Teachers' Job Satisfaction in Instructional Delivery Modalities, and the Role of School Leaders: A Study among Selected Private Schools in Abu Dhabi.

الرضا الوظيفي للمعلمين حسب أنماط التعليم، ودور القيادة المدرسية:
دراسة تم اجراؤها في مدارس خاصة مختارة في أبوظبي.

by

AHMAD YAHYA

**Dissertation submitted in fulfilment
of the requirements for the degree of
MASTER OF EDUCATION
at
The British University in Dubai**

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ABSTRACT

Teachers' job satisfaction has always been a priority for educational leaders and policymakers. It directs the institution's productivity and leaves different prints on teacher retention, absenteeism, burnout, academic performance, and turnover rate. Moreover, it impacts the outcomes of the instructional process as it influences the student's academic performance, behaviour, and even his social skills.

The purpose of this study is twofold. First, to analyze the impact of the newly applied teaching modalities on teachers' job satisfaction in selected private schools in Abu Dhabi. The primary teaching modalities that are of the research interest are the face-to-face modular, which represents the traditional teaching module that was commonly applied before the COVID-19 pandemic; the online delivery method which suggests the use of fully distance learning solutions for instruction; and the hybrid learning model, which is a mixture of both the online and face-to-face modules as some students receive instructions from home and at the same time some of their peers are attending the class physically at school. The second purpose of the study is to navigate the role of school leadership to help teachers cope with these models and find out the best ways they can increase their level of satisfaction.

The researcher adopted the mixed-methods approach to be used for his study. A survey was sent to 242 teachers and returned 151 responses. The result of the data analysis confirmed that there is a significant association between the new variable, teaching modality, and teachers' job satisfaction. First, it is found that the traditional teaching model meets the highest level of teachers' job satisfaction, then the distance learning, and lastly is the hybrid modality. This result is derived from the change in the outcomes of the satisfaction factors: job security, workload, in-class effort, work-life balance, remuneration, leadership support, students' behaviour, and relationship with co-workers.

The qualitative aspect of the study is represented in semi-structured interviews conducted with ten teachers and ten school leaders. It explores the best practices that school leaders can apply to meet the teachers' job satisfaction. For example, the interviews recommended that school leaders are invited to build an active channel of communication with their teachers, share the decision-making process with them, decrease the workload, raise the teachers' autonomy, and establish a remuneration system.

مُلَخَّصُ اَلْبَحْثِ

لَطَالَمَا كَانَ لِلرِّضَا اَلْوَظِيفِيِّ لِلْمُعَلِّمِينَ اَلْأَوْلَوِيَّةَ عَلَى أَجِنْدَاتِ اَلْقَادَةِ اَلتَّرْبَوِيِّينَ وَصُنَّاعِ اَلسِّيَاسَاتِ. وَلَا عَجَبَ فِي ذَلِكَ حَيْثُ إِنَّ لِلرِّضَا اَلْوَظِيفِيٍّ أَهَمِّيَّةً بَالِغَةً فَهُوَ بِمَثَابَةِ اَلْمُوَجِّهِ لِإِنْتَاجِيَّةِ اَلْمُؤَسَّسَاتِ اَلتَّعْلِيمِيَّةِ. كَمَا أَنَّ لَهُ بَصَمَاتِهِ اَلْوَاضِحَةَ عَلَى اَلْعَدِيدِ مِنَ اَلْأُمُورِ مِثْلِ نِسَبِ تَغَيُّبِ اَلْمُعَلِّمِينَ عَنِ اَلْعَمَلِ وَمُعَدَّلِ اَلْبَقَاءِ اَلْوَظِيفِيِّ وَكَذَا مُسْتَوَى اَلْإِنْهَاكِ اَلْوَظِيفِيِّ وَالْأَدَاءِ اَلْأَكَادِيمِيِّ وَمُعَدَّلِ اَلِاسْتِبْدَالِ. عَلَاوَةً عَلَى ذَلِكَ، فَلَهُ اَلتَّأْثِيرُ اَلْوَاضِحُ فِي مُخْرَجَاتِ اَلْعَمَلِيَّةِ اَلتَّعْلِيمِيَّةِ لِأَنَّهُ يُؤَثِّرُ عَلَى أَدَاءِ اَلطَّالِبِ وَسُلُوكِهِ وَحَتَّى مَهَارَاتُهُ اَلشَّخْصِيَّةُ وَالِاجْتِمَاعِيَّةُ.

وَلِهَذِهِ اَلدِّرَاسَةِ هَدَفَيْنِ أَسَاسِيَّيْنِ. أَوَّلًا، تَحْلِيلُ تَأْثِيرِ أَنْمَاطِ اَلتَّعْلِيمِ اَلْمُطَبَّقَةِ حَدِيثًا عَلَى مُسْتَوَى اَلرِّضَا اَلْوَظِيفِيِّ لِلْمُعَلِّمِينَ فِي مَدَارِسَ خَاصَّةٍ مُخْتَارَةٍ فِي أَبُوظَبْيَ. وَأَنْمَاطَ اَلتَّعْلِيمِ اَلَّتِي اِسْتَهْدَفَتْهَا هَذِهِ اَلدِّرَاسَةُ لِلتَّمْحِيصِ هِيَ : اَلنَّمَطُ اَلتَّقْلِيدِيُّ اَلَّذِي يَعْتَمِدُ عَلَى تَقْدِيمِ اَلْحِصَصِ اَلْمُبَاشِرَةِ وَجْهًا لِوَجْهٍ حَيْثُ يَتَوَاجَدُ جَمِيعُ اَلطُّلَّابِ مَعَ اَلْمُعَلِّمِ دَاخِلَ اَلْغُرْفَةِ اَلصَّفِّيَّةِ وَهُوَ اَلشَّكْلُ اَلسَّائِدُ اَلتَّطْبِيقُ قَبْلَ جَائِحَةِ كُورُونَا ، وَالنَّمَطُ اَلثَّانِي هُوَ نَمَطُ اَلتَّعْلِيمِ عَنْ بُعْدٍ بِشَكْلٍ كَامِلٍ حَيْثُ يَتَوَاجَدُ كُلُّ طَالِبٍ فِي مَكَانٍ مُخْتَلِفٍ وَتُدَارُ اَلْحِصَّةُ اَلدِّرَاسِيَّةُ مِنْ خِلَالِ مِنَصَّةٍ اِفْتِرَاضِيَّةٍ ، أَمَّا اَلنَّمَطِ اَلثَّالِثِ فَهُوَ نَمُوذَجُ اَلتَّعْلِيمِ اَلْهَجِينِ وَهُوَ عِبَارَةٌ عَنْ مَزِيجٍ مِنَ اَلنَّمَطَيْنِ سَالِفِي اَلذِّكْرِ ، حَيْثُ يَتَلَقَّى بَعْضُ اَلطُّلَّابِ اَلتَّعْلِيمَ مِنَ اَلْمَنْزِلِ عَنْ بُعْدٍ وَفِي نَفْسِ اَلْوَقْتِ يَحْضُرُ بَعْضُ أَقْرَانِهِمْ نَفْسَ اَلْحِصَّةِ اَلدِّرَاسِيَّةِ مِنْ خِلَالِ اَلتَّعْلِيمِ اَلْمُبَاشِرِ فِي اَلْمَدْرَسَةِ .

أَمَّا اَلْهَدَفُ اَلثَّانِي لِلْبَحْثِ فَهُوَ دِرَاسَةُ دَوْرِ اَلْقِيَادَةِ اَلْمَدْرَسِيَّةِ لِمُسَاعَدَةِ اَلْمُعَلِّمِينَ عَلَى اَلتَّعَامُلِ مَعَ هَذِهِ اَلنَّمَاذِجِ وَمَعْرِفَةِ أَفْضَلِ اَلطُّرُقِ اَلَّتِي يُمْكِنُهُمْ مِنْ خِلَالِهَا زِيَادَةُ مُسْتَوَى اَلرِّضَا اَلْوَظِيفِيِّ. وَقَدِ اِعْتَمَدَ اَلْبَاحِثُ اَلْمَنْهَجَ اَلْمُخْتَلِطَ لِيَسْتَخْدِمَ فِي دِرَاسَتِهِ. تَمَّ إِرْسَالُ اِسْتِبَانَةِ اِسْتِطْلَاعِ اَلرَّأْيِ إِلَى 242 مَعْلَمًا وَقَامَ 151 مَعْلَمًا مِنْهُمْ بِالرَّدِّ عَلَيْهَا. أَكَّدَتْ نَتِيجَةُ تَحْلِيلِ اَلْبَيَانَاتِ أَنَّ هُنَاكَ عَلَاقَةً ذَاتُ دَلَالَةٍ إِحْصَائِيَّةٍ بَيْنَ اَلْمُتَغَيِّرِ اَلْجَدِيدِ وَهُوَ أَنْمَاطُ اَلتَّدْرِيسِ مَعَ مُسْتَوَى اَلرِّضَا اَلْوَظِيفِيِّ لِلْمُعَلِّمِينَ. أَوَّلًا، وَجَدَ أَنَّ نَمُوذَجَ اَلتَّدْرِيسِ اَلتَّقْلِيدِيِّ يُلَبِّي أَعْلَى مُسْتَوَى مِنَ اَلرِّضَا اَلْوَظِيفِيِّ لِلْمُعَلِّمِينَ، ثُمَّ اَلتَّعَلُّمِ عَنْ بُعْدٍ، وَأَخِيرًا اَلْأُسْلُوبَ اَلْهَجِينِ. هَذِهِ اَلنَّتِيجَةُ مُسْتَمَدَّةٌ مِنَ اَلتَّغْيِيرِ فِي اَلْعَوَامِلِ اَلْمُؤَثِّرَةِ عَلِي رِضَا اَلْمُعَلِّمِ وَهِيَ: مَدَى اَلْإِحْسَاسِ بِالْأَمْنِ اَلْوَظِيفِيِّ، وَعِبْءَ اَلْعَمَلِ، وَالْجُهْدُ اَلْمَبْذُولُ دَاخِلَ اَلْفَصْلِ، وَالتَّوَازُنُ بَيْنَ اَلْعَمَلِ وَالْحَيَاةِ، وَالْأُجُورُ، وَدَعْمَ اَلْقِيَادَةِ، وَسُلُوكَ اَلطُّلَّابِ، وَالْعَلَاقَةُ مَعَ زُمَلَاءِ اَلْعَمَلِ.

كَمَا يَتَمَثَّلُ اَلْجَانِبُ اَلنَّوْعِيُّ لِلدِّرَاسَةِ فِي اَلْمُقَابَلَاتِ شِبْهِ اَلْمُنَظَّمَةِ اَلَّتِي أُجْرِيَتْ مَعَ عَشَرَةِ مُعَلِّمِينَ وَعَشَرَةٌ مِنْ قَادَةِ اَلْمَدَارِسِ لِاسْتِكْشَافِ أَفْضَلِ اَلْمُمَارَسَاتِ اَلَّتِي يُمْكِنُ لِقَادَةِ اَلْمَدَارِسِ تَطْبِيقَهَا لِتَلْبِيَةِ اَلرِّضَا اَلْوَظِيفِيِّ لِلْمُعَلِّمِينَ. عَلَى سَبِيلِ اَلْمِثَالِ، أَوْصَتِ اَلْمُقَابَلَاتُ بِدَعْوَةِ قَادَةِ اَلْمَدَارِسِ لِبِنَاءِ قَنَاةِ اِتِّصَالٍ نَشِطَةٍ مَعَ مُعَلِّمِيهِمْ، وَمُشَارَكَةٌ عَمَلِيَّةِ صُنْعِ اَلْقَرَارِ مَعَهُمْ، وَتَقْلِيلَ عِبْءِ اَلْعَمَلِ، وَرَفْعَ اِسْتِقْلَالِيَّةِ اَلْعَمَلِ لَدَى اَلْمُعَلِّمِينَ، وَإِنْشَاءِ نِظَامٍ وَاضِحٍ لِلْأُجُورِ.

DEDICATION

This dissertation is dedicated to my family members, those who never failed to believe in me, empower me, and praise my humble efforts. I owe you a debt of gratitude. I cannot thank you enough for the unconditional love you have shown me. The completion of this work would not have happened without your unwavering support, sincere prayers, and brilliant encouragement. I have been lucky to be overwhelmed by the love of such a fantastic family that has shaped my personal and academic life.

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A special thanks should go to all the schoolteachers who are still standing to deliver their superior message even through the pandemic. You are the educational frontline warriors that make our planet a better place to live. Thanks to the educational leaders and policymakers who could successfully carry the responsibility through the pandemic's uncertainty and take the ship to safety.

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Appendices

List of abbreviations

2019-nCoV	Novel Coronavirus 2019
COVID-19	Coronavirus Disease 2019
DoH	Department of Health
NCEMA	National Crisis and Emergency Management Authority
UNESCO	The United Nations Educational, Scientific and Cultural Organization
UAE	The United Arab Emirates
MoE	Ministry of Education
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus-2
OECD	Organisation for Economic Co-operation and Development
TALIS	The Teaching and Learning International Survey
ERT	Emergency Remote Teaching
AD	Abu Dhabi
ADEK	Department of Education and Knowledge
KHDA	Knowledge and Human Development Authority
SPEA	Sharjah Private Education Authority
IB	International Baccalaureate
WHO	World Health Organization
MENA	Middle East and North Africa
AED	Arab Emirates Dirham
TWA	Theory of Work Adjustment
f2f	face-to-face
ERG theory	Existence, Relatedness, and Growth
MARRA	Monitoring, Assessment, Recording, Reporting, and Accountability
JSS	Job Satisfaction Survey
JDI	Job Descriptive Index
TJSQ	Teacher Job Satisfaction Questionnaire
TSS	Teaching Satisfaction Scale
PTO	Purdue Teacher Opinionnaire
MSQ	Minnesota Satisfaction Questionnaire
ESI	Employee Satisfaction Inventory

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Chapter 1: Introduction

1.1   Chapter Overview

In response to the health and safety risks of the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2), by mid-May 2020, 190 countries had to suspend any face-to-face activities in their instructional organisations. As a result, 1.2 billion students around the globe were no longer allowed to attend their classes physically at schools (ECLAC-UNESCO 2020). In a similar context, the United Arab Emirates (UAE), in March 2020, announced that the physical doors of all schools should be closed, but the educational process never comes to an end. The ministry of education (MoE) instated the online learning modular for 1.2 million students to reduce the exposure to and infection with the virus and to facilitate the process of contact tracing from that date and till the end of the academic year 2019/2020 (Dajani 2020).

At the beginning of the academic year 2020/2021, the MoE, in accordance with the regulations issued by the Department of Health (DoH) and the National Crisis and Emergency Management Authority (NCEMA), decided to allow students back to schools. They sent strict precautionary measures to school leaders and gave them the full freedom to choose and apply the instructional modality that best suits their school context and enable them to strictly satisfy the precautionary need. At this stage, one party of school leaders adopted modular distance learning while a second group shifted to the hybrid learning model, and the traditional face-to-face delivery format was still a sound choice for a few others.

This quick migration attracted many scholars and researchers to study these new directions of

delivery. As a result, loads of research studies appeared to deal with these teaching environments and their impact on different variables in the education system. For example, some of these studies explored the relationship between the new instructional environment and the students' cognitive performance; others examined its influence on students' meta-emotions. At the same time, a third group followed its prints on assessment tools.

Considering educators as the frontline heroes of the educational sector during pandemics and ever, and having in mind that their job satisfaction is the power for their engines that leads to a higher level of performance (Kernan 2020), this study is designed to detect their job satisfaction level in relation to the different teaching modalities, and to explore what leaders can do to help teachers feel job satisfied. Though there are extensive research studies that concentrate on teachers' job satisfaction in general, very few related it to teaching modalities or studied the influence of this new variable on the level of teachers' job satisfaction.

In the UAE context, this research area becomes a priority because the Organisation for Economic Co-operation and Development (OECD), in its most recent report of the Teaching and Learning International Survey (TALIS), assures that teachers' job satisfaction in the UAE is below the international average, and that is why further research is needed to articulate the different variables that might affect this satisfaction. Moreover, considering job satisfaction as one of the outcomes that are more likely to occur when the school leadership shows respect to the teachers' personal feelings and needs (Kouali 2017), the study would shed light on the role of school leadership to help teachers acquire a higher degree of satisfaction.

1.2   Problem Statement

Work is an essential part of any person's life, so that the satisfaction a teacher enjoys in his job has a significant influence on his personal and professional life, especially during hard times (Nober 2014). Thus, if a teacher experiences a low level of satisfaction, he might plan to leave not only his current workplace but the teaching profession as a whole (Diaz 2018).

Researchers related teachers' job satisfaction to a lot of facets that have a great impact on it. For example, it was connected to student discipline (Barnes, Crowe & Schaefer 2007; Pittman 2020; Buckman & Pittman 2021), administrative support (Lewis, Roache & Romi 2011), work conditions (Shonje 2016a), salaries and benefits (Perie, Marianne; Baker 1997), leadership styles (Dampier & Banks 2017), and autonomy (Schall 2019). As a result, there is a general agreement that job satisfaction is a mixture of attitudes, evaluations, or personal inner responses towards multiple facets of a particular job (Smith & Holloway 2020).

In such context, the newly practised environment of teaching must be taken into consideration as one of these expected facets (Kernan 2020). These environments are represented in different teaching modalities that were recently applied. These teaching modalities include face-to-face, hybrid or blended, and distance/remote or online environments. The last two modes have been offered as a response to the pandemic situation and even called by some researchers as the emergency remote teaching models (ERT) (Hodges et al. 2020).).

1.3   Purpose and Objectives

Job satisfaction has always been a priority to educational leaders and policymakers as it directs the institution's productivity and success (Baroudi, Tamim & Hojeij 2020). In the same stream, Mcmahan (2018) states that the health and productivity of an educational organisation are dependents on the satisfaction feeling of its employees. Yet, despite this fact, and even though job satisfaction in academic research is one of the most studied aspects, it is the least understood phenomenon in institutions to date (Rowden & Conine 2005). This difficulty is reproduced because the factors impacting teachers' job satisfaction are constantly exposed to change in different contexts.

Bolino et al. (2015) state that the workplace influences the degree of staff job satisfaction and the same dogma is confirmed by (Hong 2002; Fujita et al. 2016; Johari, Tan & Zukarnain 2016; Schall 2019; Saha et al. 2020). This variable was affected when the UAE government started its plan to fight coronavirus disease 2019 (COVID-19) and support the transition of all the UAE private and public schools to different teaching modalities.
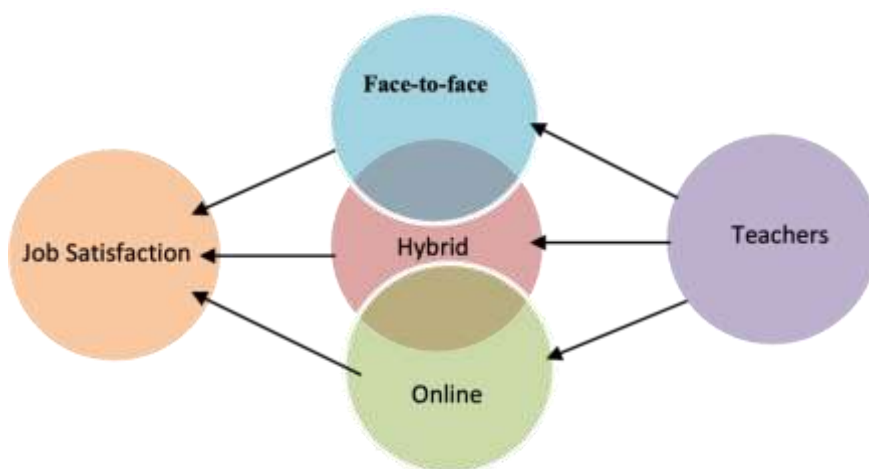
Figure 1. Study Purpose Illustration

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Therefore, the purpose of this study is twofold. First, to analyze the effect of the newly applied teaching modalities on teachers' job satisfaction in selected private schools in Abu Dhabi. The primary teaching modalities that are of the research interest are the face-to-face modular that represents the traditional teaching module that was commonly applied before the pandemic; the online delivery method which suggests using distance learning solutions for instruction; and hybrid learning, which is a mixture of online and face-to-face modules. Some students receive instructions from home while some of their peers are attending the class at school.

The second purpose is to navigate the role of school leadership to help teachers cope with different models and find out the best ways they can increase this level of satisfaction. Thereby, the study objectives are as follows:

- To specify the teaching modalities practiced in AD schools during COVID-19 pandemic.

- To investigate the relationship between the teaching models and teachers' job satisfaction.

- To examine the role of school leaders to help the educators cope with these modalities.

The study develops a mixed-methods approach that uses the quantitative aspect of a survey and the qualitative perspective of semi-structured interviews. The survey is managed through google forms and distributed to teachers through emails. It consists of four sections. The first one represents the consent form, while the second is designed to collect the participants' demographic information. Then, the third one that identifies the currently used teaching modalities from the teachers' perspectives in AD schools, while the fourth section measures the teachers' job satisfaction in relation to every instructional modality. Lastly is the leadership intervention section, which concentrates on the role of leadership to support their teachers' satisfaction level. On the other hand, there are the semi-structured interviews which are conducted either face-to-face or through zoom application. There are two types of them, one for teachers, and the other targets middle and senior leaders from the same schools.

1.4   Research Questions

Is there any relation between teachers' job satisfaction and teaching modalities?

1.   What are the teaching modalities practised in AD schools?

2.   How far do teachers in AD feel satisfied in relation to their teaching modalities?

3.   What are the factors that contribute to this level of satisfaction?

4.   What can policymakers do to achieve a higher level of satisfaction to their teachers?

To answer these questions, the researcher takes the following steps:

•   Explores the potential factors that might affect the teachers' job satisfaction according to the theoretical framework as well as the review of literature. The variables were arranged to design a reliable research instrument to highlight only the variables that affected the teachers' job satisfaction according to the literature and theories.

•   Investigates the modalities of instructions from the perspectives of teachers and literature.

•   Examines the different variables that accompany the new modalities.

•   Studies the role of leaders to help teachers deal with the modalities in challenging times.

•   Suggests the policymakers and strategic planners the best practices to support their teams.

Worth mentioning here is that as there are some modalities just recently practised and there are not enough highly cited studies dealt with, the researcher depends in this part of the research on the recent studies that might not be of a high citation but only articles from highly indexed journals were accepted.

1.5   Rationale for the Study

In the instructional sector, teachers' job satisfaction is a crucial factor that guarantees the sustainability of a productive staff (Aldridge & Fraser 2016). It plays a significant role on teachers' level of turnover, burnout, and constant pressure feelings (Albrecht, Breidahl & Marty 2018; Collie, Granziera & Martin 2018). So that, school leaders and policymakers need to detect any new elements that might change the level of their teachers' job satisfaction, especially in pandemic and crisis times. It is their role to consider their staff welfare to create a harmonious and productive environment (R Maniram 2007), so they can bring more motivation, happiness and enjoyment to their schools and students.

Going through the literature helps us understand that this influential factor was, and still is, being studied in every country. New studies are released daily to clarify its variables and related constant factors. However, studying job satisfaction on the macro level is insufficient to guide educational institutions to success. Meso and even micro-level studies are needed to achieve the institution's goals of its teachers' satisfaction. The needs and expectations of teachers in a school in a particular city that is situated in the north part of the globe are not necessarily the same as the needs of teachers in the southern part of it.

Furthermore, after the novel coronavirus pandemic, the research field has become increasingly interested to discover the new variables that might increase or decrease the satisfaction level after adopting the new instructional modalities. Yet only a handful of studies have explored this new factor, teaching modalities, and its connected variables that might affect the level of satisfaction (Kernan 2020). Moreover, these few studies investigated this factor in different countries and backgrounds other than the UAE.

The significance of this study is that it builds on the current studies and aims to investigate the gap in the new level of teachers' job satisfaction in the alternate delivery model due to crisis circumstances of COVID-19 in meso-levels of the UAE context. Moreover, the study explores the mediating factors that changed through new teaching environments that impact the teachers' job satisfaction. So that, the study represents a general guideline and offers new insights for school leaders that help them reach a higher level of their teachers' job satisfaction that influences their productivity and assure the institution stability. Furthermore, it highlights some of the areas that might negatively affect teachers' job satisfaction in different work modalities to leaders to avoid them to get quality outcomes.

For the foreseeable future, it is pretty clear that the pandemic is flashing the warning light every now and then, putting on new dresses of variants like Alpha, Delta, Beta and Omicron. But, over and above that, new pandemics and crisis would never stop visiting the universe as there are living things on the earth. For that reason, this study is meant to help us make sound instructional decisions regarding the best mode of delivery that a leader can develop for his school at the pandemic and catastrophic times.

1.6   Research Variables

The research aims to investigate the relationship between the following variables:

Independent variable

The research independent variable is the instructional modalities in three different forms: face-to-face, hybrid, and online. This variable encounters a dramatic change due to the pandemic that the whole world has been facing from 2019 and up to date.

Dependent variable

The dependent variable for the study is teachers' job satisfaction. It is reflected in the perceived relationship between what a teacher expects from his job and what he really gets. It has a higher average when the teacher is self-motivated, punctual, productive, enjoying mental and physical health (Mujkić et al. 2014).

Mediating variables

The relationship between the dependent and independent variables is not constant because some factors impacted the independent one. Therefore, this research focuses on mediating variables: workload, job security, work-life balance, salary and benefits, leadership support, student behaviour, in-class effort and coworkers' relations. Through these variables, Job satisfaction would be measured.

Figure 2. The Mediating Variables of the Study

1.7   Research Hypotheses

R1: What are the teaching modalities practised in AD schools?

R2: How far do teachers in AD feel satisfied in relation to their teaching modalities?

$H1_0$: There is no statistically significant difference between teachers practising different teaching modes regarding job satisfaction.

$H1_A$: Teachers who practice direct delivery enjoy a higher degree of job satisfaction than those who experience hybrid or online teaching modes.

R3: What are the factors that contribute to this level of satisfaction?

$H2_A$: There is a significant positive relationship between teachers' pay and job satisfaction.

$H3_A$: There is a significant negative relationship between teachers' workload and satisfaction.

$H4_A$: There is a significant positive relationship between job security and job satisfaction.

$H5_A$: There is a significant positive relationship between teachers' work-life balance and job satisfaction.

$H6_A$: There is a significant positive relationship between leadership support and teachers' satisfaction.

$H7_A$: There is a significant positive relationship between co-workers interconnected relationship and job satisfaction.

$H8_A$: There is a significant positive relationship between students' behaviour and job satisfaction

R4: What can policymakers do to achieve a higher level of satisfaction to their teachers?

1.8   Structure of the Dissertation

The research explores the impact of instructional modalities on teachers' job satisfaction in a

part of the UAE context. One of the main reasons the researcher chose this research area is to get some reflective ideas from the educators about how they think the educational community can give them a hand in critical times pandemics. Here is the organization of the chapters:

Chapter one: the "Introduction" outlines the research, presents the study problem, and highlights its purpose. It focuses on the research objectives, originality, and briefly states the research design.

Chapter two: the "Literature Review" that first maps out the key concepts that constitute the essentials of the study. Then goes through three key theories that focus on job satisfaction. After that, an in-depth analysis of the literature review about the research area represents the variables that past studies stated as influential factors to job satisfaction in different modalities.

Chapter three: the "Research Methodology", which provides an overview of the research design, research instrument, the target scope and population of the study, data collection procedures, and data analysis techniques. Hereafter, it addresses the study's ethical considerations, limitations, and delimitations. Finally, it discusses the validity and reliability of the instruments.

Chapter four: the "Results, Analysis and Discussion" that previews the statistical results of the tool. The results from the interviews are discussed and interpreted as well, as the qualitative partner of the research. This chapter explains how the mixed method approach answered the research questions.

Chapter five: the "Conclusion" is the final chapter. It summarises the study and highlights the research findings. It also discusses the implications for theory and practice then concludes with remarks and recommendations for future studies. Finally, limitations of the study are examined.

Chapter 2: Literature Review

2.1　　　　Chapter Introduction

This chapter reviews the literature from various scholarly journals, articles and books related to teachers' job satisfaction in the UAE context and worldwide. The first part of the literature review briefly introduces the United Arab Emirates and discusses its educational system and the challenges after the pandemic. Then, the researcher presents the history of distance learning and elaborates the key concepts about the different instructional modalities.

After that, a detailed discussion of three main theories that primarily identify the framework for the study is conducted. These theories are the Theory of Work Adjustment, Maslow's Hierarchy of Needs, and Herzberg's two-factor theory. Hereafter, various similar research areas are reviewed to discuss the factors that contribute to the teachers' job satisfaction. The chapter then is wrapped up with a summary of key findings from previous studies and theories.

2.1.1　The Education System in the United Arab Emirates

2.1.1.1 About the United Arab Emirates

The United Arab Emirates (UAE), or the Emirates, is a small country of approximately 82,880 square kilometres. It is situated in the Southeastern part of the Arabian Peninsula of the middle east in Western Asia. It shares a border with the Sultanate of Oman to the east and northeast, Qatar to the northwest, and Saudi Arabia to the west and south. It represents a federation

founded on 2 December 1971 of six emirates: Abu Dhabi, which is the capital city and represents 87 per cent of the total area of the country, Dubai, Sharjah, Ajman, Fujairah and Umm Al-Quwain. On 10 February 1972, a seventh emirate, Ras Al-Khaimah, joined the federation (*About the United Arab Emirates* n.d.).

2.1.1.2 General Overview of Education in the United Arab Emirates

Deep in history, even before establishing the federal state, a high priority was given to education and continues to date (Buckner 2017). Education in the UAE went through different milestones, starting from the Mutawa, Katateeb and Educational Circles, then Semi-organized Education, and ending with the current Modern Education System (Alhebsi, Pettaway & Waller 2015). Alqasimiah School of Sharjah was established in 1930 to be the first school that follows the modern education system in the UAE (Jackson & Jackson 2020).

This modern education system is now reflected through four different educational pillars. These pillars are public schools, private schools, charter schools, and higher education institutions. The UAE nationals were given free admission to public education, and many expatriates established private schools to deliver the curriculum that meets their ethnic and cultural beliefs (Gaad, Arif & Scott 2006). As a result, more than 15 different curricula are in place today throughout the country (ADEK 2019). These curricula include the International Baccalaureate (IB), national curricula of the United Kingdom, national curricula of the United States, India, Canada, France, Germany, Japan and many others.

The contemporary educational system, including higher education, in the UAE is managed by

the Ministry of Education (MoE). Public, private, and charter schools are all working under the same umbrella of the MoE. In addition, there is a local authority that aims to develop the internal educational institutions in every emirate. For example, Department of Education and Knowledge (ADEK) is taking care of Abu Dhabi emirate, while the Knowledge and Human Development Authority (KHDA) in Dubai, and Sharjah Private Education Authority (SPEA) in Sharjah have the same authority in their corresponding emirate (*The Official Portal of the UAE Government* n.d.).

2.1.1.3 Education During Pandemic in the UAE

On 31 December 2019, the highly infectious disease of Novel Coronavirus (COVID-19) appeared in Wuhan, China (Ciotti et al. 2020; Roser et al. 2020). Hereafter, on 11 March 2020, the World Health Organization (WHO) officially raised the alarm to announce the disease as a global pandemic and asked all countries to take immediate actions to save the lives of their people (Daniel 2020; Abushammala, Qazi & Manchiryal 2021). The first case in the Middle East was confirmed in the UAE on 29 January 2020. Then the number of cases started to rise till the UAE had over 23,358 COVID-19 confirmed cases and 220 death cases by 17 May 2020 (Almurshidi, Bridi & Hosani 2021)

To control the COVID-19 virus spread in the educational sector, on 22 March 2020, the United Arab Emirates had to cease the traditional face-to-face education modality and start implementing a virtual education model to students of all private and public educational institutions (*Distance learning in times of COVID-19* 2021). Overnight, more than one million students and 34,000 teachers and administrators started a completely new page of teaching

environment (*The Official Portal of the UAE Government* n.d.).

Such a radical shift could have made a great challenge to stakeholders in the educational field unless there was a previously planned map to such case. However, the decision showed that the MoE can confidently implement an alternative teaching way that ensures continuity of education under any circumstances. Many steps were taken to ensure the success of the implementation. First, smart learning portals and educational resources are made available to all students and teachers (*MoE* 2020). Then training was running for more than 30,000 teachers to use these platforms (Juma 2020) and for principals to supervise the productivity of the virtual learning experience.

Moreover, some universities like Hamdan Bin Mohammed Smart University offer free learning courses to help teachers deal with the new instructional environment. In a different aspect, students were given computers and tablets to be able to access the content. Even telecommunication companies provide students with a free mobile data package to make sure no child is left behind (*Distance learning in times of COVID-19* 2021). By the end of the day, students in the UAE were able to continue learning even through the tough time of the pandemic (Hefnawi 2020).

2.1.1.4 History of Distance Learning

The general international history of distance learning in its modern sense does not set deep in the past of humanity. It started in 1840 in the United Kingdom when Isaac Pitman used the postal service to send course content to his students and receive their feedback for correction

(Rumble 2001). This was the first generation of remote education that the printed press technology shaped (Anderson & Simpson 2012). Then the broadcasting technologies of radio (1920s) and TV (1940s) formed a second revolution of distance education; the one-way instruction where the interaction between the educator and his student is very limited (Evans & Nation 2007). Lastly is the third revolution of computer and internet-based distance learning. It was a giant leap that reformulated the principles of distance education to synchronous and asynchronous e-courses (Cox & Cox 2008; Chaney 2014).

In the UAE context, as a relatively new country, it practised the second and third revolutions of distance education. In the past ten years, it invested heavily in building smart infrastructure and activating different intelligent systems and portals (The Official Portal of the UAE Government 2021). In October 2018, it launched Madrasa, a free eLearning portal that targets math, science, physics, chemistry, and biology to all students from K-12. In November 2020, The Digital School was launched to provide accredited distance education to students who cannot join traditional education. (*Distance Learning in UAE: An Integrated Smart Experience* 2020). Many other initiatives were made to reinforce this directive of distance learning, such as Duroosi, a YouTube channel that covers grades 11 and 12 subjects; Diwan eBook reader, an application that lets students download and interact with all textbooks they study in schools; and Mohamed bin Rashid Smart Learning, an AED 1 billion project to invest in education.

2.2   Conceptual Analysis

Although job satisfaction is one of the most explored areas in the academic field (Buckner 2017), researchers did not formulate a standard definition of the concept (Nyagaya 2015). Back in history, Schneider & Snyder (1975) defined it simply as a "personalistic evaluation" of the

general job climate and the "outcomes" related to it. In a similar sense, Locke (1976) consider it as the extent of positive feeling an employee enjoys in his work and Spector (1997) described it as the degree that an employee likes or dislikes his job. While in a more profound concept, it is a "multifaceted construct that has its roots in the work" (Herzberg, Mausner & Snyderman 2017). It is a response to a multidimensional atmosphere that the employee's job (Rich et al. 2010) and an attitude that results from environmental, physiological, and psychological conditions an employee experiences (Hoppock & Odom 1974).

These "dimensions", "facets", or "combinations" that influence job satisfaction has a similar dispute. It is the recognition, responsibility, and advancement for Nyagaya (2015), while for Nober (2014), it is the kind of work, supervision and pay, but Bateman and Snell (1999) think a person is satisfied when he is "justifiably treated". As a result, finding exactly what makes an employee satisfied is not confined by certain factors.

Considering the educational environment, the teachers' job satisfaction can be defined as the teacher's evaluation of the school atmosphere and his relationship with the environment elements (Zembylas & Papanastasiou 2004). It is impacted by the school efficiency and healthy climate (Benoliel & Barth 2017) and is met when a teacher can meet his needs through his work (Baroudi, Tamim & Hojeij 2020). Many personal factors can influence the individual teacher's job satisfaction. Age, personality, gender, experience, or educational level might change the teacher's feeling of satisfaction (Ilgan, Parylo & Sungu 2015)

On the other side, it is evident that the level of teacher's job satisfaction has some prints on other outcomes like the level of teachers' burnout (Smith & Holloway 2020), retention (de Sousa Sabbagha, Ledimo & Martins 2018), student performance (Judge et al. 2001), teacher's

commitment (Reyes & Shin 1995), level of enthusiasm (Chen 2007), positive attitude towards work (Ilgan, Parylo & Sungu 2015), absenteeism rate (Nober 2014), turnover rate (Javed, Balouch & Hassan 2014), and work engagement (Alarcon & Edwards 2011)

2.3   Conceptual Framework

The study's conceptual framework examines the relationship between job satisfaction as a dependent variable and three instructional modalities (traditional, online, and hybrid) as the independent variables. The relationship between these variables would be examined through the mediating variables: workload, job security, work-life balance, salary and benefits,
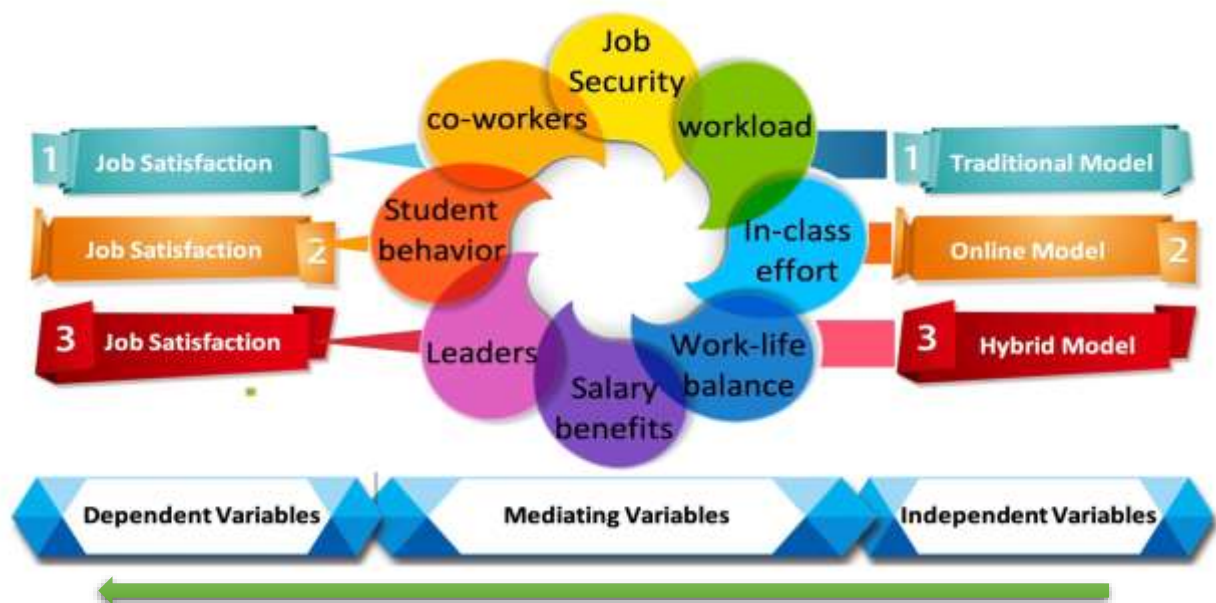
Figure 3. The Study Variables (Independent, Dependent, and Mediating)

leadership support, student behaviour, in-class effort, and co-workers' relations.

These specific mediating variables were chosen as the indicators of teacher's job satisfaction because simply job satisfaction is understood through the socio-ecological model as an individualistic feeling. Therefore, it cannot be illustrated using wholistic human behaviour (Jorde-Bloom 1986). Instead, it is seen as a dependent feeling directed through the nature of the employee, his needs, and values, as well as the nature of his work and work environment

(Buckner 2017). A deep analysis of the previous studies and related theories is conducted to come up with the mediating variables of job satisfaction. This analysis will be dealt with in the next part of this chapter of the study.

2.4 Instructional Modalities

Instructional modalities are the learning environments where a teacher meets his students to deliver his lessons. The most common modality is the traditional face-to-face classroom method (Paul & Jefferson 2019a). But during the last three years, different modalities were made accessible to a wide range of educational institutions in different countries. As the new normal of the COVID-19 pandemic accelerated the technological revolution in education, it put the distance and hybrid learning modes in action (Tanhueco 2021). It was the blessing in disguise of the critical health thread. Moreover, it raised the need for educators to equip themselves with professional digital competencies (Bervell, Nyagorme & Arkorful 2020).

2.4.1 Traditional Teaching Model

The traditional teaching is the face-to-face model of delivery. It is teacher-led and requires students to attend their lessons physically sitting in a classroom on-campus where you find desks, chairs, and textbooks (Nober 2014). It is the chalk and talks teaching model that is textbook-based and instructor-led (Chan 2007). There are no classes designed for distance learning experiences (Salman, Alkathiri & Khaled Bawaneh 2021). The content depends on active reading and writing, oral instruction, discussion, and slideshow presentation, but zero per cent for remote instructions (Allen et al. 2016). Only students with their teacher attending

lectures and taking notes in a particular place at a specific time (Johns, Moeeni & Ruby 2005).

The general face-to-face model has been occupying the dominant position of knowledge transfer for at least three millenniums. Its universal technology tool in education, "the printed textbook", is over five centuries old (Rooney, 2003). Till a short time ago, about 80% of delivery modality was the traditional one that is conducted in the classroom. At the same time, new teaching technology started to be more present in the last ten years; over ten dominant modern technologies for collaboration have been introduced (Nsofor et al. 2014).

In a regional context, the Middle East and North Africa (MENA) region in general depends dominantly on the traditional teaching model to deal with the teaching and learning process (Salman, Alkathiri & Khaled Bawaneh 2021). However, the COVID-19 pandemic forced many countries worldwide – including the UAE – to implement different modalities and platforms. Therefor, learners who were receiving instructions using the traditional f2f model in the near past shifted to the distance learning environment (Ashby, Sadera & McNary 2011).

2.4.2 Distance Learning

Distance learning is a way of delivering lessons where the learners and the teacher are not meeting in a classroom, alternatively using telecommunication technology (Moore & Kearsley 2012; Kireev, Zhundibayeva & Aktanova 2019; Vlachopoulos & Makri 2019; Rapanta et al. 2020). A similar yet accurate definition (Allen et al. 2016) defines it as a learning experience where at least 80% of the content is delivered online. It expanded to a great extent in the past five years (Song et al. 2004) that it has become dramatically overwhelming due to the urgent

call of COVID-19 pandemic "keep distance", and encouraged by the increasing use of the internet in every human activity (Peterson et al. 2020). It was the only available option to keep the education process running. Yet the UAE students were lucky that they had a ready infrastructure in hands (Bawa'aneh 2021).

During the pandemic, different terms were used by parents and students to indicate distance learning. Online learning, virtual learning, e-learning, and remote learning are only some of them (Al Salman, Alkathiri & Khaled Bawaneh 2021). Moreover, terminologies like web-based learning, tele-learning, networked learning, and even internet learning are all found in the literature to imply that the educator is using the technology as a medium of delivering instruction to reach a distant learner and to help him access the learning materials (Ally 2008).

Kim Guan (2017) states that distance learning is usually better practised by adult learners as they can initiate a student-based learning experience better than others. He adds that it is increasingly used to deliver professional development sessions to employees from different locations as it redefines time and space restrictions. It primarily serves learners who do not have easy access to classrooms for professional or social commitments (Holmberg 2005). While in a different vision, (Salman, Alkathiri & Khaled Bawaneh 2021) think that distance learning is the infrastructure of any educational institute that confirms its achievements in the current time of COVID-19 hardship for all levels of students. It is not confined to a specific age; only a certain degree of knowledge about technologies is what any student needs to be engaged in the online learning process (Weidlich & Bastiaens 2018).

2.4.3　Hybrid Learning

Hybrid learning in its current format is a new phenomenon of educational planning (Halverson et al. 2012) . It is sometimes referred to as blended learning, and both words are often used interchangeably (Nortvig, Petersen & Balle 2018). The simplest definition is the combination of the previously mentioned two learning formats, the face-to-face and distance learning models (Graham 2006; Halverson et al. 2012; Margulieux, Mccracken & Catrambone 2016). A similar broad definition is that it is any instructional modality that integrates the benefits of educational technology along with the traditional format (Joseph-Charles 2019). A limited specification of the term was given by Allen et al. (2016) as he specified between 30% to 80% to the online delivery of the course, and the rest of content delivery is for the face-to-face model, while Bernard et al. (2014) find it 50% either direction.

In recent years, hybrid learning grasps much more attention than ever (Wang, Quek & Hu 2017). Moreover, in some cases, it is seen as a better choice than using the other two models separately. It combined the benefits of face-to-face interaction along with the flexibility of the distance format to produce a third one where students interact together in a new mixed format (Adams, Randall & Traustadóttir 2015; Lakhal, Bateman & Bédard 2017).

Before COVID-19 pandemic, the structure of a hybrid learning course was understood as all students of a single class attending face-to-face sessions gathering at the same place. They use the internet technology to watch videos, respond to assignments or set an exam. In this format, all students receive the same delivery format simultaneously (Brashear 2020). This format is restructured after the pandemic. A new stream is added and commonly practised by different

schools. To reduce the possibility of interaction between students, schools in AD were asked to decrease the class capacity to 50% and to keep distance between every student and his closest classmate of at least 1.5 meters (then it is reduced to 1 meter only) (Private school reopening policies and guidelines 2020). So, schools could not allow all students to attend face-to-face classes simultaneously. In the new scenario, schools kept online and face-to-face students attending the same class in real-time during the same shared synchronous session.

In accordance with this new instructional delivery modality, the teacher has to plan different activities for every group for the same lesson. Many researchers see this new format as a "bridge to the future" (Bervell, Nyagorme & Arkorful 2020). It simplified the understanding of the blended learning model. Hence, it means that teaching and learning are running where at-home students are engaged in an actual face-to-face session by means of telecommunication applications like MS Teams, Zoom, Meet or any other video conferencing tool. For research purposes, the terms hybrid learning and blended learning would be used interchangeably to mean the same thing.

2.4.4   Synchronous and Asynchronous Distance Learning

Following the beginning and milestones of distance learning we realize that the more advanced technology, the better it adds to the teaching process (Salman, Alkathiri & Khaled Bawaneh 2021). The availability of technology developed the student-student, student-teacher, and student-curriculum interaction (Bervell, Nyagorme & Arkorful 2020). Due to this interaction, two terms were introduced to the field: Asynchronous and synchronous learning.

Asynchronous learning is when a teacher makes the learning materials available online for students to learn on their own. Learning in this approach is not limited to a specific time or specific place; yet has limited interaction between the teacher and his students but more independence (Hastie, Chen & Kuo 2007). It refers mainly to Piaget's cognitive theory where the learners can learn on their own, and at the current time, emails, discussion forums, wikis and blogs can be of help (Tularam & Machisella, 2018). But even with these tools, asynchronous learning can negatively impact the student achievement and raise the feeling of him disconnected and isolated (Kennedy & Ferdig 2018).

On the other hand, synchronous learning happens when the student attends his lessons online at a specific time and interacts with his classmates and teacher in real-time (Kilinc et al. 2020). The synchronous style has direct contact with hybrid and distance learning as the online technology is always present as a central pillar of it (Mazumder et al. 2021) and teachers can develop student-teacher interaction by using different applications and platforms (Tularam & Machisella 2018). However, given that generally synchronous blended learning is relatively new, few studies have investigated its use and effectiveness (Yang et al. 2021).

Raes et al. (2020) identify two kinds of hybrid synchronous distance environments. The first one is the mixed virtual classroom where there are two different groups of learners attending the same class at the same time. The first group is attending the class on campus "here students", while in the second group every student is attending the class remotely from a different location of his own choice "there students". The second type of hybrid synchronous distance environment is the remote classroom. In this setting, there are two groups of learners as well. One is attending the course on-site "here site", and the other is from a different single location.

2.5   Theoretical Framework

Several available theoretical frameworks are plausible for the study in concern. Therefore, there are two significant areas in the research interest: new teaching modalities and teacher's job satisfaction. So that, Theory of Work Adjustment, Maslow's Hierarchy of Needs, and Herzberg's two-factor theory would be primarily identified to frame this study. Each of them would be dealt with here in some detail.

2.5.1   Theory of Work Adjustment

The Theory of Work Adjustment (TWA) illustrates the dynamic relationship between the person "P" and his work environment "E" (Turner & Lapan 2013; Foley & Lytle 2015) with job satisfaction as an essential parameter of this adjustment (Barnes 2018). It suggests that there are double-ended interconnected relations between the individual and his work environment. On the first side, the employee has specific needs and values that he seeks to satisfy by the rewards in his workplace. While on the other side, there is the work environment which in return has some job requirements that the employee is supposed to possess through his skills and abilities. If the relationship between these two ends is positive-positive, then it is described as "correspondence"; otherwise, it is "discorrespondence" (Lawson 1993).

Work adjustment, therefore, describes the situation of obtaining and maintaining the correspondence (Tinsley 1993). It is only achieved if the employee is both satisfied and. satisfactory. In this situation, the state between the work environment and the employee would be harmonious equilibrium (Dawis 2002), and the employee is likely to stay in his job rather

than to quit or to be fired (Lawson 1993). On the opposite side, when the employee is not satisfied or not satisfactory, work adjustment would not be met (Turner & Lapan 2013).

Plessman (1985) states that the person's satisfaction indicators include (1) the resemblance between the person's professional interest and his most successful colleague's in the workplace or a similar occupation in a different environment, (2) individual's evaluation of the fulfilment of his needs and expectations in his workplace, (3) the individual's evaluation of his work environment, leaders, and coworkers, and (4) the person's evaluation of his working conditions, pay, work hours, and work type. At the same time, the satisfactoriness indicators include (1) the person's productivity and achievements, (2) the relationship between the employee's abilities and job requirements, and (3) the evaluation of worker by his leaders and coworkers.

In a similar context, Lofquist & Dawis (1978) conceptualized the needs of his work environment as "values" and the characteristics that the environment offers to meet these needs as "reinforcers". Dawis (2002) considered six core values that a person seeks to satisfy. These values are achievement, the feeling of accomplishment; comfort, keeping the stress level to its minimal; status, achieving recognition by others; altruism, reaching a harmonious level with coworkers; safety, having a stable environment; and autonomy which is the feeling of independence and ability to control the work tasks independently.

In case an individual is not completely correspondent with his work environment, Turner & Lapan (2013) describe four important modes to retain the missed harmony. These modes are flexibility, activeness, reactiveness, and perseverance. Flexibility is the tolerance level before the relationship between the individual and his work environment needs intervention to retain

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the correspondence. At the same time, activeness is the mode of adjustment that is required by the environment to reach closer correspondence. If the individual himself is invited to change something about his own behaviour to maintain harmony, this is the reactiveness mode. Lastly is perseverance which is the length of time needed by the individual to complete the adjustment.

This adjustment process is also described by Dawis (2002). He suggests four different directions that one (or more) of them is supposed to be visited by either the employee or the work environment to complete the adjustment task. Two of these directions are available if the individual is dissatisfied with his work environment. He can either try to change the work environment or change himself. For example, he can influence the workplace to increase the reinforcers, for example, raise the salary. Alternatively, he can reduce the number of his needs and expectations. On the opposite side, if the individual is unsatisfactory, he has two options: either to get more skills and develop his abilities or to try to change the environment expectations of him. Meanwhile, in the first scenario, the employer still has the choice to resign or keep his work, and in the second one, the workplace can terminate or retain the employee.

In the virtual context of distance learning, Raghuram et al. (2001) assume that working independently from home may help employees gain confidence which in return might help secure a high level of work adjustment. Moreover, autonomy is accessible when individuals work asynchronously to access different resources. Furthermore, working within a team and collaborating with the team members is easier using e-mails and similar technologies. All these factors lead to an employee that enjoys a higher level of adjustment to his work context. The same assumption is suggested by Turner & Lapan (2013) that if an employee is satisfied, then he is more likely to raise a satisfactory level, while he is less likely to do so if he is not satisfied.

2.5.2   Theories of Motivation and Job Satisfaction

Motivation and satisfaction theories are usually classified into two major categories: content theories and process theories. The content category of theories answers the question of "what" (Downing 2016); what are the intrinsic and extrinsic reasons of the behaviour that lead to job satisfaction? The theory of this approach is expected to list the factors that initiate, stimulate, guide, or maintain the employee's satisfaction (Xia, Izumi & Gao 2015; Muholi 2017). For example, Abraham Maslow's Hierarchy of Needs (1954, 1970) states five levels of needs to meet the employer's job satisfaction. These levels are physiological, safety, love and belonging, esteem, and self-actualization. Other theories of the same category are ERG theory, motivator-hygiene theory, and achievement theory.

On the other side, the process category of theories answers the question of "how" (Downing 2016). How is the employee motivated? It focuses on the individual's behaviour and examines motivation within him. For instance, Locke's goal-setting theory does not suggest what motivates an employee; it explains how goal setting can guide to better motivation and satisfaction (Xia, Izumi & Gao 2015). Other examples of the process theories include McGregor's theory X and theory Y, expectancy theory, and Ouchi's theory.

 This study follows the content theory. It tries to detect the changes in teachers' needs for every type of instructional modality that help them reach the highest level of job satisfaction. The research sheds light on Maslow's Hierarchy of Needs and Herzberg's Two-factor theory.

2.5.2.1 Maslow's Hierarchy of Needs

Abraham Maslow's needs-based theory, Hierarchy of Needs, has been exceptionally influential of all the content theories (Downing 2016). It is the most cited theory of motivation and is credited with the first framework of satisfaction and motivation (Wells 2020). Ibid (2003), (cited in Muholi 2017) states that the hierarchy of needs theory introduced motivation and job satisfaction concepts more than sixty years ago. His early studies of 1954 distinguished researches as guides to satisfaction dimensions. Later, different researchers added extra factors that serve the same dimension or contribute different ones as more profound studies are conducted (Wells 2020).

Maslow claims that people generally have needs, desires, motives, and wants (Muholi 2017). Those needs are classified into five different categories to form a pyramid of five layers that starts with the most fundamental layer that represents the essential needs to the highest one, which introduces the most sophisticated desire. He points out that humans have to fulfil the most basic layer of needs before they move on to the higher level (Sanders 2019). They can not move to a further stage unless the first one is complete (Robbins and Judge 2008).

The fundamental assumption of Maslow's model is that any employee is directed by having multiple unsatisfied needs that influence behaviour. When these needs are met, they are dropped from the motivators list for this person. Then higher-order needs take the place to motivate him. Generally, the highest level of needs is less likely to be met than those in lower layers (Bushiri 2014).

For Maslow, the start point sits at the bottom of the pyramid. It is the physiological need. This need includes water, adequate food, shelter, air, adequate salary, working conditions, etc... . When the physiological needs are satisfied, the employee seeks to meet the next level of needs: safety needs. This category includes physical safety, economic security, medical care, and job security (Law & Glover 2000). The third layer of the pyramid is the need for love and belonging. He suggests that human beings search for a positive association with the community (Wells 2020).

This category includes social interaction with coworkers, friendship, and giving and receiving love. As the individual is connected with his society, he moves to the fourth layer, seeking recognition. This is the esteem or ego need (Sanders 2019). He likes to acquire personal reputation and respect amongst his community, recognition and approval from others. Satisfying these needs gives him a sense of achievement and self-confidence (Downing 2016). Meeting the previous needs pushes the employee to the highest level of the hierarchy: self-
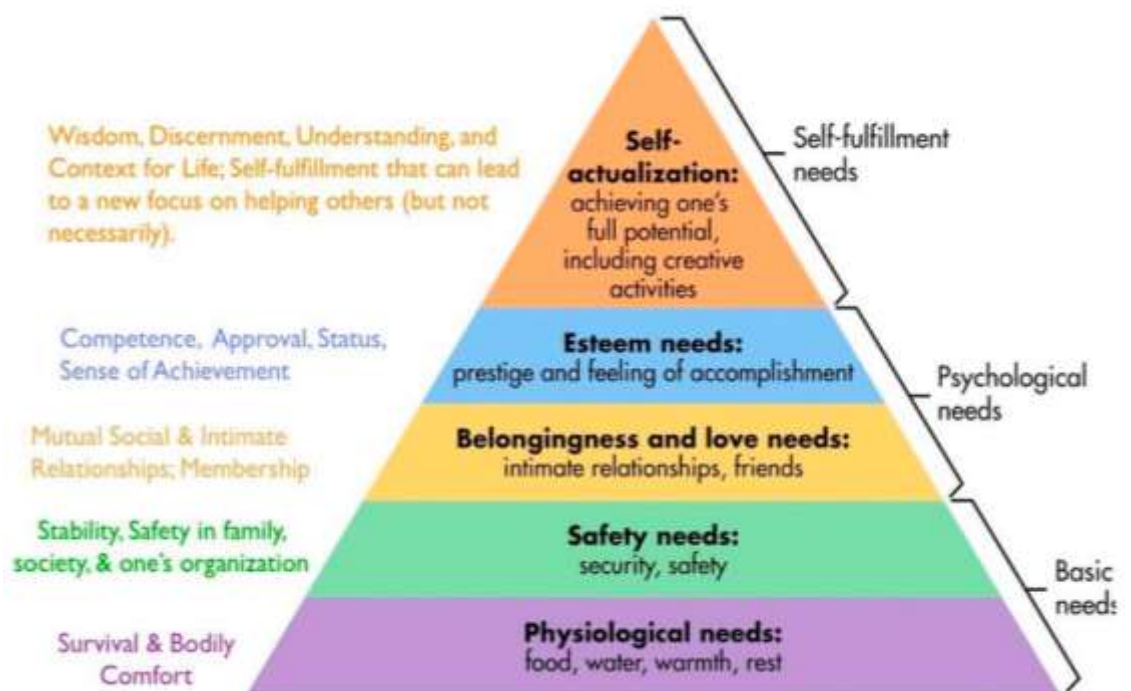
Figure 4. Maslow's Hierarchy of Needs (Pendleton-Brown 2020)

actualization. It involves the desire to reach one's full potential. This potential varies from a person to another but generally takes the individual to the highest step of accomplishment (Maslow 1954).

While Maslow's hierarchy of needs theory is considered one of the essential behavioural theories (Sanders 2019; Wells 2020), after his death, the hierarchy has been considered too simple (Butler 2010). Therefore, other researchers used it as a beginning point and built upon it to further explore the concept (Downing 2016). For example, some researchers added two more levels to the hierarchy and named them cognitive and aesthetic needs (Chapman 2012). Others proposed that individuals seek to meet different needs from different levels simultaneously with no order (Carson 2013).

To sum up, though there are a lot of theories to deal with motivation and satisfaction, Maslow's theory of hierarchal needs is still relevant and highly regarded to date (Law & Glover 2000). Moreover, it has a stunning potential appeal in the human psychology and business fields (Bushiri 2014). Its purpose is: if a leader determines the level his employee arrived in the hierarchy, he can choose the suitable rewards for him (Ramlall 2004).

2.5.2.2 Herzberg's Two-factor Theory

Two-factor theory is also known as motivation-hygiene theory or Herzberg's dual-factor theory (Bhatnagar 2014; Alshmemri, Shahwan-Akl & Maude 2017). It was first introduced by a psychologist called Frederick Herzberg when he, along with Mausner and Snyderman, published the two-factor model of motivation in 1959 (Lumadi 2014). The developed model

was influenced by Maslow's hierarchy of needs, yet it was supported by actual research with a population of accountants and engineers (Law & Glover 2000). He suggested a two-dimensional framework. This framework claims that there are some factors that motivate the human being while there are other factors raise his feeling of dissatisfaction. It has two parallel continua, unlike the old paradigm of Maslow, which was a single direction hierarchy (Boeve 2007).

Herzberg claims that specific factors in life motivate or satisfy people. He called these factors "motivation" factors. The second category of factors is essential to maintain an only "OK" or "fine" state (Timmreck 1977). These maintenance factors are called "hygiene" factors. In other words, Herzberg considered two continua: satisfaction and dissatisfaction (Grant 2006). Unlike Maslow, he confirmed that a particular set of factors is linked to job satisfaction, while a different set is responsible for the dissatisfaction feeling (Lam & Yan 2011). He points out that satisfaction is not the opposite of dissatisfaction; no satisfaction is the opposite of satisfaction; similarly, no dissatisfaction is the opposite of dissatisfaction (Fong 2015).

Herzberg called the first set of factors, the satisfier factors, as motivators. These motivators are considered as intrinsic values that are related to the job itself (Lumadi 2014). Though the presence of these factors leads to satisfaction, their absence does not lead to dissatisfaction. Instead, they are closely linked to the person's need for professional growth and self-actualization (Alfayad & Arif 2017). These factors include "achievement, recognition, the work itself, responsibility, advancement, and the possibility for growth" (Herzberg 1966).

The second category of factors in Herzberg theory is the hygiene or maintenance factors

(Cunningham 2015). These factors are related to extrinsic aspects of work like supervision, relations with co-workers, work conditions, benefits, company policies and administrative practices, and job security (Herzberg, Mausner, & Snyderman 1959). They describe the work environment rather than the job itself. They are crucial to prevent dissatisfaction, but their presence does not have any motivational value (Timmreck 1977; Lumadi 2014). It is just connected with the need to avoid unpleasantness (Boeve 2007; Alshmemri, Shahwan-Akl & Maude 2017)

Table 1. Comparison between the Two Factors of Herzberg's Theory

	Motivation Factors	Hygiene Factors
Absent	There is no satisfaction	There is dissatisfaction
Present	There is satisfaction	There is no dissatisfaction
Herzberg described	Intrinsic to the job	Extrinsic to the job
Importance to job satisfaction	Strong	Poor
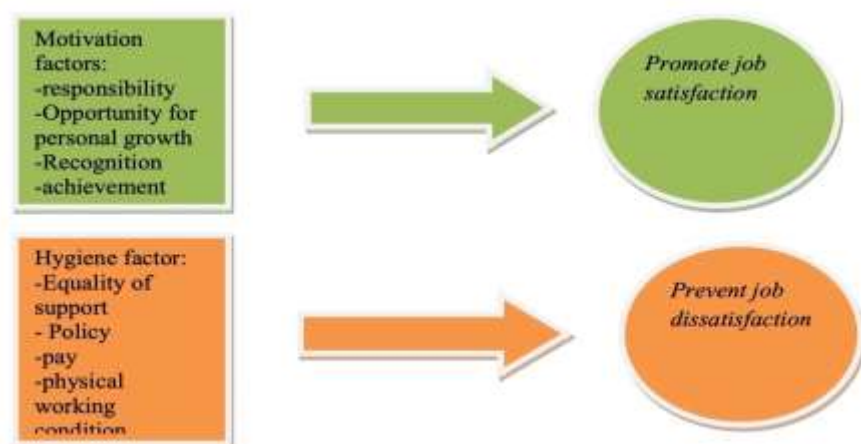
Figure 5. Herzberg's Two-factor Theory (Ayele 2014)

Most studies on teacher job satisfaction are based on Herzberg's two-factor theory that classified the satisfying and dissatisfying factors.(Bogler 2001; Hogg, Baldock & Pritchard

2011; Lam & Yan 2011; Fong 2015). If a leader aims to motivate employees, he should target the intrinsic factors of the motivators (Butler 2010). The external factors serve as a guide to create a favourable atmosphere for employees as well (Alkhyeli & Ewijk 2018). It keeps them far from dissatisfaction feelings (Tan, Yusoff & Idris 2013).

2.6   Review of Related Literature

A job-satisfied teacher is the backbone of any successful educational organization. A deep exploration of the factors contributing to his satisfaction (or dissatisfaction) is crucial to developing and supporting educational systems. In the first place, the level of satisfaction has an impact on the individual psychological wellbeing, but different researchers linked it also to other consequences (Ilgan, Parylo & Sungu 2015). It has an apparent effect on his productivity (Caprara et al. 2003; Senyametor et al. 2019), job behaviour (Klassen et al. 2012), intention to leave (Bhatnagar 2014), burnout (Gursel et al. 2016; Smith & Holloway 2020), absenteeism (Maghrabi 1999), turnover rate (Alarcon & Edwards 2011; Yaghi 2016; Ahmad 2018), classroom control (Tillman and Tillman 2008), student achievement (Patrick 2007; Dutta & Sahney 2016), student engagement (Kengatharan 2020), and numerous other factors that impact the overall school effectiveness. Therefore, teacher's job satisfaction has always been a significant research area in the academic and organizational field throughout history (Backenstoe 2018).

Keeping a high level of teacher's job satisfaction has always been a motive that sustains acceptable effort to perform required duties and undertake assigned responsibilities (Waston 1991). Such duties and responsibilities include planning lessons, monitoring and stimulating

students' progress, marking assignments, analysing data, developing curriculum, correcting misbehaviour, motivating students and other administrative duties that might be assigned to him (Shonje 2016b). For this reason, thousands of research studies were found to deal with the different variables that might influence teachers' job satisfaction. Unfortunately, most of these studies are made in western context (Kengatharan 2020). Therefore, the finding of these studies cannot be directly adopted in the UAE educational community. Moreover, among the other studies that dealt with job satisfaction in the UAE, none of the researchers has examined the impact of the new teaching modalities on the level of teachers' job satisfaction.

2.6.1 Factors Affecting Teachers' Job Satisfaction

Through the past 50 years, the factors that influence teachers' job satisfaction went through a significant change (Fong 2015). These factors used to be related to intrinsic values like teacher's achievement, recognition, or student behaviour. In contrast, recently, the factors started to include extrinsic elements like supervision, relations with co-workers or work conditions (Darayseh 2020). This change in the current century was creating teachers that seem less satisfied than those of the previous century (Klassen & Anderson 2009). So that, in the next part of the chapter, the researcher would navigate the different satisfaction variables that might encounter a recent change due to the COVID-19 pandemic. Although many variables are meant to affect job satisfaction, this research will cover workload, job security, work-life balance, salary and benefits, leadership support, student behaviour, in-class effort, and co-workers' relations. In the following part of the study, the researcher examines some of the most potent factors in more detail.

2.6.1.1 Remote Workplace and Job Satisfaction

The current health pandemic created extensive interruption to the education sector worldwide and impacted learners in continuing their education (Juma 2020). It forced schools to change how they conduct their learning activities (Darayseh 2020). In response to it, distance learning has become an indispensable necessity as the only available mode of instructional delivery (al Salman, Alkathiri & Khaled Bawaneh 2021). It represented this type of delivery as an essential pillar to secure the school community and stop the spread of the disease (Zhou et al. 2020). However, for many teachers, the implementation of distance learning was neither smooth nor effective as they didn't have the required experience to deal with the online applications (Zaharah & Kirilova 2020).

Numerous studies compare online mode of delivery to face-to-face and mention the strengths and weaknesses of each. However, in the current context, only a handful of them address the area of teachers' job satisfaction regarding the two modalities. One of these studies is Schall (2019), which included 185 participants and found out that remote work positively impacts teachers' job satisfaction. He referred this result to the high level of autonomy, low level of work-family conflict and high level of flexibility of time and location. While in Gajendran & Harrison (2007)'s meta-analysis study, they found out that there is an inverted u-shaped relationship between the level of remote work and job satisfaction. They confirm that as remote work increases, job satisfaction increases; however, it only increases up to a certain point. Further increases in remote work led to a decrease in job satisfaction.
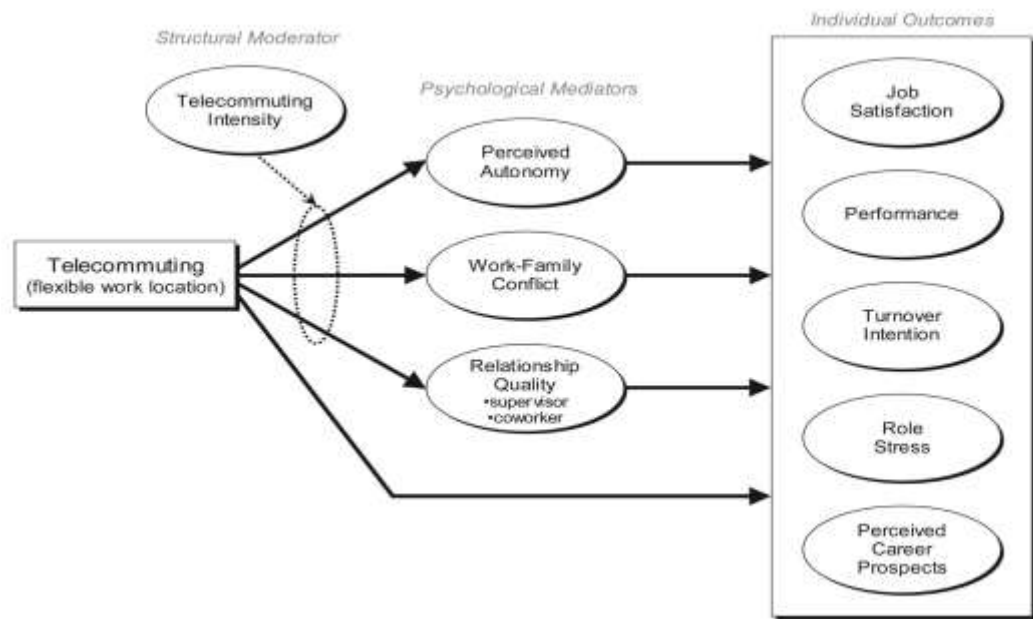
Figure 6. The Consequences of Telecommuting (Gajendran & Harrison 2007)

2.6.1.2 Workload and Teachers' Job Satisfaction

Workload is defined as the quantitative and qualitative tasks and duties placed on an employee (Pittman 2020). Butt and Lance (2005) described some of these tasks as MARRA (monitoring, assessment, recording, reporting, and accountability). Exams grading, emails checking, lesson planning, conference attending, parents contacting, and student coaching are all part of the teacher's workload (Paul & Jefferson 2019b). Moreover, a teacher may serve other academic and administrative roles before, during, or after school, during vacations; or after work hours (Cogaltay & Karadag 2016).

All these factors, which represent the teacher's workload, have an influential impact on teachers' job satisfaction (Buckman & Pittman 2021). Dealing with a heavy workload and tiring deadlines is very stressful and leads to higher dissatisfaction (Okumbe 1998). For instance, a

heavy workload may prevent a teacher from attending professional development sessions or exploring new digital technologies (Niaj 2019)

Comparing the workload in traditional teaching with that of distance delivery Stern (2004) assume it to identical. However, the blended learning model increased the teacher's workload as the teacher has to prepare everything for two environments, the actual and virtual one (Cesinger 2017; Attard & Holmes 2020).

2.6.1.3 Job Security and Teacher's Job Satisfaction

Searching for the relationship between job security and job satisfaction in our theoretical framework we find that job security is always considered a significant factor that leads to job satisfaction (Mahasen 2019). It occupies the second layer of Maslow's five-tier hierarchy and comes right after the physiological needs as one of the prerequisites for job satisfaction (Downing 2016). An employee cannot seek to satisfy any psychological needs until job security is guaranteed (Pendleton-Brown 2020). In a similar context, in his motivation-hygiene theory, Herzberg considers job security as one of the essential hygiene factors (Bogler & Nir 2015; Alfayad & Arif 2017). He confirms that the absence of it leads to an increased level of job dissatisfaction (Zembylas & Papanastasiou 2004; Thomas 2014; Bogler & Nir 2015).

Brotschul (2014) argues that job security is of great importance to the employees feeling of well-being. It guides to a positive school atmosphere (Leithwood, Sun & Pollock 2017). But Robinson (2016) argues that it has a low level in distance learning mode. Moreover, Ibrahim & Al-Taneiji (2019) divided its level into two portions in the UAE context. The first one is related

to the UAE nationals and western teachers who enjoy a high level of it, while the second is for the rest of expatriates who do not feel a similar degree.

2.6.1.4 Work-life Balance and Teacher's Job Satisfaction

Work-life balance is defined as spending enough quality time to communicate with family members, relax or take care of children and their education (Fatima & Sahibzada 2012). In other words, it is the "harmonious interaction between the different domains of life." (Johari, Tan & Zulkarnain 2018). When this harmony is reached, an employee feels comfortable with both family and work duties. Therefore, it is vital to keep the effectiveness and productivity of teachers (Dutta 2012).

Agha, Azmi & Irfan (2017) argue that though the work-life balance is crucial for life, it even reduces employee turnover and absenteeism; most employees worldwide feel stressed to prioritise their commitments between life and work. Moreover, Fatima & Sahibzada (2012) assure that a vast majority of teachers remain busy with work-related issues even after leaving the workplace and suffer insomnia when trying to sleep. Therefore, they give a preference to the work duties to the extent that might impact their personal comfort (Mcmahan 2018). In comparison, he should allocate an equal amount of time for professional-related tasks and personal life-related events to reach job satisfaction (Azeem & Akhtar 2014). Sorensen & McKim's conceptual model illustrates the relationship between work-life balance and job satisfaction.
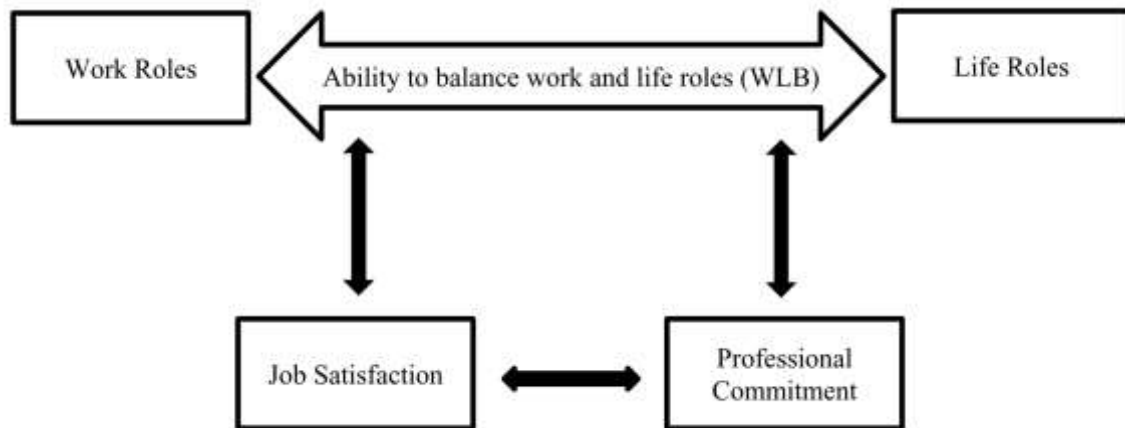
Figure 7. The Relationship between WLB and JS (Sorensen & McKim 2014)

2.6.1.5 Remuneration and Job Satisfaction

Salary and other benefits is a decisive factor that impacts teachers' job satisfaction (Wangai 2012). Baraza (2008) suggests that monthly salary is the main reason for joining the employment sector in variable cases in developing countries. Moreover, financial reward is considered the most potent motivation tool for most people (Grizzle 2017). It plays a significant role in the teacher's job satisfaction as it lets him understand that he is valued by the community (R Maniram 2007).

On the other side, poor pay that is not related to work effort leads to job dissatisfaction (Akala 2002). It pushes teachers to leave their profession and do their best in other sectors other than the educational one (Fatima & Sahibzada 2012). According to Maslow's hierarchy, the desire for money emerges as one of tier one needs.

2.6.1.6 Leadership Support and Job Satisfaction

The role of school leaders is attested to be related to teachers' job satisfaction (Lytle 2016; Mcmahan 2018; Tolliver 2018). Numerous studies examined different aspects of leadership like leadership style, leadership traits, leadership abilities, and even leadership relationships and connected it with teachers' job satisfaction and commitment (Ilgan, Parylo & Sungu 2015). Furthermore, factors like insufficient professional development and lack of guidance have been found as significant elements that contribute to teachers' stress (Darayseh 2020).

On the other side, job satisfaction is defined as the most complicated area that school leaders face (Alkhyeli & Ewijk 2018). The willingness of teachers to cooperate with the school administrator is directly related to other factors like school climate, human relations, and justice (Kernan 2020). Yet recognition and appreciation from school managers, team leaders, and peers are determined to significantly impact job satisfaction (Kouali 2017).

2.7   Summary of the Chapter

To control coronavirus infection, the educational sector in the UAE had to cease the traditional instructional modality and start implementing a virtual education model to students of private and public educational institutions (*Distance learning in times of COVID-19* 2021). As a result, more than 35,000 teachers started a completely new page of teaching environment; it is the distance then hybrid teaching models (The Official Portal of the UAE Government 2021). This change had a crucial impact on teachers' job satisfaction. This study aims to investigate this change, and elaborate on how school leaders help their teachers cope with it.

Teacher's Job satisfaction is not a new research area. It has always been a significant target to scholars as it touches the teacher as well as the leader and school governors. Moreover, it directs the holistic success meter of the institution. Various studies listed a range of outcomes triggered by the level of teacher's job satisfaction. Some of these variables are turnover rate (Javed, Balouch & Hassan 2014), engagement (Alarcon & Edwards 2011), absenteeism (Nober 2014), productivity (Alkhyeli & Ewijk 2018), enthusiasm (Femina 2016; Chen 2007), retention (de Sousa Sabbagha, Ledimo & Martins 2018), burnout (Smith & Holloway 2020), commitment (Reyes & Shin 1995), student performance (Kernan 2020), and teacher's attitude towards work (Ilgan, Parylo & Sungu 2015).

On a different perception, several factors were identified to guide teachers' job satisfaction. Previous studies divided these factors into two categories. The extrinsic category includes, but is not limited to, remuneration (Nyagaya 2015; Grizzle 2017), working conditions (Admiraal et al. 2019), school resources (Halverson 2016), students behaviour (Martin & Dowson 2009), school climate (Aldridge & Fraser 2016), and job security (Dampier & Banks 2017; Leithwood, Sun & Pollock 2017); and intrinsic variables like motivation(Grizzle 2017), self-efficacy(Alkhyeli & Ewijk 2018), and autonomy (Baroudi, Tamim & Hojeij 2020).

The current study selects eight different factors related to teachers' job satisfaction as per the study's theoretical framework advocated by Maslow's Hierarchy of Needs and Herzberg's Motivation-Hygiene theory. Here is a list of these factors and their position in the supporting theories, check table 2.

Table 2. The Variables Correspondence to the Study Theories

Variables	Maslow's Hierarchy of Needs	Herzberg's two-factor theory
Workload	Safety need	Hygiene factor
Job security	Security need	Hygiene factor
Work-life balance	Physiological need	Hygiene factor
Remuneration	Physiological need	Hygiene factor
Leadership support	Esteem need	Hygiene factor
Student behaviour	Love/belonging need	Hygiene factor
In-class effort	Love/belonging need	Hygiene factor
Co-workers' relation	Love/belonging need	Hygiene factor

Through this table we can figure out that the selected values are included in both theories that the study refer to. It reflects how important these factors are for the teachers' job satisfaction. These factors are located in different layers of Maslow's Hierarchy of needs, while these are all located in the hygiene factor of Herzberg's two-factor theory.

Chapter 3: Methodology

3.1　　　　Research Approach

The researcher adopted the mixed-methods approach to be used for his study. This method has become commonly known as the most recent development in research methods (Creswell 2012). It is defined by Creswell and Plato Clark (2011) as the procedure for gathering, analyzing, and "mixing" different data from quantitative and qualitative methods in a single study to answer the research questions and investigate the research problems. They assume that using the mixed-methods design provides a deeper understanding of the problem than either method by itself. The mixed-methods approach gives the opportunity for systematically integrating, linking, and embedding qualitative and quantitative data into a single outcome (Tashakkori & Creswell 2007) and is often chosen if the researcher wants to get into the different aspects of a phenomenon (Silverman & Marvasti 2008)

In this research, the mixed methods research design is mainly chosen because the study investigates two interconnected yet different areas; thereby, a single type of data collection is not enough to capture the detailed answer to their questions. The first area aims to detect the current teachers' job satisfaction level in different instructional delivery modalities, which is best answered through the quantitative data collected from a survey. Quantitative data produces numeric values that can statistically evaluate the frequency and magnitude of trends and comes with useful analysis that helps in describing trends (Creswell 2012).These analytic data are enough to give us a good preview about the change, if any, to the teacher's job satisfaction level experienced by changing the teaching environment in the target context.

The second area aims to finding out the best practices that leaders can develop to keep the teachers' job satisfaction to its momentum, which is answered through interviewing teachers, as well as middle and senior leaders. This qualitative aspect of the mixed methods approach is chosen to answer the second question as we need to meet different parties and interpret their reflections. Through semi-structured interviews, we can understand how personal experiences develop ideas that can help policy and decision makers raise the level of harmony in their institutions. Moreover, it gives us a deep understanding of the previously collected result through the survey for a better vision of the data analysis.

3.2 Data Collection Tools

3.2.1 Existing Instruments

As we can conclude from the literature review, Job satisfaction research has always been one of the most navigated areas in different fields. Therefore, loads of instruments have been developed to measure job satisfaction level through various settings (Gkolia, Belias & Koustelios 2014), yet researchers did not agree to validate a particular instrument for this purpose. Some of the reviewed instruments aim to examine the global multidimensional level of satisfaction, while others focus on specific jobs (Saane et al. 2003). Furthermore, the content validity of the tool was always present as a challenge towards defining the instrument. While other researchers authorized certain factors as satisfaction indicators, different ones raised the "no gold standard" attitude to reflect their opinion (Saane et al. 2003).

A review of the literature about job satisfaction instruments suggests that most of these instruments evaluated different factors as indicators of the employee's satisfaction. They developed from the general measure of "how satisfied are you with your job?" to long 6-point Likert questionnaires. For example, Spector (1985)'s Job Satisfaction Survey (JSS) is a nine-facet scale to measure the factors: pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, coworkers, nature of work, and communication (Spector 1985). It has 36 items, and each item has six choices.

A different yet reliable tool found to measure the employees' job satisfaction is Job Descriptive Index (JDI). It was developed by Smith, Kendall, and Hulin (1969) and went through different revisions till 2009. It is a five-factor tool that targets the indicators: work itself, supervision, pay, promotion and coworkers. Each of these indicators includes a checklist of either 9 or 18 phrases. Beside each of these phrases, the respondent writes "Y" for "yes, I agree", "N" for "no, I do not agree", or "?" for "cannot decide". The total number of items of the JDI is 72 items.

Other instruments include Teacher Job Satisfaction Questionnaire (TJSQ) (Lester 1987), Teaching Satisfaction Scale (TSS) (Ho & Au 2006), Purdue Teacher Opinionnaire (PTO) (Bentley & Rempel 1980), Minnesota Satisfaction Questionnaire (MSQ) (Weiss, Dawis, & Lofquist 1967) and Employee Satisfaction Inventory (ESI) (Koustelios & Bagiatis 1997).

3.2.2   Developing the Research Instrument

The review of the currently available tools that measure teachers' satisfaction found some inadequacies if applied to the current research. The research study investigates a new context

of teaching modalities that were not considered in the previous tools. Therefore, the researcher had to develop a new tool to satisfy his study area. The researcher considered two significant references to develop a reliable data collection tool. The first one is the existing revised tools specially JSS (see appendix A), JDI (see appendix B), PTO (see appendix E), and MSQ (see appendices C & D). The satisfaction indicators used in these tools were the ones that the researcher accepted.

The second reference is the theoretical framework and empirical results of the study. The study referred mainly to two different theories regarding teachers' job satisfaction. The first one is Maslow's Motivation Theory which stated five needs for motivating employees arranged in a hierarchy from basic to advanced: physiological need, safety, belongingness and love, esteem, and self-actualization. While the second theory is Herzberg's Two Factor Theory which prioritized achievement, recognition, the work itself, responsibility, salary status, quality of interpersonal relations with peers, supervision, and job security.

Therefore, the reviewed existing tools and the theoretical framework confirmed the following facets as the research indicators of job satisfaction: workload, job security, work-life balance, salary and benefits, leadership support, student behaviour, in-class effort, and co-workers' relations.

3.2.2.1 Survey Structure

The survey is made up of a total of 34 statements that are organized in four sections other than the consent one. The consent section introduces the researcher and describes the research area,

purpose, and expected benefits to the field. Moreover, it confirms the confidentiality of data and anonymity of respondents. It also informs the participant that he can withdraw at any time for no reason and assures that there is no foreseeable risks or discomfort to his participation. If he chose not to take the initiative, their responses will be not analyzed for the study. In a different response, when a participant accepts to play a part in the study, a different window opens to guide him through the various sections of the survey.

Every section in the survey is arranged to address one of the significant areas of the study. The first section consists of six questions and collects respondents' demographic information: age, gender, level of education, years of experience, teaching subjects, and teaching cycles. These data are crucial to the study as it figures out if there is a correlation between any of these variables and the level of teachers' job satisfaction. In addition, it reflects how strong is the relationship between these variables and whether this relationship is positive or negative.

The second section consists of seven questions and is meant to find out the instructional delivery modality currently in use in the target context. Only three teaching delivery modalities are considered: face-to-face model, distance synchronous model and hybrid teaching modality. The asynchronous distance model is not of the interest to this study as it is not being practised in the study geographical context of Abu Dhabi, UAE. Next is the third section of the survey which consists of 13 questions and measures the level of teachers' job satisfaction in every teaching model. While the last section is the leadership support section which comprises seven questions and collects data about the support teachers receive from the school middle and senior leadership team regarding every modality (see appendix G).

3.2.2.2 Qualitative Tool

To collect data about participants' attitudes and beliefs, the most reliable quantitative research method to use is survey research (Muijs 2004). The study's qualitative approach is represented in interviews with teachers and schools' leadership members. The qualitative phase of the study aims to discuss the best ways leaders can help their teachers in different modalities from the teachers' and leaders' perspectives. It also enabled the researcher to further comprehend the results of the data analysis of the survey. Thirteen semi-structured questions were present for the teachers' interviews (see appendix K). These questions concentrated on understanding why teachers prefer a particular instructional modality other than the others. Moreover, it seeks the teachers' opinions about the current level of support offered by leaders in their institution and different ways to raise their job satisfaction level.

The second batch of interviews targeted the school head of departments as well as principals and vice-principals. There are thirteen questions formed for this purpose (see appendix I). These questions focused mainly on exploring the impact of teaching mode on teachers' job satisfaction from leaders' viewpoint. It also navigated through the best practices that leaders initiated to help their teachers cope with different delivering modalities. Both kinds of interviews started with thanking the participant for being a part of the study, explaining the study purpose and asking him to read the consent form and sign if he is still willing to participate (see appendix H & J). They ended by asking the interviewee if there were anything else he would like to add and might be of interest to the study, thanking him again for the precious time is the last phrase.

3.3   Piloting the Instruments

A reliable survey must have explicit language, proper grammar, correct spelling, and a clear objective (Bhatia 2018). So that testing of questionnaires is very crucial to the data collection process. It assures that the questions are free of ambiguity and the target respondents could understand every question the way it is intended (Sekaran 2003). To reduce biases in this instrument, it went through two stages of revision, and consequently, editing was conducted upon the findings of both sets. First, the tool is shared with researchers of the same area of interest; a discussion is shown about the tool structure, content, language clarity, and selection bias. Changes were made depending on the feedback of the brainstorming sessions. For example, the large number of items considered in the survey was a challenge that needed intervention (see appendix F for the pre piloted instrument).

The second stage of revision started when the survey was released to a limited number of random people for the piloting purpose. Five teachers from each of the three schools represented the piloting sample of the survey. This number of participants forms about 10% of the suggested sample of the study. Several researchers suggested that the pilot sample should be 10% of the intended sample for the main study (Memon et al. 2017). Participants were asked to write any comments, suggestions, or questions about the survey.

Upon the pilot responses, the researcher found that some items were irrelevant to the current UAE educational context. For example, measuring the teachers' job satisfaction in the distance asynchronous teaching modality was not a sound choice. This type of teaching modality was not in action in any of the target schools or even in any educational institution in the UAE (see

appendix G for the post piloted instrument). As a result, thirteen of the participants in the pilot sample did not respond to the questions related to distance asynchronous modality, so the survey is modified to consider only the modalities in use.

Similarly, before conducting the qualitative phase of the study, there was a pilot step where an interview was conducted with 3 school leaders that enabled the researcher to change the questions orders, practice the interview protocols, and rephrase the questions for better results. Participants' responses were coded and arranged in thematic groups and interpreted accordingly. A semi-structured interview method is conducted so questions format combines closed and follow-up open-ended questions (Wilson & Williams & Hancock 2000). Semi-structured interviews help researchers explore a topic in detail (Wilson & Hancock 2000).

3.4   Context, Sites, Population, Samples

The target geographical context of this study is Abu Dhabi emirate, UAE. It targets the schoolteachers as well as middle and senior leaders in three private school. The total number of teachers in all three schools is 242 teachers of different specializations, age groups, genders, and nationalities. The total number of middle and senior leadership members is 39. Therefore, the target sample of this study would be categorized as follows:

Category 1: the survey sample target only teachers of the three schools. As the total number of teachers is 242, the minimum expected number of respondents was 149 considering 95% confidence level, 5% margin of error, and 0.5 sample proportion.
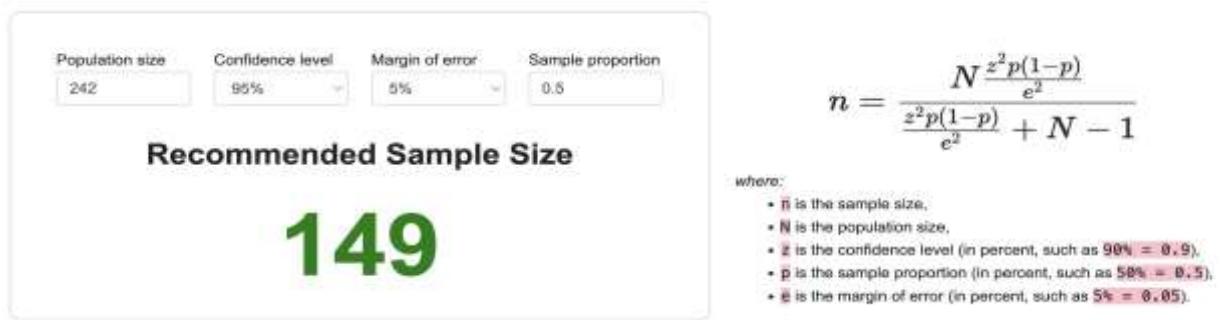
Figure 8. Calculation of Sample Size

Category 2: the quantitative part of the study is represented in two different groups. The first one targets ten schoolteachers for further clarifications about the leadership role to raise the teacher's job satisfaction level from the teachers' point of view, whereas the second group of interviews targets ten of the middle and senior leaders to focus more on their role to help their teachers in different teaching modalities.

The data collection process started at the beginning of December 2021 and completed by the end of the first week of January 2022. First, the pilot sample of teachers and school leaders was excluded from the survey. Then an email with an introductory invitation letter and a link for the online questionnaire is sent to a total number of 227 teachers through the Edi-TextEditor mailing system. As the researcher has easy access to the target participants, the questionnaire was sent directly to their individual e-mails and not to the school admins; therefore, an official letter of consent was not required from the involved school leaders. Permission was only needed from the participants before completing the survey.

The introductory invitation letter was sent as the body of the email. It introduces the researcher and the research purposes. It confirms the respondent's anonymity and assures data

confidentiality. The questionnaire was developed in English and comprised only closed questions. It took five weeks to collect 151 complete responses with an overall rate of 67% after two follow-up emails sent to target participants after week two and again after week four.

For the qualitative phase of the study, ten participants of each group of interviews were contacted through emails then phone calls. Then, face-to-face and zoom meeting interviews were conducted based on the participant's time preference. The qualitative phase lasted for three weeks and came right after the end of the quantitative phase.

3.5 Data Analysis Plan

By the end of the data collection phase, the raw data from the survey is exported to Statistical Package for the Social Sciences (SPSS) application version 25 for macOS for data analysis. Responses from the survey were divided into three categories per the instructional modalities. A comparison is made between the face-to-face, hybrid, and distance models to determine the modality that meets the most of teachers' job satisfaction and the one that meets the least of it.

Job satisfaction was measured in two different scales for data reliability. The first one is through a single global item, "How do you rate your overall level of job satisfaction?". A single query is more consistent to measure job satisfaction since spiritually sensitive practice involves the whole being rather than compartmentalization.(Hong 2009). The second scale is through multifaceted indicators derived from the theoretical framework and the review of reliable existing instruments. Researchers believe that job satisfaction is better reflected by the sum of the facet parts (Scarpello & Campbell 1983). Therefore, the variables considered in this study are listed in the following table.

Table 3. Job Satisfaction Variables in the Study Questionnaire

Variables	Items in the survey	Maslow's Hierarchy of Needs	Herzberg's two-factor theory
Job security	Items 15 and 24	Security need	Hygiene factor
Workload	Items 16 and 24	Safety need	Hygiene factor
In-class effort	Items 17 and 24	Love/belonging need	Hygiene factor
Work-life balance	Items 18 and 24	Physiological need	Hygiene factor
Remuneration	Items 19 and 26	Physiological need	Hygiene factor
Leadership support	Items 20 and 31	Esteem need	Hygiene factor
Student behaviour	Items 21 and 24	Love/belonging need	Hygiene factor
Co-workers' relation	Items 22 and 24	Love/belonging need	Hygiene factor
Overall satisfaction	Items 23 and 27		

3.5.1   Descriptive Statistics

Descriptive analyses including mean, standard deviation, percentages and frequencies are used for the teacher demographic values. These findings are tested to confirm whether there is a correlation between any of these values and job satisfaction. Using descriptive analysis, questions 1 and 2 of the research would be answered. Result values would be rounded to the closest whole number and classified accordingly (Teddlie & Tashakkori 2009)

3.5.2 Correlation Analysis

Pearson correlation analysis is used to answer the third question of the research and to find out if there is a significant relationship between the mediating variables: remuneration, workload, job security, work-life balance, leadership support, and coworkers' relationship and the dependent variable (teachers' job satisfaction) in every independent variable of the instructional delivery modalities. The same tool would examine the general correlation between job satisfaction and teaching modalities.

3.5.3 Thematic Analysis

The second phase of the data analyses is the thematic analysis of the qualitative data collected from the teachers' and leaders' interviews. The process evolves identifying, interpreting and reporting themes within data. Then the researcher connects the themes to form "a chronological sequence" and generate "a theoretical and conceptual model" (Creswell 2012). The interviews were semi-structured that there were some predefined questions in the researcher's hand, but more unprepared questions arose through the conversation. As per Braun & Clarke (2014), this phase includes six different steps: familiarizing the researcher himself with the data, coding the data, searching for the themes in his data, reviewing the patterns identified, specifying and naming the themes, and lastly, producing the findings.

3.6   Limitations and Delimitation of the Study

Though the study is designed to measure the teachers' job satisfaction in Abu Dhabi, there is a

time limitation that made it not possible to consider all the schools in the target area. There are more than 500 different schools in the target geographical context, while the study investigated the research problem only in three of them. Therefore, developing a mixed-methods approach to deal with the topic in concern made it possible to cover all the aspects and collect the needed data to make the study findings reflective and reliable.

A second limitation is that the study dealt only with eight job satisfaction associated factors in the quantitative tool while tens of other factors can be added, even though the chosen elements were supported by the theoretical framework of the study and supported by the existing reviewed tools. Moreover, the study is made during the pandemic time of COVID-19. Therefore, the result might not be consistent if the same study is conducted in a different time frame, as the pandemic consequences might affect the teachers' feeling of satisfaction.

3.7   Ethical Consideration

The researcher highly considers the principles and values of research ethics. In this concern, the researcher shares the information about the study purpose, tools, methods with the target audience before they take part in the study. He assures that participation in the study is voluntary, and this fact was revealed to all the target respondents. The consent form was explained to all participants and signed by face-to-face participants or electronically accepted by virtual respondents. Participants were made aware of being free to withdraw from the study at any point. No identification data were collected at any stage of the study to confirm the anonymity of respondents. Collected data are stored on the researcher's PC, which is password protected as and security and confidentiality of data remained a priority. moreover, to avoid his

bias and prejudice, the researcher have some of the participants as well as other researchers review the results for validating the findings.

3.8 Reliability and Trustworthiness

Qualitative studies are asked to meet trustworthiness; therefore, thick and rich data are crucial (Onwuegbuzie & Leech 2010). So that the researcher intended to meet both teachers and school leaders to form a sound understanding of the changes that might happen due to the change of teaching modality. Moreover, during the interviews, the researcher used to ask for clarification if the answer had two meanings. The question "Does this mean what we claim it means" (Parratt 2000) was always present. Furthermore, the interviewee chose the appropriate time for interviews to ensure the responses were trustworthy, the participants trusted the researcher, and they were at ease.

The concepts of reliability and validity are vital in surveys (Parratt 2000). According to Sekaran (2003), reliability is the test of an instrument that confirms it to be consistent with no errors. To establish reliability, the researcher considered the theoretical framework and the previously reviewed tools to choose the indicators of job satisfaction for his instrument. Moreover, a pilot study is conducted to ensure the tool meets the aims it is made for. The validity of data in this research confirmed that the required number of participants for every stage in the study was obtained. The number of participants represented 67% of the target sample, and 0.7 is the reliability coefficient. To evaluate the instrument's internal consistency, Alpha reliability analyses is used.

3.9 **Summary of the Chapter**

This chapter represented the methodological outline of the study. The mixed-methods approach is chosen to ensure the data collected represents what it is meant for. In addition, the instruments were piloted to avoid any tool biases. The chapter explains the reason behind selecting the target indicators for the tools and the stages for collecting data. First, the survey is sent to target participants to specify their current teaching modality and measure their job satisfaction. After responses are collected, the data is categorized into three groups for the study's three teaching modalities of interest. Then job satisfaction level is measured for each, and a comparison between its status in each modality is made.

On the other hand, a qualitative method was present through twenty face-to-face and online interviews to investigate the data collected from the survey and seek ways of support that leaders can offer their teachers. Ten of these interviews were with teachers, and another ten were with middle and senior leaders of three schools. Themes were specified through the interviews and put in order.

SPSS will be used to examine the research hypothesis that descriptive, correlation and thematic analyses will be conducted. At the end of the chapter, the researcher mentioned the limitations and delimitation of the study, ethical consideration and lastly, the trustworthiness, reliability, and validity of data.

Chapter 4: Results, Analysis and Discussion

This chapter represents the survey results and the findings from the participants' interviews. The analysis of quantitative data of the questionnaire starts with discussing the demographic information and measures the instrument's reliability. Then, testing the hypotheses which figure out the correlations between the teaching model and the level of teachers' job satisfaction on the one hand and between this level of satisfaction and the eight determinants that are claimed by the literature review on the other hand. Lastly is the qualitative approach of the study. It concentrates on two themes. The first one collects the teachers' reflections on the relation between teaching modality and job satisfaction and the second one discusses the leadership support from leaders' and teachers' perspectives.

4.1   Qualitative Analysis

4.1.1   Demographic Information

The questionnaire was distributed to 242 participants through their emails and returned 151 responses from teachers of 3 schools. This number of participants meets the recommended sample size, which is 149, considering a 95% confidence level, 5% margin of error, and 0.5 sample proportion. The analysis of the demographic data was as follows:

Participants' gender: little more than a half (53.6%; 81) of the participants were female, while (46.4%; 70) represented the male gender, as indicated in figure 9. For the detailed distribution of the gender variable split per the teaching modality, see appendix (L).
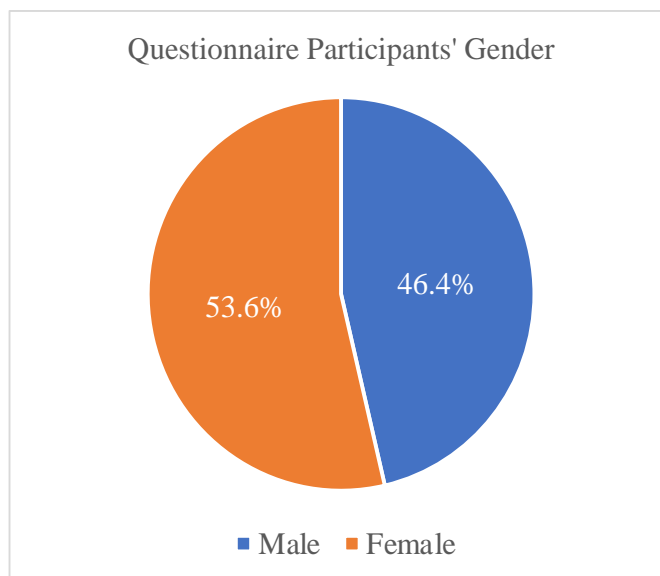
Figure 9. Questionnaire Participants' Gender

The age group of the participants (figure 10) indicates that most of them (50.3%; 76) were aged 31 to 40 years, while (21.9%; 33) were 30 or below, then (21.2%; 32) were aged 41 to 50, and lastly (6.6%; 10) were above fifty of their age. For the detailed distribution of the age groups split per the teaching modality, See appendix (M).
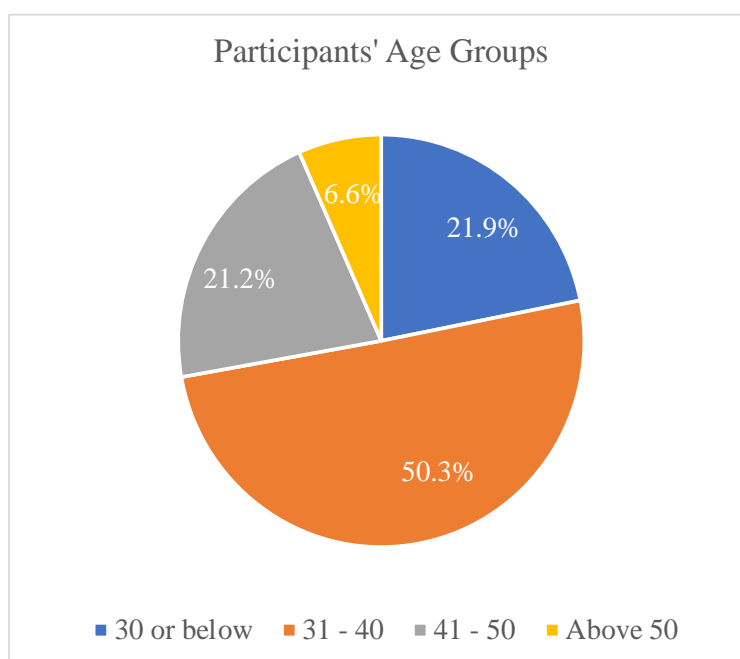
Figure 10. Questionnaire Participants' Age Groups

The participants had various educational levels, yet the large majority of them (74.8%; 113) were found to have a bachelor's degree. In addition, postgraduate diplomas were obtained by (21.9%; 33), while only (2.6%; 4) had a master's degree and only one had a doctoral degree

Figure 11. Participants' Educational Level

(figure 11). For more details about the participants' educational levels, see appendix (N).

Regarding the participants teaching experience, the responses read that (44.4%; 67) spent from
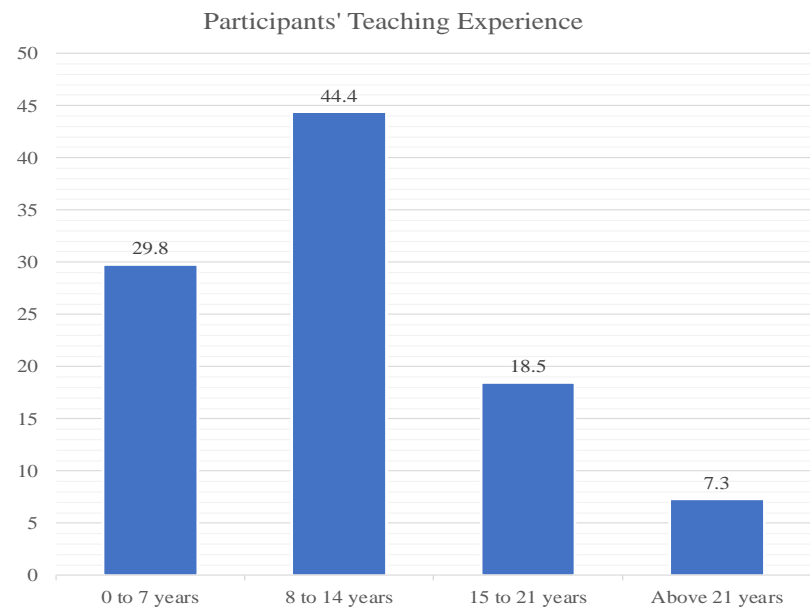
Figure 12. Participants' Years of Teaching Experience

62

8 to 14 years in the field, while (29.8%; 45) spent from zero to seven years, (18.5%; 28) spend

from 15 to 21, and lastly (7.3%; 11) spent more than 21 years, check (figure 12). For detailed

distribution of the teaching experience split per the teaching modality, see appendix (O).

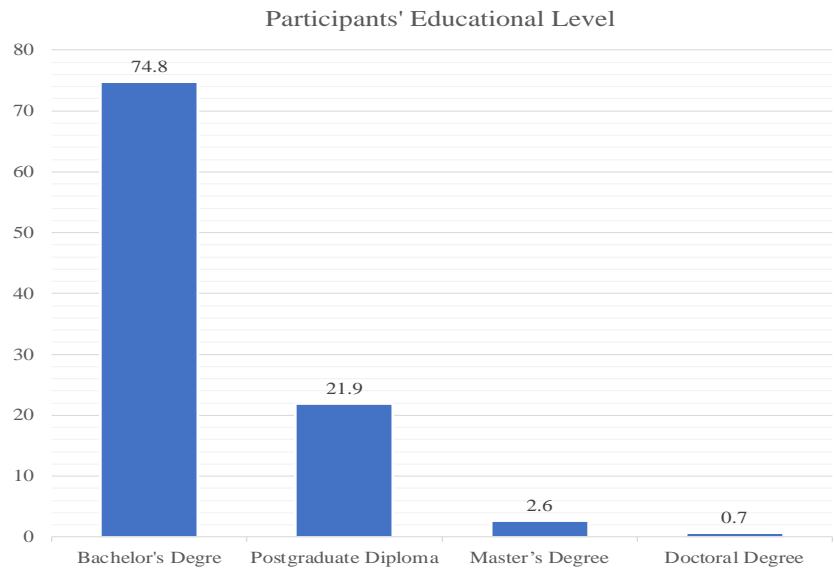The teaching areas of the respondents expanded to cover all subjects at different levels, but

languages teachers participated the most. See table (4) for the descriptive details and appendix

(P) for the distribution of this variable through teaching modalities.

Table 4. The Teaching Subject Areas of the Participants

	Frequency	Percent	Valid %	Cumulative %
Languages	69	45.7	45.7	45.7
Math	29	19.2	19.2	64.9
Sciences	32	21.2	21.2	86.1
Religions	6	4.0	4.0	90.1
Social Studies	8	5.3	5.3	95.4
Arts	3	2.0	2.0	97.4
ICT	4	2.6	2.6	100.0
Total	151	100.0	100.0	

The last question to deal with in the demographic section is the teaching cycles of the

participant. Cycle 2 teachers offered the largest portion of responses (33.1%; 50). In the second

place came cycle 1 (28.5%; 43), then cycle 3 (23.2%; 35), and lastly is kindergarten with

(15.2;23). See table (5) for the percentages and check appendix (Q) for the distribution of the

teaching cycle through modalities.

Table 5. The Teaching Cycles of the Participants

	Frequency	Percent	Valid %	Cumulative %
(Kindergarten)	23	15.2	15.2	15.2
Cycle 1	43	28.5	28.5	43.7
Cycle 2	50	33.1	33.1	76.8
Cycle 3	35	23.2	23.2	100.0
Total	151	100.0	100.0	

4.1.2 Reliability Analysis

After excluding the demographic items, Cronbach alpha reliability analysis was run to indicate an acceptable range of reliability for all modalities except that of hybrid learning. Identifying that if the item "I have the liberty in shifting my teaching modular considering the lesson objectives" is deleted, it raises the reliability score to 0.721. After the deletion of the item, Cronbach's alpha for the face-to-face model turned (.826), while that of the online modality was (.839), and (.721) for the hybrid learning modality. See table (6) for a summary of the reliability analysis, and check appendix (R) for a detailed one.

Table 6. Cronbach's Alpha Reliability Analysis

Modality in use	Split Category	No. of Items	Cronbach's Alpha
Face-to-face	Modality	9	0.8
	Job satisfaction	9	0.8
	Leadership Support	8	0.7
Online	Modality	9	0.6
	Job satisfaction	9	0,8
	Leadership Support	8	0.7
Hybrid	Modality	9	0.7
	Job satisfaction	9	0.7
	Leadership Support	8	0.7

To test if there is a relation between demographic information and teachers' job satisfaction, a t-test is conducted for gender that indicates a significant relation (P=0.2). See t-test result in table (7). In addition, a correlation test is conducted between job satisfaction and other demographic information. It found that there is a significant positive relation between job satisfaction and age group (P=0.005; r=0.0227), years of experience (P=0.005; r=0.226), and teaching cycle (P=0.013; r=0.201), while there is no relation between job satisfaction and any of the other demographic information, see appendix (S).

Table 7. T-test for Gender and Job Satisfaction

		Levene's Test		t-test for Equality of Means						95% Confidence Interval	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		Lower	Upper
job satisfaction	Equal variances assumed	18.110	.000	2.294	149	.023	.299	.131		.042	.557
	Equal variances not assumed			2.335	147.703	.021	.299	.128		.046	.553

4.1.3 Testing Hypothesis

The study aims to answer three research questions and to achieve this goal, nine hypotheses were tested.

R1: What are the teaching modalities practised in AD school?

To answer this question, the frequencies analysis of the survey question "What are the teaching modalities you are currently using in most classes?" returned that (72.2% n=109) are following the hybrid model, while (20.5%; n=31) are using the traditional face-to-face model, and only (7.3%, n=11) are using the distance learning modality. See figure (13).
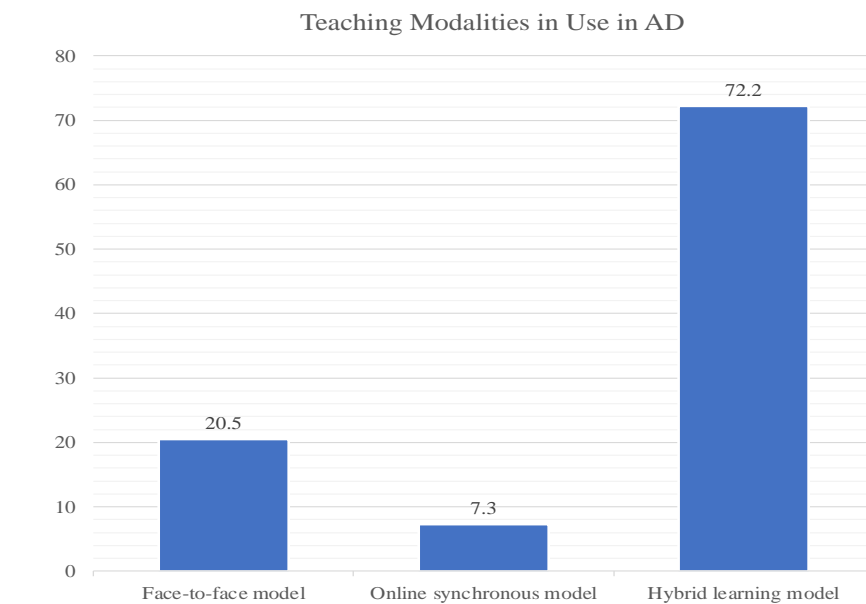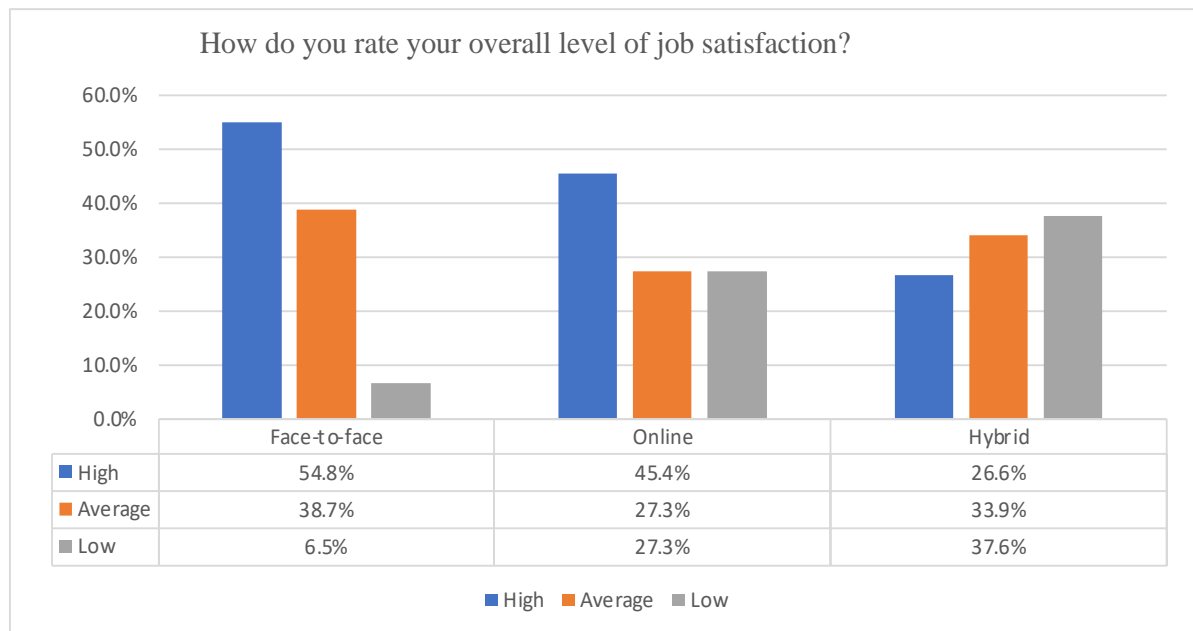

Figure 13. Teaching Modalities in AD

R2. How far do teachers in AD feel satisfied in relation to their teaching modalities?

This question raised two hypotheses: the null hypothesis and the alternative one. The alternative

hypothesis suggests that teachers who practice direct teaching enjoy a higher degree of job satisfaction than those using the online or hybrid learning model.

To answer this question, we found that the face-to-face modality has the highest percentage of teacher's job satisfaction, while the online modality comes second, and the hybrid learning is

How do you rate your overall level of job satisfaction?

	Face-to-face	Online	Hybrid
High	54.8%	45.4%	26.6%
Average	38.7%	27.3%	33.9%
Low	6.5%	27.3%	37.6%

third. See figure (14), tables (8), and for more details, check appendix (T).

Figure 14. Level of Satisfaction per Teaching Model

Table 8. Correlation between Modalities and Job Satisfaction

		Teaching Modality	Job Satisfaction
Teaching Modality	Pearson Correlation	1	.288[**]
	Sig. (2-tailed)		.000
	N	151	151
Job Satisfaction	Pearson Correlation	.288[**]	1
	Sig. (2-tailed)	.000	
	N	151	151

**. Correlation is significant at the 0.01 level (2-tailed).

To further explore the previous results, the respondents were asked "How confident do you feel

when you deliver your lesson using that teaching modality?". The responses were very reflective that 98.7% of those who practice the face-to-face model feel very confident against 88.7% for the online model, and only 65% of the hybrid learning party feel the same, see table (9) for more details.

Table 9. Relation between Modality and Job Satisfaction

	Very Confident	Moderately Confident	Not Very Confident	Not at All Confident
Face-to-face	98.68	0.66		0.66
Online Model	88.74		6.62	4.64
Hybrid Model	64.9		21.85	13.25

R3: What are the factors that contribute to the level of teachers' job satisfaction?

To answer this question, eight hypotheses were raised. Each hypothesis investigates the relationship between job satisfaction and one of the claimed factors derived from the literature review and supported by the theoretical framework. These factors are workload, job security, in-class efforts, work-life balance, remuneration, leadership support, co-workers' interconnected relationships, and students' behaviour.

To test the hypotheses and answer the third question of the research, correlation analysis was conducted. This analysis explored the relationship between these factors claimed by the theoretical framework and job satisfaction levels. As shown in table (10) Pearson's correlation illustrates a significant ($p=0.0001$) positive correlation between teachers' job satisfaction and job security, work-life balance, remuneration, leadership support, coworkers' relations, and students' behaviour (r is ranging from 0.45 to 0.96). This means that with a successive increase in the intensity of these factors, job satisfaction moves further to a higher average.

On the other hand, the respondent who reported a low level of job satisfaction reported significantly high levels of workload and in-class efforts. This means that there is a significant (p=0.0001) negative correlation between these two factors and job satisfaction, as claimed by the literature review (r is reported -0.44 and -0.47) sequentially.

Table 10. Correlation Matrix (n=151)

Correlation		1	2	3	4	5	6	7	8
Workload	Pearson Correlation	1							
	Sig. (2-tailed)								
Job Security	Pearson Correlation	-.455[**]	1						
	Sig. (2-tailed)	.000							
In-class Efforts	Pearson Correlation	.727[**]	-.458[**]	1					
	Sig. (2-tailed)	.000	.000						
Work-life Balance	Pearson Correlation	-0.086	.480[**]	0.102	1				
	Sig. (2-tailed)	0.294	.000	0.211					
Remuneration	Pearson Correlation	-.362[**]	.811[**]	-.375[**]	.655[**]	1			
	Sig. (2-tailed)	.000	.000	.000	.000				
Leadership Support	Pearson Correlation	-.404[**]	.829[**]	-.462[**]	.517[**]	.885[**]	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000			
Co-workers Relations	Pearson Correlation	-.329[**]	.900[**]	-.371[**]	.503[**]	.878[**]	.879[**]	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		
Student Behavior	Pearson Correlation	-0.124	.523[**]	-0.136	.689[**]	.556[**]	.574[**]	.535[**]	1
	Sig. (2-tailed)	0.129	.000	0.097	.000	.000	.000	.000	
Job Satisfaction	Pearson Correlation	-.443[**]	.967[**]	-.473[**]	.450[**]	.792[**]	.809[**]	.920[**]	.470[**]
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000
**. Correlation is significant at the 0.01 level (2-tailed).									

4.1.4   Summary of the Quantitative Results

The study aims to identify the relation between teachers' job satisfaction and teaching modalities in three private schools in Abu Dhabi. First, it identifies the teaching modalities currently used in the target schools. A descriptive analysis of the modalities proved that the majority of teachers (72.2%) are following the hybrid teaching model, while (20.5%) are using the traditional face-to-face model, and only (7.3%) are using the distance learning modality. Then, the relations between these used modalities and teachers' job satisfaction were tested. Pearson's correlation analysis indicates that the level of job satisfaction is significantly correlated to the practised type of teaching modality. The teachers who practice the face-to-face model enjoy the highest level of job satisfaction, while online teachers come next, and thirdly are the teachers who practice the hybrid model.

To investigate the relationship between the demographic data and teachers' job satisfaction, a t-test in conducted between teachers' gender and their level of job satisfaction. The test returned a significant relation between both, which means that female teachers enjoy a higher level of job satisfaction than that of male teachers in general regardless of any other variable. In addition, a correlation test between job satisfaction and other demographic information found that there is a significant positive relation between job satisfaction and age groups, years of experience, and surprisingly, the teaching cycle. At the same time, there is no relation between job satisfaction and any other demographic factor.

The study investigates the relationship between job satisfaction and eight factors that the theoretical background claimed. These factors are workload, job security, in-class efforts, work-

life balance, remuneration, leadership support, co-workers' interconnected relationships, and students' behaviour. The correlation analysis proved that all these factors significantly correlate to job satisfaction. Workload and in-class effort correlate negatively to job satisfaction, whereas the other factors positively correlate to teachers' job satisfaction. In other words, it is found that a higher level of workload and in-class effort leads to a low expected level of job satisfaction. At the same time, a higher level of job security, work-life balance, remuneration, leadership support, co-workers' interconnected relationships, and students' behaviour leads to a higher level of teachers' job satisfaction. Here is a list of the study hypotheses and the findings.

Table 11. Hypotheses Testing Result

	Hypotheses	**Result**	**Correlation**
$H1_0$	There is no statistically significant difference between teachers practising different teaching modes regarding job satisfaction.	Rejected	
$H1_A$	Teachers who practice direct delivery enjoy a higher degree of job satisfaction than those who experience hybrid or online teaching modes.	Supported	.288**
$H2_A$	There is a significant positive relationship between teachers' pay and job satisfaction	Supported	.792**
$H3_A$	There is a significant negative relationship between teachers' workload and satisfaction	Supported	-.443**
$H4_A$	There is a significant positive relationship between job security and JS	Supported	.967**
$H5_A$	There is a significant positive relationship between teachers' work-life balance and JS	Supported	.450**
$H6_A$	There is a significant positive relationship between leadership support and JS	Supported	.809**
$H7_A$	There is a significant positive relationship between co-workers' relationship and JS	Supported	.920**
$H8_A$	There is a significant positive relationship between students' behaviour and JS	Supported	.470**

**. Correlation is significant at the 0.01 level (2-tailed).

Table 12. Satisfaction Level in Different Modalities

|		Face-to-face			Online			Hybrid Model		
		High%	Avg.%	Low%	High%	Avg.%	Low%	High%	Avg.%	Low%
1	How satisfied are you with your remuneration	74.2	16.6	9.3	18.5	57.0	24.5	19.2	33.8	47.0
2	How satisfied are you with your workload	58.9	25.8	15.2	57.6	28.5	13.9	5.3	23.8	70.9
3	How satisfied are you with your job security	61.6	27.8	10.6	15.2	37.1	47.7	15.2	51.0	33.8
4	How satisfied are you with your in-class effort	60.9	20.5	18.5	61.6	35.1	3.3	4.6	27.2	68.2
5	How satisfied are you with work-life balance	57.0	26.5	16.6	55.6	32.5	11.9	10.6	25.8	63.6
6	How satisfied are you with leadership support	63.6	28.5	7.9	23.8	51.0	25.2	23.2	35.1	41.7
7	How satisfied are you with co-workers'	66.9	21.2	11.9	12.6	45.0	42.4	21.2	41.7	37.1
8	How satisfied are you with st's behaviour	56.3	24.5	19.2	35.1	29.1	35.8	17.9	35.1	47.0
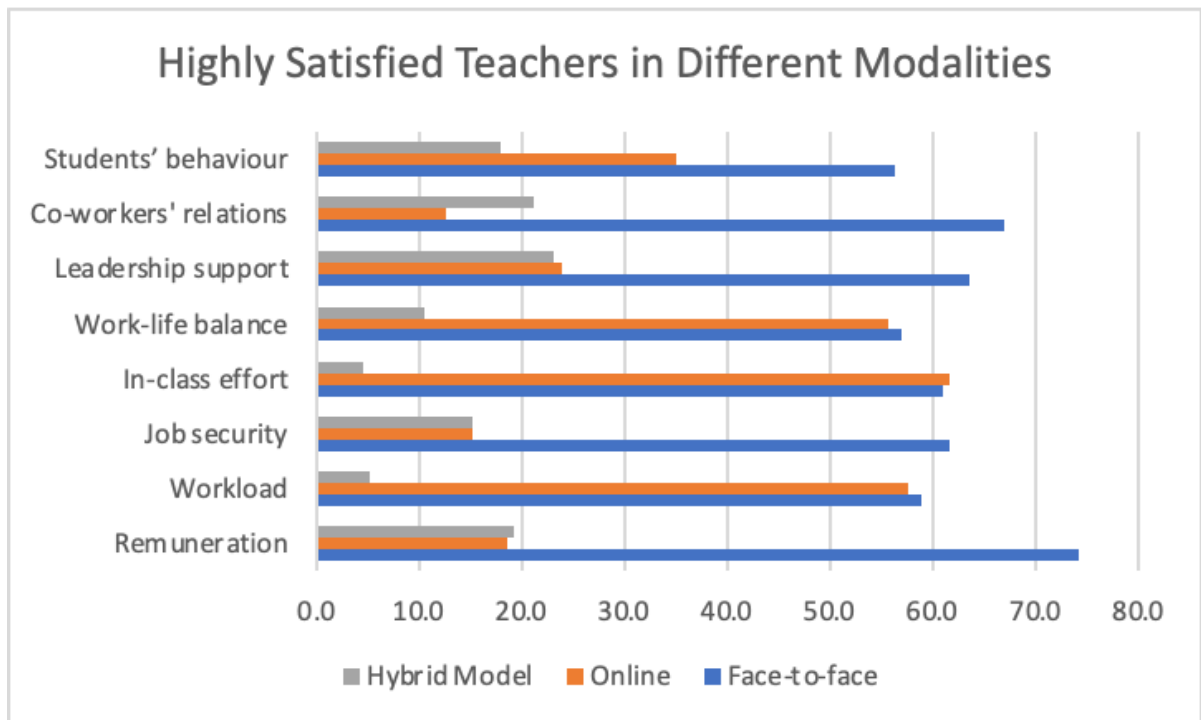
Figure 15. Highly Satisfied Teachers in Different Modalities

The traditional face-to-face modality has the highest level of teachers' satisfaction in seven factors out of eight. These factors are the teacher's satisfaction about his remuneration, workload, job security, work-life balance, leadership support, co-workers' relations, and students' behavior. It comes in the second place in the in-class effort factor.
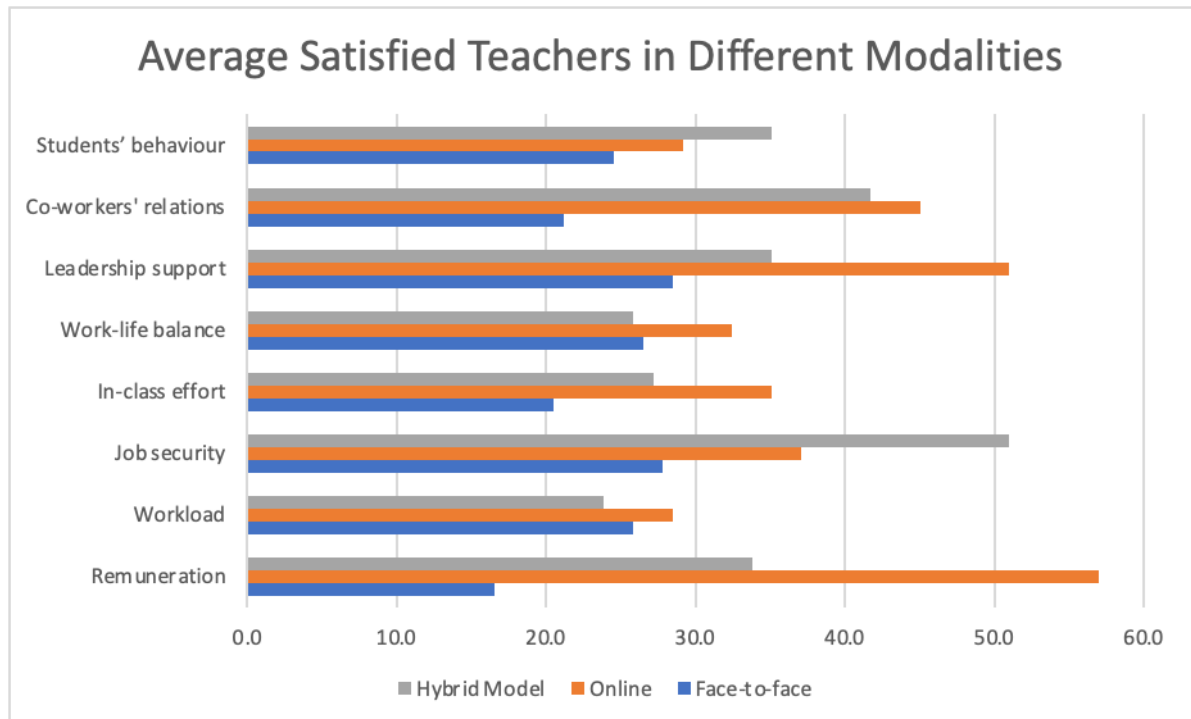

Figure 16. Average Satisfied Teachers in Different Modalities

The online distance delivery model comes in the first favourable place to teachers in one factor, in-class effort, while it comes in the second place in six factors. These factors are remuneration, workload, in-class effort, work-life balance, leadership support, and co-workers' relation. It comes as the least favourable delivery method in two factors: job security and students' behavior.
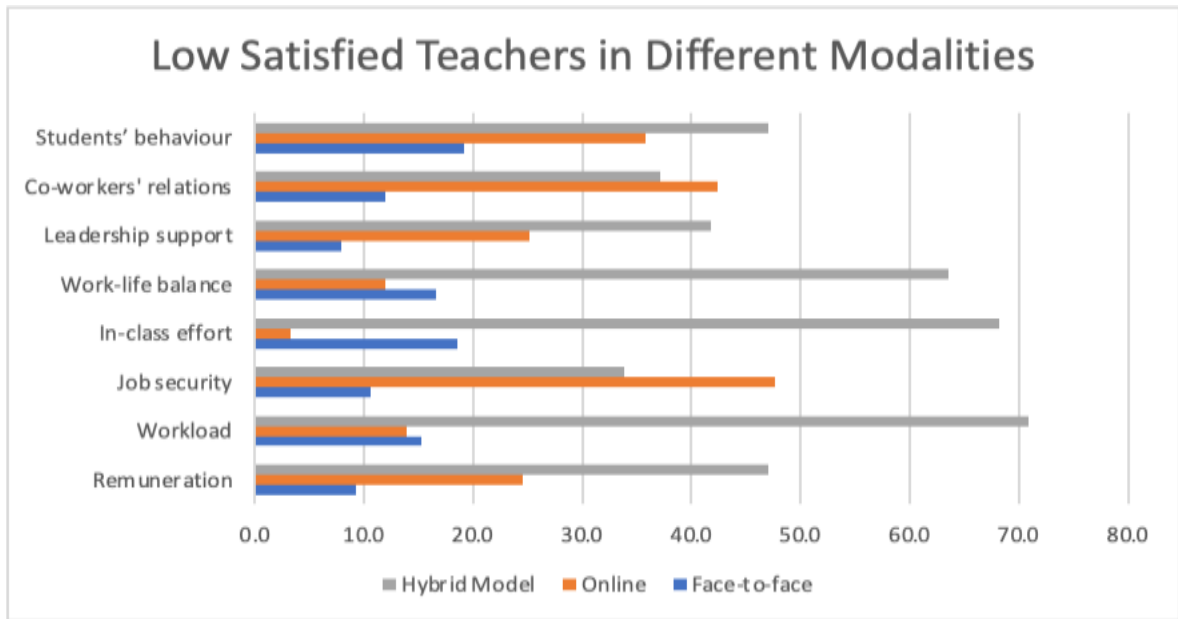
Figure 17. Low Satisfied Teachers in Different Modalities

The hybrid learning model occupies the place of least favourable teaching model in six factors. These factors are remuneration, workload, in-class effort, work-life balance, leadership support, and student behavior. At the same time, it comes in the second favourable model in the rest of factors.

At this level of the research, we can suggest that there is a correlation between the claimed factors with job satisfaction. On the other hand, there is a significant relationship between job satisfaction and teaching modalities. Consequently, changing the teaching modality changes the level of job satisfaction. The face-to-face model contributes to the highest level of satisfaction, whilst the hybrid model leads to the lowest level. In the next part of the study, we will discuss how school leaders can help their teachers in different teaching modalities.

4.2   Analysis of Qualitative Data

The qualitative aspect of the study focuses on exploring the leaders' attitudes towards teachers' satisfaction and ways leaders can help teachers obtain and maintain a high level of job satisfaction. In this phase of the study, 20 different interviews with staff in 3 schools in AD were conducted. Ten teachers were interviewed to know more about their concerns about job satisfaction and how it relates to school leaders. The participants' age range is from 30 to 52 years, with 4 to 27 years of experience in the educational field. Seven of them were females, while only three were male teachers. Two of them teach KG students, while one teaches in the primary cycle, three in middle school, and the last four teach high school. Six of them follow the hybrid teaching model, two use the distance modality, and two are still delivering traditional face-to-face classes.

The other ten participants are members of school leadership teams. Three represented the senior leadership teams (principals and vice-principals), and seven were from middle leaders' teams (heads of sections and heads of subjects). Their age range is from 37 to 55 years, with experience from 3 to 14 years in their current positions. All the schools they represent are following the hybrid learning model. They justify this choice as it is a step toward the old method after the partial improvement of health conditions. They add that following the conventional method is not possible because students were asked to leave 1.5 meters of social distancing, yet most of them were eager to return to the full face-to-face model.

According to the findings from the interviews, the data analysis is divided into two themes. 1) Teaching modalities and job satisfaction 2) Leadership support from leaders and teachers'

perspectives. Each of them will be discussed in the next part of the chapter. For the complete interviews' notes of observation, see appendix (U) and appendix (V)

4.2.1   Theme 1: Teaching Modalities and Job Satisfaction

Most of the interviewees reported that they are following the hybrid learning model, yet only one teacher and two leaders (3/20) chose this modality as their preferred model. Six of the participating teachers preferred the face-to-face model to deliver their lessons, and three others considered online teaching their first preference. While as all the participants confirmed that the teaching model is closely related to teachers' job satisfaction.

Teachers stated that many challenges are connected to the currently used hybrid modality. Some of their reflections were that it creates a workload and class management difficulty as you address two different groups simultaneously; one is learning on-site while the other is receiving remote learning. Each of these groups requires different teaching skills and different lesson planning. A high school teacher described it as "mentally demanding," while a KG teacher described it as an "exhausting" teaching model. She adds that isolating a 4-year-old kid from home distractions is challenging.

In a similar stream, another teacher described it as "not equally productive in comparison to the traditional model". She is trying to teach her kids to read and write, and a noticeable difference in progress is detected between the face-to-face and online groups. She adds that she is challenged to raise her students' communication and collaboration skills. In a different aspect, another teacher reports that she faces digital obstacles in teaching the online group. "When the

network connection is down, the class is distracted", she adds. She confesses that some students receive passive learning, especially those who suffer vision impairment. Moreover, reading students' facial expressions and body language is impossible when students are behind screens. Health and privacy concerns were also present in teachers' reflections.

In a different camp, few teachers reported that they like the hybrid learning as it raises the students' digital competencies. Moreover, they think it answers the educational question during the pandemic. It maintains the balance between the health and safety requirements on one side and the academic need on the other one.

From the interviewed teacher's viewpoint, hybrid learning does not meet the teachers' job satisfaction. It has the highest workload and in-class effort level, while it has the lowest level of work-life balance, leadership support, students' behaviour, and job security. They agree that the face-to-face model meets the highest teacher's job satisfaction level. It satisfies their needs of work-life balance, job security, co-workers' relations and leadership support and decreases workload and in-class effort. The online modality comes as the second preference for most teachers. Though it does not satisfy the teacher's needs for job security and does not secure his salaries and benefits, it keeps the work-life balance, workload and in-class efforts in an acceptable range.

4.2.2   Theme 2: Leadership Support from Leaders' and Teachers' Perspectives

Minimal support was offered to teachers from school leaders to raise their job satisfaction levels. About 50% of the interviewed school leaders reported partial and unorganized practices

they provided in their schools to support teachers during the pandemic. For example, one of the participant leaders stated that he played a part to help the traffic control and contact tracing teams in his school. A different participant made the school counsellor available to help the teachers manage their fears. Moreover, he made it possible for a 65-year-old teacher to deliver his lessons from home to avoid potential virus contact. A third leader provided PD sessions for teachers to deal with the learning platforms. One of the financial initiatives was that a participant confirmed the school offered teachers financial aid that they could pay back in instalments. He adds that he provided his teachers with laptops to broadcast their lessons.

Teachers think there are many possible ways leaders can raise their job satisfaction levels. For example, they are asked to promote an active channel of communication with teachers so they can listen to their concerns. Moreover, sharing the decision-making process with them helps reach the most effective decisions. Last minutes requests and impossible-to-reach deadlines should come to an end. Leaders should respect the teachers' time and praise their efforts to encourage them to do better. Decreasing the work overload helps build an effective relationship with direct supervisors.

Furthermore, building a stable timetable help teachers arrange their ideas and plan to deal with their classes. Being fair to all and building rules that neutralizing personal feelings is crucial to building a harmonious atmosphere. Raising the teachers' autonomy and declaring the promotion rules for staff let teachers interact responsibly. Furthermore, they consider decreasing their salaries as a meaningless action plan to deal with the financial impact of the pandemic.

Taken together, these results suggest that there is an association between teachers' current requests and the eight factors that the literature suggested being essential for teachers' job satisfaction. These factors are job security, workload, in-class effort, work-life balance, remuneration, leadership support, students' behaviour, and relationship with co-workers. Furthermore, through the qualitative phase of the study, the teachers confirmed the importance of leaders having an adequate degree of digital competencies, crisis management and a holistic action plan ready to apply when needed to avoid the sudden decisions.

Chapter 5: Conclusion and Recommendations

5.1   Introduction

This conclusion chapter constitutes a summary of the whole study. In the beginning, it summarises the study steps and processes. Then it elaborates on the findings collected from the qualitative and quantitative research methods and answers the research questions. After that, the researcher sets his recommendation and implications depending on the results. Hereafter, he deals with the limitation of the study so other researchers might avoid it. Finally, the study offers some suggestions for new researchers so they can build on this study for further investigation. After all, a concluding note wraps up the research study.

5.2   Summary of the Study

The study used the mixed-method approach to investigate two different yet related areas. The first area is the impact of the newly applied teaching modalities on teachers' job satisfaction in selected private schools in Abu Dhabi. The modalities in concern were the traditional face-to-face model, the distance learning mode, and the hybrid synchronous model. In contrast, the online asynchronous model was not investigated because it is not used in the target geographical context. Nevertheless, using some of these modalities, especially the hybrid one, was a new direction in the instructional field applied to answer the health question of the COVID-19 pandemic, so it deserved further exploration.

The second area to investigate is the role of school leaders to raise the level of teachers' job

satisfaction in correspondence to the teaching modality in action. To explore these areas, the following research questions were formulated.

1.   What are the teaching modalities practised in AD schools?

2.   How far do teachers in AD feel satisfied concerning their teaching modalities?

3.   What are the factors that contribute to this level of satisfaction?

4.   What can policymakers do to achieve a higher level of satisfaction for their teachers?

To answer the first three questions, the researcher explored the potential factors that might affect the teachers' job satisfaction according to the theoretical framework and the review of the literature and formed the tool accordingly. The questionnaire was distributed to 242 teachers in the target schools and returned 152 responses. The responses were split as per the teacher's practised modality, and the data was analysed. First, descriptive analyses, including mean, standard deviation, percentages, and frequencies, were used for the teacher demographic values. These findings are tested to confirm whether there is a correlation between these values and job satisfaction.

Moreover, it is used to answer the first and second questions of the research. After that, Pearson correlation analysis was used to answer the third question and determine if there is a significant relationship between the factors: remuneration, workload, job security, work-life balance, leadership support, and co-workers' relationships and teachers' job satisfaction. The second phase of the data analysis was the thematic analysis of the qualitative data collected from interviews with teachers and leaders. This process is used to answer the last question of the research.

5.3   Key Findings

The respondents to the survey of this study comprised 53.6% female participants and 46.4% male teachers. Most of them (50.3%) were aged 31 to 40 years, while 21.9% were 30 or below, 21.2% were aged 41 to 50, and 6.6% were above fifty of their age. Most of these respondents (74.8%) were found to have a bachelor's degreeRegarding the participants teaching experience, the responses read that 44.4% of the participants spent from 8 to 14 years in the educational field, while 29.8% of them spent from zero to seven years, 18.5% spent from 15 to 21 years. Lastly, 7.3% spent more than 21 years in the instructional environment.

To test if there is a relation between this demographic information and teachers' job satisfaction, a t-test was conducted for gender that indicates a significant relation. In addition, a correlation test is conducted between job satisfaction and other demographic information. It found a significant positive relationship between job satisfaction and age group, years of experience, and teaching cycle. At the same time, there is no relation between job satisfaction and any other demographic information.

To answer the first research question, the frequencies analysis of the survey returned that 72.2% of teachers are following the hybrid model, while 20.5% are using the traditional face-to-face model, and only 7.3% are using the distance learning modality. Regarding the second research question, the analysis of the responses found that the face-to-face teaching modality has the highest percentage of teachers' job satisfaction. In contrast, the online modality comes second, and the hybrid learning is the third one to satisfy the teachers.

To test the hypotheses and answer the third question of the research, Pearson's correlation analysis was conducted. It illustrates a significant positive correlation between teachers' job satisfaction and job security, work-life balance, remuneration, leadership support, co-workers' relations, and students' behaviour. On the other hand, the respondent who reported a low level of job satisfaction reported significantly high levels of workload and in-class efforts.

The qualitative aspect of the study is used to answer the last research question. It explored the ways leaders can raise the teachers' job satisfaction from the teachers' and leaders' perceptions. The interviews recommended that some of the practical tools leaders can follow are building an active channel of communication, sharing the decision-making process with teachers, decreasing the workload, raising the teachers' autonomy, and establishing a remuneration system.

The study's overall findings suggest that there is a significant association between the new variable, teaching modality, and teachers' job satisfaction. First, it is found that the traditional teaching model meets the highest level of teachers' job satisfaction, then the distance learning, and lastly is the hybrid modality. This result is derived from the change in the outcomes of the satisfaction factors: job security, workload, in-class effort, work-life balance, remuneration, leadership support, students' behaviour, and relationship with co-workers. Nevertheless, there are many ways for leaders to drive their teachers through higher job satisfaction and, therefore, a higher level of harmony and productivity.

5.4   Recommendations

Based on the findings of the study, the following are the recommendations and suggestions:

1.   School leaders in AD are asked to prioritise the use face-to-face teaching model over the online and hybrid learning modalities as possible if the students' social cooperation does not expose them to health and safety dangers. That is because the study's findings suggest that the face-to-face model meets the highest level of teachers' job satisfaction, then the online model, and the hybrid learning comes last.

2.   School leaders are invited to consider mainly specific factors to raise their teachers' job satisfaction, as suggested by the literature review and confirmed by the study findings. These factors are teachers' feeling of job security, workload, in-class effort, work-life balance, remuneration, leadership support, students' behaviour, and relationship with co-workers.

3.   School policymakers are invited to establish remuneration and promotion policies and procedures to keep their teachers' satisfaction to the optimum. They should also build an active channel of communication, share the decision-making process with teachers, decrease the work overload, and raise the teachers' autonomy for a higher level of performance.

4.   Strategic leaders should investigate the factors that lead to higher job satisfaction in their institutions, whether during the pandemic times or the usual norm. Factors might vary from one institution to another or from time to time through different contexts. This investigation can be better performed in focus groups to get customised outcomes.

5.   It is highly considered for leaders to master technology and integrate it into teaching and learning. In addition, crisis management skills are also required to lead the school in a way that motivates the teachers and builds the confidence in the lead person.

5.5   Implications

The findings of the current study help the research field find the reason why the face-to-face model, in comparison to other teaching models, meets teachers' job satisfaction in accordance with the same factors suggested by the theoretical framework that used Maslow's Hierarchy of Needs, Herzberg's Two-factor theory and the Theory of Work Adjustment as its reference.

In addition, the current study introduced the newly applied form of hybrid learning. It explored why it is the most miniature favourable model to teachers, though it helped a lot to control the pandemic. However, this form of modality is proved to correlate negatively with five factors (job security – workload – work-life balance – in-class efforts, and leadership support) out of eight considered for teachers' job satisfaction.

This study's findings helped to further understand the relationship between school leaders and teachers in different modalities. Furthermore, it enables the school leaders to recognise the critical role of spirituality in the workplace and invite them to motivate their teams and maintain a high level of harmony.

5.6   Limitations of the Study

There are several limitations in this study that might impact the generalizability of the results.

First, the distribution of the survey respondents between different modalities is not consistent that 72% of the participants represented the hybrid model. In comparison, 20.5% represented the traditional model, and only 7.5% represented the distance model. Therefore, comparison between these different models might be affected.

Second, this study investigated the research area only in three private schools in Abu Dhabi. Therefore, further study is needed in a different context and a reflective number of schools for generalizability consideration. Moreover, the findings might not be applied in the public school in Abu Dhabi as they have different inputs that might lead to different outcomes. Furthermore, the study is conducted in one emirate only out of seven emirates in the UAE, so it cannot be applied in their context.

Lastly, this study was conducted at the time of the COVID-19 pandemic; therefore, teachers' responses might be affected by emotional exhaustion and psychological instability. Nevertheless, this case makes the study applicable to the pandemic and crisis times, and during the normal times, a similar study might be needed.

5.7 The Scope for Further Study

This study discussed many ideas claimed by the theoretical and empirical backgrounds. However, it raised some concerns and research questions that should direct future research. For instance, this study was conducted during the critical time of the COVID-19 pandemic, yet a replicate study should be conducted under ordinary circumstances so the findings could be generalised.

Moreover, further research is needed to develop a new scale to consider teaching modalities when measuring teachers' job satisfaction. Furthermore, it can consider more factors when measuring teachers' job satisfaction like career development, school vision, and creativity opportunities.

5.8   Concluding Note

An educational institute is not only meant to bring up the future generation or inspire the little kids. It should also take into consideration the current in-field generations and help them hit their optimum development and satisfaction. School leaders are encouraged to make sure that teachers perform worry-free, whether inside or outside the school building. It is very complex to do that, yet achievable if well exists. It is complicated because every teacher has his own psychological needs. His satisfaction might depend on a long list of mediators, including remuneration, job security, work-family balance, workload, relationships with his colleagues or superiors, and students' academic or behavioural achievement.

This satisfaction is crucial to all parties and stakeholders in the instructional field. It is a multidimensional phenomenon that has different prints on different outcomes like teachers' turnover rate, absenteeism rate, productivity, teachers' burnout, retention, student performance, classroom control, teacher's job behaviour, level of positive attitude towards work, work engagement, and the level of work stress. So, teachers' job satisfaction should be a priority for every successful leader on school campuses around the globe, and that is why this study targeted it as the research area.

The purpose of this study was twofold. First, it examined the relationship between the new mediator, teaching modality, and teachers' job satisfaction. The second is to discover how school leaders can help their teachers be more satisfied while practising these modalities. This was accomplished, and results showed a strong relationship between teaching modalities and teachers' satisfaction, that the traditional face-to-face model meets the highest level of teacher job satisfaction. In contrast, hybrid learning meets the minor level of it. On the other hand, the qualitative data suggested many tools for leaders to help the teacher be satisfied when delivering their lessons in different modalities.

References

About the United Arab Emirates. (n.d.) [online]. [Accessed January 15, 2022]. Available at: https://www.protocol.dubai.ae/UAE-Dubai/About-the-United-Arab-Emirates.

Abushammala, M., Qazi, W. & Manchiryal, R. K. (2021). The impact of COVID-19 on the private higher education system and students in Oman. *Journal of university teaching and learning practice*, vol. 18(3).

Adams, A. E. M., Randall, S. & Traustadóttir, T. (2015). A tale of two sections: An experiment to compare the effectiveness of a hybrid versus a traditional lecture format in introductory microbiology. *CBE Life sciences education*, vol. 14(1), pp. 1–8.

ADEK. (2019). A parent's guide to curricular in Abu Dhabi.

Admiraal, W., Veldman, I., Mainhard, T. & van Tartwijk, J. (2019). A typology of veteran teachers' job satisfaction: their relationships with their students and the nature of their work. *Social Psychology of Education*. Springer Netherlands, vol. 22(2), pp. 337–355.

Ahmad, T. (2018). The Relationship between leadership & project staff turnover, (September).

Alarcon, G. M. & Edwards, J. M. (2011). The relationship of engagement, job satisfaction and turnover intentions. *Stress and health*, vol. 27(3), pp. 294–298.

Albrecht, S., Breidahl, E. & Marty, A. (2018). Organizational resources, organizational engagement climate, and employee engagement. *Career development international*, vol. 23(1), pp. 67–85.

Aldridge, J. M. & Fraser, B. J. (2016). Teachers' views of their school climate and its relationship with teacher self-efficacy and job satisfaction. *Learning environments research*, vol. 19(2), pp. 291–307.

Alfayad, Z. & Arif, L. S. M. (2017). Employee voice and job satisfaction : an application of Herzberg ' s two-factor theory. *International review of management and marketing /*, vol. 7(1), pp. 150–156 [online].Available at: https://www.researchgate.net/publication/312306634_Employee_Voice_and_Job_Satisfaction _An_Application_of_Herzberg_Two-factor_Theory.

Alhebsi, A., Pettaway, L. D. & Waller, L. (2015). A history of education in the United Arab Emirates and Trucial Sheikdoms. *The global elearning journal*, vol. 4(1), pp. 1–6 [online].Available at: https://aurak.ac.ae/publications/A-History-of-Education-in-the-United-Arab-Emirates-and-Trucial-Sheikdoms.pdf.

Alkhyeli, H. E. & Ewijk, A. van. (2018). Prioritisation of factors influencing teachers' job satisfaction in the UAE. *international journal of management in education*, vol. 12(1), pp. 1–24.

Allen, I. E., Seaman, J., Poulin, R. & Straut, T. T. (2016). *Online report card tracking online education in the united states*.

Almurshidi, A., Bridi, R. M. & Hosani, N. al. (2021). Assessment of human interaction and spending behavior amidst corona virus in the United Arab Emirates. *Papers in Applied Geography*. Routledge, vol. 0(0), pp. 1–16.

Alshmemri, M., Shahwan-Akl, L. & Maude, P. (2017). Herzberg's two-factor theory. *Life Science Journal*, vol. 14(5), pp. 12–16.

Anastasiou, S. & Papakonstantinou, G. (2014). Factors affecting job satisfaction, stress and work performance of secondary education teachers in Epirus, NW Greece. *International journal of management in education*. Inderscience publishers, vol. 8(1), pp. 37–53.

Anderson, B. & Simpson, M. (2012). History and heritage in distance education. *Journal of open, flexible, and distance learning,* vol. 16(2), pp. 1–10.

Ashby, J., Sadera, W. A. & McNary, S. W. (2011). Comparing student success between developmental math courses offered online, blended, and face-to-face. *Journal of interactive online learning*, vol. 10(3), pp. 128–140.

Attard, C. & Holmes, K. (2020). An exploration of teacher and student perceptions of blended learning in four secondary mathematics classrooms. *Mathematics education research journal*. Mathematics education research journal.

Azeem, S. M. & Akhtar, N. (2014). The influence of work life balance and job satisfaction on organizational commitment of healthcare employees. *International journal of human resource studies*, vol. 4(2), p. 18.

Backenstoe, K. (2018). *High school teachers' sense of efficacy: traditional teaching vs. teaching with a learning management system*. *Journal of chemical information and modeling*.

Barnes, D. (2018). *Charter school teacher satisfaction and the factors that contribute to and predict satisfaction* [online].Available at: https://firescholars.seu.edu/coe.

Barnes, G., Crowe, E. & Schaefer, B. (2007). The cost of teacher turnover in five states: A pilot study. *National commision on teaching and America's future*, p. Washington, D.C.

Baroudi, S., Tamim, R. & Hojeij, Z. (2020). A quantitative investigation of intrinsic and extrinsic factors influencing teachers' job satisfaction in Lebanon. *Leadership and policy in schools*. Routledge, vol. 00(00), pp. 1–20.

Bawa'aneh, M. S. (2021). Distance learning during COVID-19 pandemic in UAE public schools: student satisfaction, attitudes and challenges. *Contemporary educational technology*, vol. 13(3), p. ep304.

Benoliel, P. & Barth, A. (2017). The implications of the school's cultural attributes in the relationships between participative leadership and teacher job satisfaction and burnout. *Journal of educational administration*, vol. 55(6), pp. 640–656.

Bervell, B., Nyagorme, P. & Arkorful, V. (2020). Lms-enabled blended learning use intentions among distance education tutors: Examining the mediation role of attitude based on technology-

related stimulus-response theoretical framework. *Contemporary educational technology*. Anadolu university, faculty of communication sciences, vol. 12(2), pp. 1–21.

Bhatnagar, A. (2014). *Determinants of motivation and job satisfaction among primary health workers: case studies from Nigeria and India*.

Boeve, W. D. (2007). A national study of job satisfaction factors among faculty in physician assistant education. *Access* [online].Available at: http://commons.emich.edu/theses/60.

Bogler, R. (2001). The influence of leadership style on teacher job satisfaction. *Educational administration quarterly*, vol. 37(5), pp. 662–683.

Bogler, R. & Nir, A. E. (2015). The contribution of perceived fit between job demands and abilities to teachers' commitment and job satisfaction. *Educational management administration and leadership*. SAGE Publications Ltd, vol. 43(4), pp. 541–560.

Bolino, M. C., Hsiung, H. H., Harvey, J. & LePine, J. A. (2015). "Well, i'm tired of tryin'!" organizational citizenship behavior and citizenship fatigue. *Journal of applied psychology*, vol. 100(1), pp. 56–74.

Brashear, L. J. (2020). *Face-to-face, blended, hybrid, and online instructional delivery methods: a comparative study of English language learners' grades in a mathematics course in a higher education institution in the United Arab Emirates*.

Buckman, D. G. & Pittman, J. (2021). Student discipline and teacher job satisfaction: a dual district analysis. *Georgia educational researcher*, vol. 18(2).

Buckner, E. (2017). The Status of teaching and teacher professional satisfaction in the United Arab Emirates. *Al Qasimi foundation*, (May).

Bushiri, C. P. (2014). *The impact of working environment on employees' performance: the case of institute of finance management in Dar es Salaam region*.

Butler, S. G. (2010). *Analysis of a conceptual framework to express teacher job satisfaction*.

Caprara, G. V., Barbaranelli, C., Borgogni, L. & Steca, P. (2003). Efficacy beliefs as determinants of teachers' job satisfaction. *Journal of educational psychology*, vol. 95(4), pp. 821–832.

Carson, L. D. (2013). Teacher motivation: a case study on what motivates expatriate teachers at an English medium private school in Sharjah, United Arab Emirates, (May).

Cesinger, T. L. (2017). The Phenomenon of the hybrid classroom, pp. 1–122.

Chan, C. (2007). Learning styles, multimedia hybrid versus traditional teaching, course satisfaction, and learning outcomes in art appreciation courses. *ProQuest Dissertations and Theses*, p. 205.

Chaney, B. H. (2014). History , theory , and quality indicators of distance education : a literature review. Office of health informatics. *office of health informatics: Texas A&M University*.

Choudhury, K. (2013). *Managing workplace stress: The cognitive behavioural way. Managing workplace stress: The cognitive behavioural way*. Springer India.

Ciotti, M., Ciccozzi, M., Terrinoni, A., Jiang, W. C., Wang, C. bin & Bernardini, S. (2020). The COVID-19 pandemic.. Taylor & Francis, vol. 0(0), pp. 365–388. *Critical reviews in clinical laboratory sciences*

Collie, R. J., Granziera, H. & Martin, A. J. (2018). Teachers' perceived autonomy support and adaptability: An investigation employing the job demands-resources model as relevant to workplace exhaustion, disengagement, and commitment. *Teaching and teacher education*. Elsevier Ltd, vol. 74, pp. 125–136.

Cox, D. B. & Cox, D. B. (2008). Developing interpersonal and group dynamics through asynchronous threaded discussion: the use of discussion board in collaborative learning. *Education* , vol. 128(4), pp. 553–565 [online].Available at: http://ra.ocls.ca/ra/login.aspx?inst=conestoga&url=http://search.ebscohost.com.eztest.ocls.ca/login.aspx?direct=true&db=tfh&AN=32708988&site=eds-live&scope=site.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research. AORN Journal* [online].Available at: https://drive.google.com/file/d/1d5ZzlgJuCrwAyLpdBeK5dhKMZTpE2HNb/view.

Cunningham, S. L. (2015). A quantitative analysis of the factors associated with teacher attitudes and perceptions towards job satisfaction. *Seton Hall university dissertations and theses (ETDs)* [online].Available at: https://scholarship.shu.edu/dissertations/2127.

Dampier, S. & Banks, J. (2017). A study on the relationship between teachers' perception of principal's leadership style and teachers' job satisfaction at the selected bilingual school in Bangkok. *Scholar: Human sciences*, vol. 9(1), pp. 199–210.

Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*. Springer Netherlands, vol. 49(1–2), pp. 91–96.

Darayseh, A. S. al. (2020). The impact of COVID-19 pandemic on modes of teaching science in UAE schools. *Journal of education and practice*. International institute for science, technology and education.

Diaz, J. (2018). A Case study of the perceptions of teacher job satisfaction working under a transformational and distributed leadership style. *Ed.D. Dissertations* [online].Available at: https://commons.cu-portland.edu/edudissertations/237.

Distance learning in times of COVID-19. (2021) [online]. [Accessed January 16, 2022]. Available at: https://u.ae/en/information-and-services/education/distance-learning-in-times-of-covid-19.

Distance learning in UAE: an integrated smart experience. (2020) [online]. [Accessed January 18, 2022]. Available at: https://mbrf.ae/en/read/distance-learning-in-uae-an-integrated-smart-experience/9.

Downing, J. A. (2016). *Emotional intelligence, leadership style, and job satisfaction in contrasting workplace environments* [online].Available at: https://scholarworks.waldenu.edu/dissertations.

Dutta, S. (2012). Entrepreneurship & global competitiveness: a study on India. *Indian journal of industrial relations*, vol. 47(4), p. 617.

Dutta, V. & Sahney, S. (2016). School leadership and its impact on student achievement: the mediating role of school climate and teacher job satisfaction. *International journal of educational management*, vol. 30(6), pp. 941–958.

ECLAC-UNESCO. (2020). Education in the time of COVID-19, (August).

Fatima, N. & Sahibzada, A. S. (2012). An empirical analysis of factors affecting work life balance among university teachers: the case of Pakistan. *Journal of international academic research*, vol. 12(1), pp. 16–29.

Femina, D. (2016). Workplace social capital, job satisfaction and workplace performance in developed and developing countries. *PQDT - UK & Ireland*, p. 427 [online].Available at: https://manchester.idm.oclc.org/login?url=https://search.proquest.com/docview/1837035049?accountid=12253%0Ahttp://man-fe.hosted.exlibrisgroup.com/openurl/44MAN/44MAN_services_page?genre=dissertations+%26+theses&atitle=&author=Femina%2C+Devi&volume=&issue=.

Foley, P. F. & Lytle, M. C. (2015). Social cognitive career theory, the theory of work adjustment, and work satisfaction of retirement-age adults. *Journal of career development*, vol. 42(3), pp. 199–214.

Fong, H. W. B. (2015). *Job satisfaction and dissatisfaction factors influencing contract renewal of generation y and non-generation y teachers working at international schools in Asia. Education policy analysis archives.*

Fujita, S., Kawakami, N., Ando, E., Inoue, A., Tsuno, K., Kurioka, S. & Kawachi, I. (2016). The association of workplace social capital with work engagement of employees in health care settings. *Journal of occupational and environmental medicine*, vol. 58(3), pp. 265–271.

Gaad, E., Arif, M. & Scott, F. (2006). Systems analysis of the UAE education system. *International journal of educational management*, vol. 20(4), pp. 291–303.

Gkolia, A., Belias, D. & Koustelios, A. (2014). Teacher's job satisfaction and selfefficacy: A review. *European scientific journal, ESJ*, vol. 10.

Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. *Handbook of blended learning: Global perspectives, local designs*, (January 2006), pp. 3–21.

Grant, J. L. (2006). An examination of the job satisfaction of mid -level managers in student affairs administration. *ProQuest Dissertations and Theses*, p. 239 [online].Available at: http://ezproxy.umuc.edu/login?url=https://search.proquest.com/docview/304971917?accountid=14580%0Ahttp://sfx.umd.edu/uc?url_ver=Z39.88-

2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+%26+theses&sid=
ProQ:ProQuest+Dissertations+%26+Th.

Grizzle, T. L. (2017). Relationship between workplace aggression and employee job satisfaction. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, vol. 78(4-B(E)), p. No-Specified [online].Available at: http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc14&NEWS=N&AN=2 017-05720-017.

Gursel, M., Sunbul, A. M., Sari, H., European, S., March, N. & Sari, H. (2016). An analysis of burnout and job satisfaction between Turkish headteachers and teachers Linked references are available on JSTOR for this article : Your use of the JSTOR archive indicates your acceptance of the terms & conditions of use , available at http:, vol. 17(1), pp. 35–45.

Halverson, H. R. (2016). *Conceptualizing blended learning engagement* [online].Available at: https://scholarsarchive.byu.edu/etd/5981.

Halverson, L. R., Graham, C. R., Spring, K. J. & Drysdale, J. S. (2012). An analysis of high impact scholarship and publication trends in blended learning. *Distance Education*, vol. 33(3), pp. 381–413.

Hastie, M., Chen, N. S. & Kuo, Y. H. (2007). Best practice instructional design in the synchronous cyber classroom for early childhood students. *Proceedings - The 7th IEEE International conference on advanced learning technologies, ICALT 2007*, vol. 10, pp. 288–292.

Hefnawi, A. (2020). Teacher leadership in the context of distance learning. *Management in education*, p. 089202062095973.

Herzberg, F., Mausner, B. & Snyderman, B. bBosch. (2017). *The Motivation to work. Journal of the society of dyers and colourists*.

Hodges, C., Moore, S., Lockee, B., Trust, T. & Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause*, pp. 1–12 [online].Available at: https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-.

Hogg, A., Baldock, T. & Pritchard, D. (2011). Job satisfaction among newly qualified teachers in Scotland Nick. *Journal of Fluid Mechanics*, vol. 666, p. 521.

Holmberg, B. (2005). *A theory of learning and teaching in distance education. Theory and practice of distance education*.

Hong, Y. J. (2002). The influence of perceived workplace spirituality on job satisfaction, intention to leave, and emotional exhaustion among community mental health center workers in the state of Kansas.

Hong, Y. J. (2009). *The influence of perceived workplace spirituality on job satisfaction, intention to leave, and emotional exhaustion among community mental health center workers in the state of Kansas*.

Hoppock, R. & Odom, C. (1974). Job satisfaction. *Hospital administration in Canada*, vol. 16(7), pp. 30–34.

Ilgan, A., Parylo, O. & Sungu, H. (2015). Predicting teacher job satisfaction based on principals' instructional supervision behaviours: A study of Turkish teachers. *Irish Educational Studies*. Routledge, vol. 34(1), pp. 69–88.

Jackson, M. J. & Jackson, K. M. (2020). Factors that Influence Emirati male achievement in higher education factors that influence Emirati male achievement in higher education, vol. 5(2).

Javed, M., Balouch, R. & Hassan, F. (2014). Determinants of job satisfaction and its impact on employee performance and turnover intentions. *International journal of learning and development*, vol. 4(2), pp. 120–140.

Johari, J., Tan, F. Y. & Zukarnain, Z. I. T. (2016). Autonomy, workload, worklife balance and job performance teachers. *International journal for researcher development*, vol. 7(1), pp. 63–83.

Johari, J., Tan, F. Y. & Zulkarnain, Z. I. T. (2018). Autonomy, workload, work-life balance and job performance among teachers. *International journal of educational management*, vol. 32(1), pp. 107–120.

Johns, R., Moeeni, F. & Ruby, P. (2005). Comparing web-based content delivery and instructor-led learning in a telecommunications course. *Journal of information systems education*, vol. 16(3), p. 265.

Joseph-Charles, D. (2019). *The effect of a blended learning instructional model on the mathematics performance of sixth and seventh grade students in a small Northeastern urban school district* [online].Available at: https://scholarship.shu.edu/dissertations/2790.

Juma, M. (2020). *The advantages and disadvantages of distance learning for students with special educational needs and disabilities during covid-19 at university in UAE*.

Kengatharan, N. (2020). The effects of teacher autonomy, student behavior and student engagement on teacher job satisfaction. *Educational sciences: theory and practice*, vol. 20(4), pp. 1–15.

Kernan, J. G. (2020). Teachers' understanding of school finance and the impact on job satisfaction, vol. 21(1), pp. 1–9.

Kilinc, B. K., Yazici, B., Gunsoy, B. & Gunsoy, G. (2020). Perceptions and opinions of graduates about the effects of open and distance learning in turkey. *Turkish online journal of distance education*, vol. 21(1), pp. 121–132.

Kireev, B., Zhundibayeva, A. & Aktanova, A. (2019). Distance learning at higher education institutions: results of an experiment, vol. 10(3), pp. 387–403.

Kolwyck, B. J. (2020). *The relationship between efficacy and teacher turnover intent* [online].Available at: https://opensiuc.lib.siu.edu/dissertations.

Kouali, G. (2017). The instructional practice of school principals and its effect on teachers' job satisfaction. *International journal of educational management*. Emerald group publishing Ltd., vol. 31(7), pp. 958–972.

Lakhal, S., Bateman, D. & Bédard, J. (2017). Blended synchronous delivery modes in graduate programs: a literature review and how it is implemented in the master teacher program. *Collected essays on learning and teaching*. University of Windsor Leddy library, vol. 10, pp. 47–60.

Lam, B. har & Yan, H. fai. (2011). Beginning teachers' job satisfaction: the impact of school-based factors. *Teacher development*, vol. 15(3), pp. 333–348.

Law, S. U. E. & Glover, D. (2000). *Educational leadership and learning practice, policy and research*.

Lawson, L. (1993). Theory of work adjustment personality constructs, vol. 57, pp. 46–57.

Leithwood, K., Sun, J. & Pollock, K. (2017). *How school leaders contribute to student success*.

Lewis, R., Roache, J. & Romi, S. (2011). Coping styles as mediators of teachers' classroom management techniques. *Research in education*, vol. 85(1), pp. 53–68.

Lumadi, M. W. (2014). Exploring factors faced by teachers in curriculum implementation. *Mediterranean journal of social sciences*, vol. 5(6 SPEC. ISSUE), pp. 171–178.

Maghrabi, A. (1999). Assessing the effect of job satisfaction on managers. *International journal of value-based management*, vol. 12(1), pp. 1–12.

Mahasen, S. (2019). The relationship between organisational health and teachers' absenteeism in schools, (September).

Margulieux, L., Mccracken, W. M. & Catrambone, R. (2016). *A taxonomy to define courses that mix face-to-face and online a taxonomy to define courses that mix face-to-face and online learning learning* [online].Available at: https://scholarworks.gsu.edu/ltd_facpub/2.

Mazumder, A. K. M. M. R., Kamruzzaman, N. M., Akter, N., Arbe, N. & Rahman, M. M. (2021). Network intrusion detection using hybrid machine learning model. *Proceedings of the 2021 1st international conference on advances in electrical, Computing, communications and sustainable technologies, ICAECT 2021*. IEEE, pp. 1–5.

McCarthy, C. J., Lambert, R. G., Lineback, S., Fitchett, P. & Baddouh, P. G. (2016). Assessing teacher appraisals and stress in the classroom: review of the classroom appraisal of resources and demands. *Educational psychology review*, vol. 28(3), pp. 577–603.

Mcmahan, E. H. (2018). Encompass the relationship between job satisfaction and job persistence of female faculty in higher education. *ProQuest Dissertations and Theses*, (January) [online].Available at: https://encompass.eku.edu/etd/539.

Memon, M. A., Ting, H., Ramayah, T., Chuah, F. & Cheah, J. H. (2017). A review of the methodological misconceptions and guidelines related to the application of structural equation

modeling: A malaysian scenario. *Journal of Applied Structural Equation Modeling*, vol. 1(1), pp. i–xiii.

MoE. (2020) [online]. [Accessed January 17, 2022]. Available at: https://www.moe.gov.ae/En/MediaCenter/News/Pages/elearning2.aspx.

Moore, M. G. & Kearsley, G. (2012). Distance education: a systems view of online learning, third edition, p. 384.

Muholi, B. J. (2017). *school-based culture mediating teachers job satisfaction and performance in secondary schools Mbeya region- Tanzania*.

Mujkić, A., Šehić, D., Rahimić, Z. & Jusić, J. (2014). Transformational leadership and employee satisfaction, vol. 27, pp. 259–270.

Niaj, A. R. N. A. (2019). The manipulation of digital technology into the classroom settings: the various effects on the teacher's role and practices, (October).

Nober, M. (2014). *The effects of workplace restructuring on job satisfaction*.

Nortvig, A. M., Petersen, A. K. & Balle, S. H. (2018). A literature review of the factors influencing e-learning and blended learning in relation to learning outcome, student satisfaction and engagement. *Electronic journal of e-Learning*, vol. 16(1), pp. 45–55.

Nsofor, C. C., Umeh, A. E., Ahmed, B. & Sani, I. D. (2014). *Blended learning environment: an innovative pedagogical approach for redefining higher education in Nigeria*.

Nyagaya, P. A. (2015). *Factors influencing teachers' level of job satisfaction in public primary schools in Kayole division, Embakasi sub county, Kenya*.

Parratt, A. (2000). *Case study research in educational settings*. *Teacher development*.

Patrick, A. S. (2007). Examination of teacher workplace satisfaction and student achievement. *Dissertations*, pp. 1–170.

Paul, J. & Jefferson, F. (2019a). A comparative analysis of student performance in an online vs. face-to-face environmental science course from 2009 to 2016. *Frontiers in computer science*. Frontiers media S.A., vol. 1.

Pendleton-Brown, S. N. (2020). Teacher job satisfaction and school leadership. *dissertation abstracts international: section B: The sciences and engineering*, vol. 81(2-B) [online].Available at: https://scholarworks.waldenu.edu/dissertations.

Perie, Marianne; Baker, D. P. (1997). Job satisfaction among America's teachers: effects of workplace conditions, background characteristics, and teacher compensation. statistical analysis report. *National center for education statistics (ED), Washington,* vol. 29, pp. 37–54.

Peterson, L., Scharber, C., Thuesen, A. & Baskin, K. (2020). A rapid response to COVID-19: one district's pivot from technology integration to distance learning. *Information and learning science*. Emerald Group Holdings Ltd., vol. 121(5–6), pp. 451–459.

Pittman, J. (2020). The influence of student discipline on teacher job satisfaction when controlling for workplace characteristics, personal attributes, human capital elements, and … [online].Available at: https://digitalcommons.kennesaw.edu/educleaddoc_etd/25/.

Plessman, C. K. S. (1985). The relationship between personality characteristics and job satisfaction of secondary marketing education teachers.

Private school reopening policies and guidelines. (2020).

R Maniram. (2007). *An investigation into the factors affecting job satisfaction at the KwaZulu Natal further education and training college – Swinton campus. Acit*.

Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L. & Koole, M. (2020). Online university teaching during and after the covid-19 crisis: refocusing teacher presence and learning activity. *Postdigital science and education*. Postdigital science and education, vol. 2(3), pp. 923–945.

Roser, M., Ritchie, H., Ortiz-Ospina, E. & Hansell, J. (2020). Mortality risk of COVID-19 - statistics and research - our world in data. *mortality risk of COVID-19*, vol. 2020, p. 1 [online].Available at: https://ourworldindata.org/mortality-risk-covid#case-fatality-rate-of-covid-19-compared-to-other-diseases%0Ahttps://ourworldindata.org/mortality-risk-covid?country=DOM.

Rowden, R. W. & Conine, C. T. (2005). The impact of workplace learning on job satisfaction in small US commercial banks. *Journal of workplace learning*, vol. 17(4), pp. 215–230.

Rumble, G. (2001). Re-inventing distance education, 1971-2001. *International journal of lifelong education*, vol. 20(1–2), pp. 31–43.

Saane, V., Sluiter, J. K., Verbeek, J. H. A. M. & Frings-Dresen, M. H. W. (2003). Reliability and validity of instruments measuring job satisfaction - A systematic review. *Occupational Medicine*, vol. 53(3), pp. 191–200.

Saha, A. K., Akhter, J., Mittra, C. R., Reza, H. M. & Khatun, M. R. A. (2020). Workload and job satisfaction among nurses in a tertiary level hospital. *Asian journal of medical and biological research*. Bangladesh journals online (JOL), vol. 6(2), pp. 359–365.

Al Salman, S., Alkathiri, M. & Khaled Bawaneh, A. (2021). School off, learning on: identification of preference and challenges among school students towards distance learning during COVID19 outbreak. *International journal of lifelong education*. Routledge, vol. 40(1), pp. 53–71.

Salman, S., Alkathiri, M. & Khaled Bawaneh, A. (2021). School off, learning on: identification of preference and challenges among school students towards distance learning during COVID19 outbreak. *International journal of lifelong education*. Routledge, vol. 40(1), pp. 53–71.

Sanders, T. (2019). Measuring employee job satisfaction during workplace downsizing, (253), p. 58.

Schall, M. A. (2019). The relationship between remote work and job satisfaction : the mediating roles of perceived autonomy , work-family conflict , and telecommuting intensity. *SJSU ScholarWorks*, pp. 1–49.

Schneider, B. & Snyder, R. A. (1975). Some relationships between job satisfaction and organization climate. *Journal of applied psychology*, vol. 60(3), pp. 318–328.

Senyametor, F., Minadzi, V. M., Dankyi, L. A. & Maison, R. S. (2019). Relationship between teacher job satisfaction and productivity in the Asante Akim South district of the Ashanti region of Ghana. *Journal of education and learning*, vol. 8(3), p. 193.

Shonje, G. N. (2016a). The influence of working conditions on teachers job satisfaction: the case of Kisarawe district public secondary school teachers, Tanzania.

Silverman, D. & Marvasti, A. (2008). Doing qualitative research: a comprehensive guide, p. 286.

Smith, W. C. & Holloway, J. (2020). School testing culture and teacher satisfaction. *Educational assessment, evaluation and accountability*. Springer science and business media B.V., vol. 32(4), pp. 461–479.

Song, L., Singleton, E. S., Hill, J. R. & Koh, M. H. (2004). Improving online learning: student perceptions of useful and challenging characteristics. *Internet and higher education*, vol. 7(1), pp. 59–70.

de Sousa Sabbagha, M., Ledimo, O. & Martins, N. (2018). Predicting staff retention from employee motivation and job satisfaction. *Journal of psychology in Africa*, vol. 28(2), pp. 136–140.

Spector, P. E. (1985). Measurement of human service staff satisfaction: development of the job satisfaction survey. *American journal of community psychology*, vol. 13(6), pp. 693–713.

Tan, S. K., Yusoff, W. F. W. & Idris, M. T. M. (2013). Herzberg's two factors theory on work motivation: does its work for todays environment? *Global journal of management perspective*, vol. 2(5), pp. 18–22.

Tashakkori, A. & Creswell, J. W. (2007). Editorial: exploring the nature of research questions in mixed methods research. *Journal of mixed methods research*, vol. 1(3), pp. 207–211.

The Official Portal of the UAE Government. (2021) [online]. [Accessed January 17, 2022]. Available at: https://u.ae/en/about-the-uae/leaving-no-one-behind/4qualityeducation.

The Official Portal of the UAE Government. (n.d.) [online]. [Accessed January 16, 2022]. Available at: https://u.ae/en/information-and-services/education/school-education-k-12/regulatory-authorities-of-k-12-education.

Thomas, S. L. (2014). The effects of principal leadership behavior on new teachers' overall job satisfaction. *ProQuest LLC* [online].Available at: http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED565910&site=ehost-live%5Cnhttp://gateway.proquest.com/openurl?url_ver=Z39.88-

2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&res_dat=xri:pqm&rft_dat=xri:pqdiss:36 11474.

Timmreck, T. C. (1977). Motivation-hygiene theory adapted for education. *The high school journal*, vol. 61(3), pp. 105–110 [online].Available at: http://www.jstor.org/stable/40365315.

Tinsley, H. F. A. (1993). Special issue on the theory of work adjustment. *Journal of vocational behavior*, vol. 43(1), pp. 1–4.

Tolliver, J. L. (2018). Factors that contribute to job satisfaction and teacher retention.

Turner, S. L. & Lapan, R. T. (2013). *Promotion of career awareness, development, and school success in children and adolescents. S. D. Brown & R. W. Lent (Eds.), Career development and counseling: Putting theory and research to work.*

Vlachopoulos, D. & Makri, A. (2019). Online communication and interaction in distance higher education: a framework study of good practice. *International review of education*. Springer Netherlands, vol. 65(4), pp. 605–632.

Wang, Q., Quek, C. L. & Hu, X. (2017). Designing and improving a blended synchronous learning environment: an educational design research. *International review of research in open and distance learning*, vol. 18(3), pp. 99–118.

Wangai, M. M. (2012). Factors affecting job satisfaction among secondary school teachers of Mwatate district, Kenya.

Weidlich, J. & Bastiaens, T. J. (2018). Technology matters - the impact of transactional distance on satisfaction in online distance learning. *International review of research in open and distance learning*, vol. 19(3), pp. 222–242.

Wells, W. M. (2020). The relationship between the perceived value of professional development , job satisfaction , and intent to leave.

Xia, J., Izumi, M. & Gao, X. (2015). school process and teacher job satisfaction at alternative schools: a multilevel study using SASS 2007–08 data. *Leadership and policy in schools*. bellwether publishing, Ltd., vol. 14(2), pp. 167–203.

Yaghi, N. (2016). Work flexibility and job satisfaction: The mediating role of employee empowerment. *Business administration dissertations* [online].Available at: http://scholarworks.gsu.edu/bus_admin_diss/59.

Yang, M., Qu, Q., Shen, Y., Zhao, Z., Chen, X. & Li, C. (2021). An effective hybrid learning model for real-time event summarization. *IEEE transactions on neural networks and learning systems*, vol. 32(10), pp. 4419–4431.

Zembylas, M. & Papanastasiou, E. (2004). Job satisfaction among school teachers in Cyprus. *Journal of educational administration*, vol. 42(3), pp. 357–374.

Appendices

Appendix A: Job Satisfaction Survey (JSS)

<table>
<tr>
<td></td>
<td colspan="2">JOB SATISFACTION SURVEY
Paul E. Spector
Department of Psychology
University of South Florida

Copyright Paul E. Spector 1994, All rights reserved.</td>
</tr>
<tr>
<td></td>
<td>PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.</td>
<td>Disagree very much / Disagree moderately / Disagree slightly / Agree slightly / Agree moderately / Agree very much</td>
</tr>
<tr>
<td>1</td>
<td>I feel I am being paid a fair amount for the work I do.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>2</td>
<td>There is really too little chance for promotion on my job.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>3</td>
<td>My supervisor is quite competent in doing his/her job.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>4</td>
<td>I am not satisfied with the benefits I receive.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>5</td>
<td>When I do a good job, I receive the recognition for it that I should receive.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>6</td>
<td>Many of our rules and procedures make doing a good job difficult.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>7</td>
<td>I like the people I work with.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>8</td>
<td>I sometimes feel my job is meaningless.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>9</td>
<td>Communications seem good within this organization.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>10</td>
<td>Raises are too few and far between.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>11</td>
<td>Those who do well on the job stand a fair chance of being promoted.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>12</td>
<td>My supervisor is unfair to me.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>13</td>
<td>The benefits we receive are as good as most other organizations offer.</td>
<td>1 2 3 4 5 6</td>
</tr>
</table>

14	I do not feel that the work I do is appreciated.	1 2 3 4 5 6
15	My efforts to do a good job are seldom blocked by red tape.	1 2 3 4 5 6
16	I find I have to work harder at my job because of the incompetence of people I work with.	1 2 3 4 5 6
17	I like doing the things I do at work.	1 2 3 4 5 6
18	The goals of this organization are not clear to me.	1 2 3 4 5 6
19	I feel unappreciated by the organization when I think about what they pay	1 2 3 4 5 6
20	People get ahead as fast here as they do in other places.	1 2 3 4 5 6
21	My supervisor shows too little interest in the feelings of subordinates.	1 2 3 4 5 6
22	The benefit package we have is equitable.	1 2 3 4 5 6
23	There are few rewards for those who work here.	1 2 3 4 5 6
24	I have too much to do at work.	1 2 3 4 5 6
25	I enjoy my coworkers.	1 2 3 4 5 6
26	I often feel that I do not know what is going on with the organization.	1 2 3 4 5 6
27	I feel a sense of pride in doing my job.	1 2 3 4 5 6
28	I feel satisfied with my chances for salary increases.	1 2 3 4 5 6
29	There are benefits we do not have which we should have.	1 2 3 4 5 6
30	I like my supervisor.	1 2 3 4 5 6
31	I have too much paperwork.	1 2 3 4 5 6
32	I don't feel my efforts are rewarded the way they should be.	1 2 3 4 5 6
33	I am satisfied with my chances for promotion.	1 2 3 4 5 6
34	There is too much bickering and fighting at work.	1 2 3 4 5 6
35	My job is enjoyable.	1 2 3 4 5 6

Appendix B: The Job Descriptive Index (JDI)

THE
JOB DESCRIPTIVE
INDEX

2009 Revision

including

The Job in General Scale

People on Your Present Job

Think of the majority of people with whom you work or meet in connection with your work. How well does each of the following words or phrases describe these people? In the blank beside each word or phrase below, write

Y for "Yes" if it describes the people with whom you work
N for "No" if it does not describe them
? for "?" if you cannot decide

___ Stimulating
___ Boring
___ Slow
___ Helpful
___ Stupid
___ Responsible
___ Likeable
___ Intelligent
___ Easy to make enemies
___ Rude
___ Smart
___ Lazy
___ Unpleasant
___ Supportive
___ Active
___ Narrow interests
___ Frustrating
___ Stubborn

Job in General

Think of your job in general. All in all, what is it like most of the time? In the blank beside each word or phrase below, write

Y for "Yes" if it describes your job
N for "No" if it does not describe it
? for "?" if you cannot decide

___ Pleasant
___ Bad
___ Great
___ Waste of time
___ Good
___ Undesirable
___ Worthwhile
___ Worse than most
___ Acceptable
___ Superior
___ Better than most
___ Disagreeable
___ Makes me content
___ Inadequate
___ Excellent
___ Rotten
___ Enjoyable
___ Poor

Supervision

Think of the kind of supervision that you get on your job. How well does each of the following words or phrases describe this? In the blank beside each word or phrase below, write

Y for "Yes" if it describes the supervision you get on the job
N for "No" if it does not describe it
? for "?" if you cannot decide

__ Supportive
__ Hard to please
__ Impolite
__ Praises good work
__ Tactful
__ Influential
__ Up-to-date
__ Unkind
__ Has favorites
__ Tells me where I stand
__ Annoying
__ Stubborn
__ Knows job well
__ Bad
__ Intelligent
__ Poor planner
__ Around when needed
__ Lazy

Opportunities for Promotion

Think of the opportunities for promotion that you have now. How well does each of the following words or phrases describe these? In the blank beside each word or phrase below, write

Y for "Yes" if it describes your opportunities for promotion
N for "No" if it does not describe them
? for "?" if you cannot decide

__ Good opportunities for promotion
__ Opportunities somewhat limited
__ Promotion on ability
__ Dead-end job
__ Good chance for promotion
__ Very limited
__ Infrequent promotions
__ Regular promotions
__ Fairly good chance for promotion

Pay

Think of the pay you get now. How well does each of the following words or phrases describe your present pay? In the blank beside each word or phrase below, write

Y for "Yes" if it describes your pay
N for "No" if it does not describe it
? for "?" if you cannot decide

__ Income adequate for normal expenses
__ Fair
__ Barely live on income
__ Bad
__ Comfortable
__ Less than I deserve
__ Well paid
__ Enough to live on
__ Underpaid

Work on Present Job

Think of the work you do at present. How well does each of the following words or phrases describe your work? In the blank beside each word or phrase below, write

Y for "Yes" if it describes your work
N for "No" if it does not describe it
? for "?" if you cannot decide

__ Fascinating
__ Routine
__ Satisfying
__ Boring
__ Good
__ Gives sense of accomplishment
__ Respected
__ Exciting
__ Rewarding
__ Useful
__ Challenging
__ Simple
__ Repetitive
__ Creative
__ Dull
__ Uninteresting
__ Can see results
__ Uses my abilities

Appendix C: Minnesota Satisfaction Questionnaire (MSQ) - long form

minnesota satisfaction questionnaire

Vocational Psychology Research

UNIVERSITY OF MINNESOTA

Copyright 1977

Name_____ Today's Date_____ 19____
     Please Print

1. Check one: ☐ Male ☐ Female

2. When were you born?_____ 19____

3. Circle the number of years of schooling you completed:

4 5 6 7 8	9 10 11 12	13 14 15 16	17 18 19 20
Grade School	High School	College	Graduate or Professional School

4. What is your present job called?_____

_____

5. What do you do on your present job?_____

_____

_____

6. How long have you been on your present job?_____years _____months

7. What would you call your **occupation,** your usual line of work?_____

_____

8. How long have you been in this line of work?_____years _____months

2

107

minnesota satisfaction questionnaire

The purpose of this questionnaire is to give you a chance to tell **how you feel about your present job,** what things you are **satisfied** with and what things you are **not satisfied** with.

On the basis of your answers and those of people like you, we hope to get a better understanding of the things people **like and dislike about their jobs.**

On the following pages you will find statements about your **present** job.

· Read each statement carefully.

· Decide **how satisfied you feel about the aspect of your job** described by the statement.

Keeping the statement in mind:

— if you feel that your job gives you **more than you expected,** check the box under **"Very Sat."** (Very Satisfied);

— if you feel that your job gives you **what you expected,** check the box under **"Sat."** (Satisfied);

— if you **cannot make up your mind** whether or not the job gives you what you expected, check the box under **"N"** (Neither Satisfied nor Dissatisfied);

— If you feel that your job gives you **less than you expected,** check the box under **"Dissat."** (Dissatisfied);

— if you feel that your job gives you **much less than you expected,** check the box under **"Very Dissat."** (Very Dissatisfied).

· Remember: Keep the statement in mind when deciding **how satisfied you feel about that aspect of your job.**

· Do this for **all** statements. Please answer **every** item.

Be frank and honest. Give a true picture of your feelings about your **present job.**

3

Ask yourself: How **satisfied** am I with this aspect of my job?

>**Very Sat.** means I am very satisfied with this aspect of my job.
>
>**Sat.** means I am satisfied with this aspect of my job.
>
>**N** means I can't decide whether I am satisfied or not with this aspect of my job.
>
>**Dissat.** means I am dissatisfied with this aspect of my job.
>
>**Very Dissat.** means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about . . .	Very Dissat.	Dissat.	N	Sat.	Very Sat.
1. The chance to be of service to others.	☐	☐	☐	☐	☐
2. The chance to try out some of my own ideas.	☐	☐	☐	☐	☐
3. Being able to do the job without feeling it is morally wrong.	☐	☐	☐	☐	☐
4. The chance to work by myself.	☐	☐	☐	☐	☐
5. The variety in my work.	☐	☐	☐	☐	☐
6. The chance to have other workers look to me for direction.	☐	☐	☐	☐	☐
7. The chance to do the kind of work that I do best.	☐	☐	☐	☐	☐
8. The social position in the community that goes with the job.	☐	☐	☐	☐	☐
9. The policies and practices toward employees of this company.	☐	☐	☐	☐	☐
10. The way my supervisor and I understand each other.	☐	☐	☐	☐	☐
11. My job security.	☐	☐	☐	☐	☐
12. The amount of pay for the work I do.	☐	☐	☐	☐	☐
13. The working conditions (heating, lighting, ventilation, etc.) on this job.	☐	☐	☐	☐	☐
14. The opportunities for advancement on this job.	☐	☐	☐	☐	☐
15. The technical "know-how" of my supervisor.	☐	☐	☐	☐	☐
16. The spirit of cooperation among my co-workers.	☐	☐	☐	☐	☐
17. The chance to be responsible for planning my work.	☐	☐	☐	☐	☐
18. The way I am noticed when I do a good job.	☐	☐	☐	☐	☐
19. Being able to see the results of the work I do.	☐	☐	☐	☐	☐
20. The chance to be active much of the time.	☐	☐	☐	☐	☐
21. The chance to be of service to people.	☐	☐	☐	☐	☐
22. The chance to do new and original things on my own.	☐	☐	☐	☐	☐
23. Being able to do things that don't go against my religious beliefs.	☐	☐	☐	☐	☐
24. The chance to work alone on the job.	☐	☐	☐	☐	☐
25. The chance to do different things from time to time.	☐	☐	☐	☐	☐
	Very Dissat.	Dissat.	N	Sat.	Very Sat.

4

Ask yourself: How **satisfied** am I with this aspect of my job?

    Very Sat. means I am very satisfied with this aspect of my job.

    Sat. means I am satisfied with this aspect of my job.

    N means I can't decide whether I am satisfied or not with this aspect of my job.

    Dissat. means I am dissatisfied with this aspect of my job.

    Very Dissat. means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about . . .	Very Dissat.	Dissat.	N	Sat.	Very Sat.
26. The chance to tell other workers how to do things.	☐	☐	☐	☐	☐
27. The chance to do work that is well suited to my abilities.	☐	☐	☐	☐	☐
28. The chance to be "somebody" in the community.	☐	☐	☐	☐	☐
29. Company policies and the way in which they are administered.	☐	☐	☐	☐	☐
30. The way my boss handles his/her employees.	☐	☐	☐	☐	☐
31. The way my job provides for a secure future.	☐	☐	☐	☐	☐
32. The chance to make as much money as my friends.	☐	☐	☐	☐	☐
33. The physical surroundings where I work.	☐	☐	☐	☐	☐
34. The chances of getting ahead on this job.	☐	☐	☐	☐	☐
35. The competence of my supervisor in making decisions.	☐	☐	☐	☐	☐
36. The chance to develop close friendships with my co-workers.	☐	☐	☐	☐	☐
37. The chance to make decisions on my own.	☐	☐	☐	☐	☐
38. The way I get full credit for the work I do.	☐	☐	☐	☐	☐
39. Being able to take pride in a job well done.	☐	☐	☐	☐	☐
40. Being able to do something much of the time.	☐	☐	☐	☐	☐
41. The chance to help people.	☐	☐	☐	☐	☐
42. The chance to try something different.	☐	☐	☐	☐	☐
43. Being able to do things that don't go against my conscience.	☐	☐	☐	☐	☐
44. The chance to be alone on the job.	☐	☐	☐	☐	☐
45. The routine in my work.	☐	☐	☐	☐	☐
46. The chance to supervise other people.	☐	☐	☐	☐	☐
47. The chance to make use of my best abilities.	☐	☐	☐	☐	☐
48. The chance to "rub elbows" with important people.	☐	☐	☐	☐	☐
49. The way employees are informed about company policies.	☐	☐	☐	☐	☐
50. The way my boss backs up his/her employees (with top management).	☐	☐	☐	☐	☐
	Very Dissat.	Dissat.	N	Sat.	Very Sat.

Ask yourself: How **satisfied** am I with this aspect of my job?

> **Very Sat.** means I am very satisfied with this aspect of my job.
>
> **Sat.** means I am satisfied with this aspect of my job.
>
> **N** means I can't decide whether I am satisfied or not with this aspect of my job.
>
> **Dissat.** means I am dissatisfied with this aspect of my job.
>
> **Very Dissat.** means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about . . .	Very Dissat.	Dissat.	N	Sat.	Very Sat.
51. The way my job provides for steady employment.	☐	☐	☐	☐	☐
52. How my pay compares with that for similar jobs in other companies.	☐	☐	☐	☐	☐
53. The pleasantness of the working conditions.	☐	☐	☐	☐	☐
54. The way promotions are given out on this job.	☐	☐	☐	☐	☐
55. The way my boss delegates work to others.	☐	☐	☐	☐	☐
56. The friendliness of my co-workers.	☐	☐	☐	☐	☐
57. The chance to be responsible for the work of others.	☐	☐	☐	☐	☐
58. The recognition I get for the work I do.	☐	☐	☐	☐	☐
59. Being able to do something worthwhile.	☐	☐	☐	☐	☐
60. Being able to stay busy.	☐	☐	☐	☐	☐
61. The chance to do things for other people.	☐	☐	☐	☐	☐
62. The chance to develop new and better ways to do the job.	☐	☐	☐	☐	☐
63. The chance to do things that don't harm other people.	☐	☐	☐	☐	☐
64. The chance to work independently of others.	☐	☐	☐	☐	☐
65. The chance to do something different every day.	☐	☐	☐	☐	☐
66. The chance to tell people what to do.	☐	☐	☐	☐	☐
67. The chance to do something that makes use of my abilities.	☐	☐	☐	☐	☐
68. The chance to be important in the eyes of others.	☐	☐	☐	☐	☐
69. The way company policies are put into practice.	☐	☐	☐	☐	☐
70. The way my boss takes care of the complaints of his/her employees.	☐	☐	☐	☐	☐
71. How steady my job is.	☐	☐	☐	☐	☐
72. My pay and the amount of work I do.	☐	☐	☐	☐	☐
73. The physical working conditions of the job.	☐	☐	☐	☐	☐
74. The chances for advancement on this job.	☐	☐	☐	☐	☐
75. The way my boss provides help on hard problems.	☐	☐	☐	☐	☐
	Very Dissat.	Dissat.	N	Sat.	Very Sat.

Ask yourself: How **satisfied** am I with this aspect of my job?

    Very Sat. *means I am very satisfied with this aspect of my job.*

    Sat. *means I am satisfied with this aspect of my job.*

    N *means I can't decide whether I am satisfied or not with this aspect of my job.*

    Dissat. *means I am dissatisfied with this aspect of my job.*

    Very Dissat. *means I am very dissatisfied with this aspect of my job.*

On my present job, this is how I feel about . . .	Very Dissat.	Dissat.	N	Sat.	Very Sat.
76. The way my co-workers are easy to make friends with.	☐	☐	☐	☐	☐
77. The freedom to use my own judgment.	☐	☐	☐	☐	☐
78. The way they usually tell me when I do my job well.	☐	☐	☐	☐	☐
79. The chance to do my best at all times.	☐	☐	☐	☐	☐
80. The chance to be "on the go" all the time.	☐	☐	☐	☐	☐
81. The chance to be of some small service to other people.	☐	☐	☐	☐	☐
82. The chance to try my own methods of doing the job.	☐	☐	☐	☐	☐
83. The chance to do the job without feeling I am cheating anyone.	☐	☐	☐	☐	☐
84. The chance to work away from others.	☐	☐	☐	☐	☐
85. The chance to do many different things on the job.	☐	☐	☐	☐	☐
86. The chance to tell others what to do.	☐	☐	☐	☐	☐
87. The chance to make use of my abilities and skills.	☐	☐	☐	☐	☐
88. The chance to have a definite place in the community.	☐	☐	☐	☐	☐
89. The way the company treats its employees.	☐	☐	☐	☐	☐
90. The personal relationship between my boss and his/her employees.	☐	☐	☐	☐	☐
91. The way layoffs and transfers are avoided in my job.	☐	☐	☐	☐	☐
92. How my pay compares with that of other workers.	☐	☐	☐	☐	☐
93. The working conditions.	☐	☐	☐	☐	☐
94. My chances for advancement.	☐	☐	☐	☐	☐
95. The way my boss trains his/her employees.	☐	☐	☐	☐	☐
96. The way my co-workers get along with each other.	☐	☐	☐	☐	☐
97. The responsibility of my job.	☐	☐	☐	☐	☐
98. The praise I get for doing a good job.	☐	☐	☐	☐	☐
99. The feeling of accomplishment I get from the job.	☐	☐	☐	☐	☐
100. Being able to keep busy all the time.	☐	☐	☐	☐	☐
	Very Dissat.	Dissat.	N	Sat.	Very Sat.

minnesota satisfaction questionnaire
(short-form)

Vocational Psychology Research

UNIVERSITY OF MINNESOTA

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minnesota satisfaction questionnaire

The purpose of this questionnaire is to give you a chance to tell **how you feel about your present job,** what things you are **satisfied** with and what things you are **not satisfied** with.

On the basis of your answers and those of people like you, we hope to get a better understanding of the things people **like and dislike about their jobs.**

On the next page you will find statements about your **present** job.

- Read each statement carefully.

- Decide **how satisfied you feel about the aspect of your job** described by the statement.

  Keeping the statement in mind:

      —if you feel that your job gives you **more than you expected,** check the box under **"Very Sat."** (Very Satisfied);

      —if you feel that your job gives you **what you expected,** check the box under **"Sat."** (Satisfied);

      —if you **cannot make up your mind** whether or not the job gives you what you expected, check the box under **"N"** (Neither Satisfied nor Dissatisfied);

      —if you feel that your job gives you **less than you expected,** check the box under **"Dissat."** (Dissatisfied);

      —if you feel that your job gives you **much less than you expected,** check the box under **"Very Dissat."** (Very Dissatisfied).

- Remember: Keep the statement in mind when deciding **how satisfied you feel about that aspect of your job.**

- Do this for **all** statements. Please answer **every** item.

Be frank and honest. Give a true picture of your feelings about your **present job.**

2

Ask yourself: How **satisfied** am I with this aspect of my job?

    Very Sat. means I am very satisfied with this aspect of my job.

    Sat. means I am satisfied with this aspect of my job.

    N means I can't decide whether I am satisfied or not with this aspect of my job.

    Dissat. means I am dissatisfied with this aspect of my job.

    Very Dissat. means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about . . .	Very Dissat.	Dissat.	N	Sat.	Very Sat.
1. Being able to keep busy all the time	☐	☐	☐	☐	☐
2. The chance to work alone on the job	☐	☐	☐	☐	☐
3. The chance to do different things from time to time	☐	☐	☐	☐	☐
4. The chance to be "somebody" in the community	☐	☐	☐	☐	☐
5. The way my boss handles his/her workers	☐	☐	☐	☐	☐
6. The competence of my supervisor in making decisions	☐	☐	☐	☐	☐
7. Being able to do things that don't go against my conscience	☐	☐	☐	☐	☐
8. The way my job provides for steady employment	☐	☐	☐	☐	☐
9. The chance to do things for other people	☐	☐	☐	☐	☐
10. The chance to tell people what to do	☐	☐	☐	☐	☐
11. The chance to do something that makes use of my abilities	☐	☐	☐	☐	☐
12. The way company policies are put into practice	☐	☐	☐	☐	☐
13. My pay and the amount of work I do	☐	☐	☐	☐	☐
14. The chances for advancement on this job	☐	☐	☐	☐	☐
15. The freedom to use my own judgment	☐	☐	☐	☐	☐
16. The chance to try my own methods of doing the job	☐	☐	☐	☐	☐
17. The working conditions	☐	☐	☐	☐	☐
18. The way my co-workers get along with each other	☐	☐	☐	☐	☐
19. The praise I get for doing a good job	☐	☐	☐	☐	☐
20. The feeling of accomplishment I get from the job	☐	☐	☐	☐	☐
	Very Dissat.	Dissat.	N	Sat.	Very Sat.

3

Name_____Today's Date_____ 19____

Please Print

1. Check one: ☐ Male ☐ Female

2. When were you born?_____ 19____

3. Circle the number of years of schooling you completed:

| 4 5 6 7 8 | 9 10 11 12 | 13 14 15 16 | 17 18 19 20 |
| Grade School | High School | College | Graduate or Professional School |

4. What is your present job called? _____

_____

5. What do you do on your present job? _____

_____

_____

6. How long have you been on your present job?_____years_____months

7. What would you call your **occupation,** your usual line of work? _____

_____

8. How long have you been in this line of work? _____years_____months

4

IP-626A)

Appendix E: Purdue Teacher Opinionnaire (PTO)

The Purdue Teacher Opinionaire
Prepared by Ralph R. Bentley and Averno M. Rempel (1980)

I.   This instrument is designed to provide the opportunity to express your opinions about your work as a teacher and various school problems in your particular school situation. There are no right or wrong responses, so do not hesitate to mark the statements frankly.

Please **do not** record your name on this document.

Read each statement carefully. Then indicate whether you (1) disagree, (2) probably disagree, (3) probably agree, (4) agree with each statement. Circle your answers using the following scale:

1= Disagree   2=Probably Disagree   3=Probably Agree   4=Agree

1	Details, "red tape," and required reports absorb too much of my time.	1	2	3	4
2	The work of individual faculty members is appreciated and commended by our principal.	1	2	3	4
3	Teachers feel free to criticize administrative policy at faculty meetings called by our principal	1	2	3	4
4	The faculty feels that their suggestions pertaining to salaries are adequately transmitted by the administration to the appropriate personnel within your state (i.e., school board, department of education, etc.)	1	2	3	4
5	Our principal shows favoritism in his/her relations with teachers in our school.	1	2	3	4
6	Teachers in this school are expected to do an unreasonable amount of record keeping and clerical work.	1	2	3	4
7	My principal makes a real effort to maintain close contact with the faculty.	1	2	3	4
8	Community demands upon the teacher's time are unreasonable.	1	2	3	4
9	I am satisfied with the policies under which pay raises are granted.	1	2	3	4
10	My teaching load is greater than that of most of the other teachers in our school.	1	2	3	4
11	The extra-curricular load of the teachers in our school is unreasonable.	1	2	3	4
12	Our principal's leadership in faculty meetings challenges and stimulates our professional growth.	1	2	3	4
13	My teaching position gives me the social status in the community that I desire	1	2	3	4
14	The number of hours a teacher must work is unreasonable.	1	2	3	4
15	Teaching enables me to enjoy many of the material and cultural things I like.	1	2	3	4
16	My school provides me with adequate classroom supplies and equipment.	1	2	3	4
17	Our school has a well-balanced curriculum.	1	2	3	4
18	There is a great deal of griping, arguing, taking sides, and feuding among our teachers	1	2	3	4
19	Teaching gives me a great deal of personal satisfaction.	1	2	3	4
20	The curriculum of our school makes reasonable provision for student individual differences.	1	2	3	4

21	The procedures for obtaining materials and services are well defined and efficient.	1	2	3	4
22	Generally, teachers in our school do not take advantage of one another.	1	2	3	4
23	The teachers in our school cooperate with each other to achieve common, personal, and professional objectives.	1	2	3	4
24	Teaching enables me to make my greatest contribution to society.	1	2	3	4
25	The curriculum of our school is in need of major revisions.	1	2	3	4
26	I love to teach.	1	2	3	4
27	If I could plan my career again, I would choose teaching.	1	2	3	4
28	Experienced faculty members accept new and younger members as colleagues.	1	2	3	4
29	I would recommend teaching as an occupation to students of high scholastic ability.	1	2	3	4
30	If I could earn as much money in another occupation, I would stop teaching.	1	2	3	4
31	The school schedule places my classes at a disadvantage.	1	2	3	4
32	Within the limits of financial resources, the school tries to follow a generous policy regarding fringe benefits, professional travel, professional study, etc.	1	2	3	4
33	My principal makes my work easier and more pleasant.	1	2	3	4
34	Keeping up professionally is too much of a burden.	1	2	3	4
35	Our community makes its teachers feel as though they are a real part of the community.	1	2	3	4
36	Salary policies are administered with fairness and justice.	1	2	3	4
37	Teaching affords me the security I want in an occupation.	1	2	3	4
38	My school principal understands and recognizes good teaching procedures.	1	2	3	4
39	Teachers clearly understand the policies governing salary increases.	1	2	3	4
40	My classes are used as "dumping grounds" for problem students.	1	2	3	4
41	The lines and methods of communication between teachers and the principal in our school are well developed and maintained	1	2	3	4
42	My teaching load in this school is unreasonable.	1	2	3	4
43	My principal shows a real interest in my department.	1	2	3	4
44	Our principal promotes a sense of belonging among the teachers in our school.	1	2	3	4
45	My teaching load unduly restricts my nonprofessional activities.	1	2	3	4
46	I find my contacts with students, for the most part, highly satisfying and rewarding	1	2	3	4
47	I feel that I am an important part of this school.	1	2	3	4
48	The competency of the teachers in our school compares favorably with that of teachers in other schools with which I am familiar.	1	2	3	4
49	My school provides the teachers with adequate audio-visual aids and projection equipment.	1	2	3	4
50	I feel successful and competent in my present position.	1	2	3	4
51	I enjoy working with student organizations, clubs, and societies.	1	2	3	4
52	Our teaching staff is congenial to work with.	1	2	3	4

53	My teaching associates are well prepared for their jobs.	1	2	3	4
54	Our school faculty has a tendency to form into cliques.	1	2	3	4
55	The teachers in our school work well together.	1	2	3	4
56	I am at a disadvantage professionally because other teachers are better prepared to teach than I am.	1	2	3	4
57	Our school provides adequate clerical services for the teachers.	1	2	3	4
58	As far as I know, the other teachers think I am a good teacher.	1	2	3	4
59	Library facilities and resources are adequate for the grade or subject area which I teach.	1	2	3	4
60	The "stress and strain" resulting from teaching makes teaching undesirable for me.	1	2	3	4
61	My principal is concerned with the problems of the faculty and handles these problems sympathetically.	1	2	3	4
62	I do not hesitate to discuss any school problem with my principal.	1	2	3	4
63	Teaching gives me the prestige I desire.	1	2	3	4
64	My teaching job enables me to provide a satisfactory standard of living for my family.	1	2	3	4
65	The salary schedule in our school adequately recognizes teacher competency.	1	2	3	4
66	Most of the people in this community understand and appreciate good education.	1	2	3	4
67	In my judgment, this community is a good place to raise a family.	1	2	3	4
68	This community respects its teachers and treats them like professional persons.	1	2	3	4
69	My principal acts interested in me and my problems.	1	2	3	4
70	My school principal supervises rather than "snoopervises" the teachers in our school.	1	2	3	4
71	It is difficult for teachers to gain acceptance by the people in this community.	1	2	3	4
72	Teachers' meetings as now conducted by our principal waste the time and energy of the staff.	1	2	3	4
73	My principal has a reasonable understanding of the problems connected with my teaching assignment.	1	2	3	4
74	I feel that my work is judged fairly by my principal.	1	2	3	4
75	Salaries paid in this school compare favorably with salaries in other schools with which I am familiar.	1	2	3	4
76	Most of the actions of students irritate me.	1	2	3	4
77	The cooperativeness of teachers in our school helps make our work more enjoyable.	1	2	3	4
78	My students regard me with respect and seem to have confidence in my professional ability.	1	2	3	4
79	The purposes and objectives cannot be achieved by the present curriculum.	1	2	3	4
80	The teachers in our school have a desirable influence on the values and attitudes of their students.	1	2	3	4
81	This community expects its teachers to meet unreasonable personal	1	2	3	4

		standards.				
82	My students appreciate the help I give them with their schoolwork.	1	2	3	4
83	To me, there is no more challenging work than teaching.	1	2	3	4
84	Other teachers in our school are appreciative of my work.	1	2	3	4
85	As a teacher in this community, my nonprofessional activities outside of school are unduly restricted.	1	2	3	4
86	As a teacher, I think I am as competent as most other teachers.	1	2	3	4
87	The teachers with whom I work have high professional ethics.	1	2	3	4
88	Our school curriculum does a good job of preparing students to become enlightened and competent citizens.	1	2	3	4
89	I really enjoy working with my students.	1	2	3	4
90	The teachers in our school show a great deal of initiative and creativity in their teaching assignments.	1	2	3	4
91	Teachers in our community feel free to discuss controversial issues in their classes.	1	2	3	4
92	My principal tries to make me feel comfortable when visiting my classes.	1	2	3	4
93	My principal makes effective use of the individual teacher's capacity and talent.	1	2	3	4
94	The people in this community, generally, have a sincere and wholehearted interest in the school.	1	2	3	4
95	Teachers feel free to go to the principal about problems of personal and group welfare.	1	2	3	4
96	This community supports ethical procedures regarding the appointment and reappointment of members of the teaching staff.	1	2	3	4
97	This community is willing to support a good program of education.	1	2	3	4
98	This community expects the teachers to participate in too many social activities.	1	2	3	4
99	Community pressures prevent me from doing my best as a teacher.	1	2	3	4
100	I am well satisfied with my present teaching profession.	1	2	3	4

Appendix F: Pre piloted instrument

I.<u>First Section: Demographic Profile Questionnaire</u>
1. What is your age group?
a. 30 and below
b. 30 – 40
c. 40 – 50
d. Above 50
2. What is your gender?
a. Male
b. Female
c. Prefer not to tell
3. How many years have you been a teacher?
a. 0 to 7 years
b. 8 to 14 years
c. 15 to 21
d. Above 21 years
4. What is your teaching subject?
a. Languages (Arabic – English – French – ….)
b. Math
c. Science (General Sciences – Chemistry – Physics – Biology – Health Sciences)
d. Religion (Islamic – Christianity – Judaism – ….)
e. History – Geography – Social Studies – Moral Education
f. Visual Arts – Music – PE
g. ICT
5. What is/are the cycle/s that you teach?
a. Pre-cycle (Kindergarten)
b. Cycle 1 (Grades 1, 2, 3, 4)
c. Cycle 2 (Grades 5, 6, 7, 8)
d. Cycle 3 (Grades 9, 10, 11, 12)
6. What is your educational level?
a. Bachelor's Degree
b. Postgraduate Diploma
c. Master's Degree
d. Doctoral Degree

II.<u>Second Section: Modalities Satisfaction</u>
Specify the most with every point of the following:

1. How do you rate your overall level of job satisfaction?	☐ Low ☐ Average ☐ High
2. The learning modality used in my school has an impact on this level of job satisfaction	☐ Strongly Agree ☐ Agree ☐ Neutral

	☐ Disagree ☐ Strongly Disagree
3.　　What is the learning modality you are currently using in most cases	☐ Face-to-face model ☐ Online synchronous model ☐ Online asynchronous model ☐ Hybrid learning model
4.　　If you can change the school's current learning modality, which one do you find most appropriate to your students?	☐ Face-to-face model ☐ Online synchronous model ☐ Online asynchronous model ☐ Hybrid learning model
5.　　I tried this learning modular before the pandemic	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
6.　　I would like to continue practising the current learning modality after the pandemic or when we return to the old normal.	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
7.　　This delivery modality in our school is chosen by the school administration ONLY, and teachers had no choice in this decision	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
8.　　I received the sufficient training regarding this module before it is applied	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
9.　　My digital competency level helped me dealing the different learning modalities efficiently	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

10. I have the liberty in shifting my teaching modular considering the lesson objectives	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
11. I used this learning modular only as a response to the pandemic	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
12. This learning modality is the best choice to deliver the teaching message to students as it opens the innovation horizons in student minds.	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
13. After a long time of experiencing this learning modular, I still face some challenges, or new challenges might arise from time to time.	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
14. Instruction using this modular was delivered effectively.	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
15. The experience received during the pandemic and using this module was highly valuable to my professional career development.	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
16. Student behavior is affected by the learning modality affect my satisfaction	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
17. Student behavior through this modular influences my job satisfaction level	☐ Strongly Agree ☐ Agree ☐ Neutral

	☐ Disagree ☐ Strongly Disagree
18. The leadership team in my school positively respond to the teachers' concerns about the modality in use.	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
19. The level of technology infrastructure in my school represented a challenge to apply the different learning modalities.	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
20. The time used to cover the same learning objective differs according to the learning modality	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
21. My salary is decreased as a school response to the pandemic	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
22. This declination has a significant impact on my job satisfaction	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
23. I received the same workload (number of periods and after-school preparation time) before and after the pandemic	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
24. the workload (number of periods and after-school preparation time) of all the delivery modalities is the same	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

25. the workload (number of periods and after-school preparation time) is a significant factor that plays a role in my job satisfaction level	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
26. I have taken an online-only class as a student	☐ Yes ☐ No
27. I have taken an hybrid class as a student	☐ Yes ☐ No
28. In my opinion, most students in general do better in	☐ Face-to-face model ☐ Online synchronous model ☐ Online asynchronous ☐ Hybrid learning model ☐ All of the same level
29. Compared to other modalities, I put the least in-class effort when running	☐ Face-to-face model ☐ Online synchronous model ☐ Online asynchronous ☐ Hybrid learning model ☐ All of the same level
30. Compared to other modalities, I put the most in-class effort when running	☐ Face-to-face model ☐ Online synchronous model ☐ Online asynchronous ☐ Hybrid learning model ☐ All of the same level
31. How confident do you feel when you deliver a face-to-face class?	☐ Not at all confident ☐ Not very confident ☐ Moderately confident ☐ Very confident
32. How confident do you feel when you deliver an online synchronous class	☐ Not at all confident ☐ Not very confident ☐ Moderately confident ☐ Very confident
33. How confident do you feel when you deliver an online asynchronous class?	☐ Not at all confident ☐ Not very confident ☐ Moderately confident ☐ Very confident

34. How confident do you feel when you deliver a hybrid learning class?	☐ Not at all confident ☐ Not very confident ☐ Moderately confident ☐ Very confident
35. Relationship with coworkers is affected when shifting to a different learning modality that the regular one	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
36. Compared to other modalities, the most effective teaching model to deal with differentiated instructions is	☐ Face-to-face model ☐ Online synchronous model ☐ Online asynchronous ☐ Hybrid learning model ☐ They introduce the same level of support to different learning groups
37. Compared to other modalities, the least supportive teaching model to deal with differentiated instructions is	☐ Face-to-face model ☐ Online synchronous model ☐ Online asynchronous ☐ Hybrid learning model ☐ They introduce the same level of support to different learning groups
38. The ability to deal with the students' different abilities plays a role in my job satisfaction level	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
39. I can maintain an equal balance between work and private life through different teaching modalities	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree
40. I think job security is equally guaranteed through all learning delivery methods	☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

41. The teaching modular that introduces the least balance between work and private life is	☐ Face-to-face model ☐ Online synchronous model ☐ Online asynchronous ☐ Hybrid learning model ☐ They introduce the same level of balance
42. The teaching modular that introduces the best balance between work and private life is	☐ Face-to-face model ☐ Online synchronous model ☐ Online asynchronous ☐ Hybrid learning model ☐ They introduce the same level of balance

Pre-piloted Interview Questions (Middle & Senior Leaders)

1. describe your challenges in bringing about a complete school transformation and your strategy in dealing with these challenges?

2. Did you receive support from the MoE to guarantee a smooth transformation? In what way?

3. What is the most challenging teaching model from the school leaders perspectives? Why?

4. What do you think is the most challenging one from the teachers' view? Why?

5. How could your support the teachers in each of the teaching modality?

6. How could you measure the impact of the support you provide to the teachers?

7. Do you plan to continue with the current teaching model after the pandamic? Why?

8. Do you think changing the teaching model has any impact on teachers' job satisfaction? In what way?

Pre-piloted Interview Questions (Teachers):

1. What is the current teaching model you use? Did you try any teaching model other than that? To what extent are you satisfied with it?

2. What are the challenges you faced when implementing this model, how you overcome it?

3. How far did you receive the help and support from the school leadership side?

4. What are the other factors that might affect your job satisfaction? Ex. Is your salary changed in accordance with the teaching model? Do you deliver the same number of classes or the same number of courses in different teaching models?

5. In what way do you think different modalities needs different teaching skills? What skills are needed for each?

6. In what way can you maintain a balance between work and private life in this model?

7. how well do you think blended learning fits into UAE society? Why?

8. How do you yourself like to learn new topics? For instance, do you prefer to learn new topics online or taught face-to-face?

Appendix G: post piloted instrument

<u>Survey Participants' Consent Form</u>

Dear educator,

You are being invited to participate in a research study that aims to analyze the relationship between teaching delivery modalities and the level of teachers' job satisfaction. The role of leadership in supporting teachers in different teaching models will be explored as well.

This study is being done by Ahmad Yahya Sediek, a student of Masters of Education (MLP) at the British University in Dubai as a part of the program dissertation. The survey is for the teachers who are currently working in Abu Dhabi private schools. The completion of the questionnaire will take around 10 to 15 minutes of your precious time. Be confident that the anonymity of the participants is guaranteed and, the confidentiality of information assured. The data collected will be used only for academic purposes and will remain secure.

Your participation in this study will benefit your school, and the field of education by providing the educational sector with new knowledge about the impact of using different delivery modalities that raise as a response to the Covid-19 pandemic on teachers' satisfaction.

Your participation is entirely voluntary, and you can withdraw at any time. You are free to omit any question. There are no foreseeable risks or discomforts to your participation.

If you agree to participate in this study, please sign below. If you have any questions regarding this survey, please contact me at this email: 20199965@student.buid.ac.ae. You can also contact my dissertation supervisor, Dr Solomon Arulraj David at: solomon.david@buid.ac.ae

I appreciate your honest and sincere input. Thank you very much for your time and support.
Warm regards,
Ahmad Yahya

1. Do you wish to participate? *

   Mark only one oval.

   ◯ Yes   Skip to question 2

   ◯ No   Skip to section 2 (Declined Participation)

   Declined Participation   You have declined to participate in the survey. Thank you for your time, you may close the browser or click submit below.

2. 1. What is your age group?

Mark only one oval.

◯ 30 or below

◯ 30 – 40

◯ 40 – 50

◯ Above 50

3. 2. What is your gender?

Mark only one oval.

◯ Male

◯ Female

◯ Prefer not to say

4. 3. How many years have you been a teacher?

Mark only one oval.

◯ 0 to 7 years

◯ 8 to 14 years

◯ 15 to 21

◯ Above 21 years

5. 4. What is/are your teaching subject/s?

Check all that apply.

☐ Languages (Arabic – English – French)

☐ Math

☐ Science (General Sciences – Chemistry – Physics – Biology – Health Sciences)

☐ Religion (Islamic – Christianity – Judaism)

☐ History – Geography – Social Studies – Moral Education

☐ Visual Arts – Music – PE

☐ ICT

6. 5. What is/are the cycle/s that you teach?

Check all that apply.

☐ Pre-cycle (Kindergarten)
☐ Cycle 1 (Grades 1, 2, 3, 4)
☐ Cycle 2 (Grades 5, 6, 7, 8)
☐ Cycle 3 (Grades 9, 10, 11, 12)

7. 6. What is your highest educational level?

Mark only one oval.

⬭ Bachelor's Degree

⬭ Postgraduate Diploma

⬭ Master's Degree

⬭ Doctoral Degree

Modalities in Action

8. 1. What is the learning modality you are currently using in most cases?

Mark only one oval.

⬭ Face-to-face model

⬭ Online synchronous model

⬭ Hybrid learning model

⬭ All of them

Scoring Scale
1 = Strongly Agree
2 = Agree
3 = Neutral
4 = Disagree
5 = Strongly Disagree

9. 2. I have the liberty in shifting my teaching modular considering the lesson objectives

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

10. 3. After a long time of experiencing my current learning modular, I still face some challenges, or new challenges might arise from time to time.

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

11. 4. The experience received during the pandemic and using this module was highly valuable to my professional career development.

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

12. 5. How confident do you feel delivering each of the following models?

Mark only one oval per row.

	Very confident	Moderately confident	Not very confident	Not at all confident
Face-to-face	◯	◯	◯	◯
Online Synchronous	◯	◯	◯	◯
Hybrid Learning	◯	◯	◯	◯

Mark only one oval per row.

	Very satisfied	Partially satisfied	Neutral	Partially dissatisfied	Very dissatisfied
Job security	⬭	⬭	⬭	⬭	⬭
After school workload	⬭	⬭	⬭	⬭	⬭
in-class effort	⬭	⬭	⬭	⬭	⬭
Work-life balance	⬭	⬭	⬭	⬭	⬭
Salary and benefits	⬭	⬭	⬭	⬭	⬭
Leadership support	⬭	⬭	⬭	⬭	⬭
Student behavior	⬭	⬭	⬭	⬭	⬭
Relationship with co workers	⬭	⬭	⬭	⬭	⬭
General job satisfaction	⬭	⬭	⬭	⬭	⬭

14. 2. Which of the following do you think play a major role to identify teacher's job satisfaction? Choose all that apply.

Check all that apply.

☐ Level of job security
☐ After school workload
☐ In-class effort
☐ Work-life balance
☐ Salary and benefits
☐ Leadership support
☐ Student behavior

15. **3. My salary is decreased as the school shifted to the hybrid or online learning modular.**

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

16. **4. This declination, if there is any, has a significant impact on my job satisfaction**

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

17. **5. How do you rate your overall level of job satisfaction?**

Mark only one oval.

◯ Low

◯ Average

◯ High

Leadership Support

Scoring Scale
1 = Strongly Agree
2 = Agree
3 = Neutral
4 = Disagree
5 = Strongly Disagree

18. **1. The delivery modality in our school is chosen by the school administration ONLY, and teachers had no choice in this decision**

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

19. **2. I received sufficient training regarding this module before it is applied**

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

20. **3. The leadership team in my school positively responds to the teachers' concerns about the modality in use.**

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

21. **4. The school principal believes that a good quality of life is important for teachers in the pandemic time.**

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

22. **5. The school leadership plan staff development sessions to help teachers deal with the challenges they face.**

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

23. **6. The school principals place high priority on rewards for job performance.**

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

24. **7. I received equal amount of support from school leadership while practicing different kinds of modalities.**

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

Appendix H: Participant Consent Form (middle and senior leaders)

Dear school leader,

You are being invited to participate in a research study that aims to analyze the relationship between learning delivery modalities and teachers' job satisfaction. The role of leadership to support teachers in different teaching models would be explored as well.

This study is being done by Ahmad Yahya Sediek, a student of Masters of Education (MLP) at the British University in Dubai as a part of the program dissertation.

This interview is for the school middle and senior leaders who are currently working in Abu Dhabi private schools. The completion of the interview will take around 15 minutes of your precious time. Be confident that the anonymity of the participants is guaranteed, and the confidentiality of information provided by them is assured. The data collected will be used only for academic purposes and remain secure.

Your participation in this study will benefit not only your school and school district, but also the field of education by providing schools and leaders with new knowledge about the impact of using different learning models that raise up as a response to Covid-19 pandemic on teachers' job satisfaction.

Your participation is entirely voluntary, and you can withdraw at any time. You are free to omit any question. There are no foreseeable risks or discomforts to your participation.

Before I carry out the interview, I would like you to read the following statements and confirm your agreement to take part in this study. If you agree, please sign below.

- I confirm that I have read and understood the Participant Consent Form.

- All the questions that I have about the research have been satisfactorily answered

- I understand that my participation is voluntary and I am free to withdraw at any time.

- I agree to my meeting being recorded and that a transcript of my interview in which all identifying information has been removed will be used for research purposes.

- I agree to participate.

Participant's Name:_____

Email: _____

Signature: _____

Appendix I: Post Piloted Interview Questions (middle & senior leaders)

1.   What is your educational level and how many years did you spend in your current position?

2.   On what basis did you choose the learning delivering modality of your school?

3.   describe your challenges in bringing about a complete school transformation and your strategy in dealing with these challenges?

4.   Did you receive any support from the MoE to guarantee a smooth transformation? In what way?

5.   What is the most and least challenging teaching model from the school administration's perspectives? Why?

6.   What do you think is the most and least challenging one from the teachers' view? Why?

7.   Is using a certain learning mode a significant factor towards teacher's satisfaction? In what way?

8.   How could you support the teachers in each of the teaching modality?

9.   How could you measure the impact of the support you provide to the teachers?

10.   Do you think changing the teaching model has any impact on teachers' job satisfaction? To what extent?

11.   How much time did you spend in front of screens when supervising the hybrid/online learning module?

12.   Have you faced any health problems due to the teaching modality you supervise?

13.   Any thing else you would like to add that might be of interest to this study?

Appendix J: Participant Consent Form (teachers)

<u>Dear educator,</u>

You are being invited to participate in a research study that aims to analyze the relationship between learning delivery modalities and the level of teachers' job satisfaction. The role of leadership to support teachers in different teaching models would be explored as well.

This study is being done by Ahmad Yahya Sediek, a student of Masters of Education (MLP) at the British University in Dubai as a part of the program dissertation.

This interview is for the teachers who are currently working in Abu Dhabi private schools. The completion of the questionnaire will take around 10 to 15 minutes of your precious time. Be confident that the anonymity of the participants is guaranteed and the confidentiality of information provided by them is assured. The information collected will be used only for academic purposes and will remain secure.

Your participation in this study will benefit not only your school and school district, but also the field of education by providing schools and leaders with new knowledge about the impact of using different learning models that raise up as a response to Covid-19 pandemic on teachers' job satisfaction.

Your participation is entirely voluntary, and you can withdraw at any time. You are free to omit any question. There are no foreseeable risks or discomforts to your participation.

Before I carry out the interview, I would like you to read the following statements and confirm your agreement to take part in this study. If you agree, please sign below.

1.   I confirm that I have read and understood the Participant Consent Form.

2.   All the questions that I have about the research have been satisfactorily answered

3.   I understand that my participation is voluntary and I am free to withdraw at any time.

4.   I agree to my meeting being recorded and that a transcript of my interview in which all identifying information has been removed will be used for research purposes.

5.   I agree to participate.

Participant's Name:_____

Email: _____

Signature: _____

Appendix K: Post Piloted Interview Questions (teachers)

1. What is your educational level and how many years did you spend in the teaching profession?

2. What is the current teaching model you use? Did you try any teaching model other than that? To what extent are you satisfied with it?

3. What are the challenges you face when implementing this model, and how did you overcome them?

4. What are the advantages and disadvantages of the learning modular you use?

5. How far did you receive the help and support from the school leadership side? What kind of help?

6. Is using a certain learning mode a significant factor towards teacher's satisfaction? In what way?

7. What are the other factors attached to the learning model you use that might affect your job satisfaction? Ex. Is your salary changed in accordance with the teaching model? Do you deliver the same number of classes or the same number of courses in different teaching models?

8. In what way do you think different modalities need different teaching skills? What skills are needed for each?

9. In what way can you maintain a balance between work and private life in your current teaching model?

10. How well do you think blended learning fits into the UAE society? Why?

11. How do you yourself like to learn new topics? For instance, do you prefer to learn new topics online or through face-to-face?

12. Have you faced any health problems due to the teaching modality you supervise?

13. Anything else you would like to add that might be of interest to this study?

Appendix L: Gender Distribution through Modalities

Gender

Teaching Modality in Use		Frequency	Valid Percent	Cumulative
Face-to-face	Male	9	29.0	29.0
	Female	22	71.0	100.0
	Total	31	100.0	
Online model	Male	5	45.5	45.5
	Female	6	54.5	100.0
	Total	11	100.0	
Hybrid learning	Male	56	51.4	51.4
	Female	53	48.6	100.0
	Total	109	100.0	

Gender
Teaching Modality in Use: Face-to-face model

Mean = 1.71
Std. Dev. = .461
N = 31

Gender

Teaching Modality in Use: Online synchronous model

Mean = 1.55
Std. Dev. = .522
N = 11

Gender

Teaching Modality in Use: Hybrid learning model

Mean = 1.49
Std. Dev. = .502
N = 109
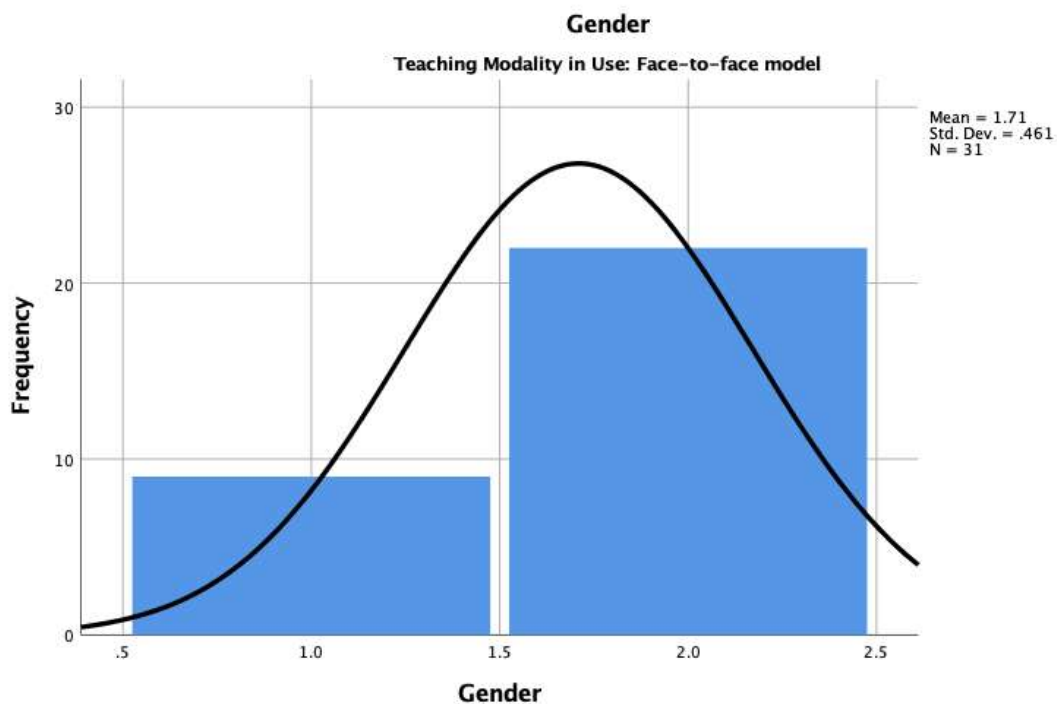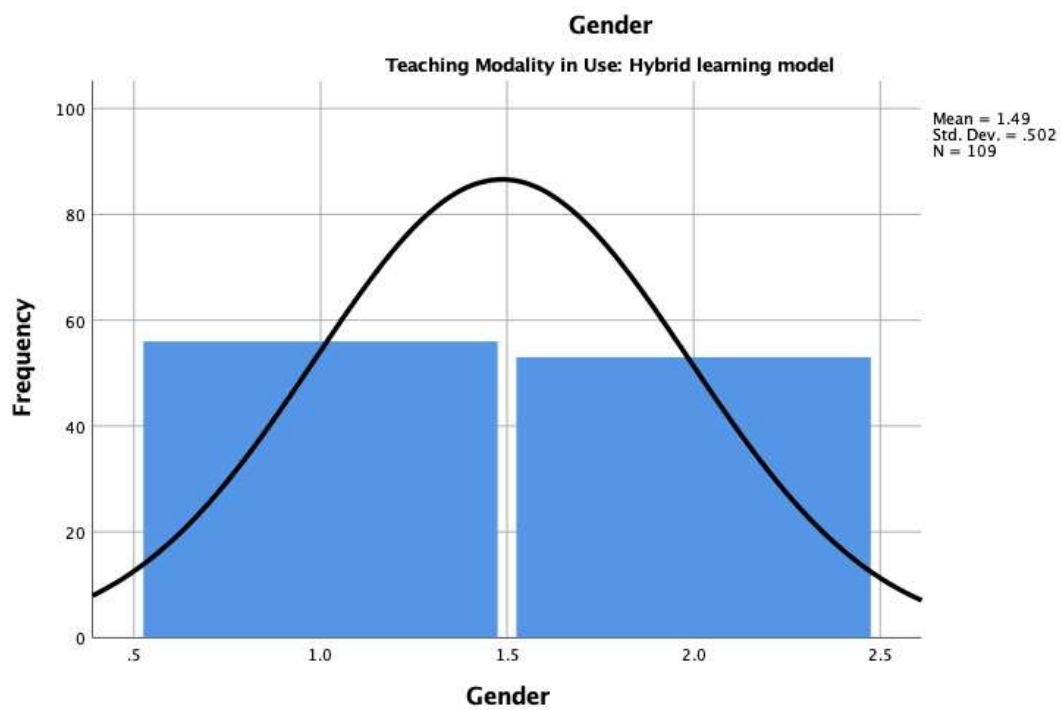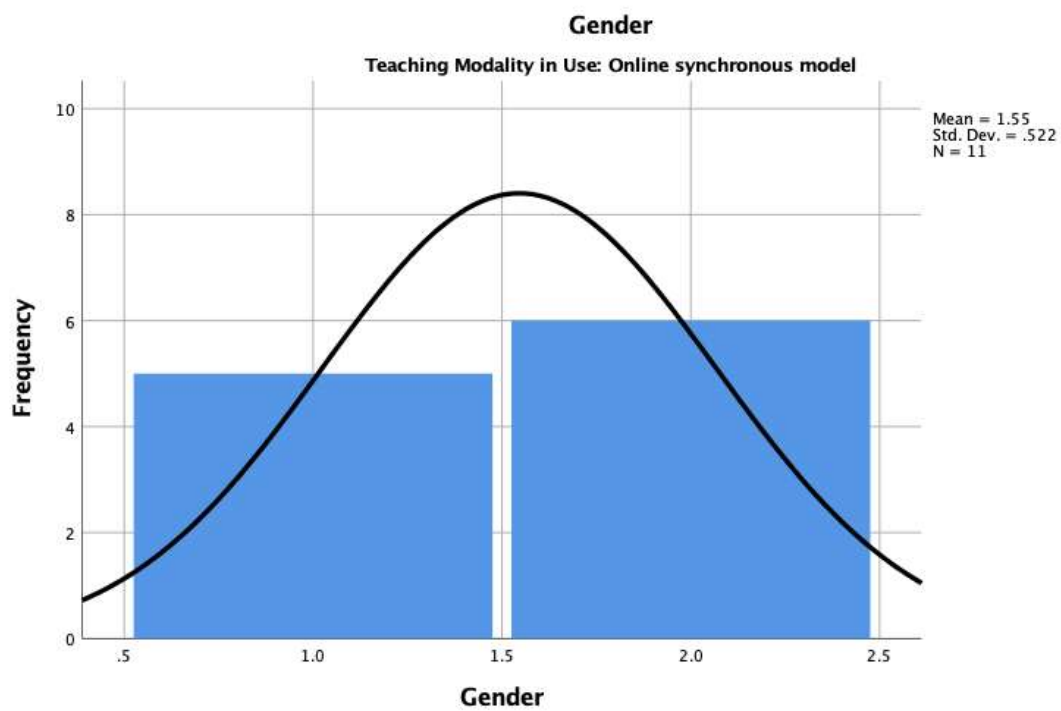
Appendix M: Age Distribution through Modalities

Age Groups

Teaching Modality in Use		Frequency	Valid Percent	Cumulative
Face-to-face	30 - 40	19	61.3	61.3
	41 - 50	11	35.5	96.8
	Above 50	1	3.2	100.0
	Total	31	100.0	
Online model	30 or below	5	45.5	45.5
	30 - 40	2	18.2	63.6
	41 - 50	1	9.1	72.7
	Above 50	3	27.3	100.0
	Total	11	100.0	
Hybrid learning	30 or below	9	8.3	8.3
	30 - 40	63	57.8	66.1
	41 - 50	30	27.5	93.6
	Above 50	7	6.4	100.0

Age Group

Teaching Modality in Use: Face-to-face model

Mean = 1.42
Std. Dev. = .564
N = 31

Age Group

Teaching Modality in Use: Online synchronous model

Mean = 2.18
Std. Dev. = 1.328
N = 11

Age Group

Teaching Modality in Use: Hybrid learning model

Mean = 2.32
Std. Dev. = .719
N = 109

144
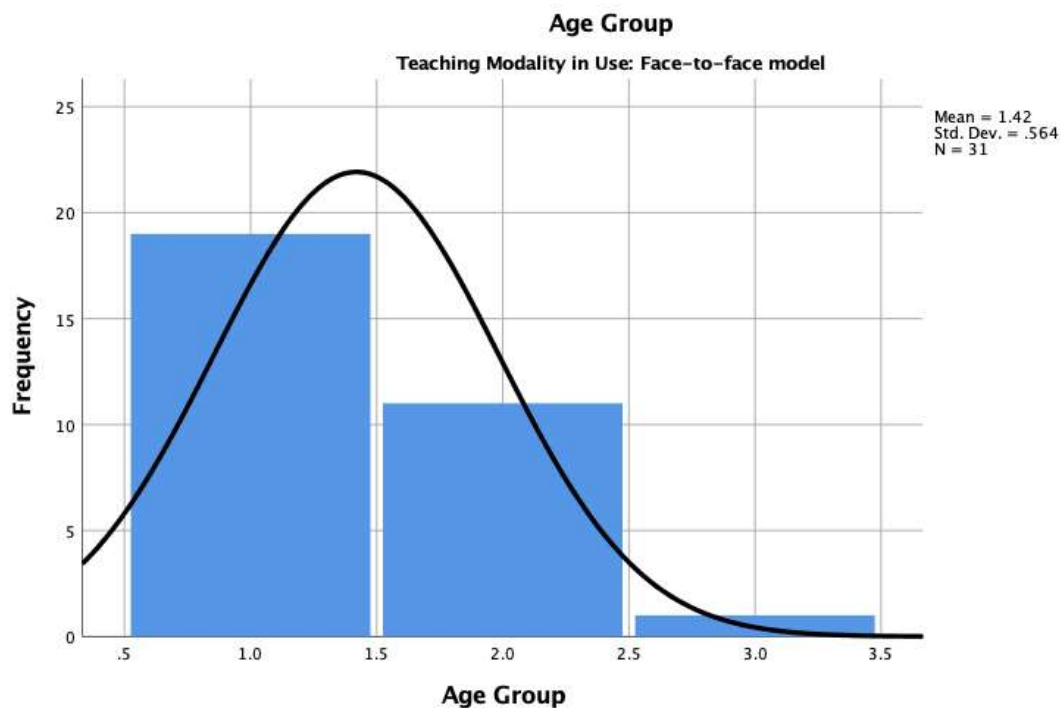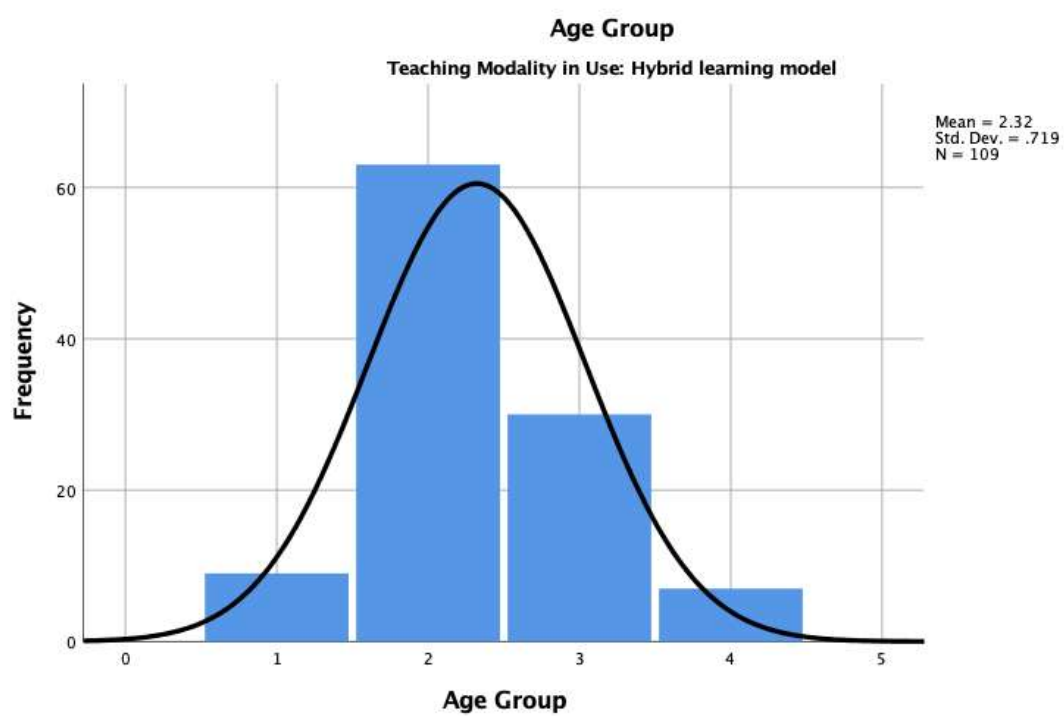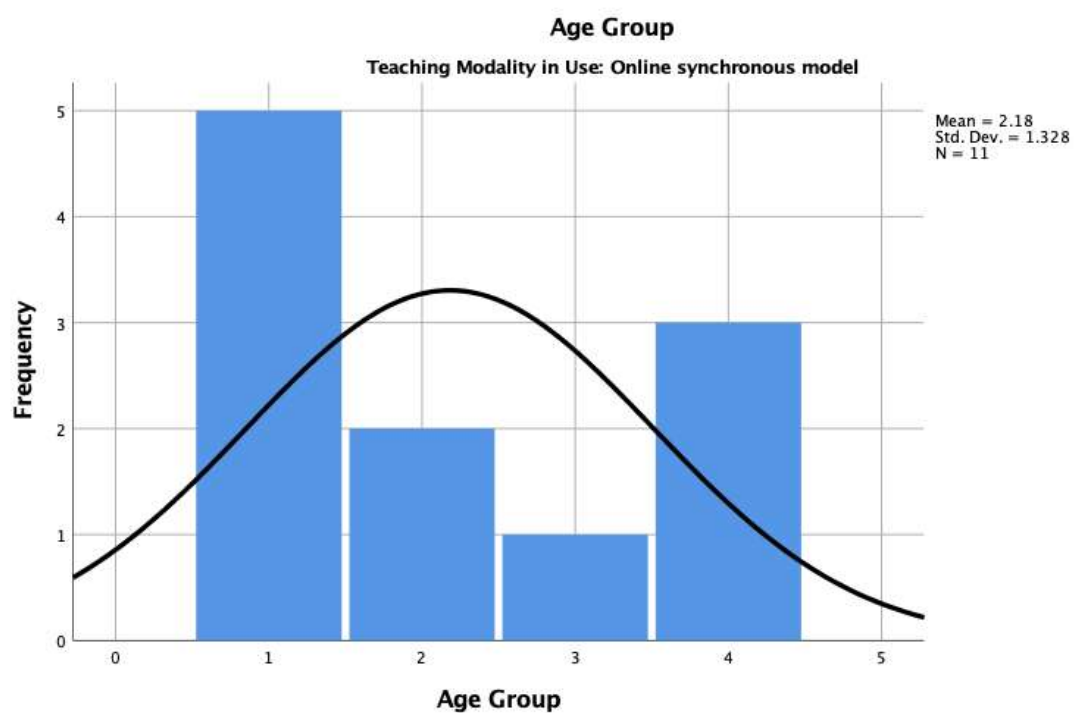
Appendix N: Educational Levels through Modalities

Education Level

Teaching Modality in Use		Frequency	Valid Percent	Cumulative
Face-to-face	Bachelor's Degree	30	96.8	96.8
	Postgraduate Diploma	1	3.2	100.0
	Total	31	100.0	
Online model	Bachelor's Degree	7	63.6	63.6
	Postgraduate Diploma	3	27.3	90.9
	Master's Degree	1	9.1	100.0
	Total	11	100.0	
Hybrid learning	Bachelor's Degree	76	69.7	69.7
	Postgraduate Diploma	29	26.6	96.3
	Master's Degree	3	2.8	99.1
	Doctoral Degree	1	.9	100.0
	Total	109	100.0	

Appendix O: Experience through Modalities

Years of Experience

Teaching Modality in Use		Frequency	Valid Percent	Cumulative
Face-to-face	Above 21 years	16	51.6	51.6
	15 to 21 years	14	45.2	96.8
	8 to 14 years	1	3.2	100.0
	Total	31	100.0	
Online model	Above 21 years	7	63.6	63.6
	0 to 7 years	4	36.4	100.0
	Total	11	100.0	
Hybrid learning	Above 21 years	22	20.2	20.2
	15 to 21 years	53	48.6	68.8
	8 to 14 years	27	24.8	93.6
	0 to 7 years	7	6.4	100.0
	Total	109	100.0	

Appendix P: Subject Distribution through Modalities

Subject Area(s)

Teaching Modality in Use		Frequency	Valid Percent	Cumulative
Face-to-face	Languages	18	58.1	58.1
	Math	5	16.1	74.2
	Science	5	16.1	90.3
	Religions	1	3.2	93.5
	Social Studies	2	6.5	100.0
	Total	31	100.0	
Online model	Languages	3	27.3	27.3
	Math	1	9.1	36.4
	Science	1	9.1	45.5
	Religions	3	27.3	72.7
	Social Studies	3	27.3	100.0
	Total	11	100.0	
Hybrid learning	Languages	48	44.0	44.0
	Math	23	21.1	65.1
	Science	26	23.9	89.0
	Religions	2	1.8	90.8
	Social Studies	3	2.8	93.6
	Arts	3	2.8	96.3
	ICT	4	3.7	100.0
	Total	109	100.0	

Appendix Q: Teaching Cycles through Modalities

Teaching Cycle

Teaching Modality in Use		Frequency	Valid Percent	Cumulative
Face-to-face	Kindergarten	8	25.8	25.8
	Cycle 1	7	22.6	48.4
	Cycle 2	9	29.0	77.4
	Cycle 3	7	22.6	100.0
	Total	31	100.0	
Online model	Kindergarten	3	27.3	27.3
	Cycle 1	1	9.1	36.4
	Cycle 2	4	36.4	72.7
	Cycle 3	3	27.3	100.0
	Total	11	100.0	
Hybrid learning	Kindergarten	12	11.0	11.0
	Cycle 1	35	32.1	43.1
	Cycle 2	37	33.9	77.1
	Cycle 3	25	22.9	100.0
	Total	109	100.0	

Teaching Cycle
Teaching Modality in Use: Face-to-face model

Mean = 2.48
Std. Dev. = 1.122
N = 31

Teaching Cycle

Teaching Modality in Use: Online synchronous model

Mean = 2.64
Std. Dev. = 1.206
N = 11

Teaching Cycle

Teaching Modality in Use: Hybrid learning model

Mean = 2.69
Std. Dev. = .95
N = 109
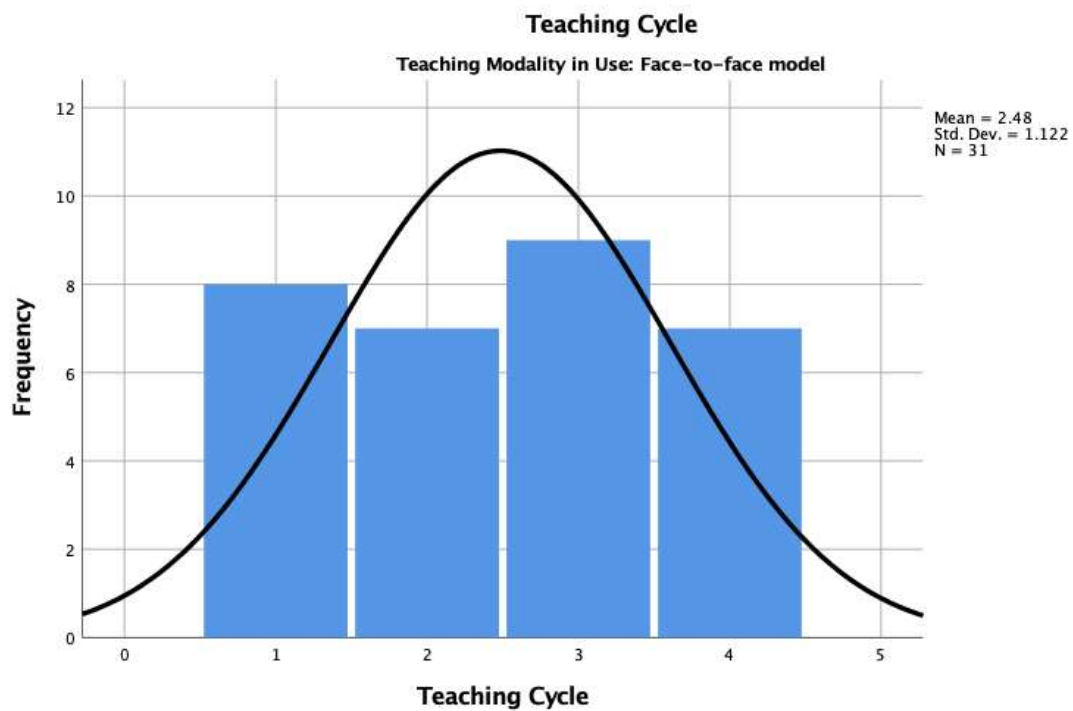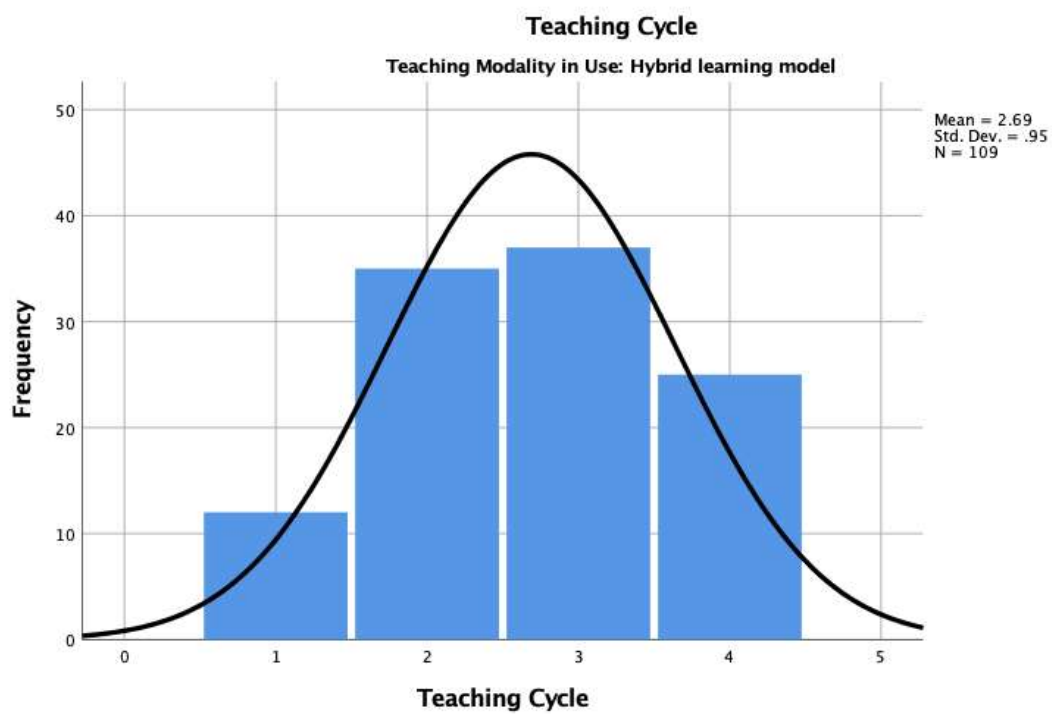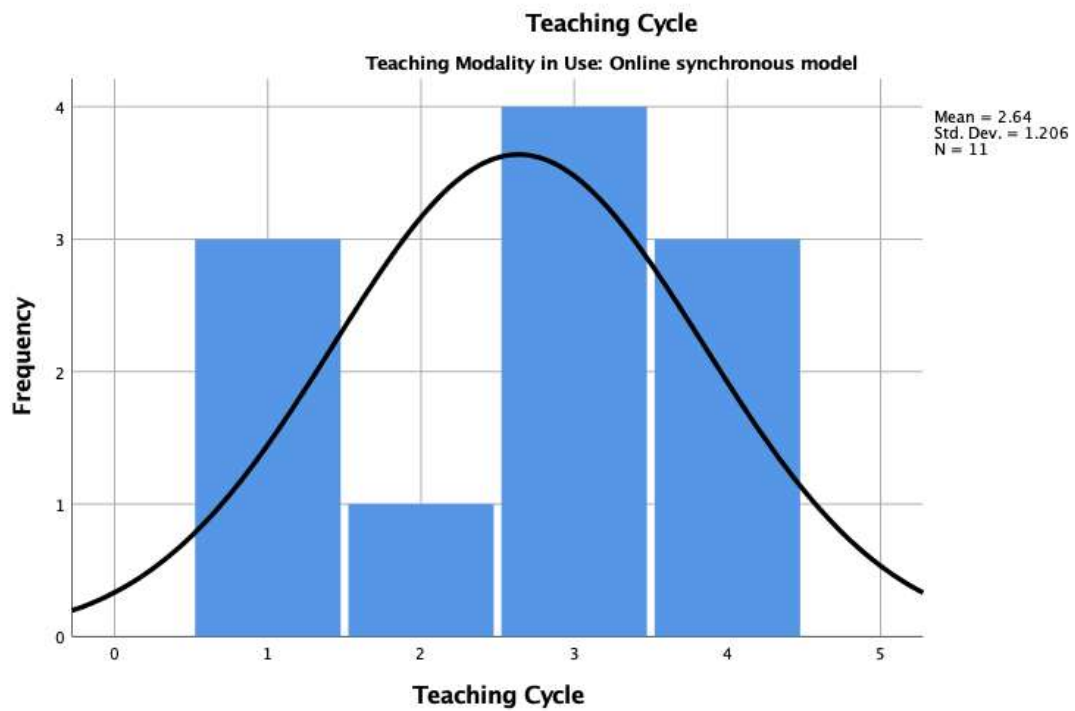
Appendix R: Reliability Analysis

Reliability Statistics

Q1 Teaching Modality	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Face-to-face	.806	.826	18
Online model	.859	.839	18
Hybrid learning	.637	.721	18

Item Statistics

Q1 Teaching Modality		Mean	Std. Deviation	N
Face-to-face	Q2 Teaching Modality	1.52	.626	31
	Q3 Teaching Modality	4.23	.425	31
	Q6 Teaching Modality	1.45	.850	31
	Q1 Job Satisfaction	1.32	.748	31
	Q2 Job Satisfaction	1.94	.250	31
	Q3 Job Satisfaction	1.26	.682	31
	Q4 Job Satisfaction	1.32	.748	31
	Q5 Job Satisfaction	1.97	.315	31
	Q6 Job Satisfaction	1.32	.748	31
	Q1 Leadership Support	1.32	.748	31
	Q2 Leadership Support	2.39	.761	31
	Q3 Leadership Support	3.32	1.194	31
	Q4 Leadership Support	2.77	.920	31
	Q5 Leadership Support	3.61	.955	31
	Q6 Leadership Support	2.87	1.176	31
Online model	Q2 Teaching Modality	1.82	.874	11
	Q3 Teaching Modality	4.27	.905	11
	Q6 Teaching Modality	2.45	1.440	11
	Q1 Job Satisfaction	1.82	1.168	11
	Q2 Job Satisfaction	2.36	1.120	11
	Q3 Job Satisfaction	2.36	1.362	11
	Q4 Job Satisfaction	2.27	1.191	11
	Q5 Job Satisfaction	2.09	1.221	11
	Q6 Job Satisfaction	2.09	1.300	11
	Q1 Leadership Support	1.82	1.168	11
	Q2 Leadership Support	2.64	1.286	11
	Q3 Leadership Support	3.82	.874	11
	Q4 Leadership Support	3.09	1.044	11
	Q5 Leadership Support	4.00	.775	11
	Q6 Leadership Support	3.27	1.191	11

	Q5 Teaching Modality	1.55	.934	11
Hybrid model	Q2 Teaching Modality	2.09	.811	109
	Q3 Teaching Modality	4.20	.989	109
	Q6 Teaching Modality	1.88	1.200	109
	Q1 Job Satisfaction	1.45	.897	109
	Q2 Job Satisfaction	1.86	.700	109
	Q3 Job Satisfaction	1.40	.840	109
	Q4 Job Satisfaction	1.42	.831	109
	Q5 Job Satisfaction	1.83	.674	109
	Q6 Job Satisfaction	1.38	.791	109
	Q1 Leadership Support	1.41	.819	109
	Q2 Leadership Support	1.87	.954	109
	Q3 Leadership Support	3.39	1.459	109
	Q4 Leadership Support	2.78	1.279	109
	Q5 Leadership Support	3.39	1.225	109
	Q6 Leadership Support	3.95	1.066	109
	Q5 Teaching Modality	1.32	.859	109
	Q4 Teaching Modality	1.04	.302	109

Appendix S: Correlation Coefficient between JS and Demographics

Correlations

		Age Group	Gender	Years of Experience	Subject Area(s)	Teaching Cycle	Education Level	job satisfaction
Age Group	Pearson Correlation	1	-.068	.853**	-.096	.087	.212**	.227**
	Sig. (2-tailed)		.410	.000	.241	.289	.009	.005
	N	151	151	151	151	151	151	151
Gender	Pearson Correlation	-.068	1	.080	.083	-.054	-.087	-.185*
	Sig. (2-tailed)	.410		.327	.310	.513	.286	.023
	N	151	151	151	151	151	151	151
Years of Experience	Pearson Correlation	.853**	.080	1	-.055	.074	.186*	.226**
	Sig. (2-tailed)	.000	.327		.499	.368	.022	.005
	N	151	151	151	151	151	151	151
Subject Area(s)	Pearson Correlation	-.096	.083	-.055	1	-.088	.218**	.068
	Sig. (2-tailed)	.241	.310	.499		.282	.007	.406
	N	151	151	151	151	151	151	151
Teaching Cycle	Pearson Correlation	.087	-.054	.074	-.088	1	-.112	.201*
	Sig. (2-tailed)	.289	.513	.368	.282		.170	.013
	N	151	151	151	151	151	151	151
Education Level	Pearson Correlation	.212**	-.087	.186*	.218**	-.112	1	.075
	Sig. (2-tailed)	.009	.286	.022	.007	.170		.357
	N	151	151	151	151	151	151	151
job satisfaction	Pearson Correlation	.227**	-.185*	.226**	.068	.201*	.075	1
	Sig. (2-tailed)	.005	.023	.005	.406	.013	.357	
	N	151	151	151	151	151	151	151

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Gender and the Overall Level of Teachers' Job Satisfaction

				High	Average	Low	Total
Face-to-face	Gender	Male	Count	1	6	2	9
			job satisfaction	5.9%	50.0%	100.0%	29.0%
		Female	Count	16	6	0	22
			job satisfaction	94.1%	50.0%	0.0%	71.0%
	Total		Count	17	12	2	31
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Online synchronous	Gender	Male	Count	2	2	1	5
			job satisfaction	40.0%	66.7%	33.3%	45.5%
		Female	Count	3	1	2	6
			job satisfaction	60.0%	33.3%	66.7%	54.5%
	Total		Count	5	3	3	11
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Hybrid learning	Gender	Male	Count	10	28	18	56
			job satisfaction	32.3%	75.7%	43.9%	51.4%
		Female	Count	21	9	23	53
			job satisfaction	67.7%	24.3%	56.1%	48.6%
	Total		Count	31	37	41	109
			job satisfaction	100.0%	100.0%	100.0%	100.0%

Appendix S (Cont'd)

Teaching Subject and the Overall Level of Teachers' Job Satisfaction

			High	Average	Low	Total
Face-to-face	**Subject Area(s)**	Languages	Count	9	7	2	18
			job satisfaction	52.9%	58.3%	100.0%	58.1%
		Math	Count	4	1	0	5
			job satisfaction	23.5%	8.3%	0.0%	16.1%
		Science	Count	3	2	0	5
			job satisfaction	17.6%	16.7%	0.0%	16.1%
		Religion	Count	1	0	0	1
			job satisfaction	5.9%	0.0%	0.0%	3.2%
		Social Studies	Count	0	2	0	2
			job satisfaction	0.0%	16.7%	0.0%	6.5%
	Total		Count	17	12	2	31
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Online synchronous	**Subject Area(s)**	Languages	Count	0	1	2	3
			job satisfaction	0.0%	33.3%	66.7%	27.3%
		Math	Count	1	0	0	1
			job satisfaction	20.0%	0.0%	0.0%	9.1%
		Science	Count	1	0	0	1
			job satisfaction	20.0%	0.0%	0.0%	9.1%
		Religion	Count	2	1	0	3
			job satisfaction	40.0%	33.3%	0.0%	27.3%
		Social Studies	Count	1	1	1	3
			job satisfaction	20.0%	33.3%	33.3%	27.3%
	Total		Count	5	3	3	11
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Hybrid learning	**Subject Area(s)**	Languages	Count	15	14	19	48
			job satisfaction	48.4%	37.8%	46.3%	44.0%
		Math	Count	10	9	4	23
			job satisfaction	32.3%	24.3%	9.8%	21.1%
		Science	Count	5	7	14	26
			job satisfaction	16.1%	18.9%	34.1%	23.9%
		Religion	Count	0	1	1	2
			job satisfaction	0.0%	2.7%	2.4%	1.8%
		Social Studies	Count	1	1	1	3
			job satisfaction	3.2%	2.7%	2.4%	2.8%

				High	Average	Low	Total
Total			Count	31	37	41	109
			job satisfaction	100.0%	100.0%	100.0%	100.0%

Appendix S (Cont'd)

Teaching Cycle and the Overall Level of Teachers' Job Satisfaction

				High	Average	Low	Total
Face-to-face model	Teaching Cycle	Pre-cycle	Count	6	2	0	8
			job satisfaction	35.3%	16.7%	0.0%	25.8%
		Cycle 1	Count	2	4	1	7
			job satisfaction	11.8%	33.3%	50.0%	22.6%
		Cycle 2	Count	6	3	0	9
			job satisfaction	35.3%	25.0%	0.0%	29.0%
		Cycle 3	Count	3	3	1	7
			job satisfaction	17.6%	25.0%	50.0%	22.6%
	Total		Count	17	12	2	31
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Online synchronous model	Teaching Cycle	Pre-cycle	Count	3	0	0	3
			job satisfaction	60.0%	0.0%	0.0%	27.3%
		Cycle 1	Count	0	0	1	1
			job satisfaction	0.0%	0.0%	33.3%	9.1%
		Cycle 2	Count	1	1	2	4
			job satisfaction	20.0%	33.3%	66.7%	36.4%
		Cycle 3	Count	1	2	0	3
			job satisfaction	20.0%	66.7%	0.0%	27.3%
	Total		Count	5	3	3	11
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Hybrid learning model	Teaching Cycle	Pre-cycle	Count	6	5	1	12
			job satisfaction	19.4%	13.5%	2.4%	11.0%
		Cycle 1	Count	14	6	15	35
			job satisfaction	45.2%	16.2%	36.6%	32.1%
		Cycle 2	Count	5	16	16	37
			job satisfaction	16.1%	43.2%	39.0%	33.9%
		Cycle 3	Count	6	10	9	25
			job satisfaction	19.4%	27.0%	22.0%	22.9%
	Total		Count	31	37	41	109
			job satisfaction	100.0%	100.0%	100.0%	100.0%

Experience and the Overall Level of Teachers' Job Satisfaction

			High	Average	Low	Total
Face-to-face	**Experience**	Above 21 years	Count	5	9	2	16
			job satisfaction	29.4%	75.0%	100.0%	51.6%
		15 to 21 years	Count	12	2	0	14
			job satisfaction	70.6%	16.7%	0.0%	45.2%
		8 to 14 years	Count	0	1	0	1
			job satisfaction	0.0%	8.3%	0.0%	3.2%
	Total		Count	17	12	2	31
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Online	**Experience**	Above 21 years	Count	5	2	0	7
			job satisfaction	100.0%	66.7%	0.0%	63.6%
		0 to 7 years	Count	0	1	3	4
			job satisfaction	0.0%	33.3%	100.0%	36.4%
	Total		Count	5	3	3	11
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Hybrid learning	**Experience**	Above 21 years	Count	5	9	8	22
			job satisfaction	16.1%	24.3%	19.5%	20.2%
		15 to 21 years	Count	21	12	20	53
			job satisfaction	67.7%	32.4%	48.8%	48.6%
		8 to 14 years	Count	5	14	8	27
			job satisfaction	16.1%	37.8%	19.5%	24.8%
		0 to 7 years	Count	0	2	5	7
			job satisfaction	0.0%	5.4%	12.2%	6.4%
	Total		Count	31	37	41	109
			job satisfaction	100.0%	100.0%	100.0%	100.0%

Education and the Overall Level of Teachers' Job Satisfaction

			High	Average	Low	Total
Face-to-face	Education	Bachelor's Degree	Count	17	11	2	30
			job satisfaction	100.0%	91.7%	100.0%	96.8%
		Postgraduate Diploma	Count	0	1	0	1
			job satisfaction	0.0%	8.3%	0.0%	3.2%
	Total		Count	17	12	2	31
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Online model	Education Level	Bachelor's Degree	Count	2	3	2	7
			job satisfaction	40.0%	100.0%	66.7%	63.6%
		Postgraduate Diploma	Count	3	0	0	3
			job satisfaction	60.0%	0.0%	0.0%	27.3%
		Master's Degree	Count	0	0	1	1
			job satisfaction	0.0%	0.0%	33.3%	9.1%
	Total		Count	5	3	3	11
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Hybrid learning	Education Level	Bachelor's Degree	Count	26	19	31	76
			job satisfaction	83.9%	51.4%	75.6%	69.7%
		Postgraduate Diploma	Count	4	15	10	29
			job satisfaction	12.9%	40.5%	24.4%	26.6%
		Master's Degree	Count	1	2	0	3
			job satisfaction	3.2%	5.4%	0.0%	2.8%
		Doctoral Degree	Count	0	1	0	1
			job satisfaction	0.0%	2.7%	0.0%	0.9%
	Total		Count	31	37	41	109
			job satisfaction	100.0%	100.0%	100.0%	100.0%

Age Group and the Overall Level of Teachers' Job Satisfaction

			High	Average	Low	Total
Face-to-face model	Age Group	Above 50	Count	6	11	2	19
			job satisfaction	35.3%	91.7%	100.0%	61.3%
		41 - 50	Count	11	0	0	11
			job satisfaction	64.7%	0.0%	0.0%	35.5%
		30- - 40	Count	0	1	0	1
			job satisfaction	0.0%	8.3%	0.0%	3.2%
	Total		Count	17	12	2	31
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Online synchronous model	Age Group	Above 50	Count	4	1	0	5
			job satisfaction	80.0%	33.3%	0.0%	45.5%
		41 - 50	Count	1	1	0	2
			job satisfaction	20.0%	33.3%	0.0%	18.2%
		30- - 40	Count	0	1	0	1
			job satisfaction	0.0%	33.3%	0.0%	9.1%
		30 or below	Count	0	0	3	3
			job satisfaction	0.0%	0.0%	100.0%	27.3%
	Total		Count	5	3	3	11
			job satisfaction	100.0%	100.0%	100.0%	100.0%
Hybrid learning model	Age Group	Above 50	Count	4	1	4	9
			job satisfaction	12.9%	2.7%	9.8%	8.3%
		41 - 50	Count	17	22	24	63
			job satisfaction	54.8%	59.5%	58.5%	57.8%
		30- - 40	Count	10	12	8	30
			job satisfaction	32.3%	32.4%	19.5%	27.5%
		30 or below	Count	0	2	5	7
			job satisfaction	0.0%	5.4%	12.2%	6.4%
	Total		Count	31	37	41	109
			job satisfaction	100.0%	100.0%	100.0%	100.0%

Appendix T: Job Satisfaction through Modalities

How do you rate your overall level of job satisfaction?
Teaching Modality in Use: Face-to-face model

Mean = 1.52
Std. Dev. = .626
N = 31

How do you rate your overall level of job satisfaction?
Teaching Modality in Use: Hybrid learning model

Mean = 2.09
Std. Dev. = .811
N = 109

How do you rate your overall level of job satisfaction?
Teaching Modality in Use: Online synchronous model

Mean = 1.82
Std. Dev. = .874
N = 11

Appendix U: Selected Observation Notes from Teachers' Interviews

Participant	Observation notes
Participant #1	- A forty-year-old female teacher with 15 years of experience. - Participant teaches at the primary level. She confirmed that she follows the hybrid learning model, yet he is eager to return to the face-to-face mode. - She describes the journey of shifting from the traditional model to the hybrid model as "exhausting" as she had never tried this model before; it came to existence overnight. - She adds that the challenge she faced was class management as she had to make sure that in-person students were keeping distance all the time and at the same time, the distant students were focused and not distracted by home activities. She describes a scenario where two or even more children are sitting at home in the same room, and she can hear the other teacher explaining to the student's sister. How distracted he is! - She expressed disappointment that the leadership role is confined only to excessive demands requests. She adds that leadership should listen to the teachers' worries, especially during hard times. In addition, workload and work-life balance should be considered. - Last-minute requests and the impossible-to-reach deadlines should never exist as they are very stressful. Moreover, it hinders the relationship between the teacher and his supervisor as a middle circle in the chain. - Inadequate guidance and lack of communication with leaders made it even more challenging. - She describes that the underachieving student could not achieve the lesson objectives as the teacher cannot actively reach him because teachers are not allowed to move closer to students. She has to leave at least 2 meters between her and the nearest student. She confirms that the academic progress is far higher if they return to face-to-face mode. - She stated that she suffered from eye aching at the beginning, but afterwards, she got some advice to tackle it. - She thinks that hybrid learning is not a suitable mode of learning in the UAE context as students' houses are seen in many cases, which is culturally unacceptable, especially if the sessions are recorded. - She concludes by saying that the traditional model is always the best choice for teachers' satisfaction and student progress unless there is a safety issue. - I spend more than 12 hours working on my computer either during the school time delivering the lessons or after school planning

	for tomorrow's lessons. I feel backache and eye strain that change their intensity from time to time. I try to take real rest from screens during the weekend and official vacations.
Participant #2	- A thirty-year-old female teacher with five years of experience. She is a homeroom teacher in the kindergarten stage.
	- She is the only homeroom teacher who follows the hybrid model. That is because the school had to accept the parents' choice to teach their kids remotely. These online students are collected in a single class with some face-to-face students, while the other KG classes follow the full traditional model.
	- She evaluates his experience in hybrid teaching as not equally productive compared to the traditional model.
	- She describes the challenges as she says it is a challenging experience to control a 4-year-old kid, especially if he is at home. Parents are also suffering as they have to dedicate someone to sit with their kids during classes. "I am struggling to teach my students how to read and write while part of them is far away and the other part is far away inside the classroom.
	- She adds that she is challenged to raise students' engagement, motivation, communication, and interaction. She adds that students during the pandemic put less effort than they used to offer before it. Managing time and completing the curriculum assigned for every trimester is difficult in hybrid models. Moreover, she can not balance her work and her personal life. She works for about 12 hours a day, either at school or home, planning for the following lessons.
	- The leadership team can raise the teacher's job satisfaction if the administrators respect their time and appreciate their efforts. She confirms that principals are not working to make teachers' lives easier; they care only about meeting deadlines. They should focus on the teachers' needs first to be able to support them. Considering human relations and urgent needs is crucial to the leader's duties. They should give credit to those who perform well and forgive the mistakes of those who have wise excuses. Timetabling skills are as simple to leaders as necessary to teachers to be considered.
	She thinks face-to-face teaching is the best choice for her KG students to develop social skills.
Participant #3	- The participant is 45 years old male teacher with 18 years of experience. He follows the hybrid learning model to teach secondary school students.
	- The participant did not seem motivated to reflect on his personal experience in the hybrid learning world. He was challenged, especially at the beginning of the transition phase, as he has little expertise in technology. He used his PC only to use Microsoft Office applications like PowerPoint presentation, Word processing program, and Excel. He had no previous idea about using interactive

teaching platforms like Teams, Zoom, or Meet. He also never used the test platforms like Quizziz, Kahoot, or SwiftAssess.

-        Students at school lose their curiosity as they cannot interact in groups and communicate with their peers. On the other hand, at-home students are challenged because house environments are not made for online learning; they can leave the lesson and communicate with their family members without the teacher's knowledge.

-        For leadership support, he assures that leaders in his school consider teachers as the only channel of communication between the school and the parents. Therefore, they ask us to pass memos to parents, collect documents, and check PCR test results at any time after work hours.

Participant #4   -   The participant is 42 years old female teacher with 16 years of experience. She follows the hybrid learning model to teach secondary school students.

-        She confirms that the hybrid learning model is mentally demanding as the teacher has to think twice for every lesson about how to teach the online students and how to teach the face-to-face students. This necessity raises a conflict between work and family life.

-        Students are not forced to turn their cams on during exams, so we do not know who is sitting behind the screen sitting the exam, while we are sure of those sitting in front of us. This condition raises a nonconsistency issue in detecting the attainment and progress of students. For many of them, they are practising passive learning. Moreover, you cannot read the facial expressions or track students' body language while sitting behind screens. This affects the interaction and communication between the student and his peer on the one hand and between the student and his teacher on the other hand.

-        Students of determination do not receive a quality education during pandemics. For example, students with vision impairment lose attention as they feel bored fast.

-        Leadership members could not support us in the best way as they were also not experiencing this model. But we expect them to be fair to all, whatever the context. Moreover, they are expected to develop a relationship with the local community to help fight the pandemic.

Participant #5   -   The participant is 35 years old male teacher with nine years of experience. He follows the hybrid learning model to teach middle school students.

-        He likes the teaching modality he is following though the school admin chose it, and nobody had the right to discuss it. He adds that the hybrid model balances educational and safety precautionary requirements. Moreover, now disturbing students do not have the

chance to chat in the class, so now their classmates can focus better. It also helped students obtain practical technical knowledge and befriend the new open world of the web.

- School administrations, management, and senior leaders were not qualified enough to run online learning or hybrid learning. They are used to paperwork and are not used to using technology; they are older people who follow different teaching methods than today.

- The only disadvantage of hybrid learning, in his opinion, is that it builds a high workload and disturbs the work-life balance.

- He agrees that the hybrid teaching model requires some technical skills from the teachers and patience from the students and their parents.

- He confirms that the teaching modality a teacher uses plays a role in his job satisfaction.

- Regarding the support he received from the school leaders, he responded that uncertainty was covering the leaders as well as the teachers. They couldn't give us a helping hand at the beginning. Hereafter, they arranged some PD sessions led by knowledgeable teachers to help the challenged ones perform better.

- He confirms that lack of autonomy and not participating in the decision-making process frustrates the teacher while building a climate of harmony and effort recognition contributes to higher satisfaction.

Participant #6
- The participant is 52 years old female teacher with 27 years of experience. She follows the hybrid learning model to teach high school students.

- She states that she was challenged at the beginning, but she managed to cope with the educational process. She adds that her students used to help her when she has stuck with technology "thanks for my students". I also used my daughter to help me plan for the lesson using interactive websites and assessment platforms. She adds that though she feels fine using hybrid learning now, she is still keen to see her classes in a full face-to-face model. "That is the modality I prefer", she adds.

- Regarding the pros and cons of hybrid learning from her viewpoint, she articulates that endless work, lack of social activities during the pandemic, extended work hours, potential technical issues and changing lessons timetables in close intervals frustrate her. But, on the other hand, I have backache ache and sight dryness because of the long time I spend in front of the screen.

- Regarding the leader's support, she adds that the school admin made it available for any teacher to borrow a PC and return it by the end of the year. It performed a maintenance process on all projection devices around the school. Furthermore, it strengthens the network quality for easy internet access. Hygiene supplies are made available everywhere on the school campus.

Participant #7 - The participant is 27 years old female teacher with four years of experience. She is a homeroom teacher who follows the traditional face-to-face modality to teach KG1 students.
- She enjoys the traditional teaching modality. She has only 15 students in her class "thanks for the pandemic". She can reach any of them quickly and guide him directly. The level of students is even better than the old normal when she used to have 25 students in the class.
- She confirms that this model meets my satisfaction and that she needs "only a better pay". "KG teachers receive the lowest salary ranges and do the hardest job. Moreover, we pay to make the instructional activities more engaging to students.
- She thinks "to some extent" she can keep a balance between her personal and academic life.
- Regarding the challenges she faces, she states that sometimes she is afraid to get infected by COVID-19 when she knows one of her students or colleagues was infected. While on the other hand, differentiation, students' achievements, parental engagement, and raising students' communication skills are some advantages of traditional teaching.
- She requests a better level of involvement in decision-making and problem-solving activities and cooperation in brainstorming sessions that open new horizons to teachers.

Participant #8 - The participant is 37 years old female teacher with 12 years of experience. She teaches high school and follows the traditional face-to-face modality to teach grades eleven and twelve.
- She prefers the online teaching method. She adds that it gives her the chance to raise her students level of using technology.
- She thinks the speed of the learning process is dramatically high in the face-to-face model, while using distance learning allows the student to think and reflect.
- What she thinks leaders have to do to raise the teachers' satisfaction is to decrease paperwork and manage the bureaucracy. She adds that they are invited to set clear policies for all.
- Her salary didn't face a decrease, but the online teachers suffered from a critical reduction that reached 25% of the total salary.
- She didn't notice any difference in teaching load, except for the health challenge of the COVID-19 pandemic.

Participant #9 - The participant is 40 years old male teacher with 14 years of experience. He teaches middle school and follows the distance learning model to teach grades six and seven.
- He prefers online teaching to any other modality as he manages the online teaching tools though she teaches from the school campus.

- He describes his experience as "wonderful". It let him interact personally with students who used to be silent and shy in the traditional teaching model. Moreover, it saves the teacher's and student's time. The assessment tools are now different from the old ones. Even the teaching materials and lesson recordings are made available, so slow learners can repeat them to better understand.
- He receives an acceptable amount of teaching load, and the type of leaders' support is still the same as before the pandemic.
- He confirms the role of leaders to raise the level of teachers' job satisfaction. He assumes that considering the teachers' comfort and keeping a suitable environment with suitable temperature, ventilation, and acceptable noise level help raise teachers' satisfaction.
- He complains that the admin makes the teachers account for the students' attainment and performance, while many factors distract teachers' mission.
- His salary was cut by 25% as she moved to the online teaching, and some other teachers were given an unlimited leave. He adds that financial stability plays a significant role in teachers' satisfaction. Even non-monetary recognition from peers counts. He misses direct communication with His colleague, but they always call each other. Leaders should put clear promotion rules and not leave them for personal considerations.

Participant #10
- The participant is 36 years old female teacher with 12 years of experience. She teaches middle school and follows the online learning model to teach grade five.
- She enjoys online teaching. It allows her to collect two different classes at the same time to help them work on big projects. Students liked the idea, became more active and communicative, and created a sense of belonging.
- Students who live far away from the school or those who suffer a low-level immunodeficiency can now attend their classes without worry. She adds that she has a student who uses a wheelchair that used to attend school day after day; now, he never misses a class.
- This delivery mode made the students familiar with technology and testing apps. Other apps help them build mind maps and gain critical thinking and independent learning skills.
- Some of the challenges remote learning offers are lack of training, gadgets unavailability to many students, lack of effective network connectivity, IT literacy for many teachers and students, and lastly, the exposure of teachers' privacy to danger as any student can share teachers' pictures without permissions.
- To increase teachers' job satisfaction levels, the principal should listen to his team member, respond to their concerns, and share the responsibility with them.

Appendix V: Selected Observation Notes from School Leaders' Interviews

Participant	Observation notes
Participant #1	- The participant is 53 years old senior male leader. He spent nine years in his current position. His school follows the hybrid learning model for grades 3 to 12, while the full face-to-face model is followed for KG1 to grade 2. - He justifies this choice that at the beginning of the pandemic, apprehension covered the educational field as a part of the general atmosphere we faced in public life. At that time, we met the unknown without a framework to follow. The educational authorities used to guide us through specific directives passed from health authorities based on the infection control plan of the country. Then, they asked all public and private schools to transfer to the distance learning module overnight. We didn't have a distance learning platform to use at that time. Some schools recorded sessions and sent the session links to the parents. Some other schools used telegram to deliver the lessons. Few other parties used Teams, Zoom or Meet applications. Though they were recently developed, these applications confirmed their validity, and the rest of the schools started using them. - A second stage started as the health authorities allowed the school leaders to choose the modality in accordance with the number of students in every class and the available facilities in every school. If the class has 15 students or fewer, the class can return to a full face-to-face model. While if there are more than 15, students have to attend a hybrid learning model. So, in our school, we have some classes that follow the hybrid model while others attend the traditional style. Moreover, if two positive cases were detected, the whole class moved to the distance learning model, and students had to isolate themselves. - Regarding the challenges they faced, he adds that technology literacy, especially for elderly teachers", the financial resources "parents started not to pay the school fees as many of them faced a financial crisis due to the pandemic", and the general fear atmosphere especially at the beginning. Moreover, when students started to return to school, we faced network connectivity problems, contact tracing load, and a lack of infrastructure management. - He confirms that the traditional module is always the best option, in his opinion, about the best modules. It helps students build social skills, develop friendships, and get involved in school activities. - He thinks that the face-to-face model meets the highest level of teachers' satisfaction. First, they need to get rid of the

pandemic environment. Then, they are interested to see their students back at school, especially lower grades teachers.

- He described how the school helped the teachers by providing laptops to start broadcasting the sessions. Moreover, financial aid was offered to teachers so that they could pay it back in instalments. In a different aspect, the curriculum was modified to deliver only the core objectives, and the exams were all internet-based. In addition, paperwork is decreased as using papers was advised to stop.

- He adds that he spends about 5 hours a day in front of screens, but he practices exercises to decrease the effect of this extended sit.

Participant #2

- The participant is 48 years old senior female leader. She spent seven years in her current position. Her school follows the hybrid learning model for all grades.

- She justifies the choice of this teaching model as the school has more than 25 students in every class, so they can not attend the school at the same time, considering the current precautionary measures. Yet she confirms that this teaching model is valid for her school, except for the lower grades "KGs, grades 1, and partially 2", which little kids are not fully qualified to use.

- Regarding the challenges the school face, she adds that finding qualified teachers is difficult, especially if a teacher quits in the mid of the year. Communicating regulations to parents is still a challenge due to the staff shortage. Moreover, we were not trained to lead during a pandemic though we received free practical training to act amid chaos. One of the difficulties we faced was the teachers not trusting distance learning as a delivery module. Even high school students were developing trauma due to the pandemic. They can no longer communicate with their peers the way they used to.

- About the support they provide to teachers, she emphasized that the leadership team in her school supported the staff, whether in the academic or admin duties. She adds that she used to stay with the traffic control team to make sure students are safe, check their Alhosn App before they access the school to make sure none of them is infected, enforce masks and even trace contacts when in need. Having said that, we still feel teachers drained before even the school day finishes. They adapted fast to the new normal, but the hybrid learning model was tiring.

- Regarding teachers' job satisfaction, she explains that job satisfaction during pandemics is always below the average level of satisfaction in general. But following the mixed teaching method increased the dissatisfaction influenced by the feeling of fear of virus infection. In addition, due to financial shortage, the school has to cut a part of teachers' salaries, increase the number of teaching sessions, and assign some admin duties to teachers.

But after returning to the old normal, everything would be fine, and teachers will receive everything they lost.

- I spend about 5 hours working on my laptop, yet I don't suffer from health problems. But in general, many parents, especially of younger boys, reported eyesight weakness and fatigue that their children face.

Participant #3

- The participant is 55 years old senior female leader. She spent 14 years in her current position. her school follows the hybrid learning model for all grades, except for one section in grade 7 that temporarily shifted to distance learning due to the COVID-19 cases.

- We chose the alternate weekly hybrid learning to support the gradual return to regular school life as the health conditions improve.

- We understand that it is the most exhausting and challenging model to follow because we need to check the student's health conditions every week before they are allowed to school. Moreover, it is not easy for a teacher to plan and then deliver his lessons to two different groups of students at the same time, considering both face-to-face and distance groups, but it is the pandemic situation.

- Students are getting familiar with this type, and even we think they will face some difficulty returning to attend school every day.

- MoE provided us with Ms Teams accounts for all students and school staff to facilitate the transformation. In addition, they changed the assessment tools and modality to suit the new scenario.

- Yes, using a specific teaching modality impacts the teachers' job satisfaction, and the hybrid model is the most difficult one. However, it has some advantages as the teacher does not physically address the whole number of students in his class. Therefore, he only deals with half of them with fewer behavioural challenges.

- Supporting teachers in these conditions goes through making the school counsellor available for their queries. In addition, they were given professional development sessions to help them deal with different modalities and exam tools.

- I spend about 4 hours working on the screens, and I don't report any health problems.

- Some of the difficulties we faced included inadequate infrastructure, lack of ancillary and teaching staff and absence of teachers due to virus infection, isolation for contacting an infected person, or other personal reasons. We also faced a difficulty motivating students and helping them access the live sessions for technical reasons. Moreover, sometimes parents insist on bringing

their children to school every day, though they have the instructions beforehand.

Participant #4

- The participant is 49 years old male middle leader. He spent 13 years in his current position as head of a section. His school follows the hybrid learning model for all the grades in his section.

- He confirmed that he, with the instructions of SLT, activated the emergency plan from the beginning of the pandemic. The priority was given to students' mental and physical health. We agreed to use the 3 C's strategy to deal with chaos, communication, consistency, and calmness. We prioritised communicating with all stakeholders before coming to any decision, building roles and procedures to be followed by all, and dealing in a way that gives us a chance to think deep without any stressors.

- We supported teachers through different channels. We followed their health conditions and considered their privacy. For example, we have a 65-year-teacher who suffers from a health condition that makes it dangerous for him to be exposed to the virus infection. This teacher was permitted to broadcast his lessons from home while a support teacher took his place in his classrooms.

- Our school was not given access to Teams application, so we had to build a free environment with trial accounts for all teachers that lasted for three months, then it expired, and we created a new one. We had to do this due to the lack of financial support. This process disturbed the learning process and took time for teachers and students to use the new accounts.

- Teachers like to use distance-learning or face-to-face models, but hybrid learning is their last preference.

- I spend about 6 hours working on my PC. I take precautions in order not to have health concerns.

Participant #5

- The participant is 50 years old male middle leader. He spent 14 years in his current position as head of a section. His school follows the hybrid learning model for all the grades in his section.

- He states that school administrations were not ready for hybrid learning at the beginning of the pandemic. Some schools were practising distance learning, but the hybrid one was a new model. So, we expected to face some difficulty using it during the initiation process.

- The ministry of education suggested some platforms to use.

- Some teachers liked the teaching model, but others did not. It depends on how confident the teacher uses technology and controls his class. Surprisingly, some of the talented teachers in

the face-to-face model proved less confident using the hybrid model, while others proved confident while this was not their usual practice before the pandemic. So, teachers' satisfaction changed upon the application of new models. Similarly, we faced a challenge in the retention percentage of online students, but it improved gradually.

-        After all, we can see that technology has helped us find an answer to health challenges.

-        We made an agreement with one of the medical centres to make the PCR test for teachers on the school campus. Before that, they used to spend extended time in diagnostic centres making the test.

-        I spend about 4 hours visiting classes and communicating with staff through MS Teams application.

-        I don't face any health issues other than what I had before the pandemic.

Participant #6   -   The participant is 46 years old male middle leader. He spent four years in his current position as head of a department. His school follows the hybrid learning model for all grades.

-        He thinks teachers prefer the online model if they broadcast from their homes. They have a reliable network connection that helps them avoid technical glitches, but they face multiple pauses and slow rendering range when they use the school network.

-        He confirms the need for senior leaders to develop their digital leadership skills. He prefers the online model because it reduces social interaction to avoid the virus.

-        I spend about 5 hours working on a PC, yet I do not have any health worries.

Participant #7   -   The participant is 41 years old male middle leader. He spent 11 years in his current position as head of a department. His school follows the hybrid learning model for all grades.

-        As a head of a subject, I practically use the hybrid model. In my opinion, it meets the needs of both the educational sector and the health sector. It provides the students with the subject standards and secures student safety to a great extent.

-        Sometimes students lose their internet connection. Then when they come back, they lose the flow of the subject. If the objectives are related, the student feels he is in the middle of nowhere. Even if the teacher repeated what the student missed, he would be wasting the class time and might not be able to complete the lesson objectives.

-        Many of the teachers, especially the female ones, were reluctant to broadcast live sessions, especially when the administration asked teachers to turn on their cameras during the live lessons. They were not completely aware of what tools to use

to manage their classes. They faced difficulties as students started to take control of the sessions and drive out their classmates and even teachers. After that, the tools were updated, and permissions were given to teachers only for controlling the live meetings. This history of using online platforms developed the teacher's knowledge to meet his satisfaction.

- MoE released instructions, and the government formed an article of the law to protect the teachers' privacy and to prevent any party from publishing recorded material on the web without the consent of the teacher and school administration.

- I spend more than 8 hours on my laptop. I started using glasses after the pandemic.

Participant #8	- The participant is 43 years old female middle leader. She spent six years in her current position as head of a subject. her school follows the hybrid learning model for all grades.
	- She assures that the challenges she faced with both online and hybrid learning are the connectivity cut, the inability of parents to maintain a learning atmosphere for their children at home, and the students' lack of motivation.
	- Teachers' job satisfaction decreased because of the health restrictions and the normality of lifestyle. In addition, hybrid learning added a lot of extra load on the back of the teacher. Salary cut, anxiety, workload, admin tasks, and even health and safety duties play a part in this level of satisfaction.
Participant #9	- The participant is 37 years old male middle leader. He spent three years in his current position as head of a subject. His school follows the hybrid learning model for all grades.
	- When the pandemic started, I was just taking the HoD responsibility. It was a rough start that teachers had many questions, but no one had the answers at that moment.
	- Before that time, the Dubai government, Diwan, and Madrasa made some initiatives. These initiatives encouraged independent learning but focused on asynchronous learning, not the synchronous online or hybrid learning modes.
	- Students were given tablets and mobile data packages to access the educational platforms.
Participant #10	- The participant is 42 years old male middle leader. He spent eight years in his current position as head of a subject. his school follows the hybrid learning model for all grades.
	- We practised many problem solutions for the first time during the pandemic to check their validity. Some of these solutions proved valid, and others needed to go through a modification process, while a third group proved invalidity.
	- Time shortage to complete the curriculum was a significant challenge to us as HoDs and for teachers as well.

\-   Teachers used to sit at their desks, opening teams and delivering lessons depending on the lecturing type of teaching. Site students watch the content through a projector, while home-students focus on their screens through Teams application.

\-   Teachers mainly like the online or face-to-face models.

\-   All stakeholders were facing the same uncertainty that no one put a clear plan to support teachers and admin staff.

\-   I spend more than 5 hours g at screens, yet I do not suffer any health issues.

End of the Dissertation