



The Role of Teaching Aids in Higher Education to Counter the Emerging Coronavirus (COVID-19)

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ABSTRACT

Producing a competent and highly qualified graduate has become a vital issue in higher education concern. Graduates could be well-prepared for the required skills which meet the hospitality industry's needs and demands by applying appropriate and updated teaching aids. The research aims are focused to measure and rank the role of the teaching aids in higher education from the students' and lecturers' opinions to identify the areas that need improvements and to counter the emerging Coronavirus. Moreover, if the above-mentioned affected and stipulated the achievement of their purposes, roles, and tasks in the teaching and learning process. Questionnaires were distributed to lecturers and students of the three higher tourism and hotels institutes in Egypt. Nine hundred fifty persons completed questionnaires and returned, then after 822 out of them were valid for the research to be analyzed by (86.52 % valid rate). Results show that teaching aids have a vital role in higher education to counter the emerging coronavirus (COVID-19). Moreover, the use of modern technology in educational aids contributes to supporting higher education to counter the emerging Coronavirus; using remote teaching aids tools which satisfy students and people to prevent the spread of the Coronavirus; teaching aids help raise the level of students. The study recommended that: more care should be taken with regard to assessing the role of educational aids in higher education to confront the emerging coronavirus. Improving technical support provided by higher education; As well as renewing the content of distance educational tools; the role of educational aids especially on distance must be activated for their role in supporting higher education to counter the Coronavirus; this by its turn should encourage the application of educational methods as an active teaching method in higher education, which has become an inevitable and indispensable necessity for conducting this study.

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1. Introduction

The success of educational situations is not only dependent on the knowledge content and the lecturer's skills in explaining it, but it is also dependent on adopting the appropriate pedagogical approach, adopting effective teaching methods, and employing

different educational methods. From this standpoint, this research paper attempts to shed light on the issue of modern educational methods and the importance of their use (Mostafa and Motahari, 2017).

Students are surrounded by teaching aids such as visual representations, audiovisual and auditory materials daily, owing in particular to media such as

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the internet; it is difficult to imagine today's educational process without the use of various teaching and teaching aids in higher education to counter the emerging Coronavirus. Therefore, the researchers sought to carry out this study in the belief of supporting the importance of teaching aids and their vital role in supporting higher education to counter the emerging coronavirus (COVID-19) and the activities that related to higher education.

The aim of this paper is thus to investigate the use of teaching aids in the interactions between lecturer and students at higher education from a student and lecturer perspective. Moreover, appreciation of the use of different teaching aids in the interactions with their lecturer was analyzed as well as to counter the emerging coronavirus (COVID-19). A general research objective is to evaluate the role of teaching aids in higher education to counter emerging Coronavirus in order to support and improve higher education. The purpose of teaching aids is to make the educational process more interesting and more attractive, moreover encouraging active learning, the development of different students' skills, and the adoption of desirable values and attitudes. Moreover, to help to avoid Coronavirus spread in the Egyptian institutes.

The main objective of this study is to describe the role of teaching aids in higher education to counter the emerging Coronavirus (COVID-19). More specifically, the study's objectives are:

- To evaluate and rank the factors affecting the role of teaching aids in higher education.
- To investigate what are the important factors to the teacher and the students when using the teaching aids in higher education.
- To investigate what are the important factors to the teacher and the students to counter the emerging Coronavirus disease (COVID-19).

This study is to identify the definitive factors that impact the role of teaching aids in higher education in order to support and improve higher education. Moreover, the role of teaching aids in higher education to counter the emerging Coronavirus (COVID 19).

2. Literature Review

2.1 Teaching aids definition

Any means, human or non-human, that transmits a message from the source of learning to the learner and uses it functionally in achieving learning goals. All that the lecturer uses in his teaching makes his lesson more exciting and exciting for his students, and to

make the educational experience that these students go through, living, purposeful and direct experience at the same time (Song *et al.*, 2018). In other words, "*It is every means that helps the lecturer to present new experiences to his pupils in a more operative and effective way*" (O'Neill and McMahon, 2005). Moreover, Salama (2008) defines Teaching aids as "*It is a group of devices; tools and materials taught to improve the teaching, educating and learning process clarify meanings and explain ideas in the hearts of students*".

Teaching tools, materials and devices, and the different methods that the lecturer uses with expertise and skill in educational situations to transfer educational content or access to it so that the learner (the student) is transferred from (Mostafa and Motahari, 2017). The reality of abstract experience to the reality of physical experience and helps it to learn effectively with less effort, in a shorter time, and with cheaper cost in an interesting atmosphere and a desire for better learning.

2.2 Teaching aids usage in higher education

Capable and highly qualified graduates have become a vital issue in the higher education concern keenness. By applying appropriate and fit teaching aids, graduates will be prepared with the required skills to meet the industry needs, requirements, and demands, so hospitality and tourism higher education and teaching aids are critical to each other and for this reason, the industry, as well as the prospective intern, should be fully aware of the teaching aids and its various aspects. To make the teaching aids more effective it should be studied from the perspective of prospective lecturers and students (Graham and Philips, 2010, Gad and Abd El-latif, 2019).

Lecturers prepare to teach aids before teaching and learning to read get started; Lecturers use many visual aids in teaching students to avoid getting bored; Lecturers create teaching aids built on student ability; Lecturers use audio-visual equipment to attract students; Teaching aid helped lecturers' teaching process (Mills, 2005, Abdul Rasid and Baharomb, 2011).

2.3. The importance of modern educational methods

The modern way of teaching is more activity-based; using questioning, explaining, demonstration, and collaboration techniques it is claimed that this is more effective than teaching students by traditional methods for four hours, thus helping the brain cells to create connections that they need to remember knowledge.

On other words: “The teaching method which focuses more on teaching the students for improving their intelligence behavior by using various new and innovative ideas rather than making them recite the syllabus to clear the examination with the same old style. The teaching method is more activity-based and centers the learner’s mind which involves them entirely in the process of learning. On the other hand, the mentor or teacher only leads them and guides them to focus on the objectives of the subject which will also help in reducing the competition among the students, promote cooperation, and boost the health study environment (Mehta, 2020).

Educational aids played a fundamental role in enriching education by adding special dimensions, effects, and distinguished programs, making the education process more economical by increasing the percentage of learning at a lower cost to stimulate student interest, satisfy learning needs, and raise their motivation towards learning. Increasing learners’ experiences, diversifying them, increasing their effectiveness, keeping pace with scientific progress, and the growth of human knowledge (O’Neill and McMahon, 2005).

Increasing the speed of learning, as it achieves learning as soon as possible and with less effort, to other pedagogical gains that make educational means, especially modern ones, an essential and effective element in the modern educational process (Song et al., 2018).

2.4 Importance of teaching aids

Teaching aids make lessons more enjoyable and clearer for students; are effective in increasing a student’s memory; might facilitate a better understanding of the subject which discourages the act of misunderstanding. Moreover, Activities used during the teaching make their learning process like a game, and students should be delighted in the learning process. The use of teaching aid is effective because it makes the whole process simple, productive, and enriches the learning activities.

Increasing students’ interest and motivating them to learn a second language better; provides a natural learning atmosphere and helps them to be involved in the learning, teaching, and experiencing process; Teaching aids make the classroom live and active and avoid dullness because of the involvement of every student. It provides direct knowledge and experience to the students; the use of proper teaching aids saves lots of time and money. It saves time from long and boring explanatory classes and helps the students to

understand the complex subjects easily (Conrad and Donaldson, 2004).

Higher education establishments have many benefits of using teaching aids as higher excellence students, which by its turn increase contact with students, support the higher education to counter the emerging diseases such as coronavirus (COVID-19), allow opportunities for course content evaluation and teaching improvement, and increase a good reputation (Bennett et al., (2008; Gad and Abd El-latif, 2019).

2.5 Selection criteria for the appropriate method

The criteria of the appropriate method are depending on the applicability of the method (availability, simplicity ...etc.); the suitability of student characteristics (in terms of age, mental level, tendencies, social background ...); and the educational activities (as appropriate to the purpose of their use...). The educational method takes its position in the educational activities and performs its function if the use and preparation of these standards were considered in the selection process (Salama, 2008; Achmad et al., 2019).

Types of Teaching Aids are Word Cards; Photos; Picture Books; Sentence Cards; Computer; Transparency; Mobile Technology; Language games; Language; News Paper; Improvisation (Abdul Rasid and Baharomb, 2011). Technologies used in the classroom: Whiteboard – mini-lessons; Digital book; Videos; Internet; PowerPoint (Pritchard, 2007, Abdul Rasid, and Baharomb, 2011).

Teaching aids by the internet helps students learn how to think about content, localize information, sort data, Analyze and organize information, classify information by context, think critically, create new thinking, ideas, and decisions and express themselves (Song et al., 2018).

2.5. Coronavirus

COVID-19 is a new virus within a large family called coronavirus, which infects the respiratory system and ranges from common colds to more serious diseases such as SARS and MERS, and no treatment has been discovered for Covid -19 (Egyptian Ministry of Health and Population 2020). Coronaviruses are a large group of viruses that may cause disease in animals and humans. The newly discovered Coronavirus causes the Corvand-19 virus, which is an infectious disease caused by the newly discovered Coronavirus (World Health Organization, 2020).

Coronavirus statistics are known by the scientific community. In this sense, the mortality rate or the re-infection probability are already known. That is,

CVOA is parametrized with actual values for rates and prospects, preventing the user to achieve an additional study on the most suitable setup configuration (Martinez et al., 2020; World Health Organization, 2020). The COVID-19 viral disease that has swept into at least 124 countries and killed a lot of people is now officially a pandemic. (COVID-19) is a highly infectious respirational disease. Its name stems from the fact that it looks like a crown under the microscope. Common symptoms include fever, a dry cough, shortness of breath, and extreme tiredness. Most cases have a mild development, but in a certain share of cases, severe pneumonia develops that can be life-threatening. The first patient was identified in Wuhan – China (World Health Organization, (2020; Fuchs, 2020a).

To fight the Coronavirus pandemic, WHO (2020) endorses “that social distancing and quarantine measures need to be applied in an appropriate way. Some of the measures that countries may consider adopting are the closures of universities. Humans should avoid direct face-to-face community relations. Social distance is not an avoidance of communication, but the replacement of face-to-face communication that bears the risk of contagion by mediated communication (World Health Organization, 2020; Fuchs 2020b).

2.6 Education establishments and COVID-19

Humans avoid face-to-face social relations and replace them with mediated social relations, in which communication is organized with the help of social media, messenger, and video communication software (Fuchs 2020b). Many universities are running scenarios to create intelligent readiness for unexpected situations. Scenarios necessity should be simplified and modified. Education establishments should expect that the Covid-19 crisis will change businesses and society in important ways. It is likely to online education and public health investments, for example (Reeves et al., 2020).

When there is interaction, learning takes place: In addition to the tools, “learning strategies should be devised in order to make learning an enjoyable, social experience with appropriate collaboration with tutors and peers” (Sukon et al., 2012). It is important that the right tools should be used at the right place and at right time in order to facilitate teaching and learning to take place especially in corona Information and Communication Technologies (ICT) and Teaching Aids are very important.

Open and Distance Learning (ODL) is a general term for the use of telecommunication to provide or enhance learning. Around the world, the academic community is discovering and exploring the Internet, teleconferencing, and related means to achieve an extended classroom or learning experience. Students and teachers at all levels are taking part in teleconferences and forming associations that would have been unlikely five years ago (Rouse, 2020). Effective crisis communications involve media management, event management, and team management (Lanz et al., 2020).

Communication technologies play an important role in the higher education and institutes of social life under the exceptional conditions that the Coronavirus crisis poses for society and individuals. There is the wide use of mediated communication with the help of secondary, tertiary, quaternary, and quinary mean of communication. Face-to-face communication is replaced by mediated communication, which creates challenges because closeness, love, and emotions are hard to achieve and communicate in mediated communication (Li et al., 2020). Respondents’ communications will likely be exposed to conflicting information and feel anxious or confused about the best sequence of action. Be certain to interconnect policies clearly, promptly, and in a sensible method. Moreover, interconnect appropriate information and the reasoning behindhand policies so that respondents can deepen their understanding and also take initiative in unexpected situations (Reeves et al., 2020).

2.7. Obstacles of distance teaching

Learning at a distance is still not the learners’ first choice. When asked to choose, most students still prefer meeting with a learning group and an instructor in a set place (Smaldino, Albright, & Zvacek, 2008). Furthermore, the dropout rate for distance education is higher (Simpson, 2013). These obstacles include the quality of instruction, hidden costs, misuse of technology, and the attitudes of instructors, students, and administrators. Each one of these has an effect on the quality of distance learning (Schmidt et al., 2016). Distance education is used by individuals from a wide range of backgrounds, in terms of different ages, cultures, educational histories, and social status. Different online courses employed in diverse situations offer the individuals great divergent experiences. Furthermore, similar terms, such as virtual learning, e-learning, web-based learning, and online learning, are often used interchangeably without explicit definitions. This casual use of

terminology makes it difficult for researchers to conduct cross-studies and build on the research of previous studies (Moore, Dickson-Deane, & Galyen, 2011). The Obstacles to distance teaching the barriers to participation that external students may experience are particularly evident in collaborative learning tasks through group work, group presentations, and group assessments (Davidson, 2015). Some of the issues experienced can be personal such as anxiety associated with using technology; (perception of) inequity in assessment, particularly in “group” assignments; and, the (perceived) inability or difficulty in peer interaction, particularly in presentations. Despite the best intentions of teaching staff to provide equitable and beneficial learning experiences for all students, regardless of enrolment mode, many academic staff members feel apprehensive and not suitably equipped to teach via wholly (or mostly) online particularly as they themselves may be still learning to use some of the platforms (Jaques & Salmon, 2007; Little-Wiles & Naimi, 2011; Thorsteinsson, 2013; Rucker & Downey, 2016). This may be an assumption that students studying externally will be disadvantaged in group presentations when compared to the group presentation delivery and activities that can be completed by their face-to-face peers. As such, group presentations are less frequently incorporated in the online assessment repertoire than other types of group work activities (Napier et al., 2011)

How to overcome distance teaching? This can leave learners in an isolated place where they may also have varying levels of competency and proficiency using different forms of IT and are therefore somewhat on

their own when it comes to the online learning environment through different Learning Management Systems (LMS). individuals may be barely managing to navigate the system on their own. Providing additional scaffolding to support the student online learning experience (Caplan, 2004) as well as embracing the flexibility inherent in the online environment can also support these processes (Crawford-Ferre & Weist, 2012; Broadbent & Poon, 2015) and more fully involve the isolated learner in the online learning and group work experiences.

2.8 The Research Hypotheses

Based on the above discussion, the following hypotheses and model are developed (as shown in Figure 1-3):

- H 1: There are statistically significant relationships between the dimensions that affect the role of teaching aids in higher education to counter the spread of Coronavirus: (A) The first dimension: teaching aids in higher education, (B) The second dimension: technical support provided by higher education, (C) The third dimension: the content of distance educational aids, and (D) The fourth dimension: the scientific material presented in educational aids quality.
- H2: There is an effect of the role of teaching aids in higher education to counter the emerging Coronavirus. (E) The fifth dimension: activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus

Figure 1

The research model

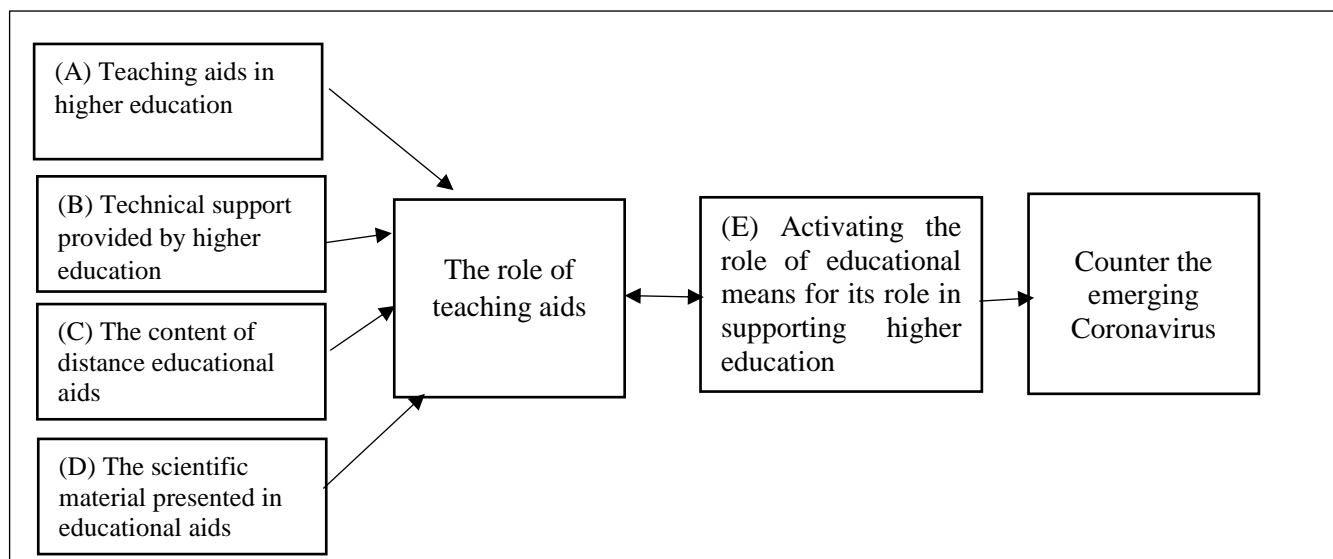


Figure 2

Unstandardized estimates

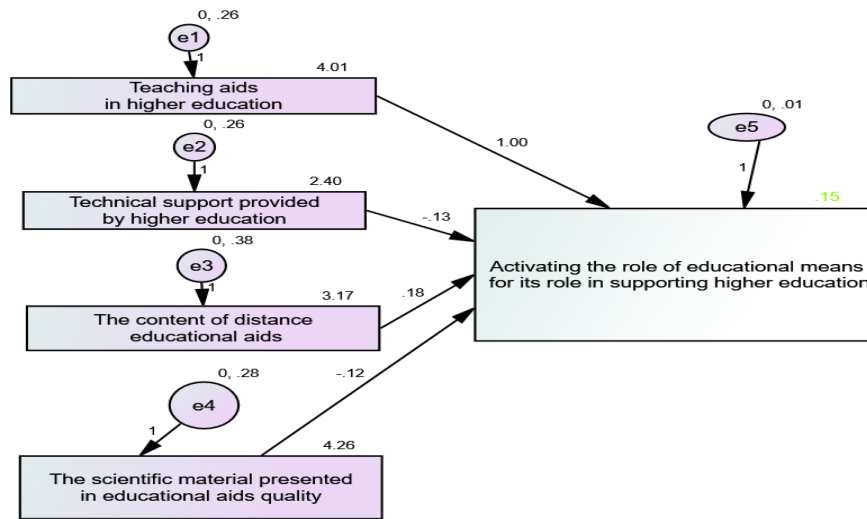
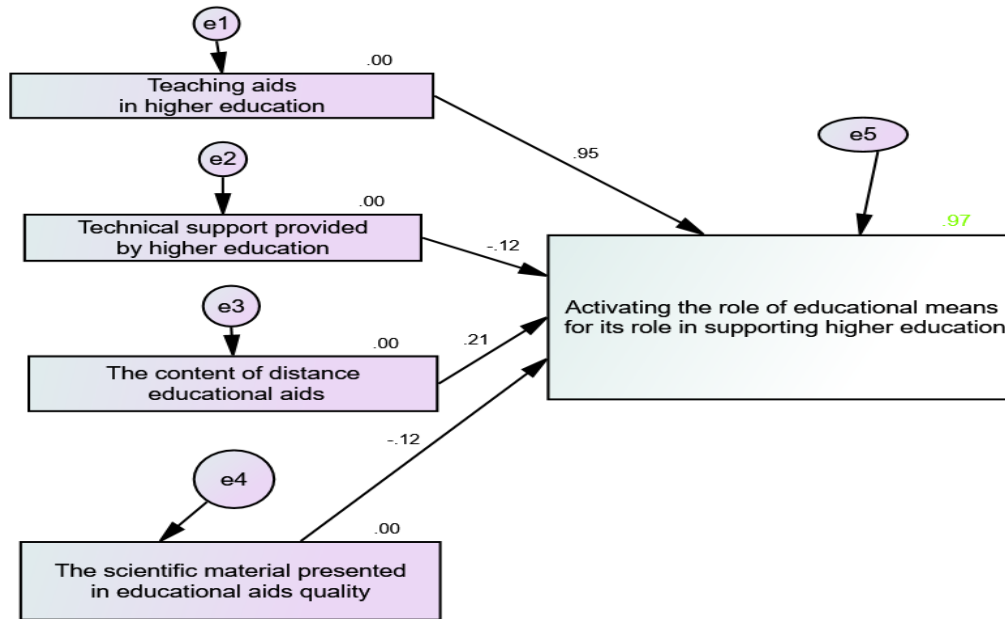


Figure 3

Standardized estimates



3. Methodology

This research is a study in the form of a survey or a descriptive study that mainly used a questionnaire. Descriptive studies are studies that seek to explain a situation. The aspects to be studied is the background of the lecturer's gender, age, students' and lecturers' perception of the teaching aids, the facilities available, challenges, and the problems in higher education.

Questionnaires provide an effective way of gathering a large amount of data from a sizable population. The questionnaire is divided into five parts; the items are about teaching aids and their items, the facilities, and problems of higher education administration and service. Evaluating the role of educational aids in supporting higher education is highly recommended to counter the emerging Coronavirus - and the technical support provided by higher education - and the content of distance learning aids - and the scientific material

presented in educational aids quality - and activating the role of teaching aids for their role in supporting higher education to counter the Coronavirus emerging. The questionnaire was developed based on prior studies (Abdul Rasid and Baharomb, 2011; Kumar, 2017; Mostafa and Motahari, 2017; Song et al., 2018; Karabag, (2019); Hafiz, et al., (2020); Fuchs, 2020a; Reeves et al., 2020; World Health Organization, 2020).

A pilot study was conducted in this study in February during the second semester of the year 2019- 2020. The pilot study aimed to find out where and how could evaluate the role of teaching aids in higher education to counter the emerging Coronavirus. The questionnaire was reviewed by some academic scholars from Luxor University and the three branches of EGOTH Institutes to establish their appropriateness, clarity and to ease the understanding. Some alterations were suggested and then were implemented. The questionnaire was pre-tested to investigate the respondent's understanding of scale items and to identify also any issues that were complex or confusing to develop appropriate scale items to ensure the validity and reliability of the research. For this purpose, a questionnaire was distributed to a random sample of the students at the three institutes. 40 forms were distributed to respondents who were asked to complete them only 35 questionnaires were valid to analyze.

The field study was accomplished through surveys by phone calls, social media networks, and emails. The target population for these studies is the higher institutes tourism and hotels in Egypt. The study sample: To reach the results of the study, 3 higher institutes of (EGOTH) company were chosen as a sample of tourism and hotels institutes in Egypt. the researchers choose the higher institutes which belong to (EGOTH) as a case study because the researchers work in EGOTH institutes in aim to improve and develop (EGOTH) institutes. The sample represents 17.64 % of the total numbers of higher institutes for tourism and hotels in Egypt, which have been reached 17 institutes in different governorates of Egypt, namely Cairo, Giza, Alexandria, Ismailia, Luxor, the Red Sea, South Sinai, North Sinai and Damietta (Portal for Coordination of Universities and Higher Institutes in Egypt for the year 2019). The institutes were chosen as a sample for the study were The High Institute of Tourism and Hotel Management– Alexandria City (EGOTH); The High Institute of Tourism and Hotel Management -Luxor City

(EGOTH); The High Institute of Tourism and Hotel Management – Ismailia City (EGOTH).

The study was conducted through the second semester of the academic year 2019-2020. A random sample have been used to distribute 1200 questionnaire sample in the 3 (EGOTH) institutes, nine hundred fifty persons completed questionnaires and returned, then after 822 out of them were valid for the research to be analyzed by (86.52 % valid rate). A questionnaire was carried out for students and lecturers in the departments of hotel studies, tourism studies, and guiding in the three institutes in different academic years, starting from the first to the fourth year, who were already taught for online learning courses because of Coronavirus to evaluate the role of teaching aids in higher education to counter the emerging Coronavirus. Accordingly, respondents who are higher education lecturers and students have returned completed. Questionnaires were conducted through telephone calls, the Internet, the personal meeting.

A survey was carried out on the impacts of the teaching aids in higher education to counter the emerging Coronavirus. These items have no right or wrong answer because the assessment is only seen by the degree of agreement on the items presented on five Point Likert scale. 1. Strongly Disagree, 2. Disagree, 3. Neutral, 4. Agree, 4. Strongly Agree. For this study, the data found is discussed by using the 'Statistical Package for the Social Science (SPSS) version 20.0. To describe the information or data obtained, the analysis used is the frequency, percentage, mean and standard deviation to see the relevant aspects. A reliability test was carried out to check the consistency of all statements set measurement items within each predetermined variable and Paired sample T-test was used for testing the hypotheses. The paired sample T-test is used when the same sample is measured under different conditions. Moreover, with Pearson correlation analysis which represents proposed liner relationships, all the research hypotheses were fully supported.

3.1 Instrument Reliability

The Cronbach's alpha correlation coefficient was calculated to determine the internal consistency of the scale. For all scales, The Cranach Alpha reliability was computed, and the tests showed that the reliability coefficient for all the instruments was 0.990, and this by its turn indicates that the instrument is reliable. Cronbach's alpha for survey instruments is shown in table 1:

Table 1

Reliability Statistics

Cronbach's alpha	No. of Items	No. of respondents
.990	44	822

4. Results and Discussion

4.1 Demographic data

Concerning the demographic data, it was found that most of the respondents' age 69.6% were from 18-25 years old. This indicated that most of the respondents' segments are youth. Concerning the gender of the respondents, it was found that most of the respondents were male with 69.6 % of the sample. Regarding the profession, most of the respondents 94.3 % were a student. The results are presented in table 2.

Table 2

Respondents profile analysis

Demographic data	Freq.	%
Gender		
Male	572	69.6
Female	250	30.4
Total	822	100.0
Age		
Under 18	90	10.9
From 18-25	572	69.6
More than 25	160	19.5
Total	822	100.0
Profession		
Lecturer	20	2.4
Student	775	94.3
Another	27	3.3
Total	822	100.0

The results showed that:

4.2. The respondents' opinion toward the first dimension: ‘

Concerning the teaching aids in higher education, the results indicate that:

- Both of using distance learning aids is a good idea to overcome the spread of Coronavirus; and the diversity of teaching aids and the increase in technological progress in the media contribute to higher education to combat the emerging Coronavirus are the first efficiency average by a percentage of (97.81%), with a mean (4.89) and Std (0.31). This indicated that the importance of distance learning aids and diversity of teaching aids and the increase in technological progress.
- Regarding 2nd agree on position where the teaching aids suffer from weakness within higher educational institutions by a percentage of

- (93.63%) with a mean (4.68) and Std (0.47). this indicated that teaching aids need more care in higher educational institutions.
- In the 3rd position were multiple ways to access various educational means, such as from a mobile phone, computer, or laptop by a percentage of (91.44%) as agree on average, with a mean (4.57) and Std (0.68).
- Concerning the 4th level agrees average was (87.79%) regarding agreeing with that one of the reasons that limit educational aids is the lack of knowledge of others and its importance. With mean (4.39) and Std (0.49).
- In the 5th position was that through educational means, everyone can participate in the face of the emerging Coronavirus, by a percentage of (81.87%) as an agree average, with a mean (4.09) and Std (0.71).
- In accordance with the 6th acceptance average level was that educators can tackle the new Coronavirus for pupils through distance-learning aids. With (79.93%) average, mean (4.00) and Std (0.64).
- In the 7th position which was teaching that aids achieve complementarity and interdependence in the various knowledge of the higher education student, by a percentage of (79.85%) as agree average, with a mean (3.99) and Std (0.78).
- Students are always easily accessible to the platform regarding the 8th priority to the respondents with agreeing average level (79.51%), mean was (3.98), and Std (0.64).
- Followed in the 9th importance with (77.32%) as an acceptance average in higher education, it provides access to all students in a simple way, with a mean (3.87) and Std (0.68).
- Concerning the 10th, agree level which was Distance teaching aids that are available in higher education by average (70.12%), with Std (0.68) and mean (3.51).
- In accordance with the 11th acceptance, average level were educational aids having a role in supporting higher education to tackle the emerging Coronavirus. With (69.73%) average, mean (3.49) and Std (0.50).
- Concerning the 12th level, agree average was (67.15%) which indicate that raising the efficiency of educational systems, improving their quality, and renewing their methods and means requires educational methods to assist and assist in higher education programs with a mean (4.28) and Std (0.91).

13. Higher education provided distance education in a timely manner. Achieved the 13th level by average acceptance (63.65%) with a mean (3.18) and Std (0.61).
14. Regarding the last position, the presence of a specialized department in charge of educational aids within the higher education until the use of the role achieved the 14th level by average acceptance (45.84%) with a mean (2.29) and Std (0.45).

Results showed that: Both using distance learning aids is a good idea to overcome the spread of Coronavirus; and the diversity of teaching aids and the increase in technological progress in the media contribute to higher education to combat the emerging Coronavirus are the first efficiency average. This indicated that the importance of distance learning aids and diversity of teaching aids and the increase in technological

progress. followed by the teaching aids suffer from weakness within higher educational institutions this indicated that teaching aids need more care in the higher educational institutions . In the 3rd position were multiple ways to access various educational means, such as from a mobile phone, computer, or laptop.

These indicated that teaching aids are available in higher education and have a good role. The study showed that teaching aids had a high impact on educating higher education student achievement; almost all respondents acknowledged that teaching aids help in the teaching process to counter the emerging Coronavirus. This showed that teaching aids are a vital element in confirming that teaching and learning counter the emerging Coronavirus. This is agreed with Abdul Rasid and Baharomb, (2011); Shkurti, (2020).

Table 3

The Respondents' feelings about those statements: The first dimension: teaching aids in higher education

Scale Item	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	Mean	Std. Deviation	Weighted Average (%)	Ranking over all
	%	%	%	%	%				
1. Distance teaching aids are available in higher education	0	0	60	29	11	3.51	0.68	70.12	10
2. Higher education provided distance education in a timely manner	0	11	60	29	0	3.18	0.61	63.65	13
3. In higher education, it provides access to all students in a simple way	0	0	31	52	18	3.87	0.68	77.32	9
4. Students are always easily accessible to the platform	0	0	22	59	20	3.98	0.64	79.51	8
5. Multiple ways to access various educational means, such as from a mobile phone, computer, or laptop	0	0	11	21	68	4.57	0.68	91.44	3
6. Educational aids have a role in supporting higher education to tackle the emerging Coronavirus	0	0	51	49	0	3.49	0.50	69.73	11
7. The presence of a specialized department in charge of educational aids within the higher education until the use of the role	0	71	29	0	0	2.29	0.45	45.84	14
8. Educators can tackle the new Coronavirus for pupils through distance-learning aids	0	0	21	59	20	4.00	0.64	79.93	6
9. Teaching aids suffer from weakness within higher educational institutions	0	0	0	32	68	4.68	0.47	93.63	2

10. One of the reasons that limit educational aids is the lack of knowledge of others and its importance	0	0	0	61	39	4.39	0.49	87.79	4
11. educational means, everyone can participate in the face of the emerging Coronavirus	0	0	21	49	30	4.09	0.71	81.87	5
12. Teaching aids achieve complementarity and interdependence in the various knowledge of the higher education student	0	0	31	39	30	3.99	0.78	79.85	7
13. The diversity of teaching aids and the increase in technological progress in the media contribute to higher education to combat the emerging Coronavirus	0	0	0	11	89	4.89	0.31	97.81	1*
14. Raising the efficiency of educational systems, improving their quality, and renewing their methods and means requires educational methods to assist and assist in higher educational programs	0	0	0	10	59	4.28	0.91	67.15	12
15. Using distance learning aids is a good idea to overcome the spread of Coronavirus	0	0	0	11	89	4.89	0.31	97.81	1*

4.3. Technical support provided by higher education

The result showed that:

1. In the 1st position there are explanatory videos for dealing with educational aids, by a percentage of (55.18%) as agree weighted average, with a mean (2.76) and Std (0.60).
2. Regarding the 2nd agree average was the higher education provides instructions on how to use educational aids by a percentage of (51.68%) with a mean (2.58) and Std (0.49).
3. In the 3rd position there are illustrative videos to work with and use of educational aids by a percentage of (48.18%) as efficiency average, with a mean (2.41) and Std (0.68).
4. Concerning the 4th level agrees average was (47.79%) regarding agree with that higher education provides a technical support team to solve problems dealing with educational aids remotely. With mean (2.39) and Std (0.66).
5. In accordance with the 5th acceptance average level was that it is easy for students to access the technical support team in higher education. With (45.84%) average, mean (2.29) and Std (0.45).

6. Technical support solves my problems in dealing with educational aids regarding the 6th priority to the respondents with agree average weigh level (39.51%), mean was (1.98), and Std (0.64).

The result showed that: In the 1st position there were explanatory videos for dealing with educational aids; Regarding the 2nd agree average was the Higher education provides instructions and instructions on how to use educational aids; In the 3rd position there are illustrative videos to work with and use of educational aids; Concerning the 4th level higher education provides a technical support team to solve problems dealing with educational aids remotely. In accordance with the 5th acceptance average level was that it is easy for students to access the technical support team in higher education; Technical support solves my problems in dealing with educational aids coming in the 6th priority to the respondents.

These indicated that technical support provided by higher education needs more care and improvement. Teaching aids is the potential to produce meaningful learning. This means that every lecturer especially higher education teacher; in particular, need to ensure the maximum use of the teaching aids during the

teaching and learning process. Teaching aids to strengthen the teaching of basic skills, lecturers should be competent and capable in providing more effective teaching by using a technique or a more creative approach to counter the emerging Coronavirus. This is agreed with Reeves et al., (2020); Kumar, (2017). The first aspect of food safety training on Nile cruises was the availability of such specific training. The findings exposed that most of the experts (5/7) reported that **Table 4**

they provided and/or received food safety training. For instance, (expert 4) mentioned that "Of course, there are training courses offered by the ministry of tourism to the quality controllers and inspectors the food monitor before they are hired". The nature of training was also highlighted as (expert 4) underlined that the training is "It is only a theoretical but not practical training".

The respondents' feelings about those statements: The second dimension: technical support provided by higher education

No.	Scale Item	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	Mean	Std. Deviation	Weighted Average (%)	Ranking overall
		%	%	%	%	%				
1.	Higher education provides instructions and instructions on how to use teaching aids	0	42	58	0	0	2.58	0.49	51.68	2
2.	There are explanatory videos for dealing with educational aids	0	33	58	9	0	2.76	0.60	55.18	1
3.	Higher education provides a technical support team to solve problems dealing with teaching aids remotely	0	71	20	10	0	2.39	0.66	47.79	4
4.	It is easy for students to access the technical support team in higher education	0	71	29	0	0	2.29	0.45	45.84	5
5.	Technical support solves many problems in dealing with educational aids	22	59	20	0	0	1.98	0.64	39.51	6
6.	There are illustrative videos to work with and use of educational aids	0	70	20	11	0	2.41	0.68	48.18	3

4.4 The content of distance educational aids

The results showed that:

1. The content of teaching aids is valuable and useful. Regarding the 1st priority to the respondents with agree average weigh level (85.55%), the mean was (4.28) and Std (0.80).
2. Followed in the 2nd importance with (66.42%) as an acceptance average by teaching aids enable the student to view all the lectures easily and at any time with a mean (3.32) and Std (0.63).
3. Concerning the 3rd agreed level was the Lectures are to be delivered by educational means in a timely manner by average (60.24%), with Std (0.78) and mean (3.01).
4. In the 4th position was this last year, there were educational assignments and assignments for students in the teaching aids by a percentage of (57.98%) as agree average, with a mean (2.90) and Std (0.55).
5. In the 5th positionalities are presented in an organized and understandable manner, by a

percentage of (87.74%) as agree average, with a mean (4.39) and Std (0.80).

6. Regarding 6th agree to average the lecture is well understood by educational methods by a percentage of (83.75%) with a mean (4.19) and Std (0.88).

The content of teaching aids was valuable and useful. followed by the importance as an acceptance average by teaching aids enable the student to view all the lectures easily and at any time; Concerning the 3rd agreed level was the Lectures are to be delivered by educational means in a timely manner by average (60.24%), with Std (0.78) and mean (3.01). In the 4th position was this last year, there are educational assignments and assignments for students in the teaching aids; In the 5th position was Lectures are presented in an organized and understandable manner; Regarding 6th agree average the lecture is well understood by educational methods. These results indicate that the content of distance educational aids needs more attention and renovations. This agreed with Mostafa and Motahari, (2017); Tabish, (2020).

Table 5

The third dimension: the content of distance educational aids

No.	Scale Item	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	Mean	Std. Deviation	Weighted Average (%)	Ranking overall
		%	%	%	%	%				
1.	Lectures are to be delivered by educational means in a timely manner	0	30	39	31	0	3.01	0.78	60.24	3
2.	The material is available in educational methods sufficiently	0	58	20	22	0	2.64	0.82	52.85	6
3.	There are educational assignments and assignments for students in the teaching aids	0	21	69	11	0	2.90	0.55	57.98	4
4.	It is easy to raise assignments and duties by educational means	0	21	70	10	0	2.89	0.54	57.79	5
5.	Teaching aids enable the student to view all the lectures easily and at any time	0	9	50	41	0	3.32	0.63	66.42	2
6.	The content of educational aids is valuable and useful	0	0	22	29	50	4.28	0.80	85.55	1
7.	Teaching aids help the higher education doctor in the educational process to better display and control the material to be delivered to students	0	0	0	52	48	4.48	0.50	89.54	4
8.	Teaching aids help enable students to follow the subject in a good and clear manner	0	0	22	53	25	4.03	0.69	80.68	5
9.	Teaching aids in education help to stimulate students' motivation by carrying out educational activities to solve problems and discover facts	0	10	73	18	0	3.08	0.52	61.53	8

4

.5. The scientific material presented in educational aids quality

The results showed that:

1. In the 1st position is that there are explanatory videos for dealing with educational aids, by a percentage of (55.18%) as agree weighted average, with a mean (2.76) and Std (0.60).
2. Regarding the 2nd agree average was the higher education provides instructions and instructions on how to use educational aids by a percentage of (51.68%) with a mean (2.58) and Std (0.49).
3. The 3rd position was that teaching aids Lectures are presented in an attractive, easy-to-read way by a percentage of (91.68%) as efficiency average, with a mean (4.58) and Std (0.49).
4. Concerning the 4th level agrees average was (90.12%) regarding agreeing with that diversity of presentation of lectures by educational means (video, PowerPoint, etc.). With mean (4.51) and Std (0.50).
5. In accordance with the 5th acceptance average level is easy for students to access the technical

support team in higher education. With (45.84%) average, mean (2.29) and Std (0.45).

6. Technical support solves my problems in dealing with teaching aids coming in the 6th priority to the respondents with agree average weigh level (39.51%), mean was (1.98), and Std (0.64).
7. Regarding the last position, teaching aids are well understood achieved the 7th level by average acceptance (76.06%) with a mean (3.80) and Std (0.40).

In the 1st position, there are explanatory videos for dealing with teaching aids. Regarding the 2nd agree average is the higher education which provides instructions and instructions on how to use educational aids. In the 3rd position is that teaching aids Lectures are presented in attractive, easy-to-read ways. Concerning the 4th level agree with the diversity of presentation of lectures by educational means (video, PowerPoint, etc.). In accordance to the 5th acceptance average level is easy for students to access the technical support team in higher education; Technical support solves my problems in dealing with educational aids coming in the 6th priority to the

respondents; Regarding the last results position, teaching aids are well understood achieved the 7th level. These results indicate that the scientific material

presented in educational aids quality needs more care. This agreed with Mills, 2005; ng et al., (2018); Fuchs, (2020^a) as shown in table 3

Table 6

The respondents' feeling about those statements: The fourth dimension: the scientific material presented in educational aids quality

No.	Scale Item	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	Mean	Std. Deviation	Weighted Average (%)	Ranking overall
		%	%	%	%	%				
1.	Lectures are presented in an organized and understandable manner	0	0	20	22	58	4.39	0.80	87.74	5
2.	The lecture is well understood by educational methods	0	0	31	20	50	4.19	0.88	83.75	6
3.	Teaching aids Lectures are presented in attractive, easy-to-read ways	0	0	0	42	58	4.58	0.49	91.68	3
4.	Diversity of presentation of lectures by educational means (video, PowerPoint, etc.).	0	0	0	49	51	4.51	0.50	90.12	4
5.	I frequently use the online teaching aids offered by higher education	0	11	60	29	0	3.18	0.61	63.65	8
6.	Distance teaching aids are useful in the educational process	0	0	0	22	78	4.78	0.41	95.62	1
7.	Teaching aids the lectures are presented in an organized and understandable way	0	0	9	21	70	4.61	0.64	92.26	2
8.	Teaching aids are well understood	0	0	20	80	0	3.80	0.40	76.06	7

4.6 Activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus

The results showed that:

1. The use of modern technologies in educational aids contributes to supporting higher education to counter emerging Coronavirus. Regarding the 1st priority to the respondents with agree average weighs level (95.62%), the mean was (4.78) and Std (0.41).
2. Followed in the 2nd importance with (91.63%) as an acceptance average by using remote teaching aids tools makes me feel good to prevent Coronavirus from getting worse. with a mean (4.58) and Std (0.68).
3. Concerning the 3rd agreed level was that teaching aids help raise the level of students by average (90.12%), with Std (0.50) and mean (4.51).
4. In the 4th position was that teaching aids help the higher education doctor in the educational process to better display and control the material to be delivered to students by a percentage of (89.54%)

as agree average, with a mean (4.48) and Std (0.50).

5. In the 5th position teaching aids help enable students to follow the subject in a good and clear manner, by a percentage of (80.68%) as agree average, with a mean (4.03) and Std (0.69).
6. The 6th position contributed to finding a successful alternative to risk reduction by a percentage of (73.24%) as efficiency average, with a mean (3.66) and Std (0.76).
7. In accordance to the 7th acceptance average level was current teaching aids have the potential to support college education to tackle the emerging Coronavirus with (63.20%) average, mean (3.18) and Std (0.61).
8. In the 8th position was that teaching aids in education help to stimulate students' motivation by carrying out educational activities to solve problems and discover facts, by a percentage of (61.53%) as agree average, with a mean (3.08) and Std (0.52).
9. Finally, Teaching aids help develop human knowledge, shape his attitudes, modify his behavior, and establish values and concepts.

Regarding the 9th priority to the respondents with agree average weigh level (61.44%), mean was (3.07) and Std (0.59).

The results showed that: The use of modern technologies in educational aids contributes to supporting higher education to counter the emerging Coronavirus. Coming in the 1st priority to the respondents; Followed in the 2nd importance using remote teaching aids tools makes me feel good to

prevent Coronavirus from getting worse; Concerning the 3rd agreed level was that teaching aids help raise the level of students. This indicates that the activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus. This agreed with Karabag, (2019); Hafiz, et al., (2020); World Health Organization, (2020^{A*}); World Health Organization, (2020).

Table 7

The respondents' feeling about those statements: The fifth dimension: activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus

No.	Scale Item	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	Mean	Std. Deviation	Weighted Average (%)	Ranking overall
		%	%	%	%	%				
1.	Using remote teaching aids tools makes me feel good to prevent Coronavirus from getting worse	0	0	11	20	69	4.58	0.68	91.63	2
2.	Current teaching aids have the potential to support college education to tackle the emerging Coronavirus	0	11	60	29	0	3.18	0.61	63.65	7
3.	The use of modern technologies in educational aids contributes to supporting higher education to counter the emerging Coronavirus	0	0	0	22	78	4.78	0.41	95.62	1
4.	Teaching aids help develop human knowledge, shape his attitudes, modify his behavior, and establish values and concepts	0	14	64	21	0	3.07	0.59	61.44	9
5.	Contribute to finding a successful alternative to risk reduction	0	0	51	31	18	3.66	0.76	73.24	6
6.	Teaching aids help raise the level of students	0	0	0	49	51	4.51	0.50	90.12	3
7.	Teaching aids help the higher education doctor in the educational process to better display and control the material to be delivered to students	0	0	0	52	48	4.48	0.50	89.54	4
8.	Teaching aids help enable students to follow the subject in a good and clear manner	0	0	22	53	25	4.03	0.69	80.68	5
9.	Teaching aids in education help to stimulate students' motivation by carrying out educational activities to solve problems and discover facts	0	10	73	18	0	3.08	0.52	61.53	8

Results in the table (8) showed that the respondents are aware of the important factor evaluating the role of teaching aids in higher education to counter the emerging Coronavirus and ranking them as follows: the 1st ranking level is the fourth dimension: the scientific material presented in educational aids quality with a mean (4.25) and Std. Deviation (.52). Moreover, the first dimension: teaching aids in higher education achieving the second position, with a Mean

(4.00) and Std. Deviation (.50).in the 3rd ranking level is the fifth dimension: activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus; followed in the 4th level by the third dimension: the content of distance educational aids; Finally, The second dimension: technical support provided by higher education were in the 5th position with a Mean (2.40) and Std. Deviation (.51).

Table 8

Dimensions evaluating the role of teaching aids in higher education to counter the emerging Coronavirus (N 822).

Code	Dimension	Statistic	Std. Error	Statistic	Rank
HmD	The fourth dimension: the scientific material presented in educational aids quality	4.2555	.01834	.52587	1
HmA	The first dimension: teaching aids in higher education	4.0067	.01770	.50734	2
HmE	The fifth dimension: activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus	3.9303	.01759	.50432	3
HmC	The third dimension: the content of distance educational aids	3.1736	.02144	.61477	4
HmB	The second dimension: technical support provided by higher education	2.4015	.01793	.51407	5

Results in table (9) showed that the impact of applying teaching aids in higher education and comparing the differences between the main variables of the study that evaluating the role of teaching aids in higher education to counter the emerging Coronavirus through applying a one-sample T-test, the values were suggested because they were a suitable value that referred to the highest levels were hmD: the scientific material presented in educational aids quality. With Mean 4.25; Std. Deviation 0.18; F 12.295; and Sig. (2-tailed) was 0.000. Followed by hmA: The first dimension: teaching aids in higher education. With Mean 4.00;

Std. Deviation 0.01; F 11.270; and Sig. (2-tailed) was 0.000.

The results showed that the p-value was definitely less than .05 (0.00). So, the null hypothesis was rejected and the second hypotheses of the research were valid. There is an effect of the role of teaching aids in higher education to counter the emerging Coronavirus. Moreover, there are a statistically significant differences between the dimensions of teaching aids in higher education to counter the emerging coronavirus disease (COVID-19). Results agree with Graham and Philips, 2010; Mostafa and Motahari, 2017; Song et al., 2018; Gad and Abd El-latief, 2019.

Table 9

One-Sample Test (T – test) used to compare means

		Independent Samples Test									One-Sample Statistics	
		Levene's Test for Equality of Variances		t-test for Equality of Means							Mean	Std. Error Mean
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference			
									Lower	Upper		
hmA	Equal variances assumed	11.270	.001	-6.680-	793	.000	-.75660-	.11327	-.97895-	-.53425-	4.0067	.01770
	Equal variances not assumed			-14.464-	24.541	.000	-.75660-	.05231	-.86444-	-.64877-		
hmB	Equal variances assumed	29.454	.000	-4.630-	793	.000	-.53903-	.11641	-.76755-	-.31052-	2.4015	.01793
	Equal variances not assumed			-21.044-	84.107	.000	-.53903-	.02561	-.58997-	-.48810-		
hmC	Equal variances assumed	11.159	.001	-6.066-	793	.000	-.83613-	.13784	-1.10670-	-.56556-	3.1736	.02144
	Equal variances not assumed			-11.379-	22.945	.000	-.83613-	.07348	-.98815-	-.68411-		
hmD	Equal variances assumed	12.295	.000	-7.223-	793	.000	-.84234-	.11662	-1.07126-	-.61342-	4.2555	.01834
	Equal variances not assumed			-12.332-	22.181	.000	-.84234-	.06830	-.98392-	-.70075-		

hmE	Equal variances assumed	5.289	.02 2	-6.718-	793	.000	-.75541-	.11244	-.97613-	-.53469-	3.9303	.01759
	Equal variances not assumed			-10.441-	21.577	.000	-.75541-	.07235	-.90564-	-.60519-		

In accordance the main dimensions affecting the role of teaching aids using the Onaway “ANOVA “ T-Test to compare the different variable effect on compared to the fifth dimension: activating the role of teaching aids for its role in supporting higher education to counter the emerging Coronavirus. Results show that the variables have different effect and all the dimensions have significant relations as shown in table 10.

A one-way ANOVA method was used to study a role of Teaching Aids from the different students and lecturers’ perspective ; they are five dimensions: The first dimension: teaching aids in higher education; the second dimension: technical support provided by higher education; The third dimension: the content of distance educational aids; The fourth dimension: the scientific material presented in educational aids quality; and the fifth dimension: activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus. As

well as, evaluate the impact of the students and lecturers’ perspective on the main study variables on the Higher Education to counter the Emerging Coronavirus Disease (COVID-19).

The study evaluates the students and lecturers’ vision regarding the impact of Teaching Aids on evaluating the main study variables (teaching aids in higher education; technical support provided by higher education; the content of distance educational aids; the scientific material presented in educational aids quality) compared to activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus. As a comparison of both the scale and application possibility of the students and lecturers’ point of views and the extent of application of teaching aids and its effect on Higher Education. Results agree with Song et al., 2018; World Health Organization, 2020.

Table 10

Compare mean t-test “ANOVA” measuring the effects of the different variables

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Hm A: The first dimension: teaching aids in higher education	Between Groups	209.672	12	17.473	8556.261	.000
	Within Groups	1.652	809	.002		
	Total	211.324	821			
Hm B: The second dimension: technical support provided by higher education	Between Groups	206.729	12	17.227	1361.841	.000
	Within Groups	10.234	809	.013		
	Total	216.963	821			
HmC: The third dimension: the content of distance educational aids	Between Groups	300.487	12	25.041	2065.695	.000
	Within Groups	9.807	809	.012		
	Total	310.294	821			
HmD: The fourth dimension: the scientific material presented in educational aids quality	Between Groups	223.620	12	18.635	4410.225	.000
	Within Groups	3.418	809	.004		
	Total	227.038	821			

H1A: Adapting appropriate Teaching Aids in higher education positively activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus., the Paired Samples Correlations (.983) and Sig. (0.000); and Paired Samples Test were wit t value (23.343), and Sig. (2-tailed) (0 .000) .

H1B: technical support provided by higher education and activating the role of educational means for its role in supporting higher education to

counter the emerging Coronavirus, the Paired Samples Correlations (.916) and Sig. (0.000); the Paired Samples Test were wit t value (-209.846-), and Sig. (2-tailed) (0 .000).

H1C: the content of distance educational aids negatively influences activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus, the Paired Samples Test were wit t value (-129.865-), and Sig. (2-tailed) (0 .000). Moreover, Paired

Samples Correlations was with Correlation (0.975), and Sig. (0.000).

H1D: The scientific material presented in educational aids quality positively activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus., the

Paired Samples Correlations (.936) and Sig. (0.000); and Paired Samples Test were wit t value (50.263), and Sig. (2-tailed) (0 .000) . Results agree with Abdul Rasid and Baharomb, 2011; Achmad et al., 2019; Martinez et al., 2020.

Table 11 : Paired Samples T-Test of the variables compared to each other (N: 822

		Mean	Std. Deviation	Std. Error Mean	Paired Samples Correlations		Paired Samples Test	
H1A	HmA: The first dimension: teaching aids in higher education	4.0067	.50734	.01770	.983	.000	23.343	.000
	The fifth dimension: activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus	3.9303	.50432	.01759				
H1B	HmB: The second dimension: technical support provided by higher education	2.4015	.51407	.01793	.916	.000	-209.846-	.000
	The fifth dimension: activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus	3.9303	.50432	.01759				
H1C	HmC: The third dimension: the content of distance educational aids	3.1736	.61477	.02144	.975	.000	-129.865-	.000
	The fifth dimension: activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus	3.9303	.50432	.01759				
H1D	HmD: The fourth dimension: the scientific material presented in educational aids quality	4.2555	.52587	.01834	.936	.000	50.263	.000
	The fifth dimension: activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus	3.9303	.50432	.01759				

The Mann-Whitney U test

In this research, the Mann-Whitney U test was used in this research to compare between the respondents’ opinion regarding the role of teaching aids in higher education to counter the emerging Coronavirus disease (COVID-19) in accordance to their job in order to find out if there is a significant difference between them in terms of the job differences (Lecturer and Student) in accordance to the acceptance of the role of teaching aids in higher education to counter the emerging Coronavirus disease. The following table handles this issue:

Table 12

Mann-Whitney U test was used in this research to compare between the respondents’ opinion regarding the role of teaching aids in higher education

Dimension	Ranks				Test Statistics ^a			
	Job	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
HmA: teaching aids in higher education	Lecturer	20	95.65	1913.00	1703.000	1913.000	-5.989-	.000

	Student	775	405.80	314497.00				
HmB: technical support provided by higher education	Lecturer	20	129.55	2591.00	2381.000	2591.000	-5.398-	.000
	Student	775	404.93	313819.00				
HmC: the content of distance educational aids	Lecturer	20	88.15	1763.00	1553.000	1763.000	-6.155-	.000
	Student	775	406.00	314647.00				
HmD: the scientific material presented in educational aids quality	Lecturer	20	88.15	1763.00	1553.000	1763.000	-6.238-	.000
	Student	775	406.00	314647.00				
HmE: activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus	Lecturer	20	92.50	1850.00	1640.000	1850.000	-6.088-	.000
	Student	775	405.88	314560.00				
a. Grouping Variable: Job								

Research hypotheses were tested using Pearson product-moment correlation coefficient. Preliminary analyses were made to ensure no violation of theories of normality and linearity. Results show that there are strong correlations between all the proposed relations in the conceptual model with (r) values ranging from

(.916 to .983), (P< .005), and the obtained correlation value are in the expected positive direction. Based on the results of Pearson correlation analysis which represents proposed liner relationships, all the research hypotheses were fully supported. As shown in table 9.

Table (13):

Research hypotheses teste and Correlations.

		Correlations				
Items		HmA	HmB	HmC	Hm D	HmE
HmA	Pearson Correlation	1				
	Sig. (1-tailed)					
Hm2	Pearson Correlation	.931**	1			
	Sig. (1-tailed)	.000				
Hm3	Pearson Correlation	.981**	.933**	1		
	Sig. (1-tailed)	.000	.000			
Hm4	Pearson Correlation	.950**	.811**	.933**	1	
	Sig. (1-tailed)	.000	.000	.000		
Hm5	Pearson Correlation	.983**	.916**	.975**	.936**	1
	Sig. (1-tailed)	.000	.000	.000	.000	

** . Correlation is significant at the 0.01 level (1-tailed).

5. Conclusion

Concerning the respondents’ opinion toward the first dimension: teaching aids in higher education, the results showed both using distance learning aids is a good idea to overcome the spread of Coronavirus, and the diversity of teaching aids and the increase in technological progress in the media contribute to higher education to combat the emerging Coronavirus are the first efficiency average. This indicated that the importance of distance learning aids and diversity of teaching aids and the increase in technological progress. Followed by the teaching aids suffer from weakness within higher educational institutions this indicated that teaching aids need more care in the higher educational institutions. In the 3rd position were multiple ways to access various educational means, such as a mobile phone, computer, or laptop. These results agreed with (Pritchard, 2007, Abdul Rasid, and

Baharomb, 2011, Song et al., 2018, Karabag, 2019 ; Hafiz, et al., 2020).

It could be concluded that teaching aids were available in higher education and had a good role in educational process improvement. The study displayed that teaching aids have a relative impact on improving higher education student achievement; almost all respondents approved that teaching aids help in the teaching and educating process to counter the emerging Coronavirus. This shows that teaching aids are significant elements in confirming that teaching and learning take place effectively to counter the emerging Coronavirus. This agreed with (Abdul Rasid and Baharomb, 2011 ; Shkurti, 2020).

Concerning the second dimension: technical support provided by higher education the results showed that: In the 1st position is that there are explanatory videos for dealing with educational aids; Regarding the 2nd agree average was the Higher education provides

instructions and instructions how to use educational aids; In the 3rd position was that there were illustrative videos to work with and use of educational aids; Concerning the 4th level higher education provides a technical support team to solve problems dealing with educational aids remotely. In accordance with the 5th acceptance average level was that it is easy for students to access the technical support team in higher education; Technical support solves my problems in dealing with educational aids coming in the 6th priority to the respondents.

These are highly indicate that technical support provided by higher education needs more care and improvement. Teaching aids is the potential to produce meaningful learning. This means that every lecturer especially higher education teacher; in particular, need to ensure the maximum use of the teaching aids during the teaching and learning process. Teaching aids used to strengthen the teaching of basic skills, lecturers should be competent and capable in providing more effective teaching by using a technique or a more creative approach to counter the emerging Coronavirus. This agreed with (Kumar, 2017 ; Reeves et al., 2020).

Concerning the third dimension: the content of distance educational aids the results showed that: The content of educational aids is valuable and useful. Regarding the 1st priority to the respondents; Followed in the 2nd importance as an acceptance average by teaching aids enable the student to view all the lectures easily and at any time; Concerning the 3rd agreed level was the Lectures are to be delivered by educational means in a timely manner by average (60.24%), with Std (0.78) and mean (3.01). In the 4th position was this last year, there are educational assignments and assignments for students in the teaching aids; In the 5th position Lectures were presented in an organized and understandable manner; Regarding 6th agree average the lecture is well understood by educational methods. These indicate that the content of distance educational aids needs more attention and renovations. This agreed with (Mostafa and Motahari, 2017; Tabish, 2020).

Concerning the fourth dimension: the scientific material presented in educational aids quality the result showed that: In the 1st position is that there are explanatory videos for dealing with educational aids. Regarding the 2nd agree average was the Higher education provides instructions and instructions on how to use educational aids; In the 3rd position was that teaching aids Lectures are presented in attractive, easy-to-read ways. Concerning the 4th level agree with that diversity of presentation of lectures by educational

means (video, PowerPoint, etc.). In accordance to the 5th acceptance average level was it is easy for students to access the technical support team in higher education; Technical support solves my problems in dealing with educational aids coming in the 6th priority to the respondents; Regarding the last results position, teaching aids are well understood achieved the 7th level. These results indicate that the scientific material presented in educational aids quality needs more care. This is agreed with (Mills, 2005; Fuchs, 2020a).

Concerning the fifth dimension: activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus the results showed that: The use of modern technologies in educational aids contributes to supporting higher education to counter the emerging Coronavirus. Coming in the 1st priority to the respondents; Followed in the 2nd importance using remote teaching aids tools makes me feel good to prevent Coronavirus from getting worse; Concerning the 3rd agreed level was that teaching aids help raise the level of students. This indicates that the activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus. These results agreed with (World Health Organization, 2017; Karabag, 2019; Hafiz et al., 2020; World Health Organization, 2020)''.

Results showed that the respondents are aware of the important factor evaluating the role of teaching aids in higher education to counter the emerging Coronavirus and ranking them as follows: the 1st ranking level is the scientific material presented in educational aids quality; Moreover, teaching aids in higher education achieving the second position; in the 3rd ranking level is the activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus; followed in the 4th level by the third dimension: the content of distance educational aids; Finally, technical support provided by higher education were in the 5th position. This indicates that the important factor evaluating the role of teaching aids in higher education to counter the emerging Coronavirus are the scientific material presented in educational aids quality, technical support provided, evaluating the role of teaching aids in higher education. These results agreed with (Karabag, 2019; Hafiz, et al., 2020; Fuchs, 2020a; World Health Organization, 2020; World Health Organization, 2020) Results showed that there were strong correlations between all the proposed relations in the conceptual model with (r) values ranging from (.916 to .983), (P<

.005), and the obtained correlation value is in the expected positive direction. Based on the results of Pearson correlation analysis which represents proposed liner relationships, all the research hypotheses were fully supported.

Though, efforts to support the skills of higher education students must be accompanied by strong support by the higher education administration. This is because the complete infrastructure and facilities must be provided by the higher education administration. Therefore, the administration should be more sensitive in ensuring that all requirements and equipment are adequate in higher education to counter the emerging Coronavirus.

The research recommendation are:

1. Exploiting the role of teaching aids in higher education to counter the emerging Coronavirus.
2. Improving the technical support provided by higher education is mandatory.
3. Renovating the content of distance educational aids.
4. Activating the role of educational means for its role in supporting higher education to counter the emerging Coronavirus.
5. Encouraging and implicating teaching aids in higher education.
6. Assuring and improving the scientific material presented in educational aids quality.
7. Formatting a team to face Coronavirus.
8. Spreading awareness and principles of the role of teaching aids in higher education, which includes holding seminars and training programs to counter the emerging Coronavirus.
9. Setting a guide for the risks and crises faced by higher education and expected to happen in the future, depending on experts in building a modern and advanced information program.
10. Avoiding close contact with people especially if they are suffering from Coronavirus.
11. People with symptoms of Coronavirus infection should practice cough etiquette (maintain distance, cover coughs and sneezes with disposable tissues or clothing, and wash hands).
12. Within health care facilities, enhancing standard Coronavirus infection avoidance and control practices in higher education.

6. Limitations and suggestions for further studies

The population in this study was limited to students at 3 higher tourism and hospitality institutes belong to (EGOTH) company. For the further study could focus on the other institutes or the public Universities.

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