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Research article

The working condition of the teaching staff and their perception of teleworking during the pandemic: The case of the University of Costa Rica's Paraiso Campus in 2020*

Condición laboral del personal docente y su percepción respecto al teletrabajo en la pandemia: el caso del Recinto de Paraíso de la Universidad de Costa Rica en el 2020

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Abstract

The objective of this document is to present the results obtained on the teaching-learning experience, within the framework of the virtualization of the teaching activity in the year 2020 at the Paraíso Campus of the University of Costa Rica, due to the conditions caused by the pandemic caused by COVID - 19. For this purpose, we consider a) the teacher's own conditions, b) the conditions for teaching, c) the physical space used for work, e) the teaching work in the virtual context and f) the balance between life and work. For this purpose, a perception study was carried out by means of a self-managed questionnaire in the Google Forms platform, from which 52 responses were obtained. Among the main results obtained, the interim status of a high percentage of the teaching conglomerate and the obligation to adapt quickly to the virtual teaching process, despite the fact that they did not have the necessary preparation, stand out. This meant an adaptation and/or reinforcement of skills and abilities, as well as of physical work spaces. Another result was the increase in the workload caused by the teaching practice.

* Original article. Research and innovation article. Research article. Research activity related to the labor condition of teaching staff with respect to teleworking implemented in 2020 at the Paraíso Campus of the University of Costa Rica, Headquarters of the Atlantic.

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In addition, there were problems for virtual lessons such as Internet accessibility, both for students and teachers.

Resumen

El objetivo del presente documento es dar a conocer los resultados obtenidos sobre la experiencia en la enseñanza – aprendizaje, en el marco de la virtualización de la actividad docente en el año 2020 del Recinto Paraíso de la Universidad de Costa Rica, debido a las condiciones provocadas por la pandemia causada por el COVID – 19. Para ello se consideran a) las condiciones propias del docente, b) las condiciones para la docencia, c) el espacio físico utilizado para el trabajo, e) la labor docente en el contexto virtual y f) el balance, vida y trabajo. Para tal efecto se realiza un estudio de percepción por medio de un cuestionario auto gestionado en la plataforma de formularios de Google, del cual se obtuvieron 52 repuestas. Dentro de los principales resultados obtenidos se destaca la condición de interinazgo de un alto porcentaje del conglomerado docente y la obligación a una rápida adaptación al proceso de enseñanza virtual, a pesar de que no se contaba con la debida preparación. Lo anterior significa una adecuación y/o reforzamiento de habilidades y destrezas, así como de espacios físicos laborales. Otro resultado fue el aumento en la carga laboral originada por la práctica de enseñanza. Además, se evidencian problemas para las lecciones virtuales como la accesibilidad a *Internet*, tanto del estudiantado como de los y las docentes.

Palabras Clave: Condición Laboral, Educación en Línea, Trabajo Remoto, Pandemia, TIC, COVID – 19

SUMMARY

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Introduction

The year 2020 was an atypical year due to the pandemic caused by SARS VOC 2. On December 31 of the previous year, a group of pneumonia cases of unknown origin was reported in Wuhan municipality in Hubei province, China. By January 16, 2020, through the Pan American Health Organization of the World Health Organization (PAHO/WHO), the first epidemiological alert related to the outbreak of COVID-19 was generated. Based on the high number of cases reported in China and those confirmed in other countries, on January 30, the WHO Directorate General declared the outbreak a public health emergency of international concern. Similarly, the Directorate declared a Disaster Situation for all PAHO/WHO Representations due to the global outbreak of Coronavirus. On March 11, WHO qualified the situation as an international pandemic (PAHO/WHO, 2020).

During this period, it became common for humanity to hear about the worldwide spread of the disease known as COVID-19. In order to address the situation, governments took measures aimed at slowing down the transmission of the disease. Among the actions taken was the restriction of people's local and international mobility, which led to social isolation and alienation. Thus, the "new normality" was born, an adaptation to the new reality in which the

way of carrying out most of the productive and educational processes was rethought to guarantee their continuity as far as possible. More intensive use of Information and Communication Technologies (ICTs) was resorted to to carry out activities related to health, entertainment, work, and education, among others. In this regard, the United Nations Educational, Scientific and Cultural Organization (UNESCO) recommended "harnessing the use of public interest media, information technologies and open educational resources (OER) for e-learning, and connecting people online" (n.d.). Based on these situations, it began to be perceived that the pandemic also entailed social, economic, and educational consequences, in addition to the effects on an individual's physical and mental health, among other aspects.

In Costa Rica, the first case of COVID-19 was reported on March 6. On March 15, the Board of Directors of the National Commission for Risk Prevention and Emergency Attention urged the President of the Republic to declare a state of national emergency, which generated inter-institutional coordination activities in order to respond to the situation (PAHO/WHO, 2020). The University of Costa Rica (UCR), part of the national system of public universities, was no exception and, in response to this "new normal," adapted all its substantive activities to the remote work format. Abruptly, it resorted to developing teaching tasks in the virtual format, despite all teaching and administrative planning being planned for face-to-face classes. As Ruiz (2020) points out, the faculty was forced to work from home, possibly without the experience or technical skills necessary to manage digital platforms and the fundamental technological resources for distance education. Teachers had to modify or reduce their teaching methods and didactic resources to cope with this new experience.

In this context, the concern was born to know the perception of the teaching staff of the Paradise Campus about the teaching-learning process in the framework of virtualizing the teaching activity during the first and second school years of 2020. In addition, it was proposed to evidence and systematize this group's work situation and provide a space for them to share their experiences so that these inputs would be useful for future decision-making. To this end, teachers who worked during at least one school year under study were contacted because not all personnel teach during both academic cycles, and it was important to include in the same way the population that worked only one period.

The UCR has a presence throughout the national territory through its six regional headquarters and participation in the Inter-University Headquarters in Alajuela. The regional campuses aim to democratize access to higher education and promote comprehensive change in Costa Rican society (Barahona & Rojas, 2017). The Paraíso Campus is administratively attached to the Atlantic Headquarters, located in the canton of Turrialba, belonging to the province of Cartago. It originates from multiple efforts of political and social actors that began in 1990 so that the institution would have a presence in the canton of Paraíso through an agreement between the Municipality of the canton, which provided economic resources for the academic offer of the General Studies group. Finally, on December 5, 1995, the campus facilities were inaugurated on the land donated for this purpose by the Administrative Board of the Paraíso High School (Salazar, 1998). By 2020, work began to remodel the infrastructure and modernize the current facilities.

Concerning academic offerings, for the year under study, the Paraíso Campus offered the following complete degree programs: the bachelor's degrees in English Teaching, Business Informatics and Ecological Tourism, and the bachelor's degree in Business Management. Courses corresponding to the final stages of the bachelor's degrees in Teaching Spanish and Literature and Teaching Mathematics were also offered. About the teaching staff, according to information provided by the administrative area, in 2020, 85 professors worked during the first

academic year, of which 45 were men and 40 were women. For the II Cycle, 81 teachers worked, 44 men and 37 women, representing an equal distribution by gender.

Resolution scheme

1. Research problem

How has the experience in teaching-learning, in the framework of the virtualization of the teaching activity in the year 2020 at the Paraíso Campus of the University of Costa Rica, due to the conditions caused by COVID-19 from the perspective of the teaching staff?

2. Methodology

This research was developed in two stages and sought to know the perception of the teaching staff of the Campus on the teaching process supported by the use of ICT that was implemented due to the pandemic. It was also proposed to evidence and systematize the work situation of this population. The approach was mixed because it was intended to assess the subjective and objective reality of what would come to constitute the participants' perceptions.

This research was developed in two stages and sought to know the perception of the teaching staff of the Campus on the teaching process supported by the use of ICT that was implemented due to the pandemic. It was also proposed to evidence and systematize the work situation of this population. The approach was mixed because it was intended to assess the subjective and objective reality of what would come to constitute the participants' perceptions.

The quantitative elements included knowing the number of participants with interim appointments and the number of people who considered themselves affected by this new labor context. The qualitative element on which the study was based was to collect the participants' perspectives on the same situation and inquire into the strategies followed to cope with it. The sample was self-selected because people participated by responding to an invitation made through different electronic means (Battaglia, 2008b as cited in Hernández-Sampieri, Fernández-Collado & Baptista-Lucio (2014).

In the first stage of the study, a self-managed questionnaire was developed on the Google Forms platform. This instrument is the most commonly used for data collection in social phenomena, such as the one that is the subject of this research. The questions posed were directly related to the variables to be measured (Hernández et al. 2014). To identify the career to which the teachers belonged, a list was presented with the careers offered; the General Studies System was also included, and the option "other" for those cases that were not directly related to a particular one. They were also asked about their work situation and to indicate the type of appointment (interim, tenured), the period, and the assigned workday. They were also asked about the availability of the necessary inputs for their teaching work (type of Internet connection, computer equipment, and physical space) and their perception of equity and equality of conditions compared with the administrative staff and the student body. They were also invited to reflect on their teaching work and the work-life balance in the new context. Finally, they were allowed to provide additional comments.

The information was processed utilizing the Google Forms platform, which allows the visualization of graphs and statistics of the responses obtained. The open-ended responses were categorized according to the repetition of concepts that indicated the teachers' feelings. After systematizing the questionnaire results and as a second stage of the research, a workshop was

organized through the ZOOM Video Communications platform, better known as Zoom. This program allows video calls and virtual meetings for those teachers who want to know the results obtained and validate them based on their experience. Once the results were presented, working groups were organized to create spaces for interaction among the participants, as a method for generating information based on their opinions, feelings and thoughts to obtain qualitative data based on their experiences. In parallel, the online collaborative whiteboard of the MIRO platform was used, where the research axes were presented through a matrix and participants were asked to contribute at least one conclusion on the topic. Finally, each group was invited to present the results, with a plenary session and sharing lessons learned and experiences in this new context. These data were used as inputs for the conclusions and recommendations.

3. Writing plan

3.1 Working condition of the teaching staff at the University of Costa Rica

The labor status of the faculty is organized by the Regulations of the Academic Regime and Teaching Service, which divides this conglomerate into two large groups: personnel in the Academic Regime and personnel outside the Academic Regime. The first group is divided into Instructor, Adjunct, Associate, and Professor. The main difference between these divisions lies in academic merit and university experience. On the other hand, personnel outside the Academic Regime are divided into the following conditions: Retired, Ad honorem, Emeritus, Guest, Interim, and Visiting. In the particular case of the Paraíso Campus, there are teachers inside and outside the Academic Regime. In the latter category, there is only interim status.

An interim teacher is a person who is appointed for one academic year to fill a vacancy. Under this condition, the appointment may be extended for up to one year and, in the case of sinopia demonstrated by competition, for up to two years. The appointment period may be longer than those above, given that interim professors are appointed to replace a professor on leave, elected to a temporary position, or because the position is linked to a temporary program. To enter the academic regime, interim personnel may do so through a background competition or by reserving a position to study abroad.

Regarding the interim condition, León, Kikut & Villalobos (2020) point out that it has increased due to "multiple historical phenomena and diverse institutional practices," causing a structural problem that must be comprehensively addressed in such a way as to comply with the objectives of the institution, as well as with the normative postulates that regulate "labor relations in the country."

3.2 Academic year at the University of Costa Rica

According to the University's Student Academic Regulations, the academic year comprises three cycles: the first runs from March to July, the second from August to December, and the third, called the summer course, in January and February of the following year. This information is important if it is considered that not all interim teaching staff at the University of Costa Rica were appointed during this last cycle.

3.3 The University of Costa Rica and its virtualization process

Virtuality at the University of Costa Rica dates back to 1993 with the installation of the Internet. In 2003, institutional activities began to consolidate an institutional platform that would support teaching through the incorporation of ICTs. In 2006 the Information and Communication Technologies Mediated Teaching Support Unit (METICS) was created. In 2009, the Institutional Platform "Virtual Medication" was formalized, which broadens the possibilities of incorporating digital media to support educational processes. By 2016, the regulations on virtuality in the institution were published, which was strengthened over the years. The context of the pandemic forced the virtualization of all courses offered (Francis, 2020).

3.4 Education in times of pandemic

The effects of the pandemic on the education sector have generated research from various perspectives. For this study, research on the work of teachers was reviewed. Gutiérrez & Díaz (2020), in their article "Virtual education in times of pandemic," reports the results of their documentary research on the subject. They concluded that the main challenge faced by the education sector was to minimize the effects generated by this new context. Teachers must be trained to develop their work adequately and help their students adapt to the changes to achieve good results. Emphasis is placed on the need to propose viable actions that respond to the requirements of students by their environment.

Is also pointed out by Cifuentes (2020), for whom the improvement of online teaching implies that the teacher must have a different vision of teaching that allows him/her to capture the students' attention. Students and teachers faced this new reality with little or no experience with this new form of teaching. The teaching staff could use the same pedagogical and didactic practices as face-to-face teaching. Fernández-Gubieda (2020) points out that the change in teaching modality implemented from the pandemic makes necessary the incorporation of "the technological, the cognitive, the relational and the pedagogical"; the teaching staff must have access to didactic recommendations to different technological tools in such a way that they can design in a "personalized" way the courses they are in charge.

3.5 Teleworking

The International Labor Office (ILO) indicates that teleworking is a work in which the collaborating person uses ICTs to work outside the employer's premises. This form of work must be implemented through a voluntary agreement between the employer and the worker, which establishes the place of work (the home), the schedule, the communication tools to be used, the work to be performed, as well as the monitoring mechanisms and the arrangements for reporting on the work performed (ILO, 2020).

In Costa Rica, telework is regulated through Law No. 9738, which determines it as an instrument that allows the generation of sources of work and the modernization of public and private institutions. Under this law, teleworking is voluntary and is regulated through an agreement between the worker and the employer in which respect for national and international legal instruments for the protection of labor rights is observed. This law makes a specific differentiation of the telework performed from home; it defines it as "home telework."

In March 2020, as a result of the sanitary emergency, the Executive Power published Directive No. 073-S-MTSS "On the Measures of Attention and Interinstitutional Coordination in the Face of the Sanitary Alert for Coronavirus (COVID-10)", by which all state institutions were instructed to implement "temporarily" the modality of teleworking. At the University of Costa Rica, the personnel had to complete an Addendum to the Work Contract called "Convenio de Trabajo Remoto por Alerta Sanitaria" (Remote Work Agreement due to Health Alert). During 2020, four of these documents were formalized. The following information was included:

- The address from which the work would be performed.
- The contact information of the worker.
- The respective workday and Schedule.
- The tasks to be performed.
- The control mechanisms of the immediate supervisor.

In addition, the worker was required to complete a biweekly logbook describing the work performed. Through this procedure, the institution complied with the regulations above.

3.6 Physical space for teleworking

"The Guide of occupational health and prevention of risks in teleworking" by the Ministry of Labor and Social Security (2019) determines that the workstation of a collaborator must have a physical space of a minimum area of 2m² and a height to the ceiling not less than 2.5 m per person. It must have the supplies and equipment required to carry out the work and good ventilation (air quality and thermal comfort) through doors and windows or mechanical means. Regarding lighting, considering the location, it must have natural or artificial light so that it does not cause direct glare or produce annoying reflections on the computer monitor. Another aspect considered in this guide is noise; in this particular, the station must be away or isolated from external noises, such as traffic and noise from neighbors or the house itself (visitors, children, household chores, equipment, and pets, among others). It also describes the local, electrical, physical, and ergonomic risks, which are the conditions that must be taken into account by the employee to prevent damage to health.

3.7 Balance, life and work

The challenge for companies or institutions lies in developing policies that generate employee commitment and trust. The balance between life and work is the ideal state of any person since changes in these conditions affect their performance, and this is how this research considers evaluating this issue, given the circumstances and situations that caused the virtualization and uncertainty of living in a pandemic. Rodriguez (2001), cited in Salas & Valenzuela (2012), defines work-life balance as follows:

Quality of work life represents the degree of satisfaction of needs achieved by company members through their experiences in the company. The quality of work life reconciles two antagonistic positions: on the one hand, the claim of employees in terms of well-being and satisfaction at work; on the other hand, companies' interest in the effects on production and productivity (p. 36).

Along the same lines, Méndez (2006) considers that the organizations that best lead and know their employees will be able to optimize their working capital:

The organization's environment is produced and perceived by the individual according to the conditions he finds in his social interaction process; and in the organizational structure that is expressed by variables (objectives, motivation, leadership, control, decision-making, interpersonal relations, and cooperation) that guide his belief, perception, degree of participation and attitude; determining his behavior, satisfaction, and level of efficiency at work (p. 28).

In Costa Rica, Law 9862 of 2020 establishes the Public Policy to reconcile family and work life, where the Costa Rican State:

will develop, implement and evaluate a public policy that promotes, in public institutions, the private sector, families, and other instances of society, awareness, awareness, training, and the adoption of concrete measures that enable the reconciliation of family life with work life and family co-responsibility.

The remote work carried out in the year 2020 implied, for most of the workforce, the concentration in the same physical space (home) of professional and personal tasks. Robinet & Perez (2020) studied the stress levels suffered by teachers in the context of the pandemic through the reading of publications made in the world on the subject, as well as studies conducted on previous dates to have a frame of reference. Among the most important results obtained was that the stress of European and Latin American teachers was of medium and high levels. Among the factors they identified as causing these stress levels were the incorporation of ICTs, increased tasks at home, and the fear of suffering from illness. They also mentioned that teacher stress is associated with psychosocial factors originating by isolation, fear, and uncertainty. Barrón (2020) points out that the pandemic represents a complex situation of uncertainty and doubt. One lives with false news, ambiguity, contradictions, and questions about what will happen once the confinement passes. The population has seen its family, professional, and labor stability altered.

4. Research Results

4.1 Information from the teaching staff

According to the data provided by the secretary's office and indicated above, there was wide participation of the teaching staff; 52 people responded to the questionnaire, of which 46.00% were men and 54.00% were women. Of those surveyed, 78.00% worked during both school years of the year under study. In addition, we obtained a representation of all the careers taught that year. Regarding the main economic activity, 75.00% of those surveyed indicated that their main activity was teaching means that the academic offer, understood as the availability of courses and careers at the Campus, directly impacted their job stability.

Concerning the appointment status, three responses indicated that they had ownership, while 52 indicated that they were on an interim basis. In this result, it is important to

consider that in the University, there are people who have full-time or part-time appointments in Academic Regime. Another result of the research allowed visualization that the interims' teaching loads or work shifts varied from one-eighth to full-time. Even though most of the teaching staff at the Paraíso Campus have teaching as their main source of income, they do not have job stability due to their interim status.

Most of the teachers at the Campus did not have an appointment during the third academic year (summer course). Of the interim personnel answering the questionnaire, 86.00% stated that they had never been appointed. Those who answered affirmatively indicated that it was due to University Community Work projects. This social action activity is a graduation requirement at the undergraduate and graduate level, according to Article 2 of the University Community Work Regulations, whose budget originates from the Office of the Vice Rector for Social Action. In addition, other inter-college appointments originated from career coordination tasks or from offering specific courses during that period.

The answers given to show the condition of vulnerability experienced by the majority of the teaching staff at the Paraíso Campus, who do not have a guaranteed appointment for the entire institutional school year. Due to this uncertainty, 58.00% of the participants indicated that during inter-college, they work either in another part of the university or another institution. Given the relevance of the comments arising from this topic, it was considered significant to include some of the statements obtained concerning personal status during the inter-college period:

- Having a stable appointment has consequences on economic and labor factors.
- Meeting the payment of basic services is a latent concern in every intellectual time.
- Savings must be made in previous periods.
- There is the insecurity of needing a stable salary throughout the year due to the variation of working hours and the interruption of appointments.
- Lack of motivation for teaching work has been done in the university career.
- Due to the current situation, there are fewer options for alternative activities to compensate for the lack of hiring during this period.
- The precarious working conditions demotivate teachers and generate human capital flight and rotation.

In light of the results of this research, it is necessary to refer to the concept of decent work, one of the four strategic objectives of the ILO that should be carried out in conditions of freedom, equity, security, and human dignity. The organization states as part of this declaration of decent work, job, and economic security as fundamental elements of security and social guarantees in case of eventualities that affect their health, as well as the need to set limits to the insecurity of losing their jobs and means of subsistence (ILO, 2016). Within the information obtained, job and economic instability stand out, a condition that may impact teachers' motivation.

4.2 Teaching conditions

Another aspect investigated through this study was whether or not the teaching staff had adequate conditions for remote work. We inquired about the availability of technological resources and physical space. In this regard, 86.50% of the participants used their equipment, 21.20% shared the device with other members of their environment, and one person used a

laptop provided by the Campus. According to the results, 53.80% were obliged to purchase equipment or electronic components to carry out their work. Regarding the cost of the Internet connection, which was assumed by all the professors, the University of Costa Rica established an agreement with the Instituto Costarricense de Electricidad (ICE), owner of the commercial brand Kolbi, to reduce it. Despite the above, of the 52 responses, 23 said they were unaware of this possibility.

We also inquired about the perception of the support provided by the Campus to the teaching and administrative staff, as well as to the student body, to face this new context. Notably, 61.50% of those surveyed said they needed to be made aware of the situation in the administrative area. When they compared the assistance given to the teaching and administrative sectors, 21.20% considered that the assistance was less for teachers, while for 15.40%, it was the same, and for 1.90%, it was better. Regarding the assistance offered to teachers compared to that given to students, 44.20% of those surveyed said they were unaware of the issue. A total of 15.40% considered that the conditions given to teachers were better, 25.00% that they were the same, and 15.40% considered that the support given to students was better. Notably, most of the teaching staff who participated in the study stated that they needed to be made aware of the situation of the administrative staff and the group of students.

For the first cycle of the year under study, the teachers had programmed their courses to be face-to-face, so they were forced to switch to virtual learning. Among the support activities organized by the institution for the teaching sector, there were different trainings to face the new educational context. The evaluation of these was consulted. A total of 65.40% considered that the training was good, while 21.20% rated it as excellent. For 11.50%, the activities were regular, and 1.90% considered them bad. There was an institutional effort that reflected the university's initiative to solve the shortcomings of its personnel.

4.3 Physical space used for the work

The conglomerate of the Paraíso Campus had to look for a physical space within their homes to carry out their work. In this regard, 81.00% of the space used met the conditions to carry out their virtual teaching work. Among the reasons the remaining 19.00% gave were having to share the physical space and the Internet connection with other members of their environment simultaneously, noise and distractions, and using the bedroom as a workspace. The conditions for this 19.00% were not following the Ministry of Labor and Social Security guidelines.

4.4 Teaching in the virtual context

The teaching task is affected by different factors that intervene in it. Among these factors, we can consider the content, the materials, the context, and the interaction between the participants. Regarding the context in which the teaching task was developed in 2020, the Vice Rector's Office for Teaching recommended that the synchronous sessions that included various interaction activities with students should not exceed 50 minutes. When asked about this resolution, 86.50% answered that this time was insufficient, while 13.50% considered it adequate. Of all the teachers who participated, 71.20% indicated they did not adhere to this guideline. Among the reasons given for not following the instruction, those that stand out are those that emphasize the nature of the course, as well as the need to achieve interaction with and among the students. The following are the perceptions expressed by the teachers:

- The characteristics of the course, the content, and the activities, such as presentations, made it difficult to adapt to that time.
- It is impossible to do practical courses in the recommended time.
- Implementing the topics addressed in the course could not be synthesized in 50 minutes; it required theoretical development and applied activities that the students developed.
- The students requested a full class.
- It is impossible to comply with the programs in such a limited time; the course programs need to be adjusted to virtual reality.
- Not enough for interaction with and between students.

4.4.1 Interaction in synchronous activities

According to Pérez (2009), interaction is relevant for educational processes in face-to-face and distance or virtual education. Through it, interpersonal relationships between the actors in the teaching-learning process can be strengthened, thus reducing the effective distance through communication. The study assessed the interaction in two ways, the first between students and their peers, and the second between teachers and students during synchronous sessions. Regarding the interaction between peers (students), 51.90% rated it as good and 3.80% as excellent. 26.90% rated it as fair and 3.80% as excellent. 26.90% considered it to be fair and 11.50% considered it to be bad. Finally, 5.80% of the respondents chose "Don't know/No answer". In general, the interaction between students was positively evaluated. Despite the above, we wanted to document part of the reasons given for a regular or negative evaluation, as an important input for the research:

- Students need to learn from each other.
- Problems of limited time for group and collaborative work.
- Lack of attention, motivation, and interest on the part of the students.
- Problems with the equipment and connection interfered with the dynamics of the lessons.

Regarding the interaction between teachers and students, 50.00% rated it as good, and 19.20% as excellent. 26.90% considered it regular and 1.90% considered it bad, and finally, 1.90% of the respondents chose the option "Don't know/No answer". We wish to highlight, as input for this research, some of the reasons given by the people who considered this interaction negative:

- Little participation, communication, and interest of the students.
- In the classroom, they make more inquiries.
- It was complicated to change the face-to-face methodological scheme to the virtual one.
- The spirit of interaction diminishes in courses that depend on field trips and activities.
- It was impossible to follow up with some students, and most did not participate actively.
- There were few interventions during the class when teaching the theoretical part, while there was more interaction in the practical or applied part.
- Communication could have been better. In some cases, some students have yet to participate in the discussions.

Similarly, some responses indicated the willingness of the teacher to provide communication spaces beyond the synchronous session:

- The opportunity to communicate by traditional and non-traditional means was provided.
- The time of online consultation hours was extended.
- Tools and applications were used to express ideas and carry out practical activities, where there was freedom of opinion and consultation.
- Throughout the cycle, the options for more efficient interaction were expanded.

Regarding the reasons given by the students to the teacher for not interacting during the synchronous classes, 84.60% indicated connection problems, followed by microphone problems (38.50%) and sound failures (23.10%). Similarly, there were other reasons indicated as justification for the difficulty in interacting, among which are the following:

- Personal commitments, such as caregiving.
- Family problems and disruptions at home.
- There needed to be more preparation prior to the classes.
- They did not express doubts, which gave the impression that the subject matter was clear.
- They need more space in their homes.
- Weather conditions, such as heavy rains, affected the connection.
- Problems with the equipment used, some connected with their cell phones, made it difficult to access the classes more agilely and with greater availability of platforms.
- The lack of electricity affected.

The teaching staff also faced obstacles in interacting during the synchronous sessions. Connection failure was the circumstance mentioned by 67.30%, while for 23.10%, it was sound problems, and for 17.30%, the microphone. 42.30% indicated that the problems interacting with the students affected their lesson planning during the synchronous sessions. As can be seen in this section, it is important to recognize what is expressed in the State of the Nation Program (PEN, 2020), about the distance education modality, which deepens the gaps in the educational system, given the conditions of partial and stable access to the Internet for many students and teachers in the country, in addition, the latter, presented a lack of training for virtual education.

4.4.2 Student engagement

Another factor that influences the teaching process is student commitment. The study showed that the perception of the teaching staff about this issue was mostly positive; 51.90% rated the students' commitment as high, while 38.50% considered it medium and 9.60% low. Despite this assessment, it is appropriate to point out that there were teachers who expanded their answers and pointed out the lack of preparation of the students for this new modality of work and indicated the following reasons:

- Good time management habits and organization caused them to fail to meet their obligations. They did not know how to do it.

- It is difficult for students to fulfill all their obligations due to the academic load caused by the number of courses enrolled, the content, responsibilities, and evaluation activities of each course.
- Some students were not able to adapt to virtual learning and dropped out.
- Some factors affect the degree of willingness or availability of students. Our collective perception still has problems accepting that we are at home but in class. Students need help accepting this reality.
- Many students need the necessary maturity for the virtual context.

4.5 Balance, life and work

In light of this study, 82.70% indicated that the work performed during this period was not reflected in the economic remuneration received according to the hours of each course; that is, according to the working day for which they had been appointed. Among the reasons given for this assessment, it was mentioned that the time dedicated to the preparation of materials, the acquisition or improvement of technological skills, the adaptation of materials and didactic strategies, and the revision of students' work was greater.

Another of the recurrent manifestations within the work/life balance was the long working hours outside the established schedule and late at night in order to be able to fulfill teaching tasks. In addition, the teacher had to perform the work for which he/she was hired and participate in activities that might be scheduled outside his/her working hours. 76.90% of the participating population perceived the existence of an excess in the organization of this type of activities.

From the perspective of the teaching staff, remote work caused not only an increase in their workload, but also a direct effect on their mental and physical health, known as burnout syndrome. Among the physical effects of this work overload, they mentioned back and lower back pain, migraines, vision problems, and insomnia. Among the results obtained, stress was the most common element, followed by anxiety crises, panic attacks, depression, demotivation, and guilt for taking time off. Finally, 59.60% of the participants expressed frustration with their teaching work. Among the reasons given for this feeling, they indicated the low participation of the students for immediate feedback, the feeling of not being able to fulfill the assigned tasks and the concern for their students' learning. The above, leaving aside the existence of a global pandemic, carries a feeling of uncertainty. The results above are in agreement with Robinet & Pérez (2020).

Conclusions

Most of the teaching staff at the Paraíso Campus have teaching as their main economic activity high percentage of this group has an interim appointment, which means that there are periods throughout the calendar year in which they do not have an appointment and, therefore, no salary, a situation shared by most of the workers at the University of Costa Rica. Also, the possibilities of having an appointment during the III cycle or summer course are very limited, given that this is derived from responsibilities generated by Career Coordination, Social Action, or Research projects, as well as by course offerings, which are due to special situations such as student backlog or unsatisfied demand. Finally, it became evident that teachers do not always have the same working day each school year, so their salaries also vary. This situation creates financial uncertainty, affecting their emotional stability and motivation. During the year under

study, most of the teaching staff at the Paraíso Campus had to cope with this complex context and the job instability of not being in the Academic Regime.

Due to the above, the teaching staff should consider presenting projects in the other two substantive areas of university work, namely, Social Action and Research, which will allow them other appointment possibilities. For their part, the persons in charge of the administration of the Atlantic Campus and, failing that, of the Paraíso Campus, should implement strategies that consolidate their academic personnel through the revision of the procedures that allow for teaching competitions for permanent appointments in addition to establishing lines of action that contemplate activities that can be carried out during the III cycle and that due to their nature may be more difficult to execute in the I and II cycles of the year, when the workload is greater. These specific activities can be assumed by interim personnel. In this way, the academic unit and the personnel in charge of implementing these activities would benefit.

Most teaching staff had adequate physical space to carry out their work virtually. Despite the above, there were also cases of teachers who adapted spaces in their homes to carry out these tasks and even shared them with other members of their environment. All participants indicated that they assumed the economic costs derived from this change of context. Also, a high percentage of the population needed to be made aware of the support processes provided within the institution to facilitate their work, and that of the students in the new educational context was evidenced by the fact that personnel who did not have their equipment, or who otherwise had to share it, did not request support from the Campus authorities.

The communication strategies used should be reviewed. If a faculty member is aware of the institutional support given to staff and students and knows of students with needs that can be met through the Campus, he/she can support the process with greater clarity. In addition, he/she will know where to go if he/she has a particular need for support.

University teaching in the new virtual environment was affected as a whole. To face the situation, the teaching staff had to distribute their teaching practice in the design of synchronous and asynchronous activities. For both modalities, it was necessary to prepare materials and activities, which meant a recharge in their work as they had to reconvert their teaching practice. In addition, time had to be set aside for attending student consultations, so most of the teaching staff considered their workload greater during this period. Similarly, the time recommended for synchronous activities could have been perceived as insufficient to meet the course objectives, resulting in an excessive workload that also influenced the work/life balance of both faculty and students.

The context originated by the COVID-19 pandemic in the educational environment evidenced the importance of having personnel trained in ICT-supported teaching and the need to adapt quickly. The teaching staff was willing to assume the responsibility of remote teaching despite a latent need for training in this regard, which should continue with a view to making pedagogical and curricular changes that allow for the potential of ICT-supported teaching, without sacrificing content, objectives, or learning styles and taking into consideration the reality of the people involved. With these measures, a better work-life balance will be achieved. This training should also progress towards the particularities of each course and the discipline they serve. For this reason, it seemed appropriate to include a reflection contributed by a participant in one of the sections of the instrument, where they were asked to expand on their response:

Organizing the class with such dynamics requires not only the willingness of the teacher but also that he/she has the experience to prepare drops of knowledge and

material and that the students have the experience to self-manage their learning and are not deficient in the handling of basic mathematical operations.

From the faculty's perspective, different elements impacted the teaching-learning process. For example, teacher-student and student-student interaction was affected during synchronous activities in this new context. In general, this intercommunication was interrupted due to external factors such as equipment and Internet connection failures and the suspension of electrical service. Cases were also mentioned in which interaction was affected by the environment of the people involved since they had care responsibilities for other people or because they had to share work spaces with other members of their environment. In addition to the above, there was the perception that the student was unprepared to face this new context.

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