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The Impact of Covid-19 Health Protocol on Teachers' Productivity and Learners' Achievement.

The Case of Tabouch Mohamed Secondary School- Tiaret

A Dissertation Submitted in Partial Fulfilment of the Requirements for the Degree of Master in Didactics

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fatima

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## List of Abbreviations and Acronymes :

CD-ROM Covid-19	compact disc read-only memory corona virus
H1N1	Hem agglutinin Type 1 and Neuraminidase Type 1
HCPs	healthcare professionals
ICT	information communications technology
INEE	Interagency Network on Education in Emergencies
LAN	Local Area Network
MNS	Medical Staffing Network
OECD	Organization for Economic Co-operation and Development
PTSS	Post Traumatic Stress Syndrome
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2
UN	the United Nations
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund
WAN	Wide Area Network
WHO	world health organization

#### Abstract

This outbreak of covid-19 poses serious challenges to education systems around the world. Most governments have decided to temporarily shutdown educational institutions over fears of the virus spreading in schools. So, following the total closures, it was therefore agreed to open schools and return students in the adoption of the COVID-19 health protocol. The present study attempts to investigate the impact of the covid-19 health protocol on teacher productivity and student achievement, This research aim to investigate the effectiveness of health protocol on the learning and teaching process. How that new health protocol serves teachers and learners. How covid-19 health protocol impacts both teachers and learners and on in what ways it affects them. this research work will define all the variables used on it. Thus, this study adopted a mixed- method approach that includes qualitative and quantitative methods. Two data collection tools were used: a questionnaire, which is divided into three sections, delivered to number of students of Tabouch Mohamed secondary school ,and an interview meant for the teachers in the same school . As well as the observation in classroom. The findings indicate that the health protocol serves learners in a positive way wherase it affect teachers in a negative way .

Keywords: Covid-19, health protocol, E-learning, Education, students

# **GENERAL INTRODUCTION**

#### **General introduction**

Coronavirus has become a pandemic that swept and overwhelmed all humanity and affected our lives at various levels. The danger of this virus on several levels, including all life aspects, education in general, cultural activities, and social life, and it paralyzes all vital activities. COVID-19 caused an unprecedented education crisis. The pandemic affected educational systems worldwide causing a total closure of schools, universities, and institutes. This disease outbreak poses serious concerns to global educational systems. Most governments decided to temporarily close educational institutions to avoid the spread of the virus in schools. Consequently, The World health organization has recommended the use of distance learning platforms. Distance learning has issues and did not give the required results and that due to many factors, So it was agreed on the opening of schools and the return of students in the adoption of COVID-19 health protocol. The present study seek to investigate the impact of covid-19 health protocol on the learning and teaching process and if it serve teachers and learners in a positive way .the research provides basic information about health protocol and data collection analysis, and recommendation .

#### **1.Purpose of the study**

the purpose of this study is to examine the impact of covid-19 health protocol on teachers' productivity and students' achievement. since this protocol is applied in educational institutions and with the return of students to schools, the objective is to find out if the adoption of this protocol is useful , how that new health protocol serves teachers and learners. The aim of this research is to investigate how covid-19 health protocol impacts both teachers and learners and on in what ways it affects them , Also if it is effective.

#### 2. Research questions

The present research addresses the following questions :

- 1- What kind of challenges school faced during the pandemic ?
- 2- What are the advantages and disvantages of covid-19 health protocol ?
- 3- What are teachers' and learners' reactions toward covid-19 health protocol ?

#### 3. Research hypotheses :

1- schools may face many challenges during the pandemic such as the need to adapt certain subjects and curriculum to the current situation, lack of psychological preparation due

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to the abrupt school closures and basic limited in the use of technological tools and online applications and incapability to provide regular online classes .

2- the advantages of covid-19 health protocol cause :

Teachers are more comfortable because of the small number of students in each group . for students the reduced curriculum and small numbers helps to better understanding , also time suit both learners and teachers.

Disvantages of covid 19 health protocol cause :

Much difficulties when repeating for numerous groups for several times, the physical and physiological fatigue, this health protocol limited teacher -learner centered because of the lack of time, also the absence of chronological order of lessons because of the reduced curriculum.

3-teachers' and learners' reaction to covid -19 health protocol:

the reactions of both teachers and learners toward covid-19 health protocol is positive, they believe that it serve them in a good way, and improve the learning and teaching process.

#### 4. Structure of the dissertation:

This research is divided into three chapters. The first and the second chapter are devoted to a review of related literature; they summarize the previous and recent studies of the impact of covid-19 health protocol, its consequences on both teachers and learners efficiency and productivity. It also aims to examine the extent to which this protocol facilitates the learning and teaching process. The third chapter presents the target population and the collected data through observation, students' questionnaire and teachers' interview as well as the data analysis from classroom observation.

## **CHAPTER ONE**

## E-learning during the Pandemic

#### **1. Introduction**

The spread of coronavirus has a negative impact on various fiels, And education nis no exception, Educatuonal institutions has closed in attempts to avoid the spread, As a result to the total closure, E-learning wa recommended by world health organization. E-learning did not give the expected results, so as a result of the fear of the negative impact of the school closure, World health organization suggested to open schools and the return of student using covid-19 health protocol.

#### **1.1.** An Overview about the pandemic

Covid-19 is a fatal and contagious virus. It appeared for the first time in 2019 in China, in the city of Wuhan exactly. Moreover, the virus outbreak caused deaths and cases of patients by millions. This disease poses more danger to patients with chronic diseases such as diabetes, blood pressure, blood vessels, and shortness of breath. This disease has many symptoms, such as high fever, diarrhea, severe fatigue, and the inability to taste and smell (Centre for Disease Control and Prevention, 2020). This deadly disease has left countless cases in more than two hundred countries. Since December 2019, the Chinese city of Wuhan has been in the headlines due to the outbreak of a surprising new coronavirus (Li et al., 2020), which has been linked to a bulk seafood market in Huanan (Y. Chen, Liu, & Guo, 2020). The Government took rapid public health measures, including constant transparency, epidemiological investigations, and the shutdown of supermarkets on January 1, 2020. (N. Chen, Zhou, et al., 2020).

#### *1.1.1.* Coronavirus: the impact

The coronavirus outbreak has affected the current situation of the global environment on various fields of life and psychological wellbeing. The disruption that the pandemic has caused presents an actual and unprecedented challenge for mental health all over the countries. COVID-19 has been identified in over 2,700,000 people all over the world. According to official reports, the U.s, Italy, Spain, and France have the most reported incidents; COVID-19 has been reported in 213 states and regions, according to Trusted Source. Many countries have enacted to limit the spread of SARS-CoV-2

#### 1.1.1.1. Psychological impact

Coronavirus is considered as a fatal disease that threatens peoples' lives, psychological and mental health. The lockdown implemented in most countries and the necessity of social distancing between people to avoid gatherings and the spread of infection.

As Eric Kleinberg, a New York University sociologist, reported, "We've also entered a new period of social pain. There's going to be a level of social suffering related to isolation and the cost of social distancing that very few people are discussing yet."

Human beings are creatures who have social relationships and interactions with others, and cannot live in isolation, and due to the current situation, people find themselves alone and in isolation and that is a reality imposed by the lockdown and social distancing policies, this affected their interactions with others. Consequently, this led to psychological consequences such as anxiety and stress for both physical and psychological problems like, loneliness, anger, changes in appetite, restlessness, depression, mental disorder and many others.

(Center of disease control & prevention) Many studies have shown that sheltering has a harmful psychological effect about the apparent health benefits; during the severe acute respiratory disorder (SARS) epidemic, segregating, in conjunction with other risk variables, increased the odds of depressive symptoms three years ago and a 2 to 3, fold increase in reply perceived stress (PTSS). Social isolation, pressure, and depression were also linked to an increased suicide rate among SARS members. The proximity of an epidemic's intense occurrences was also associated with higher rates of anxiety.

The pandemic influences not only physiological health Leading to a more significant level of vulnerability, the COVID-19 pandemic's essential considerations and psychological effects could be particularly acute for medical practitioners. For example, a poorly defined communicable diseases' outbreak, such as COVID-19, causes unavoidable stress, fear, and depression in higher-risk groups, such as health care providers, including nursing. Fear of being subjected to COVID-19 cases in clinics, being separated from families, and seeing the death or disease of COVID-19 patients may all have a significant effect on health care providers' psychological health.

Limited clinical knowledge about the virus, long hours, risk of disease, and insufficient procurement of safe clothing, isolation, physical fatigue, and separation from families all put healthcare professionals (HCPs) at risk of harmful mental health effects during the epidemic.

#### 1.1.1.2. Impact on mental health

The Health Organization (WHO) has viewed mental wellbeing as an essential component of the COVID-19 response. Its fast review of the delivery of services for behavioral, physiological, and substance use (MNS) disorders during the COVID-19 pandemic, on which this study is based, is the first international attempt to measure the pandemic's influence such programs. Around June and August 2020, data were gathered through a web-based survey completed by psychological health focuses at the health ministry. The questionnaire includes the accessibility and financing of mental health and psychosocial resources, the role and structure and the degree of continuity. (WHO, 2020). A pandemic is much more than an actual crisis; it affects individuals and society, creating a significant mayhem impact on the rapid human-to-human transmission of SARSCoV2 entailed implementing local shutdowns to avoid the infection from occurring further. Separation, social isolation, and the closing of public universities, workplaces, and tourist attractions forced people to stay at home to assist the distribution line.

An individual's psychological state as it applies to public health differs from person to person and is affected by his background, social and professional standing.

Self-isolation and isolation are likely to have a detrimental effect on one's mental health. Separation from family members, loss of freedom, frustration, and uncertainty, according to a study published in The Lancet, can lead to a decrease in an individual's mental health. Person and societal-level measures are required to overcome this. In addition, both children and adults are feeling a mixture of possibilities due to the current global situation. As a result, they can be forced into a problem or condition that they do not like.

Children at home, away from the school, peers, and family, may have several questions about the epidemic, and they switch to their parents for answers. Parents and children do not respond to stress in the same way. Anxiety, depression, social isolation, and an abusive atmosphere may affect a kid's mental health in the long term or short term.

Separation caused by the Covid-19 outbreak may significantly influence the mental health of older people and the disabled. Exclusion among family members may endanger the mental health of older adults and the disabled. It can cause them anxiety, depression and even place them in a traumatic situation. Older adults depend on their kids for their daily needs, and separation can damage a family structure. Hospital patients, especially the poor and infirm, may suffer from severe mental health problems. However, during a pandemic, anything as easy as a phone call will help comfort older people.

Since Coronavirus outbreak in china, things have changed all over the world. Most countries were not prepared for that kind of surprise. Since world health organization declared an emergency on 30 January 2020. This outbreak causes serious concerns for all countries all over the world.

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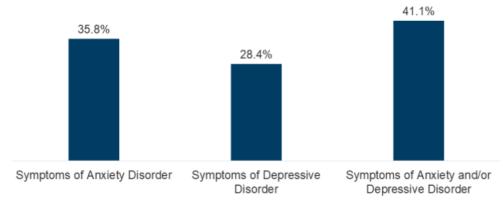
Young adults have faced a range of contagion repercussions, such as university closures and lost income, which may have attributed to their mental health problems. Moreover, during the pandemic, a more significant percentage of young adults (ages 18-24) suffer from anxiety and symptoms of depression (56 percent). Young adults are more likely than other adults to disclose drug addiction are and suicidal tendencies are. Adolescents were also at higher high risk for poor psychological wellbeing and drug use disorders before the disease outbreak, but many did not receive care.

Job loss is associated with increased stress, anxiety, distress, and low self-esteem, as well as increased premiums of substance use disorder and suicide, according to research from previous financial crises. Adults in households with job loss or lower wages face higher mental disorder symptoms than people in families without a job or financial losses during the disease outbreak. During the disease outbreak, studies revealed concerns about child welfare and wellbeing, especially among moms facing problems such as closing schools and childcare scarcity. Women with children are more likely than men with children to suffer anxiety or mood disorders. Women with children are more likely to suffer anxiety or psychological distress (49 percent vs. 40 percent). Women have recorded the highest rates of depression and anxiety both before and during a pandemic.

Many vital employees face serious obstacles, including risk for contracting the coronavirus, than other workers. In addition, during the pandemic, critical workers are likely than non-essential employees to show psychological symptoms like depression, anxiety, and even suicidal ideation

#### Figure 2

## Share of Adults Reporting Symptoms of Anxiety or Depressive Disorder During the COVID-19 Pandemic



NOTES: These adults, ages 18+, have symptoms of anxiety or depressive disorder that generally occur more than half the days or nearly every day. Data shown is for January 6 – 18, 2021. SOURCE: U.S. Census Bureau, Household Pulse Survey, 2020 - 2021.



**Figure 1** Share of Adults Reporting Symptoms of Anxiety or Depressive Disorder during the COVID-19 Pandemic

#### 1.1.1.3. The Impact of Covid-19 on Education

The new virus Corona is a global crisis and represents a challenge for the whole world; because of the increase of deaths, which reached two million, the world has become helpless. The danger of the latter is not only in one aspect but rather at various levels, and education is not an exception. It represents an unprecedented crisis for educational systems and programs. As UNESCO's Director-General Audrey Azoulay reported, "The global scale and speed of the current educational disruption are unparalleled and, if prolonged, could threaten the right to education" "(UNESCO, 2020.) According to Erika and Nickolas (2020), the school can be reactive or even proactive. Reactive closing is applied when students, parents, or institutions discover new cases, while proactive closing is done before the disease occurs in schools. Another matter effect on education in for example, in In Saudi Arabia, many private schools are closed to protect children. In addition, several reports have been released over the past two weeks, halting enrollment at colleges and universities. As of March 13, the OECD projected that funding cuts impact more than 421 million children declared in 39 nations or enforced (Huelsman 2020). However, 22 other states said limited "concentrated" quarantining (Tam 2020). Globally, the sluggish rate of reform in learning institutions is appalling, despite thousands of years-old, seminar-based learning methods; structural prejudices rooted and outmoded classes. After all, it is right to say that Class delays have a detrimental effect on academic performance for the pupils (Akther 2020).

According to (Tanveer et al. 2020) indicate that earlier this week, Saudi Arabia launched an online education program when it suspended universities around the Country over coronavirus issues. However, students, including academics, ran into problems transitioning to a digital educational environment. Blackboard Learn, its multinational interactive site, has already led on Saudi Twitter in the past few days. However, most university students are often worried about specific areas' weak connectivity, trouble logging in into the network, and taking courses, including lack of resources to access reports or even comprehend particular mentors (Obaid 2020).

#### **1.2.**School closures

Countries around the world decided to close schools in an attempt to reduce Coronavirus cases. at least 248,000 public schools have closed in the United States (national center for education statistics) 2020. Besides the United States, 22 countries have decided to close schools since March 2020, affecting about 98 million children (UNISCO, 2020). Such as Japan, Iran, North Korea, Italy, Lebanon and Mongolia, Thailand, France, Germany, South Korea, and the United States.

This disruption in educational systems may last for an extended period. With the resumption of the virus, the virus keeps spreading despite the attempts to reduce it, which affect schools and children, so countries are working on a solution as , Azoulay reported "working with countries to assure the continuity of learning for all." Moreover, the organization will call an emergency meeting of education ministers on March 10 to share ideas on how to continue learning and make sure all children are included in the plans. (UNESCO, 2020). Consequences of closing schools during the pandemic Schools support children and youth's learning, health, and development; school absences have destructive effects on children and families, The existence of schools around the world has enormous importance not just in students' academic performance but also gives another service for all parts of society .schools emphasize the importance of psychological, physical function for a human being. It builds the appropriate characteristics for a good human being.

1.5 billion Students worldwide are or have been affected by school and university closures due to the COVID-19 pandemic. With the spread of the virus and abrupt school closures, much young and youth lost a space that provides the stability. Coronavirus has an economic

consequence such as increasing rates of starvation, nutritional instability, as well as nutritional imbalance for many families, as well as the decline of mental and emotional health, Moreover, because of social isolation and lockdown, numerous adolescent individuals and families find themselves stuck inside their residences, which resulted in high rates of violence and attacks.

#### **1.2.1 Disruption of learning**

Schools have a vital impact on learners' achievement and performance, and emotional learning. The abrupt ending of schools has caused a loose sense of desire to learn since it has a vital influence on student achievement, quality, and passion. Without the daily interaction and communication with students and teachers in schools, educators lose pedagogic skills to help facilitate and engage them in lessons, and most students rely on schools to interact with their peers. The more extended schools are closed, the longer students are cut from the elements of childhood. (UNESCO, 2020). Furthermore, children lose dependable routines, Schools provide structured activities and practices, which increase the child's potentials, and with this lockdown, that increase the negative feelings that resulted from that absence may lead to isolation and other damages. The more extended schools stay closed, the higher the risk of children and youth losing out on their future. A new study for UNESCO shows that more than 100 million children will fall to the minimum level in reading due to school closures. (UNESCO, 2020). Schools provide chances for development and growth for learners, and with the total closures that deprived children who have fewer opportunities beyond schools. (UNESCO, 2020). Also, calendared assessment and examination determine admission or advancement to new education levels canceled when schools closed, resulting in stress for students. (UNESCO, 2020).

#### 1.2.2. Lack of childcare:

UNESCO data showed that over 1.6 billion learners in more than 190 countries were out of school. The sudden closures of learning institutions affected over 100 million teachers and school personnel. Covid-19 pandemic has swept all over the world originated several challenges in children's education, care, and well-being. Many parents struggle to balance responsibilities with paid employment, especially for working women. With no alternative options, working parents often leave children alone when schools close, leading to risky behaviors like substance abuse. it is estimated that about 35 million children under the legal age of 5 years are left at home when parents are absent because of work, without adult

supervision, resulting in unknown consequences. (INEE)

#### 1.2.3. Poor training parents for distance learning

When schools close, parents are often asked to facilitate the teaching of children at home and struggle to perform this task. This is especially true for parents with limited education and resources (UNISCO, 2020).

#### 1.2.4. Unequal access to information and communication technologies

Access to the equipment and materials required to continue studying while schools are closed is highly unequal. Students with insufficient income have no means to finance their education. (UNESCO, 2020). 3.6 billion People currently lack an internet connection. Almost one-third of students across the globe cannot access remote learning. This means that due to a lack of online learning policy or lack. UN reports estimate that 500 million students lack access to new technology and that the data on the Internet and even expertise necessary to use this is discriminatory owing to their parental circumstances, according to Young Lives. Therefore deprived children living in rural areas are less likely to have access to digital technologies in the same way.

Unequal access to digital learning will almost certainly increase children's inequalities in education.

#### 1.3. The solution of school closures

While it seems that the decision to close schools is correct in the light of the spread of a pandemic, this unscheduled action and closure originated in such a terminal scenario for the global and education sectors and significant implications for children and families as for the overall education sector. Although this seemed logical to agree to shut down the education institutions, many changes happened for the disease outbreak, particularly for the globe and the educational field. This reduction has impaired learners, instructors, and the educational system and populations. As a response, the demand for future solutions for children and schools has been ongoing. Consequently, the need for options was increasing, and the decision had been made to use digital technology to protect the integrity of children and schools. Technology, especially in light of the Corona epidemic, is considered a significant way of doing things, to prevent interaction with human beings; it played a crucial role in doing unsolved matters, such as using robots and aviation for delivery.

Technology can assist in spreading awareness through platforms and systems, and that via

the Internet.

#### 1.3.1. E learning

E-Learning became an essential part in higher education institutions .The development and introduction of various e-Learning tools (from using email to a digital portfolio and a virtual learning environment) have been causing.

According to Oblinger and Hawkins (2005), many educators assume e-learning

Means that "an entire course and all the interactions between faculty and students

Are online" (p.14). e-Learning is "computer-based training supplied over Email systems and the Online world" (Dublin, 2003: 2), e-Learning is "the computerized transfer of a teaching, mentoring, or schooling system, e-learning requires the use of a handheld electronic machine (e.g., a mobile phone) and provide teaching, mentoring, or education." (Stockley, 2005), e-Learning is a term that refers to the act of online learning.

Web-based learning, for instance, is one of many technologies and processes addressed.

Computer-based learning, online classes, and internet connectivity are all examples of active cooperation. It comprises of communication quality through the Net, internal web (LAN/WAN), audio- and YouTube clip VHS, satellite broadcast, video streaming, CD-ROM, and other devices are designed." (Singh et al.),( 2003: 1), or e-Learning is "distance education or education delivered on the Web" (Zemsky and Massy, 2004: 5).

In other definitions e Learning involves more than just offering fully online

Courses. Oblinger and Hawkins (2005) suggest that Temporary students can be residential moving or at a distance from a fully online training in technology to provide a certain course or all of a courses regardless of time and place. "(p.14).

Or as the European Commission (2001) describes e-Learning as "using Digital technology tools and the World wide web to evidence provided quality and improve accessibility and capabilities as well as remote exchanges and collaboration". This is also the focus of Gallagher's (2003) definition which describes e learning as "The use of digital technologies that enable and provide some or all of the education and learning for a certain course of study" (p.11). According to HEFCE (2005), E-Learning is "any learning that uses ICT" (p.4). HEFCE further emphasizes, "With this definition, one has to ensure that there is the Effective utilization of the full range of ICT instructional potential.

This encompasses flexibility, distance teaching and ICT use as a form of educational institutions. Communication and delivery tool between individuals and groups, to support and improve the management of education" (p. 4).

"E-Learning refers to the use of information technology (ICT) to augment and support learning in tertiary education," according to the OECD (2005). E-learning applies to both digital and school grounds or another length service that is augmented with ICT in some way" while keeping presiding desire in much more sophisticated technologies (p.11).

"e-Learning may mean a complete course online," remark Oblinger and Hawkins (2005). Towards others, this might mean applying a course management system." The latter definitions put more emphasis on both classroom instruction and higher education process management. (OECD, 2005) The Internet is an essential way of making education and research resources available. We are exchanging and collecting knowledge for both students and teachers (Richard and Haya 2009).

The use of the web and other essential technology to produce teaching materials, teach learners, and regulate courses in an organization is referred to as technological advancements in e-learning (Fry, 2001). There has been much discussion definition of what constitutes a standard definition of the term e learning. According to Dublin (2003), current reports tend to reveal the researchers' specialization and preferences. As a concept, e learning covers various applications, improving learning and procedures (Rossi, 2009).

Thus, according to Tao et al. (2006), this new educational system is concentrated on Learners at academic institutions who can now obtain personalized help and support and communicate via electronic means. Have differentiated learning timetables from other classmates. This means allowing for more cooperation and discussion between instructors and their students than in a traditional classroom. In academia, e learning, defined by vibration magnitude, has made active learning more active, engaging, and enjoyable (Liaw et al., 2007). The essential components that have made e learning the best potential online education.

According to Hammer and Champy (2001) and Liaw et al. (2007), service, budget, quality, and speed are all factors. E-learning can encourage participants at different educational qualifications to obtain their education while also pursuing their individual goals and ensuring their careers without sticking to a set schedule (Borstorff and Lowe. 2007). Ka

In his evaluation of the performance of the e-learning expertise in Saudi Arabia, Algahtani (2011) divided the definitions of e learning into three categories: distance education (Perraton, 2002; Alarifi, 2003; Holmes and Gardner, 2006), technical (Wentling et al. 2000; Nichols, 2003), and e-learning as pedagogical approaches (Wentling et al. 2000; Nichols, 2003).

#### **1.3.1. E-learning and the pandemic:**

Since the massive outbreak of the virus Corona throughout the world, this has not

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influenced just the health sector but also the education industry. To prevent the virus education through the traditional way has been stopped in China Like what happened in 2009 when education has been suspended in educational institutions because of the epidemic of H1N1. The quick spread of covid-19 left the world in trauma and Changed life dramatically in many aspects.

#### **1.3.2.** Goals of e learning

Distance education is the new trend of the 21 century, and there are many goals for this latter:

-Providing a proper learning setting with different sources to enhance academic performances at different stages.

-Contributing to the propagation of technology and the development of the growing generation.

-Provide education for all age groups, taking into account individual differences. (Abdullah Al-Aziz, 2002).

-The transition of technical knowledge to educators by online communication and meetings through academic multiple exchanges and conversations.

-Establish and cope with the challenges of modernity and development and create a new generation of lecturers who know technology.

-Reinforcement of teaching and learning communications and interaction via online platforms.

-attract people by overcoming space and time barriers and reducing educational costs in the long run.

-E-learning is often seen as the optimal need for human and other resources, the rare disciplinary concern. (Al-Mabrik in 2002).

#### **1.3.3. E-learning techniques:**

Traditional education occurs within the classroom, whereas Digital learning is based on multiple technological means of education, such as laptops, Mobile, TV, radio, audio, Web, and video conferencing.

Internet: tool in which services in all areas of life in general and in the educational phase

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and in particular in e-learning are offered to all its subscribers, including -e-mail services, Transfer protocol of information, Web services, - Another computer communication device, Chat sys3tem

Computer: A tool is used for teaching-learning educational strategy, and it

Numerous types or software strategies for standardized or virtual learning use of computer systems

**Multimedia Book:** a book that contains thousands of hours presenting a reader with interactive, video, and audio data that is consumer and comprehension could be read or seen at the exact moment by the number of individuals from the rest of the world (Ahmed Mohamed, 2004).

**Video Conference:** An audiovisual communication between several people who are situated geographic lye space where concepts, perceptions, and data elements become discussed/sand exchanged in an interactive atmosphere designed to ensure cooperation and cooperative Comprehension (Ahmed Mohamed, 2004).

**Satellite programs:** this system is mainly characterized by the speed during which programs and events are being sent throughout the globe and the ability to drive on written spoken and communication and will be used for e-learning (Abdullah Yahya, 2006).

**E-book**: is a new way of approaching information in the form of an integrated replica of a knowledge bug with illustrations, movements, video conferences, and YouTube videos, bowered via the computer and simple to check for or object to browse (Ahmed Mohamed, 2004).

**Text and graphic photos remote locations**: this strategy is used as part of the TV signal to send digital visual content to the future and as a document or graphical image, Graph after decoding (Abdullah Yahya, 2006).

**Virtual campus**: Platform that participants can access, move, and connect to virtual schools and resources via Web without heading to the research website (Zakaria, 2005).

**Virtual classroom:** A series of tasks that approximate the exercises of the classical worked out by a teacher and a participant, divided by spatial barriers, but they work\ together at the same time, especially of where they're from and where when students connect across online dialogue, and they print updates that anybody whom the channel can see (Zakaria, 2005).

**Audio Conferences:** this process includes using regular devices with multiple cell towers, which dynamically associate educators with several students in and outside of the class and identify the teacher via communication (Abdullah Yahya, 2006).

**Interactive video**: the implementation of computation and software, as well as the support mechanism, contain the same substance, where studies have shown that communication with the learning process and the learning organizations increases learner's performance. In addition, it contributes to maintaining the data longer (Zakaria, 2005).

#### **1.3.4.** Obstacles of applying e –learning:

On the side of teachers: Struggles with self-educating learners.

Difficult to make sure the pupil's laptop can be used.

The extent to which specific items are complicated.

According to the data presented by the College of Social and Human Sciences, El Oued University, different obstacles play a vital role in which may pose difficulties in applying distance education can be classified into multiple types: personal barriers, pedagogical obstacles, organizational obstacles, technical obstacles, and financial ones.

#### 1.3.4.1. Personal obstacles:

The findings indicate that there is a lack of incentives as well as the desire to utilize distance training, including both teachers and students, some of the teachers have a warped outlook about the e-learning system because they assume that it is not essential and have a lack of trust in the e-learning system too (Alumari et al.'s), as well as the Complexity of achieving frustration in the present circumstances, in addition to a lack of willingness for online learning. Even maybe the students want to adopt a learning system at a distance that can prevent them from feeling alienated and social isolation and the absence of interaction with others because of their use of traditional education.

#### 1.3.4.2. Pedagogical Obstacles:

This category has many significant problems, as lack of knowledge and preparedness can be regarded. Teachers do not have enough expertise to run this notable change since the teachers have inadequate skills and experience in the fundamentals of distance education. Similarly, due to the inability to use educators in communication with students in advanced technologies, especially e-mailers and media platforms, the fulfillment of the online assessments, and the absence of classroom interaction. (Falta, E.; Sadrata, F).

#### 1.3.4.3. Technical Obstacles:

Technical barriers include the reality that students and teachers experience slow Network access and the level of technical security that concerns online testing, cheating, and hacking. Learners, for example, take assessments in the houses through electronic devices, and the

participant has the chance to do an ethical violation. (M. Jadee. Jadee.) Besides that, power outages are forces that prohibit online learning from progressing since lengthy interferences disrupt users from communications and education.

#### **1.3.4.3. Financial and Organizational Obstacles:**

The lack of communications capacities such as electronic devices, Internet flow and services, and economic and technological capabilities are financial barriers. Most educators indicated the absence of digital communication means, as stated in the data by (Alumari et al.),, and the management of immature photoreceptor cells from learners is often complicated, and their way to demonstrate computer skills is difficult to determine. Financial and Organizational Obstacles.

#### **1.4. International experiences:**

In the implementation of various e-learning structures, multiple, countries have made revolutionary trials, and here we are highlighting a few of those:

#### **1.4.1. Malaysia experience:**

A systematic conceptual plan was developed by the State Environmental Development Group in 1996 as a sign for learning in 1996 and is expected to incorporate computers and the Internet for each grade, and in 1999 as a percentage of learning Schools peaked around 90percent and called brilliant colleges.

#### **1.4.2. Experience in Japan:**

In 1994, Japan started a television network project that included video material for schools on request, cable, and in 1995, the campaign for 100 schools, configured with educational institutions to manage and develop educational practices and educational tools through the hat platform, was launched; the Centre approved the aid to scientific work for Online Libraries in 1996-1997.

#### **1.4.3. Britain Experience:**

a national educational system, through which around 32,000 online classes, nine million learners, 40,000 instructors have been founded in Britain. An electronic address was generated in each participant and various education sites connected to this platform, and this system in Britain is constantly evolving.

#### 1.4.4. Experience USA:

in 1995, the American Government finalized all its computer applications and data, was engaged in training teachers, and provides support and infrastructure for their classmates and their colleagues.Upwards of 2000 academic institutions in the United States currently distribute one or both of their online programs, employees gain, and the number of classes and specializations provided by such colleges varies (Polfelaf, 2013).

#### 1.5. Advantages of E-Learning:

One current drawback is that not all data accessible on the Internet is appropriate for all beginning courses. While these data sets are appropriate for many advanced undergraduate courses, students may not have gained sufficient knowledge of a specific field to use them. Too often, data necessitates Should professional decisions be taken, or should the expertise of a specialist be assumed. When specialists use data, desirable characteristics may become a hindrance when beginners are exposed to them. As more educators understand the needs in their specific field of expertise, maybe more relevant data sets will emerge to fill these gaps (Mann, 1998).

#### **1.5.1. Stress symptoms:**

It points out that online learning can be frustrating for a variety of reasons. Moreover, for at-risk youth, this may result in negative consequences, such as substance abuse problems. It is crucial to keep in mind that COVID-19 has already raised our anxiety levels. Increasingly occur because of online learning. It can be a dangerous mixture for adolescents, online learning stress. Isolation and loneliness. Teen will be separated from his or her peers as they learn online. Teenagers can spend the entire day alone, depending on their family situation. The volume of work has grown. When a student engages in online education, it is presumed that they will fully understand and use new technologies such as Zoom or WebEx. Moreover, Physical exhaustion Gazing at a screen all day, perhaps without even a proper position, scowling through sunlight, all of these items can be physically painful. Changes in Physical educational exhaustion Gazing at a screen all day, perhaps without even a proper position, scowling through sunlight, all of these items can be physically painful. Changes in educational support. To attend in a classroom with a teacher means that somebody is always there to reply to questions and solve problems. Yet another interaction is impaired by the online environment. If a teenager's stress from online learning is not handled correctly, this can have many other effects on his or her life support. to be in a classroom with a teacher means that somebody is always there to reply to questions and solve problems. It can be difficult for students to receive the instructional technology help they need to excel. In addition, the Fatigue from virtual learning both teachers and students may become exhausted after spending a considerable amount of time online. This effect is often referred to as "Zoom fatigue." Our minds are unable to process information in the way they are used to, and this is

one of the factors that a day full of video interactions is so mentally overwhelming. (High Focus Centers, 2020)

#### 1.5.2. Students' interaction methods:

A pupil's ability and willingness to self-monitor and accurately evaluate content understanding and seek support when required can be a crucial factor that influences both teaching and learning processes in a remote educational environment. Teachers don't have immediate access to their learners' verbal or nonverbal feedback in a distance classroom environment. In a traditional classroom, this feedback allows the teacher to use verbal and nonverbal signals to adjust the instructional process in real-time to the demand of their learners. In distance education, students use interaction methods. Many learners already have created and use websites, online forums, and mailing lists in their effort. E-mail is, without even a question, the most important means of communication between students and teachers. Lack of learning motivation. For students worldwide, the shift to online learning has been challenging, and this challenge has presented itself in some different ways among Granite Bay students. Many people have expressed a low motivation as a part of the recent education sector, which might affect their academic performance throughout the term as junior Ian McCarthy reported, "When I'm at home, I'm not usually there to learn... and it is just a lot harder to stay motivated on one task without getting distracted.", the lack of a physical space to establish as a work zone, including the class once given, can result in a loss of concentrate due to multiple disruptions in an average home.

-While student engagement can only come from the inside, the instructor or course planner is instrumental in creating the best digital environment where the students want to learn and feel successful. Thus according to Martin, there is a shortage of teacher interaction, face-toface communication, and technology help in today's digital platforms (2009). Also, the most very well carefully thought appropriate educational framework is inadequate to satisfy the learning process or facilitate innate intelligence. Pupils who are unfamiliar with an online environment, on the other hand, often neglect the metacognitive strategies, knowledge, time management, and self-directed learning that are required. (Martin, 2009).

#### **1.6. Challenges of E- learning:**

#### **1.6.1. Digital resource at home:**

UNESCO General Director Audrey Azoulay said, "While attempts to just provide access to all must be increased, we now realize that continuous learning and teaching cannot be limited to digital platforms." "We must also support other alternatives, such as community radio and television broadcasts, as well as ingenuity in all ways of education, to reduce already existing inequalities. These are the kinds of solutions we're focusing on with our International Coalition members." According to the National Centre for Education Data estimates, people in the United States have an extensive connection to the Web from their households. Nevertheless, there will still be gaps in internet access between different classes of students. Children from 5 to 17 who live in poverty have lower interest rates of residential access to the Internet than individuals who come around 100 and 185 per cent of the federal poverty line and students who fall above 185 percent of the national poverty line. In addition, Amerindian Native, Black, or Hispanic learners have lower interest rates of home access to the Internet than students who are White, Asian, or of two or more races. In terms of home-based internet access, the geographical position of a student's residence is also significant. Except for remote towns, students in households in relatively isolated and distant rural areas had less access to technological means and the Internet than students in suburbs, villages, or towns. The percentage of students aged 5 to 17 who did not have access to the net at home was exceptionally high among those living in rural regions, in the middle of nowhere. At home, 41% of Black students and 35% of students from low-income families had no internet service or tap access. Students with no internet at home scored significantly lower on various national and global tests in reading. Compared to developed countries, the United States had such a more significant percentage of 16- to 19-year-olds with the lowest quality of educational technology. In an era when digital format distance learning is used to ensure educational quality in the majority of countries, half of the total number of students who don't have access to private computers from of the COVID-19 pandemic class, and 706 million do not have Internet at home, according to data of the UNESCO Institute for Statistics and the International Telecommunication Union, UNESCO establishes an international alliance. In low-income countries, inequalities are particularly pronounced: in Sub-Saharan Africa, 89 per cent of students do not have access to household computers, and 82 per cent do not have access to the Internet. Furthermore, while cell phones can also provide learners with access to data and enable them to participate in class and peers, nearly 56 million students live in areas where mobile networks are not available, with approximately half of them in Sub-Saharan Africa

#### **1.6.2**. Teachers' digital skills:

Teachers have a significant impact and influence in the classroom, regardless of the method of implementation. According to Armstrong (2011) and Mahoney (2009), students believe that the teacher is missing from college courses. Therefore, lecturers must also adapt their teaching techniques for online classes.

Feedbacks, partake in discussion boards, and respond to comments via mail. By coordinating and shaping the course effectively, the lecturer will minimize technological difficulties for students through the design phase (Baker, 2010). The instructor should not entirely direct the course. Instead, through elements like discussion boards, students can be involved in their learning process. Thus, online community discussions, according to Barnett-Queen, Blair, and Merrick (2005), generated a student-cantered, critical analysis climate, which was not always the case in face-to-face classrooms. The student-led discussion forums produced the social constructivism climate. Professor involvement with group discussion was criticized by Barnett-Queen, Blair, and Merrick (2005). Several students felt that the course provided more teacher communication; however, the people investigated whether that is the case, and Merrick (2005) debated the extent of interaction between scholars and the online forums. Several students felt that more teacher communication was needed in the class; however, the critics examined whether this would damage the relational and critical analysis setting. Professors must consider reconfiguring lectures to promote constructive professorstudent partnerships and enhance sustainability with student involvement. When revamping and conducting classes online, scholars must be aware of the technological implications. "Online training curriculum must be part of the training and the digital age," For teachers, there are tests and discussion forums. Besides, once the class has begun, the teacher must provide constant In education, technological requirements are rapidly developing. Professors, who teach online, like anyone else, must keep up with technological improvements in the online system. As a response, academics will still be required to gain scientific understanding through quality career development to incorporate its most speed available technology (McBrien, Jones, & Cheng, 2009). Due to the difficulty of the advanced technical skills required, this goal becomes more challenging when employing professors to teach online classes (DiPietro, Ferdig, Black, & Preston, 2008). The course planning and quality of teaching are more likely to improve if institutions employ experienced instructors and provide the required practical skills. This benefits the students.

#### 1.7.2. Students' digital skills:

Students who take online courses benefit from the scheduling flexibility and comfort that a typical face-to-face course does not provide (Armstrong, 2011; El Mansour & Mupinga, 2007). Online courses, on the other hand, have some technological requirements. Consequently, in addition to getting involved in the course work, the participant must also have technical expertise. To be productive, a student had to be technically minded and have access to computers. Despite this requirement, Mahoney (2009) and Muilenburg and Berge

(2005) found out that the majority of students who are comfortable with online learning have very few technological problems, on the other hand, El Mansour and Mupinga (2007) found that technology is a significant challenge for learners. As a response, it's critical to figure out what can be done to give students a positive online learning experience. The degree of software proficiency was considered more significant than the period of computer skills by Dupin-Bryant (2004). Students with the necessary technical education and competencies are more likely to complete courses online, according to this report, because technology issues do not hinder student learning. Besides that, the results indicated that computer pre-processing, such as the internet communication process, would help students excel in the virtual class (Dupin-Bryant, 2004). Tallent-Runnels et al. (2006) agreed, noting that learners of prior perception of online learning and strong computer skills have a lot more leverage.

#### **1.7. Reopening the schools:**

Teachers across the world became confronted goal of identifying millions of students who will start the new school year as part of an on-going disease outbreak. They all were aware that the significant damage wrought by rapid learning resulted in many students losing educational territory. As a consequence, restricting in-person instruction will be a costly decision borne predominantly by learners. The uncertainty and threat of the virus, on the other hand, was a competing factor in support of reopening. Moreover, reopening schools could threaten the health of learners, their families, and school employees. Despite these competing pressures and a slew of others, one fall came, along with a new school year. The coronavirus pandemic's second entire school year began with even more disparities between public schools than the preceding year. Over 190 countries have closed schools affecting 90 percent of children and teenagers of the world's student population. Closures were carried out in rapid succession to contain the Covid-19 virus. In what has been the most much further experiment in the teaching-learning process, governments' properly configured measures to allow learning to continue through platforms, television, and radio, When it relates to closing Data from the United Nations Educational, Technological, and Cultural Organization (UNESCO). One hundred countries have yet to announce a reopening date for schools, 65 are preparing partial or complete reopening, and 32 intend to end the academic year digitally. The academic calendar, on the other side, has never been so uncertain for 890 million students. One of the most complex and sensitive decisions on today's political agendas is when and how to reopen schools. Policymakers can foresee and plan for the effective reopening of schools by putting in place the appropriate precautions. By putting in place the required protections. UN

Secretary-General "António Guterres" recently instructed leaders and donors to make education a priority for all kids, even the most vulnerable. The Global Education Coalition formed to help government enhance distance learning and help school reopening. As one would expect, the longer the school interruption,

The stronger the lack of knowledge. As a result, the earlier schools open, the lowering the risk of lengthy damage to millions of child's edited volume and well-being. We are concerned that long-term school closures would exacerbate inequalities, and now, more than ever, it's crucial to protect education from the pandemic's socioeconomic consequences. Because as we all want schools to reopen on time and comfortably and to make sure that every child's right to education is shielded, Like UNICEF, UNESCO, the World Food Programs, and the World Bank have joined forces up and create guidelines for municipalities on how to keep children safe when they return to school. The Framework for Reopening Schools is a valuable feature for officials and policymakers that identify all of the factors that will make this a successful experience for everyone concerned. One designed for students, teachers, principals, parents, and the wider community, the main goal is to protect the child's best interests. The aim is to open up greater, healthier schools. And this is a step to create educational institutions that are more inclusionary, support all students to learn and are more adaptable to future risks.

#### **1.8.** The Algerian health protocol

Over 5 million children in the primary cycle will return to school on Wednesday. Exceptional circumstances of health marked by the replication of the new Coronavirus. Algiers count over 19,000 schools. Prime Minister Abdel Aziz Djerad will start the 2020-2021 school year and inspect many social and economic development projects in the province of Batna. The school year for primary education exceptionally begins on October 21 due to the spread of the Covid-19 pandemic, which triggered the closing of schools in Algeria since 12th march. In this respect, the education minister of Education Policy, Mohamed Ouadjaout, asked for unveiled the unique plans for classroom lesson resumption while taking all the "required" precautions to secure the students' health and personnel.

Minister of Educational System Mohamed Ouadjaout called for "conformance" with the health protocol adopted by the Health Ministry's scientific committee and its rigorous application during his meeting with the heads of education cadres and managers of public, private educational institutions. Accordance" with the health guidelines adopted by the Health Ministry's scientific committee and the rigorous application of all social distancing initiatives. Minister called for guaranteeing the perpetual washing of schools and classrooms and following the law of physical dissociating by restricting The pupils' meeting. He also ordered ongoing training to supply people with education—the necessary expertise to fight against the virus. According to the exceptional program, primary schools that act on a singular basis must move to a double-shift system (morning and afternoon) without disruption, and pupils must be split into classes. There should be two sub-groups of each class, with teachers maintaining the exact timetable (Arabic, French, and Tamazight). Each sub-group will work conversely for a week of 5 days, according to the plans. The hourly volume for each stream would be correspondingly decreased under the contractual agreement.

Procedures of the protocol Kids and adolescents are modern world residents. Any catastrophe creates an opportunity to educate them on valuable skills, create humility, and increase resilience while still creating a safer and more loving society. Learners' concerns and resentments about COVID-19 will be mitigated as they obtain information and insight about the illness and their capacity to adapt to any secondary effects in their lives. This report contains significant messages and considerations for influencing school officials, students, and other team members. To enhance a healthy and safe school, families, parents, and members of the community, as well as children themselves, must cooperate. The aim is to provide direct and clear guidance for safe activities in universities and other educational institutions by detecting, identifying, and regulating COVID-19. In addition, applicable in all the different circumstances. Students can be encouraged to become supporters for disease prevention and control at home by education. Maintaining safe and secure school operational activities or re-opening educational institutions after a shutdown requires many factors, but it can advantage public health when appropriately managed. (UNESCO, 2020). The Minister advocated for holding classrooms clean all of the time and imposing physical distancing rules such as preventing students from gathering. He also urged teachers to provide the necessary psychological help to learners to fight against the virus's spreading. According to the exceptional program, primary schools that function on a single-shift system must move to a double-shift system (morning and afternoon) without disruption, and children must be split into groups. Each teaching unit must be divided into two subgroups, with instructors adopting the exact timetable (Arabic, French, and Tamazight). Each sub-group will work conversely for a week of 5 days, according to the schedules. The hourly amount for each flow will be reduced correspondingly under the specific project, while the focus will remain on the composition of the material.

The exceptional policy enables a workable system (early evening and evening, variously) for all elementary school communities that operate with double sessions. The two groups

would work optionally daily over the period of a six-day week, with a two-week rotation. Thus, there will be a corresponding decrease in the number of hours for each tube.

#### 1.9. Guidelines:

#### **1.9.1. Before entering:**

The protocol disclosed by the guardianship included the procedures to be applied, and the rules must be respected to prevent the spread of the Coronavirus.

It ordered the necessity of preparing public and private educational institutions before entering school by ensuring the cleaning and disinfection of all facilities of the institution, cleaning and disinfection of water tanks, and the institution's space by setting and outline of how the pupils are navigating.

And that is during the specified date for the entry of the administrative staff on August 19, 2020, and the protocol stipulated that the entrance to the school must be prepared by placing physical barriers or colored ribbons in a manner that ensures the movement of students in one direction while respecting physical spacing. The protocol also stipulated the care to provide cleaning and disinfection supplies and ensures temperature measuring devices in sufficient numbers.

For the entry of students on October 21 and November 4, the protocol stressed the need to avoid pupils gathering and jostling when entering and exploiting all the institution's outlets,

the attendance of professors to the institutions inadequate time to accompany students to the departments before the beginning of the classes and to ensure that the teachers enter the departments under Supervision of educational supervisors in intermediate or secondary schools, and under the Supervision of a teacher of primary school in primary school.

#### 1.9.2. Teachers' Entrance on August 23, 2020:

Holding a public session with the professors, the administrative staff, and all the administrative structures with the presence of the doctor of the detection and follow-up unit to read the protocol and define the tasks and obligate everyone to the necessity of recruitment and vigilance to pass the exceptional circumstance, Activating the vigilance cell installed at the level of all educational institutions to generalize and implement measures Preventive, dictated by the Ministry of Health.

Hold a coordination session and the presence of the doctor of the Examination and Followup Unit with the parents of students to involve them in the prevention process. Holding education councils for the beginning of the school year concerning preventive and

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precautionary arrangements and adherence to them.

#### **1.9.3. Students' Entrance:**

For the entry of students on October 21 and November 4, the protocol stressed the need to avoid pupils gathering and jostling when entering and exploiting all the institution's outlets, the attendance of professors to the institutions inadequate time to accompany students to the departments before the beginning of the classes and to ensure that the teachers enter the departments under Supervision of educational supervisors in intermediate or secondary schools, and under the Supervision of a teacher of primary school in primary school. Students must avoid gathering when entering school, also opening schools in sufficient time before lessons start; teachers and students must attend before lessons start. Make special corridors designed for the entrance and respect the social distancing (1.5cm). For students' safety Measure each student's temperature, and if symptoms of infection are recorded on one of the students (fever leakage), student directed to the clinic or a particular room in Waiting for necessary action to be taken. Moreover apply preventive measures when dealing with learners (wearing masks, social distancing ...).and, Avoid touching.

Every student should commit to a sitting place and not change it; and Make sure to use alcohol-based hand sanitizer by students and teachers, Avoid sharing bottles of water, drinks, and food. Avoid sharing school tools among students.

#### **1.9.4. Restrooms and Toilet:**

Programming different times for rest by organizing other times for each group, taking into account social distancing.

The possibility of benefiting from the rest within the department under the supervision of the teacher, with the possibility of allowing students to go the bathroom, taking into account the rules of prevention, and that their number does not exceed two students at one time

Ensure the constant cleanliness of hand washing basins and toilets, the necessity of constant provision of water, liquid soap, and disposable wipes.

Ensure that the hands are washed with water and soap before and after using the toilet.

Exit from the school.

Coordination between educational supervisors and departmental teachers to arrange the exit of each department.

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Ensure that pupils pass through the special exit corridors.

Ensure that the physical spacing is respected during the exit of students. Make sure of the daily cleaning of the institution every evening.

After leaving the pupils and disinfecting the surfaces, the halls should be ventilated daily.

# **1.9.5. School restaurants**

The necessity of daily cleaning and disinfection of the restaurant, thus wash all utensils and all kitchen equipment, for workers make sure that they conduct the necessary checks and wear protective masks; and respect social distancing; also the daily washing using liquid soap and water.

For meals, organize meals in batches to achieve the social distancing, and take care of physical distancing between students, and ensure the identity of the shrines before and after entering the students.

#### **1.9.6. School transport:**

Disinfection of the transport bus before and after students ride. And put special alcohol gel at the entrance of each bus, and wearing protective masks, and respect physical distancing in the bus .avoid shaking hands.

#### **Conclusion:**

since the pandemic ,educational systems impacted by the virus , so schools shut down , so as a result Educational institutions move on to E –Learning as a an option to improve learning and to provide a chance to learners to continue their learning . E-learning become an effective way that teachers and learners use to protect their lives and to guarantee their education .

# CHAPTER TWO

The Impact of Covid-19 on Education

#### 2. Introduction:

- In fact, education should not be confined to a classical pedagogy and contemplate its continuity with all fervor. In fact, it should transcend this stage and diversify its domain. Development in the field of education controls the profitability of success and the doubling of capabilities and competencies For this, a set of questions can be raised, how education can be developed and how to raise the efficiency of the teacher and the learner, and all this is linked to several psychological, social and economic reasons. The concept of education is a set of competencies related to knowledge and know-how that are embodied by ability.

#### 2.1Education:

#### 2.1.1. Etymological Definition:

The term "education" comes from a Latin origin that bears the meaning of the Latin words, "Education" is came from the Latin words "educare" and "educere". Some others believe that the word has been derived from another Latin word "educantum" which has two components. "Eimplies a movement from inward to outward and "duco" refers to developing or progressing. The analysis of the term concerned with education aims to provide educational basics for the child, including an educational environment that works to develop the child's latent potentials and release and gradually release them until we reach a point where we know that the education process has been successfully completed. Some philosophers such as Rousseau and Flaubert and others were unable to determine the true meaning of learning because it does not carry one and only meaning, but it includes many meanings for each field Education is the knowledge that can be woven into the white page of the child, and on the other hand it is the ability and competence that can be completed because it is an instinct. Knowledge and awareness of what is around it, and in return, we expect the implanted knowledge to branch out in depth until the classic limit of knowledge is exceeded and new ideas can be created and embodied in reality.

#### 2.1.2. Types of education:

Education is not limited to what the child learns during the separation between the four walls, but rather goes beyond that because simply the process of his education is completed by his connection with the external situation and its reality.

-There are three main types of education:

#### 2.1.2.1. Formal education:

Education is divided into three educational sections First, formal education, so that this type is linked to the school and is academic and formal education, even for kindergarten children and this education continues from the primary stage to the secondary stage This

education is focused on teaching and developing skills

- Post-secondary education: Or higher education, it is a type of formal

Education that is based on a set of stages, rules, and even grants and grades, and this is to form qualified teachers who have the ability to take responsibility for bringing out an educated and talented group, knowing that there is a link of respect and commitment between the teacher and the learner.

- Examples of formal education: (Learning in a classroom (School,: Education in the school-centered Grants, certificates and higher degrees that all its educational institution

#### 2.1.2.2. Informal education:

is education that is not academic and formal education because it does not take place in school or college, but takes place outside of that .Non-formal education is education that can be acquired by reading books and magazines and participating in forums, and it can also be acquired by engaging in social status by the way a father teaches his son or friends or otherwise that it does not count the grades or the presentation of certificates or any of that informal education is education about the method of communication and contact with reality.

# 2.1.2.3. Non-formal education:

is education that does not have a specific time period or official and ministerial decisions from the Ministry of Education or Higher Education Rather, it is an education related to learning in the language of communication in the family and society, or through cultural and arithmetic games such as punctuation games, puzzles, arithmetic, and so on.. There are no certificates or degrees to determine the child's learning or intelligence rate. Informal education is an equation that is not equal to zero, because education is considered the most skilled and acquired because it does not cause any psychological pressure for the child, such as school. It is also an education to develop individual and social latent skills.

Non-formal education is education that separates from formal education, but the difference is that formal education is programmed and planned education, but what is lacking is that it does not include a specific payment because it includes groups in general and this does not answer the full needs of the child in school However, informal education develops the child's hobbies and physical and intellectual abilities .What his idea suggested in these years is that the situation should be harmonious with academic education and non-formal education to form a generation or an intellectual group.

#### 2.1.3. An overview about the educational system in Algeria:

As for the syllabus and study programs and even the time periods can be changed because it is a continuous program from Algeria's independence in 1962In terms of the school entry age, which is six years old Education has not been systematized in a developed way or any of the modern educational curricula have been applied to remedy the educational deficiency in institutions .As for non-formal education, it is continuous education throughout life and is not limited to a specific age or to specific educational stages, which makes it different and effective also because it is in line with the capabilities of children.

After the emergence of the Ministry of Higher Education and the building of universities, starting in 1970, according to statistics, it represented about 60 percent of the educational staff in it, which made the Algerian university with all its social, cultural, scientific and artistic specializations.

It also consists of supervisors such as the dean, the head of the attaché, the secretariat and other administrative staff system for reasons Algeria continued an educational system based historically on the period of French colonialism. like all the others Countries, and Algeria faced the theory of globalization in its universities so that the system was changed from a classic to an LMD system after the reforms it had undertaken so that the classic system was studied in three in-depth stages in the baccalaureate subjects and four years of a classic BA, then two years as a master and three years As for the new system, which is the LMD system, which was implemented in 2006, it is limited to a baccalaureate and three years of study for a bachelor, two years for a master, and then three years for a doctorate . This was the transitional phase of higher education in Algeria.

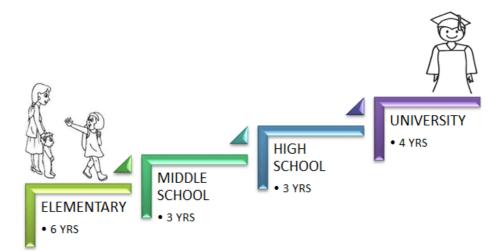


figure02:Educational system in Algeria

#### 2.2 .1. Teaching-Learning Process:

Education is a continuous process whose stages are not separated because they are homogeneous and linked to each other. Wilson and Gallup also said that the important steps of education are the attention step followed by the attention step, meaning that the intellectual attention of the learners is attracted by attracting their interest in the material.

It has become necessary to pay attention to the needs of the learner in his academic stage to develop his idea, and this is also based on counseling process. It means meeting the needs based on the pillars of attention, interest, motivation, strength of thought and full responsibility towards the learners.

This step, the teacher will have completed half the task, which is to instill conviction in his students, and now the lessons are presented in a regular manner, because, in short, their strengths, weaknesses, desires and the intellectual file related to their education have been identified. Therefore, this stage should not be neglected because it helps to The best evaluation in the class.

#### **2.2.2. Teaching Principles:**

Teaching is not telling what you know ,its teaching what learners needs it based on understanding pupils teaching start with the relationship between the teacher and the learners during the teaching process teacher should have principles to follow ,he should ask himself what to teach and how to teach he must be motivated a teacher, for example, might post problems or assignments online (creating an active learning environment) to be submitted prior to a traditional or online class session (help students manage their time.) Reading course materials and examining narrated PowerPoint slides might provide the answers (focus attention and connect knowledge.) An instructor can call on students during a virtual classroom session. During a virtual classroom session, an instructor might call on different students to provide their responses (enhance motivation to learn.) Immediate feedback (providing quick comments and interacting with teachers and students) is possible. If a correction is required, a private message inquiring "do you require more assistance" might be sent to the student (balance high expectations with necessary support.) The teacher might request that the student explain how the solution was arrived at (connect knowledge.) Furthermore, the instructor might ask all pupils a question such, "Why is the knowledge relevant?" (assist pupils in organizing their knowledge).and the possibilities of teaching must be available so that the teacher can develop the learner's skills .The teacher should adopt a variety of different curricula and teaching methods according to the needs of the learners In addition to writing notes because it helps to know the level of learners.

#### 2.2.3. Teaching process:

It should be, as we said before, that the teaching process should be diverse, and the following stages should be followed determining the educational goals, then planning and determining the intellectual level of the students, and then determining the method and methodology of teaching have a positive relationship with students and be open to students' questions and inquiries. The process of stimulating and enhancing confidence is necessary because there are students who are shy about asking questions or answering.

Enhancing teamwork because it enhances the ability of understanding among the educated because most of them are of the same intellectual level, that is, they inquire and raise the problem and engage in dialogue and answer it; Work period • Culminating activities (Dr.

Nicolas T. Cap long; Assistant Schools Division Superintendent).

#### 2.2.4. The effective teacher:

Effective teachers must concentrate on their pupils' progress. According to Alton-Lee (2003), an effective link between school and cultural context is required; in addition to being caring, it is also necessary to improve assessment, feedback, and evaluation, as well as to be responsible for students' learning process, curriculum goals, multiple tasks, and contexts. According to Gurney (2007), in order to be a good teacher, many elements must interact. One of them is the teacher's knowledge, passion, and learning responsibility. Another element is that good teachers should involve pupils in activities and assessments that motivate them to learn (and learn through experience). Respect will increase learning if the teacher creates a pleasant environment and a relationship with the pupils. Effective instructors, according to Borich (2000), have lesson clarity, instructional diversity, teacher task orientation, participation in the learning process, and a high student success rate.

#### 2.2.4.1. Elements of Effective Teaching:

The effective teacher should:

#### I. Planning:

- A. Meet objectives of the curriculum/syllabus.
- B. Show mastery of subject area.
- C. Design Pedagogically sound lessons with:
- 1. stated objectives.
- 2. modeled activities.
- 3. guided practice.
- 4. Checks for understanding.
- 5. feedback/evaluation.

- 6. review/closure.
- D. Learn new techniques and keep abreast of applied research.

#### **II. Instruction:**

- A. Use methodology appropriate for class.
- B. Provide a balance of teacher/student talk.
- C. Make effective use of media, illustrations, and resources.
- D. Use effective questioning techniques.
- E. State intended outcome to lesson.
- F. Model new activities to ensure understanding of task .
- G. Provide guided practice.
- H. Monitor student progress.
- I. Check student understanding.
- J. Devote appropriate time to task.
- K. Spiral lesson to previously learned material.

#### **III. Management:**

- A. Establish and enforce consistent class rules.
- B. Keep class on target, avoiding digressions.
- C. Control potentially disruptive behavior.
- D. Be dependable and responsible (starting class and returning homework on time).
- E. Be organized and prepared.
- F. Make good use of time.
- G. Manage group work effectively.

#### **IV. Interpersonal Relations:**

- A. Establish positive rapport with students.
- B. Be open to learn from students.
- C. Keep students involved and actively participating.
- D. Show concern for students and their problems.
- E. Motivate and inspire students to learn.

#### 2.2.5. Teaching strategies:

Many instructors are attempting to alter their teaching methods in order to promote critical thinking through writing and reading. They want their pupils to be able to solve, explore, produce, question, discuss, and understand the content in their classes, not merely listen and memorize it. Teaching strategies are the approaches, styles, and tactics used by the instructor in the classroom to provide the concepts and achieve the desired results Teaching methods are

a variety of approaches used by teachers in the classroom to ensure that pupils grasp a topic quickly. Teachers employ a variety of unique and original teaching techniques to present concepts to pupils, based on their prior experience and expertise. Merrill (2003) identified five principles for excellent education that are defined by some principals and ensure their excellence. These guidelines state that learning occurs when:

- 1- Students are active in real- life problems solving.
- 2- Prior knowledge activation as a foundation for new information.
- 3- The learner's new information is shown.
- 4- Students put what they've learned into practice.
- 5- Incorporation of new information into the learner's environment.

With differentiated instructions and teachers oriented tactics toward students learning requirements, traditional teacher-centered practices have altered (Grill 2013) Teachers as Qahtani (2016) described them are facilitator, delegator, personal model and have experiences in teaching method. He advised them to use different not one teaching style since learners has different learning abilities. When developing lesson plans with varied levels of skills, Tomlinson in 2014 (quoted in Qahtani 2016) noted that when a teacher employs a different teaching approach, he or she would keep all pupils in mind when making lesson plans with different level and abilities. According to Bhalli, Sattar, and Asif (2016), teachers should pick instructional approaches that promote active participation and engagement of students. Also, a range of information transfer techniques that are more student-centered than teacher-centered should be used.

#### 2.2.6. The challenge that face teacher in class:

Observing teachers' behavior in the face of teaching difficulties is at the heart of the work of Smylie (1999), which introduces the concept of professional stress to talk about teaching difficulties. This stress and the increasing difficulty of teachers in adapting their educational strategies to pupils' difficulties and dropping out can then be a source of professional exhaustion or burnout (Laugaa, 2004; Rudow, 1999). These growing tensions in the face of difficulties then lead teachers to adopt positions, either professional withdrawal or overinvestment. The perception of a discomfort to be taught will gradually lead to the transformation of these professional acts, sometimes leading to absenteeism (Basco, 2003) and dropping out through resignation (Romano, 2008).

As early as 2002, the notion of teacher dropping out, conceived as a cessation of teaching activity and resignation, has been exposed in Anglo-Saxon and Canadian studies (Borman & Dowling, 2008; Stoel & Thant, 2002; Karsenti, Collin, Villeneuve, Dumouchel & Roy, 2008;

Karsenti, Collin, Villeneuve, Dumouchel & Roy, 2008; Stoel, Collin, Villeneuve, Dumouchel & Roy, 2008)In Europe, this phenomenon is little studied as such but taken up in studies on stress and burnout Our research aims to broaden the notion of professional dropout by examining the modalities and the link between the phenomena of progressive withdrawal of the teacher from professional activity in order to understand how the teacher, faced with the difficulties of the class, perceives an impediment. Professional in the performance of his skills and how the teacher reacts to this impediment

# 2.2.7..The major challenges of the teacher in the education:

- In the field of education and the educational system First let's start with
- Giving the student a mental analytical and contemplative program.

• Sufficient training for teachers so that the teacher understands what to study and the student what to study.

• To have the Naval Students Parents Association with the educational staff.

• The teacher manages the student's psychology in terms of motivating him and encouraging them to learn and learn, because in the end, knowledge is light and ignorance is darkness.

• The abilities of their students and their social and even mental conditions

• Treating them the same way, that is, there is no discrimination between the students, the students who sit at the end of the section and who are confused to those students.

• The teacher must re-explain the lesson each time the students understand and comprehend the lesson.

• Teaching and learning lessons in Education.

It is critical for a teacher to develop a positive relationship with his or her students. A teacher should make every attempt to get to know their students. The engagement should take place outside of the classroom. A teacher should first and foremost be a friend, with the obligation of nurturing students with warmth and a positive attitude. Students should feel free to discuss any topic and express themselves. Any and all doubts should be addressed, and a teacher should be approachable and available. When it comes to getting to know the students well, a teacher with a broad mind and a pleasant demeanor will make all the difference.

• An excellent teacher is known for his or her politeness, patience, perseverance, and assertiveness. Teachers should rise to these problems and meet them front on in order to make a difference and affect society as a whole.

#### 2.2.8. The impact of corona virus health protocol on teachers' productivity:

-The Corona pandemic forced teachers to take measures related to the educational system from them

-The grouping policy is that there are twenty students in the department

-The spacing in addition to dividing the cohorts into two reciprocal roles in terms of distance study.

Regarding the Corona pandemic, we note that the education process was based on the virtual platform, that is, using the Internet to prevent late lessons, discourage the education process and continue educational programs in the same meaning this program is to up-skilling and motivating teachers, organizing counseling sessions for stakeholders such as teachers, parents, and students are just some of the measures taken by the Algerian and all the world administration in the past few months.

Making a continuous effort to provide customized teaching-learning material suitable for online classes has been another way of facilitating the schooling of children.

#### 2.3. The concept of learning:

The role of education is largely related to the role of the teacher and the learner, because in these recent years the focus has been on the learner and his intellectual needs so that he can absorb the huge amount of information and lessons .Education is related to the following terms: -Learner and teacher.

-Knowledge, lessons and tutorial.

-The pedagogy of providing lessons, i.e. defining the method.

-Appeal to behavioral methods, knowledge and social disposition.

Learning is "a process that results in change as a result of experience and improves the pos sibility for increased performance and future learning" (Ambrose et al, 2010, p.3). Changes in the learner's knowledge, attitude, or conduct are all possible. Learners develop new perspectiv es on concepts, ideas, and/or the world as a result of their experiences.

#### **2.3.1. Learning theories**:

Learning Theories are frameworks that Instructional Designers frequently employ to satisfy the needs of the target audience and the circumstance. In order to fulfill this obligation, an Instructional Designer must first understand and apply Learning Theories. Main Learning Theories (The Behaviorists - (behaviorism: Stimulus – Response) (The Neo-Behaviorists (Neo-behaviorism: Human Mind) (The Gestaltism (Insight) (The Cognitvism (Cognitive development: Learning to think) (The Humanists (Active nature of Learner (Dr. A. H. Sequeira)

#### 2.3.2. Learning styles:

Every student has a method for remembering knowledge more effectively when studying. Some take notes, some draw diagrams, and others prefer to listen to lectures, and so on. Because no single learning style fits all students. Learning style defines as "the preferred manner in which a learner receives, processes, comprehends, and remembers information." For example, one student may learn better by carrying out a procedure, whilst another may prefer to read about the subject. "People utilize their five senses to acquire information and then channel it through three distinct channels, termed representational systems, to make sense of it," writes Fatt (2000). (p. 34). Visual, auditory, and kinesthetic learners are represented by these representational systems (Fatt, 2000). Each individual has a preference for one of these systems, as well as a preferred mode of communication.

#### **2.3.2.1. Visual learning style**:

According to Fatt (2000), those who prefer visual learning "see the world by building or recalling mental images" (p. 35). According to Fatt (2000), visual learners prefer reading, observation, and the display of facts and visual aids. Visual learners prefer to learn through watching movies, film strips, images, and graphs that assist them integrate the material (Fatt, 2000).

#### 2.3.2.2. Auditory style:

Auditory learners prefer sound and make better judgments based on what they have heard or read (Fatt, 2000). According to Fatt (2000), auditory learners favor lectures, seminars, debates, and recordings. Allowing auditory learners to listen to tape recordings of information increases the likelihood that they will ask questions about what they have learnt and may not have comprehended (Fatt 200).

#### **2.3.2.3. KINESTHETIC:**

A kinesthetic learner prefers hands-on experience that allows them to build and develop what they have learnt (Fatt, 2000). A kinesthetic learner would do better if a test with task-oriented questions was administered (Fatt, 2000). A person who prefers kinesthetic learning has "the capacity to utilize the body to create rapport, soothe, convince, and assist others" (Silver et al., 1997). A kinesthetic learner might work as a coach, counselor, professional athlete, or even a choreographer (Silver et al., 1997).

#### 2.3.3. Types of learning according to vaster in essence:

Educated people. P. vister distinguishes between 4 types of Learning type which are:

1- Auditory learning: for example, to learn English vocabulary, you must listen to an audio recording of these vocabularies

2- Visual learning: is a type of learning that is based on watching videos to complete the learning process. Learning type

3- Tactile learning: is done by feeling things. Learning type

-The fourth type: mental, i.e. like a game of chess.

This type of categorization necessitates a rigorous examination. The kind of receptive channel (sensory mode) for information differs between learning types 1 and 3. Logically, the fourth form of learning does not fall into this group, notwithstanding Vester's assertion in his writing: "In all four situations, the explanation has the same content: huge pressure, tiny area; little pressure, large area .The sole distinction is in the receptive channel." (page 51) By categorizing learner types in this manner, Vaster limits intellectual effort to learner types 1–3, reserving it alone for learner type 4. Vaster, on the other hand, connects perception with the ability to construct abstractions in order to explain the experience, i.e. perceiving Equals learning or understanding.

#### 2.3.4. Learners needs:

The difference between what a student's wants to obtain out of the learning experience and his or her existing level of knowledge, ability, and passion is represented by a learner's requirements (Noessel, 2003). Table 1 shows possible learning requirements in four areas: cognitive, social, emotional, and psychomotor. When facilitators create a new learning environment, it's a big deal. It is critical that they assess participants' readiness in all four dimensions (3.1.3 Methodology for Creating a Quality Learning Environment).

Affective	Social	Cognitive	psychomotor	
Attain goals	Make a difference	Ask a good questions		
Be open to	Communicate with	Thion independately	Get enough	
feedback	éthers		sleep	
Self	Interact with	Get help from experts	Have a child	
confidence	problem solving		care	
	Explore conventions	Utilise learning	Have	
Sense of		resources	transportation	
belonging				
Understand	Give support	Practice problem	Have a good	
others'		solving	energy level	
motivations				
Have time for	Grow with friends	Process new	Get enough	
reflection and		informationn	sleep	
self assessement				
Positive	Manage time	Create work products	Be in	
attitudes			acomfortable	
			setting	

# Table of learners needs:

# 2.3.5. The impact of health protocol on student achievement:

With the outbreak of the Corona virus Covid-19 around the world at the beginning of last year, the Ministry of Education and Higher Education had no choice but to stop studying and switch to remote education to complete the school year, and then the Ministry worked to develop a plan for students' attendance to actual attendance at school at vary ingrates with the beginning of The new academic year and the completion of the study for a number of days remotely, in order to preserve the safety of students and to achieve precautionary measures and social distancing, but these measures, despite their health necessity, have affected the level of students in the semester exams, so their results in the mid-term exams were low, and they improved slightly during End-of-term tests, but the problem remains.

A number of educational experts attributed the reasons for the decline in the average grades of students to two main factors, namely: the presence of students for a limited number

of days in the school building and the reliance on distance learning more stressing that the actual attendance to the school, and the student's interaction with the class teacher is more important and beneficial than attending lessons Online, and its results on the academic level for the student are better, pointing out that the other reason is the absence of the supervisory role for parents during school days from home, which made distance education lose its value and importance, and the student became disdainful in studying and studying during the days of distance study, with reliance on the teacher Specialists in solving homework and electronic

Assessments, demanding the need for the guardian to cooperate with the school, and strictly activate the absence and attendance policy.

# 2.4. The advantages and the disadvantages of covid-19 health protocol to teachers and learners:

#### 2.4.1. The Advantage of the health protocol to the teacher:

Positive were represented in solving the problem of classroom overcrowding, as Lutfi Al-Bajouri said that the Corona virus Protocol "forced everyone to use technology after the Corona virus eliminated the idea of learning in the traditional classroom. Online learning is no longer limited to specific groups, as everyone in the education system uses Electronic applications, so that the matter in the education sector turns into a compulsory technology.

#### **2.4.2.** The Disadvantage of health protocol to the teachers:

The education sector has been experiencing lately a number of problems, the source of which is the Corona Health Protocol, which angered teachers and their unions, in addition to the hourly size and working hours. "The professor isn't a robot." According to Sadiq Dzairi, the twisting system put a lot of pressure on teachers because of the large number of teaching classes, which were estimated to be 45 minutes in average and secondary school, and it is known that there is no difference between educational classes on average, knowing that the pressure affects four subjects: mathematics, Arabic, and science, French and social services whose shares exceed 32 classes, while the Syndicate demanded 26 classes at the latest.

#### **2.4.3.** The Advantage of health protocol to the students:

To promote spent the specter of overcrowding Sadiq Dzairi considered that the system has many advantages in spite of some shortcomings. However, it became possible to deal with 20 students in the department, and this was a dream in the past, as the student studies comfortably, and the information reaches easily and the teacher interacts with the lesson well. It is the system that allows all pupils to benefit from the study by respecting preventive

measures, especially physical distancing, while its disadvantages lie in the convergence of students in the midday break, in addition to focusing on basic learning and performing several

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pedagogical activities, as well as repeating the same learning lessons twice for the teacher. The same applies to the educational organization of double-shift schools, where students benefit from the same educational sessions for the one-shift system, with the importance of maintaining teaching every Saturday until Thursday.

#### **2.4.4.** The Disadvantage of health protocol to the students:

Dr. Ahmed Al-Said: Distance education has become a "space" for students. "With the passage of more than 4 months after the academic year, and with the students' performance of the semester exams, many students' grades showed low, due to several reasons, the most prominent of which is the transformation of remote school days into a space and a period of rest for the student at home," said Dr. Ahmed Jassim Al-Said, a professor at the College of Education, which negatively affected the students' academic achievement". Dr. added. Al-Said said that the teacher also had great burdens as a result of his commitment to follow up students remotely as well as through school attendance, in the absence of the important role of the guardian to follow up on the children, and to make sure of their commitment to attend online lessons and solve the duties and daily assessments, and of course in the case of the parent's lack of interest in the research The student is able to study on a daily basis, most likely the student will consider days of remote schooling as agood time and space for playing instead of studying .Aisha Al-Jaber: There is no implementation of the attendance and absence policy The educational expert, Aisha Al-Jaber, confirmed that the students 'results in the quarterly exams gave negative indications about the schools' success in increasing students' academic achievement, stressing that despite the importance of distance education in light of the spread of the new Corona virus, this educational system has clearly had an impact. Negatively on students, as a result of many factors, including the absence of the supervisory role of the guardian, as well as the failure of schools to implement the absence and attendance policy on students.

#### 2.5. Problem and disadvantages of health protocol in Algerian school:

Added problems .A shortage in the number of professors due to the promotion policy, which necessitated the institutions to summon the assistant professors

Overcrowding, which led to a shortage of educational departments in terms of timing, forty-five minutes is not enough to absorb the entire lesson

The professors relied on the policy of filling due to the lack of time and the overcrowding of the study program

Distance education has negatively affected students, meaning that there is no eagerness to study at all, not like in-person education

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The health protocol is not 100% healthy, because the separation was at the level of the departments for the attendance group, but when leaving the university or school or even for a break, the students meet with each other The teacher did not submit to any of the pedagogy of education in the Corona pandemic, his only concern was to provide the lesson only.

# **Conclusion:**

Education is a process of imparting and acquiring knowledge, developing the power of reasoning and judgment. It improves the personal life of people and community .the teaching and learning process are the most important elements in the instructional process and also in education, in this chapter we shed light on the concept of education .teaching process and the learning process and the educational sector is effected by covid-19 health protocol.

# CHAPTER THREE

# Data Analysis and Interpretation

#### Introduction

After introducing the theoretical frameworks of the impact of covid-19 health protocol on teachers' productivity and learners' achievement. The section at hand deals with the practical issues. The aim .Thus, is identifying the extent to which health protocol influence both teachers and learners. This research hypothesis that the influence of new health protocol is positive on learners and negative on teachers .The present chapter is an attempt to answer the research questions, This research also describes the various stages of research which includes the selection of participants, the data analysis.

The research starts with providing an overview about the methodology conducted, then moving to data collection and analysis. The chapter closes with presenting the findings and some recommendations.

#### 2. Research design

In overall, research design refers to a framework for designing and carrying out a study. The strategy, the conceptual framework, the identification of whom, and the research design are all important factors of the research.

What to research and what methods and methods to utilize for gathering and analyzing data, the research design is separated into different kinds, such as qualitative and quantitative.

#### 2.1. Mixed method: Qualitative and Quantitative

A mixed-method approach combines both qualitative and quantitative research; A mixed methods research study uses both qualitative and quantitative methods either concurrently or sequentially (Venkatesh, Brown, &Bala, 2013). The research seeks to explore how students and teachers are influenced by covid-19 health protocol. To collect and an analyze data qualitatively researchers use "Non -participant observation", semi structured interviews, (Yilmaz, 2013: 315), which means that qualitative study aims to discover how the health protocol influence the teaching and learning process.

Moreover, the qualitative approach focuses on describing present phenomena as they occur naturally, without any attempt to manipulate the situation under study. On the other hand, the quantitative approach is used to express data in the form of mathematical models, numbers, and statistics, and also to quantify data then generalize results from the sample to the population of interest. (Tavakol and Sanders, 2014) illustrate that quantitative research focuses on inspecting how and why phenomena vary, however it is not the same as how and why questions in qualitative research since quantitative research provides numerical results. To collect data quantitatively researchers generally use questionnaires, The previous methods have been very common in various disciplines, such as education, psychology, and social

sciences. The descriptive-analytical methodology was selected on the basis that it allows describing the present phenomenon and its characteristics, report what is happening or what has happened, answer all kind of enquiries ( what, why, when, who, how), Therefore, observation and survey tools, such as questionnaires are often used to gather data (Gall, Gall, & Borg, 2007). Similarly, analytical research mainly carries out analysis of the present phenomenon which involves unstructured interviews in the current study, it also tries to explain existing state of affairs from available data, additionally, in analytical research, researchers use facts or information readily available to them in order to analyze to make critical evaluation of the context. In such research, the data may be collected qualitatively; however it is often analyzed quantitatively, using frequencies, percentages, averages, and other statistical calculations, as it can be analyzed qualitatively.

#### **3.** Population and Samples

#### **3.1 Population**

In a study, Reid defined population as "all entities having certain characteristics which are of interest to researchers." According the definition, population refers to the chosen group of people, who are engaged in or selected by the researcher for his investigation,

As a consequence, the target population of this study from which samples is selects is Tabouch Mohamed high school.

#### 3.2 Sampling

Sampling as it is defined by Kumar (2011) is the process of selecting a few (a sample) from a bigger group (the sampling population) to become the basis for estimating or predicting the prevalence of an unknown piece of information, situation, or outcome regarding the bigger group. In other words, sampling is the process of determining a population or a sample that is a specific representative group of individuals selected to collect data from.

The investigation used the purposive sample strategy to pick the participants in this study. Purposive sampling involves the selection of a sample based on the study's requirements. This means that the researcher selects respondents due to the willingness to participate in the study. In the same way, this method allows the researcher to collect relevant and useful data to answer the study question. The purposive sample is 100 hundred of third year of Tabouch Mohamed high school.

## 3.2.1. Questionnaire sample: Learners

The questionnaire for students was designed in English. The questionnaire was composed of 14 questions classified under three sections each one focuses on a particular aspect:

\_section one: personal questions

\_section two: students' psychology

\_section three: students' productivity

The table below show the three sections

# Table 1: section one

	Section 01 : Personal information
	Questions
1-	what is your gender ?
٠	Male
•	female
2-	Level :
3-	School name : Tabouch mohamed

# Table 02: section two

Section two : students' pychology		
	Questions	
1-	Do you wear masks and respect the social distancinng ?	
•	Yes	
•	No	
2-	Since the outbreak of the pandemic did you feel anxious or afraid ?	
•	Yes	
•	No	
3-	Do you think that covid-19 affected you pschologically ?	
•	Yes	
•	No	
if y	es, how?	

4- Did you experience any pschological symptoms during the lokdown ? like (depression , phobia, stress ......)
Yes
No
If yes , mention them

 Table 03: section three

Section three: Health protocol and students' productivity					
Questions					
1-	Do you know what is covid-19 health protocol and its guidelines ?				
2-	Does this protocol provides suitable atmosphere to study ?				
•	Yes				
•	No				
if n	o, why?				
3-	Do you think that reducing students' number per class is :				
5-	Positive				
•					
•	Negative				
•	Nothing changed				
Wh	y ?				
<b>4-</b>	Indicate your level of agreement and disagreement with these statements				
a.	How often your teacher ask you to read a passage ?				
b.	How often you go to the board and solve an assignment?				
c.	How often your teacher ask you to write a paragrah or a piece of writing ?				
d.	How often your teacher gives you the chance to speak freely ?				

	Never	Rarely	Sometimes	Often	Always			
5-	Do you think that this health protocol helps you as a student in your studies ?							
•	Yes							
•	No							
if ye	if yes, How?							
6-	6- In the future do you prefer to study using this protocol or go back to the previous							
system ?								
J								
Justify your choice ?								
•••••								

# 3.2.2. Interview sample: teachers

Interviews were conducted with a total of 4 participants; the interviews were face-to-face, lasted 20-30 minutes in high school. The questions during semi structured interview were prepared questions, but the interviewer gives the chance for participants to express themselves freely, and also they were free to suggest ideas and directions for the discussion. Some respondents may lie, or provide wrong answers when answering the questionnaire, for this purpose interviews were conducted in order to gain more reliable data. The semi structured interview was divided into two sections, each section combines different items.

# 3.2.3. Observation in classroom

The main purpose behind designing an observation is to see how both teachers and learner are performing in the classroom using health protocol .Observation was designed to notice the current situation in Tabouch Mohamed secondary school. The purpose of the observation is meant to highlight the real states of classroom setting; The general environment of the classroom, seating arrangement; how students are seating, also the effectiveness of the teacher and the movement and the activeness. Moreover the interaction and participation in the classroom. Also the purpose is identifying the teachers different methods and styles that implement in the classroom. Observation is the suitable method to examine also the interaction between teachers and learners and who is dominated in class; moreover the purpose behind implementing observation is to observe learners' preferences and their motivation toward learning using health protocol and that protocol provides a suitable atmosphere for learners to learn, also analyze the interaction between students.

observation provide strong credibility and reliable source for data collected by giving a chance to experience real life situation and presentation of the classes of other partners It is a complementary investigative instrument , it helps to provide empirical data of live performances of both teachers and learners.

#### 4. Data collection

Data in the current study were collected from three different sources questionnaires and interviews as well as observation. The data collection methods for students started with questionnaires as an effective strategy to start with and collect data easily; the total number of respondents was ninety students.

Semi-structured interviews, where the questions are pre-planned prior to the interview but the interviewer gives the interviewee the chance to elaborate and explain particular issues through the use of open-ended questions (Blandford, 2013). Researcher would like to use semi-structured interviews because questions can be prepared ahead of time

This allows the interviewer to be prepared and appear competent during the interview.

This interview is appropriate to researchers who have a picture in their mind of their topic so that they can ask questions openly. Therefore, it has been recommended that these openended questions be piloted in advance. Such format is an easy method to keep the conversation tightly focused on the target topic (Alsaawi, 2014). Hence, this type of interview is suitable for researchers who understand exactly what kind of information they are looking for In order to obtain reliable and accurate results, semi structured interviews face-to-face, lasting 20-30 minutes were conducted with 4 unknown teachers The advantage of the semi structured interviews for this research was that the during the interviews, the depth and detail of the answers were better than the questionnaires; interviewees provided more details and information which helped the investigation, and finally observation that was designed to see how learners and teachers are in the classroom using this health protocol, the observation was implemented in TABOUCH MOHAMED secondary school in third year foreign languages class. In observation divided into three categories classroom setting ; teachers' teaching methods and learners different learning styles, and in each one of the categories we observe many items that has relation with teaching and learning and how health protocol is influencing, and if it give a good atmosphere to study and to teach in . Observation provide more empirical data about classroom real situation.

#### 4.1. Description of the questionnaire

As a data collection tool, a questionnaire was chosen. The typical questionnaire is the most popular highly structured data collection instrument, with most items either asking about very specific pieces of information (for instance, one's age) or giving various response options for the respondent to choose from, for example by ticking a box or giving open-ended questions to express freely. Questionnaires are frequently used as valuable vital tools to collect a wide range of information from wide range of individuals. A questionnaire is a series of questions asked to respondents in order to obtain useful, efficient information about a certain topic especially when the questions are properly constructed. Several researchers assert that questionnaire is the easiest widespread way to collect data, as it can be used in both qualitative and quantitative types of research. The aim of designing and distributing questionnaires in the current research was to explore and investigate the effect of language and culture on the process of communication, and to figure out the students 'perceptions towards each other easily.

The student questionnaire consists of three sections of a total number of 14 questions designed primarily to provide students with an opportunity to express their views about the influence of covid-19 protocol on them.

### A. Section one:

This session contains questions which mainly represents students' personal profile. It tries to know the gender of participants and their educational level.

#### **B** .Section two:

This session contains (4) questions; it states students attitudes towards covid-19 and their views on how the pandemic affect them psychologically.

#### C. Section three:

This part includes (6) questions concerning learners' productivity; thus how covid-19 influence students' achievement, also their perspectives towards the health protocol; weather it provides a comfortable learning environment or not.

#### 4.2. Description of the interview

Semi-structured interviews are a ubiquitous tool for gathering data despite a vast literature suggesting that they have little validity. Even though they are like a free flow conversation which is very informal and open to discuss, however they have lots of features as structured interviews. In unstructured interviews, interviewers try to find out about a specific topic,

while the interview has no structure or plan, or expectation as to how the interview will be conducted. One of the major advantages of using an unstructured or in-depth interview is that the interviewer would be able to evaluate the interviewee very well because questions are raised from the interviewee's replies and mainly because of the sudden free-flowing questions during the interview. The aim of conducting the interview in this research was to collect more reliable data for efficient valid results. Semi-structured interview consists of two sections of a total number of 08 questions designed primarily to provide teachers with an opportunity to express their views about the influence of covid-19 protocol on them.

Section one: informants' personal data

Item 1: gender and duration of teaching

Section two: informants' perspectives toward covid -19 health protocol

Item 01: do you think that covid -19 affect you psychologically?

Item 02: do you know what covid-19 health protocol is?

Item 4: since the new changes in the time table, how many hours you teach per week?

Item 05: do you feel exhausted or tired because of this timetable?

Item 06: what is your opinion toward reducing students' number or class? And why?

Item 07: does this health protocol provide a good atmosphere for learners?

Item 08 : Do you prefer using this protocol or go back to the previous system and why?

### 4.3. Description of the observation

the observation period lasted for two sessions, the theme of our observation is a class of third year foreign languages composed of 20 students. During the observation period in speaking and listening skills, the teacher used data to explain the lesson, which makes the session intressting for the learners and enjoyable. we notice that when the teacher used pictures, songs, or audio the learner feel motivated and intressted in the lesson .but when the teacher uses the traditional way ( without any materials) learners feels bored and not intressted in the lesson, and they d do not follow him. consequently, the interaction between students is rare, also limited communication with each other.

the paper of observation contains three sections :

#### 1. section one: observation of the classroom setting .

this section deals with the setting of the classroom and how it looks ;the activeness of the teacher , the lesson design and its objectives , and the interaction in the classroom, and the seating arrangement, and the general environment of the class .

#### 2. section two : observation of teachers' productivity .

this parts combines the methods used by teacher in classroom, the interaction between students and teacher , and wherase the classroom is dominated by learner centered or teachers' centerd , and if the time is enough for teachers to explain lessons.

#### 3. section three: observation of learners' achievemnt .

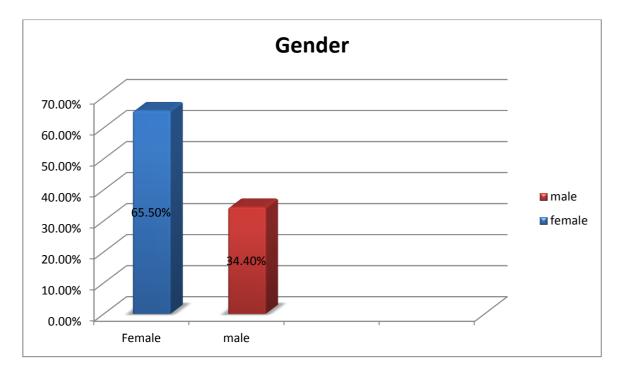
this session deals with the learners' preferences ; and learner motivation in the classroom, and their comfort .

## 5. Data analysis and Interpretation of the Findings

#### **5.1. Questionnaire Analysis**

This part deals with the analysis of our collected data which are obtained through the questionnaire that was addressed to the pupils of Tabouch mohamed secondary school on Mellakou.

# 5.1.1. Result analysis



# 1. Personal information

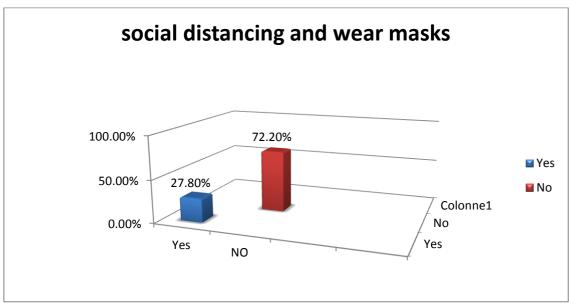


#### Analysis:

Figure 01 provides a summary of personal information for all the respondants, including gender and educational level and school.

The whole number of students as participants is ninty students . the number of males is 30 and the number of females is 60 . they are all in third year of secondary school we notice that the number of females are more than males . we tried to do our best to creat balance in sample choice in order to give a chance for more students , for credibility of our respondants are girls involving feminization of the learning community .

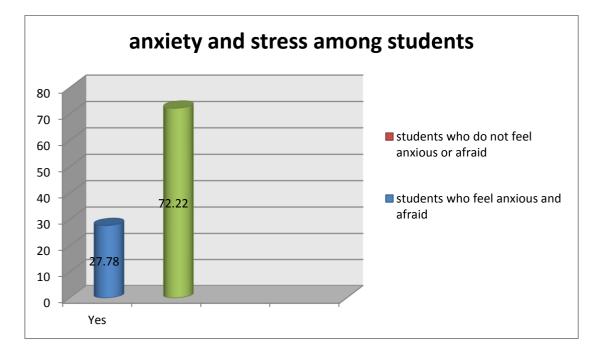
Students' pschychology



# **1.2.1.** Do you wear masks and respect the social distancing ?

## Figure 02: social distancing and wearing masks.

From the graph we can notice that only (27. 8%) of the participants wear masks and respect the social distancing, Whereas the majority of them (72.22%) do not, maybe because students are no longer afraid of covid-19, and they do not have fears to get damaged, also that indicates that Covid-19 health protocol guidelines are not followed at this school; and this school do not implement the guidelines and being severe with students.



3.2.2. Since the outrbreak of the pandemic, did you feel anxious or afraid?

Figure 3 : anxiety and fear among students .

(72.22%) of the respondents answered with NO, while the others said yes they feel anxious and afraid. From the data we realize since the outbreak of the pandemic majority of learners did not experience stress or anxiety, this may be because learners were not damaged by covid-19, and also they were not casesses in their families or their villages, so learners do not feel anxious or afraid because they see them unconconcerned with the situation.

#### 3.2.3.Do you think that covid 19 affected you pschochologically ?

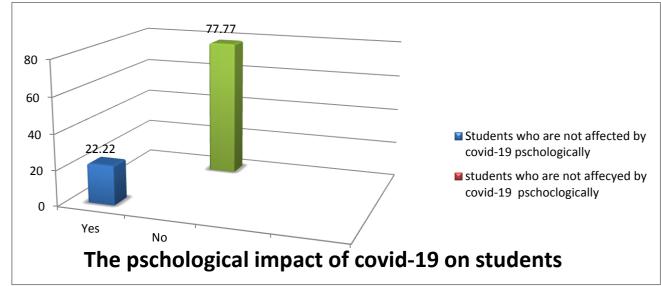


Figure 3 :the effect of covid-19 on psychological health of students.

The graph display that most of pupils (77.7 %) answered by NO that means that covid-19 did not affected them psychologically, maybe that because learners' pychological state differ from one to another, so students deal with covid-19 in different ways, and it impact them on different scales, also from the graph we can notice that just (22.2 %) of the respondents said that they were affected psychologically. the participants who have answered by yes are concerned to mention how they are affected, but they did not answer only few of them said as follow:

• Yes covid-19 affected me psychologically because I would never thought being around people can affect me to catching a deadly virus .

- It affected me because during the pandemic I felt isolated, stressed and alone .
- I think because the lockdown .

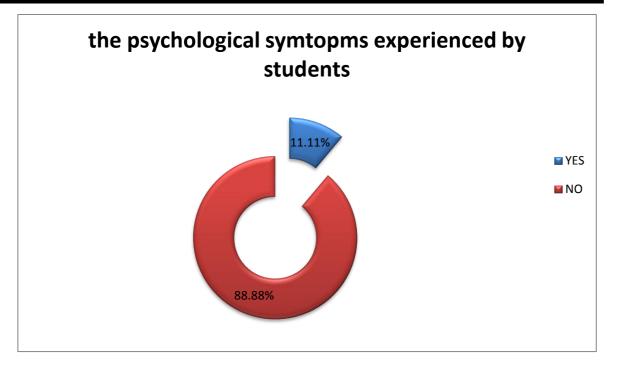
• yes covid 19 affected our psychology because we were oblige to follow some guidelines like wearing masks .

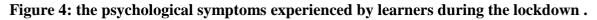
• yes I think because covid-19 has disrupted our normal life and, it has put us in many stressed situation .

• covid -19 affected us psychologically because it kept us away from our family .

• corona virus affected me and all my family because my brother died from the virus and my father lose his job

**3..2.4.** did you experience any pscychological symptoms during the lockdown ? (like depression , phobia ,stress......)

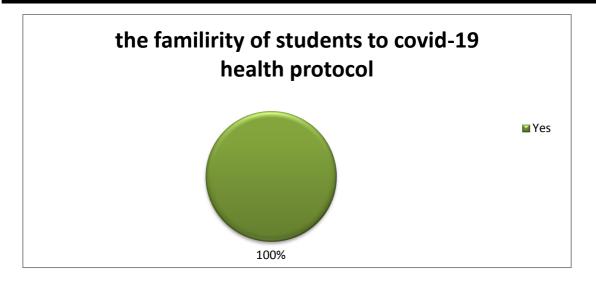


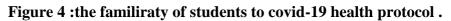


The whole of the participants which they represents (88.88%) they said that they did not experience any psychological symptoms, we asked the rest of them which they answered by YES represents (11.12%) to mention the symptoms, they said had stress and depression, maybe because the lockdown and seating all day at home; students felt stressed, anxious, and e ven lazy, most of them indicated that they loss desire to do activities, or even get out from bed, while others reported that they feel stucked in their homes, and loss contact with their peers, while others said that even after the lockdown they had essues, they could not leave their houses without being afraid to get damaged by the virus, and een avoid social contact; they had phobia.

# 1.3. <u>Health protocol and students' productivity</u>

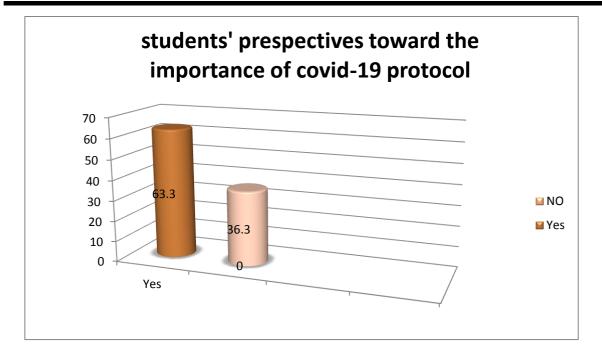
# **1.3.1.** Do you know what is covid-19 health protocol and its guidelines?

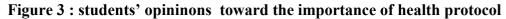




From this pie chart we noticed that all the participants which represents (100%) are familiar with the term covid-19 and its guidelines , which indicate awerness of students toward covid-19 and its guidelines , which is something positive .

**1.3.2.** Does this health protocol provide suitable atmosphere to study ?





#### Analysis :

In this question we asked students to give their opinions toward this health protocol, we observe from the results attained from graph 03 that 63.33% of the pupils respond with YES ,so it indicates that covid-19 health protocol provide suitable atmosphere to them to better understand and study , however 36.67% answer by NO . we asked them to justify , according to them why this health protocol did not provide suitable atmosphere to them they answered as follow :

in my opinion this protocol did not provide suitable atmosphere to study because time is not sufficient we cannot understand lesson in 45minute and interact

- this protocol did not provide suitable atmosphere to study because I like to study with my friend and do activities in pair or group because I am shay and I can not ask my teacher about everything .

• I think this covid-19 health protocol did not provide suitable atmosphere to study because, I still have fear of this virus.

• this health protocol did not provide atmosphere to study because we did not being prepared to return to school.

• this protocol did not provide suitable atmosphere to study because I used to take good marks but now my level decrease.

3.3.3. Do you think that reducing students 'number per class is ; postivive, negative ,nothing changed ?

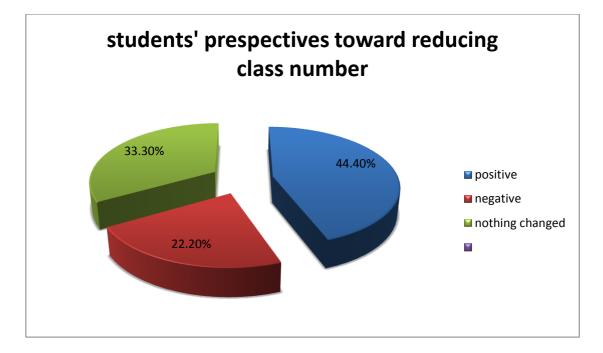


Figure 04 :the presepectives of students toward reducing class number

#### Analysis :

As is it appear in the graph. The majority of the students (44.44%)choose the answer "a", they believe that reducing students number per class is positive, while (22.22%) said that it has a negative impact on them while the rest(33.33%) said that nothing changed .Observing that the majority choose the first option which is positive it is a good sign show that covid-19 health protocol have a good impact .We asked them to justify their choice ,we mention some of their response as follow:

#### For positive :

• because we were just 20 pupils in the class so we were calm and we could concentrate

• because noisy students were in the second group so they could not interrupt us .

• reducing students number is good because the teacher find suitable atmosphere to explain the lesson .

• because the class was not as the last year so crowded because we were 45 students, but after reducing the number our class was so calm.

• it is obvious that reducing number of pupils per class is positive because it improves the quality of learning and the relationship between teacher and learners .

• -it is positive because teachers can work better than in large class .

• because we receive individual attention from the teacher and we interact more than in the past .

#### for Negative :

• reducing students number per class in negative for me because doing activities in groups help me to understand more.

• I think that it is negative because my level did not improved .

• it is negative because when we used to study in large class we learn from each other from making conversation and debate .

• I do not like to study in small group because I like to study through exchanging information with my friend

#### For nothing changed

Here all respondants shre simiar answers, majority of them indicate that they donot have a huge number, 20 students at least, so they were not devided and they study as usual, nothing changed, aslo they do not feel any changes in their performance or their level; still have the same level, they do not observe any improvement.

#### 3.3.5. level of agreement and diagreement

- e. How often your teacher ask you to read a passage ?
- **f.** How often you go to the board and solve an assignment ?
- g. How often your teacher ask you to write a paragrah or a piece of writing ?
- **h.** How often your teacher gives you the chance to speak freely ?

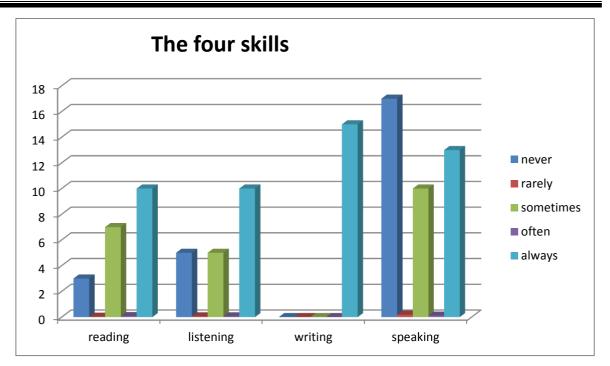


Figure 6 represents the four skill

#### Analysis :

#### How often your teacher asks you to read a passage ?

As it summarized in the obtained result of the first question from the table 07 ,(77.7%) respond with " always" ,(11.11%) answer with "sometimes", while (07.7%) respond with "rarely", and the rest (03.3%) of them answer with "never".as we can observe majority of learners respond with always , which indicate that students always have the chance to read certain passages in the class , this also show that teacher give the opportunity for learners to devolope their reading skills.

#### How often you go to the board and solve an assignment?

According to the statistics in the obtained result of the second question from the graph, the majority (72.2%) respond with "always", (11.11%) answer with "sometimes", and in each of "often", "rarely" and "never" (05.5%) is recorded.

For this question ; the majority of learners answered with always ;thus means students have the chance to solve assignment in the classroom , even though time does not help , but teacher make sure that students go to the board and solve some tasks to better understand .

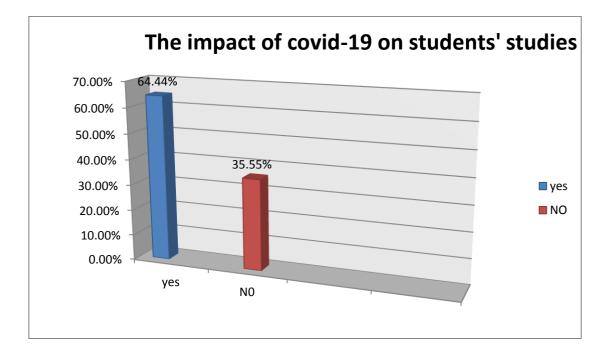
#### -How often your teacher ask you to write a piece of writing ?

As is it shown in the table and the graph most of pupils choose the answer "always", while the rest respond with "sometimes".thus indicate that students have the opportunity to write pieces n essays n paragraphs in the class, also show that teacher makes sure that they improve their writing skills.

#### How often your teacher gives you the chance to speak freely ?

The table above show that (22.2%) represents the participants who respond with "always".(27.7%) among them answer with "often", while (14.4%) answer with "often" .(11.11%) answer with rarely and the rest represents (18.8%) respond with never; from the data and the graph above we can say that majority of learners have the chance to speak, eve, though curcumestances, but students have the chance to speak and interact in the classroom, also this indicates that teacher is careful and makes sure to give learners the chance to interact and to participate and engage in the classroom, thus help learner to build a good communication stategies and improve their speaking skills, also to build a good relationship with teacher.

The table and the figure above show that although teachers face many challenges but they try to involve the four skills.



3.3.7.Do you think that this health protocol helps you as student in your studies ?

#### Figure 7 students' prespectives toward the impact of covid-19 on their studies .

#### Analysis :

The point behind asking this question is to know the effectiveness of this protocol if it is helpful for the students and if it has negative or positive impact on learners achievement. According to the figure above (64.44%) answer with "YES" and (35.56%) answer with "NO". the participants who have answered with "YES" they are concerned to justify their opinions, only few of them were cooperative they said as follow :

• yes this protocol helps me in my studies ,for example when we study just half a day we will not get tiered and we will have a lot of time to rest and to do homework .

• yes I think because they have reduce the curriculum so we did not have a lot of lesson to study .

• yes this protocol helps us to study because we better understand the teachers explanation and we can exchange feedback .

• in my opinion this protocol serves our needs because we were studying in small groups and each one site alone we can listen to the teacher and interact with each other.

from the answers we can say that the health protocol hepl learners in their studies, and it provied a good atmosphere for learners to improve their competencies and potentials.

## 3.3.8 in the future do u prefer to study using this prtocol or go back to the previous system ?

This question was open-ended in which we asked pupils to express their opinions, if they want to study using this protocol or go back to the previous system, the important point behind asking them this question is to see if it serves learners needs during the learning process. the majority of them said that they prefer to study using this protocol as system of education, we can say that it is a good sign .here some answers :

• I wish in the future , the ministry of education apply this protocol as system of education,

because it serves our needs .

• I prefer to study using this protocol next year because it has good impact on my level .

• Î do not like to go back to the previous system because we get tiered from studying the whole day and getting lot of lessons.

• I like to study using this protocol because the class was not crowded ,we studied in suitable atmosphere .

• I prefer to study using this protocol because after the exams I notice that my level is in progress .

#### **5.2. Interview Analysis**

#### 5.2.1 Informants personal data

#### Item 1: gender and duration of teaching

- A) Interviewee 01: female /twenty years of experience
- b) Interviewee 02: female /five years of experience
- c) Interviewee 03: female / seven years of experience
- D) Interviewee 04: female / novice teacher

The participants who took part in the interview were experienced teachers 3 out of 4 teachers are trainee while 1 of them is novice teacher. We also notice that all respondents are females. The interviewees were chosen intentionally since the questionnaire was implemented in the Tabouch Mohamed secondary school, so teachers were chosen automatically.

#### 5.2.2. Section two: informants' perspectives toward covid -19 health protocol

Item 01: do you think that covid -19 affect you pchochologically?

a)Interviewee01: NO, not really

b) Interviewee 02: yes somehow, I felt distracted and confused and even I had phobia

from going out. Even after the lockdown I refused to go out.

c) Interviewee 03: no, personally I had no issues at all. Covid-19 did not affect me

D) Interviewee 04: not at all

The item 01 refers to the answers of on the mental and psychological influence, majority of teachers confirmed that there was no effect on their mental and psychological health; thus most teachers did not suffer from covid-19, while one of the teachers announced that she had psychological problems and that effect on her negatively and had different symptoms like phobia and fear from going out. This impact differ from one to another and that due to the different personalities, each one of the respondents dealt with the pandemic on his way and handle it from different perspectives. And maybe this is the reason why interviewees had different perspectives toward the influence.

Item 02: do you know what covid-19 health protocol is?

<u>a</u>)Interviewee 01: yes of course

**B)** Interviewee 02: definitely

c) Interviewee 03: yes I know

**D) Interviewee** 04: sure

in the item 02 indicate the knowledge of teachers to covid-19 health protocol, cording to the data all the respondents are familiar with covid -19 health protocol and its guidelines, since teachers are an essential elements of the educational process and the school, and since the protocol was applied in schools, so teachers have a good knowledge with the the protocol and the guidelines that consist of it, which is something positive that teachers are aware of this new system that has been applied in educational schools.

Item3: since the new changes in the time table, How many hours you teach per week?

a) Interviewee 01: it depends on the day, sometimes I teach all the day, éthers half a day, other times just few hours a day. But generally 18 hours per week.

**b)Interviewee 02:** for me I have a full time table , every day is full day ; I teach all days , I have no chance for a break , I teach about 20 hours .

c) Interviewee 03: crowded table about 24 hours per week, and sometimes there is a gap between hours, so I wait 2 hours to teach one hour at the evening.

d) Interviewee 04: as a novice teacher, I do not know about the usual time table but I have 17 hours to teach per week.

*Item 03:* express how many hours are Tabouch Mohamed's' school teachers are teaching per week, according to interviewees, Majority of them teach more than 15 hours per week. Maybe that because the changes in the timetable, because classes were divided into 2 groups,

so the number of classes increased. So the pressure for teachers they find themselves teaching extra classes ;thus according to respondents teachers are teaching for a long duration than the usual and aloe there is no organization for the hours , sometimes teachers wait all the half day to teach several hours and other times they teach just few hours a day while there are a crowded days .

Item 04: do you feel exhausted or tired because of this timetable ?

A)Interviewee 01: As I said before, it depends on the day, when I teach all the day I feel tired and extremely exhausted, but when I teach just for a half of a day so I do not feel that tired; but generally 18 hours kind of tired.

**B)** Interviewee 02: it is extremely exhausted for me, wake up early and I do not arrive early to home. I feel tired and unmotivated every day; someday I teach from 8 to 4 in spite the systems of groups but I find myself exhausted more than the usual situations. so for me I feel tired, when I get home I have no desire to do anything except take a rest.

c) Interviewee 03: it is extremely exhausted for me, wake up early and I do not arrive early to home. I feel tired and unmotivated every day; someday I teach from 8 to 4 in spite the systems of groups but I find myself exhausted more than the usual situations. so for me I feel tired, when I get home I have no desire to do anything except take a rest, It's tedious and stressful, imagine repeating the same day for all the weak, you feel unmotivated, less focused and exhausted and you cannot do your job effectively, I find it unfair specially for us as teachers who teach back classes , you made much efforts and energy. In the end of the day I cannot do my familial duties in the right way.

d) Interviewee 04: for me it is kind of normal situation, sometimes I feel tired but usually I do not suffer as my colleagues do, I guess aim a lucky person because I do not have long duration at work and I have breaks also.

item04: indicate the different prespectives of teachers toward the timetables ; majority of teachers feel exhausted and tired because of that time table , according to them those timetables donot serve them at all , it adds another responsabilities and another burdens to them to deal with it . Most of them said that it is exhausting and bring much effort to them .

Item 05: what is your opinion toward reducing students' number per class? And why?

a) Interviewee 01: I think reducing students' number per class is something positive, and negative in the same time .for teachers, personally I like this situation, teacher can deal with the small number, and can perform well with the small number, also learner understand better, but with the reputation for several groups and write the same information on the table it is kind of trying and exhausting which influence on us as teachers.

**b)Interviewee 02:** I think that this group system is quite a good strategy for students' achievement, but still nothing changed at all still students' performance under the level, in the other side teachers who are concerned with the situation, am speaking from my perspectives, I teach 16 groups, I find it tedious to repeat the same content for numerous groups, and write the same information, also to write in the textbook for many times.

c) Interviewee 03: the quality of group systems differ from one to another, I find it both positive and negative, positive because it reduced some difficulties in classrooms like crowded classes, and the destruction and the comprehension of students to the lesson, in the other side it bring new obstacles for teachers, teacher is ordinary person , not kind so extraordinary people, so how we can manage all the tired.

*d*) **Interviewee04:** reducing students' number per class is something positive, it works for me and I find it useful it helps me a teacher and serves learners as well. I would like to keep the the current situation like that.

Item 05 refers to the different perspectives of teachers toward reducing students' number per class, as we can see the opinions differ, majority of teachers agree on the positivity of this group system for students and what how many benefits it brings ; it is quite good for learners because it helps them to study because the small number, they do not feel crowded, also they understand better and interact with teacher belter, moreover they have half a day as break they study day by day, they do not feel exhausted because they have time. Respondents share the same opinions about the negative influence of group system, in spite the numerous advantages, it has disvantages on teachers, it caused the the stress, the psychological pain, and the tired and distraction, so group system represent advantage and disvantage for the teaching and learning process specially for teachers.

Item 06: Does this health protocol suit you as teacher?

A) Interviewee 01: kind of, it suit me if there is changes in it

b) Interviewee 02: NO n it does not

c) Interviewee 03: for me no it does not suit me as teacher, in spite the advantages but it really brings disvantages with it. But it can work if we make remake some changes

d) **Interviewee 04:** I like the new health protocol, and the changes that bring it, I find myself comfortable in doing my job.

item 06 reflect on the question if the covid-19 suit teachers, Most of teachers share the same opinion that indicates that health protocol stress full for them because it influences their performance and their quality of doing their jobs, also it brings new conditions to their lives and impact on their mental and psychological health , But also they agree that it can work if

some changes can be made ; it can work for them if they tried to fix some points in it .

Item 07: does this health protocol provide a good atmosphere for learners?

a)interviewee 01: yes, it does

**b)interviewee 02:** for sure , this health protocol seves students in the right place and provide them a good conditions to study and to perform well .

c)interviewee 03: Definitely, health protocol provide numerpus advantages for students to study and to make efforts and ecven to make a good results.

d)interviewee 04: I find that this health protocol really serves learners in a positive way, it has a lot of advantages, it gives them free time since they study for a half a day, learners are no more leaving school with full tasks and home works they have the time, moreover because the new seating arrangement, they have the opportunity to understadnd better, also because of the small number they focus more .so all that are advantages for this health protocol which serves the student.

item 07 deals with the question if the health protocol represents an advantage for the learner . all teachers 4out of 4 agree on the positivity of this health protocol for the learners , because it brngs a lot of benifites and good charecteristics which aims to make it easier for learner to perform well in his study . this health protocol helps learner in the first place , it provides the time , the comfort and the small number of students in which help to focuse and product well .

item 08 : Do you prefere using this protocol or go back to the previous system and why?

a)interviewee 01 : it is quite hard decission, I really donnot know maybe if there will be some chages concerning the group system and timetable, I would prefere this system.

b)interiewee 02: I would like to go back to the previous system, since its less stressfull and exhausting.

c)interviewee 03: inspite the disvantages, I prefere this system with some changes in it, maybe the increase of teaching jobs and change the timetables.

d)interviewee 04: I prefere this system definitely.

item 08: represents the different prespectives of teachers aon which system they prefer, there were some contradictions in the opionons; some of them perefere the previous system, while other insiste on this system but they recomen with some changes as interviewee 01 she recommended with changes in the time table, while interviewee 03 recommended with the new teaching jobs, she recommended to bring new teachers to provide a suitable balance with students' groups, also some changes in timetable, reducing hours for teachers.

#### 5.3. Observation Analysis:

#### 5.3.1. section 1: observation of the classroom management

### 5.3.1.1. the phisical setting of the classroom was clean, clear and comfortable for the learners

#### **Analysis:**

According to the session that we attended ,the classroom was clean and orgainzed , and the phisical environent was good and promote students to learn because the first step that teachers should take into consideration .

#### 5.3.1.2.the activness and movement of the teacher

#### Analysis:

according to what we observe in the classroom the teacher was not moving around the classroom, the teacher explained the lesson and check for comprehension but without moving around the learners maybe that because of the limite time 45 minutes so teacher don not have time to move around and ask eveyone for their comprehension and understanding one by one, and maybe that affect on students negatively because it plays a vital role in the classroom.

#### 5.3.1.3. lesson design and its objectives

#### **Analysis:**

we noticed that the teacher whome we attended had a specific objectives for lesson to be understood ,also the teacher set up a certain objectivives and a design for the lesson and show that the teacher is aware of what he is doing maybe because she is experienced teacher and she has anough experience in the field so she know how to give information to the learners , and in the end of the lesson the objective was obtained by students.

#### 5.3.1.4. the interaction in classroom

#### Analysis:

according to our perception about interaction between student –students, interaction differ according to the skill to be taught and according to the lesson and the materials used, we noticed that the interaction was excited but not for all students the interaction is not very noticeable, sometimes students feel bored and unmotivated maybe because of the seating arrangement that limited the interaction , also maybe teacher donnot vary in methods and techniques .

#### 5.3.1.5. seating arrangement

#### **Analysis:**

Since the new health protocol was applied in schoools, seating arrangement was changed, we noticed that both teachers and learners are commmitted with the guidelines of health protocol because they change the seating arranemnt, every student seat by himself in the table, and according to what we observe that help student to focuse on their studies, and also bring their materials to study because they know they they seat alone so they have no option exept bring their stuffs, moreover in the observation we recored that the interaction between student student is less than the usual because everyone is seating by himself; that helps teacher to focus on the lesson more than students talks and distruption; thus also students focus on what teacher explain and pay attention to their lessons, so seating arrangement was a successful strategy for the learners' achievent and productivity in classroom.

#### 5.3.1.7. General environment of the classroom

#### Analysis:

The general anvironment of classrom is calm ,good , clear and safe and suitable for both teaching and learning and that what promote both teachers and learners to make more efforts and encourage them to build a good relationship that reflects on the productivity and achievemn, we observed that the classroom was organized in a good way , and the atmosphere was prepared well , but one note that we take into consideration , students are not comitted with social distancing and wearing masks ; we have noticed that majority of them donnot wear masks , and exchange materials and other stuffs .

#### 5.3.2. section two : observation of teachers' productivity .

#### **5.3.2.1.** observation to The methods used by teacher in teaching:

#### Analysis :

teacher prepare leraners for the current lesson with the previous one and relate them, that good for learner because it intressess him and make him engaged in the lesson.

#### 5.3.2.2. observation to the materials used by teacher in classroom:

#### Analysis :

according the obsevation that has been done in classroom, The teacher used one method and limited materials to explain the lesson which is canonsidered as a traditional materials like : students' book , pens , white board , while there are many different materials to use like data Show and games , songs audios ..... and so on .those materials are great ways to provide information and to deal with the different preferences of leraners . but majority of teachers do not use those methods they focus on just one method ,according to what we observe the teacher used one method to explain lesson and to provide information and does not change or use different methods , that may influence students negatively because learners have different learning styles every one learn through different way ,so using the same method for several times make learners feel bored and unmotivated and does not enhance their creativity and skills , the main purpose behind not using that kind of methods because time does not help teacher to use them , also the limited resources of schools , and the time and efforts that needed to use them ; maybe that are the main reasons why teachers do not vary in using materials and techniques , in the other hand that may influence learners' critical thiking and capacities and desire to learn .

#### 5.3.2.2. the interaction between students and teacher:

The interaction between students and teachers is noticeable and exist, we note that learners participate and interact with teacher maybe because of the good atmoshpere of the classroom and the good seating ,learners interact and participate and ask questions and they were motivated to study , teacher works collaboratively because collaborative learning is an approach that encourages students to be engaged in the learning process. In the light of the adaption of covid -19 health protocol , some collaborative activities like group works and peer work were eliminated but teacher adaopted other way , give the opportunity for leaners to do activities collaboratively in terms of games and correct together on the board ,through this way teacher build a good realtionship with students and check for their comprehension and understanding , also maybe due to the small number and seating arrangement which helps to provide a suitable atmosphere for both teachers and learners to make a good intercation in the classroom .

#### 5.3.2.3 the dominante centered

#### Analysis:

the classroom is a combination of learners and teachers and their interaction and relationship, according to what we note the dominant centured is 40% learner and 60% is teacher, because it differ according to the lesson and according to the skill to be taught. but generally there is kind of balance between teacher and learner interaction but in some skills teacher centered is the dominant

#### 5.3.2.3. observation to the time

#### Analysis:

for the time 45 minutes is not enough for both teachers and learners .

teacher does not have anough time to explain , and write , and to check learners' comprehension , and even to to do activities .shortening the time for the course is not enough for 45 minutes to explain the lesson and do the activities in same time , and because of the limited time some activities were done directly on the board .

teacher are dealing with information in quick way ;thus means that teacher does not have the time to take time to deal with each part and give it the right time . teacher is obliged to give a quick review and quick explanation to the learner , and sometimes time is not enough even for one task .

#### 5.3.3. section three: observation of learners' achievemnt:

#### 5.3.3.1. observation to the learners' learning styles:

#### **Analysis:**

In the observation of learners preferences, the data show that there are multiple learning pereferences, we noticed that some learners like to take notes while teachers is explaining which helps them to understand, while others perefer to see the the information in terms of pictures ;the rest like to hear the teacher what he said and focus on it. so the classroom is a combination of different learning styles that need to be taken into consideration by the teachers .in spite that fact that teacher does not provide different methods to meet the different needs of learners , but she tried to adopt different activities that help each of them to

understand according to his pereference which is a good way to enhance ther comprehesion and understanding.

## 5.3.2. observation to the learner desire and motivation , and the comfort of the environment

For learners motivation, we find out that motivataion does exist, learners were ready to learn, and ask question they interact and participate and ask for extra information which is something positive, they have the deisre to study and to make efforts. For the comfort of students, health protocol as a new system provide a suitable and scomfortable atmosphere for learners to show their capacities and comptencies and to perform well.

#### 6. General Discussion of the Findings:

The research findings show the impact of covid-19 health protocol on the productivity and achievemnt on both teachers and learners in Tabouch Mohamed secondary school.

This chapter was conducted with the analysis of the research findings about the influence of new health protocol . the questionnaire was directed to students of Tabouch Mohamed high school . after analyzing the responses of the learners, The descriptive statistical method that was used to analyses the questionnaire results, shows that most respondants agree on the productivity of this health protocol and its importante for them as learners , this latter provide a good and comfortable setting for learners to perform well and to achieve a good results.the results that was obtained from quetionnaire ans so observation helped us in finding out some main points for students that health protocol was usefull and helpful for them .and through interviews that was conducted to teachers , and through the data and finding that was obtained from the interview and observation as well ; we find out the this health protocol as it had advantages , in the other side it had disvantages that influence on teachers suffered from the time tables and long durations at work , moreover teacher find himself strussfull and damaged pschologically and even cannot do his regular job.

So as a result Covid-19 health protocol is a coin that has two sides side which has numerous advantages for learners, and in the other side it has disvantages for teachers, so it serves learners and does not serve teachers

#### 7. Limitations of the Study:

This study has met a number of obstacles that should be considered.

#### **CHAPTER THREE**

• Due to lack of time, the researcher was also unable to access to all teachers from different schools.

• Due to the unpredictable situation, there have been a series of strikes in schools .so there was no access to all students .

• The semi-structured interviews did not take the required time because , teachers were to busy finishing the rest of the syllabus perior the exams.

- The researcher could not implement his case study on all schools .
- Time was not enough .
- Since the topic is original and new, there was not mush sources to rely on them.

#### 8. Suggestions and Recommendations .

Based on the findings of our research, we make the following recommendations in order to stimulate further reasearch

- government should make a special committees to oversight schools and make sure that students are in a good environment

- prevent all educational parts from going in schools without masks and respect social distancing .also make a severe punishement for those who controverts the laws

The adoption of health protocol as long term educational system and implemnt it in all educational insitutions

- Reducing teaching hours for teachers .

- Change 45 minutes to 1 hour for every session, because 45 minutes is not enough.

- The increase in teachers' job positions, bring more teachers who are in need for job so there will be a certain balance between teachers and number of groups.

-Make three terms intead of two terms for the whole year .

-Keep the group system with the seating arrangement.

## General Conclusion

#### **General conclusion**

This research attempted primarily to examine the influence of covid-19 on the productivity and the achievement of teachers and learners . the study was targeted to direct the teachers and learners 'attitude and perspectives toward this health protocol and

the influence of health protocol on the productivity and achievement. This dissertation sought to discover the influence of health protocol on the teaching and learning process, and how its impacted .The study aimed to investigate teacher and learners are performing using this health protocol .this research findings gives a clear view about the impact of this health protocol, according to the findings of the study, the new health protocol seems to encourage learners' performance and productivity and even autonomy, while in the other side it influences teachers' performance in a negative way ,it influences teachers' achievement. In the third chapter in our dissertation we deals with the analysis of this research finding about the questions in the survey. the questionnaire was directed to students of secondary school Tabouch Mohamed, also semi structured interview was directed to the teachers of the same school .after analyzing the responses of young people, the descriptive statistical method that used to analyses the questionnaire and the interview results, for students results show that most respondents find that health protocol is a good strategy to enhance their learning and to improve their competencies and their potentials, majority of learners agree on the positive outcomes of this health protocol .for teacher, the resulted data indicate that the majority of teachers agree on the negative outcomes of covid-19 health protocol .Also from the resulted obtained from the observation helped us to to take clear idea about the total impact on both teachers and learners, the result highlights some important points teachers are doing their baestt to meet the need of learners, but in the shadow of the pandemic and the adoption of health protocol teacher find himself stressed and distracted because of the new changes that occur in the classroom .The new health protocol does not suit the majority of teachers because it gives burdens to them and a lot of obstacles to deal with them, whereas in the other side it brings comfort and provide a good setting for learners to To unleash their skills and improve their performance. Consequently, covid-19 health protocol is a coin with two faces ; positive face and negative one .Through the process of investigation, the research hypothesis was confirmed for the learners 'achievement and denied for the teachers' productivity, the study highlights some points for the improvement of this health protocol and the improvement of the educational system.

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# Appendices

#### Appendix 1

#### **Questionnaire in English**

#### 10.1. Students' questionnairre

#### Questionnaire

#### The impact of covid -19 health protocol on students' achievement.

Dear students,

This questionnaire serves as a data collection tool for a research work that aims to investigate the impact of covid-19 health protocol on students' achievements. Your answers are highly appreciated and be assured that your identity will be kept strictly confidential. Thanks Beforehand.

#### **Part I:Personal Information**

1-gender
Male
Female
2-level : 3 year high school
3- school name :
Part I :students' psychology
4- do you wear masks and respect the social distancing ?
Yes No
5- Since the outbreak of the pandemic did you feel anxious or afraid ?
Yes No
6- Do you think that covid-19 effect you psychologically?
Yes No
If yes, how ?
7- Did you experience any psychological symptoms during lockdown? like( depression ,
phobia, stress)
Yes No
If yes mention them
Part III: Health protocol and students' productivity
8- Do you know what is covid-19 health protocol and what are its guidelines?

### Appendix

<b>9-</b> Does thi to study?	s nearth protocor pr	ovide suitable atmosph	ere	
Yes [	No			
	if	No	,why	
10- Do you 1	hink that reducing	students' number per c	lass is;	
<b>10-</b> Do you t A. Positive	hink that reducing	students' number per c	lass is;	
-		students' number per c	lass is;	

11\_Please indicate your level of agreement or disagreement with each of these statements.

г

	N ever	Ra rely	Someti mes	O ften	Alw ays
2. How often your teacher asks					
you to read a passage					
3. How often you go to the					
board and you solve an					
assignment? 4. How often					
your teacher gives you the chance to speak freely?					
5. How often your teacher ask you to write a					
piece of writing?					

12- Do you think that this health protocol help you as a student in your studies ?

Yes No 13- If yes,How ? ..... 14- In the future do you prefer to study using this protocol r go back to the previous system? Justify your choice?

.....

Thank you for your cooperation

Appendix 02 10.2. teachers' semi-structured interview Section one : informatns personal data Item 1:gender and duration of teaching a) Section one : informatns personal data Item 1:gender and duration of teaching b)Section two: informants presepectives toward covid -19 health protocol Item 01: do you think that covid -19 affect you pchochologically ? ..... Item 02: do you know what is covid-19 health protocol? ..... Item 4: since the new changes in the time table , How many hours you teach per week? ..... ..... ..... Item 05: do you feel exhausted or tired because of this timetable ?

Item 06 : what is your opinion toward reducing students' number er class ? and why ?

item 07: does this health protocol provide a good atmosphere and comfort to the learners ?

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item 08 : Do you prefere using this protocol or go back to the previous system and why?

observation :

School : Tabouch mohamed secondary schoolNumber of students : 20studentsobserver : Bakhti and yagouniClass: 3 rd year of foreign languagesTeacher : Laaradj dounia

Section one : observation to the classroom setting and the general environment in classsroom.

	Yes	NO
the phisical setting is clean, clear, orgainzed and comfortable for		
learners		

Teacher and learner respect the social distancing and wear masks	
The classroom is noisy	
Teacher move around tables and check learners' comprehension and understanding	
Teacher set up clear objectives for the lesson	
Teacher and learners respect the Seating arrangement according to the guidelines of covid -19 health protocol	
The interaction between learners is present	
the classroom provide a good atmosphere and environment to study	
The general environment enhance learners' desire to study	

#### Section two : Observation to the teacher ' productivity in classroom

	Yes	No
Teacher make a connection between previous lesson and the current one to grap learners' attention		
Teacher use different techniques and materials to explain lesson for different students, and to meet their needs		
Teacher interact with learners, if learners participate		
Teacher talks all the session without giving the chance for students to speak		
Learners speak and have the chance to interact and intrpret with teacher and participate		
Teacher have the time to explain the lesson and do the activities with learners		

Section three : observation to the learners'achievemnt.

	Yes	No
Classroom is a combinition of different learning perefeences		
Learners participate and make efforts		
Learner are motivated to study		
Learner are comfortable to study in scuch environment and with the new system		

#### Abstract

This outbreak of covid-19 poses serious challenges to education systems around the world. educational institutions shutdown over fears of the virus spreading in schools. So,It was therefore agreed to open schools and return students in the adoption of the COVID-19 health protocol. The present study attempts to investigate the impact of the covid-19 health protocol on teacher productivity and student achievement, This study adopted a mixed- method approach that includes qualitative and quantitative methods. Two data collection tools were used: a questionnaire, delivered to number of students of Tabouch Mohamed secondary school ,and an interview for the teachers in the same school . As well as the observation in classroom. The findings indicate that the health protocol serves learners in a positive way wherase it affect teachers in a negative way .

Keywords: Covid-19, health protocol, E-learning, Education, students

#### Resume

Cette épidémie de covid-19 pose de sérieux défis aux systèmes éducatifs du monde entier. fermeture des établissements d'enseignement par crainte de propagation du virus dans les écoles. Il a donc été convenu d'ouvrir les écoles et de renvoyer les élèves dans l'adoption du protocole sanitaire COVID-19. La présente étude tente d'étudier l'impact du protocole de santé covid-19 sur la productivité des enseignants et les résultats des élèves, Cette étude a adopté une approche de méthode mixte qui comprend des méthodes qualitatives et quantitatives. Deux outils de collecte de données ont été utilisés : un questionnaire, remis au nombre d'élèves du lycée Tabouch Mohamed, et un entretien aux enseignants du même établissement. Ainsi que l'observation en classe. Les résultats indiquent que le protocole de santé sert les apprenants d'une manière positive alors qu'il affecte les enseignants d'une manière negative.

Mots clés : Covid-19, protocole sanitaire ,E-learning ,Education , eleves

#### ملخص

يفرض تفشي مرض كوفيد -19 تحديات خطيرة على أنظمة التعليم في جميع أنحاء العالم. إغلاق المؤسسات التعليمية بسبب مخاوف من انتشار الفيروس في المدارس. لذلك ، تم الاتفاق على فتح المدارس وعودة الطلاب في اعتماد بروتوكول كوفيد الصحي. تحاول الدراسة الحالية تقصي أثر البروتوكول الصحي كوفيد -19 على إنتاجية المعلم وتحصيل الطالب ، وقد اعتمدت هذه الدراسة منهجًا مختلطًا يتضمن الأساليب الكمية والنوعية. تم استخدام أداتين لجمع البيانات: استبيان تم تسليمه لعدد من طلاب مدرسة تبوش محمد الثانوية ، ومقابلة للمدرسين في نفس المدرسة. وكذلك الملاحظة في الفصول الدراسية. وتشير النتائج إلى أن البروتوكول الصحي يخدم المتعلمين بطريقة إيجابية حيث يؤثر على المعلمين بشكل سلبي

الكلمات المفتاحية: كوفيد -19 ، بروتوكول صحي ، تعليم إلكتروني، تعليم، تلاميذ ،