# **Changes in Teaching During the Covid-19 Pandemic**

Miriam Gonzalez Dueñas University Center of the Valleys

Rodolfo Omar Dominguez Garcia University Center of the Valleys

Susan Vega Leal University Center of the Valleys

During the confinement derived from the Covid-19 pandemic, many aspects of life changed; including, formal and informal economic activities were suspended. However, education could not be stopped, and for this reason, teachers found themselves in need of including ICT as part of their teaching strategies; seeing themselves in the obligation to modify their training practices. This paper analyzes the changes in teacher training during the confinement due to the pandemic. For this, a survey was made to teachers of the University Center of the Valleys of the University of Guadalajara, in order to rescue their experiences when training during this period. It would seem that the virtual training that was beginning to emerge, and was not yet very well accepted, came to satisfy or complement the learning needs, including disciplinary update courses, which were taught using technologies such as ClassRoom©, Youtube® transmissions, videoconferences via Meet© and Zoom®, which opened a wide panorama in terms of teacher training.

Keywords: teaching, technologies applied to teaching

### INTRODUCTION

Analyzing the situation, before and after of the Covid-19 pandemic, concerning some of the phenomena that affected or disrupted<sup>1</sup> the teaching-learning processes, such as teaching during this pandemic, generated several reflections. By virtue of the fact that education could not be stopped, as Plá (2020) mentions, "she only took her out of school and put her at home."

On March 11, 2020, the World Health Organization (WHO) declared that the Covid-19 coronavirus outbreak had become a global pandemic (Cucinotta & Vanelli, 2020). Since then, the world and societies in each country have experienced one of the most critical situations in the history of humanity. The conditions of forced confinement, social distancing, and paralysis of activities in virtually all nations have severely affected the daily lives and actions of women and men around the planet.

During the confinement due to the Covid-19 pandemic, many aspects of our lives changed, and teaching was no exception, as already mentioned above.

It was observed that face-to-face sessions, as most of the time happened from one day to the next, could not be carried out. What was left undone on this issue? During the pandemic, it could be said that the courses

and degrees carried out in person were suspended. Finally, what is considered a new normal? Or what came to stay in the subject that concerns us? (teaching). Considering the above and the practice that was established on this subject, it would seem that virtual teaching, which was beginning to emerge and was not yet very well accepted, came to meet or complement the training needs, including disciplinary refresher courses, which were taught using platforms such as Google's® ClassRoom, Youtube® live broadcasts, videoconferencing via Meet© and Zoom®, which opened up a broad landscape in terms of teaching and peer support. For this, a survey was carried out among higher-level teachers at the University Center of the Valleys (CUValles) of the University of Guadalajara (UdG), in order to rescue their experiences when training during this period.

### State of the Art

Educational processes have undergone many changes in the last 12 or 13 months; the Covid-19 pandemic that occurred in January 2020 in some parts of the world and specifically in March of the same year in Mexico, since it caused educational institutions to suffer a series of changes where their teaching-learning processes were strongly modified, which affected the paradigm of face-to-face; for example, they went from having face-to-face programs to having virtual programs or as many institutions call it: technology-assisted learning (Ordorika, 2020).

However, the use of ICTs, instead of being a benefactor of social change, showed the digital divide that still exists. Regarding inequity in access to the internet and improving opportunities in education, economic and social areas due to the lack of infrastructure. In addition, the limitation of digital skills of teachers and students at all educational levels was perceived (Cardona, 2021).

Despite this adverse situation, many see positive things in having this new education and an opportunity for improvement in their institutions or classes. The methodology used was to know, through semi-structured interviews, each experience or reflection of teachers in this education lived during the Covid-19 pandemic. Many of the reflections in the interviews show positive results, but they see many opportunities for improvement in both virtual and face-to-face education. Students are also affected by modifying teaching-learning processes (Manrique, D. 2020).

In Marinoni and van't Land (2020), several respondents referred to the fact that a different pedagogy is required for distance teaching and learning and that it is a challenge for teachers to seamlessly make this sudden shift, with or without preparation from face-to-face teaching and learning to distance teaching and learning. Teachers' willingness or preparation level to face this challenge is very diverse. However, although continuing education to the greatest extent possible may not guarantee the same level of quality compared to face-to-face education as initially planned for the semester, it is reported that it is still better than no education at all.

Many teachers pointed out the fact of suddenly assuming non-face-to-face teaching activities as an inevitable professional commitment, adjusting as best as possible the standard methods and procedures to current needs, and found the management and use of the platform to be more difficult (Picón, González de Caballero and Paredes Sánchez 2020).

Velazquez Rojas, L., Valenzuela Huamán, C., Murillo Salazar, F.,(2020) point out that, like all the crises that have existed on the planet, the pandemic, where there was a before and after, the Covid-19 pandemic will also be an awakening to plan and improve long-term university higher education through online courses, using virtual platforms effectively and mainly ceases to be a forgotten sector for the State, which must invest in technology and the university's human potential.

## **Development**

A semi-structured survey was applied to teachers electronically, disseminated through social networks and email, aimed at CUValles teachers, including part-time and full-time teachers, from a population of approximately 300 teachers. This consisted of the following questions:

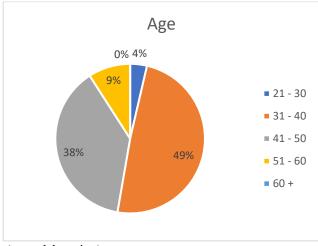
Capacitación presencial												
1.	1. ¿Cuántos cursos presenciales tomabas al año, antes de la pandemia?											
		a. 1-2		b. 3 – 4		c.	Más de 4		d.	0		
2.	Antes d	le la pandemia, ¿Ya habías tomado cursos (	de m	anera virtual?								
	a) SI_(En caso de contestar SI, continua a la pregunta 3) b) NO											
3.	¿Cuál fu	ue tu experiencia con los cursos virtuales?										
	a.	Muy buena, los recomiendo ampliament	е			C.	Regular					
	b. Buena, pero creo que se pueden mejorar					d.	Mala, no me gustó la capacitación virtual.					
Capacitación virtual												
4.	4. ¿Cuántos cursos virtuales tomaste durante el confinamiento por el COVID-19?											
		a. 1 – 2	b. 3 – 4		c. Más de 4							
5.	5. ¿Cuál es tu opinión sobre los cursos virtuales?											
	a.	Los cursos virtuales son más flexibles que	los	presenciales – S	Si —		Son más difíciles de trab	-			)	
		No				d.	Durante el curso te sent	iste s	olo – Si – No	)		
	b. Los cursos virtuales tienen un formato más dinámico — Si — No											
6.		anto se te facilitó trabajar en este formato?					_					
_		Mucho		Bastante		C.	Poco			d.	Nada	
7.		anto se te facilitó trabajar en este formato? Mucho	Ь.	Bastante		_	D				N-d-	
۰						C.	Poco			a.	Nada	
٥.	. ¿Qué obstáculos enfrentaste al capacitarte de manera virtual?  a. Habilidad de usar alguna  c. Administración del tiempo  f. Uso de las plataformas pa										aformas nara	
	<del>-</del>			Falta de motivación								
				. No me gusta el formato virtual				g. Ninguno				
	b.	Autogestión						0.				
		uedaste satisfecho con los cursos virtuales b) No c) Me es indiferente	que	tomaster								
10	,	nejorarías de los cursos virtuales?										
10.		Materiales más	h	Actividades ma	ác	-	Mayor			Ч	Otro	
	۵.	atractivos	٥.	significativas	u3	٠.	acompañamiento			u.	0.10	
11.	¿Qué m	neiorarías de los cursos virtuales?		Significativas			acompanamento					
		Materiales más	b.	Actividades m	ás	c.	Mayor			d.	Otro	
		atractivos		significativas			acompañamiento					
12. Al regreso a la "Nueva normalidad" si pudieras elegir el formato de la capacitación que tomarías, ¿cuál sería?												
	a.	Presencial		b.	Virtual			c.	Mixto			

## **Development**

The Academic and Pedagogical Model of CUValles proceeds under an unconventional modality called Optimized Face-to-Face. It seeks to favor both face-to-face and virtual work, encouraging student learning to be autonomous, capable of directing, organizing, and regulating their own way of learning (Arreola and Mendoza, 2019). However, to migrate completely towards virtuality as a result of the pandemic, the teaching staff of this center, found it necessary to modify its continuous teaching form.

Thus, the survey mentioned above was answered by 55 teachers of the center, including subject and full-time teachers (PTC), of which 21 are women and 34 are men. 49.1% range between 31-40 years of age, as shown in Figure 1.

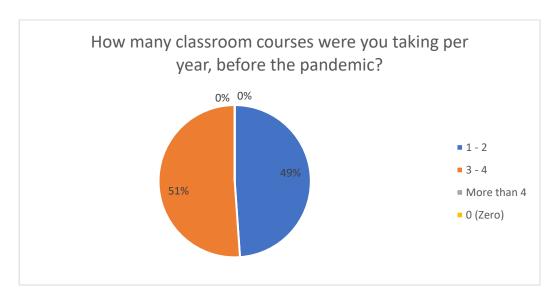
FIGURE 1 **AGE** 



(own elaboration)

Most teachers have always been concerned about updating their disciplinary or didactic knowledge. Before the pandemic began, 98.1% took face-to-face courses, as shown in Figure 2. 59.3% took more than 3 courses per year. It is also supported by what Picón, et al. (2020) said, that teachers assume this continuous training as an institutional commitment.

FIGURE 2



Within the teaching habits of teachers, it was found that 76% had already taken courses virtually. This shows that virtual teaching had already been seen as an option; when asking teachers what they think of their experience with virtual classes, 49% refer that their experience was very good, and that they highly recommend them; coupled with this, a group not too far from these, that is, 43% refer that their experience was good, but that courses can be improved, so it can be inferred that most have a good concept of virtual teaching, as can be seen in Graph 3.

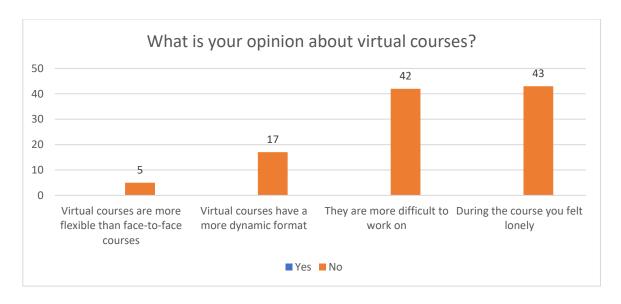
FIGURE 3



As is well known, in March 2020 everything suddenly changed, so that teachers had to migrate classes to virtual sessions, and in the same way they had to teach virtually. So, the teachers were asked if they were trained in this virtual modality and how many courses they took.

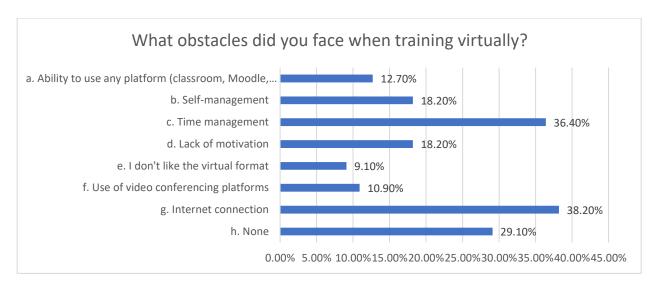
It was found that 78% took more than 3 courses, highlighting that there is an increase in teachers who were not trained at this stage; before the pandemic, only 1.9% did not train frequently, but in confinement, it increased to 5.6%, so it is interesting to know the opinion about virtual courses during the pandemic, in Graph 4, it is shown that the majority agree that virtual courses are more flexible and have a more dynamic format, while 11 participants that is, 20% indicate that they are more difficult and felt alone during the course, so, it is essential to provide further accompaniment to the participants to facilitate their training.

FIGURE 4



Participants were asked to select what were the obstacles they faced during their virtual training, 38.2% agreed that their main obstacle was connectivity, followed closely by Time Management, as shown in Graph 5 Connectivity services must improve in order to facilitate the development of virtual activities, but we must also take action to organize our activities.

FIGURE 5



80% of teachers who took virtual courses during confinement report being satisfied with these, as can be seen in Graph 6; even though it is the majority, we asked what aspects would improve online courses, 45% would add more attractive materials, followed by significant activities, 32.70% agree that greater instructor accompaniment is necessary, as shown in Figure 7. They also suggest that courses could be Mooclike for each student to take the course at their own pace, specify the topics and scope of the courses, and the level of performance required of participants.

FIGURE 6

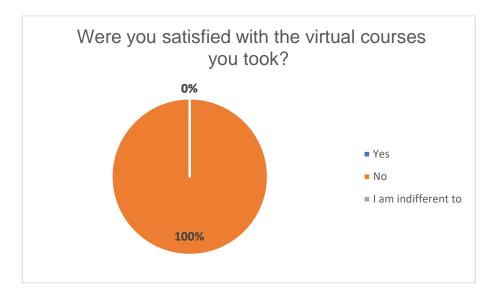
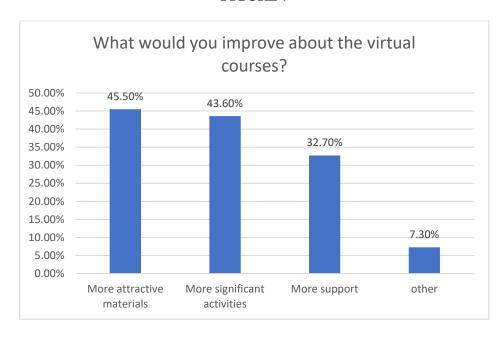
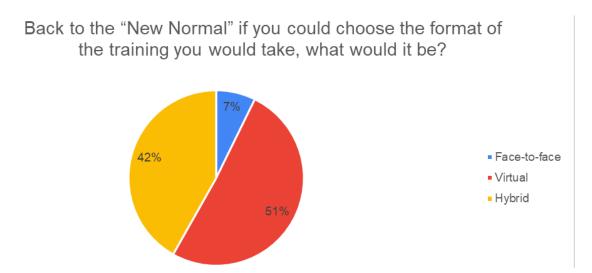


FIGURE 7



Upon returning to the "New Normal," only 7% prefer face-to-face courses, while notoriously half of the professors prefer virtual training, and a close group, 42% prefer mixed training, as shown in Figure 8.

FIGURE 8



### **CONCLUSIONS**

Teachers have always been attentive to be in constant training and updating, and during the confinement and all the changes that occurred were not an obstacle for them to continue doing so.

Although some had already begun to experience virtual courses at some point, and obviously for them, this training modality was no longer alien, allowing a better adaptation, we still have a small group of teachers who reported feeling alone during the virtual courses, which would force us to include better accompaniment by the advisor, as well as the interaction between participants.

In addition to the fact that the pandemic came to show the lack of stability in the internet connection in many places, we hope that the service providers improve the quality of the connection and coverage.

The return to normality cannot be with the same format of teaching; it must be supported with mixed courses, according to the academic model of the University Center of the Valleys, but also improve virtual courses to motivate teachers to take classes in this modality, so that there is diversity in teaching options, and in this way, to invest, transform and improve virtual learning environments that allow the student to learn from home.

#### ACKNOWLEDGEMENT

Translated & edited by American Publishing Services (https://americanpublishingservices.com/).

### **ENDNOTE**

**Disrupted** is an interruption or break with the traditional way of executing something.

#### REFERENCES

- Arreola, M.I., & Mendoza, M.T. (2019). Modelo pedagógico del Centro Universitario de los Valles (CUValles) de la Universidad de Guadalajara (U de G) y sus implementaciones curriculares en una modalidad educativa no convencional. *Debates en Evaluación y Currículum/Congreso Internacional de Educación*.
- Cardona, T.F. (2021). Marco de trabajo para la generación de innovación social en comunidades vulnerables en proceso de apropiación digital en América Latina. Medellín: EAFIT University.
- Ordorika, I. (2020). Pandemia y educación superior. *Revista De La Educación Superior*, 49(194). Mexico City. https://doi.org/10.36857/resu.2020.194.1120
- Cucinotta, D., & Vanelli, M. (2020). WHO Declare COVID-19 a Pandemic. *Acta Biomed*, 91(1), 157–160. doi:10.23750/abm.v91i1.9397.
- Marinoni, G., van't Land, H. (2020). *The Impact of Covid-19 On Global Higher Education Around the World*. IAU Global Survey Report, International Higher Education Special Issue No. 102, Association of Universities UNESCO House ISBN:978-92-9002-212-1. https://doi.org/10.36197/IHE.2020.102.03
- Picón, G.A., Caballero, K.G.de., & Paredes, N. (2020). Performance and educational training in digital competences in non-presential classes during the covid-19 pandemic. In *SciELO Preprints*. https://doi.org/10.1590/SciELOPreprints.778
- Plá, S. (2020). La Pandermia en la escuela: entre la opresión y la esperanza. In J. Aguilar, A. Alcántara, F. Álvarez, R. Amador, C. Barrón, M. T. Bravo, . . . M. Zabalgoitia, *Educación y pandermia. Una visión académica*. Mexico City: National Autonomous University of Mexico.
- Velázquez Rojas, L., Valenzuela Huamán, C., & Murillo Salazar, F. (2020). Pandemia COVID-19. Repercusiones en la educación universitaria. *Odontología Sanmarquina*, 23(2), 203–205. http://dx.doi.org/10.15381/os.v23i2.17766