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The Online learning Experiment in the Intermediate and Secondary Schools in Lebanon during the Coronavirus(COVID-19) Crisis

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ABSTRACT: This study aims at finding out if the online learning was a success or a failure in Lebanon during the Coronavirus crisis (COVID-19) in the intermediate and secondary schools. Additionally, the study aims at determining the leading reasons that led to considering the online learning experiment successful by some and those that led to considering it a failure by others. Through the random sampling technique, the sample of the study was formed of 46 schools principals, 666 teachers and 746 students for a total of 1476 respondents reached via an online survey. For statistics, double entries tables and tables of frequencies and percent were used. Results have revealed that most of the respondents considered the online learning as a failure in the intermediate and secondary schools. The diversity of the explanation techniques, such as usage of educational videos, teacher's ability to teach online, the good communication between the teacher and his students, and students' commitment to participate were the main reasons that led some to consider the online learning a success, while the slow internet connection, the electricity outages, students' lack of participation and not having more than one phone or laptop at home were the main reasons that led others to consider it as a failure.The researchers have recommended the teachers to embrace teaching online and start adapting to teaching differently at a distance when they find themselves in a need to do so. By following the preventive measures, they were also recommended to divide their students into groups and assess them inside them school. Students were recommended to fully participate to make the online learning successful in Lebanon. Parents were recommended to endorse the teachers and play a vital role in making sure that their children continue learning through their smartphones, social media, laptops or any other technical instrument available. Finally, the Lebanese government was recommended to provide the electricity and a good internet service capable of enabling the students to learn at a distance, otherwise the online learning will remain catastrophic.

KEYWORDS: Online learning, teaching at a distance, participation, communication, smartphones, social media, laptops.

I.INTRODUCTION

Background of the study: Teaching online emerged in Great Britain in the 60s and at that time, the television and the radio were the only two main instruments provided for the online teaching process. The "National Council for Distance Education", that was established during those times to add to the authenticity of teaching online, was converted later on in 1982 to the "International Council for Distance Education" to enable it receiving great financial support from the International Development Bank(Atallah & Bou Melhem, 2020).

The online teaching process depends on the existence of spatial boundaries that separate the teacher from the learner, as well as on multiple communication media that help creating new patterns that serve the educational system as much as possible despite the existence of many economic and social problems(Atallah & Bou Melhem, 2020).

In the current era, thanks to the rapid development in technology, online learning has taken its rightful spot in education. Many courses nowadays are taught online. Certificates, BA, master and PhDs degrees are earned online, something that was impossible to achieve decades ago(Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

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Many universities embraced the concept of teaching and learning online. They started offering online classes to students at far distances. These students were able to register in their dream university and complete their courses online at a time they weren't capable of reaching the campus (Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

By time, the number of courses given online at a flexible time started to increase gradually. These courses were provided in almost all subjects and tailored to suit the schedules of the learners. Even more, students were capable of registering in universities on different continents, attending the online classes live, participating in discussions or watching the sessions at a later time. Due to that, the number of participants started to increase and the online learning became a viable alternative to studying inside the campus (Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

More importantly, universities made sure that their students received the self-motivation support during the online sessions in the same way they would have received on campus. EBooks, journals, videos, recorded/live sessions, quizzes and discussion forums were assembled for the benefit of reaching a fruitful online learning experience. Phasing away from the physical text book and embracing the eBooks and cutting-edge technical online resources became the focal point of any online experiment (Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

The eBooks and the journals are written materials needed for almost every course. Students have to dedicate some of their time to read them and understand what is written inside. They are an easy medium for students to reach as they can access them through their tablets, desktops, laptops or phones (Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

The videos and recorded lectures are an essential way capable of providing a large amount of information during a specific limited time. Students can watch these lectures from their bedroom if they wish to do so at any time. Reviewing them multiple times and taking notes is extremely helpful for students to better understand the content (Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020)

All those electronic resources pushed some universities to go further in their online classes. They distinguished the resources provided most suitable for a course or a major. It is a fact that students who are registered in a Biology major learn differently than those who are registered in the Art-History major. For that, resources were needed to be distinguished and classified according to students' major of study (Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

Now, despite endorsing the online learning in all possible ways, intellectually, morally and physically, achieving a true interactive online learning session remains its biggest challenge. The interaction between the students and the teachers through discussion forums and questions-answers sessions are a must for a successful online experience, otherwise it won't be beneficial for many students (Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

Assessing students is one of the many challenges capable of hindering a successful online experience. Many say that it is impossible to assess students' understanding of the content online; andwhile some agree with that, others don't (Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

The teacher can individually assess his students' understanding at a predetermined time. In addition, he can send assignments to them to finish and send them on a deadline. Exams are the most relevant way to assess students' understanding(Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

Unfortunately, students are able to cheat in online exams much easier than we can think. For that, some instructors demand proctoring their students during the exam virtually through installed cameras or any other possible tool to prevent them from cheating (Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

The thing is that the online learning does not mean an easier way of learning. Institutions should adhere to the excellence standards required for a successful online experience. Fortunately, some institutions reached the Excellency level of online learning as they can provide their students with the content and the interaction required for a great online learning environment, in addition to ensuring that cheating is almost impossible during the online exams (Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

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Despite that achievement, online learning still faces many obstacles worldwide. Many concerned students fear that their institutions cannot ensure that their needs are met online in all areas. The absence of student-instructor/teacher interaction is a main concern for these students because watching recorded sessions without that interaction is not enough for them to fill their needs (Guthrie, Yiu, Butterworth, Guthrie, & Aery, 2020).

Moving forward to 2020, due to the Coronavirus crisis, schools were shut down in more than 177 countries all over the world. According to the UNESCO, The United Nations Educational, Scientific and Cultural Organization, 1.3 billion student, approximately 72.4% of the students registered in schools and universities, were forbidden to attend their regular daily classes (Al iimyan, 2020).

This pandemic caused a rational change in the way teachers teach and students learn. Teaching and learning inside the classrooms were not options anymore, so everyone resorted to the distance learning platforms. Additionally, the provision of e-learning instruments became also a major priority for all countries to ensure continued online education (Al iimyan, 2020).

In the Gulf counties, many schools and universities took an unprecedented trend in adapting to the online learning despite its relying on teaching in classes since their inception. These educational institutions were supported by their governments that reacted quickly to the situation and started providing alternative educational instruments through the E-learning platforms and TV channels (Al iimyan, 2020).

The government of the Saudi Arabia provided the students with more than 20 televised channels with a comprehensive educational system and a channel on the YouTube platform to ensure facilitating the online educational process. In the Emirates, more than 42 000 teachers were trained through a free workshop entitled “How to become an online teacher in 24 hours” (Al iimyan, 2020).

On the third of March 2020, the Coronavirus forced all students in Lebanon to be locked inside their houses. Solutions needed to be taken to save the school year. Teaching inside the classroom was not an option anymore and alternative solutions were needed to be taken into consideration.

In a point of fact, Lebanon does not recognize university degrees obtained by students abroad through distance learning and rejects their equivalence with the Lebanese University. For that, teaching and learning at a distance, especially in schools, were never tested before as most Lebanese schools still rely on the traditional teaching approach through which students sit in class and receive the information provided by the teachers(Atallah & Bou Melhem, 2020).

At first, the social media platforms and networking sites were considered as an alternative solution for teaching inside the classroom. Unfortunately, it failed in achieving this task because many failed to realize that these platforms and networking sites can revolutionize the way we teach but not replace it(Muller, 2016).

Next, Zoom and the Microsoft teams were relied on to replace teaching inside the class. Sessions were recorded and uploaded for students to download and watch. Live sessions were provided regularly as much as possible. Despite that, many considered this attempt to be a failure because of the weak internet connection and the lack of 24/7 electricity in the majority of the Lebanese regions.

Some teachers thought differently. These teachers uploaded their recorded sessions for students to watch and take notes after which they interacted with them through the WhatsApp groups. Others prepared PowerPoint presentations and sent them to students through the WhatsApp groups to study and take notes after which they interacted with them through the same groups at a predetermined time. These teachers found this way to be the easiest, most reliable and suitable for online teaching with the lack of electricity and a good internet connection.

Some schools opened their classes virtually through the Google Classroom from 8:00 am till 15:00 pm. Students were asked to attend their sessions virtually as if they were attending them normally. Through his computer, the teacher was present in front of his students backed up with videos, notes and exercises (Kadi, 2020).

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Those who were aware of the requirements of online teaching indicated that it is completely new in Lebanon. Most of the Lebanese students and teachers are not used to it because it is not integrated in the curriculum in any form. Additionally, no previous circumstances, like the Coronavirus here, forced using it(Kadi, 2020).

That is why many students nagged about their lack of understanding not only because of the bad and slow internet connection but also because they have not grown accustomed to be taught online(Kadi, 2020).

Additionally, unlike those who grasp knowledge easily, some students need the help of their teacher during the learning sessions. It is a reality for many students that communicating with the teacher through the e-mail is not effective in replacing the student-teacher interaction (Kadi, 2020)

Each school started operating according to its ability because not all of them were at the same level despite the difficult situation and the chaos caused by the Coronavirus crisis. Some schools went forward successfully with teaching online because they were already well equipped, while other administrations asked parents to print out the homework and lessons for students to work on their own due to the lack of strong internet service and the absence of electricity for many hours during the day (Kadi, 2020)

In spite of this difficult situation, those who were in charge at the ministry of education stated that the online teaching in Lebanon was addressed to keep students focused on their studies as much as possible during the Corona crisis (Atallah & Bou Melhem, 2020).

The school year in Lebanon was terminated by the mid of June 2020, and at the end of this online experience we find ourselves asking about its success and failure according to the opinions of the teachers, students and schools principals. Additionally, we find ourselves asking about reasons behind its failure when it failed and reasons behind it success when it succeeded.

Theoretical Framework: A theory is defined as a set of ideas, statements or principles related to a certain subject. Usually, it describes, explains and predicts a phenomenon, and answers questions associated with that phenomenon, such as why something is happening now or is going to happen later on(Picciano, 2017).

Theories of learning are meant to help us understand how people learn by taking into consideration their social status, psychological state, multiple disciplines and educational background, and of course the neuroscience, the scientific studies of humans' nervous system (Picciano, 2017).

Behaviorism, cognitivism and social constructivism are three of the major learning theories out of which a number of theories, like the Online Collaborative Learning theory, derived from (Picciano, 2017).

The Online Collaborative Learning theory (OCL) was initially proposed by Linda Harasim in 2012. It focuses on the internet connection that facilitates learning at a distance and provides adequate learning environment that can foster collaboration and knowledge construction among students (Picciano, 2017).

The Online Collaborative Learning theory (OCL) was derived from the social constructivism theory through which students collaborate to solve a problem. Facilitating students' knowledge building is essential in this learning environment. Despite that, teacher's knowledge about his subject material and the content he is presenting is a critical factor in hindering or making such environment a success (see Figure 1)(Harasim, 2012).

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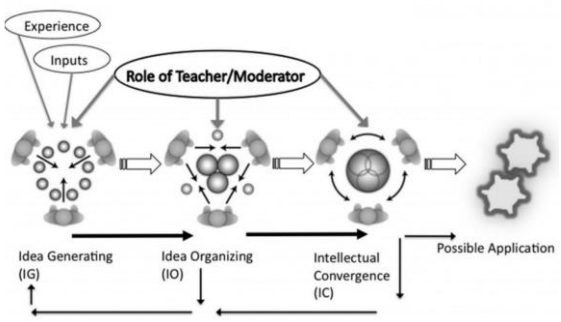

Figure 1 : Online Collaborative Learning Theory (Harasim, 2012).

According to this theory, moving from traditional to online teaching and learning through the internet connection has many benefits. Students can construct their knowledge through three phases: idea gathering, idea organizing and intellectual convergence (Picciano, 2017).

The idea gathering is the brainstorming phase through which students' divergent ideas are gathered and converged. The idea organizing is the second phase through which students argue, discuss, compare, analyze and categorize their ideas. Finally, the intellectual convergence is the phase through which students agree, barriers are dissolved and broader answers are found to important questions (Picciano, 2017).

Although gathering, organizing, analyzing, valuating and creating ideas cannot truly be finished for any learner, the end result of this learning environment is ensuring students' integrating the concepts of a certain subject material (Harasim, 2012).

Speaking of realities, ensuring a fruitful online learning environment is hard and sometimes impossible due to our inabilities in overcoming certain factors. Despite that fact, Terry Anderson examined the possibility of building an effective online learning theory in 2011 (Picciano, 2017).

According to Anderson (2011), online learning is more flexible in time and space than the situated-based learning associated with a campus or a school classroom. Community-centeredness, knowledge-centeredness, learner-centeredness, and assessment centeredness are the four main lenses that underlie the foundation framework approach of Anderson's effective online learning theory (Picciano, 2017).

The community-centered learning environment promotes expectations, collaboration and critical inquiry. It fosters new forms of learning by encouraging students in learning. Here, it is more favorable for students to take a risk and give a false answer than to remain calm and answer those that they are sure about (see Figure 2)(Kroll, 2020).

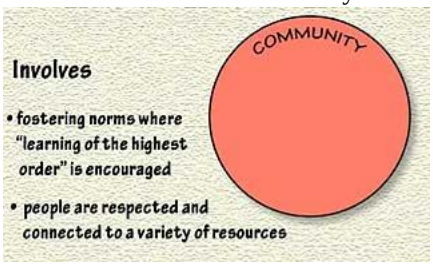

Figure 2 : The Community - Centered Learning Environment (Tyler, Brown, & Miller, 2020).

The knowledge-centered learning environment provides rigorous content and introduces ideas, facts, principles and concepts at the right time when there is a need to do so.Here, learning makes sense, students are

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respected and connected, and they should be prepared to ask questions, understand the content they are taught to build their knowledgerather than simply memorizing it(see Figure 3) (Tyler, Brown, & Miller, 2020).

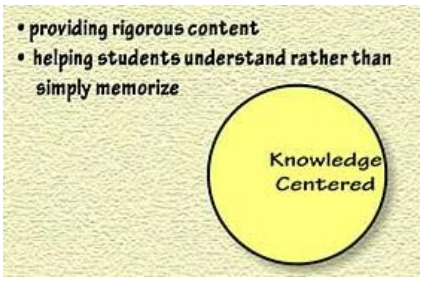

Figure 3 : The knowledge - centered learning environment (Tyler, Brown, & Miller, 2020).

The learner-centeredness, also known as the student-centered learning, is a teaching approach in which the learner is the center of the learning environment. He becomes responsible about his learning while the teacher is responsible for facilitating the learning process (Smith, 2017). Thus learning environment is moved from being directed by the teacher to being directed by the learners (see Figure 4) (Tejada, 2016).

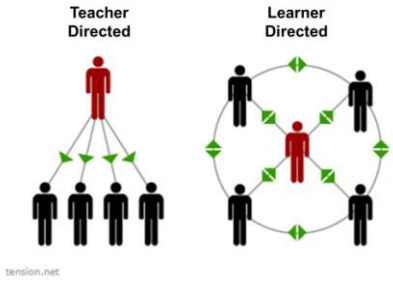

Figure 4 : The Learner - Centeredness (Tejada, 2016).

The assessment learning environment revolves around teachers creating opportunities for each student to meet predetermined high standards, and despite these high standards, all students are expect to succeed. Frequent opportunities for a feedback, reflection and revision present the teachers with valuable information not only for students' assessment but also for a better learning environment (see Figure 5) (Tyler, Brown, & Miller, 2020).

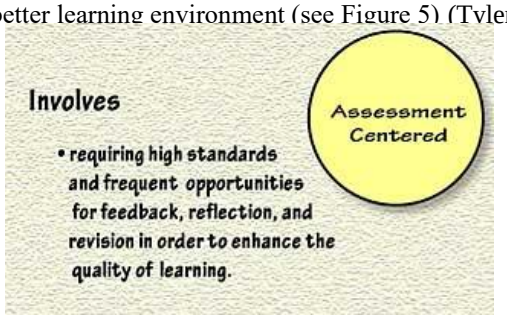

Figure 5 : The AssessmentLearning Environment (Tyler, Brown, & Miller, 2020).

Anderson (2011) proposed his own model for the online learning (see Figure 6). Though, he separated the community/collaborative models from the self-pace instructional ones because they are incompatible by nature (Picciano, 2017).

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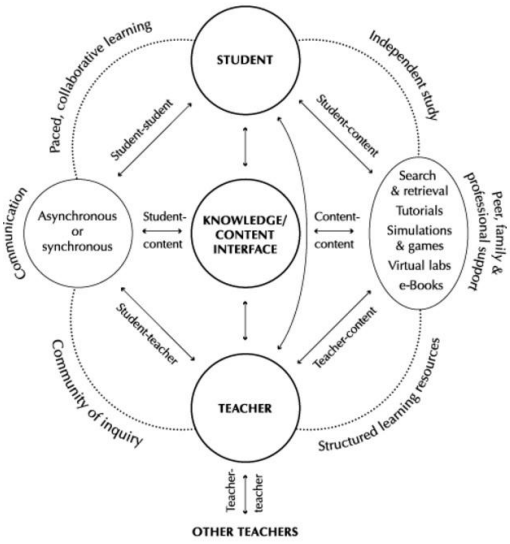

Figure 6 : Andersons'Online Learning Model (Picciano, 2017).

The community/collaborative models require extensive interactions among the students and the teacher to scale up, while the self-pace instructional ones revolve around students' abilities and responses to instructions. They are constructed in a way that students move on from one topic to another according to their own speed (Picciano, 2017).

In a community/collaborative model, students can interact and collaborate online with each other or their teachers at a synchronous or asynchronous durations. In this part, students and teachers interface by interchanging knowledge about a certain content. Additionally, teachers can do the same with other teachers(Picciano, 2017).

In the self-pace instructional model, students interface with the content and learn independently. Each one can take the time he needs and set up his own schedule instead of working within a well structured environment by a teacher(Butcha, Mugleston, & Ellis, 2020).

Researches, tutorial videos, games, virtual books, e-books are used to present the students with different learning styles, and while one student could be starting, another one could be almost done with a given task. Students here are able to review the same material multiple times to memorize it even better and improve their performance independently from their colleagues(Butcha, Mugleston, & Ellis, 2020).

Purpose of the Study: The aim of this study was to enlighten on the online learning experience in Lebanon during the Coronavirus crisis. Additionally, through its sample, this study has aimed at determining the percent of students/teachers/schools principals who believed that online learning was successful and the percent of those who believed that it was a failure. Finally, this research has aimed at determining reasons behind the success of the online learning when it succeeded and reasons behind its failure when it failed.

Significance of the Study: This study has added to the literature by revealing what happened during the use of the online learning in Lebanon for the first time ever and providing reasons behind its success and failure according to the experience of teachers, students and schools principals.

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Research Questions
According to the answers of the schools principals, teachers and students in the sample of the study:

1. Was the online learning successful in Lebanon during the Coronavirus crisis?
2. What were the reasons that led to considering the online learning a success by some?
3. What were the reasons that led to considering the online learning a failure by some?

Limitations of the Study: This study has had three limitations to deal with. First, parents were not included in the study because not all of them are not directly associated with teaching and learning like the schools principals, teachers and students. In addition to that, many of them did not have faith about teaching and learning online, so they completely ignored it and preferred staying aside. Second, students at the primary level were also excluded from the study because they are not able to answer the questions of the online survey adequately. Finally, it was not possible to reach all schools principals, teachers and students in all different regions in Lebanon. That is why the researchers were able to reach no more than 1476 answers thanks to the online survey assigned for this study.

Delimitations of the Study: Teachers, students and schools principals contributed in validating the results of this study by first answering the questions of the online survey adequately on their own terms and then sending it to their colleagues at different and far Lebanese regions. As a result, the researchers reached 1476 answers, an ideal number of answers for any quantitative study because it exceeds 200 (Panditharathna, 2015).

II. LITERATURE REVIEW

Over the years, online learning rose and became a trend for many to adopt. The online courses became extremely popular among students to use, especially those who were at a far distance from their universities or those who were forced to skip classes for different reasons. Fortunately, these students are able to use these online resources at a later time and catch up what they have missed live (The Dexway Team, 2020).

Even more, students could rely on these online resources and use to learn in between their commitments and responsibilities at any time they wished to do so. Whether they were home, in a car, on a bus, in a coffee shop or even in their comfort zone, students could simply log on and experience the benefits of the virtual learning environment (The Dexway Team, 2020).

More importantly, in nowadays, many students are relying on learning online instead of campus based-classroom based learning approach. These students are serious about improving their understanding, gaining new skills and acquiring new information. That is why they keen on enrolling in courses that are most effective in helping them doing so (The Dexway Team, 2020).

Like any other phenomenon, some supported the online learning approach while others were against it. Those who supported it indicated that students can learn through the online learning approach way much better than the traditional one because of its many electronic resources(The Dexway Team, 2020).

Attaining students' concentration during the lectures or the learning sessions, especially those of lengthy durations, is extremely hard for any instructor/teacher. Here, the online learning approach is more advantageous than the traditional one because its E-resources are capable of holding students' attention for lengthy periods. Additionally, teachers can assess their students more frequently. They are able to track down the progress of their improvement and aid them whenever they need to do so(The Dexway Team, 2020).

In an important note, students who work to pay their fees are most likely to skip many class sessions. The online learning approach provides them with many resources they can rely on to learn at any time, even during their lunch break if they wish to do so (The Dexway Team, 2020).

Despite that, many claim that the online learning approach has many disadvantages. In class, teachers can give their students direct feedbacks and they are able to resolve their problems through the face to face interaction. Through

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motivation, these personal feedbacks ease students' learning process, make it richer and more significant(Tamm, Fakhri, Martisiute, & Lee, 2019).

Unfortunately, providing students with these personal feedbacks is still relatively weak in the online learning approach. Researches are needed in this area and it may take time for it to be proven effective(Tamm, Fakhri, Martisiute, & Lee, 2019).

Moreover, many stand up against the online learning approach because they believe that students are isolated socially when they resort to its electronic resources. According to them, there is no student-student interaction and those who spend too much time teaching or learning online are most likely to suffer from a lack of human communication in their lives. They may lead to them suffering from stress, anxiety, and even negative thoughts that should be addressed by experts (Tamm, Fakhri, Martisiute, & Lee, 2019).

Even more, many believe that the online learning approach is not suitable for everyone. Time management skills and strong self-motivation are required for a successful E-learning experience. In class, students receive feedbacks from their teachers and peers, interact with them according to a predetermined schedule, work as a team, grow their communication skills and be pushed whenever they are needed to be(Tamm, Fakhri, Martisiute, & Lee, 2019).

Online, students may be left to hold on to themselves to stay on track without anyone urging them, and they may fail to manage their time to keep up with regular deadlines(Tamm, Fakhri, Martisiute, & Lee, 2019).

Additionally, cheating through various methods is one of the biggest weaknesses in the online learning approach. Teachers cannot proctor their students the same way they are used to do in class. Detecting cheating is hard even with a video camera because the teacher has to check each student alone at a time during the exam. Unfortunately, this fact may lead to poor assessment and a fraudulent exam results (Tamm, Fakhri, Martisiute, & Lee, 2019).

Focusing on theory rather than practice is another disadvantage for online learning. Reason behind it is because implementing a practical project requires significantly more preparation than presenting a theory online (Tamm, Fakhri, Martisiute, & Lee, 2019).

Beside the aforementioned disadvantages, not being suitable for all materials remain the biggest obstacle standing in the face of the online learning approach. Many consider this type of learning to be more suitable for humanities and social sciences studies rather than scientific materials such as engineering and medical sciences simply because they require more practices than theories; and while things may change in the future, we are still at a point where online learning cannot level up to the benefits of an autopsy for medical students or real life industrial training for engineering students (Tamm, Fakhri, Martisiute, & Lee, 2019).

After what was said, for online learning to become authentic and effective as much as the traditional one, standards should be set up and schools should be qualified to live up to these standards. Criteria should be presented, credited platforms should be assigned, and adequate training should be offered for teachers/instructors to reinforce their poor online teaching skills (Tamm, Fakhri, Martisiute, & Lee, 2019).

Between the traditional and online teaching and learning approaches, and those who were against or with, a famous Huanan sea food market in the Wuhan city in China was infected by the Coronavirus disease (COVID-19) in December 2019; and while many debated about it origin (Cennimo, et al., 2020) everyone agreed about shutting down most schools and universities for everyone's safety in an attempt to contain the spread of this pandemic(UNESCO, 2020).

There are many different kinds of the Coronaviruses. COVID-19, the newly identified type of the Coronaviruses, is considered as a pandemic because it causes respiratory illness and can very easily spread among humans. Coughing, having a sore throat, a headache or a nausea, losing smell or taste, feeling fever, chills or pains in the body muscles, dealing with shortness or difficulties in breathing, vomiting and staying fatigued are the most common symptoms for COVID-19 (Sauer, 2020).

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With this imposing reality, schools were shut down all across the world. The number of learners enrolled at the pre-primary, primary, middle schools, and the secondary level who were impacted by national schools closer worldwide increased significantly from less than 0.3 billion in February 2020 to 1.38 billion in March of the same year (see Figure 7) (Li & Lalani, 2020).

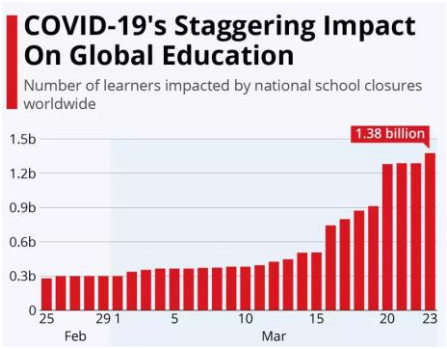

Figure 7 : Impact of COVID 19 on Global Education (Li & Lalani, 2020).

As a result of that, education had no choice but to change dramatically. E-learning emerged in a strong way as many digital platforms were relied on to enable students and teachers continuing their classes virtually (Li & Lalani,

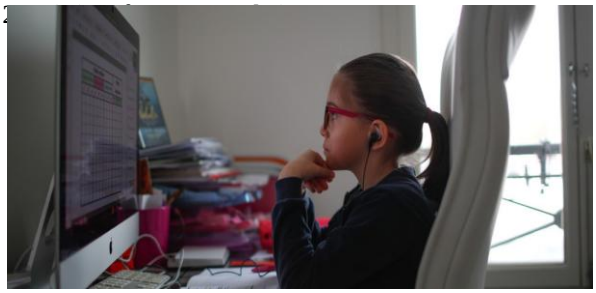

Figure 8 : Learning online (Li & Lalani, 2020).

Figure 9 : Learning online (The Dexway Team, 2020).

With the sudden shift from teaching and learning inside the classes, some questioned continuing relying on the online learning after the end of the COVID-19 pandemic and its impact on the worldwide educational systems(Li & Lalani, 2020).

Despite these questions, global investments in E-learning peaked up to reach 19.66 billion dollars in 2019 before the COVID-19 pandemic, and it is estimated to reach 350 billion dollars by 2025; and while this disease has negatively impacted the world in the worst case scenario possible, there has been a significant rise in using the E-learning platforms all over the world during the crisis(Li & Lalani, 2020).

While some schools relied the free access service of many E-platforms, others formed unique partnerships with many software companies to provide their students with best platforms capable of enabling them learning at a distance outside their classes; and while many believed that this speedy and unplanned move to online learning will result in a bad taste of experience for both teachers and students because they are not trained and qualified for it, others, like Wang Tao, the vice president of Tencent Education, truly believe that a new hybrid model of education of future significant benefits will be emerging(Li & Lalani, 2020).

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Due to this pandemic, integrating technology in education has further been accelerated and the online learning will ultimately become a component of school education as many have been touting its success ever since(Li & Lalani, 2020).

Why? Because many university professors and school teachers were able to reach their students scattered across the regions by texting them, chatting with them through groups, and meeting them via online videos. For that, many believe that the traditional and the online teaching approaches can go hand to hand in the future, which will be beneficial for the students and the teachers at the same time (Li & Lalani, 2020).

Despite the support and the bright image that started to surround the online learning, real challenges are out there to overcome. Certainly, students without a reliable internet service will suffer from the online digital experience rather than benefiting from it. To make thing worse, till these days, many students worldwide do not own a desktop computer or a laptop. This issue has yet to be solved in many countries(Li & Lalani, 2020).

For example, while students in Norway, Switzerland and Austria use personal computers for their school work, 34% of students in Indonesia do so, and only 25% of students aged 15 with different disadvantaged backgrounds have a computer to work on in the United States of America. For that, instead of receiving proper education, those who do not have the right technical support will be negatively affected by the online learning(Li & Lalani, 2020).

While some might not care about solving the aforementioned issues because they have grown accustomed to traditional teaching, some researches showed that students retain between 25% and 60% of what they were taught online compared to only 8 to 10% of what learned in class (Li & Lalani, 2020).

Why? Because students can go back to the online sessions to listen to the discussions, read the content on their own pace and navigate between the presented concepts according to how it suits them. Studies have shown that we learn better when we have fun and when our senses are in a state of complete impact; and this can be achieved through the various features of electronic platforms capable of motivating students to participate in learning, which may result in making them falling in love with learning (Li & Lalani, 2020).

It is clear that the Coronavirus crisis has disrupted and altered many educational systems. In his book entitled "*21 Lessons for the 21st Century"* Harari (2018) assured that schools keep on focusing on traditional academic skills instead of the critical thinking and adaptability skills, the ones more important for students' future and careers. Here we have to ask ourselves if moving to online learning will be the catalyst we need to create a new and a more effective teaching method for our students; and while some are still skeptical about moving forward, others have started making plans to make e-learning part of their educational system (Harari, 2018).

If there is one thing we have learned from this pandemic, then spreading knowledge across the regions is a must in all cases; and if the online learning approach is capable of doing so, it is incumbent that all of us figure out its full potentials and benefit from it (Li & Lalani, 2020).

III. METHODOLOGY

Design of the Research: Through its descriptive design, a research of quantitative approach doesn't start with hypotheses. It develops them from the data collected and analyzed(CIRT;, 2015). Additionally, the random sampling technique is usually implemented when the population targeted by a study is extremely large (Bhat, Adi;, 2019).

Based on that, the random sampling technique was adopted to select the students, teachers and schools principals from different Lebanese regions to form the sample of the study. Therefore, through its quantitative approach, this research has aimed at finding out if the online learning was a success or a failure in Lebanon, despite being used for the first time with the lack of technical requirements and the knowledge background. Additionally, it has aimed at revealing reasons that led some to consider the online learning a success and reasons that led others to consider it as a failure.

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Research Instruments: For their study, the researchers have used a 5 point-likert scale online survey of four main questions. The online survey developed specifically for this study was modified multiple times and then validated by a professor in higher education, a math coordinator and a head of deputies both with master degrees.

The first question was used to distinguish the students from the teachers and schools principals who participated in filling the survey.

The second question addressed finding out if the online learning experience in Lebanon was considered successful or a failure.

The third question addressed determining reasons that led to the success of the online learning by some, while the fourth question addressed determining the reasons that led to its failure by others.

Each of the participants had to select only one answer for each of the first two questions and more than one answer for each of the third and fourth questions if he wished to do so. Notably, seven reasons were addressed for the success of the online learning by some and equally seven other reasons were addressed for its failure by others.

	A Survey about the Online Teaching in Lebanon
1. Identify yourself, You are :	**a.** A school principal
	b. A teacher
	c. A student
2. During the Coronavirus pandemic, was the online learning experience successful in Lebanon?	**a.** Yes
	b. No
3. Some may consider this experiment to be a success. What are the reasons that led them to this belief? (More than one answer can be selected here)	**a.** Students' commitment to participate
	b. Teacher's adequate evaluation of his students
	c. The good communication between the teacher and his students
	d. Teacher's ability to teach online
	e. The diversity of the explanation techniques, such as usage of educational videos
	f. A fast internet service
	g. A good digital environment to study
4. Some may consider this experiment to be a failure. What are the reasons that led them to this belief? (More than one answer can be selected here)	**a.** Students' lack of participation
	b. Teacher's lack of experience in teaching online
	c. Students' lack of motivation
	d. A slow internet connection
	e. Electricity outages
	f. Not having more than one phone or laptop at home
	g. No room in the house dedicated for teaching online

IV. DATA COLLECTION PROCEDURE

The online survey remained open for filling for two weeks through a link sent by the WhatsApp platform to schools principals, teachers and students. As a result of this way, the survey was filled by 1476 participants.

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V. DATA ANALYSIS

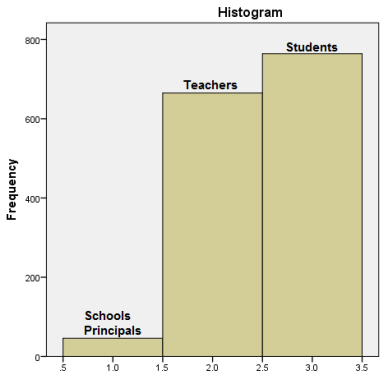
At the end of the two weeks, the researchers collected the data and imported it from the Excel Spread Sheet into the Statistical Package for the Social Sciences (SPSS) to analyze it.

Table 1: Descriptive Statistics for the Identity of the Respondents (Frequency and Percent)

Identifyyourself, You are:		
	Frequency	**Percent**
A school Principal	46	3.1%
A Teacher	666	45.1%
A Student	764	51.8%
Total	1476	100%

According to the table here, 56 schools principals, 665 teachers and 764 students have participated in the study.

Chart 1: Bar Diagram for the identity of each of the respondents



The schools principals, the teachers and the students who participated in the study were represented by the bar diagram above. The schools principals who participated in the study are less counted than the students and the teachers, and this is due to the fact that the number of schools principals is generally lesser than that of teachers and students

Table 2: Descriptive Statistics for the Success/Failure of the Online Learning in Lebanon during the Coronavirus Crisis (Frequency and Percent)

During the Coronavirus pandemic, was the online learning experience successful in Lebanon?		
	Frequency	Percent
Yes	322	21.8%
No	1154	78.2%
Total	1476	100%

According to the table of frequency and percent above, 322 participants believed that the online learning was successful in Lebanon during the Coronavirus crisis, while 1153 participants believed it was a failure.

Chart 2: Bar Diagram for the Success/Failure of the Online Learning in Lebanon during the Coronavirus Crisis

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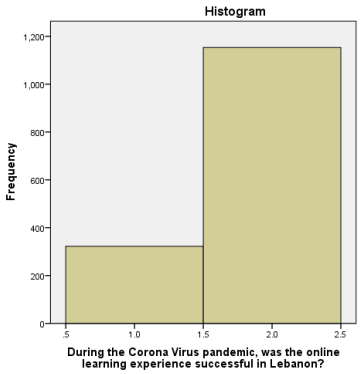

According to the above bar diagram, the largest number of participants believed that the online learning in Lebanon was a failure during the Coronavirus crisis.

Table 3: Double Entries Table for the Success/Failure of the Online Learning in Lebanon during the Coronavirus Crisis According to the Identity of the Respondent (Frequency)

	During the Coronavirus pandemic, was the online learning experience successful in Lebanon?	
	Yes	No
Identity of the Respondents		
A school Principal	5	41
A Teacher	181	485
A Student	136	628

The double entries table here has revealed that only 5 schools principals (10.87%) out of 46, 181 teachers (27.18%) out of 666 and 136 students (17.81%) out of 764 believed that the online learning experience was a success in Lebanon.

More importantly, the double entries table has revealed that 41 schools principals (89.13%) out of 46, 485 teachers (72.82%) out of 666 and 628 students (82.19%) out of 764 believed that the online learning experience was a failure in Lebanon.

Table 4: Descriptive Statistics for the Reasons that Led to considering the Online Learning as a Success by Some (Frequency)

What were the reasons that led to considering the online learning a success by some?	
	Frequency
Students' commitment to participate	404

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Teacher's adequate evaluation of his students	182
The good communication between the teacher and his students	526
Teacher's ability to teach online	530
The diversity of the explanation techniques, such as usage of educational videos	920
A fast internet service	182
A good digital environment to study	205

According to the table of frequency above, with 920 counts, the diversity of the explanation techniques, such as usage of educational videos, is the main reason that led to considering the online learning a success by some.

This reason was followed by teacher's ability to teach online, the good communication between the teacher and his students, and students' commitment to participate with 530, 526 and 404 counts respectively.

Finally, a good digital environment to study, teacher's adequate evaluation of his students and having a fast internet service were the least counted with 205, 182 and 182 counts respectively.

Table 5: Double Entries Table for the Identity of the Respondents and the Reasons that Led to considering the Online Learning a Success by Some (Frequency)

	Identity of the Respondents		
	A School Principal	A Teacher	A Student
Reasons that Led to considering the Online Learning a Success by Some			
Students' commitment to participate	23	159	223
Teacher's adequate evaluation of his students	3	55	124
The good communication between the teacher and his students	25	267	234
Teacher's ability to teach online	19	304	207
	28	454	438
The diversity of the explanation techniques, such as usage of educational videos			
A fast internet service	15	69	98
A good digital environment to study	5	83	117

The double entries table here has revealed that according to the opinions of the schools principals, teachers and students who participated in the study, the diversity of the explanation techniques, such as usage of educational videos is the leading reason for considering the online learning a success by some.

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The result of table 5 here conforms to that of table 3. Meaning that the schools principals, teachers and students in the sample of the study agreed on considering the diversity of the explanation techniques, such as usage of educational videos as the main reason for the success of the online learning.

Similarly to the results of table 4, the schools principals, teachers and students agreed that teacher's ability to teach online, the good communication between the teacher and his students and students' commitment to participate are factors that followed in making the online learning a story of success.

Also similar to the results of table 4, a good digital environment to study, teacher's adequate evaluation of his students and having a fast internet service were the least significant factors in the success of the online learning experiment by the schools principals, teachers and students.

Table 6: Descriptive Statistics for the Reasons that Led to considering the Online Learning as a Failure by Some (Frequency)

What were the reasons that led to considering the online learning a Failure by some?	
	Frequency
Students' lack of participation	1020
Teacher's lack of experience in teaching online	675
Students' lack of motivation	805
A slow internet connection	1326
Electricity outages	1248
Not having more than one phone or laptop at home	1015
No room in the house dedicated for teaching online	823

According to the table of frequency above, with 1326 counts, a slow internet connection is the main reason that led to considering the online learning a failure by some. This reason was followed by the electricity outages, students' lack of participation and not having more than one phone or laptop at home with 1248, 1020 and 1015 counts respectively. Finally, having no room in the house dedicated for teaching online, students' lack of motivation and teacher's lack of experience in teaching online were the least counted with 823, 805 and 675 counts respectively.

Table 7: Double Entries Table for the Identity of the Respondents and the Reasons that Led to considering the Online Learning a Failure by Some (Frequency)

	Identity of the Respondents		
	A School Principal	A Teacher	A Student
Reasons that Led to considering the Online Learning a Failure by Some			
Students' lack of participation	37	543	439
Teacher's lack of experience in teaching online	33	273	369
Students' lack of motivation	34	368	403

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A slow internet connection	45	592	689
Electricity outages	44	540	664
Not having more than one phone or laptop at home.	42	534	439
No room in the house dedicated for teaching online	28	382	413

The double entries table here has revealed that according to the opinions of the schools principals, teachers and students who participated in the study, a slow internet connection is the leading reason for considering the online learning as a failure by some.

The result of table 7 here conform to that of table 6. Meaning that the schools principals, teachers and students in the sample of the study agreed on considering the slow internet connection as the main reason for the failure of the online learning.

Similarly to the results of table 6, the schools principals, teachers and students agreed that the electricity outages, not having more than one phone or laptop at home and students' lack of participation are factors that made the online learning a failure.

Also similar to the results of table 6, not having no room in the house dedicated for teaching online, students' lack of motivation and teacher's lack of experience in teaching online were the least significant factors in the failure of the online learning experiment by the schools principals, teachers and students.

VI. CONCLUSION AND HYPOTHESES

Conclusion

Results of the study have revealed that the online learning experiment was considered as a failure by most of the schools principals, teachers and students in the sample of the study. At the time these results cannot be generalized, some people considered the online learning successful while others opposed to that.

According to this study, the researchers have concluded the diversity of the explanation techniques, such as usage of educational videos, teacher's ability to teach online, the good communication between the teacher and his students, and students' commitment to participate were the main reasons that led to considering the online learning a success by some.

Additionally, the researchers have concluded that a slow internet connection, the electricity outages, students' lack of participation and not having more than one phone or laptop at home were the main reasons that led to considering the online learning a failure by others.

Hypotheses

Based on the answers provided by the answers of the 1476 respondents in the online surveythe researchers hypothethized that:

H_1: The online learning experiment failed in Lebanon during the Coronavirus crisis

H_2: The diversity of the explanation techniques, such as usage of educational videos, teacher's ability to teach online, the good communication between the teacher and his students, and students' commitment to participate were the main reasons why some people considered the online learning a success story.

H_3: The slow internet connection, the electricity outages, students' lack of participation and not having more than one phone or laptop at home were the main reasons why other people considered the online learning a failure.

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VII. RECOMMENDATIONS

For the teachers

- It is a fact that teaching online was a sudden shock for many teachers who were not prepared for it and who are used to teaching in class since they their start. Despite that, many teachers tried teaching online in the best way possible.

  While others considered the online learning as a way to keep students focused, they fail to realize the importance of moving forward with our teaching methods. The traditional teaching approach cannot be relied on during the 21st century crises, like COVID-19 here.

  Leaving the traditional teaching approach is not a possibility right now because the current curriculum still relies on it. Despite that, it is a must to employ the instruments provided by this era of technology in a way that enables the teachers teaching their students outside the classes.

  There is no escape from training for online teaching and relying on the smartphones, the social media platforms and networking sites, the tutorial videos, the PowerPoint presentations, the Microsoft teams, Google classroom, Zoom and many others to ensure continuing teaching and learning during the hard times.

  Teaching online creates innovation and opportunities to develop new skills (Nielson, 2011). For that, teachers are recommended to leave the shell they have been living in, gain new skills and start adapting to teaching differently at a distance when they find themselves in a need to do so.

  More importantly, some teachers refuse teaching online because they cannot assess their students adequately. These teachers believe that the online exams are not valid and cannot be relied on because students can cheat in different ways.

  While this belief is true and backed up by the literature of this study, in hard times, like the COVID-19 here, it is possible to divide our students into groups and assess them through exams inside the schoolby following the preventive measures; and while this might put more load on the schools principals and the teachers, it is the most suitable way that forces the majority of students to deal with the online learning seriously.

For the students

- For many students in Lebanon, online teaching is a joke. They do not take it seriously simply because they have grown to learning inside the classrooms. Believing that teaching and learning take place inside the class only is an obsolete fact.

  Like many teachers, students must dump that belief. The good communication and their commitment to participate are and will always be main reasons in making the online learning a success in Lebanon.

For the parents

- While some considered the online learning in Lebanon successful, most principals were depressed because the parents did not aid them during that hard time. This is due to the fact that many parents are not accustomed to this new kind of approach.

  They have grown used to teaching and learning inside the class and they believe that their children should be taught and learn in the same way. This belief is not true anymore in our era because teaching and learning can be moved from the in between of the classroom walls to the outside.
  For that to happen adequately and properly, parents should endorse the teachers and play a vital role in making sure that their children continue learning through their smartphones, social media, laptops or any other technical instrument available.

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For the Lebanese Government

- Unfortunately, the majority of the respondents considered the online learning experiment in Lebanon during the Coronavirus crisis a failure; and while this study has revealed many teachers/students/parents' factors that contributed to this failure, others were associated with the living conditions of these learners.

  The slow internet connection, the electricity outages and not having more than one phone or laptop at home were the main reasons behind that failure.

  While it might not be possible to provide the students with another phone or a laptop, the Lebanese government is hereby recommended to at least provide the electricity and a good internet service capable of enabling the students to learn at a distance, otherwise the online learning will remain catastrophic.

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