), 2384-2396.