# **COVID-19 And Higher Education: Effects On The Training Of Panamanian Teachers**

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#### **Abstract**

The last few months have been totally disruptive for teaching in Panama - and around the world. The response of the Panamanian public system - and of the states - has been dysfunctional and surprising at first and calmer as the months have passed, but this has led to learning what teachers should be like in the future for the new educational system that is coming, according to understanding of the lessons learned this will be the State's response, so 'before we give a definite opinion about education that we think is preferable, we should have some idea of the kind of person we want to produce'. In essence we ask ourselves whether teachers should continue to promote dual intellectual and character education in our students and use new technologies as one more tool, that is, a very useful tool (virtual platforms, videoconferencing programs, etc.) or on the contrary new technologies are already an essential part of teaching and are not a more useful tool, so all our students and all our teachers must be technological.

#### Introduction

The need for teacher training in COVID-19 times, represents for the training institutions, emerging challenges in the face of the new scenarios imposed by the pandemic and the confinement of students and teachers. Let us remember that, as a result of the pandemic, the National Government of Panama, by Executive Decree No. 500-2020 prescribes the closure of commercial activities of most companies, as well as mass meetings of citizens. Therefore, the Ministry of Education of Panama (MEDUCA) orders the prohibition of class attendance of students to their campuses. Likewise, the University of Panama (UP) as well as Public and Private Universities assume the decree. In this sense, the Covid-19, far from appearing exclusively as a medical-health phenomenon, stands as a polyhedral reality of great economic, social, media, political and, of course, educational impact (Cervantes Holguín and Gutiérrez Sandoval, 2020; Von Braun, Zamagni and Sorondo, 2020).

The Ministry of Education asked its teachers to continue their activity and to maintain virtual classes online. Many of them have knowledge of how to do this, with tools that have accessible such as social and communication networks, but many are not as experts in these tools. In this scenario, authorities of the Ministry of Education, the Graduate School of Education of The University of Panama, The Center for Critical Thinking of the Graduate School of Education of The University of Panama, with support from the Vice-Director of Research and Postgraduate, identify the commitment to bring training tools to the more than forty-five thousand teachers through online classes. Immediately, The Center for Critical Thinking convened a group of interdisciplinary researchers from the University of Panama, Universidad Internacional de la Rioja, UNIR, Spain, Universidad Autónoma del Estado de Hidalgo, Mexico, to form a specialized team, who through virtual and collegiate meetings promote the training of teachers of basic education in times of pandemic. The mass adoption of distance learning in a hasty manner – defined as emergency remote education (Bozkurt and Sharma, 2020) - has allowed some contradictions of education systems to emerge, the most evident in so-called "high-complexity schools" in social environments with high risk of social exclusion, where the social gap that hinders the already complicated digitization of teaching has been confirmed (Alvarez, Gardyn, Iardelevsky and Rebello, 2020; Murillo y Duk, 2020), becoming questioned the right to education itself (Ruiz, 2020).

The accumulated experience of the University of Panama in the training of professors in the face-to-face, semi-presence and virtual modalities allowed to have 576 classrooms on the platform of the university and recognize the strength in the creation of virtual courses, starting with the Diploma in Mathematics Education or Didactics of Mathematics carried out in 2018 and 2019, which promoted The Center for Critical Thinking. Another experience was the collaboration of Universidad Internacional de la Rioja, UNIR, University one hundred percent online, which has trained graduate students in Panama.

These experiences enabled the use of communication technologies through the selection of digital platforms, with this reference, the support of UNIR it was possible to organize several webinars to bring tools to face the times of pandemic and the "new normal" to teachers of the Ministry of Education.

The Center for Critical Thinking of the Graduate School of Education of The University of Panama promotes with the support of all institutions that support it the training of 500 teachers in the first webinar to achieve 10 specialized webinars with the Adobe Connect platform of UNIR with capacity for 2000 connections at the same time. The topics served the educational emergency in times of pandemic and towards the new normality. Topics that provided academic, emotional, and organizational tools to identify strengths in school contexts. In the field of pedagogy, curriculum and formal education, this translates into the proposal, and implementation, of disruptive, democratic, decolonizing, anti-racism pedagogies, oriented towards social justice, committed to a continuous process of reflection and permanent improvement (Belavi and Murillo, 2020; Giroux, 2015; Murillo y Hernández, 2014; Rodríguez-Romero, 2020; García Marimón et al, 2021) and, therefore, far from the pedagogies of indifference (Lingard and Keddie, 2013) that end by omission, naturalizing injustice and inequality.

# The context and design of the Webinar

First, it must be acknowledged that the confinement conditions are not the same for everyone. Family dynamics are as diverse as family training today, some teachers stay at home taking on online work and domestic work simultaneously with the attention of children and supporting their tasks. Some household chores may be shared, in other cases conflict and tensions will be more evident. There will be families with the resources and infrastructure for online work. An ideal scenario for teaching work in COVID times necessarily requires the necessary infrastructure for connectivity and technological equipment available and personal, however, the conditions of many provinces of Panama do not have the infrastructure, some teachers will have to share the equipment available at home with other family members. Added to this, there is little or no teacher training in the use of connectivity platforms and LMS or Moodle technology tools for technology-mediated learning.

The pandemic placed us in this emerging scenario to which we would have to respond. It is the commitment of the institutions to bring training tools to Panamanian teachers that support their educational practice and strengthen the learnings of students, where the constant are uncertainties for all. But above all, connect to face this challenge together.

Faced with the above questions, we can start from some certainties: the teaching commitment that allows students to achieve learnings of which they feel satisfied, the

pedagogical strength that accumulates the experience in practice, in the knowledge of their students, their learning needs and even emotional needs, each teacher activates the teaching knowledge imbued with affection and disinterest to achieve the learning of the students.

In the 21st Century, new scenarios are glimpsed in pandemic and post-pandemic, in the new normality we must cling to the values of empathy, solidarity to recognize ourselves in each other. Capitalize on all emotional, affective and academic tools to learn how to use them and incorporate them into technology-mediated education, the use of technology as a means, and not as an end.

The possible scenarios towards the new normality forced us in this webinar, to rethink practices that do not set aside strengths and knowledge, and that allow us to incorporate new knowledge to face uncertainty in the face of the pandemic and to be able to influence the inequalities that will increase in confinement. It was therefore essential to recognize the training needs of basic and elementary education teachers, because they know the learning needs of their students and specifically the context of the school, which can be as diverse as the provinces of Panama, the school contexts and the learning needs of students and the possible teaching scenarios towards the new normal, specifically in the contexts that characterize the provinces of Panama.

In this cluster of ideas, reflections and scenarios, the interdisciplinary team focused efforts for teacher training to support the face of pedagogical practice from the emotional and affective dimension, quality in schools through management and leadership, and the importance of teacher training to strengthen student learning, or in the case of managers, the improvement and quality of schools through the management and academic leadership of each basic education school in Panama.

#### 1. Resilience in the Time of COVID

The topic of resilience and emotions was attended by two exhibitors, and with the connectivity of 700 professionals in teaching at the basic and university level, as well as the connectivity of parents and students. The speakers shared with participants some tools to build resilience in children and young people with teachers and parents, to guide them in developing skills in the new generations.

The Coronavirus has changed the way we understand and see the world and has forced us to transform education. Today education develops in most countries remotely, and for teachers and authorities it is important to work on the emotional aspects to help teachers and students develop their cross-cutting skills, such as resilience, autonomy, and socioemotional competence. The moderator pointed out among the spaces of reflection of the day the experience lived in Spain, one of the countries most affected by the COVID -19

pandemic and how as a European nation, through the resilience of its inhabitants, has managed to overcome the emotional effect of the situation.

Stress and fear are emotions that affect our health and family environment, times of crisis intensify family instability, financial problems and uncertainties generate anxiety, fear and it is essential to work together with parents.

The new school routine in Panama encourages us to have a greater commitment to students who study at home and require greater discipline and supervision from parents, and teachers must work hand in hand with them and develop resilience as a cross-cutting theme at all levels of the educational community.

The pandemic has made visible the need to develop socioemotional competence among students and teachers "not only to manage moments of crisis, but for life". The biggest failure of the education system in this regard has been not paying attention and resources to the emotional management of both teachers and the students, and with the pandemic we have had to work on this aspect.

Participants, for their part, interacted through chat and felt that these topics are meaningful in the times we live in, and it has been a positive action that allows them to overcome obstacles. In times of pandemic, it is urgent to have elements of emotional support for our students, to face the crisis it is necessary to overcome the fear and paralyzing emotions, and the development of resilience is essential to obtain better results.

#### 2. School leaders in the new normal

In the second webinar, virtually 1000 people from various countries attended, including Panama, Colombia, Chile, El Salvador, Brazil, and others. This activity was performed using the Adobe Connect platform.

The Covid-19 situation challenges school leaders, Esbrí (2020) stated that in the context of remote work, emotional vulnerability puts people in a situation of prolonged stress and will be a period of experimentation to change their own mindset and, beyond the crisis, identify opportunities. During the emergency, leaders and their teams must adopt a "test and learn" attitude, be prepared to recognize what works and what does not work in order to immediately adapt the process. The speakers agreed in considering the school as a changing environment, sustained by constant mutation in which students and their families are subject to constant change. Leadership contributions include:

#### The leader's self-knowledge

It is important for a true leader to recognize his or her personality as well as the opinion he or she has of the community. He recommends the DISC test to determine the manager's profile, decision-making capacity, influence, compliance among others. The profile of the manager allows to know the abilities and potentiate them, otherwise the leader will end up managing leadership with stress. In the time of the pandemic and the digital era, they are fundamental and will be remembered as opportunities, from the leader's position to serve others.

#### Characteristics of a school leader.

Among the characteristics that a good leader must have is to surround himself and support himself with advisors or specialists in areas of his professionalization (of curricular knowledge, disciplines such as specialists in mathematics, literacy, history, biology, pedagogy, etc.) in addition to having a database that allow him to resolve situations more quickly and efficiently.

A good school leader is visible to the entire educational community, is aware of the processes or activities that take place on a daily basis and also in emerging activities. At this point it is important the projection that gives all members, students, teachers, parents, authorities and be careful in interpersonal relationships where respect and support for work prevails. It is important to communicate with a verbal and nonverbal language that allows decisions for improvement to be communicated assertively.

# Parents and their participation.

Parents are now more informed about their rights and the school's responsibility to provide quality education. They are much more aware of their rights and demand their exercise. Parents cannot remain on the sidelines of the school's decisions. Therefore, the principal must strengthen relationships with families, so that they participate in the life of the school, therefore one of the great gifts of the school manager is the development of meetings with parents where they know the school's project and join efforts to work for common goals.

#### Teachers.

Teachers, since today they demand more participation in decision-making, but at the same time also demand clear and strong leadership to guide the helm of the educational center, the manager is required to empower and empower others for their continuity, hence the need for team culture for the continuity of the projects. The director as a leader must create an organization that is nothing more than a culture, where habits must be created in the team.

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#### The context.

Schools' leaders must take into account when managing the school, the management of two fundamental elements: the ability to adapt to the environment and the context where it is located. Each school is unique, its characteristics and the contexts of the students are also different. Adaptation to the context adds interaction, knowledge and coexistence with the environment, taking into account the cultural, social and linguistic characteristics that allow it to positively discriminate all diversity, appreciate the diversity and incorporate it as part of the school's culture.

One of the aspects that concerns the school manager is the daily practice of management that requires making important decisions with agility and promptness, so it requires more training in management skills, a greater ability to prioritize problems, because leadership has to do with the ability to do decisions and the demand of management.

Burgos (2020) analysed the contexts and pedagogical challenges towards the new normal and showed 4 shock solutions to address the current scenario in education, through data analytics and open science as resources that allow meaningful and useful adaptation for almost any responsible learning context, including the current crisis context. 1. Continuous innovation, 2. In practice: informal and formal, integrated, open education and science, 3. Data Analytics, 4. Online Support Services. With these shock solutions and through descriptive, predictive and prescriptive actions it will allow us to know what is happening, what will happen and what actions can be taken. For his part, "Starting learning in virtuality through pedagogical relationships and empathy" favours pedagogical relationships in the transition to virtuality in which we find ourselves living. The university professor invited us to reflect on what types of learning we want to initiate with students and provides guidance on how empathy can help in pedagogical relationships in the transition to virtuality in which we are living. Motivation in interaction between teacher and student is fundamental in the teaching-learning process, everything is written, but it is necessary to reinvent and apply effectively.

Education of the 21st century should favour the formation of the human being -the individual- over knowledge, in this process, empathy is the sensitivity towards the other and towards the conditions of each person. This analysis gave rise to a Conceptual Thematic Matrix (Morales-Maure, 2019) aligned to six (6) areas of adequacy that teachers should have when teaching mathematics. An important limitation was found due to the little or non-existent emphasis given to the areas of: foreign language, digital competence, mathematical competence, innovation and initiation to research.

#### As a closure

In this webinar teacher preparation and educational reform in Panama still faces challenges, as the results of the TERCE test from 3rd to 6th grade applied by UNESCO are below those of other countries in the region. In contrast to the above, studies reveal that Panama is

the richest country in the region according to its per capita income than any other Latin American country, for this comparison it is necessary to consider that there are more resources for education and yet, considering various variables, the performance of Panamanian students is much lower. But what do these results imply? That the quality of education in Panama is very low, despite the apparent availability of resources. It also indicates that Panama faces difficult conditions in the rural sectors, since many students in these areas are far from urban centers and with indigenous population where those resources do not arrive. In addition, it indicates that considering the highest socioeconomic groups in the country the students' performance is lower than in other countries and it is not due to a lack of resources or human resources. Studies conducted 13 years ago in Panama with interviews to teachers and managers as well as the area of teacher training and recordings of teaching practice from 3rd to 7th grade to analyse teaching conditions, it was concluded that this points to disciplinary training, whoever teaches mathematics, must know the contents of the subject. For its part, the World Bank links that element to teaching, so Carnoy (2020), argues that this is certainly possible in Panama, on the other hand it indicates that something much more serious has been observed in Panama and is the lack of teaching methods involving the students and the lack of knowing how to explain well the fundamental concepts of the curriculum, and also stresses that teachers have not been prepared to carry out professional and even more complex work. Young teachers sent to places of difficult condition "were even worse prepared" for their work (Carnoy).

But in the face of these approaches, who has the responsibility to prepare teachers, corresponds to the Universities and Normal Schools or Teacher Training Schools. Continuing professional education is in the hands of the Ministry of Education, therefore, if teachers do not have the preparation, then what are the characteristics of a good teacher training? It is necessary that universities and schools work closely together under the premise of unifying theory with practice. Each lesson in the training centres should be modelled in the classrooms of schools, the formation of teaching methods should be adjusted to those that will be used in the classroom and the training curriculum must be consistent with the locality, unifying the theory and classrooms practices.

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