# College of Language and Communication – Media Department (Alexandria). The Effects of E-Learning on students' Academic Achievement

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### الملخص:

يركز هذا البحث على تأثير التعلم الإلكتروني على مستوى التحصيل الأكاديمى للطلاب. يحلل البحث سلوكيات الطلاب تجاه التعلم الإلكتروني وما إذا كان الانتقال الأخير داخل أنظمتهم التعليمية قد أثر عليهم سلبًا. والأهم من ذلك، أن هذا البحث يسلط الضوء على أنماط التعلم المختلفة التي يتعلم الطلاب من خلالها، كما أنه يتناول الاحتياجات التي يجب على المدارس والكليات الاعتراف بها ودراستها بشكل مناسب من أجل تنفيذ مناهجها عبر الإنترنت وفقًا لذلك.

يحمل البحث مزيجًا من الأساليب الكمية والكيفية التي من خلالها يتم قياس عدد الطلاب المتأثرين سلبًا بالتعلم الإلكتروني، وسيتم الاعتماد على المقابلات المتعمقة للتعرف على التجربة الشخصية لأولئك الموجودين على الجانب الأخر من إجراءات التعلم من أساتذة الجامعات والمعيدين.

تمثلت عينة الدراسة في: الطلاب وأعضاء هيئة التدريس بالأكاديمية العربية للعلوم والتكنولوجيا والنقل البحري (الإسكندرية) - فرع ميامي. وذلك بالاعتماد على عينة عمدية قوامها 100 مفردة من طلاب الأكاديمية. واستخدمت الدراسة في إطارها النظري نظرية التعلم الاجتماعي. وجاءت أهم النتائج كالتالي: خلص إلى أن 87٪ من المبحوثين يشعرون بشجاعة أقل وإحباط للتعلم عبر الإنترنت بدلاً من الذهاب إلى الكلية، كما أشار نسبة 76٪ من المشاركين في الاستطلاع بأنهم يشعرون بالتحدي بسبب المطالب التي تأتي مع التعلم الإلكتروني مثل توفر الأجهزة عالية التجهيز، وباقات الإنترنت باهظة الثمن، وتشغيل الكاميرات أثناء الجلسات عبر الإنترنت. وأخيرًا، يعد دمج التعلم الإلكتروني في الأنظمة التعليمية في مصر ذا فائدة كبيرة لكل من الطلاب والأكاديميين على الرغم من المقاومة المستمرة مع التحول المفاجئ في المعايير التعليمية التقليدية.

#### **Abstract:**

This research focuses on the effects of E-Learning on students' academic achievement and psychological wellbeing. The research analysis students' behaviors towards E-Learning and whether the recent transition within their education systems has affected them negatively. Most importantly, this research sheds light on the different learning styles by which students learn that need to be gratified cognitively, as

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well as it addresses how schools and colleges must acknowledge and study them coherently in order to implement their online curriculums accordingly. Furthermore, this research examines not only the experiences of the students with online education, however it discovers that of the faculty staff members as well.

**Keywords:** E-Learning, internet disconnection, anxiety, User difficulties, data bundles, learning styles

### - Introduction

The unexpected rise of Covid-19 resulted in a complete shut to schools all around the world, as it obligated people to remain quarantined under lockdown for an accordingly long period of time. Consequently, education has changed drastically, and took an unforeseen turn. Here began a distinctive surge in the usage of E-Learning through digital platforms. Whilst countries currently are at different levels regarding their Covid-19 infection rates, there is presently a significantly large number of children in numerous countries worldwide affected by schools' closure due to the pandemic. Moreover, with the sudden shift away from classrooms many of students, parents and academics question the degree of efficiency distance learning retains. Additionally, whether the adoption of E-Learning will continue to strive and linger post pandemic, and how a shift as such could impact the education worldwide in the future. The effects of E-Learning on students' academic achievement have been a topic open for debate more than ever since the rise of the pandemic Covid-19, and are considered now as a subject of controversy. Without a doubt, E-Learning benefits not just students but individuals of all ages with all sorts of interests and needs looking to be gratified. Its platforms vary, starting from streaming a YouTube tutorial on all the "how to do-s", all the way to prepping for masters or PHDs via online courses. However, many students have suffered with the procedure they must follow to accomplish an unchallenging, successful, and smooth learning operation; needless to mention the stress that comes with learning the given curriculums at hand. Therefore, efforts made by schools and higher institutes of learning to implement a suddenly changed and largely unfamiliar method of education in a short period of time, must be recognized and examined.

#### Research Problem

Since the schools' shutdown, students feel as though they are at strife with their learning procedures, as they find themselves stressing more than they are learning and benefitting from their curriculums. "1.2 billion children in 186 countries are affected by school closures due to the pandemic" (World Economic Forum, 2020)<sup>1</sup>. Most students around the world find it difficult to learn through a soulless screen and maintain the same level of interest and engagement they would have inside of a classroom. Therefore, face to face interaction is crucial within any process of assimilation as it is undeniably required for a successful learning experience to take place. With the lack of traditional learning styles, students enrolling in courses that are mainly based on practical trainings, believe they are not gaining the education they sought and signed up for. For instance, subjects like Mathematics or statistics are almost impossible to fully grasp and learn through an online method no matter how highly efficient it may be. College majors such as Media and Mass Communication are likewise, in the sense that students need practical teaching methods and practices in studios on campus. As a result, the overall academic achievement of students enrolling full semesters of five to seven subjects at once, can hardly be sincerely and accurately measured. Additionally, this often leaves the students in unfair positions with unjust gradings. Nevertheless, problems that occur whilst logging into the servers provided by E-Learning platforms as well as interchanging variables so simple as the house power shutting down, ironically has the power to limit students as it causes them to miss lectures or even an exam. In conclusion, E-Learning must be well studied and developed by researchers and academics for guarantying youths the best outcomes and learning experiences.

### **Research Significance**

- ➤ This research's core focuses on the wellbeing of a student's intellectual mind, learning experience, process of assimilation and progress of attainment.
- ➤ The previously mentioned factors are exceptionally important and essential in deciding the future of students who faced a fatal

transition with their education and learning norms to a sudden digital landscape, unlike those before them.

- ➤ It is safe to say that students who retained education with no world crisis intervening with their chance at getting the best learning outcomes, may just be a better contribution to the working market in all its fields than students of today.
- It is pivotal to uncover the possibilities of the extent to what that assumption might be true. "E-Learning is stressful and irritating" (Lawson, 2020)2. "Werra" another pre-medical student adds "It's stressful in the sense that the workload is more than it would be in person since the classes are more self-paced, It gets stressful at times, not wanting to keep up and doing other things" (North Texas Daily, 2020)3.
- ➤ In the light of students' complaints from different countries, schools and levels of education, ministries of education along with the cooperation of researchers and psychologists must form a well-established plan with new standards and criteria that fit with the current changes the world has to accustom to.

### - Research Objectives

- 1- Exploring the impact of E-Learning on students' academic achievement
- 2- Discovering the most effective practices in teaching and delivering the closest learning experience there is to a normal classroom during familiar circumstances.
- 3- Examine students' academic progress and wellbeing via using elearning.
- 4- Discuss the negative variables of E-Learning.
- 5- Explore the difficulty that comes with demanding expensive, highly equipped devices to keep up with E-Learning platforms such as Zoom and Microsoft Teams.

### <u>Literature Review</u>

### - The Effect of E-Learning Approach on Students' Achievement

According to a study done by the University of India, E-Learning has achieved greater efficiency than traditional learning. It carried so in terms of understanding, remembering, and applying skills. This to many of the students

who find E-Learning to be complex and challenging will come as a surprise, especially so for an *experimental* group of 30 students proved that there was a significant *inc*rease in gain in achievement and enhancement of students' attainment of Mathematical skills. The main results of the experiment conclude that E-Learning was of noticeable positive effect on the students. (Thabet, et al., 2014)<sup>4</sup>.

### - User difficulties in E-Learning System

As appose to the unexpected results concluded by that research, another study conducted by a conference on Science in information technology presents precisely what students struggle with in E-Learning. Ramadiani's research shows that the difficulties faced by students and educators exist primarily within the communicativeness of the interface, along with or followed by self-assessments. In addition to that, the technical issues that appear with the login pages and servers which are considered the least difficult to deal with in contrast to the uneasy learning process that subsists through technology. (Ramadiani, et al., 2016)<sup>5</sup>

### - E-Learning Challenges Faced by Academics in Higher Education

As stated by The Journal of Education and Training Studies, the challenges of E-Learning can be divided into 5 categories. Those five classifications face both teachers and students as they revolve around learning styles, culture, pedagogical E-Learning, technology, technical training, and time management challenges. This paper emphasizes the importance of the fact that students have a variety of learning styles, which not only need to be met but *studied* to reach every student's intellectual mind. Consequently, this comes as a challenge and as a serious issue to academics and staff as they are required to understand the different learning styles and provide based upon them an innovative learning environment. (Islam et al., 2015)<sup>6</sup>

### - Best Practices for Designing and Teaching

In agreement with *The Perfect Online Course: Best Practices* for *Designing and Teaching* the book, **engagement** and **interaction** simply are key in distance E-Learning. This study investigated all types of interaction that students perceive as important and essential, for their E-Learning. The interaction attributes that were delved into with this

study incorporated content interaction, conversation, collaboration, interpersonal and metacognitive skills. (Brande, 2010)<sup>7</sup>

### - Online Courses in Colleges

Similarly, the Public Policy Institute of California states that since online courses enrollment in California's community colleges totaled almost *one million*, representing about 11% of the colleges' total enrollments; participation and the level of achievement which students acquire by the end of the online course must be focused upon, recorded and given more attention. This study examined the students' outcomes and found that the short-term results were poor, however the long-term were not. Furthermore, students' outcomes were weak and unfavorable in online courses as appose to results of traditional courses on campus.

The researchers discovered that students are less likely to complete an online course or score a passing grade taking it. Moreover, they found that lower course success rates were amongst all types of students, over a wide range of subjects and across almost all colleges. (Johnson et al., 2015)<sup>8</sup>

### - E-Learning & The student experience

Research draws an in-depth study of how students feel about E-Learning. Remarks from understudy assessment of an e-learning module on an MSc in Information Technologies and Management, to build up an image of their point of view on the experience. Surveys that collected some essential quantitative information and a rich crease of subjective information were managed. General inquiries on fulfillment and disappointment distinguished the models that understudies utilized in assessment. (Gilbert, et al., 2007)<sup>9</sup>

### - Effects of e-learning on students' motivation

Study emphasized that E-learning has a huge job in guidance of understudies in advanced education, so the goal of this examination was to explore the strength of the connection between e-learning and understudies' inspiration among understudies taking an interest in exploration. This exploration was directed in Tehran Alzahra University. In general, the results of this investigation have affirmed

that e-learning is a component which influences understudies' inspiration. A survey was applied to gather information from understudies of Tehran Alzahra University. (Harandi, 2015)<sup>10</sup>

#### - Communication in education.

In Dr. Dawn's research it was proven that communication is very important in education as to deliver the information successfully you must have a strong communication and body language with students. The study revealed that students need interaction between their professors in order to keep motivated. This makes online learning challenging that some students, especially introverts, tend to keep silent in online classes as they feel unsatisfied. Therefore, contacting your professor in his office, school, college etc., helps majorly. Developing the student–teacher relationship is important in the education system. (Dawn, 2005)<sup>11</sup>

# - E-learning Depression, anxiety, and stress symptomatology among students during COVID-19 quarantine

Dr. Fawaz discussed that the E-Learning process is being adopted from the whole world since the pandemic of Covid-19 and this process is causing stress and anxiety to most students. His study aims at evaluating the amount of depression, anxiety, and stress among University students. Learning through online platforms has given a rise to depression and anxiety disorders among undergraduate university students, where there was a significant correlation between student satisfaction and prevalence of depression, anxiety, and stress. (Fawaz, et al., 2020)<sup>12</sup>

### - How does distance education compare with classroom Instruction?

Bernard analyzed how people can compare online education with face to face education. Some students perform poorly in the online education process, not all students know how to communicate throughout a screen. Some students need to meet their professors to have a good successful learning. (Bernard, et al., 2004)<sup>13</sup>

### - Theoretical Framework

The social learning theory is pivotal in understanding how people learn

as well as it focuses on the creation of the best environment for learning to occur in. It indicates that people learn by observing other individuals whom they perceive as credible and knowledgeable. Additionally, it emphasizes that when behavior is reinforced or rewarded it tends to be repeated and adopted by the observer (McLeod, 2016)<sup>14</sup>. People learn through observation, reading, hearing, and watching. Those are essentially what the principles of the social learning theory consist of. "Learning" is a very complex process that is heavily influenced by several factors. Observation, imitation, and modeling are key in any process of assimilation (Bandura, 1997)<sup>15</sup>. The relationship between the social learning theory and E-Learning exists in the assumption which suggests that E-Learning is a social process. Nonetheless, the ordinary process of social learning is indeed affected by the environment and the interactions people have amongst one another.

#### - Scoop of Usage

Entirely like E-Learning, this method too is a social process for it is built upon observing teachers who are recognized as reliable and trustworthy. Also, it heavily depends on the environment, interactions and engagement present within the students and teachers. Finally, and undoubtedly the 4 principles of the social learning theory which are attention, retention, reproduction, and motivation can all be linked and applied to all aspects of the process of E-Learning.

### - Methodology

This research carries a merge of both quantitative and qualitative methods by which one method will measure the number of students negatively affected by E-Learning, as well as it will highlight the challenges that are ever-present in the process of assimilation affiliated to learning through technology. Additionally, a qualitative method will be used to delve into the personal experience of those on the other side of the learning procedure from college professors and teacher assistants, as it will explore their point of views and test whether or not they have the same concerns as those of the students.

#### - Society of the Study

The population targeted of this study is the students and the teaching staff members of the Arab Academy for Science, Technology &

Maritime transport (Alexandria) - Miami branch. The survey built on this research shall reveal the attitudes, viewpoints and feelings of the students enrolled in the colleges of the branch of Miami. Moreover, shedding light on the teaching staff and their involvement in E-Learning within this study is of no less importance than determining the students' take on the drastic transition they had to face with their learning.

#### - Sample type and size

This research uses a Non-probability sampling method which is (convenient sampling). The study conducted a survey as a quantitative method, As for the sample size, it was calculated to be 100 students, in addition to In-depth interviews with 5 staff members of the faculty of Language and Communication in the AAST as a qualitative research method.

#### Research tools

The research uses both a survey and In-depth interviews to conduct data. A survey conducted from 100 students is used to investigate the characteristics, behaviors, or opinions of the students in the AAST, Alexandria. The research's survey questions main goals are to conclude how students feel about E-Learning, as it provides them with the chance to suggest ways to better options in E-Learning to enhance their learning procedures. The qualitative In-depth interviews aim to delve into the personal experiences of the teaching staff with E-Learning and explore perspectives on their end.

### - Research Variables

Independent	Dependent
E-Learning	Students' Achievement

#### - Operational Definitions

**Definition of E-Learning:** E-Learning is a system based on formalized teaching with the use of technology and electronic resources (The Economic Times, 2021)<sup>16</sup>. Additionally, E-Learning is associated with network enabled transfer of skills and knowledge as well as the delivery of education is received by a large number of recipients

simultaneously. "Stress and trauma can interrupt cognitive processing, reduce students' executive functioning skills, and disrupt emotional regulation. All that makes it difficult to learn, think, and engage meaningfully." (Morin, 2021)<sup>17</sup>.

**Definition of Students' Achievement:** A **student's** achievement **refers** to the measurement of the amount of academic content a student learns in a particular given time frame. "Student achievement refers to the extent to which a learner has attained their short or long-term educational goals. Individual differences in academic performance are strongly correlated with differences in personality and intelligence. As well, students' levels of self-efficacy, self-control and motivation also impact levels of achievement.

### - Research Questions:

- 1- Does E-Learning have more negative than positive impacts on students' wellbeing and academic achievement?
- 2- How can schools make online students feel connected to their campus? (How can they create a sense of belonging and a learning community?)
- 3- What do schools and colleges need to do to provide appropriate technical support to students online?
- 4- How can the teaching staff build better engagement with students online?
- 5- What do academics need to modify to support online students in their learning?
- 6- Are lessons' materials designed to support different learning styles, preferences, abilities, and needs?
- 7- Is the pace of assessments broadly even, allowing time between assessments to rest and plan?

### - Results & Data Analysis

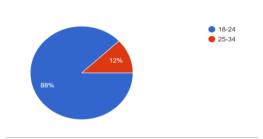
The number of students who have responded to our survey is 100

#### Age group:

As figure 1 reflects, results for the first question showed that the respondents of age 18-24 was 88% while the percentage of the

respondents of age 25-34 was **12**%. Hence the majority of those who answered the survey were students.

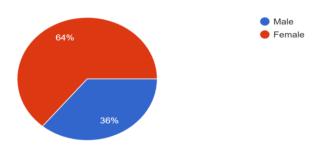
Figure (1)



### **Gender**:

As figure 2 reflects, results for the second question showed that the gender of the 100 respondents who took our survey was 36% males, and 64% were females. The majority of the students in the Miami branch of the AAST are females.

Figure (2)

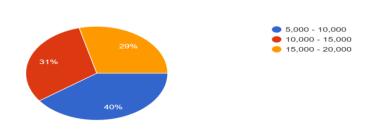


### **Income:**

Respondents were asked about their monthly income, and as figure 3 reflects, 40% of respondents have the income of 5000-10000 (L.E), while 31% have the income of 10000-15000

(L.E), and it was found that 29% of them have the income of 15000-20000 (L.E) a month.

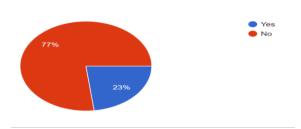
Figure (3)



# Does the E-Learning procedure provided by your college serve your learning style and gratify your cognitive needs?

According to the displayed figure (4), it was concluded that 77% of the respondents have chosen (No) and 23% of them have agreed. This proves that more than *half* of the students are not provided by an education delivered through E-Learning that gratifies or even serves their cognitive needs.

Figure (4)

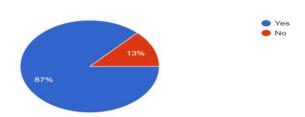


# Do you feel less couraged or unmotivated to learn via the internet as opposed to going to college?

Respondents were asked if they feel less courage or unmotivated to learn via the internet as opposed to going out to college. According to the responses displayed in figure (5), 87% of the respondents have voted (Yes), while only 13% of the respondents have voted (No). This

evidently shows that almost a 100% of the students feel less courage and demotivated to learn through the internet.

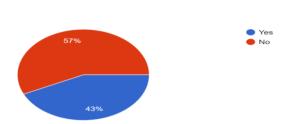
Figure (5)



# Do you feel it is important and necessary for you to successfully learn through physical contact in an actual classroom?

As shown in figure (6) responses were displayed as follows, 57% of the respondents have chosen (No), while 43% of them have agreed. This implies that most of the students feel it is necessary for them to learn through physical contact.

Figure (6)

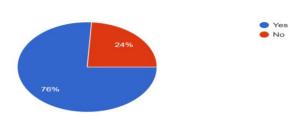


# Are you challenged by the demands that come with E-Learning such as the availability of highly equipped devices, expensive Internet packages and turning on cameras during online sessions?

As shown, in figure (7) the results displayed indicate that 76% of respondents have voted (Yes), while only 24% of them have voted (No). This must come as a wake-up call to schools, colleges as well as the

Ministry of Education for almost all students feel excessively challenged by the demands that come with E-Learning.

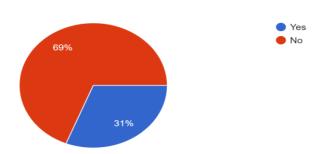
Figure (7)



# Do you feel safe that colleges in the Miami branch of AAST implement a system of 40% of on campus classes during the current pandemic of Covid-19?

As displayed in the following pie chart (figure 8), it was concluded that 69% of respondents have voted (No) while 31% of them have voted (Yes). This too must be considered and acknowledged for the majority of students *do not* feel safe attending college on campus during the pandemic.

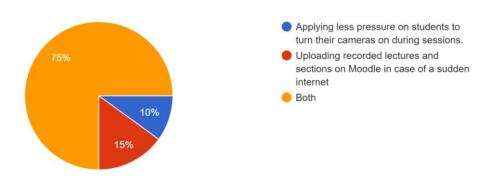
Figure (8)



<u>Please choose a way by which colleges must provide you appropriate technical support online.</u>

As displayed below, 10% of respondents chose apply less pressure on students to turn their cameras on during sessions (choice number 1) and 15% of them chose uploading recorded lectures and sections in Moodle in case of a sudden internet problem (choice number 2). Majority of the respondents (75%) chose the choice "Both" referring to the choice of number one and choice of number two.

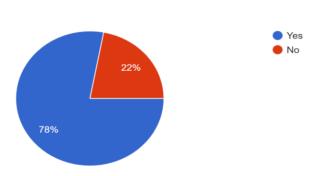
Figure (9)



# <u>Does E-Learning have more negative than positive impacts on students' wellbeing and academic achievement?</u>

The obtained results from this question is displayed in the following figure (10) as follows, 78% of respondents have chosen (Yes) while only 22% of them have chosen (No). This concludes that unfortunately the effects of E-Learning are noticeably and vividly much *more* negative, than they are positive.

Figure (10)



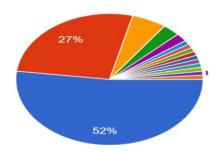
# Please suggest ways by which you believe the teaching staff can build better engagement with you during online classes.

Most of the suggestions here students' requests for doctors and teacher assistants to upload a recorded video of the lectures and sections due to problems that may occur to one's device or internet connection. Other suggestions stated were, not applying too much pressure to the students like turning on their cameras and trying to be more understanding of students, and making classes less boring by implementing fun activities for students therefore making it less stressful, encouraging and competitive.

# How do you feel about having to reach to and communicate with your Teacher Assistants and college Doctors via the internet?

It was concluded that 27% of respondents feel there is no trouble with that as they chose the option "No problems at all", while 52% of respondents feel shy as they chose the option "Shy". The remaining 21% of respondents have chosen the option "Other" and it was concluded from most of the results that one the most common answers were the students feeling uncomfortable with the new changes overall. Whilst other responses were the students feeling bothered and pressured about having to do so, and some others felt strange they had to communicate through the app Facebook.

Figure (11)



### **Likert scale questions:**

# 1. <u>E-Learning has more negative impacts than positive on students' psychological wellbeing and academic achievement.</u>

It was concluded in the graph results that, 20 respondents have strongly disagreed with this statement, while 6 only disagreed, 18 were neutral, 7 only have agreed and 49 have strongly agreed. This proves that colleges and schools must come together along with the Ministry of Education with the contribution of psychologists to set a constructive plan that demonstrates solutions to such conflict of great importance which cannot under any circumstance be neglected.

# 2. <u>If E-Learning persists post-pandemic, then students will remain unmotivated and stressed.</u>

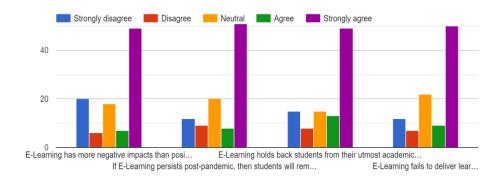
The results are displayed on the graph as follows, 12 respondents have strongly disagreed, 9 disagreed only, 20 were neutral, 8 agreed, and 51 respondents have strongly agreed with this statement.

# 3. E-Learning holds back students from their utmost academic potential.

The results have shown that 15 of the survey respondents have strongly disagreed with the statement, while 8 only disagreed, 15 were neutral, 13 have agreed, and 49 respondents have strongly agreed with the statement.

# 4. <u>E-Learning fails to deliver learning experience to students due</u> to the lack of physical interaction

It was concluded that, 12 respondents strongly disagreed with the statement, while 7 only disagreed, 22 were neutral, 9 agreed, and 50



have strongly agreed with the statement.

#### **Figure (12)**

- Findings of In-Depth Interviews
- How successful faculty members find E-Learning to be on their end of the spectrum & whether they feel they can fully deliver the content to their students and fulfill their utmost potential in teaching it

The interviewees generally believe "E-Learning is successful, however at a limit". One of the faculty members interviewed adds that there are some practical skills that online education cannot deliver to students. Moreover, the lack of face to face communication where the lecturer makes sure whether students are focused comes to be problematic most of the time. However, she believes that with theoretical subjects that do not require physical interaction and direct communication where students do not need to get familiar with the technicalities of a camera for instance or a computer editing program, E-Learning then becomes a great medium of education. "Undoubtedly, practical subjects were extremely effected negatively as many aspects

of their nature were not transferred to the students since the start of COVID19 until the present time. If we continue this way, students will remain to experience a shortage of practical skills."

An interviewed college TA believes that E-Learning is a great idea with very good development "I am happy that such thing has been applied to Egypt however, there is a big problem and that is we never could have expected a global pandemic to rise where we must use E-Learning as a mean of education and implement technology in our learning. Students in the AAST are accustomed to submitting assignments online to a great extent since before the pandemic, however for other public schools and colleges it is a huge conflict for teachers have very little to none, media literacy. Therefore, this is one of the major reasons why E-Learning does not seem to improve in Egypt and is primarily why development in such areas is being held back."

### - How their experience with E-Learning has been so far

Another interviewee's experience with E-Learning was very positive for integrating technology in her teaching was far from new to her usual teaching experiences as she has used Zoom and several platforms as such in the past within her career. One of the 5 interviewed staff members' experience with E-Learning on the other hand was not easy. One of the hardest obstacles she faced mainly revolved around how students were not at all collaborative or accepting of the idea of E-Learning as a whole and were solely interested in receiving their education inside of a traditional classroom. She believes that the chance the students have of learning whilst they are at the safety and comfort of their homes is a great opportunity which students are taking for granted. Moreover, she found that students were more likely to be much more attentive during face to face communication rather than online.

# - The difficulties and obstacles as College Doctors & Tas that they meet with E-Learning the most

As per the difficulties they all met with E-Learning the most, the unstable internet connection was the biggest issue faced on both their side and that of the students'. Since the internet now is being used immensely more than ever not only inside of Egypt but worldwide,

problems such as internet disconnections during lectures or program laggings impacts the concentration of the students as it makes it harder for them to stay in touch as well as it distracts them from fully grasping the content. "The internet disconnection in Egypt influences E-Learning in the worst way as its capacity cannot bear millions consuming it simultaneously." One of the interviewees adds.

### - Ways they believe them, and their colleagues can make E-Learning during this pandemic easier on both their side and that of the students'

The prices of internet bundles not only remained expensive during the pandemic however, it has excessively increased since nearly the entire population desperately is in need of internet and data bundles in every aspect of their daily lives due to the current circumstance. "I was expecting the country to do something about it and make it easier on us since everything has transferred to being online, by charging less for the internet packages." one college doctor says. She continues to suggest ways by which E-Learning can be less complex on students such as creating workshops of 10 students maximum rather than forty students inside of one zoom room, thus enhancing one on one interaction and strengthening engagement with every student in the room.

Furthermore, "assignments and assessments must be set to be unchallenging, not for the sake of making them easy however, to avoid overwhelming students by complicated tasks that seem unattainable." she adds. Another College TA believes that he along with the teaching staff must be easy on students when situations such as the house power going off or internet disruptions occur. Additionally, the students too are required to contribute positively to this two- way operation between the student and the teaching staff, as well as participate and engage in return.

#### - The Common Main Points between the Interviewees

All 5 of the interviewed College Doctors and TAs believe that using E-Learning is an exceptionally beneficial mean of education, as well as they are both glad it has become implemented in Egypt for this

implementation put many laggards face to face with using such a great medium of learning as they come to discover both learning and operating with technology.

### - Results Discussion

This research focuses on the effects of E-Learning on students' academic achievement and psychological wellbeing. The research will analyze students' behaviors towards E-Learning and whether the recent transition within their education systems has affected them negatively. This research carries a merge of both quantitative and qualitative methods by which one method measures the number of students negatively affected by E-Learning, as the other will discover the experiences of the faculty staff members with the current transition. The population targeted of this study are the students and the teaching staff members of the Arab Academy for Science, Technology & Maritime transport (Alexandria) - Miami branch. Thus, it is a purposive sample. The research uses a Non-probability sampling method which is (convenient sampling). As for the sample size, it was calculated to be 100. After having conducted both the survey and the In-depth interviews, the research questions have now been answered and thoroughly examined.

# 1- Does E-Learning have more negative than positive impacts on students' wellbeing and academic achievement?

Results have shown and proven in fact that E-Learning does have more negative impacts on students' academic achievement, than positive. The survey and In-depth interviews conducted data display that the only positive factor apparent with implementing E-Learning to educational systems and especially that of Egypt, is educators and students becoming up to date with the newest teaching methods as well as not only be introduced to them however trained and accustomed to them too. It was shown that students struggle with anxiety and depression, as well as the lack of appropriate support systems provided by colleges and schools. Therefore, due to the data analysis positive impacts on students' psychological wellbeing and achievement are evidently slim to non-existent.

# 2- How can schools make online students feel connected to their campus? (How can they create a sense of belonging and a learning community?)

Some students believed a hybrid educational system based on E-Learning and on-campus classes would be the best option, where they can attend the majority of their classes with the inclusion of face to face interaction as that enhances their entire learning experience and boosts their sense of belonging to a learning community. However, the majority of students felt unsafe due to that hybrid system being put to action amid the current stronger wave of the pandemic COVID19. For that reason, it is on academics to search for ways and create a course of action they can integrate this kind of connection to online classes.

# 3- What do schools and colleges need to do to provide appropriate technical support to students online?

Colleges and schools must genuinely consider *all* the challenges, demands and intermediate troubles that come with internet disconnections, devices, and highly equipped technology overall. As they must provide support systems that aim to effectively *assist* students with any technical issue they may face and *encourage* them to overcome it, rather than add more pressure to them by possibly being inconsiderate, ignorant, or unkind. They must avoid increasing from students' anxiety levels as it inevitably mentally *drains* them and contributes negatively to their psychological wellbeing and academic achievement.

# 4- How can the teaching staff build better engagement with students online?

Academics must find innovative methods and techniques by which they can motivate students to participate. Moreover, they shall deliver the content online in a way that is seemingly simple and uncomplicated rather than intimidating and overwhelming.

# 5- What do academics need to modify to support online students in their learning?

Academics must be understanding and patient with students especially with those who are committed, as well as they must be considerate of the stress and pressure students must face having to *communicate* and learn *online*.

# 6- Are lessons' materials designed to support different learning styles, preferences, abilities, and needs?

Most of the students believe E-Learning neither gratifies nor serves their different learning styles and cognitive needs. The lessons' material delivered online are not by any means designed to suit the 4 known learning styles Visual, Auditory, Read & Write, and Kinesthetic. This correspondingly results in many students losing passion for learning, give up on fulfilling their utmost potential and struggle to continue with the courses online.

# 7- Is the pace of assessments broadly even, allowing time between assessments to rest and plan?

Students often feel beyond overwhelmed for there is barely enough time to rest and plan or recharge and regain energy between tasks, given assignments and assessments. This to all the students is a major issue for it terribly effects their psychological wellbeing and consequently influences their academic achievement unfavorably.

#### - Recommendations

Teachers across the globe made a rapid transition to online learning in 2020. In many cases this happened with little advance support or guidance, and as a result, not everyone made a smooth transition to teaching this way. Therefore, after extensive research and investigation, the research team has come up with multiple recommendations, starting with providing devices for students to work if at all possible or at least ensure that any online learning activities can be completed with a smartphone. Another recommendation is also for doctors and teacher assistants to use simple assignments that do not require students to navigate complex instructions. Most instructors made strong efforts to develop original materials, and reported great investments in adapting their course materials, largely in isolation. So having said so, another recommendation would be to share the recorded lectures and uploading them on Moodle, and by that making is accessible for all students at all times in case they weren't able to join the class due to technical difficulties. Having the students participate in fun, competitive, interesting competitions to keep classes and learning do-able would also help a lot of students because some students can be extremely impatient and with the whole pandemic and e-learning it can be difficult to make them like doing it. Applying less pressure on students to be present in classes and making attendance overly critical also needs to be less intense, supplying students with encouragement; support is very much needed by most students and is guaranteed to make them improve in many ways.

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