

**The Distance Education Strategy of Ministry of  
Public Education during the Covid-19 Pandemic and  
the Adaptations in the Pedagogical Mediation and  
Administrative Functions in the English Teaching  
Staff of Liceo San José de Alajuela, during 2020**

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**Thesis Submitted to obtain the Licentiate Degree in  
English Language Teaching**

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## Table of Contents

Declaration Under Oath.....	vii
Letter from the Tutor.....	viii
Letter from the Reader.....	ix
Acknowledgements.....	xii
CHAPTER I.....	ii
INTRODUCTION.....	1
1. 1 Problem Statement.....	2
1.1.1 Background and Description.....	2
1.1.2 Problematization.....	17
1.1.3 Justification.....	20
1.2 Problem Formulation.....	21
1.3 Objectives.....	22
1.3.1 General Objective:.....	22
1.3.2 Specific Objectives:.....	22
1.4 Scope and Limitations.....	22
1.4.1 Scopes of the Research.....	22
1.4.2 Limitations of the Study.....	23
CHAPTER II.....	24
THEORETICAL FRAMEWORK.....	24
2.1 History, Vision, and Mission of Liceo San José de Alajuela.....	25
2.2 Theoretical Context.....	27
2.2.1 Distance Education.....	27
2.2.2 Distance learning during COVID-19.....	32
2.2.3 The Effects of Distance learning environment during COVID-19.....	33
2.2.4 Quality of the educational system in distance learning.....	35
2.3.1 Information and Communication Technology in Education (ICT).....	37
2.3.2 Teacher’s training for the use of ICT tools.....	39

2.3.3 ICT in distance learning in Costa Rica during the Covid 19-pandemic .....	42
2.4.1 Autonomous Learning .....	45
2.4.2 MEP's Autonomous Work Guides (GTA in Spanish) .....	48
2.4.3 MEP's Basic Learning Templates (PAB in Spanish) .....	54
2.5.1 Assessments in Education .....	56
2.5.2 Assessments in education during Covid-19 pandemic .....	57
2.5.3 MEP's Assessment strategies during COVID-19 pandemic .....	59
2.6.1 Teleworking definition and implementations in distance education .....	63
2.6.2 Teleworking in distance Education .....	65
2.7.3 Teachers 'Administrative functions during COVID 19-pandemic .....	67
2.7.4 Effects of teleworking during pandemic .....	69
CHAPTER II .....	71
METHODOLOGICAL FRAMEWORK .....	71
3.1 Type of Research .....	70
3.1.1 Purpose of the research .....	70
3.1.2 Projects' Delimitation .....	71
3.1.3 The Scope of the Research .....	71
3.1.4 Nature of the Research .....	72
3.1.5. Character of the Research .....	73
3.2. Subjects and sources of information .....	73
3.2.1 Units of Analysis .....	74
3.2.2 Primary Source of Data .....	75
3.2.3 Secondary Source of Data .....	76
3.2.4 Thirdly Sources of Data .....	76
3.3 Sampling Selection .....	77
3.3.1 Population .....	77
3.3.2 The Sample .....	77
3.3.3 Nonprobability Research .....	78

3. 4 Techniques and instruments to collect information .....	79
3.4.1 Techniques used for the data gathering .....	79
3.4.2 Instrument in Use for the Data Gathering.....	81
3.5 Research variables .....	85
3.5.1 The Conceptual definition of variables .....	85
3.5.1.1 Specific Objective:.....	86
3.5.1.2 Specific Objective:.....	86
<b>3.5.3</b> Specific Objective:.....	87
CHAPTER IV .....	89
DATA ANALISIS AND INTERPRETATION .....	89
4. Data Analysis and Interpretation.....	90
4.1 Survey Results from the English teaching staff of Liceo San José de Alajuela .....	90
4.2 Interviews results from the English Staff of Liceo San José de Alajuela .....	110
CHAPTER V .....	118
CONCLUSIONS AND RECOMMENDATIOS .....	118
Conclusions .....	119
5.1 Conclusions:.....	120
5.2 Recommendations: .....	124
References .....	127
Annexes .....	136

## Questionary Results, List of Graphs

Graph #1: Teaching experiences in distance education prior to COVID-19 pandemic.....	91
Graph #2: Understanding the significance distance education.....	92
Graph #3: Trainings for distance education.....	93
Graph #4: Teaching job perception for distance education.....	94
Graph #5: Health effects during distance education.....	95
Graph #6: Evaluation system applied in distance education.....	96
Graph #7: Formative and summative evaluation preferences.....	97
Graph #8: Limitations to make objective evaluation in distance education.....	98
Graph #9: Limitations to make objective evaluations.....	99
Graph #10: Preparedness for working in distance education with MEP.....	100
Graph #11: Technological tools for distance education.....	101
Graph #12: Purchasing equipment to work in distance education.....	102
Graph # 13: Working schedule in distance education.....	103
Graph # 14: Teachers 'schedule during distance education.....	104
Graph # 15: Teaching working interference with personal and family activities.....	105
Graph # 16: Home adaptations during distance education.....	106
Graph #17: Academic activities in distance education.....	107
Graph #18: Academic activities in distance education.....	108
Graph #19: Administrative activities in distance education.....	109

## List of Figures

Figure #1: Process for the development of the development of the Autonomous Work Guide.....	12
Figure #2: Subjects for group #1.....	15
Figure #3: Subjects for group #3.....	15
Figure #4: Subjects for group #4.....	16
Figure #5: Roles in teaching and counseling.....	45
Figure #6: Autonomous Work Guide Format.....	48
Figure #7: Recalling what I learned in class format.....	49
Figure #8: Putting into practice what I learned in class.....	50
Figure #9: Self-regulation and evaluation matrix.....	51
Figure #10: Self-evaluation of students' performance level rubric.....	52
Figure #11: Base Learning Template.....	53
Figure #12: Performance level rubric.....	54
Figure #13: Assessment in the first period 2020.....	58
Figure #14: Learning evaluation only for formative purpose.....	59
Figure #15: Evaluation process second semester 2020.....	61

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**Carrera Enseñanza del Inglés**  
**Universidad Hispanoamericana**

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" El cual ha elaborado para optar por el grado académico de **Licenciatura en la Enseñanza del Inglés.**

En mi calidad de persona tutora, he verificado que se han hecho las correcciones indicadas durante el proceso de tutoría y he evaluado los aspectos relativos a la elaboración del problema, objetivos, justificación; antecedentes, marco teórico, marco metodológico, tabulación, análisis de datos; conclusiones y recomendaciones.

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## Letter from de Reader

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### CARTA DE LECTOR

San José, 16 de abril de 2021

Universidad Hispanoamericana  
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Estimado señor

El estudiante Cristian Calderón Arroyo cédula de identidad 205900592 me ha presentado para efectos de revisión y aprobación, el trabajo de investigación denominado "The Distance Education Strategy of Ministry of Public Education during the Covid-19 Pandemic and the Adaptations in the Pedagogical Mediation and Administrative Functions in the English Teaching Staff of Liceo San José de Alajuela, during 2020", el cual ha elaborado para obtener su grado de Licenciatura en la Enseñanza del Inglés.

He revisado y he hecho las observaciones relativas al contenido analizado, particularmente lo relativo a la coherencia entre el marco teórico y análisis de datos, la consistencia de los datos recopilados y la coherencia entre éstos y las conclusiones; asimismo, la aplicabilidad y originalidad de las recomendaciones, en términos de aporte de la investigación. He verificado que se han hecho las modificaciones correspondientes a las observaciones indicadas.

Por consiguiente, este trabajo cuenta con mi aval para ser presentado en la defensa pública.

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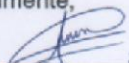
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## Acknowledgements

*Then Samuel took a stone and set it up between Mizpah and Shen. He named it Ebenezer, saying,*

*“Thus far the Lord has helped us.”*

*1 Samuel 7:12*

I dedicate this graduation work firstly to God, who deserves all the glory and honor for giving me the intelligence and perseverance to reach this level in my university studies.

To my parents and wife for the unconditional support they have given me throughout these years.

Also, to my teachers for their guidance during the preparation of this work and especially to my tutor for the motivation and guidance throughout the process of this project.

# **CHAPTER I**

## **INTRODUCTION**

## 1.1 Problem Statement

Distance education has been one of the novelties with the greatest impact in the Costa Rican educational system and the rest of the world, during the COVID-19 pandemic, in 2020. It caused a series of changes in teaching methodologies since teachers had to face several new provisions emanating from the Ministry of Public Education (MEP). Those changes included long days of training, new learning strategies, the use of Information and Communication Technologies in education (ICT's), and a series of orientations to apply during that year.

In this research, the teacher was the key factor in the implementation of educational guidelines, and the ones who had to take on challenges, never seen before. From this work emerged, many adaptations that allowed each of these professionals to carry out their job.

In this chapter, the problematization of the research appeared with a brief description of the context where the pedagogical intervention took place during the COVID-19 pandemic in Costa Rica. Also, the justification explained why this investigation arise and the accomplishment. After that, the central question of the investigation or definition of the problem on which this investigative process was carried out. Next, the objectives that seek to develop specific areas of the research problem. Finally, the scope and limitations that determined how far it went on and what elements the investigation defined.

### 1.1.1 Background and Description

Teaching in a distance learning environment means an adaptation to new styles that has positive and negative outcomes of a greater magnitude than the traditional education. Espinoza (as cited in Maddox 2015, p.3) suggests “[We

should] instead consider the need to adapt to the times for the sake of the student” Every student has the right to receive quality educational attention. Therefore, the existence of various educational modalities makes the school system more flexible and efficient. This flexibility is a paramount for those who for several reasons such as financial, family, work, or disability, need to access to educational services which they would otherwise be excluded.

The disruption caused by COVID-19 in everyday life meant the missed out of millions of children and teenagers in education. The United Nation states, “An estimated 40 percent of the poorest countries failed to support learners at risk during the COVID-19 crisis, and past experiences show that both education and gender inequalities tend to be neglected in responses to disease outbreaks” (2020, p.8). The challenges faced by under developing countries with students currently out of classes has an enormous negative impact in aspects such as food insecurity, economic instability, and the increase of social issues like violence, prostitution, and drugs consumption.

Nevertheless, the new conditions imposed by COVID-19 pandemic caused the reinvention of the majority of the educational systems around the world. For instance, as soon as Costa Rica confirmed the first cases back in March 2020, the government along with the Ministry of Public Health, ordered the closure of all private and public schools in the country. Since then, teachers started to develop distance education initiatives to maintain contact with their students by using some technological tools such as WhatsApp, emails, phone calls, and virtual platforms like Google Classroom to provide teaching material to

work at home. Later on, The Ministry of Public Education (MEP) provided some general guidelines to support the continuation of teaching and learning during confinement, taking into consideration different scenarios emerged in that new reality. In addition, the official MEP's website, updated digital resources where students and teachers had easily access to interact to develop some of the curriculum objectives for the school year.

The Ministry of Public Education (MEP) has not only the responsibility to organize the educational system in Costa Rica, but also the commitment of supervising that minors receive proper education in the country, and equal opportunities to learn, regardless social conditions. It is an imperative task to focus on that in all regions of the country. In the document, "Guidance for educational intervention in educational centers before the COVID-19", states some of the following principles:

a. Educational centers are fundamental contexts for the effective promotion of virus contagion prevention practices, not also at school but also at home and in the community.

b. Students are active agents who can lead and disseminate both, within the educational center and in the community, valid and reliable information about the virus and the promotion of prevention of contagion. They are not simple receivers of the information.

c. The global and pandemic situation offers a context of highly powerful learning for skill development and relevant curricular knowledge approach, which allow the students understand clearly:



d. Students and some other people suffer worries, have anxiety, and want to know in detail what is happening in the country and worldwide. They must receive constant information, clear and according with their levels of development, as well as having spaces to express doubts, ideas, or proposal on the subject.

e. The continuity of the educational process in case of absenteeism or partial or temporary closure of the educational center, depends on actions and specific pedagogical programs that recognize how to transcend the space of the classroom to promote the autonomy of the students' population, with the support that can be provided from homes. Experience and teaching innovation to offer didactic alternatives that can respond to the students' needs.

f. In this context, the contribution of families is essential as partners in the actions that the Ministry of Public Education executes to guarantee the continuity of the students' educational process. (MEP, 2020a,).

The COVID-19 pandemic affected the conventional education with the closure of schools at the national level. However, the Ministry of Public Education considered essential to maintain bonds between the students and the educational system. Therefore, the implementation of protocols, guidance and strategies to carry out the school year. In addition, authorities saw an unprecedented opportunity to transform the national educational system, by adding the use of virtual tools for learning purpose considering students' technological resources, and some other strategies to engage in distance education.

### **MEP and the implementation of new scenarios**

Healthcare and lifetime measures during the COVID 19 pandemic promoted new learning scenarios. Therefore, in April 2020, The Ministry of Public Education (MEP) implemented a nationwide strategy for supporting learning at home. In this policy, they gave relevance and pertinence to the use of technological resources, and specific and contextualized actions for learning distance environments in all possible contexts, due to the circumstances implied from face-to-face model of classes to a non-face to face model, or remote contact. Based on access to technological resources and connectivity, MEP (2020b) organized the educational system in the four following scenarios to assist students:

- a. Attention to students with internet access and device at home.
- b. Attention to students who have a device.
- c. Attention to students who have technological devices but not connectivity.
- d. Attention to student who do not have technological devices.

In those variety of contexts, teachers promoted different educational experiences and mediation strategies with technical support for students with partial or full connectivity, and printed material for the ones who did not have access to technological devices or internet at home. In addition, the family contribution became essential to accompany and supervise their children in the new role of learning at home, as well as the timely completion of the assignments to provide evidence of learning. The supporting learning at home guidance during the distance educational process had the following purposes, (MEP, 2020b):

- Design learning spaces for the students considering the context and possibilities to access to technologies or other sources.
- Avoiding disconnecting students from schools and activating all those communication mechanisms that promote their permanence in the educational system.
- Rethink the forms of pedagogical mediation to promote and generate learning from the immediate students' contexts.
- Form support networks as a strategy for professional and technical skill development.

Therefore, The Ministry of Public Education was able to provide equal opportunities, and thereby took action to ensure that most of students remained in the educational system, minimizing the impact of exclusion and the loss of short- and long-term learning. In addition, the implementation of technology in distance education, as never seen before in the country in such a magnitude, was a great achievement to support the learning process through new abilities and skills.

For the scenarios and strategies intended for pedagogical mediation in distance learning, the Ministry of Public Education states the following descriptions (MEP, 2020b):

**Attention to students with Internet access at home**

- It must be characterized by a pedagogical mediation that promotes autonomous learning for the construction of knowledge, using technological tools made official by the Ministry of Education. The intention

of it is carrying out learning session among teachers and students to promote construction knowledge and skill development by using Information and Communication Technology (ICT). That integrates the design of online learning activities.

- The planning of a virtual class requires strategies and resources different from those that would be face to face mode and generate autonomy and the ability to learn with the support of self-study material.
- The office 365 package was selected and particularly the Microsoft Teams platform, with free and secure access to teachers, students, parents, and caregivers. It also allows to define profile policies and traceability of the data. This is the MEP's official communication tool.

#### **Attention to students who have a device with limited internet access**

- The teachers used autonomous work guide as tools for planning activities with students as the previous scenario.
- The priority is given to asynchronous activities in which teachers must previously record their voice, images, or short procedures easily to distribute by different means (Facebook, WhatsApp, Teams, electronic)
- The existence of technological resources make sense when it has been previously designed and planed.

#### **Attention to students who have technological devices, but not connectivity or technological devices:**

- Educational support for the students without devices or internet: Autonomous work guides printed by subject, Infographics with topics

reviews, educational games specialized to address contents readings, anthologies, and copies available in libraries.

- Educational support for the students with device but no access to internet: USB storage devices, digital autonomous work guides, specialized readings to address contents, anthologies, related audios, videos or multimedia presentations, audios or orientation videos for parents, educational games for preschool children and I cycle.

In addition, in the document for supporting learning at home (MEP, 2020b) the Ministry of Public Education (MEP) established the teachers' role in the mediation strategies in distance education for the four possible scenarios, as follows:

- Plan, prepares and develops synchronous or asynchronous mediation strategies for learning according to study programs and focusing on the current Educational Curricular Policies for the areas and levels.
- Identify students' access to technological resources and connectivity to communicate promptly to their superiors, providing ideas and strategies to make possible the continuation of the de educational process
- Apply collaborative strategies between coworkers to optimize virtual tools that contribute to pedagogical mediations.
- Inquire about trainings and self-training options offered by MEP.
- Prepares work materials and practices that guide the students during their autonomous work at home for the maximum use of the designed learning space and timely feedback to the students.

- Request support from the immediate leadership and the pedagogical consultancies of the Regional Directorate when it is required to meet specific needs of the students 'population.
- Participate in virtual meetings with the immediate leadership to report their progress or particular situation.

Teaching in distance education highlights the role of the teacher as the mediator of the students' educational process by the development of activities and tasks carried out in distance environments. They are also in charge of motivate ad facilitate learning experiences through virtual activities or printed material. However, the new contexts in education require teachers' preparations and student's proactivity to efficiently contribute to meeting the objectives. That means more teachers' time and dedication but also a new way of learning, improving, and updating teaching strategies.

### **The Autonomous Work Guide (GTA in Spanish)**

As part of strategies for the new reality, the Ministry of Public Education implemented the Autonomous Work Guide in all programs, as the didactic tool in the distance pedagogical mediation during COVID-19 pandemic. The purpose was to support the continuity of the learning process by creating a standardized format and recommended activities to complete school assignments and objectives, with the support of technological devices or printed resources, according to the corresponding scenario. The Ministry of Education (2020c). The structures of the Autonomous Work Guide considered the three following aspects: planning, self-regulation, and evaluation. However, teachers were still responsible for curricular decision making in distance educational support. In

other words, they needed to know the reality of each student to determine the reinforcing expected learning strategies, and when it was appropriate to start the approach to new knowledge.

### **Steps to follow during the implementation of the Autonomous Work Guide**

Teachers were in charge of performing actions and the selection of the best scenario for each student, taking into consideration technology and physical resources available. These criteria allow them to determine the type of format (digital or physical) that should be implemented in the assignment. Based on a previous research on students' conditions at home, teachers had to adapt the autonomous work guide in the best possible way to each context. The Ministry of Public Education through the Directorate on Curriculum Development established a template for it. The teaching and the administrative staff must ensure that the academic load offered to students is balanced considering individual characteristics, expected learning activities and suggested time for the development. It had also to consider adaptations in materials for students with disability. The teaching staff and the school management should ensure that all students have the corresponding work through digital or printed mechanism, so students must develop the work at home independently or at least with the support of a family member (MEP 2020d).

The planning and elaboration of the self-study work was a fundamental didactic tool for the distance educational process during the confinement. The Ministry of Public Education organized the mediation strategies for students to perform them efficiently in a timely manner to cover all the schools' subjects. Therefore, the administrative team along with the teaching staff create a

chronogram for the delivery of the assignments and the deadline for students to complete them. The students who had connectivity and devices to perform the assessment at home received the self-study guide through the official MEP’s tool, “Microsoft Team Platform” when they had synchronous and asynchronous classes during the week. However, there were some other means for sending and receiving materials such as Classroom, Facebook, Email, Google Form or WhatsApp. On the other hand, for students who needed printed material, teachers worked together, elaborating and anthology for each level with all the subjects. They also organized a monthly schedule to send and received the Autonomous Work Guide. The assignments included activities to cover the whole month, while the students with internet connection had materials every two weeks

The Ministry of Education (2020g) established the process for the developing of the self-study guideline as follows in the diagram:

**Figure #1 Process for the development of the Autonomous Work Guide**





**Note:** This figure describes the organizational process of the Autonomous Work Guide. The cycle includes the planning and development of the assignments according to MEP's objectives, the instrument to record the information and the later analysis of the students' performance. Based on the results, teachers made decision and provide feedback to students. At the end, teachers filled up reports and determined the inputs for the corresponding school authorities, parents', legal guardians, and students. Adapted from: *Technical guidelines for learning evaluation in the second period (p.15)* by MEP, 2020.

### **MEP Guidelines for the evaluation of learners' achievement**

Before March 16<sup>th</sup>, 2020, the evaluation of learners' achievement was based on conventional classes throughout daily activities and homework. After that, with the school closure during the pandemic context, the Ministry of Public Education implemented the Autonomous Work Guide for the reinforcement of the learning expectations and the skills development in the pedagogical mediation strategies. By that time, MEP conceived the evaluation as a comprehensive process with a formative nature (2020g). Teachers received the Autonomous Work Guide or other sources associated once students completed, then, they proceeded to the revision and feedback that allow them to analyze the performance and progress demonstrated by the students. The information derived from the analyses carried out by the teachers was an input for decision making oriented to provide feedback and support of the process. MEP (2020g) For the preparation and subsequent implementation of the evaluation strategies, teachers had to consider, spaces for self-evaluation, where students were able to assess their own progress, the quantity and quality of students' participation

and the provision of multiple opportunities for students to receive feedback consistently to promote constant improvement.

On July 28<sup>th</sup>, 2020, the Ministry of Public Education announced the two periods of the 2020 school year and organized it as follows:

- I Period from February 10<sup>th</sup> to August 14<sup>th</sup>
- II Period, from August 17<sup>th</sup> to December 23<sup>rd</sup>.

In the first period of 2020, MEP established the learning assessment as formative, focusing on assessing the students' progress and performance during the distance education process through qualitative descriptions to guide actions for strengthening and improving performance. To carry out the formative evaluation, teachers had the evidence obtained from the Autonomous Work Guide, and what was observed in the face-to-face period, before the COVID-19 pandemic. In addition, teachers had to provide a feedback to learners and communicate the level of performance evidenced in the completion of their assignment. For that purpose, The Ministry of Public Education created an official document called, "The Descriptive Achievement Report" to deliver the students' level of performance to parents or legal guardian. (MEP 2020e).

For preparing the final report for the first semester, teachers indicated the level of performance based on the following criteria:

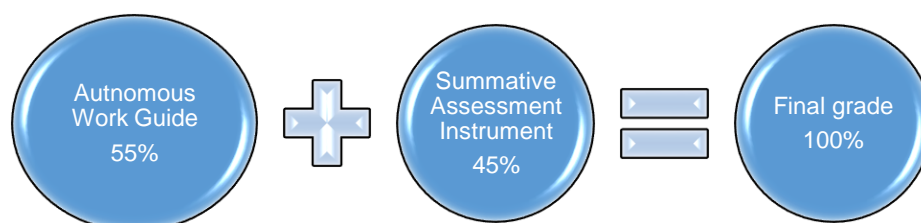
- **Reached:** Students were able to complete all the tasks.
- **In progress:** Students were not able to complete all the tasks or complete them with some difficulties.

- **Not reached:** Students were not able to complete the tasks. (MEP 2020e).

On September 21<sup>st</sup>, 2020, The Ministry of Public Education announced the technical guidelines for learning evaluation in the second period of 2020. During that time, teachers had to continue using the Autonomous Work Guide as the didactic tool, and portfolios and assessment instruments for some academic subjects. However, the learning assessment was no longer formative as in the first summative, but summative in nature. After reviewing the assessments, teachers would score students, including their grades in the Descriptive Achievement Report. If the students' grade was above 60, they were promoted to the next level (MEP 2020f).

In order to operationalize the final promotion, the Ministry of Public Education organized subjects to evaluate them using different instruments and according to the following distribution (MEP. 2020g):

**Figure #2**  
**Subjects for group #1**

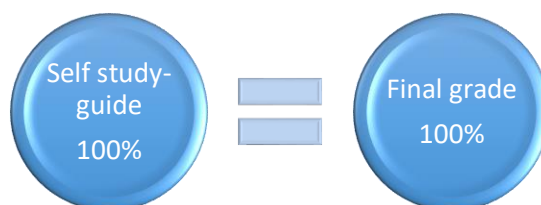


**Note:** The subjects Included in group #1 are the following: Mathematics, Spanish, Social Studies, Science, Biology, Chemistry, Physics, and foreign language. In order to determine the final students' promotion, teachers had to consider 55% from the autonomous Work Guide, and 45% from the Summative Assessment

Instrument to provide the level of achievement and a numerical value to average the final grade. Taken from: *Technical guidelines for learning evaluation in the second period* (p.10) by MEP, 2020g.

**Figure #3**

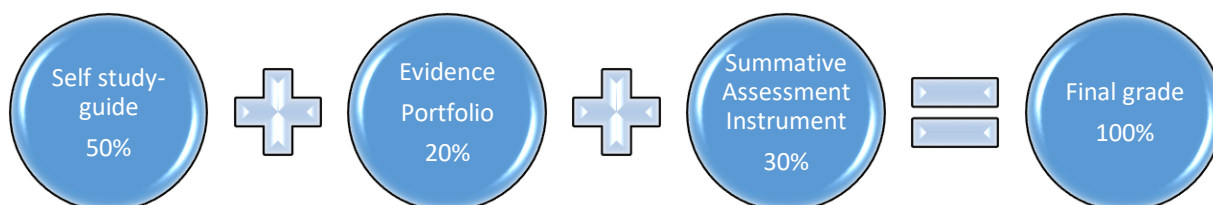
**Subjects for group #2**



Note: The subjects included in group #2 are the following: Plastic Arts, Industrial Arts, Civic Education, Psychology, Home education, Physical Education, Musical Education, Philosophy, Religious Education. In order to determine the student's final promotion, teachers considered 100% of the final grade from the Autonomous Work Guide. Taken from: *Technical guidelines for learning evaluation in the second period* (p.11) by MEP, 2020g

**Figure #4**

**Subjects for group #3**



Note: Group #3 includes subareas, exploratory workshops, Conversation English and technologies. In order to determine the students' final promotion teachers

consider 50% from self-study guide, 20% of the evidence portfolio and 30% from a summative assessment instrument to provide the level of achievement and a numerical value to average the final grade. Taken from: *Technical guidelines for learning evaluation in the second period (p.11)* by MEP, 2020g

### **1.1.2 Problematization**

With the arrival of the COVID-19 pandemic, the teaching staff had begun a process of adaptations to the new strategies required by distance education. The United Nations (2020) stated that the situation has an unparalleled education disruption and is far from over. Therefore, preventing a learning crisis from becoming a general catastrophe requires urgent actions from all. This is a massive effort made in a short time to respond to the shocks to the education system, and it had to be focused on: addressing learning losses and preventing dropouts of marginalized groups, offering skills for employability programs, supporting the teaching profession and teacher readiness, including, and removing the barriers in the data and monitoring of learning, as well as types of education and training.

Several distance learning strategies emanating from the Ministry of Public Education, (MEP) came to demonstrate the organizational capacity of the authorities and the level of receptivity to the changes that this pandemic produced in all social areas. In a very particular way, within the entire panorama and of all the personnel involved in education in Costa Rica. To carry out the different measures of care and support the education system, MEP implemented a series of actions to facilitate the process with the use of technology and digital tools, not

only in the academic but also in the administrative management. The guidelines were created considering the needs and contexts of the students' population and the adjustments over time, according to new regulations established by the corresponding authorities.

A sector that is directly committed to advancing the school year, are teachers, who had to play new roles that they never practiced before. Hence, the need to update digital issues, the approach to the educational community from virtuality, or by physical means, with the intention of supporting the student body, even if there are no face-to-face classes. This had meant a greater effort from each teacher at the preschool, primary and secondary levels.

However, on July 29<sup>th</sup>, 2020, The National Association of Educator (ANDE), expressed disapproval for the Ministry of Public Education guidelines in regard to the assessment of the first semester 2020, without the possibility of providing important suggestion to carry out the process, and not considering teachers overworked.

The specific observations in that announcement were the following:

a. MEP require individual reports for each student in charge and all teachers equally, without considering the different conditions in which they work such as students' levels, specialties, and modalities.

b. Despite the risk of their health, teachers have to commute to schools to collect students' evidence.

c. Technological difficulties for which students are not able to connect with their teachers, implying the problem of not having the Autonomous Work Guide on time. Therefore, teachers must be available, on many occasions after hours of their schedule, to provide follow up and feedback to students. In addition, some teachers must travel long distance to get internet connection, causing exhaustion and economic cost.

d. The situation is also aggravated by the constant changes and improvisations of the Ministry of Public Education on all the reports that teachers must carry out. That generated work overload and severe emotional exhaustions in the midst of the pandemic. (ANDE, 2020)

Teachers and families are closely related in this context because both entities are doing academic work from home. The adaptations to new forms of learning and the link with the educational centers are different since March 16<sup>th</sup>, 2020. Currently, the connection between teachers and the school community were determined by the Autonomous Work Guide, virtual classes through Microsoft TEAMS platform, virtual meetings, and ongoing trainings. In addition, teachers had the responsibility for the preparation of weekly reports, communication with the students and their families, delivery, and reception of printed material in the institutions, among other activities that goes beyond the hours contracted by the Ministry of Public Education.

### **1.1.3 Justification**

The strategies in distance education during the COVID-19 pandemic is a challenge for each teacher in this country, and to know the adaptations made in their teaching practices during the new scenarios is one of the fundamental elements of this research. The United Nations (UN) on their report, "Education during Covid-19 and beyond" mention that from the onset of the pandemic, teachers were immediately tasked with the implementation of distance learning modalities, without sufficient guidance, training, or resources (2020.p14). The systematization of this information gives important results and reveal the reality in which some English Costa Rican educators were living for the 2020 school year.

One aspect that needs to be highlighted is that people are facing a global disease and education was also drastically affected at that level, causing teachers' adjustments to new demands in a short period of time. The International Institute for Higher Education in Latin America and the Caribbean (IESALC) states that although the focus placed on the pandemic is always on students' impact, teachers also suffer significant impact at work and professionally. The majority of teachers did not have previous experience in distance education, and their institutions do not provide enough training, with all the communication media at the disposal to transform the presential classes to a virtual mode. This entry to a complex teaching modality with multiple technological and pedagogical options could result in frustration and overwhelming due to the adaptation to an educational system never experienced before without the corresponding knowledge. (IESALC. 2020).



Hence the reason for the research, that was, the reality that the teaching staff in Costa Rica had to face to carry out the 2020 school year, and that as far as possible, having less impact on learning and human formation of childhood and adolescence in this country. Also, it was important to emphasize the purpose of the research, such as the systematization of the information about the adaptations that each teacher had made during distance education, in response to the suspension of lessons due to the present pandemic. Besides that, the input that this research might represent in decision-making in the national education system to guarantee the labor rights of this very important sector in the life of the country, and the correct functioning of educational activities

Thus, this research organized the antecedents that led to reality during a social and health situation on a global scale, which caused the suspension of face-to-face lessons and led to the practice of other procedures to maintain the continuity of the education process. With this, it also generated various teaching modalities, applicable to the same class group; but broken according to the requirements of each student.

## **1.2 Problem Formulation**

**What type of adaptations in the pedagogical mediation and administrative functions had the distance education strategy of MEP during the COVID-19 pandemic caused in the teaching staff of Liceo San José de Alajuela?**

## **1.3 Objectives**

### **1.3.1 General Objective:**

To know the adaptations in the pedagogical mediations and administrative functions caused by MEP's distance education strategy during the COVID-19 pandemic in the teaching staff of Liceo San José de Alajuela.

### **1.3.2 Specific Objectives:**

- To Identify aspects of the MEP's distance education strategy, during the COVID-19 pandemic, that had forced the English teaching staff of the San José de Alajuela High School to acquire new skills with the use of ICT tools.
- To describe the adaptations developed by teachers to cope with the challenge of distance education strategy.
- To enlist how had the distance education strategy of the MEP, during the COVID-19 pandemic, generated adaptations in the administrative functions of the English teaching staff of the San José de Alajuela High School.

## **1.4 Scope and Limitations**

### **1.4.1 Scopes of the Research**

The research was developed with the teaching staff of Liceo San José de Alajuela who had to adapt to the new demands on distance education, caused by the COVID-19. In the first quarter of 2021, teachers were contacted to administer the research instruments.

### **1.4.2 Limitations of the Study**

The limitations in this research were lack of previously systematized information on this topic in the educational sector, and the school closures caused by COVID-19 that only allows o contact teachers to administer the research instruments by using ICT tools.

**CHAPTER II**  
**THEORETICAL FRAMEWORK**

## **2.1 History, Vision, and Mission of Liceo San José de Alajuela**

The first part of this theoretical framework was a brief description of the Liceo San Jose de Alajuela where the researcher went to obtain the information. That includes their history, mission, vision, and some other details that helped readers understand the context where the researcher went to.

### **Historical Context of Liceo San Jose de Alajuela**

Liceo San José de Alajuela belongs to the Educational Circuit 05 of the Regional Directorate of Education of Alajuela. It was founded in 1974 and situated in Barrio San José de Alajuela, a district of Alajuela, canton, and province of Costa Rica. In its beginnings, it occupied the facilities of the José General de San Martín School, with a population of 150 students. From that year on, one of the institutional concerns was to acquire the necessary infrastructure. In 2000, the institution established a special education area (III and IV Cycle of Special Education). Later in 2003, the construction of a Home Education Workshop and the Academic Classroom for the special education population began.

Currently, the institution serves a population of more than one thousand students, through more than one hundred and ten public employees, including the teaching staff, principal, principal assistant, and administrative assistants.

The following services provided at the institution:

- Educational Innovation Program: Laboratory and Conversational English.
- Advanced French Group.
- Photocopy service within the facilities.
- Students' bus service in districts such as Cacao, Santa Rita-Pueblo Nuevo, El Coyol.

- Highschool cafeteria: selling breakfasts and lunches.
- Free and subsidized student lunch and breakfast.
- Educational informatics.
- Sports area.
- Art groups: International Dance, Theater, Rhythmic Band.
- State Support

### **Mision of the Liceo San Jose de Alajuela**

The mission is to provide a comprehensive education to young people in the San José de Alajuela neighborhood and neighboring places; through the implementation of innovative methodological strategies, which produce critical and creative thinking. In this way, students build a more humane and respectful society for the environment. Likewise, the institution staff fully train to contribute to their insertion into the labor market as professionals or qualified workers in pursuit of social mobility, and above all, as respectful citizens of the highest values.

### **Vision**

To be an avant-garde educational institution in the Central Canton of Alajuela. Where the essential elements: space (infrastructure), technology, spiritual and artistic training, physical activity, civic responsibility, and development of thought (scientific, linguistic, logical, mathematical), are mixed for comprehensive training of students. Through innovative, critical pedagogical action, committed to a fair and responsible society with the environment.

## 2.2 Theoretical Context

### 2.2.1 Distance Education

According to Bušelić, distance education is a field of education that focuses on teaching methods and technology with the aim of delivering teaching to students, who are not physically present in a traditional educational setting such as a classroom (2012). The developing of the teaching learning process in this modality is partially or totally through the information and communication Technology (ICT). On the other hand, Honeyman and Miller describe it as, “A process to create and provide access to learning when the source of information and the learners are separated by time and distance, or both” (1993, cited in Bušelić 2012, p.24). The establishment of this educational system is provided through several methodologies and strategies in which, despite physical distance, there must be a real and significative approach between teachers and students to have a level of recognition an acceptance within the society today.

Sadeghi (2019) mentions that distance learning might not be the best choice for every student; However, there are some suggested advantages as the followings:

#### **Advantages in distance education**

- **Study from anywhere, anytime:** It does not matter the part of the country where students are, they can join a course and start learning.
- **Saving a significant Amount of Money:** The courses offered at distance learning centers are cheaper than the courses provided at traditional education centers.
- **No commuting:** Students do not have to commute in crowded buses, wasting their time and money.

- **Flexibility to Choose:** Different types of distance learning allow learners to set their learning schedule as per their convenience without following a regular schedule of learning.

On the other hand, despite the benefits of distance education through the accessibility, cost, and time, Sadeghi (2019) also recognizes the following disadvantages:

#### **Disadvantages in distance education**

- **High chances of distraction:** According to Bijeesh (2017 cited in Sadeghi 2019), with no faculty around for face-to-face interaction and no classmates who can help with constant reminders about pending assignments, the chances of getting distracted and losing track of deadlines are high.
- **Complicated technology:** Student seeking to enroll for a distance learning program needs to invest in a range of equipment including computer, webcam, and stable internet connection. Moreover, the complicated nature of the technology used in distance learning only limits online education to students who are computer and tech savvy.
- **No Social Interaction:** Learners will often be studying alone, and so they may feel isolated and miss the social physical interaction that comes with attending a traditional classroom. Moreover, they do not have the chance to practice the lessons verbally. In addition, working alone at night caused many complexities and depressing experiences.
- **Difficulty Staying in Contact with Instructors:** When learners have trouble with assignments, they can schedule meeting with the instructors or teachers before or after classes. However, in a distance learning



environment, there are more difficulties getting in contact with the instructors or teachers.

The teaching-learning process seems no longer an issue in this modality, in terms of place, time and cost. Nowadays, most of the population can access to this type of education from where they reside, and it is perhaps, an excellent system to continue and improve the academic and professional development since there are not limitations in access to face to face courses. For instance, the schedule flexibilities enable students' organization of time and assume low cost in commuting to facilities. In addition, the methodologies applied increase the learning autonomy by the use of self-learning mediation strategies that can be reinforced through the Information and Communication Technology tools. (ICT's).

On the other hand, an educational system that differs from the traditional one requires a certain level of adaptations that can be difficult for some learners. For instance, schedule flexibility is sometimes limited and require students' and teachers' participation at specific hours to clarify doubts and queries. Moreover, the lack of interactions affects the students' confidence, ending up in specific learning difficulties when they are not attending on time. Therefore, students' engagement and perseverance and motivation come down. In addition, it implies certain level of isolation of students since they do not have an active intervention of the teacher so their motivation can make can feel their goals impossible to reach.

Martins et al. (2018) in their article, "Distance education: advantages and disadvantages of the point of view of education and society" researched the effectiveness of this modality in relation to others traditional form of teaching. The

results analysis in terms of the benefits for the educational institutions are the following:

**Lower cost:** with distance education the institution can meet a wider audience of students using the same or fewer resources than traditional courses because the courses have a much larger number of students than in conventional classrooms, which ends up resulting in the decrease of the institution costs

**There is no need for a physical space:** the need for a physical space in classroom courses ends up generating a series of bureaucratic and costly processes, such as the need for business license and adjustments in physical facilities. The distance learning courses eliminate this need because the classes can be taught in virtual environments and other contacts that are relevant between student and institution can also be made between this and other non-personal means.

**A single class (video) serves to several classes:** in the case of regular classes, the teacher must teach the same class for various classes at varying times. In distance education, the teacher and tutor have their lessons recorded in video format, for example, and the institution offers these videos to students, or the teacher teaches the content once. There is a need to record a new video just to update the content.

On the other hand, despite the low cost, accessibility concerning classes and classroom, Martins et al also describe in the study the following disadvantages of maintaining distance learning classes:

- **As for learning:** the institution may end up losing its quality when in classroom mode the student has no opportunity to contribute more actively

to the preparation of lessons. During conventional classes, students can contribute with their experiences, questions and considerations and thus make the class take different paths. While in the class distance, the student gets ready the teacher's speech and is unlikely to change the parameters set by the recorded lectures.

- **Feedback student takes longer:** in traditional classes the teacher gets feedback immediately, which does not happen in non-face classes. Therefore, the teacher takes longer to be aware if the student has obtained or not an efficient learning.

**Master of Education:** the vast majority of teachers has both academic and professional experience, training to teach regular classes and are already used to this mode. This may generate some difficulty for teachers to teach classes of action at a distance.

**Cultural aspect:** despite distance education has already been spread throughout the world and has an ever-increasing culture, many students still have certain prejudice with this mode of teaching and believe distance courses are ineffective when compared to classroom courses. (2018)

This study demonstrated the accessibility that this modality has to a greater number of students than in a traditional class. That implies reducing operational cost for the institution, making it for profitable per student. However, Annetta (2004 cited in Martins et.al 2018) points out that the dropout rate in distance education in The United States is 15% higher (35%) than in the traditional teaching (20%) making the distance mode, the same of even more expensive per students at school. On the other hand, the quality of the program

might end up being poor for the lack of students' participation and contribution during classes. Besides that, students may not receive proper and satisfactory feedback when they required it. They also may feel that distance learning classes are not as significant and important as the conventional classes are, diminishing the effectiveness and popularity of the modality. In addition, some of the teachers are not qualified and trained, making more difficult the adaptation

### **2.2.2 Distance learning during COVID-19**

Hyseni and Hoxha point out that the isolation during this pandemic period, has become technology as the most appropriate alternative to keep the education system functional in many parts of the world. The changes to remote learning contribute to improving interactivity and collaboration between those who learn parents, and teachers. However, parents are concerned for their unpreparedness to assist their children in online learning assignments, lack of access to the necessary technology, connectivity, and economic difficulties. On the other hand, teachers' concerns are related to their capacities of conducting an online process, with their level of knowledge, the skills in the use of technology, and the access to it (2020). There is no doubt about the benefits brought out through distance education during Covid-19 pandemic with the struggles that implies to meets students' needs, when they had not been able to attend face to face classes, due to distance and time constraints.

The consequences of not being prepared for this modality affected the educational system efficiency since in many cases, students ended up dropping out the schools, as the opportunity to avoid responsibilities and face new challenges. It also increased their frustrations for the expectations once undertaking at the beginning of the academic learning process, leading them up

to feelings of personal and family failures. In addition, the main exponent of the qualitative and quantitative effectiveness of the school system is based on students' permanence in school, and therefore, the rarely school leaving affects the teaching staff and their value in the society perspective as the fundamental key in the modeling leaders and guidance to become better citizens for developing of their communities.

### **2.2.3 The Effects of Distance learning environment during COVID-19**

UNESCO (2020, cited in Hyseni and Hoxha, 2020) points out some concerns reported by many countries declaring low-level of classroom technology prior to the COVID-19 pandemic. There was a lack of preparation for an abrupt changes and expectations on how the new reality would affect the educational system. Ibid states that the requirements for immediate adjustments to online formats were reported to increase the level of stress and anxiety among teachers in different parts of the world (2020 cited in Hyseni and Hoxha, 2020). In addition to the teaching inexperienced faced with online environment in distance learning, teachers also encountered some other problems related to the increase workload such as planning the best distance educational model to fit the students' needs. During distance education, there was an increasing trend to recognize and value the teachers' role in the transformation of the society. However, it had also caused physical an emotional implication in their life. For instance, exceeding the working hours contracted, suffering cuts in their salary, suffering pain for sickness and lost during the pandemic and scares of getting fired, Therefore, many teachers experienced mental health disorders such as disorientation, anxious, dissatisfaction and depression.

Researchers such as Palmer et al. also point out some other factors that can affect teachers in the process to adapting to changes in the distance learning environment. For example, privacy, economic and working conditions, authority, responsibility, level of self- satisfaction, and the time and dedication for the implementation of new models (2009 cited in Hyseni and Hoxha, 2020). It is essential to underline that teachers were trained to give classes in conventional settings not in distance learning environments. Teachers were forced to do so, and it implied physical and psychological adaptations that are no easy to adjust. Their working from home included issues such as managing the time, remembering regular breaks, organizing meetings, establishing segments to assist students, preparing virtual classes, avoiding unrelated work activities, among some others. In addition, there were also some practical issues in contents for subjects that could not be taught virtually for their nature. However, despite the short comings, the sanitary crisis generated excellent opportunities for teachers to reinforce technical competences, creativity, and innovations.

According to Flamholtz and Randle (2028 cited in Hyseni and Hoxha, 2020), some psychological factors that can influence teachers' ability to be part of the adaptation are discomfort, feeling lost, and experiencing doubt and worry when they depart from what they know, and feel comfortable to something that is unusual and uncomfortable. Some other factors include teachers' stress, accumulation of fatigue, and mental exhaustion that affects not only the resistance to change but also negatively affect their performance and level of satisfaction (Margolis and Nagal 2006 cited in Hyseni and Hoxha, 2020). The tension accumulated by teachers to try to develop their work in unknown conditions might affect their physical and emotional dimension. Therefore, fatigue

and mental exhaustion in teacher occurs because of continuous levels of stress that exceed what is bearable.

#### **2.2.4 Quality of the educational system in distance learning**

Hyseni and Hoxha (2020) carried out a study to analyze the factors that influence the quality of educational systems in the Republic of Kosovo to assist in the adaptation of education strategies and the further organization of online learning, with positive and long-term effects. The findings were considered a great value to policy makers, education leaders and teachers. The goal of the study was to explore and describe concerns about students, parents, and teachers regarding the circumstances caused by the confinements and the perspectives of them, in remote or online learning. For this purpose, there was a semi-structured interview to teachers, comprising the following topics:

- Level of technology use by teachers before the COVID-19 pandemic.
- Methods of lesson implementation in the classroom before the COVID-19 pandemic
- level of teacher concerns; methods of online learning implementation and student assessment
- Assessment of remote learning, challenges, and opportunities
- Attitudes toward remote or online learning
- Level of motivation of teachers to implement online learning.

The study concluded with the following results: For the level of technology used by teachers before the COVID-19, teachers stated that they did not have previous experiences in conducting remote or online learning, and most of the information from the school and communication was transmitted verbally or by

phone with lack of technology training. In terms of methods for the implementation of lessons before COVID-19, participants mentioned that they used a format of lesson implementation similar to the online, in which students have an active role during learning. In the level of teachers' concerns, they stated that the circumstances created by the virus such as home isolation and the changes associated with the organizations of lessons made them feel anxious, confused, insecure, and overloaded. In the case of the methods of online learning implemented and students' assessments, teachers used alternatives online remote or online environments. For instance, in virtual learning, they used Google Meet and Zoom; compilation and placement materials, Google classroom; homework and online test submission through Viper and email; to communicate with students and parents, by Viper and WhatsApp (2020).

Continuing with the study. Hyseni and Hoxha mention that for terms of the evaluation of online assessments of remote learning, challenges and opportunities, teachers mentioned that the quality of the implementation of online education may be affected by organizational factors such as the distribution of information to teachers. Also, students' participation is low with many difficulties in using technological devices. In addition, teachers expressed the necessity of raising their level of knowledge, technological skills, and interactions with students. In regard to attitudes, teachers considered that online learning is an advantage that enable them to be more flexible. Finally, concerning of levels of motivations to implement remote or online learning, the expressions of gratitude from the students' families was a key factor that influenced teacher's motivation. (2020).



The previous study performed in Kosovo with the influence of remote and online learning environment showed similar circumstances in all countries after the COVID-19 pandemic. The world educational system has suffered an abrupt change with the implementation of new strategies to keep students in their learning process, outside of the physical classroom. Every school staff was prepared to assist students in the traditional classroom settings but not in scenarios with no face-to-face classes involved. Teachers did not get previous training to know how to interact with students and the situation raised up many concerns about how to use technological tools and the required technology to work in the new context. Therefore, technological devices with accessibility to internet created a paradigm shift in the use of technology, evidently in the field of education. The study in Kosovo described how teachers needed to overcome issues in the distribution of information and fluent communication within the institution. Moreover, they were able to consider the benefits of using online learning tools to improve skills and student's interaction. For instance, the use of virtual classes in Microsoft Teams and Zoom Platforms, assessments submission through Google Classroom and communication in mobile applications such as WhatsApp and Viber.

### **2.3.1 Information and Communication Technology in Education (ICT)**

The advancement of technological tools in different areas has strongly influenced education, causing an interrelation in the classroom and teacher training. Fallas & Zuñiga, refer to Digital Technologies or Information and Communication Technologies (ICT) as the set of convergent technologies that use digital language to produce, store, process and communicate information in

short periods of time (2010). ICTs allow people to communicate instantaneously and across geographical areas, overcoming borders and promoting process of global connections. The implementation of these type of resources has increased and currently provide useful services such as email, information searching information, downloading of materials online business, among others.

Symphathonia states, “As a result of the spread and the infiltration of ICT, many countries worldwide developed national policies that endorse the use of ICT in education as a means of offering new ways in which quality, effectiveness and efficiency can be improved in teaching and learning fraternities” (2016, p.2). The education systems around the world face the challenge of using information and communication technologies to provide the necessary tools and knowledge. They are the ongoing educational innovation allowing students and teachers to make changes in the classroom environment and the teaching learning process.

Through the development of technology and search for new more efficient forms of communication, ICT tools have become one of the basic pillars in education. Ratheeswar (2018) mentions the following conditions required for an effective power of new technologies:

- Students and teachers must have sufficient access to digital technologies and the Internet in their classrooms, schools, and teacher education institutions.
- High quality, meaningful, and culturally responsive digital content must be available for teachers and learners.
- Teachers must have the knowledge and skills to use the new digital tools and resources to help all students achieve high academic standards.

The challenges that ICTs face in the educational must be assumed for the people involved in the teaching and learning process. Designing of innovate learning environments contributes to the development of competence required by the educational systems and the economy based on revolution of digital technologies. Learning environments are not limited to physical conditions., the amount of information found in the net and the development of different digital devices can modify the nature of a class playing a notable role in the representation, explanation, and demonstration of ideas.

### **2.3.2 Teacher´s training for the use of ICT tools**

The use of ICT´s tools has been widely extended and caused changes in different aspects of human life, Jacovkis mentions that they have impacted profoundly around the world in science, technology and therefore, in the society (2012, cited in Hernandez et al.,2018). They have not only improved the productivity of the educational system, but also the participation in the teachers´ training, and the management of administrative processes. However, the educational system must require the students´ and teachers´ training to generate work and production linked with digital technologies. In Costa Rica, the Ministry of Public Education (MEP), implemented a Policy related to the use of Information and Communication Technology (ICT), and its application to education (2020). The guidance emanating to all public and private schools around the country was addressed to provide orientation, vision, and relevance to consider the effectiveness of technological resources to complement and transform educational environments, into learners centered where students are actively involved in the process.

. UNESCO mentions that the rapid progress of ICT's modifies the way of elaboration, acquisition, and transmission of knowledge. (1998, cited in Hernandez et al.,2018). Teaching is no longer limited to a group of people in a classroom while a teacher exposes the ideas that everyone has to abide by. The new technologies have revolutionized the way information is imparted, modifying the scope of education and extended the distance studies. Shan mentions the following benefits of using ICT in education.

- Assist students in accessing digital information efficiently and effectively
- Support student-centered and self-directed learning
- Produce a creative learning environment
- Promote collaborative learning in a distance-learning environment
- Offer more opportunities to develop critical (higher order) thinking skills
- Improve teaching and learning quality
- Support teaching by facilitating access to course content (2013).

The changes and modifications in society become human beings more creative, critical, and autonomous, searching for acquiring new competences for their development, in a context that is increasingly variable and uncertain. Hernandez et.at state that there is a new challenge in the educational field where the knowledge and use of ICT redefining students and all those agents that surround him. The preparation, training, and proper use of technology as pedagogical tools unable students with an educational accompaniment instrument (2018). Teachers must contribute to the education quality through the transformation of educational practices with the ICT tool support and adapt strategies to guide students towards the use of ICTs. The purpose is to generate

positive changes in the classroom environments and transforming the schools in places of interactive learning.

Hernandez et.al also mention that teachers, faced with a transformative vision of a society that needs to integrate ICT's into the classroom changing, the roles into agents with the ability to generate the necessary skills in a society yearning for technological knowledge (2018). Consequently, ICTs become transforming agents of society and measure of the knowledge generated with the management of the information. According to UNESCO, the successful integration of ICT's depends to a large extent on the teachers' ability to structure the learning environment by organizing the way students acquire cognitive competence and manage to apply it in different situations (2018 cited in Hernandez et. al 2018). The teaching work focuses on taking advantages of the didactic resources offered by ICT such as the combination of text, graphics, sounds, images, animations, and videos to promote the construction of knowledge involving all the senses. That implies the adaptation of new roles for teachers and students.

The integration of ICT in education must be accompany by a series of guidelines to define a framework for decision making, regarding the actions to be taken during the process. Tapia and León make references to three dimensions:

- Identified: Information related to access to, shaping and transformation of new knowledge and digital environment information
- Communication connected with collaboration, teamwork, and technological adaptability

- Ethical and Social impact linked to the competences needed to face the ethical challenges of globalization and the rise of ICT's (Cited in Hernandez 2017)

Therefore, it is essential to establish the relationship of new technologies with the students' development of their ability to learn, search for new information selectively, and to have a critical position on the information available online to understand the virtual community and reinforce collaborative learning. In addition, a multicultural reality online contributes to promote values of tolerance, respect, empathy, among others.

The technological development, specifically in information and communication, offers useful tools in different areas, including education. There are new challenges in the educational system and people must continue a lifelong training process. Hernandez et.al point out that the teaching process must lead to a serious teacher's reflection, not always carried out, on the importance of having knowledge about the proper use of ICT's to achieve their fully integration in education (2018). That also helps to define a flexible and dynamic teacher profile, capable of adapting to the continuous changes that occur in the society. The main objective in the new teachers' role requires skills in digital and technologies is to potentiate their students' abilities to achieve a significant change that made possible for them to respond to the needs demanded by the society.

### **2.3.3 ICT in distance learning in Costa Rica during the Covid 19-pandemic**

On April 2020, the Ministry of Public Education in Costa Rica announced a series of actions to strengthen distance education to support teachers and

students during the sanitary confinement due to COVID-19. One of the measures to face the health crisis was the implementation of the Microsoft Teams application, as the official virtual platform. Martin and Tap describe this technological tool as a cloud app digital hub that brings conversations, meetings, files, and apps together in a Single Learning Management System, allowing its users to run it either in computers or mobiles (2019, p.60). The main objective was to have a digital learning environment where teachers and students could interact through chats, calls, conference, and virtual classes. Also, it allows to work collaboratively by accessing to learning material online and sharing assignments. In addition, Microsoft Teams platform tool integrates all Microsoft Office 365 applications into the fold such as word, excel, power point presentations, among some others, and enable them to be edited in real-time.

Microsoft Teams, as a digital tool, requires that students and teachers maintain full connectivity to implement activities such as taking virtual classes, sharing material and having some other types of interactions. Therefore, only students with internet access could take advantages of this platform. The teaching staff was in charge to organize and implement the corresponding attention to students in this scenario. The Ministry of Public Education implemented steps that teachers needed to follow in order to coordinate the use of the application:

- In virtual synchronous contact, the teacher needs to consider the availability of technological devices and multiple factors such as complex, emotional, social, and economic situations.

- The load academic synchronous, asynchronous and distance activities offered to students, are balanced in regarding to the context, activities, and suggested time for the development.
- Self-study guide constitutes the planning strategies for activities supported with virtual and remote tools to develop in each scenario (MEP, 2020b).

Every teaching school staff, either public or private, had to make sure that students in this scenario were able to use the platform, considering their capacities to perform the tasks without being overwhelmed for the number of assignments for each subject. Besides that, all the activities had to follow the Self-study guide format to maintain records of the objectives accomplished through the corresponding program.

Even though the Ministry of Public Education mention that Microsoft Teams was the official tool in distance education, during the sanitary confinement for COVID-19 pandemic, some other applications were used to maintain interaction with students Deb states, "Since Information and Communication Technologies (ICTs) provide greater opportunity for both teachers and students to adjust learning and teaching to individual needs, so it is necessary to integrate ICT application in School education" (2015, p.72). Deb also summarizes de benefits of ICT application as the following:

- It increases the access to education and improve the quality by developing new ways of interaction, making teaching-learning process more interesting.
- It provides specialized tools for learners with visual, hearing, or mental impairment, so they can acquire knowledge at their own pace.



- It enables the distance education system to be more effective, creating opportunities for lifelong education and enhancing the teacher's quality in terms of teaching and research (2015)

With the ICT applications the educational system is open, inclusive, and intuitive to recognize what students attract more to learn. It also eliminates the barriers of space and time making more accessible the knowledge in whatever condition. Therefore, teachers have been using some other technological tool in distance education to make their work more efficient and accessible to students' necessities. For instance, the use of emails, WhatsApp, Google Classroom, YouTube and Zoom.

#### **2.4.1 Autonomous Learning**

Corea and Sanhueza mention that autonomy is an aim in which most educational programs declare to promote; however, the challenge is how to achieve this goal and the dilemma is to know what teachers and students understand by autonomous learning (2019). The purpose is to enable the students to acquire control of their formative process with the teacher's guide. The Ministry of Public Education defined autonomous learning as the process in which students through the didactic activities designed by the teacher can self-regulate their learning and take awareness of their own cognitive and social affective process. In other words, it is about how students learn the ability to perform task on their own without the presence of teachers, and in some cases, with the support of relatives (MEP, 2020c) Alonazi describes the most emphasizes teachers' roles as the follows:

- Teachers' role as facilitator: "A facilitator provides the technical support by helping learners to plan and carry out their independent learning by means of needs analysis, objective setting, work planning, and materials selecting"
- Teacher's role as Counselor: "teacher functions as counselor, he/she gives advice and helps learners so that they become more efficient learners"
- Teachers' role as sources: "A resource makes his or her knowledge and expertise available to the learners"
- Teacher Role as Manager and Organizer: "In a learner-centered classroom, the teacher should be responsible for organizing different kinds of games and activities such as roleplay, group discussions, presentations and debates (...) different activities need to be effective and suitable for the learners' needs and interests. (2017)"

The role of teachers and their influence lies in the guidance and accompany of the learning process, they are not spectators, only aware of the results but to promote the desire to learn fostering new interest that led students to continue looking for more knowledge.

**Figure #5****Roles in teaching and Counseling**

<b>TEACHING</b>	<b>COUNSELING</b>
1. Setting objectives	1. Eliciting information about aims, needs and wishes
2. Determining course content	2. Why, what for, how, how long: giving information
3. Selecting materials	3. Suggesting materials, suggesting other sources
4. Deciding on time, place and pace	4. Suggesting organization procedures
5. Deciding on learning tasks	5. Suggesting methodology
6. Managing classroom interaction, initiating	6. Listening, responding
7. Monitoring the learning situation	7. Interpreting information
8. Keeping records, setting homework	8. Suggesting record-keeping and planning
9. Presenting vocabulary and grammar	9. Presenting materials
10. Explaining	10. Analyzing techniques
11. Answering questions	11. Offering alternative procedures
12. Marking, grading	12. Suggesting self-assessment tools and techniques
13. Testing	13. Giving feedback on self-assessment
14. Motivating	14. Being positive
15. Rewarding, punishing	15. Supporting

**Note:** This table presents the main teachers' roles as technical support and the strategies to promote the motivation to develop the autonomous work. *Taken from: The Role of Teachers in Promoting Learner Autonomy in Secondary Schools in Saudi Arabia (2017, p.186)*

### **2.4.2 MEP's Autonomous Work Guides (GTA in Spanish)**

The Autonomous Work Guides was a didactic tool that Ministry of Public Education implemented for the distance pedagogical mediation during COVID-19, whose purpose is to support the continuity of the learning process with the support of ICT or printed resources, considering each subject and educational level. The structure was built following three important indicators: planning, self-regulation, and evaluation (MEP 2020d). Teachers was the responsible for curricular decision making and in distance educational support. They needed to know the scenario of each student to determine reinforcing expected learning and when is appropriate to start the approach to new knowledge. (MEP 2020d:). The Work Autonomous Guide was a key instrument to organize the students' pedagogical activities with the purpose of offering the necessary guidelines to integrate the objectives for each subject and orientate methodologically the exercises. For the preparation of the Work Autonomous Guide, teachers had to take into account the following information: a) The mediation strategies must fully respond to the skills, indicator of the expected learning, corresponding to the didactic planning of each month; b) The expected learning indicator and skills in the corresponding month constitute the foundation of the activities propose in the guideline; c) Teacher must design as many guidelines as necessary to comply what is propose in the planning (MEP 2020d: p.8).

For the estimated time to complete the Work Autonomous Guide for each subject, the quantity and frequency depended on the decisions taken between the institutional management and the teaching team in the institution. However, teachers considered the following criteria: students have at least one work to develop daily during the five days of a week, and the activities are carried out in

short times and with the possible conditions at home. The management of the institution develop a weekly schedule with the dates, subjects, and periodicity of delivery to students (MEP 2020d: p.8).

The Ministry of Public Education indicates the next steps to follow during the implementation of the Work Autonomous Guide:

- Teachers perform actions to select the best scenario for each student according to technology and physical resources available, to determine the type of format (digital or physical) implemented in the self-study guideline.
- Based on a previous research of students' conditions at home, teacher adapt the autonomous work in the best way possible to each context. The Directorate on Curriculum Development established a template for the autonomous work, and the teaching and the administrative staff must ensure that the academic load offered to students is balanced considering individual characteristics, expected learning activities and suggested time for the development.
- It must also consider adaptations in materials for students with disability. The teaching staff and the school management must ensure that all students have the corresponding work through digital mechanism or printed.
- Students must develop the self-study guide at home independently or with the support of a family member. (2020d).

The Ministry of Public Education provide the following recommendations for the design of the Autonomous Work Guide, MEP (2020d):

**A. In section 1. "I prepare to solve the Autonomous Work Guide":**

Figure #6



**Autonomous Work Guide Format**

School Name:
Teachers:
Nivel
Subject:

Aspects to verify before I start working:

Materials needed	<p>Suggested materials:</p> <ul style="list-style-type: none"> <li>• Notebook, pencil, pen, eraser, highlighters, etc.</li> <li>• Self- study guide #</li> <li>• Computer &amp; Internet access if possible</li> <li>• If no Internet access, see transcript at the end of this self- study guide</li> </ul>
Conditions of the place to work	<ul style="list-style-type: none"> <li>• Work in a place where you do your assignments and homework daily.</li> </ul>
Expected time to work this self-study guide	<ul style="list-style-type: none"> <li>• This self-study guide will take you 80 minutes to be completed.</li> </ul>

**Note:** In the first section of the self-study guide, students had to complete the administrative part and check that they have all the required material before starting the tasks. In secondary school, the average time to finish the assignments is eighty minutes. *Taken from: Guidelines for the implementation of autonomous work in the strategy, "I learn at home (p.26) by MEP 2020d.*

## B. In section 2. Recalling what I Learned in class format

Figure # 7

### Recalling what I Learned in class format

Instructions	Write, step by step, clear instructions of the task to make
Activities to resume or introduce the new knowledge	<ul style="list-style-type: none"> <li>• Plan strategies to resume or introduce the new knowledge and that allow the construction of processes that enable the achievement of the expected learning.</li> <li>• Plan an activity with which learning develop gradually, progressively and the person student constantly recover what they have learned.</li> <li>• Use drawings, maps or diagrams to help you the student person to review and / or learn. Remember to include different forms of representation of the information.</li> </ul>

**Note:** In this section, teachers must be edit clear instructions about the task and the objectives must be linked with the unit to be developed and in accordance with the corresponding study program. *Taken from: Guidelines for the implementation of autonomous work in the strategy, “I learn at home (p.26) by MEP 2020d.*

## C. In section 3. “I put what I have learned into practice”:

The Ministry of Public Education (2020d) suggested for the preparation of the Autonomous Work Guide, in the subjects of French, English and Italian, the

teaching person must consider the following aspects: students 'age, available resources, socio-cultural aspects and educational needs.

**Figure # 8**

**Putting into practice what I learned in class**

<p><b>Instructions</b></p>	<p>The teaching person....</p> <ul style="list-style-type: none"> <li>• Write clear instructions that specify what I should do, how do it, where do I put the work and what materials are required.</li> <li>• The autonomous work guide will develop, due to its format, the ability to learning to learn (planning, self-regulation, and evaluation), pedagogically you can also use another, another skill as a methodology in the process of building knowledge to achieve learning expected.</li> <li>• The pedagogical mediation used in the GTA is elaborated with the Elements of the subject planning template. support the teacher mediation raised in the GTA while the student person does his work at home</li> </ul>
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**Note:** In this section, it is essential to know what student can really achieve based on the current circumstances. *Taken from: Guidelines for the implementation of autonomous work in the strategy, "I learn at home (p.27) by MEP 2020d.*



MEP (2020d) asked teachers to include in the autonomous work the following aspects: indications, questions, or matrices for self-regulate and evaluation.

**Figure #9**

**Self-regulation and evaluation matrix**

With the self-study guide, I'm going to learn how to learn.	
I check the actions carried out while completing the self-study guide	
Mark with an X on the icon that answers the following questions.	
Did I read the instructions carefully?	 
Did I check on the words that I didn't understand?	 
Did I use the dictionary or asked a relative about the meaning of the words that I didn't understand?	 
Did I read the instructions again when I didn't understand what I had to do?	 
With the self-study guide, I'm going to learn how to learn.	
I self -assess what I did when I finish the study guide.	
Mark with an X on the icon that answers the following questions.	
I proofread what I did in my self-study guide.	 
I checked my self-study guide to make sure that everything is complete.	 
I feel satisfied with the work I did.	 
What was the favorite part of this work?	
What can I improve the next time I work on the self-study guide?	

**Note:** Example of a self-regulation and evaluation matrix recommended in the autonomous work guide. Taken from: *Guidelines for the implementation of autonomous work in the strategy, "I learn at home* (p.27-28) by MEP 2020d.

**Figure #10****Self-evaluation of students' performance level rubric**

Upon completion of the job, I self-assess the level of performance achieved.		
I mark an X above the level that best represents my performance on each indicator.		
Indicators of expected learning  (For writing, you must use a verb in first singular person and understand a single aspect to observe, that provides a single interpretation for the student body).	Performance levels	
	<b>Initial</b>	<b>Intermediate</b>
	<b>Advanced</b>	

**Note:** Example of the rubric, “I self-assess my performance level”, to be included in the Autonomous Work Guide (this rubric must be prepared by each teacher according to the expected learning). *Taken from: Guidelines for the implementation of autonomous work in the strategy, “I learn at home (p.29) by MEP 2020d.*

**2.4.3 MEP's Basic Learning Templates (PAB in Spanish)**

On June 2020, The Ministry of Public Education (2020h) made official a document called, “Base Learning Guide” (GAB). In this resource, MEP established for each signature and educational level, the main learning objectives to achieve during the rest of the 2020 year for the disruption caused by the COVID-19 pandemic. Later on, its name changes to Basic Learning Templates (PAB) to avoid confusion with the Autonomous Work Guide (GTA) and improve

the understanding of each instrument. Both instruments have different functions. PAB's is a monthly plan that integrate and prioritize the expected learning for each study program. On the other hand, GTA's is the methodological instrument sent to students to complete the academic work at home. Based on the prior definitions, the Basic Learning Templates (PAB's) is the didactic planning in the developing of teaching work during the confinement. Its purpose is to respond and trace the main objectives to carry out during the year to guarantee the development of contents required for student advancement.

In order to clarify the Basic Learning Templates (PAB) functions, the Ministry of Public Education (2020h) established the following:

- PAB's are the teaching planning for the second period 2020
- The PAB resource defines the achieved learning, the indicator of the expected, and their performance level rubrics. Through it, teachers plan the GTA for students who must develop the didactic strategy and the evaluation of learning.

The following tables present the 2020 PABs and the performance rubrics:

**Figure #11**

**Plantilla de Aprendizaje Base (PAB) 2020**

Base Learning Template (PAB) 2020

Expected learning base (Fundamental)	Learning expected (Component of the study program)	Learning expected indicators	Didactic strategies suggested

Source: CIRCULAR DDC-0671-07-2020 (p. 3) by MEP 2020h

**Figure #12****Performance level rubric**

Indicator (guidelines for skill development)	Indicator of expected learning	Performance levels		
		Initial	Intermediate	Advanced

**Note:** The performance level rubric derives from the learning indicators expected, presented at the PAB 2020. Its objective is to support the teaching staff about the aspects to develop in the GTA. *Taken from: CIRCULAR DDC-0671-07-2020 (p. 3) by MEP 2020h*

**2.5.1 Assessments in Education**

One of the fundamental purposes, of the evaluation process in education is the students' improvement and development. That is measure through a series of collected information, considering their achievement and performance. Vageriya states, "IT (assessment) is used for the description of systematic gathering information about what learners should know at the end of each unit or lesson (...) In classes that includes observation, weekly examination and regular progress report (2018 p.2). The obtained data provides the strategies to make decisions regarding the learning process. Vageriya describes two types of assessments as follows:

- **Formative assessment:** It is an assessment carried out by a teacher to find the knowledge of a learner at the end of each chapter or unit. The frequency of assessment will be weekly, fortnight, monthly or quarterly. A

learner can adopt new principles to improve his performance in next examination

- **Summative assessment:** It is an assessment which is carried out at the end of semester or year to evaluate the overall performance of a candidate. It is also known as term examination or cumulative examination. It will be in term of percentage, grades or marks. It is also useful for the measurement of course outcome. It is prepared to determine the extent to which the instructional objectives have been achieved. This report is very useful for accreditation, grant and marketing of institute. “Summative” assessment is also known as “evaluation (2018)

The difference between these two assessments lies on the educational processes in regards of short- and long-term goals, where teachers need to shape the learning process along the course and also establish final scores or reporting accomplishments. The formative assessment is an individual approach to provide feedback. On the other hand, summative assessments consider grades and judging of learning qualities. However, both instruments are complementary to analyze forms of learning considering abilities and competences.

### **2.5.2 Assessments in education during Covid-19 pandemic**

Due to the arrival of the covid-19 pandemic, the different educational systems around the world put the distance education strategy into practice. One of the greatest challenges was the process of assessing learning outcome since considering the lack of experience in this type of modality. In order to continue helping students at home, it was important to monitor the students learning

progress, making sure of the retention of skills and the learning of new ones. Therefore, The American Physiological Association (APA, 2020) mention the following tips for assessing and monitoring students learning during COVID-19 pandemic:

- Set specific, realistic goals for each lesson and explain how learning will be assessed.
- Intersperse two or three assessment questions periodically during online instruction.
- Use a sufficient number of questions to determine whether students have met goals for each lesson.
- Discuss student progress on a regular basis with students, parents, and teachers
- Make instructional decisions promptly after collecting assessment information.
- Teachers, parents, and students should remember that the same assessment may have different outcomes for students from different cultures, communities, homes, income levels, or those who speak different languages.
- Upon return to school, use information from summative assessments, if available, to describe student progress during COVID-19 and at-home learning.
- Given that students' social-emotional wellness affects learning, it is important that parents and teachers check in with students.
- Any important academic or social decisions made by parents or teachers should be based on evidence from formative and summative assessment.

- Parents and teachers should practice self-care

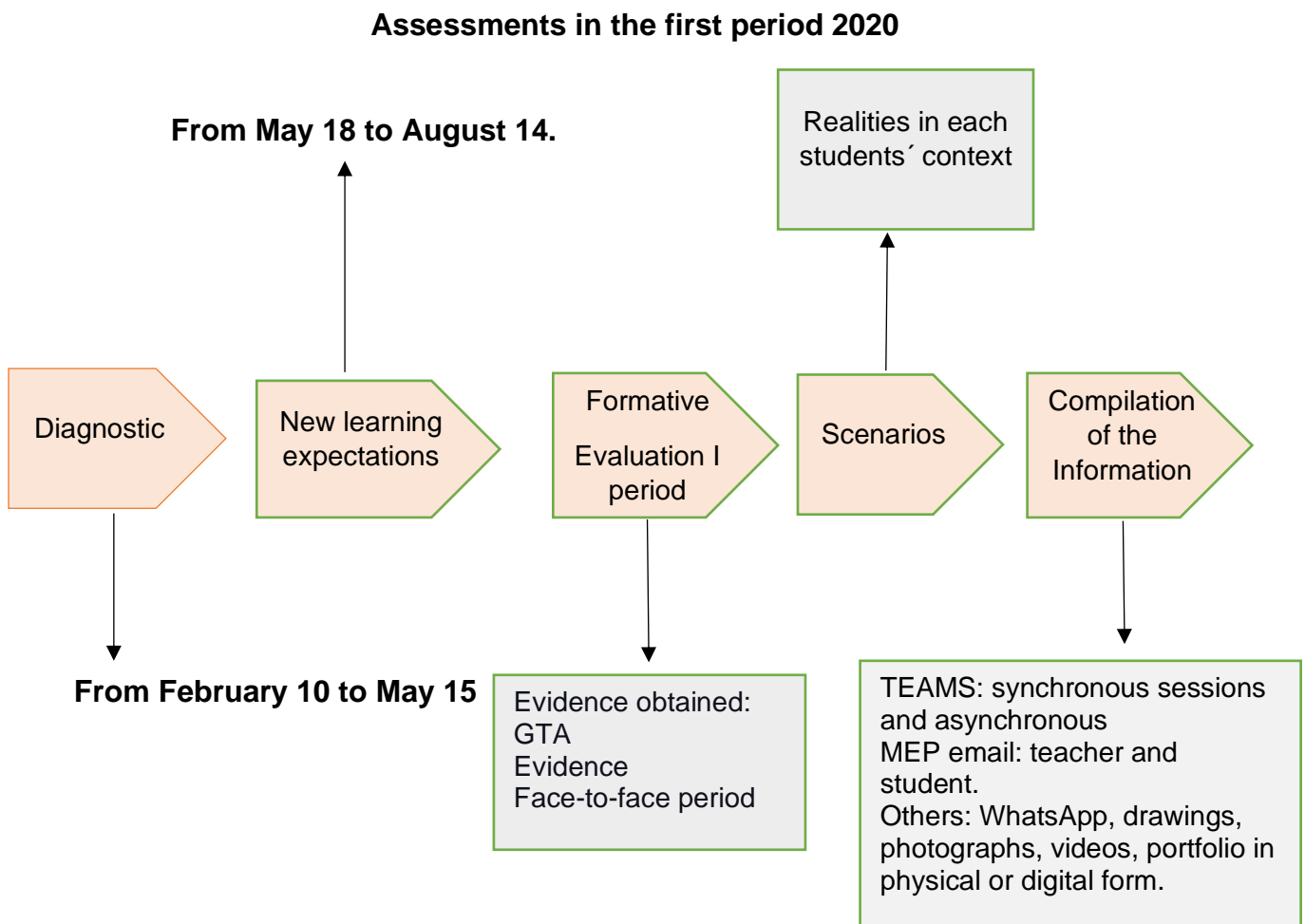
The American Psychological Association (APA) distinguishes important guidelines to carry out the assessment process throughout distance education based on the inexperienced in this type of modality. Therefore, the teacher's role is essential to motivate the student in the learning process by guiding them in skills improvement. Parents also have their part in the students' commitment to fulfilling their academic responsibilities

### **2.5.3 MEP's Assessment strategies during COVID-19 pandemic**

Part of the Ministry of Public Education strategy during the first semester of 2020 was to apply a formative assessment through the registration of the Autonomous Work Guide (GTA) and any other evidence in relation of expected learning indicators (2020d). The purpose of it was to prepare a qualitative performance report for that period. Teachers were in charge of the elaboration of the report to deliver it to parents or students' legal guardians. The criteria to evaluate the performance level were not reached, in progress, and reached. The development of the GTA and the evaluation of the performances demonstrated by the students allow teachers to make decisions oriented towards the feedback of the process.

The Ministry of Public education elaborated some templates for the descriptive achievement report during the I semester for elementary and secondary school. The documents were more than a simple report since, in there, teachers registered the final assessments ins the distance educational process. The precise information to be considered for the preparation of the descriptive report of achievements for the first period is established in the following figure:

Figure #13



**Note:** This figure shows the assessment process in the first period, 2020. It began with the diagnostic assessment at the beginning of the year and the objectives covered before May 15<sup>th</sup>. After that, teachers started to collect evidence through portfolios, the Autonomous Work Guide and some other assessment obtained prior to the school closures. Teachers also compiled information through different technological applications for students with connectivity and printed material for students who required it. *Taken from: PIAD digital template for the Achievement Descriptive Report of I semester 2020, (p.12) by MEP 2020i.*

In September 2020, The Ministry of Public Education established the final students' promotion in the second period of the school year, reforming the

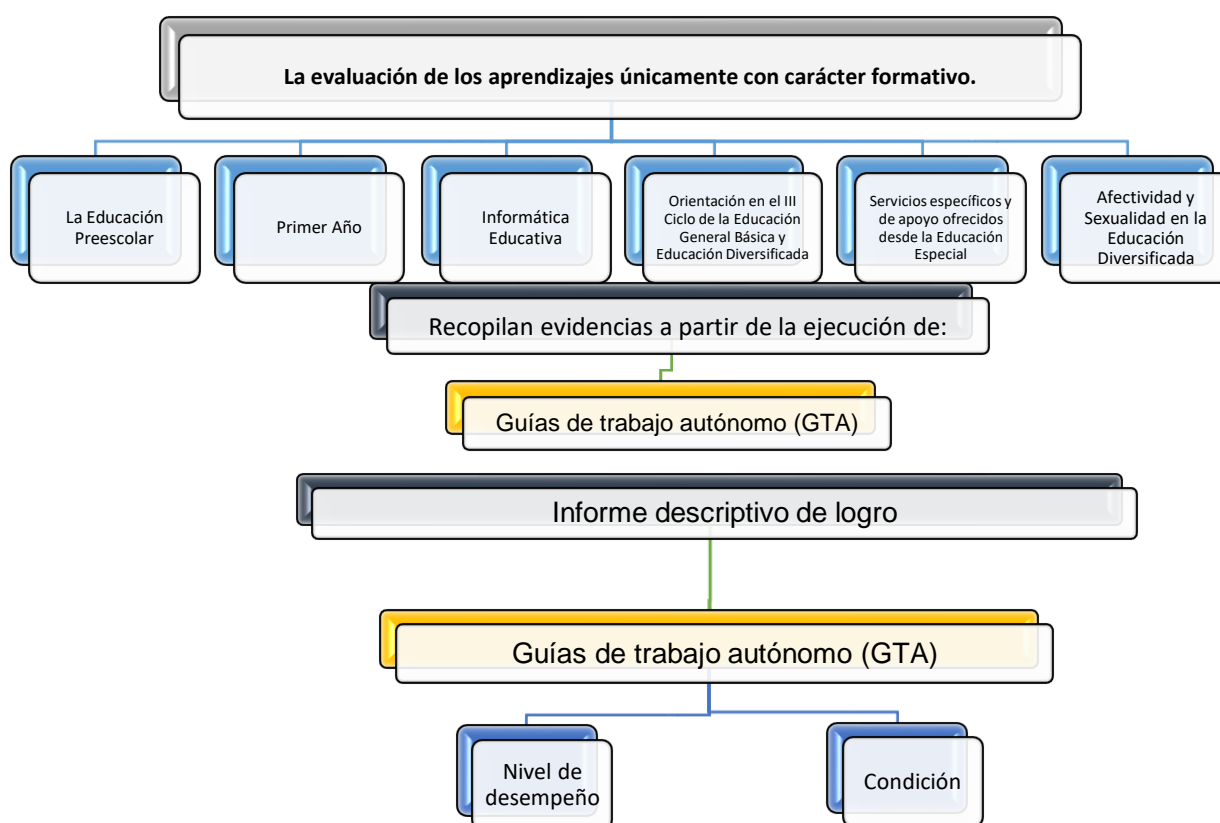


Learning Assessment Regulation. Taking into consideration the nature of each subject, they created the following groups (MEP 2020g):

- ❖ **The evaluation of learning only with a formative nature, including:** Preschool Education, the first year of General Basic Education, affectivity, and Integral Sexuality in the third cycle of General Basic Education and Diversified Education, among some others

**Figure #14**

### Learning evaluation only for formative purposes.



**Note:** For the subject of group #1, teachers elaborated the Achievement Descriptive Report only with the information provided by the Autonomous Work Guide. Taken from: *Technical guidelines for learning evaluation in the second period 2020* (p.9) by MEP 2020g

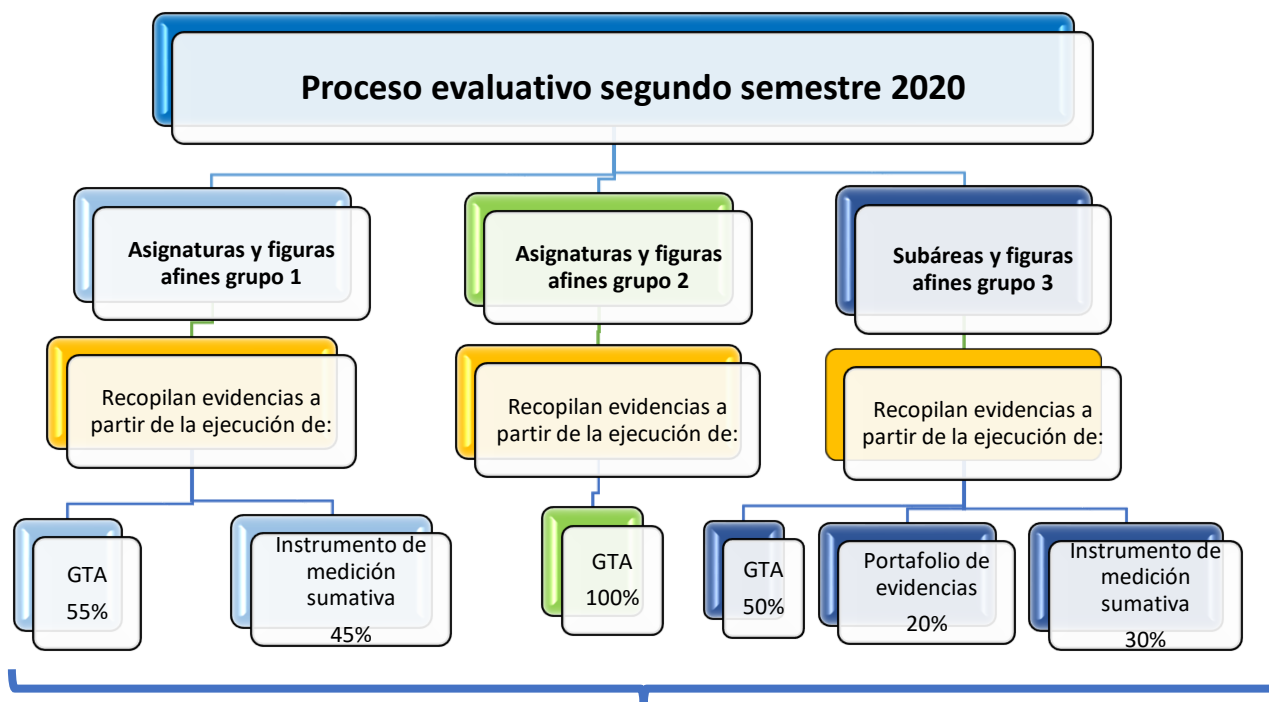
- ❖ **The evaluation of learning in subjects such as:** Math, Spanish, Social Studies, Science, Biology, Chemistry, Physics, and Foreign Language. They belonged to group #1 that provides an achievement level and a numerical value that were averaged for the final grade of the student. The final promotion considered 55% in Autonomous Work Guide and 45% through a summative assessment instrument.
- ❖ **Subjects, workshops, optional modules, periods and courses did not include in the previous point, as well as the subjects of indigenous languages and indigenous cultures (Group 2).** To define the final promotion, teachers considered the information collected based on the autonomous work guides, which had a 100% grade.
- ❖ **The subareas, exploratory workshops, conversational English, technologies, all these from Technical Education (Group 3).** To define the final promotion of the person student was considered the information collected from the Autonomous Work Guides (50%), the elaboration of the portfolio of evidence (20%), and the summative evaluation instrument (30%)

For the second period of the 2020 school year, the development of the Autonomous Work Guides continues, which constituted the didactic tool through which the monitoring of the educational process was guaranteed.

The planning, development and evaluation of the Autonomous Work Guide constituted an act of permanent, dynamic reflection, and inherent to the process itself.

Figure #15

### Evaluation process second semester 2020



Note: This figure summarizes how the subjects were integrated in different groups to define the best way to assign a percentage for the final promotion.

*Taken from: Technical guidelines for learning evaluation in the second period 2020 (p.12) by MEP 2020g*

#### 2.6.1 Teleworking definition and implementations in distance education

The need that raised for the teaching staff to maintain contact with their superiors and students through digital platforms to develop the distance education strategy during the health emergency due to the COVID -19 pandemic demonstrated that in education also teleworking was possible, under specific circumstances. An approximate definition of telework is the use of information and communications technologies (ICTs), such as smartphones, tablets, laptops, and desktop computers, for work that is performed outside the employer's premises (Eurofound and ILO, 2017 as cited in Teleworking during COVID-19).

2020). Employees can complete different tasks almost if they were in the workplace. This type of job offers some benefits for both the employee and the company. For instance, the investment of time to commute from home to the office is avoided. This also makes possible for a person to work in a foreign country without any inconvenience. Teleworking is presented as an appropriate option for the current circumstances. It takes advantages of updating technologies to expand job opportunities meanwhile reducing maintenance costs.

In the other hand, technology makes the presence of part of all the workforce no longer necessary to perform certain tasks since people can do it remotely. Rosenfield and Alves (as cited in Martins 2018) point out the following ways to implement teleworking:

- **Work from home:** also identified by the term small office/home office, it is the work done at the home of the worker
- **Work from satellite offices:** workers perform their duties in scattered small units of a central company.
- **Work from telecentres:** the work is carried out in establishments usually located next to the home of the employee that offer work positions or several telematic organizations or services to remote clients.
- **Mobile work:** outside the home or main office, comprising business or field trips and work at the client's premises
- **Work from remote or offshore companies:** call-centers or teleservices through which firms install satellite offices or subcontract

telecommunication companies from other parts of the globe with cheaper labor force.

- **Informal work or mixed telework arrangement** with the employer to work a few hours outside the company.

Teleworking is a work activity taking outside the organization in which all processes are centralized. It uses technology as the main tool to facilitate communication and interactions between the parties without needing a specific place to accomplish functions. In addition, this is an organizational model different from the traditional one that reshapes the internal communication form in an organization, generating new mechanisms of control and monitoring tasks. The health crisis caused by COVID-19 generated in many companies the need to implement the telework model in order to continue with their activity and education systems would not be the exception. Remote working became essential for institutions to remain operational, and the employee staff can have access to the applications and data needed to work from any device, location, and connectivity.

### **2.6.2 Teleworking in distance Education**

Filardi et al mention that a modern state is based on an innovative model of public employment, able to incorporate tools such as teleworking and the use of Information and Communication Technology to respond to society's demand efficiently and fast. However, teleworking has been more developed in private companies, taking advantages of the increases of new technologies that have contributed to the organizational flexibility and management process (2020). Not all the organizations are at the same starting point in terms of implementing

teleworking even with the consequent of lockdown. While many private companies are endowed with the means and digital environment to implement remote work, most of the public institutions are far from those capacities. Considering the high level of information, the countries required to approve laws to promote teleworking in public administrations.

The Ministry of Education in Costa Rica (MEP) has been emphatic that distance learning is not synonymous of teleworking; however, teleworking was one of the activities included in the distance learning strategies during the Covid-19 pandemic. For instance, it took an effective role in the pedagogical mediation and administrative functions, involving activities in distance environments where the main approach was through the implementation of Information Communication Technology tools (ICT) from home. Fernandez, mention that the MEP's guideline published back in in April 2020, established scenarios for pedagogical mediation in distance learning that made clear distinctions between those who had and those who did not have access to technological devices and connectivity at home. (2020).

The categorization of the possible scenarios established by the Ministry of Public Education (MEP) determined the educational support required in each student's case based on their financial context. The resources used to assist them varied from digital to printed material, according to what they needed to develop meaningful learning experiences while covering all possible settings. It became a challenge for the education system to respond quickly and efficiently and an opportunity for technological innovation in the educational field through the development of new skills and competences, in teachers and students from home and no longer in conventional classes. In addition, teachers were required

to start generating reports to the management staff and parents to supervise and control students' performance and improvements, as part of their teleworking tasks.

### **2.7.3 Teachers 'Administrative functions during COVID 19-pandemic**

Faradila et al (2017) points out that teachers are usually responsible to teach and educate students to achieve the objectives of teaching and learning preplanned on the designated syllabus by the school. However, nowadays the tasks of teachers are more challenging. Teachers also have clerical duties apart from teaching such as be a facilitator, motivator, planner, curriculum advisor, manage student's data, discipline and more. In some case, the process of manually managing this heavy workload makes a negative impact on the teachers' daily routine. As the increases tasks while none have been taking away, teachers have less time available to complete each task. In this sense, teachers must carry out administrative tasks within the classroom. even though planning is the main activity to execute. Therefore, Taharim et.al (Cited in Jacobson, 2017) mentions that the problem of managing the clerical work burden upon teachers is a universally accepted issue, and some countries have taken necessary steps to reduce the workload, so teachers can focus more in their daily academic tasks.

The stages and activities expected for developing the distance educational process, made changes in the teachers' administrative functions in Costa Rica. The Ministry of Public Education, in their document, "*Guidance for educational intervention in educational centers before the COVID-19*" established the following teachers' expected actions for the developing of the distance education strategy for the four scenarios:

- Provides to the immediate management with data to know the initial condition to access to technological resources and connectivity when requested. The required data are the following:
  - a) students have their technological resources to interact,
  - b) student have technological equipment provided by MEP's programs educational or with private institutions,
  - c) students neither have technological resources nor connectivity.
- Coordinate with their immediate management to analyze the solution options when students do not have the technological conditions for access to the virtual work platform.
- Identify the conditions of access and connectivity to technology and resources with their students and communicate promptly to their superiors these conditions, contributing ideas and strategies to enable the continuity of the educational process (and what is required for this).
- Applies cooperation and collaboration strategies between peers (teachers) to optimize virtual tools that contribute to pedagogical mediation.
- Inquire about the training and self-training options offered by MEP, either through institutional email or some other means.
- Request the support or the corresponding advice, from the immediate leadership and the pedagogical consultancies of the Regional Directorate of Education, when it is required to meet specific needs of the student population.
- Designs and shares, with its immediate leadership, the schedule of virtual or remote organization and execution activities, equivalent to the weekly face-to-face session, integrating activities such as: Planning of activities,



schedule for review of work assigned to students, design of communication strategies and individual feedback to promote learning and development of skills and competences, schedule of virtual meetings with specific advisers (when so established by the Regional Directorate of Education).

- Participate in virtual meetings with the immediate leadership to report their progress or particular situations (2020a).

People who render teleworking services might extend their schedule beyond what is stipulated in the labor agreement. That was the experience faced by many teachers during the COVID-19 pandemic. They received more pressure for the immediate management and the government to fulfil their multiple functions. However, those functions were not only pedagogical but also administrative such as the ones previously mentioned.

#### **2.7.4 Effects of teleworking during pandemic**

The Occupational Health Council (CSO) in Costa Rica identify early signals to know when employees in teleworking during COVID-19 were exposed to direct or indirect significance labor stress as follows:

- Psychological manifestations: mood changes (anxiety, feelings of guilt, irritability, sadness, crying), low tolerance, frustration, feeling of exhaustion, deterioration in the quality of life, irony, distrust, hostility, impotence, superficiality in contact with others, isolation.
- Physical manifestations: general discomfort, chronic fatigue, physiological alterations such as headaches, sleep disorders, alterations eating

disorders, gastrointestinal disorders, aches and pains muscle, hypertension, migraine, allergies, insomnia, and some others.

- Cognitive manifestations: lack of concentration and focus, inattention, slowness, alterations in memory processes, disorientation, difficulties for decision making and problem-solving.
- Behavioral manifestations: use of psychoactive substances (legal and illegal), difficulty in enjoying activities of daily living, leisure, and recreation, high-risk behaviors, increased hyperactive and aggressive behaviors.
- Social manifestations: low social participation, isolation, limited leisure and recreation activities, affective distancing, affectation of interpersonal relationships within and outside of work (2020).

The psychological symptoms are the most common symptom in any life situation. However, when arise to physical consequences on people's health, they tend to pay more attention to those who suffer from them and those around. The consequences can be temporary or chronic. In the case of education, during the sanitary crisis, some teachers suffered physical and phycological manifestations, and there were also personal and family crisis due to the stress caused by teleworking. For example, the pressure to maintain students´ actively working with the use of technological devices and applications, supposed a challenge for teachers who had to learn the usage in a short period. In addition, they needed to keep students from non-technological devices and internet working in distance learning activities, with less interaction and opportunities to provide feedback.

# **CHAPTER III**

## **METHODOLOGICAL FRAMEWORK**

### **3. Methodological Framework**

In the Methodological framework chapter, the researcher presented the purpose of the project based on the new adaptations faced by the English teachers in Liceo San José de Alajuela, due to the implementation of distance learning strategies from the Ministry of Public Education, as a result of the confinement during the COVID-19 pandemic. This is a mixed research that included quantitative and qualitative techniques to collect data and the corresponding analysis. The sources and subjects of the information had been carefully selected according to some characteristics that the researcher considered as requirements to obtain accurate findings to understand the phenomenon.

#### **3.1 Type of Research**

##### **3.1.1 Purpose of the research**

The purpose of this study was to systematize the English teachers' adaptations in the pedagogical mediation and administrative functions in distance education, as a result of COVID-19 pandemic and the strategy implemented by the Ministry of Public Education in Costa Rica, during the confinement and high school closure. It included an overall description of the MEP's guidelines nationwide to determine the best actions to follow in order to continue with the students' learning process but carried out in different scenarios. On the other hand, it also involved the effects of the new reality faced by teachers because of the unexpected changes and lack of training to the use of technological tools.

The study also intended to bring answers in real life situations that needed changes or improvement. Therefore, the project referred to Applied Research

rather than Theoretical, as Babbie (2013, p.18 cited in Gooyerta and Gröblerb, 2018, p. 575) states, “The main difference is that the purpose of theoretical research is to increase understanding (ideally, by developing new theory or scrutinizing existing theory), while applied research is “deliberately intended to bring about social change”. The analysis of the teachers’ adaptations to new strategies implemented by MEP during the COVID-19 pandemic was completely new since is part of the decisions made, by most of the educational systems around the world during the 2020 school year.

### **3.1.2 Projects’ Delimitation**

For the purpose of this research, a cross sectional study was carried out to at one time in a short period. Levin (2006, p.24) states, “The purpose of the [cross-sectional] study was to find the prevalence of the outcome of interest, for the population or subgroups within the population at a given timepoint”. Therefore, the topic developed in this work was the English teaching adaptations in Liceo San Jose de Alajuela, to the MEP’s strategies during 2020 in the pandemic context. The benefits obtained from this type of study in a short period of time allowed the intervention to change, transform, or adapt to specific issues without waiting until the situation is harder to deal with and more difficult to resolve.

### **3.1.3 The Scope of the Research**

Simon and Goes (2013 p.1) states, “The scope of the study refers to the parameter under which the study will be operating” In terms of extension, the current research came about in a specific place in Costa Rica to analyze teaching adaptations in pedagogical mediations and administrative functions during 2020. That placed the research in a “Macro” frame to determine the perception of the

institution in terms of the changes that have happened in the last year, for the pandemic effects in term of distance education.

### **3.1.4 Nature of the Research**

In order to be most suitable for the formulated research question, the data collection and analysis procedures fell under the mixed method research. Niglas (2014, p) refers it as, “empirical research that involves the collection and analysis of both qualitative and quantitative data”. This was a social research focused on education in which the research applied a questionnaire to cover most of the population, and its analysis required the tabulation of data. In addition, the use of in-depth interview allowed the researcher to identify teachers’ adaptations in pedagogical mediations and administrative functions during COVID-19 pandemic and its effects. Hammersley (1993 cited in Johnstone, 2015 p.17-18) propose three broad purposes for the application of mixed-methods in social research:

- a. Triangulation, which refers to the use of quantitative research to corroborate qualitative findings, or vice versa (...) Triangulation is particularly useful to a lot of small-scale researchers, as it might be difficult to draw inferences from a data from a small number of interviews without a larger sample of quantitative questionnaire data to confirm suppositions, for example.
- b. Facilitation, which is when one research strategy is used to make using another possible, or more effective. So, for example qualitative data derived from interviews may be used to formulate, or to sharpen, a hypothesis that will inform the research questions underlying a quantitative questionnaire (...)
- c. Complementarity, which refers to two different research strategies being used so that different aspects of an investigation can be made to ‘speak’ to each other.

The mixed method research is not a simple combination of specific characteristics. Both are complements to understand the educational phenomena from different perspectives by covering all possible data. The use of several strategies helped the researchers to go deeper in their project than through the application of only one method.

### **3.1.5. Character of the Research**

The present project applied an ethnographic research approach for descriptions and interpretation of adaptations, in the pedagogical mediation and administrative functions of a specific group of teachers in Liceo San José de Alajuela. Reeves et, al (2013, p.1366) provides de following definition, “Ethnography is the study of social interaction and culture groups, whether these groups are defined as societies, communities, organizations or teams” Teachers engage in this approach has the opportunity to develop a wide range of studies about community, contexts, their own practices, and reflections over their pedagogical mediations. Therefore, this approach is very useful in the education field since the ethnography approach focuses on what is happening in a school environment on a daily basis to obtain information, and conclusions that can facilitate the understanding of the educational practices.

### **3.2. Subjects and sources of information**

The subjects and sources of information such as participants, literature review sources, the institutions where the research took places, and the instruments were the elements used for the structure of the Methodological Framework, the Methodological Framework, and the collection of data for the corresponding posteriori analysis.

### **3.2.1 Units of Analysis**

#### **Subjects**

Martínez et al (2016, p.326) states, "...the target population corresponds to the entire set of subjects whose characteristics are of interest to the research team" For the purpose of this research, the participants were the teachers of Liceo San José de Alajuela. They were the target population who had the challenge to adapt to new pedagogical mediations and administrative functions to accomplish the distance education strategies implemented by the Ministry of Education in Costa Rica.

The participants selected were part of the educational process since the beginning of 2020 when Costa Ricans initiated the school year. They also had the MEP's orientations in regard to the institutions' closure for the first cases of people with COVID-19. After that, they received instructions in terms of teaching in a distance learning environment and maintaining contact with students, until the MEP, implemented the Microsoft Teams Platform to start virtual learning classes, and some other activities. Those teachers had training for the use of Information and Communication Technology (TIC's). Finally, they ended up the school year generating final reports to parents, students, and the school management to promote students to higher levels.

#### **Sources of information**

The sources of information were all documentation required to make the research possible and support the analysis of the data collected by contrasting



and comparing the information gathered, through the participants and the theory. This section presents primary, secondary, and tertiary sources.

The Ministry of Public Education in Costa Rica implemented a strategy for distance education during COVID-19 pandemic, and teachers made adaptations to adapt to it. Since it was an unexpected experience in the country in a short period of time, there were not academic studies in regards of the effects in terms of education. Therefore, this research was considered new in this field of education. However, there were interesting information to address the issues such as the MEP's guidance for intervention and support in educational centers to continue the educational process, under different scenarios and modalities.

In addition, The United Nations published sources such as the article, "Brief: Education during COVID-19 and beyond" where they described the effects of the pandemic in the education systems around the world, and the risk of students leaving the school before graduating. These types of information supported the researcher project and provided awareness of the context and future dissertations.

### **3.2 2 Primary Source of Data**

The National Library of Jamaica defines, "Primary sources are documents, artistic works and objects that were created during the time period being studied (...) examples are diaries, letters, government records, newspaper, articles, journals and maps (2013, p.2). Some of the primary source documents used for the purpose of the research are, "Guidance for Educational intervention in educational centers before the COVID-19" and "The impact of COVID-19 on education and on the well-being of teachers, parents, and students: Challenges

related to remote (online) learning and opportunities for advancing the quality of education,

### **3.2.3 Secondary Source of Data**

The National Library of Jamaica states, “Secondary sources are analytical works that comment on and interpret other works as primary (...) examples of secondary sources include textbooks, biographies, newspapers articles, movies, stories and musical recordings”. (2013, p.4.)

As a secondary source, Fallas & Zuñiga wrote an article where they analyze the use of Digital information technology and communication in Costa Rican Education that supports, the definition of convergent technologies for digital language. Some other sources are, “*Clerical work for school teachers: A burden or a responsibility?*”, “*Teaching with Teams: An introduction to teaching an undergraduate law module using Microsoft Teams*. Innovative Practice in Higher Education” and “*Application of ICTs in Teaching-Learning Process*. International Research Journal of Interdisciplinary & Multidisciplinary Studies”

### **3.2.4 Thirdly Sources of Data**

The Sotheby’s Institute (2020) explain that thirdly sources are those that collect information sources primary or secondary. The objective is to search for data to get a general idea or some topics; For instance, bibliographies, directories, journal titles etc. (2015) An example of secondary source in this research was a study of Filardi and Castro (2020) talking about the advantages and disadvantages in teleworking in Brazilian Public Administration.

### **3.3 Sampling Selection**

#### **3.3.1 Population**

Majid mentioned that the population is the study target intended to treat. He also states that in some research is required to describe characteristics from them such as their age, ethnicity, socioeconomic status, education, work statuses and so on. The eligibility criteria will optimize the recruitment and retention (2018). For the purpose of this project, the population required to meet some characteristics to determine its effectiveness. In this case, English teachers of Liceo San José de Alajuela, who were involved in the whole process of distance education learning during the COVID-19 pandemic in 2019

The English teaching staff of Liceo San Jose de Alajuela received general orientation by the Ministry of Education and the school management. They performed similar activities for the effect of this research such as the elaboration of pedagogical mediations for virtual classes, trainings for the use of the Microsoft Team platform and technological tools, planning the Autonomous Work Guide to upload it in Microsoft Teams or some other platforms. In addition, they also prepared printed material for students without connectivity and descriptive evaluation reports for the school's community and management.

#### **3.3.2 The Sample**

Majid (2018, p.3) states, "Sampling is the process of selecting a statistically representative sample of the individuals from the population of interest (...) is an important tool for research studies because the population of interest usually consists of too many individuals for any research project to include as participants". Small population are the sample to carry out the research; however,

it is representative to identify causes of the issues studied. Even though the population have similar characteristics, there are many factors that affected their participation in this research such as availability, disposition, motivation, and the researcher judgment. In this mixed research approach, the researcher criteria are fundamental to select the sample according to the level of experience. and persona contact with each participant in the educational setting.

### **3.3.3 Nonprobability Research**

Showkat and Parveen mention the two most important techniques to select a representative sample of the population that makes the research more accurate and economical: probability sampling and non-probability sampling (2017). The main objective to obtain a reliable sample is to estimate the important characteristics to analyze from the population. Showkat and Parveen state in the same document that in probability sampling, each sample has the same possibilities to be chosen. They also point out the following sample techniques (2017):

- Simple Random Sampling

- Stratified Random Sampling

- Systematic Random Sampling

- Cluster Sampling

- Multi-stage Systematic Sampling

On the hand, the non-probability research technique instead on randomization, the researcher selected participants involving judgment and the findings cannot go beyond that particular sample. (Showkat and Parveen, 2017). Unlike the probability sampling, the non-probability sampling, obtain the sample without considering that all the individuals have equal possibilities for the

selection. Showkat and Parveen point out some of the following sampling techniques:

Convenience Sampling

Purposive Sampling

Quota Sampling

Snowball sampling (2017)

For the purpose of this work, teachers were selected using the non-probability technique since the qualitative method required the researchers' experience to analyze information by the consideration of specific characteristics from the sample such as: being part of the teaching staff of Liceo San José de Alajuela and working during the implementation of the MEP's distance learning strategy, due to the Covid-19 pandemic in the 2020 school year.

### **3. 4 Techniques and instruments to collect information**

According to Canals the methods used to collect data are determined for the research questions and objectives (2017). The aim of this project was to incorporate qualitative and quantitative methods that serve to provide detailed information enabling to address the objectives and formulation problem to ensure the validation of the data collected.

#### **3.4.1 Techniques used for the data gathering**

For the gathering of data, the researcher included two different techniques:

The Interview and the Survey

The Interview

Fox mentioned that an interview is a data gathering technique that involves verbal communication between the researcher and the participants

(2009). It is a basic tool in the qualitative method since it allows the researcher to maintain closer to the participants and try to get a friendly conversation with them. The purpose is that the population selected can feel open to communicate information than by other means would never do it. However, the abilities of the interviewers may have impact in the veracity of the information gather, as Fox states (2009, p.4), "The quality of the data collected in an interview will depend on both the interview design and on the skill of the interviewer. Therefore, the people in charge of the interview needs to be careful in order to obtain accurate information from the participants

Oltman points out that in the past three decades the telephone interview has become more and more common due to the growing of new communication forms (2016). That has been even farther with the use of technological tools where the participants can set up virtual interviews in long distance without wasting time and money. Adhabi and Blash present the following advantages and disadvantages of interviews: The flexibility of explaining issues based on how well the participants know. The interviewer can make interferences during the interview to ensure that the subjects understand the topics or questions. In addition, the interviewers get used to the use of personal skills to explore on significant issues (2017). Those advantages of using the interview technique were required to interview the English teachers, so they describe some of the main adaptations in the distance education strategy implemented by MEP during COVID-19 pandemic.

For the survey technique, the instrument in use to gather the information was the semi-structured interview that enables the researcher to include additional questions during the conversation as cited by Adhabi and Blash (2017,

p.89), "...unlike the structured, semi-structured interviews have no rigid adherence. Their implementation is dependent on how the interviewee responds to the question or topics laid across by the researcher".

### **The survey**

Ponto defines the survey research as the gathering of information from an individual sample based on their responses to questions. Researcher can use it in different approaches. For instance, questionnaires for numerically rated items in quantitative research, open ended questions for qualitative research or both strategies in the mixed method (2015). The advantages of using this technique rely on its flexibility and easy distribution through printing material or technological applications such as Microsoft of Google Form.

That technique allowed the researcher during the confinement and school closure for the COVID-19 pandemic to gather information through the use of ICT's tools. That also enabled the researcher to reach a considerable number of participants without anyone being exposed to the virus. Furthermore, the participants did not require specific time to complete the form, and they could do it whenever they felt prepared to answer the question

For the purpose of this work, the research used questionnaires as the survey technique because it did not require a significant amount of time to tabulate. In addition, self-oriented question enabled participant to answer, without researchers 'intervention for clarifications.

### **3.4.2 Instrument in Use for the Data Gathering**

#### **The Semi-structured interview**

Alshenqeeti states, "As analysts point out, this is the most used type of interview in qualitative researchers (2014 cited in Adhabi and Blash 2017, p.89).

The nature of this instrument enables the interviewer not only to organize and prepare the questions, as the structured interview does, but also to implement and change them when new topics arise. As Adhabi and Blash mention, “Although there is a set of guiding question, the response of the subject gives the researcher the flexibility to pose more enhanced questions than the initially drafted ones (2017, p.89). The purpose of the interview is not only to engage in a conversation with the participants but also to obtain significant information of the phenomenon study.

Legard et al points out some of the advantages of using the semi structured interview as the following: The combination of structured with flexibility to cover the most suitable topics for the interviewee and allowing fully probed and explored responses, so the researcher can gather relevant issues raised spontaneously by the participants (2003 cited in Balushi 2017). Another advantage is that the instrument is interactive in nature, meaning the material is generated through the interactions (Balushi, 2017). It is dialogue established between the interviewer and the interview with a previous script that allows the second one ordering the ideas to follow in order to obtain more directed and original information on the topics studied.

On the other hand, Legard et al argue that the type of interview also demands mental and intellectual abilities specially in the novice interviews; for instance, the listening skill (2003 cited in Balushi 2017). The interviewer needs to focus on the responses, and not missing any details that can be significant to the research. Balushi also point out that the semi structured interview requires a clear and logical mind to be able to think quickly to distinguish essential points from the participants’ responses (2017). The logical sequence of concepts enables the



researcher to organize the information and distinguish which information is trustworthy and significant for the corresponding analysis.

The semi structured interviews was applied to the Academic and English coordinators of Liceo San José de Alajuela thorough the online application Google Form. The questions were addressed to know leaders´ perceptions over the English teachers´ staff adaptations to MEP´s distance education strategy due to the school closure as a consequence of COVID-19 pandemic. The objective was to obtain insights regarding these adaptations and its impacts in the professional learning environment of that institution.

### **Survey**

Brown defines a questionnaire as, "...any text-based instrument that give survey participants a series of questions to answer or statements to respond to either by indicating a response – by marking a page, writing a number, or checking a box on paper or online, for example" (2001 cited in Young, 2017, p.4). The instrument does not require too much effort for the participants to answer a set of standardize question. It is also easier for the researcher to tabulate the information collected. In addition, it is less time consuming that an interview, becoming the most common tool in research.

Young (2017) provides some reason to argue why questionnaires appeal in some researchers such as students doing dissertation projects:

- They are easy to construct, or at least can appear to be so
- There are many extant questionnaires which can be used or adapted for use, and which are often freely available to researchers
- They are portable or can be made available online

- They can be used to gather large datasets relatively easily, either through direct contact, by mail, or online via the web or email.
- The data they gather can be processed and analyzed relatively easily compared to spoken data which has to be recorded and transcribed before analysis.

In addition to the previous reasons for adapting questionnaires in social researchers, they are also useful and efficient for collecting data in a short period of time. That make this research feasible to accomplish in the medium-term period of time.

Young (2017) states that questionnaires are frequently for the determination of the following:

- Reporting participants' background and demographic information (age, biological sex, nationality, income).
- Reporting behaviors (what people did, or would do, in response to certain cues or stimuli, for example)
- Expressing attitudes (towards a cultural group other than their own, for example)
- Reporting opinions (about the desirability of multiculturalism or other social phenomena)
- Determining their factual knowledge about something (what proportion of a country's population are immigrants, for example (2017))

For the purpose of this research, a questionnaire online was the instrument in which teachers expressed the pedagogical and administrative adaptations required for distance education during the pandemic. In addition, the researcher recognized the difficulties for teachers to respond to the new students' scenarios,

in an educational system that demanded the continuation of the learning process, in the middle of an environment, where the entire population was not prepared.

Bird points out that researchers must decide on questions response format whether to include close questions, open questions, or both. However, in terms of quantitative research, close questions are often used while open questions are more common in qualitative research (2009). For this research, open questions were more suitable for teachers to express their opinion spontaneously and share opinions, understandings, interpretations, and reactions to the phenomena studied.

### **3.5 Research variables**

According to Shukla (2018) variable can be defined as, “A characteristic under study of which an identity or value changes or is possible to change per unit is called variable, or (...) is a characteristic that varies in the context of its value or identity. Variables are also known as attributes and can be collected by qualitative and quantitative data. Kaliyadan and Kulkarni point out that variables differing in quantity are called quantitative variables. For instance, weight of patients, whereas variables differing in quality are called qualitative variables. For example, the Fitzpatrick skin type (2019).

For the purpose of this study, the variable was developed in terms of conceptual definition.

#### **3.5.1 The Conceptual definition of variables**

The conceptual definition outlines the basic principles underlying a term (Clark 2004). As example, the author of this research provided some descriptions and meanings of teachings adaptations during Covid-19 pandemic during 2020

### **3.5.1.1 Specific Objective:**

To Identify aspects of the MEP's distance education strategy, during the COVID-19 pandemic, that forced the English teaching staff of the San José de Alajuela High School to learn new skills with the use of ICT tools.

**Conceptual Definition:** The new social conditions, imposed by the COVID-19 pandemic, caused a reinvention of relationships, of the functioning of the structure social and the performance of organizations, both public and private. The education systems around the world also experienced the consequences of the situation and develop immediate procedures, where innovation and ingenuity were key elements to face the challenges. Costa Rica was not the exception. Therefore, the Ministry of Public Education (MEP) launched a strategy for the pedagogical mediation called, "I learn at home" which was based on the provisions of the Educational Policy and the Curricular Policy current, giving relevance and pertinence to the use of technological resources, as well as to the generation of specific and contextualized actions for learning to distance (MEP,2020b)

**Instrumental Definition: From Part I:** Experience in distance education to Part IV: Evaluation in distance education. From item #1 to item #9 of Questionnaire applied to the English Teaching staff of Liceo San José de Alajuela, 2021.

### **3.5.1.2 Specific Objective:**

To describe the pedagogical adaptations developed by teachers to cope with the challenge of distance education strategy.

**Conceptual Definition:** In the educational field, a large part of the measures that the countries of the region adopted in the face of the crisis were related to the

suspension of face-to-face classes at all levels. This gave rise to three main fields of action: the deployment of distance learning modalities, through the use of a variety of formats and platforms (with or without the use of technology); the support and mobilization of the educational staff and communities, and the attention to the health and integral well-being of the students. (CEPAL-UNESCO, 2020)

In the framework of the suspension of face-to-face classes, the need to maintain the continuity of learning implied challenges that countries tackled through different alternatives and solutions in relation to school calendars and ways of implementing the curriculum, by non-face-to-face means and with various forms of adaptation, prioritization, and adjustment. To make the adjustments, it was necessary to consider the characteristics of the national or sub-national curricula, the resources, and capacities of the country to generate distance education processes, the levels of segregation and educational inequality of the country and the elapsed time of the school year (CEPAL-UNESCO, 2020)

**Instrumental definition: From Part V:** Preparation for distance education to Part IX: Academic activities. From item #10 to item #18 of Questionnaire applied to the English Teaching staff of Liceo San José de Alajuela, 2021

### **3.5.3 Specific Objective:**

To enlist how has the distance education strategy of the MEP, during the COVID-19 pandemic, generated adaptations in the administrative functions of the teaching staff of the San José de Alajuela High School.

**Conceptual Definition:** In times of crisis like the one experienced in 2020; teachers made invaluable contributions to education through teleworking and the

use of digital resources. Duhalde stated that teleworking should not be reduced to a formality that merely replicates in a different way a list of materials and subjects that was planned to be covered under normal conditions. Instead, these unusual circumstances of having to work from home had to serve as an excellent opportunity to become aware of the importance of ensuring adequate conditions in any given context, as well as giving us a chance to rethink traditional methods of teaching and learning. (2014)

**Instrumental definition: From Part X:** Contact with other members of the educational community to Part XI: Variety of administrative functions. From item #19 to item #10 of Questionnaire applied to the English Teaching staff of Liceo San José de Alajuela, 2021.

**CHAPTER IV**  
**DATA ANALYSIS AND INTERPRETATION**

#### **4.Data Analysis and Interpretation**

Sharma stated, "Data Analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data" (2018, p. 4). Considering the above, the quantitative and qualitative analysis of the information obtained through the administration of the research instruments such as the survey and interview applied to teachers and academic coordinators and the English department of the San José de Alajuela high school are presented below.

##### **4.1 Survey Results from the English Staff of Liceo San José de Alajuela**

The participants of the survey were six English teachers of Liceo San Jose de Alajuela who answered twenty questions to know the pedagogical and administrative adaptations caused by strategy implemented by the Ministry of Public Education during the COVID-19 pandemic in the pedagogical mediations and administrative functions, in teachers of Liceo San Jose de Alajuela, during the Covid-19 pandemic during 2020. The results obtained from the survey were presented in eleven sections, according to the specific objectives described in the methodological chapter. From Part I to Part IV, the participants answered questions connected to identify aspects in the distance education strategies that forced English teachers to learn new skills in the use of ICT tools, such as experience in distance education, trainings for distance education, teachers' health effects during distance education, and the evaluation system implemented for distance education. From Part V to Part IX, the participants answered questions to describe the main adaptations for teachers to deal with the distance education strategy such as preparation, work equipment, schedules, workplace,

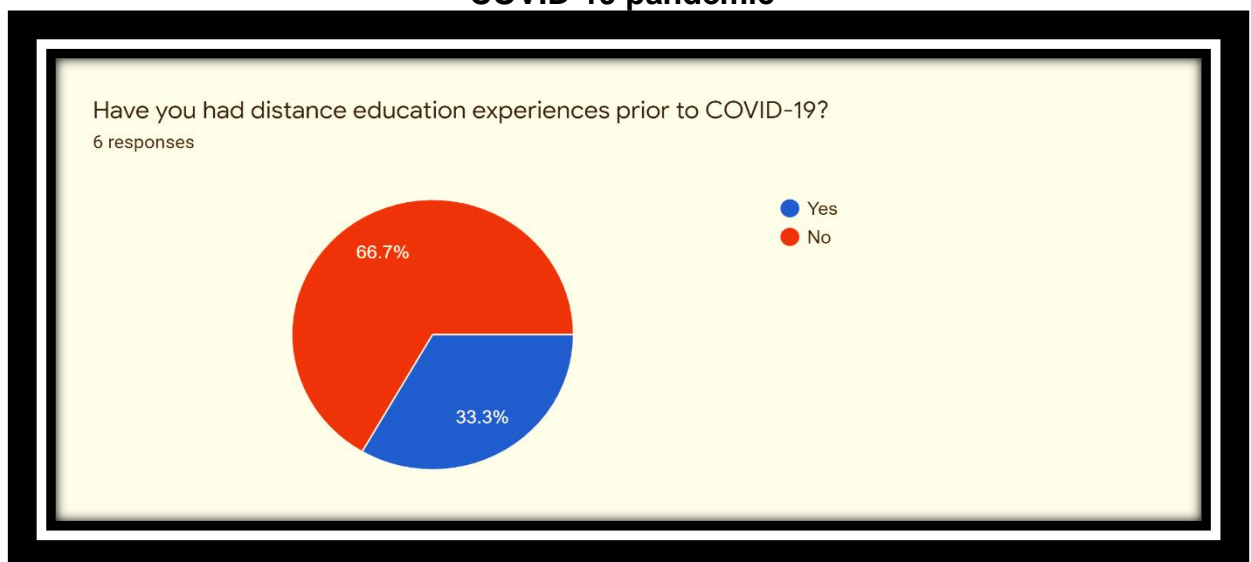


and academic activities. Finally, from Part X to Part XI, the participants answered what were the administrative adaptations during the covid-19 pandemic.

#### 4.2 Questionnaire results from the English teaching staff of Liceo San José de Alajuela

##### Graphic #1

##### Teaching experiences in distance education prior to COVID-19 pandemic



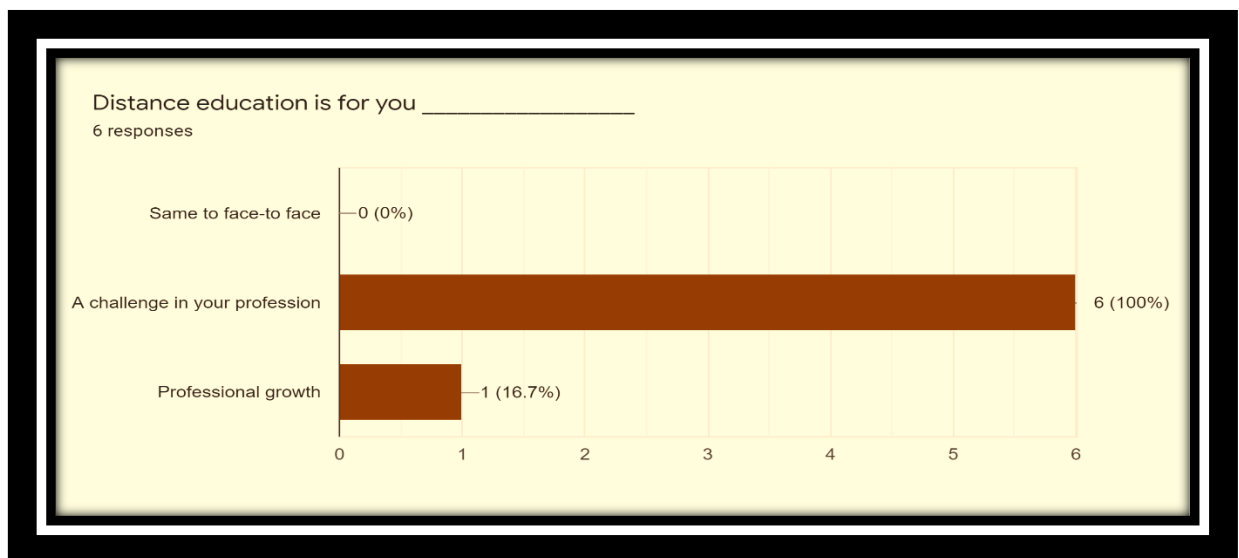
*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

Most of the teachers recognized the lack of experiences in this new methodology. Martin et.al consider it as an essential disadvantage in maintaining distance learning as classes by stating “The vast majority of teachers has both academic and professional experience, training to teach regular classes and are already used to this mode. This may generate some difficulty for teachers to teach classes of action at a distance” (2018, p.150). That also indicated the impact of changing to distance methodologies during Covid-19 might mean for teachers

who were not prepared for this educational modality, considering that they only interacted with students every day at the schools. However, the fact that 33.3% had any type of distance educational experiences was probably through teaching online courses or in distance education program. It facilitated them to adapt easier to the news strategies implemented by the Ministry of Education during the sanitary crisis.

## Graphic #2

### Understanding the Significance of distance education



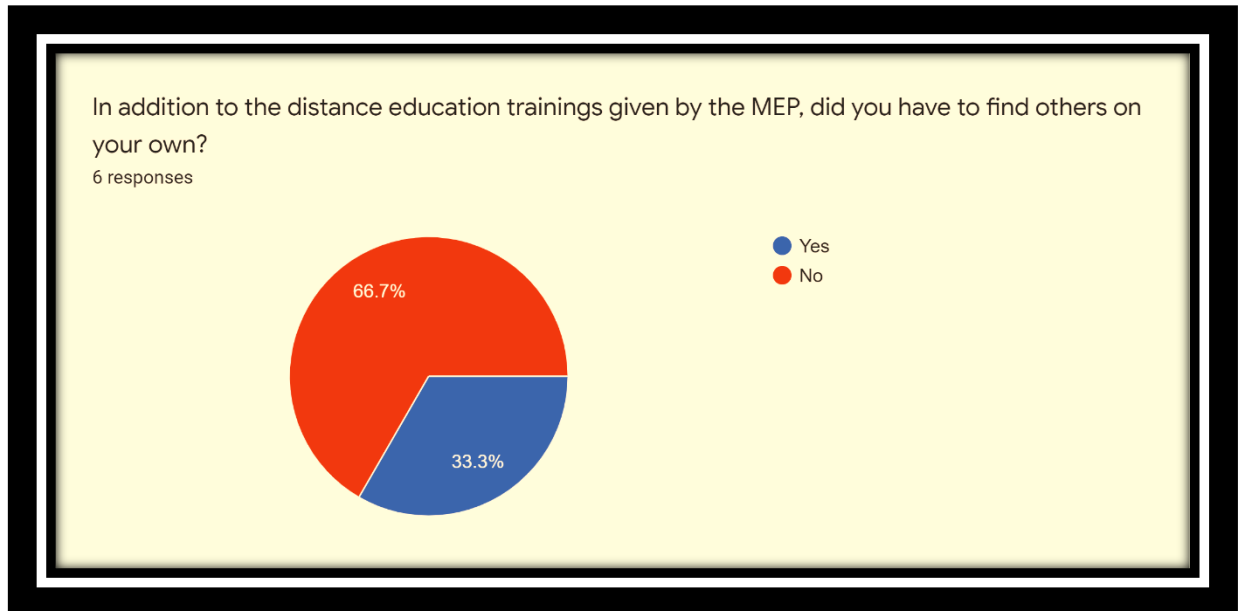
*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

For this question, teachers understood that the educational mode was completely different from the traditional one and demanded a new perspective in regard to how to handle the approach. Palmer et.al point out factors that could encourage or discourage people to adapt to changes, such as security, economic conditions, authority, status, responsibility, working conditions, level of self-satisfaction, or the time and dedication needed to implement the change (2009

cited in Hyseni and Hoxha, 2020). For the teachers, the challenges were many, and it implied for them to change the face to face and experiential activities

### Graphic #3

#### Trainings for distance education



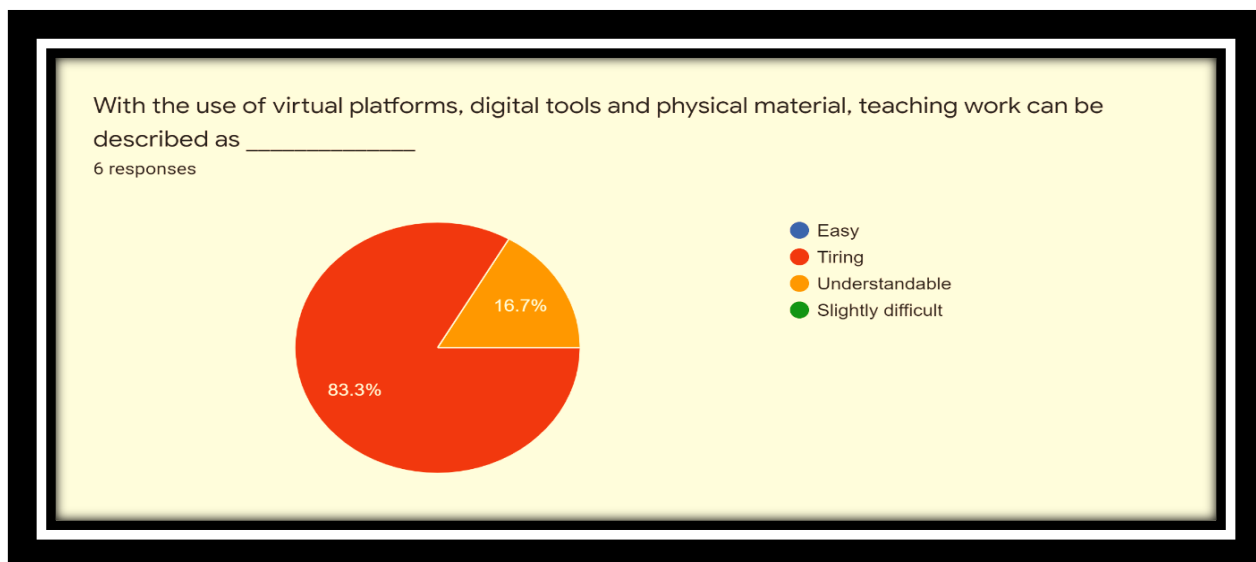
*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

Most of the teachers realized that the training implemented by the Ministry of Public Education was not enough to help student to achieve their academic goals. For instance, UNESCO mentions that the successful integration of ICT tools in the classroom mostly depends on the teachers' ability to structure the learning environment by organizing the way students acquire cognitive competence and manage to apply it in difference situations (2018 cited in Hernandez et. al 2018). Therefore, in order to improve skills and provide with better attention to students, as part of their challenge, teachers tried to look for different trainings in all possible websites to incorporate in their daily activities.

The teachers who did not see necessary to have other trainings might have used the digital resources from the MEP's website to cover the gaps and answer questions during the process

#### Graphic #4

##### Teaching job perception for distance education

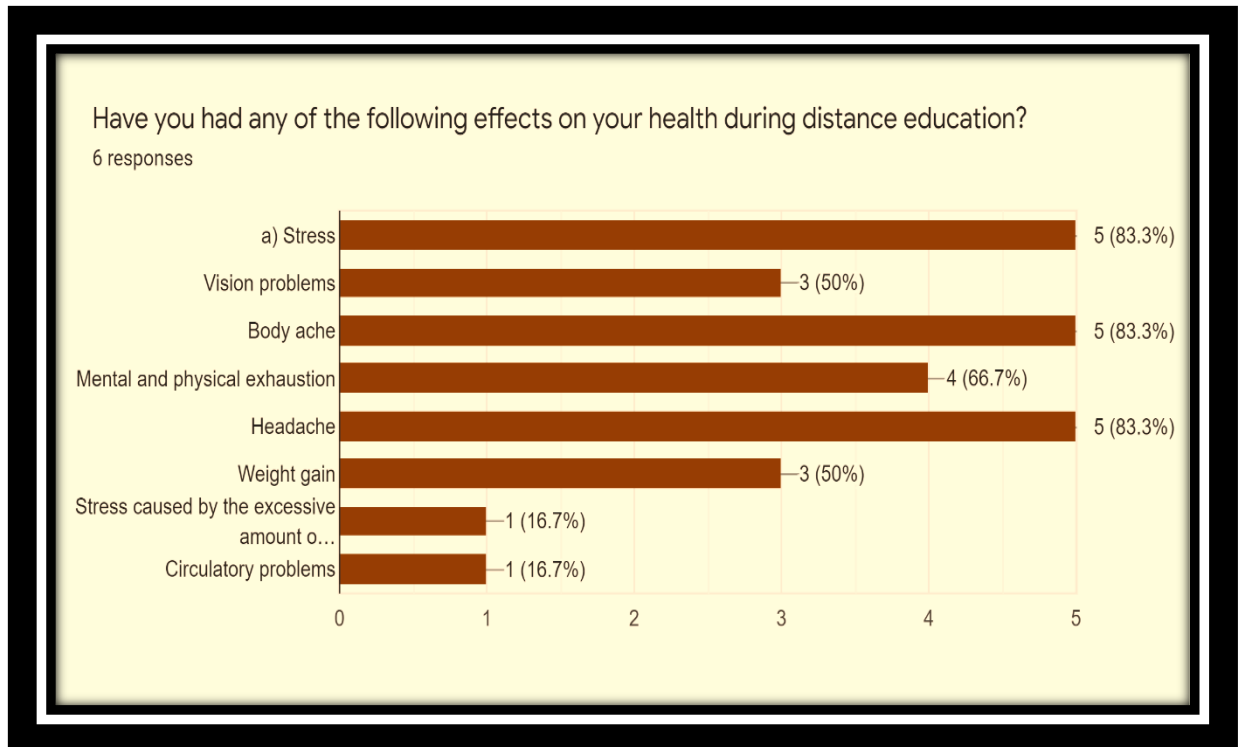


*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

The Ministry of Public Education established that the teaching staff was in charge of performing actions and the best scenario for each student, considering technology and physical resources available (MEP 2020d). Teachers had to prepare their work activities using the four scenarios. That included the preparation of the autonomous work guide, planning the lesson for virtual classes every week, evaluating the assignments, and making reports for the school management, students, and parents. Therefore, most of teachers considered the teaching job very tiring since the amount of work was excessive and a little time to complete it.

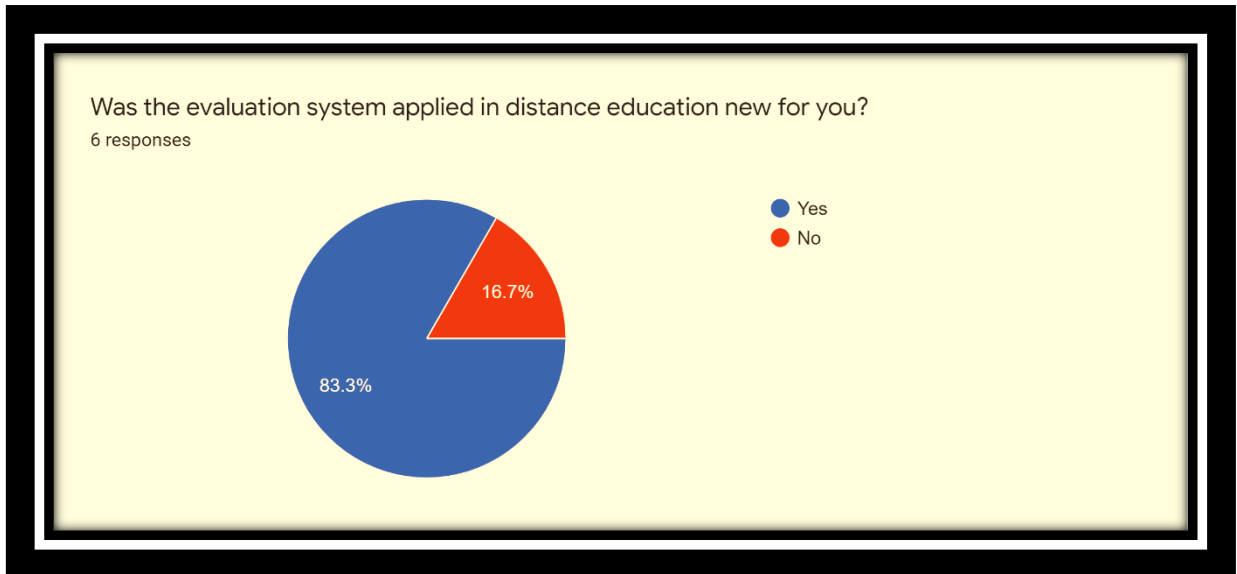
## Graphic #5

### Health effects during distance education



*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

The Occupational Health Council (CSO) elicit a series of psychological, physical, and mental manifestations for teleworking employees (2020). This graphic shows some of the most relevant teachers' health issues during the distance education. The stress is a reaction of physical and emotional tension that increases with the isolation from the workplace and the mental and physical exhaustion. Sitting for long periods can cause joint stiffness and hip pains. Extended computers or digital device use might cause headaches and vision problems. Those were manifestations presented in teachers during the covid-19 pandemic that demonstrated the difficulties faced for the abrupt and immediate changes implemented.

**Graphic #6****Evaluation system applied in distance education**

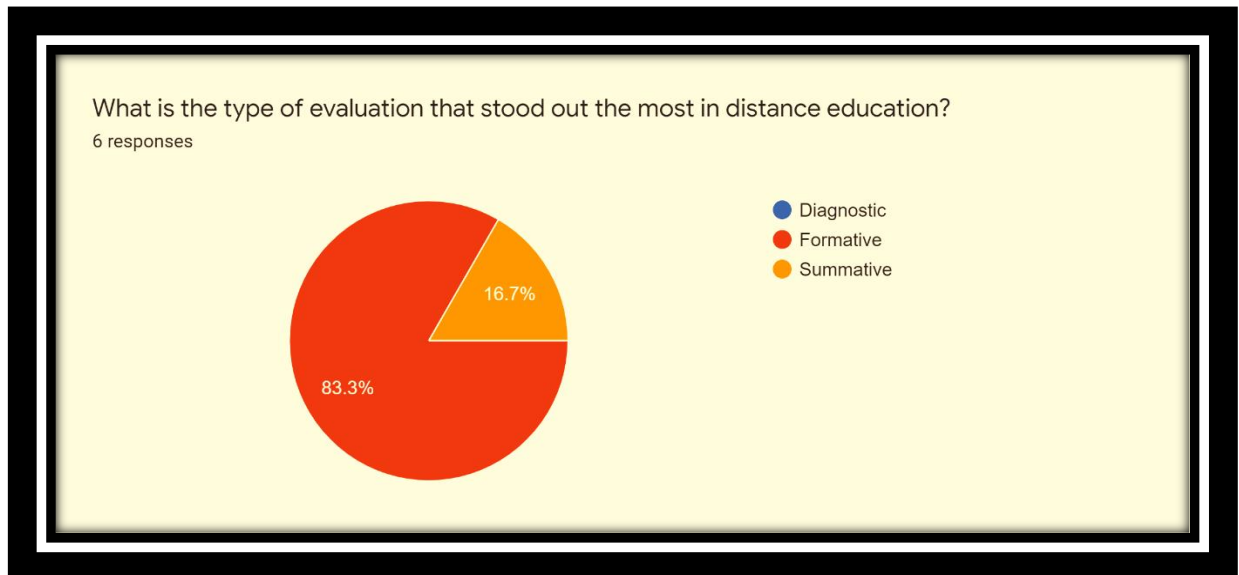
*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

The evaluation process implemented by the Ministry of Public Education in the English subject was formative during the first semester of 2020 through the registration of the Autonomous Work Guide and some other evidence (2020d). However, for the second semester of 2020, it was included a summative evaluation by adding a numerical value to the final students' grade. That meant 55% for the Autonomous Work Guide and 45% through a summative assessment instrument (MEP 2020g). This evaluation was definitely new for teachers in Costa Rica since the Ministry of Public Education reformed the Learning assessment regulation for that purpose. The Basic learning Templates (PAB) established the main objectives to achieve during 2020. Therefore, teachers had to prioritize contents in the pedagogical tasks assigned to students. That also needed to be

registered in the Descriptive Report of Achievements at the end of the semester and the year.

### Graphic #7

#### Formative and summative evaluation preferences



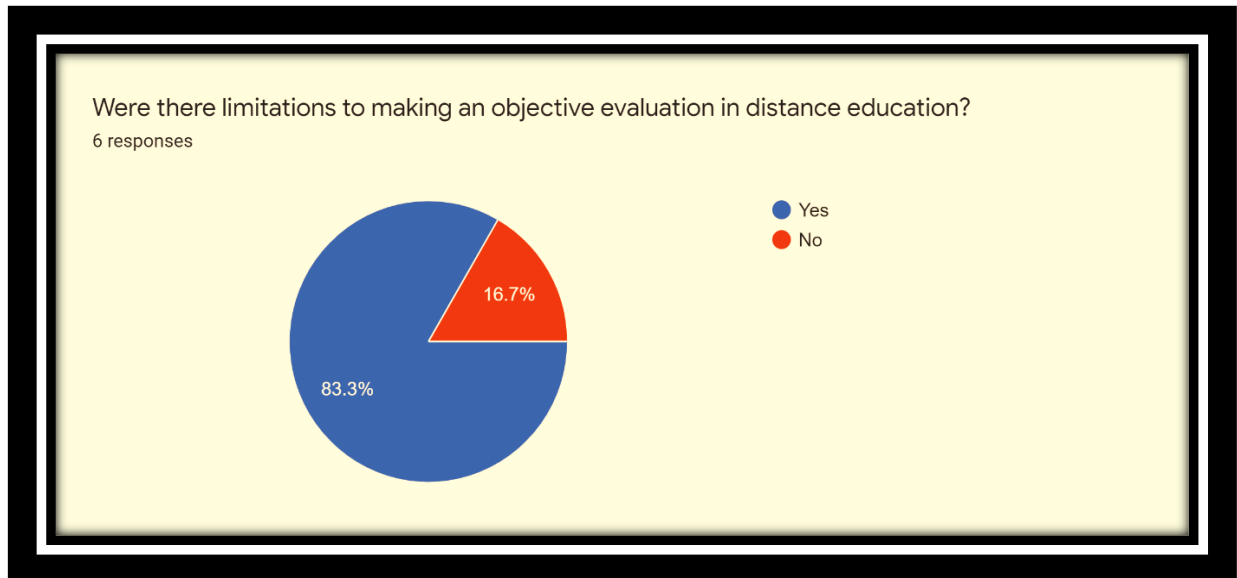
*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

Vageriya describes the formative assessment as the process carried out by the teacher to provide ongoing feedback, so learners can adopt principles to improve their performance in the next examination. On the other hand, summative assessment is carried out at the end of the semester or a year to evaluate the overall students' performance (2018). Most of teachers preferred the formative assessment in distance education since it goes according to the achievements, limitations, and reality of each student in order to develop self-learning. Therefore, every Autonomous Work Guide (GAB) had the Self-regulation and evaluation matrix to identify themselves their level of understanding, and the Self-evaluation of students' performance level rubric to

recognize themselves the expected learning indicators reached. Every time that students delivered their job, teachers needed to record the progress and send them the corresponding feedback.

### Graphic # 8

#### Limitations to make objective evaluations in distance education



*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

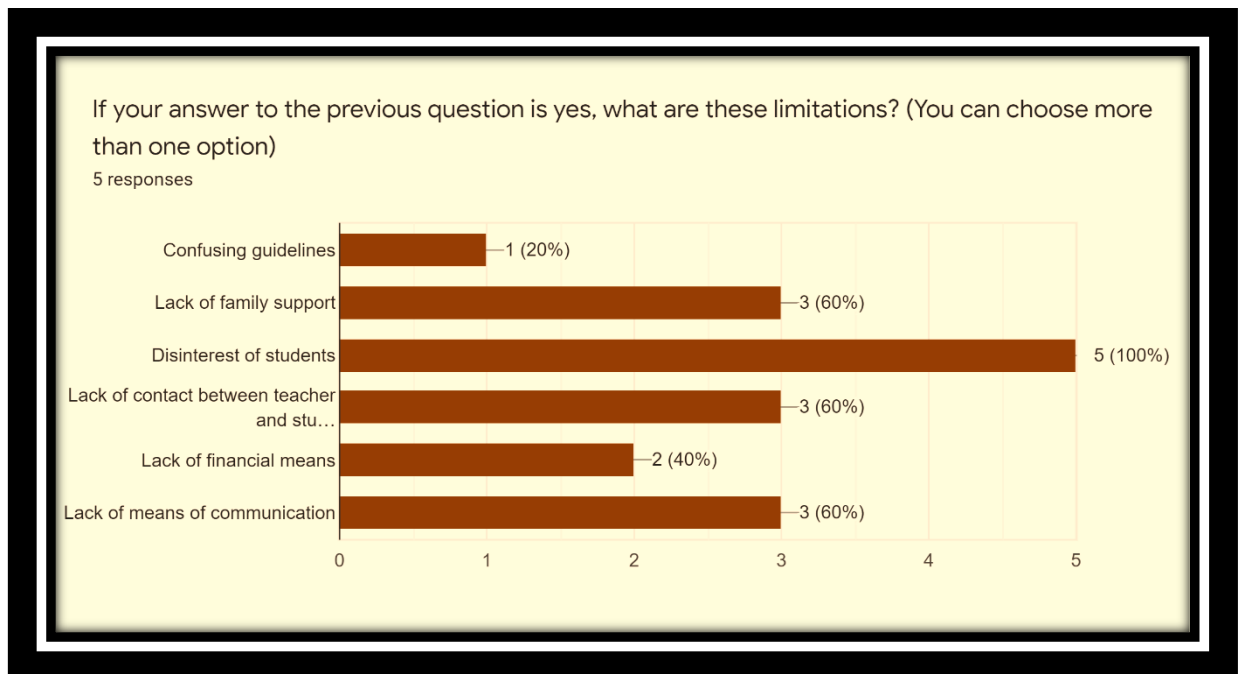
Vageriya states, “IT (assessment) is used for the description of systematic gathering information about what learners should know at the end of each unit or lesson (...) In classes that includes observation, weekly examination and regular progress report” (2018 p.2). In distance education, teachers relied completely in what students could send in the Autonomous Work Guide to evaluate their performance. Not all the students were able to connect to virtual classes and many of them barely knew the teachers during the Covid-19 pandemic in 2020. Therefore, the answer is negative in regard to making objective evaluations in that period. However, they had to review students’ assignments and provide



feedback for each indicator, so students could identify their strengths and weaknesses.

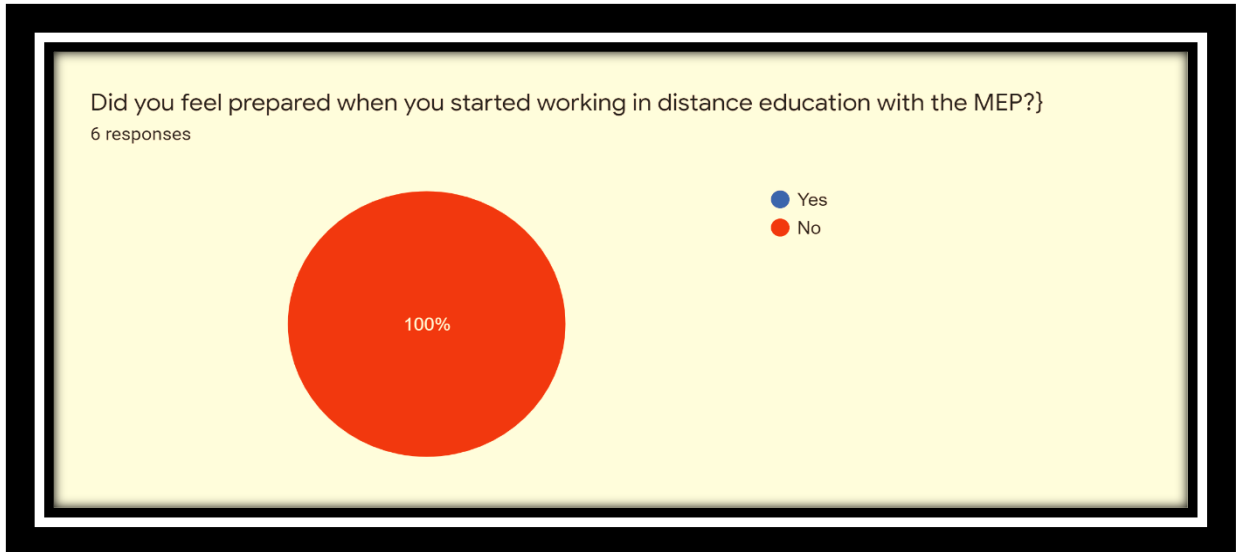
### Graphic #9

#### Limitations for objective evaluations



*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

Martin et.al describe some disadvantages in maintaining distance learning classes because the students consider this type of educational mode ineffective when comparing to classroom courses. In addition, students in traditional classes obtain immediate feedback which does not happen in non-face classes (2018). Therefore, the teachers noticed students lack interest in completing their assignments on time or doing them for themselves. In addition, the lack of communication and family support make harder for teachers to establish contact with students and parents to track down their level of performance

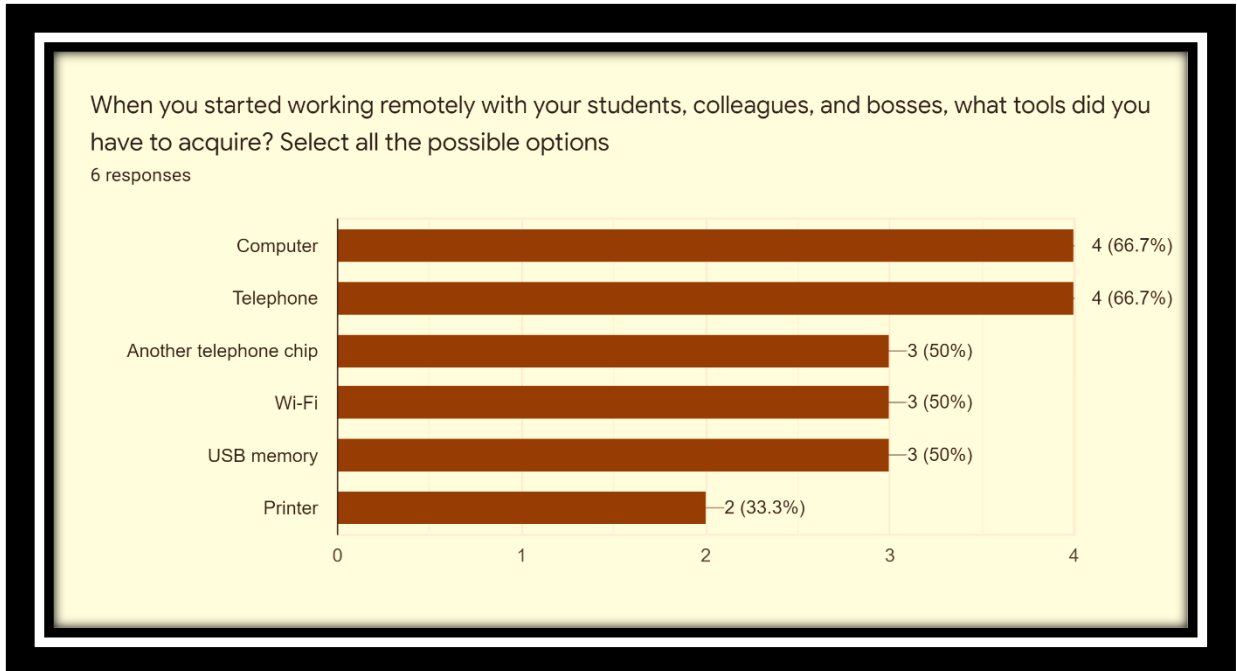
**Graphic #10****Preparedness for working in distance education with MEP**

*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

In response to the sanitary crisis, the Ministry of Public Education implemented a countrywide strategy for supporting distance education, organizing the educational system in different scenarios depending on the students' financial resources to have technological devices and connectivity (MEP, 2020b). The guideline from the Ministry of Public Education was changing according to the fast-growing pool of people infected. Therefore, even though some teachers had experiences in distance education, they never felt comfortable with the MEP's strategies since it changed several times

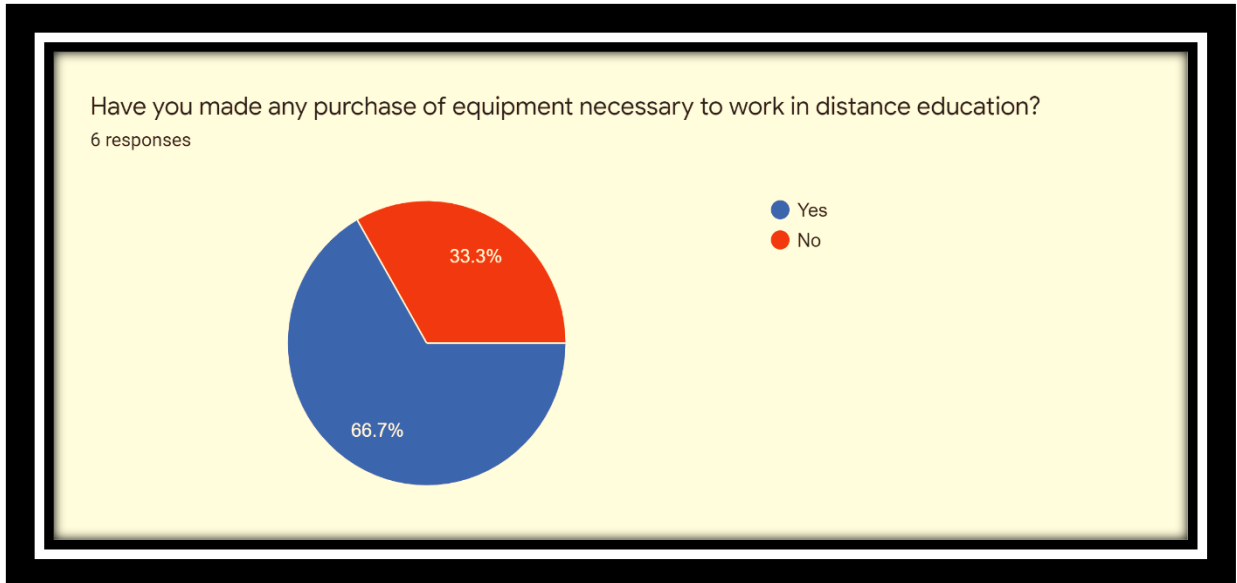
## Graph #11

### Technological tools for distance education



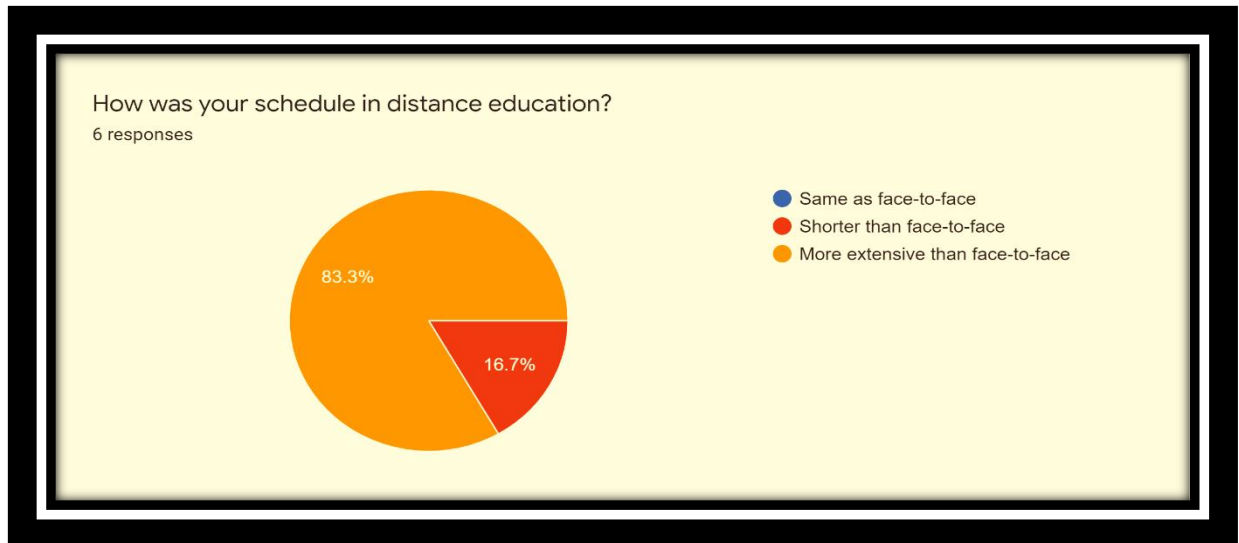
*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

Teachers considered computers and telephones as the main tools for working remotely. The Ministry of Education, in the actions to strengthen distance education during the sanitary confinement, implemented The Microsoft Teams platform. That is describe by Martin and Tap "... as a cloud app digital hub that brings conversations, meetings, files, and apps together in a Single Learning Management System, allowing its users to run it either in computers or mobiles" (2019, p.60). In addition to that, most of teachers used to have the WhatsApp application to contact students and parents to follow their progress and to send and receive assignments, when there was no connectivity at home to support the use of the platform.

**Graph #12****Purchasing equipment to work in distance education**

*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

For the implementation of the nationwide strategy for supporting learning at home, The Ministry of Public Education gave relevance and pertinence to the use of technological resources. For instance, the use of Microsoft teams as the official platform and main mean of communication and pedagogical and administrative activities. However, not all teachers had technological devices with enough storage, speed, and capacity to maintain working their equipment longer hours. Therefore, the majority of teachers needed to buy new computers and cellphones to achieve their goals at work. In addition, teachers also needed to purchase new cellphones with different SIM cards for job related purposes and free up storage space from their personal ones.

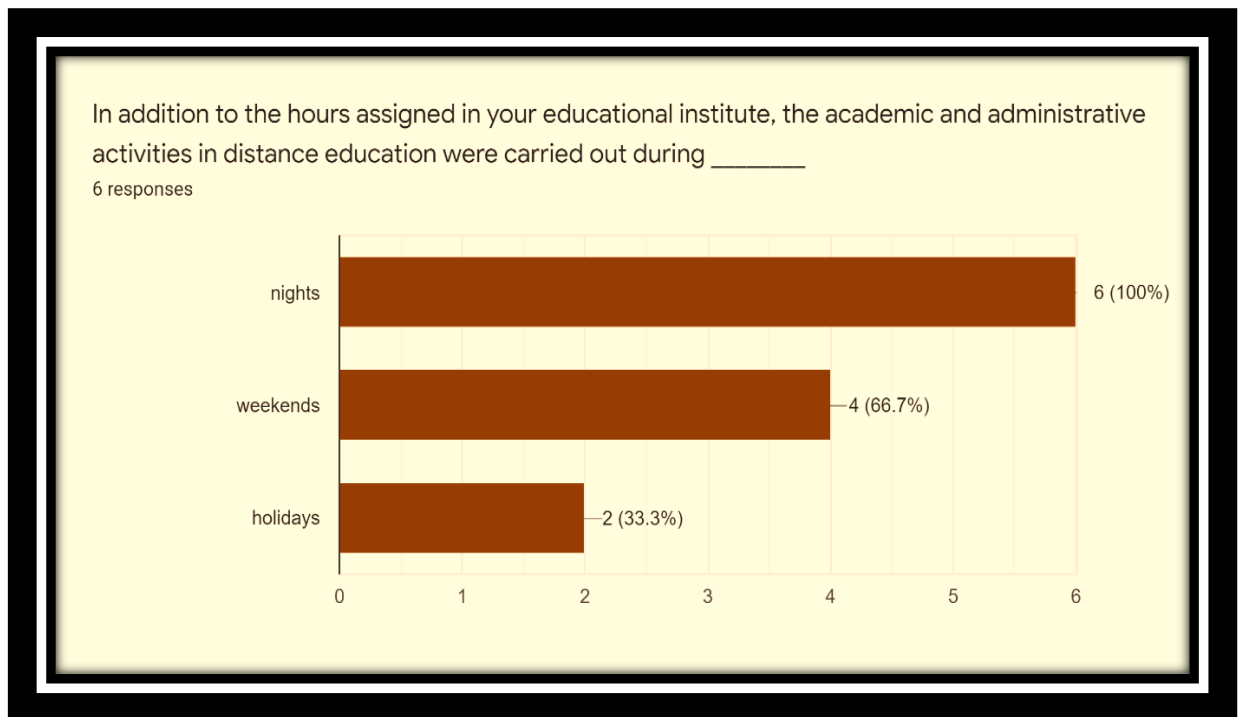
**Graph #13****Working schedule in distance education**

*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

Distance education is extremely exhausting for most of the people whose work is developed at home. Faradila et.al mention that the teachers' tasks are more challenging nowadays. Besides their responsibilities to educate students to achieve their objectives, teachers also have clerical duties that makes them manage a heavy workload with less time available to complete each task (2017). Teachers rendered services at home during the pandemic extended their schedule beyond the labor agreement. For example, the teachers' administrative functions established by the Ministry of Public Education to develop in the distance education strategy for the four scenarios when teachers had full schedule to attend students during week.

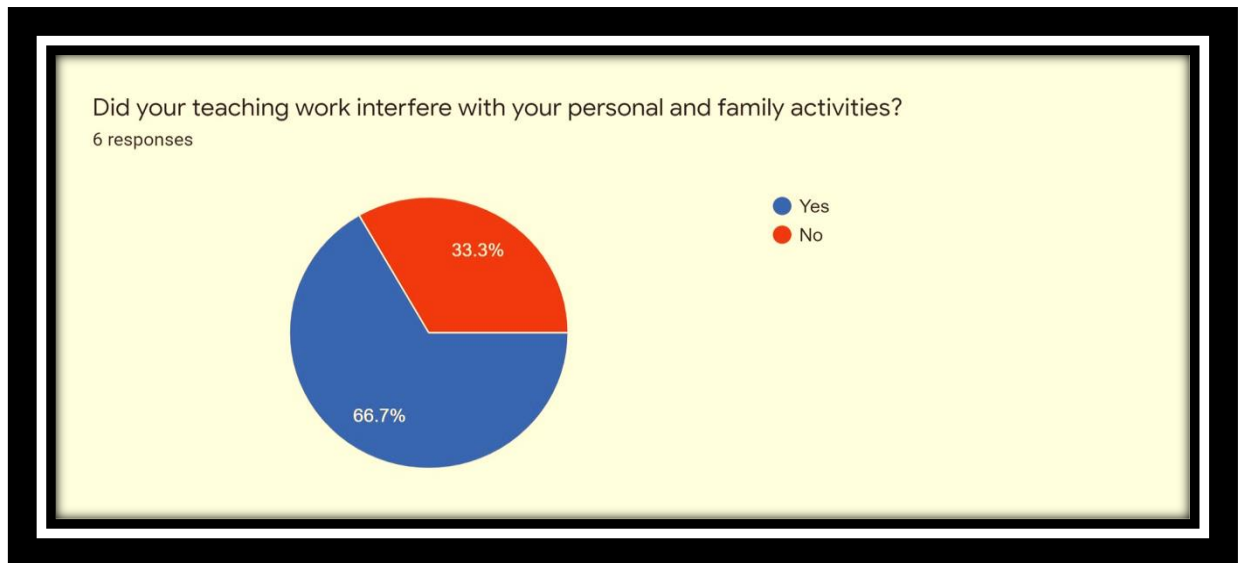
## Graphic # 14

### Teachers' schedule during the Covid-19 pandemic



*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

The National Association of Educator (ANDE) made some observations to the Ministry of Public Education, expressing disapproval in the distance educational process for not considering teachers overworked such as: the individual report required, the risk of teachers' health when commuting to schools to collect student's evidences, technological difficulties for students not able to connect in classes; Therefore the teaching staff complained about not having the Autonomous Work Guide on time, and the constant changes and improvisations in all the reports that teachers had to carry out (2020). The graphic shows how teachers needed to work at nights, weekends, and holidays to contact students and checked their assignments even when delivering late.

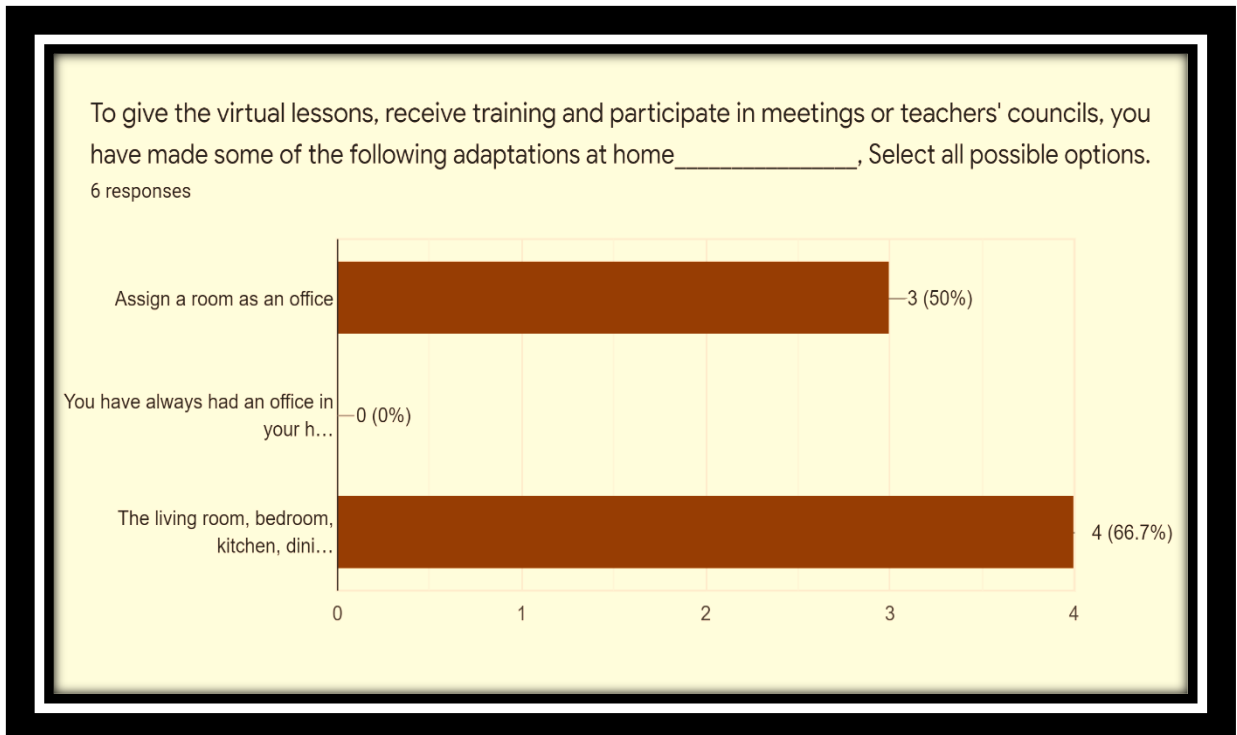
**Graph # 15****Teaching work interference with personal and family activities**

*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

The occupational Health Council in Costa Rica (CSO) identifies early signals to know when employees in teleworking during covid-19 pandemic suffer labor stress in regard to social manifestation such as: low social participation, isolation, limited leisure and recreation activities and affectation of interpersonal relationship within and outside of work (2020). Most of teachers expressed that teaching work during pandemic affected their personal and family activities since they needed to work, weekends, holidays, and nights. In addition, many students and parents were calling after schedule hours asking for assignment clarifications, additional time to deliver the autonomous work guide and even to ask teachers what they need to do.

## Graph #16

### Home adaptations during distance education



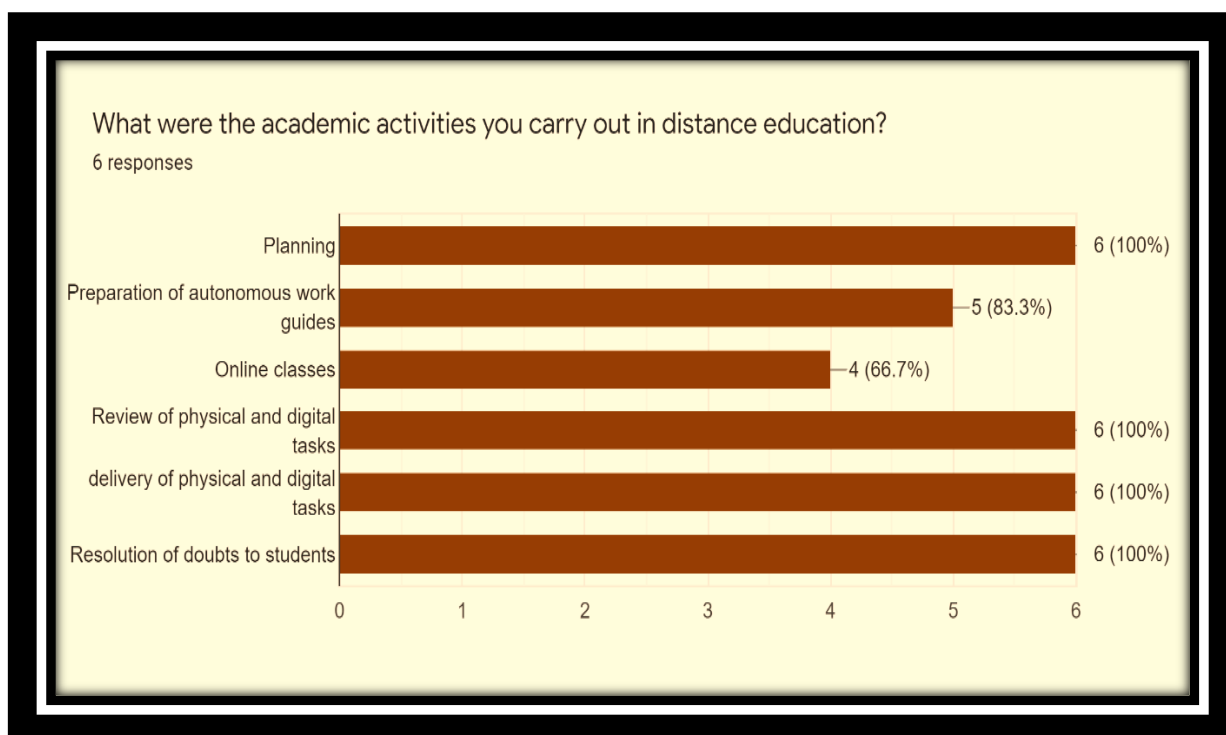
*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

Rosenfield and Alves (as cited in Martins 2018) mentioned that one of the ways to implement teleworking is to prepare a small office or home office to work. Since teachers needed to perform their task out of the schools, they had to adapt their home to attend their students, receive training, and participate in school meetings. Teachers started to use any part of the house or assigning a place to do their job. That could also cause inconvenience with their kids or family for the lack of attention, noisy environment, low internet connectivity and even interferences by atmospheric conditions.



## Graphic #17

### Academic activities in distance education

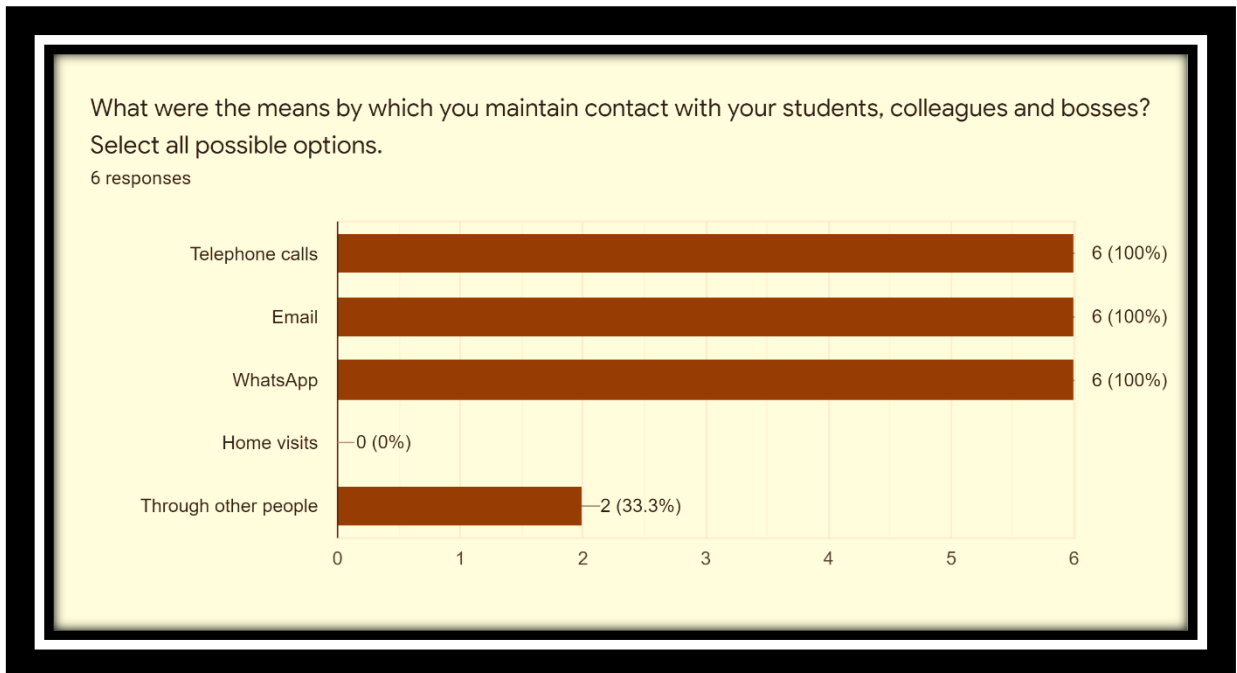


*Source: Questionnaire applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

According to the Ministry of Public Education, the supporting learning at home guidance during the distance education had purposes such as students to learn considering the context and access to technology, activating communication mechanism to promote the students' permanence in the educational system, reforms pedagogical mediations and create support networks for professional and technical skills development (MEP, 2020b). Therefore, almost all the academic activities were part of the distance education strategy to support the continuation of the school year. The online classes were the lowest score because not all the students were able to connect or demonstrate interest in virtual classes

## Graphic #18

### Academic activities in distance education



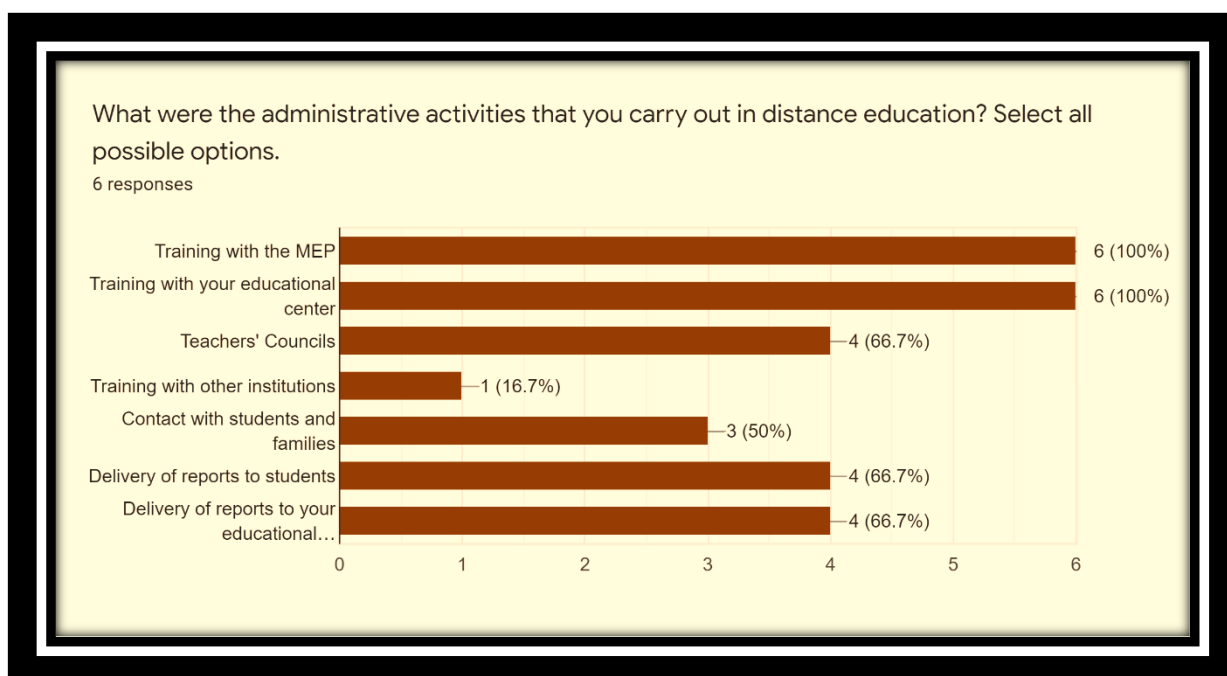
*Source: Survey applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

During the Covid 19 pandemic in 2020, it was required to maintain contact with the school community and prevent students to leave the school year, causing an enormous impact in the society in terms of violence, crime, drugs, among others. As Fallas & Zuñiga, explained, digital Technologies or Information and Communication Technologies (ICT) is a set of convergent technologies that use digital language to produce, store, process and communicate information in short periods of time (2010) Therefore, teachers realized that the use of technological tools such as call, emails and WhatsApp were the best form of communication. In addition, these applications allowed teachers to have proofs of what students did during the year and the attempts they did to keep students in the educational system. Also, the teachers were able to keep records of interactions with the

principals and other coworkers and avoid any misunderstanding in terms of working without any physical supervision.

### Graphic #19

#### Administrative activities in distance education



*Source: Questionnaire applied to the English Teaching staff of Liceo San José de Alajuela, 2021*

The Ministry of Public Education in the document, “*Guidance for educational intervention in educational centers before the COVID-19*” established administrative functions for the developing of the distance education strategy in the four scenarios, such as inquiring about trainings and self-trainings options offered by MEP, participation of virtual meetings with the immediate leadership. the application of collaborative strategies between peers and maintain contact with students to know their conditions and progressiveness (MEP 2020a). The graphic describes that teachers selected all the options available. It demonstrated

the time consumed in administrative functions and the hours spend taking courses implemented by MEP and their institutions. In addition, the delivery of reports was another activity that maintain the teachers busy specially at the end of each semester, when they had to provide final grades to students, parents, and school authorities.

### **Interview data**

The semi-structure interview was conducted with the Academic and the English Coordinators to know the organization of the teaching staff during distance education. Therefore, the interview was more of an administrative nature, so for the most part, it is intended to cover the specific objective number three. Although questions four, seven and eight are related to objectives one and two.

#### **4.2 Interviews results from the English Staff of Liceo San José de Alajuela**

##### **Dynamic work for distance education during Covid-19 pandemic**

The Academic coordinator mentioned that the institution management established a coordinator at each level, in charge of organizing the necessary actions to carry out the distance education process such as teaching schedules, weekly meetings in Microsoft Teams, analysis of weekly compliance, dates for sending and receiving the Work Autonomous Guide, among others. In addition, the principal organized weekly meetings with the coordinators´ levels to report the activities done by the teaching staff and the orientations to follow the next week. In the other hand, the English coordinator added the necessity to maintain constant communication with students through phone calls and texts messages, with the purpose of motivating them to stay in the educational system.

Those guidelines implemented by the institution responded to the Ministry of Public Education strategy, to ensure the continuity of the educational process for partial or temporary closure of the educational center so the actions could transcend the space of the classroom, promoting autonomy and didactic alternatives according to the students' needs (MEP 2020a). Hence, the educational institution tried to act quickly to the suspension of the face-to face classes determined on March 16<sup>th</sup> by promoting pedagogical and administrative strategies as well as inclusion actions to respond effectively during the contingency.

### **Organization of teaching staff for distance learning**

The academic coordinator pointed out that the teaching staff organized biweekly sessions through the Microsoft Teams platform to coordinate the elaboration of the printed and virtual Autonomous Work Guide, as well as the issues that might arise from students' needs. In addition, the English coordinator mentioned that the slogan in the department was always, "Teamwork". Therefore, the initial meeting was held to establish schedules for attending students according to the four scenarios and make sure that the means and time for sending and receiving information was the same for all English teachers in the institution.

In order to support students in their educational process, The Ministry of Public Education implemented the four scenarios, considering students' accessibility to technological devices and internet for virtual activities or printed material. (MEP, 2020b). For that purpose, the Autonomous Work guide was fundamental to establish the most important contents to study during the year.

Therefore, the organization of the teaching staff had to be effective to coordinate the students' attention and individual integration to have the same developmental opportunities for everyone.

### **The MEP guidelines and teaching needs**

The two interviewees considered that the Ministry of Public Education responded late to the health crisis and the school closure. At the beginning of the pandemic, it was uncertain the steps to follow by the teaching staff and the community. The guidelines to be followed came late and for the lack of orientation, each educational institution had to design its strategies. For instance, in the first semester, MEP stated that the evaluation was formative. Later on, with the second period in progress, they changed it to a summative evaluation without having the tool for this purpose. However, the English coordinator appreciated the MEP's initiative to make a compendium of the study program objectives, because it was not possible to cover the school year curricula

Martins et.al. point out that the majority of teachers with academic and professional experience receive trainings to teach regular classes, and not at a distance. (2018). Even though it is understandable the late actions taken by the Ministry of Public education, based on the pandemic context spread rapidly across the country, they never maintained the same guidelines. For example, the formative evaluation procedure for the first semester and the summative for the second one. That made their teaching work more difficult and stressful for the changes in strategies, methodologies, and applications to generate reports.

## **Teachers' Adaptations in technological equipment, training, or personal schedules**

The Academic coordinator stated that some teachers acquired technological equipment such as computers or cell phones and carried out some MEP's trainings for their job performance. The English coordinator added that many teachers attended students' inquiries at any time: morning, evening, afternoons, weekends, and holydays, taking away family and personal time. Through the use of the Microsoft Team platform, as the official technological tool for assisting students with technological devices and connectivity, the Ministry of Public Education implemented the steps to coordinate the use of the application such as, the organization of synchronous and asynchronous lessons and the planning activities supported by virtual and remote tools (MEP, 2020b).

As the interviewees stated, the use of technological applications implied for some the teachers the purchase of new resources, and the necessary technological support to create and produce new information. In terms of schedules, Faradila et.al mentioned that the teachers' workload had increased since they are not only responsible to teach students contents in the designated syllabus, but also to have clerical functions such as be a facilitator, planner, curriculum advisor, manage s data, discipline and more, having a negative impact in their daily routines (2017). Therefore, the English coordinator expressed the issue in the adaptation to extended schedule because some teachers did not separate their regular job from their private and personal lives.

### **School objectives achievement with the distance education strategy**

The participants stated that it was not possible to achieve the school objectives in terms of contents because of the characteristics presented in the students' community, such as lack of financial resources, Covid-19 contagious, and the increased deaths during that period. However, teachers were able to provide a formative education to their students through the countless effort to reach most of them by printed material, virtual classes, WhatsApp, phone calls, among others

On June 2020, the Ministry of Public Education made the official document called, "Basic Learning Templates (PAB)" with the purpose of establishing the main objectives for each signature and educational level to achieve during 2020, for the disruption caused by the Covid-19 pandemic (MEP, 2020h). These strategies modified the educational programs, so teachers focused only on specific objectives to develop. However, the distance education mode has several disadvantages in terms of losing quality, as Martin et.al mention since students do not have the opportunity to contribute more actively to classes through their experiences, questions, and considerations (2018). In addition, many students did not have connectivity at home and not even the time and the financial resources to go to the institution to pick up the Autonomous Work Guide in print. On the other hand, many students were able to develop formative education in terms of understanding of the topics, feedback, autonomy, responsibility, among others.



### **Teachers' accompaniment during the distance education strategy**

The academic coordinator stated how the institution supported the teaching staff by printing the Autonomous Work Guide for students with no connectivity scenarios and providing internal trainings for the use of the Microsoft Teams platform and its applications, to develop activities with the school community. The English Coordinator mentioned about the implementation of the English department meetings to analyse students' progress in the use of the language and organize together the activities for the Autonomous Work Guide.

The Ministry of Public Education emphasized the teachers' expected actions to develop the distance education strategy for the four scenarios. Some of the instructions were to provide to the immediate management information to know the initial conditions of the students' scenarios, coordinate with them solutions for students, lack of technology resources to work at home, apply cooperation and collaboration between peers, request support from the immediate leadership and design and share schedules and report progress or particular situation (MEP, 2020a). Therefore, teachers needed to work closely with the school management, so they could receive support to face that new challenge. The interviewees identify some school orientations to facilitate resources and time to develop actions, so they could make their job efficiently by having clear and coordinated orientations and trainings.

### **Teachers' changes in their physical and emotional health**

The Academic coordinator stated that the restrictive measures in the country to avoid contagious made excessive changes in peoples' routine. For

example, teleworking, unemployment, teaching from home, housework, concerns about contagion, and the lack of physical contact with family, friends and co-workers were the trigger for many colleagues or people in general, with health disorders. In the other hand, the English coordinator confirmed that during 2020, due to the excessive workload, the teaching staff suffered changes and manifested psychological and physical health conditions.

The Occupational Health Council in Costa Rica, (CSO) mentioned the consequences of being exposed to significance labor stress for teleworking employees during Covid-19 pandemic in psychological, physical, cognitive, behavioral, and social aspects. (2020). Teachers were burned out because the demands were high, felling the pressure to support the continuation of the educational process, with limited resources to attend, and unpredicted situations that cause abrupt changes in short periods of time.

### **Curriculum overload during distance education**

The two interviewees stated that some teachers expressed much more workload since apart from their attention to students for the four scenarios, they had to organize their time to carry out MEP's training, students 'reports, telephone calls, meetings, etc. Likewise, they had to be attentive to the news since MEP announced their guidance and orientations first to the population and then to the teaching staff. The academic coordinator considered that any decrease in the amount of lesson during the pandemic could bring teachers and their family economic and emotional issues. In the other hand, the English coordinator stated that the curriculum overload is not a consequence of fulfilling the schedule by attending students, but the additional activities that they had to

carry out later, such as home calls, creating reports, planning the Autonomous Work Guide, feedback, trainings, meetings, among others.

Alonzo describes the emphasizes teacher's roles in term of being a facilitator, counselor, source, and manager and organized (2017). In addition to that, teachers also increased clerical work during the pandemic, with the implementation of the MEP's strategy. Both teachers considered understandable to do their job if it were only to teach students and focus on the accomplishment of school programs and objectives. However, the administrative functions such as meetings, home calls, trainings, reports, among others, made more difficult the teaching work during the sanitary crisis.

### **Improving the distance educational system during Covid-19 pandemic**

The interviewees considered that the Ministry of Public Education made extreme efforts to meet students' needs under all possible circumstances. However, It was necessary for educational centers to develop a reliable register of families and the most vulnerable students, to be prepared for a distance learning program that could respond to emergencies. In addition, the school management must analyze options to provide students with the technical means that allow them to carry out activities or classes online and continue with the scholarship programs, which comes in handy in times of crisis. As the Ministry of Public Education stated in the supporting learning home guidance about rethinking the form of pedagogical mediations to promote and generate learning from the immediate students 'context. (2020b).

**CHAPTER V**  
**CONCLUSIONS AND**  
**RECOMMENDATIOS**

## Conclusions

In 2020, teachers had to relearn themselves to become designers of new learning experiences to maintain students in the school under distance learning scenarios. The researcher analyzed the adaptations developed by the English teachers of Liceo San José de Alajuela to accomplish the Ministry of Public Education strategy during the Covid-19 pandemic.

The continuation of the school system through the distance education process had some challenges to face in terms of the lack of knowledge and training in technological applications. Added to that, there were many difficulties that students experienced for not having connectivity or devices to work in the assignments at home. In this project each participant shared their experiences in distance education during the last school year, in which it seems that many of them have similar issues with their particular needs. However, the primary objective was to utilize distance education as the platform to continue the learning process, seen as an opportunity to provide a valuable teaching method, with the corresponding adjustments.

This section provides conclusions and recommendations to the research once the data analysis was completed. The conclusions responded to the objective previously designed in the first chapter. The author also pointed out some recommendations to teachers, institutions, and the Ministry of Public Education to make the necessary accommodations for similar context.

## **5.1 Conclusions:**

a. Considering the problem formulation of this project, the conclusions stated that the teaching process made many adaptations in terms of pedagogical and administrative functions. That occurred because most of the teachers did not have experiences in distance education before the Covid-19, causing enormous impacts in the implementation of distance methodologies through technological applications for the corresponding scenarios or printed material for students with no connectivity.

### **b. Regarding to the general objective**

The researcher identified many adaptations in the pedagogical mediation in terms of the use of technological tools and the implementation of the Autonomous Work Guide. For the administrative functions, the author recognized activities such as trainings, meetings, delivering reports, students' interactions, among others.

### **c. Regarding to the first objective**

Regarding the objective about the identification of aspects that forced the teaching staff of Liceo San José de Alajuela to learn new skills with the use of Information and Communication Technology tools (ICT's), the researcher concludes the following:

- Most of the teachers did not have preparation or experiences in distance education prior COVID-19 pandemic making more difficult the adaptation to the MEP' strategies.

- In terms of understanding distance education, teachers considered that opportunity as a challenge in their professional carrier, even though it demanded hard work, more responsibilities, time consuming and dedication.
- To face the new reality, teachers tried to find new trainings so they could obtain technological and distance learning abilities, in response to students' necessities to accomplish competence and abilities from the curriculum objectives.
- The combination of virtual and distance education was more exhausting for each teacher who had to organize the pedagogical mediation and the administrative functions, considering all the possible scenarios. Their job was more demanding and tiring, especially when the procedures were not clear to follow by the corresponding authorities and the uncertainty of not knowing when the sanitary crisis would end.
- Based on the previous conclusion, the mental and physical exhaustion that the teachers experienced had negative impacts in their health, being the stress, body aches and headaches the main manifestations.
- It demonstrates that the abrupt changes in teachers' daily activities with the inclusion of technological tools was a challenge for developing new skills. However, the consequences of adapting to a new process of teaching and learning, could bring serious issue in their lifestyle.

d. Regarding the second objective to describe the adaptations for developing pedagogical mediations to cope with the challenge of distance education strategy, the research concludes the following:

- The teachers experienced a new evaluation system through the changes made by the Ministry of Public Education during the first and the second semester of 2021 school years. The English teaching staff appreciated that the Ministry of Public Education prioritized contents from the programs. However, the constant improvisations and the alternation of formative and summative evaluation was confusing for them, making difficult to provide objective evaluations and correct feedbacks.
- For the preparation of distance education and remote classes, many teachers required new equipment such as computers, cellphones, and Wi-Fi to create their own labs at home. That also extended their work schedules to reach most of their students and finish their tasks.
- The distance education strategy during the pandemic interfered with teachers personal and family activities. This is part of the overwhelming consequences of the sanitary crisis. There were no limitations in teleworking hours, and they experienced overworked for the tasks assigned. That also impacted their family relationship such as attending children, taking care of parents, missing celebrations, and spending recreational activities together.
- Home adaptations were also relevant for distance education. In addition to the lack of preparation for distance education, teachers did not have an appropriate place for teaching purposes. The fastest and economical way was to do their job using a part of the house. That also caused a series of inconvenience with their family.



- The academic activities in distance education were surrounded by the Autonomous Work Guide, either with students who worked under scenarios with internet or printed material. Therefore, the teachers selected all the options: planning, preparation for the Autonomous Work Guide, online classes, review of physical and digital tasks, delivery of physical and digital tasks and resolutions of student's doubts.
- a. Regarding the third objective about enlisting the adaptations in the administrative functions for the distance education strategy during the COVID-19 pandemic, the researcher concludes the following:

Engaging students in school activities during the pandemic was a top priority for the Ministry of Public Education, and teachers were aware of their responsibility, as the main contact between students, and the institutions. Therefore, as part of the administrative job, they had to perform new administrative functions such as making regular telephone calls, sending emails, texting in WhatsApp. That also implied to work extra hours to reach students and make sure that they were working in their assignments.

With the implementation of the new scenarios, teachers also experienced some other administrative functions such as MEP's trainings, school trainings, teachers' councils, contact students and families, and delivering of reports. All these activities were also time consuming. For example, the delivery of reports in each semester made teachers work extra hours to provide final reports on time

- The institution management of Liceo San José de Alajuela determined actions to carry out the distance education process by organizing weekly meetings and schedules for the teaching staff. The effective coordination was focused on how to attend students from different scenarios, so they could have equal opportunities.

## **5.2 Recommendations:**

For this final section, the research provided some recommendations for the process of distance education, so the school system involved could take ideas in a future crisis or hybrid learning environment.

### **a- To the Ministry of Public Education:**

- Expand the national curriculum for teachers to develop technological skills with the supervision and guidance of specialized professionals to support, facilitate, and guide process.
- Overcome technological barriers in education by investing in digital infrastructure and improving connectivity for the schools and the teaching staff.
- Promote at all levels and all subjects' trainings for the use of ICT tools through participatory and innovative teaching methodologies in the classroom and outside of it.

### **b- To educational Institutions**

- To orientate the teaching and the administrative staff for the appropriated attention to students, during distance education and

changes arise during the process. For example, the use of technological tools and new procedures.

- To advise the teaching staff and exchange ideas about the implementation of pedagogical mediations that favor the integral development of the students, without implying overloading of teachers' functions.
- To promote open and sincere dialogue between school authorities and the teaching staff, without neglecting the needs and circumstances that each teacher lives, and the objectives pursued by the institution to support the community, through distance educational modalities.
- To Support teaching staff initiatives to implement methodologies and procedures to make their job efficiently. For example, the use of blogs for didactic guides that promote a self-learning environment or application for recording summative evaluations and reports.

#### **c- To teachers**

- To provide support for all students in distance education but especially for those who need more attention because they do not have technological resources.
- To take trainings to improve knowledge and skills that allow them to be up to date in educational procedures and technological application, to be prepared for new requirements. In this manner, teachers might avoid stress or other types of psychological

manifestations for the lack of preparation in uncertain environments.

- During teleworking, teachers should maintain an organized schedule with weekly tasks to accomplish goals. In addition, they must differentiate between his personal and labor life to guarantee the accomplish of objectives during the contracted hours, so they can enjoy time with the family and friends.
- Collaborative work between peers allows teachers to analyze common issues with better criteria to resolve them. Therefore, in circumstance of a lot pressure and work overload, the coworkers advise, or help is essential to develop new skills and vent frustrations.

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## Annexes

**Annex #1 Survey applied to the English teaching staff of Liceo San José de Alajuela.**

Dear English Teachers: As part of the Final Research Project for the Major of English Teaching Licentiate from Universidad Hispanoamericana, a thesis is held on the Distance education strategy of Ministry of Public Education during the Covid-19 pandemic and the adaptations in the pedagogical mediation and Administrative Functions in the Teaching Staff of the San José de Alajuela High School During 2020.

Instructions: Answer the following questions at your discretion, in some cases you can choose more than one answer.

**I. Specific Objective: To Identify aspects of the MEP's distance education strategy, during the COVID-19 pandemic, that has forced the teaching staff of the San José de Alajuela High School to acquire new skills with the use of ICT tools.**

Part I. Experience in Distance Education

**1. Have you had distance education experiences prior to COVID-19?**

a) Yes

b) No

**2. Distance education is for you \_\_\_\_\_**

a) Same as face-to-face

b) A challenge in their profession

c) Professional growth

Part II. Trainings for distance education

**3. In addition to the distance education trainings given by the MEP, did you have to find others on your own?**

a) Yes

b) No

Part III. Health effects during distance education

**4) With the use of virtual platforms, digital tools, and physical material, teaching work can be described as**

- a) Easy
- b) Tiring
- c) Understandable
- d) Slightly difficult

**5) Have you had any of the following effects on your health during distance education?**

- a) Stress
- b) Vision problems
- c) Body ache
- d) Mental and physical exhaustion
- e) Headache
- f) Weight gain
- g) Others

Part IV. Evaluation for distance education

**6) Was the evaluation system applied in distance education new for you?**

- a) Yes
- b) No

**7) What is the type of evaluation that stood out the most in distance education?**

- a) Diagnostic
- b) Formative



c) Summative

**8) Were there limitations to making an objective evaluation in distance education?**

- a) Yes      b) No

**9) If your answer to the previous question is yes, what are these limitations? (You can choose more than one option)**

- a) Confusing guidelines
- b) Lack of family support
- c) Disinterest of students
- d) Lack of contact between teacher and student
- e) Lack of financial means
- f) Lack of means of communication

**II Specific objective: To describe the pedagogical adaptations developed by teachers to cope with the challenge of distance education strategy.**

Part V. Preparation for working in distance education

**10. Did you feel prepared when you started working in distance education with the MEP?}**

- a) Yes      b) No

**Part VI. Technological tools for distance education**

**11. When you started working remotely with your students, colleagues, and bosses, what tools did you have to acquire?**

- a) Computer
- b) Telephone
- c) Another telephone chip
- d) Another email address

- e) Wi-Fi
- f) USB memory
- g) Printer

**12) Have you made any purchase of equipment necessary to work in distance education?**

- a) Yes
- b) No

**13) If your answer to the above question is Yes, please mention what you have purchased.** \_\_\_\_\_

Part VII. Working schedule in distance education

**14) How was your schedule in distance education?**

- a) Same as face-to-face
- b) Shorter than face-to-face
- c) More extensive than face-to-face

**15) In addition to the hours assigned in your educational institute, the academic and administrative activities in distance education were carried out during**

- a) night
- b) weekends
- c) holidays
- d) Other \_\_\_\_\_

**16) Your teaching work interferes with your personal and family activities**

- a) Yes
- b) No

**Part VIII. Home adaptations in distance education**

**17) To give the virtual lessons, receive training and participate in meetings or teachers' councils, you have made some of the following adaptations at home:**

- a) Assign a room as an office
- b) You have always had an office in your home
- c) The living room, bedroom, kitchen, dining room or other place in the house was useful for these activities

**Part IX. Academic activities**

**18) What were the academic activities you carry out in distance education?**

- a) Planning
- b) Preparation of autonomous work guides
- c) Online classes

**III Specific objective:** To enlist how has the distance education strategy of the MEP, during the COVID-19 pandemic, generated adaptations in the administrative functions of the English teaching staff of the San José de Alajuela High School.

**Part 10: Administrative Functions: Variety of administrative activities**

**19) What were the means by which you maintain contact with your students, colleagues, and bosses?**

- a) Telephone calls
- b) email
- c) WhatsApp
- d) Home visits

e) Through other people

**20) What were the administrative activities that you carry out in distance education?**

a) Training with the MEP

b) Training with your educational center

c) Teachers' Councils

d) Training with other institutions

e) Contact with students and families

f) Delivery of reports to students

g) Delivery of reports to your educational center h) Others

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**Annex #2: Semi-structure interview**

Dear Academic and English Teachers coordinator: As part of the Final Research Project for the Major of English Teaching Licentiate from Universidad Hispanoamericana, a thesis is held on the Distance education strategy of Ministry of Public Education during the Covid-19 pandemic and the adaptations in the pedagogical mediation and Administrative Functions in the Teaching Staff of the San José de Alajuela High School During 2020.

the interview was more of an administrative nature, so for the most part, it tends to support specific objective 3, although questions 4, 7 and 8 are more related to objectives 1 and 2.

**Specific objectives:**

1. To Identify aspects of the MEP's distance education strategy, during the COVID-19 pandemic, that has forced the teaching staff of the San José de Alajuela High School to acquire new skills with the use of ICT tools.
2. To describe the pedagogical adaptations developed by teachers to cope with the challenge of distance education strategy.
3. To enlist how has the distance education strategy of the MEP, during the COVID-19 pandemic, generated adaptations in the administrative functions of the teaching staff of the San José de Alajuela High School.

Instructions: Answer the following questions at your discretion.

1. What has the work dynamics been during the distance education strategy due to the health crisis caused by COVID-19?
2. How have you organized the teaching staff to work on the distance learning strategy during the COVID-19 health crisis?
3. Do you consider that the MEP guidelines focused on the teaching needs for the development of the distance education strategy during the health crisis due to COVID-19?
4. Do you know any adaptations in technological equipment, training, or personal schedules that the teachers' staff have made to carry out their academic and administrative work, during the health crisis due to COVID-19? Yes, No. Which ones?
5. Do you consider that the objectives proposed at the beginning of 2020 were achieved with the remote strategy during the health crisis due to COVID-19?
6. On behalf of the school, what is the teachers' accompaniment in the distance education strategy during the health crisis due to COVID-19?

7. Have you observed any changes in the teachers' physical and emotional health during the COVID-19 health crisis?
8. Have any teachers expressed their feelings about the quality and quantity of work done during the health crisis due to COVID-19?
9. If you could solve the current crisis, in education, cause by the COVID-19 pandemic, what would you do?
10. Could increasing or decreasing the number of lessons for each teacher improve the quality and quantity of work in distance education during the health crisis caused by COVID-19?