

Distant Learning; Its impact to EFL Students Due to COVID- 19, Onaizah Colleges, Saudi Arabia

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Abstract

Distant Learning has become an essential approach in teaching English language due to Covid_19 pandemic. Even though, this method plays an important role in teaching EFL students during the period of corona virus pandemic, students do not interact in virtual online classes properly, and in turn, they get high scores in online final examinations. Therefore, this study aims mainly to investigate the impacts of distance learning to EFL Students due to covid-19. The sample is, third and fourth year college students, Onaizah Colleges, K.S.A. The researcher followed the quantitative method to fulfill this study. The researcher distributed a questionnaire to the EFL students to collect the data. The study found that the differences in the variables are in favor of 1) English lecturers properly and ably deliver their online lectures during the school shutdown, 2) students attend virtual classes while they are at work, driving, sitting with family or on bed, 3) *and* the student used more than one device in examinations to look for the questions' answers, 4) students faced repeated disconnection of internet while taking online virtual classes or examinations, 5) students answered open questions by using copy and paste. The study recommended that; the Online virtual classes should be attractive, motivated, well-prepared, and also the online examinations should be multiple choice to avoid copy and paste from other references. Students should be dependable in all virtual tasks and final exams. Students should check the power of internet before lectures or examinations start. The teachers should concentrate on critical thinking questions in writing.

Keywords: Distant Learning, Teaching Methods, Impacts, COVID-19.

1. INTRODUCTION

Coronavirus pandemic started in China last year, 2019, and spread out very quickly across the globe. Life has affected and paralyzed because of Coronavirus pandemic. Countries implemented strict lockdown measures which drive the educational officials to suspend schools and universities all over the world. Therefore, distance learning has replaced direct education as a compensation method to the students to complete the school year.

Saudi Arabia has started to shift from direct learning to distant learning on March 8th, 2020, when coronavirus pandemic started to spread out in the eastern province. The Saudi officials took an immediate decision in order to stop the surge of coronavirus cases.

The main objective of Saudi government is to save Saudi citizens, its residents, students, teachers and workers from Covid 19 and took precautionary measures. Meanwhile, Saudi Officials imposed lockdowns across the country. The ministry of Education suspended classes on schools and universities on March 8, 2020. During the lockdown, all educational institutions in Saudi Arabia were ready to shift from direct learning to virtual classes learning due to COVID-19 pandemic. The transition was smoothly completed because Saudi Arabia has strong ICT infrastructure. Moreover, all Saudi Universities have educational systems and platforms, like: blackboard, Classera, Moodle, Zoom applications or Microsoft teams.

Onaizah Colleges was one of the pioneer universities in Saudi Arabia that shifted smoothly from traditional learning to digital learning or distant learning. Distance education replaced the traditional education and modern education, wherein universities and colleges trained their staffs and students on how to use the new technologies and communications in acquiring the knowledge from different remote locations. Although the transition from direct to virtual classes was smooth, EFL students have negative and positive impact on distance learning due to COVID-19.

This study aims mainly to investigate the impacts of distance learning to EFL Students of the university due to COVID-19. Most students were motivated during the virtual classes of English Language in Onaizah colleges, thus, EFL students get high scores as compared to direct learning classes which lead to inflation of the grades. The problem seems to be complex when students graduated from colleges; wherein they find it difficult to deal with English language skills when they get their jobs. English language became the main important factors for the graduates to get jobs. It is obvious that EFL students have another work during their

distance classes which led them mentally distracted. They use more than one device to help them search and browse the answers during final examinations. They faced many problems in their study field; some of them may fail to accomplish their exams due to searching for the answers from internet, other documents or references. Moreover, EFL students answered the open questions by using copy and paste from other documents and references which they do not help them to write. In addition, there is a lack of exposure to English speaking skill during virtual online classes.

Many current studies that have been conducted on online distance learning show that most of students perceived that online learning is an important method, and it is an urgent need of delivering lectures and finishing the school year due to suspending schools and universities classes. However, EFL students feel wholly incapable of the on-going distance learning.

The importance of this study deals to investigate the impacts of distance learning to EFL students in this unprecedented period due to COVID-19 and to find exact solutions. The researcher choose the third and fourth year students of Onaizah colleges' to perform this study, because students within this level are prepared to graduate from English language, and easier to deal with technology and experience distance learning problems at such stage.

Distance learning, like all methods, is full of problems for the EFL learners, especially in Arab countries. Some of these points are easy to explain. For instance, EFL Students have work during the distance learning and they use devices that would help them seek for answers in exams, and also they answer open-questions using copy and paste method. These problems are tricky and cause inflation on student's scores even for students at colleges and universities.

During the distance learning, EFL learners encountered mental distraction because they are working, driving, sitting with family or laying on bed during online classes, and there is a lack of exposure to English speaking and writing skills during virtual online classes. The problems of copy and paste for open-questions in examinations maybe the barriers to successful language competence.

Some EFL learners are frustrated when they are unable to access to the internet. Internet connections during the occurrence of pandemic might be slow due to so many users accessing the internet, thereby slowed the connections. Poor internet connection especially on far flung

areas can cause backlogs in the accomplishment of tasks and examinations. Therefore, this study aims to investigate the impacts of distance learning to EFL students due to COVID-19, and set up some solutions.

2. REVIEW OF RELATED LITERATURES

Dawadi, et al. (2020), demonstrate on a research "Impact of COVID-19 on the Education Sector in Nepal - Challenges and Coping Strategies". They demonstrate that many countries have adopted a range of actions to respond to the Covid-19 crisis relying on their available resources. For instance, countries which have advanced technologies, such as Italy, France, Germany, Australia, the United Kingdom and the United States, they adopted distant learning as a means of compensating for the loss. They quickly enhanced their e-learning platforms (Moodle, LMS, cloud systems, etc.) to create common distance learning centre portals, and provided students access to e-content and repository through mobile devices and laptops. In these countries, all stakeholders, institutions, teachers, publishers, and parents have joined to create digital resources like; textbooks and learning materials so that they could be delivered through virtual classrooms (Azzi-Huck & Shmis 2020).

Dawadi, et al. (2020), reveal that the present scenarios indicate that students in Nepal are affected differently by COVID-19 pandemic. For instance, few schools and colleges in urban areas have started to run online classes to mitigate the impact on learning. However, running online classes does not seem to be feasible for most rural schools in Nepal. It is estimated that only 56% people in Nepal have access to internet. According to Pandit (2020), only 13 % schools might be able to run online classes (though 35% schools have access to internet). In other words, the current ICT infrastructure and the distribution of access in the urban and rural areas have created two-tier of inequalities in the Nepalese citizenry, i.e., between students who live in urban area and those from rural area, and between the rich and poor who can barely afford to access the internet. Considering such divide, the Human Right Commission in Nepal has requested the Ministry of Education Nepal and private schools not to pressurize children in the name of online education (Kantipur News 2020).

Fadillah Nur Rahmania (2020), conducted a research on EFL Students' Self-Efficacy and Online Presentation Performance: Correlational Study" she reveals that the modeling of online presentation performance has been discussed by Irina (2013), she found that academic speaking delivery in an online environment can be effective if the teacher could provide a

relevant instruction and rehearsal guideline. Moreover, a study conducted by Kenkel (2011) conducted a research on " Teaching presentation skills in online business communication courses" he showed that in teaching presentation using an online platform, the teacher must be able to create an assessment rubric to point out common deficiencies in the given assignment. Mitchell & Bakewell (1995) found that if the feedback from the teacher and the students are well-incorporated, the presentation performance will be improved. It means that the teacher has to arrange a suitable system to provide both teacher's feedback and students' peer feedback.

3. RESEARCH METHODS

Methodology of this research depends upon which all of the study process. The researcher collected the data throughout the questionnaire. The questionnaire is designed in distance learning and its impact to EFL students, and it is used as survey for the EFL learners.

The study follows analytic descriptive method to accomplish its goals. The researcher provides a clear questionnaire. The questionnaire allows the EFL learners to determine their perceptions of the subjects towards distance learning and its positive and negative impacts to EFL students due to COVID-19. It is used to investigate the negative and positive impacts of Distant learning to EFL Students compared with direct learning.

A sample was chosen from 3rd and 4th year students, at Onaizah Colleges (male and female), Onaizah city. The sample of the study was composed of twenty (20) EFL learners which most of them came from different social backgrounds.

The main aim of this study is to find out the positive and negative impacts of distance learning to EFL students due to coronavirus pandemic which shift learning from direct learning to e. learning. This study followed survey methods to achieve its aim. Questionnaire results on all subjects has been handed, then the researcher analyzed the results by making graphs which enabled him to see the general tendency or outcome of the subject answers

4. RESULTS AND DISCUSSION

The researcher presented the results of the survey and explained the statistical significant differences between variables on the percentages for all variables of the Questionnaire. The

researcher provided comments and discussions with setting the graphical diagrams as explained below

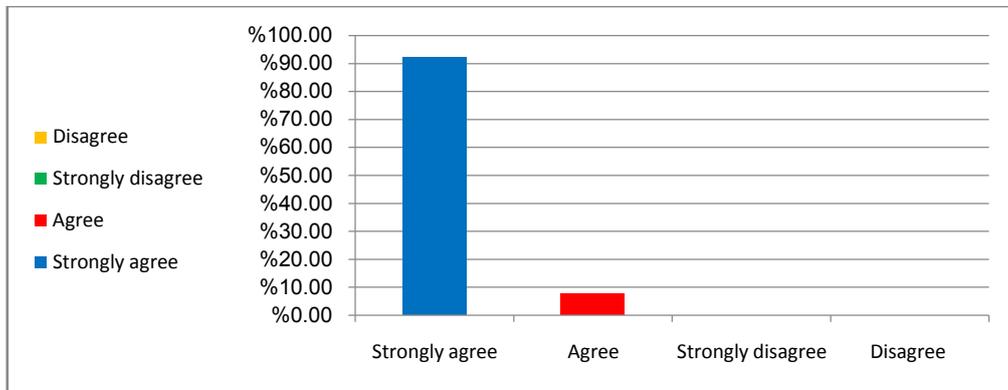


Figure 1. *Delivering the online lectures during the school shutdown.*

Based on statistics, Questionnaire statement number 1, i.e., English lecturers properly and ably deliver their online lectures during the schools and universities shutdown. The result revealed that there is a significant difference between participants' results in variable (1) on questionnaire. The result demonstrates that there is highest percentage for strongly agree which is 92.3% and 7.7% for agree. Therefore, 100,% of the students' consensus agree that English lecturers properly and ably deliver their online lectures during the schools and universities lockdown of direct learning due to Coronavirus pandemic. Therefore, this consensus supports teachers'positive impact of online teaching due to Covid-19 pandemic.

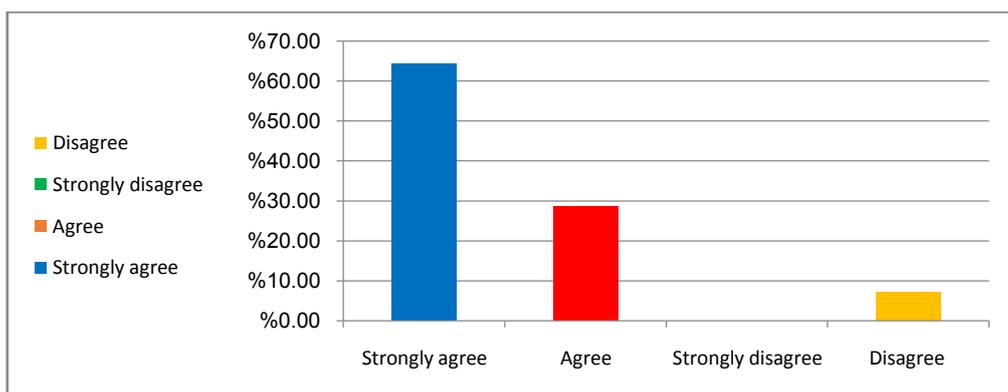


Figure 2. *Using interactive methods to motivate students in virtual classes.*

English lecturers use interactive methods to motivate students in virtual classes, which is Questionnaire Statement No. (2) has a high significant difference between participants' results in variable (2) on Questionnaire. Survey results revealed that 64.3% is recorded for Strongly Agree and 28.6% for Agree, thus, 92.9% of university students' consensus agree that

English lecturers use interactive methods to motivate students in virtual classes during lockdown due to COVID-19 crisis.

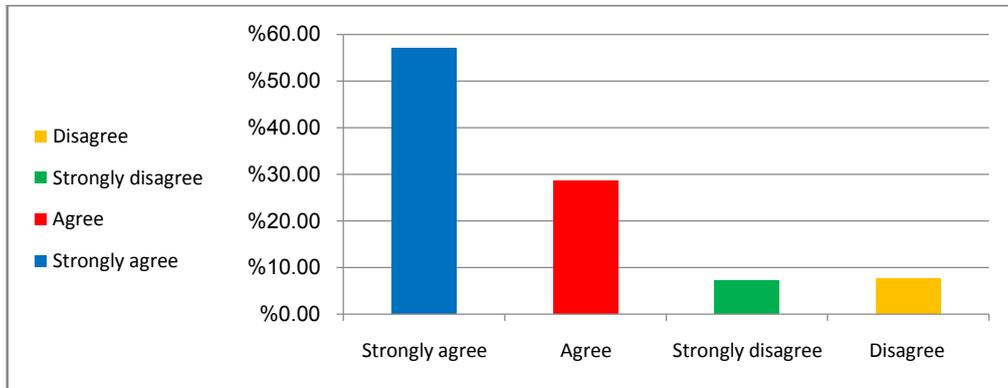


Figure 3. *Spending more time in preparing online lectures than direct classes.*

There is a significant difference between participants' results in variable (3) on Questionnaire, Statement No. 3 which is English lecturers spend more time in preparing online lectures than direct classes. Result showed that Strongly Agree has the highest percentage which is 57.10% and followed by agree which is 28.6 %, that is 85.7% of the university students agree with " English lecturers spend more time in preparing online lectures than direct classes."With the percentage of 85.7% indicates statistically the significant difference in favor of agree that English lecturers spend more time in preparing online lectures than direct classes. Thus, this is a negative influence for teachers to sit on chairs much time, and it may affect the teachers concentration.

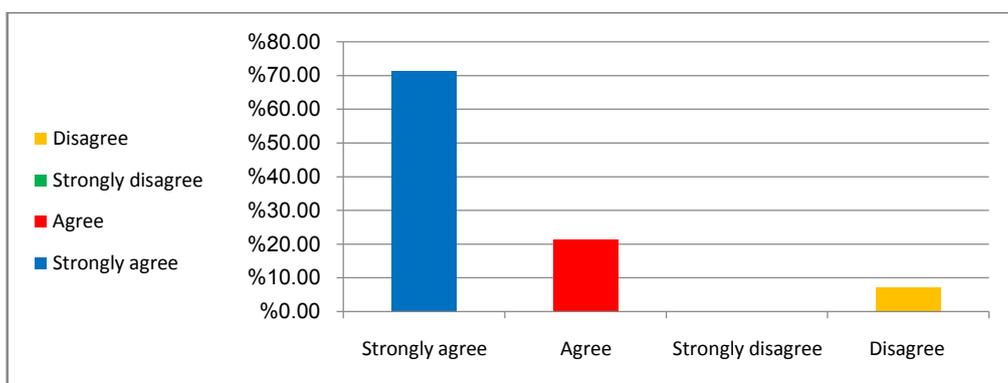


Figure 4. *Displaying the online virtual classes in an attractive way.*

Study revealed that there is a significant difference between participants' results in variable (4) on questionnaire, Statement Number 4, i.e., English lecturers display their online virtual classes in an attractive way. The result showed that there is a high percentage for strongly agree and Agree which is 92.8% and 7.1% for disagree. This indicates statistically the significant difference in favor of agree that college teachers display their online virtual classes in an attractive way during the pandemic.

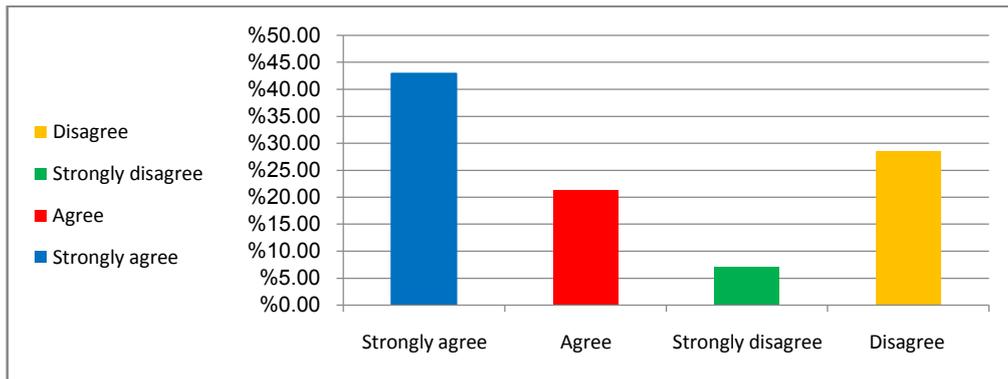


Figure 5. *The effectiveness of Online Virtual classes and direct teaching.*

Based on statistics, Questionnaire statement number 5, i.e., I think virtual classes are more effective than direct classes, revealed that there is a significant difference between participants' results in variable (5) on questionnaire. The result demonstrates that there is highest percentage for Strongly agree which is 42.9% and 21.4% for agree. Therefore, 64.3% of the students' consensus agree that virtual classes are more effective than direct teaching. This consensus supports the positive impacts of EFL students towards online virtual classes due to coronavirus pandemic while the schools lockdown

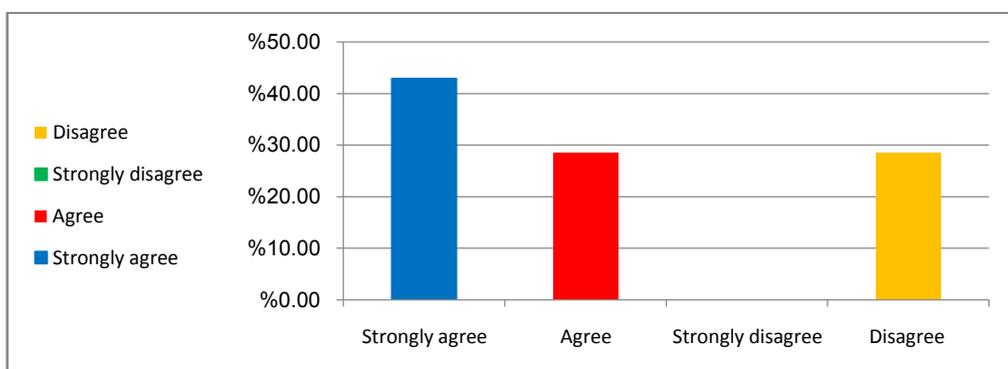


Figure 6. *The Motivation of Virtual classes and direct classes.*

Virtual classes motivate me more than direct classes which is Questionnaire Statement No. 6 has a high significant difference between participants' results in variable (6) on

Questionnaire. Survey results revealed that 42.9% is recorded for Strongly Agree, 28.6% for Agree and 29% for disagree, thus, 71.5% of university students' consensus agree that virtual classes motivate them more than direct classes which lead to the positive effects to EFL students due to coronavirus crisis.

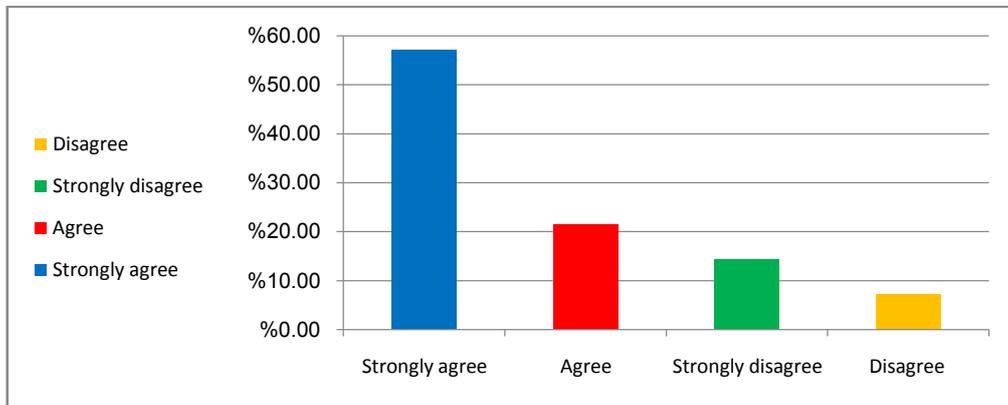


Figure 7. *The attendance of virtual classes while working, driving, sitting with family or on bed.*

Results of the survey showed that questionnaire statement number (7) which is "I can attend virtual classes while I am at work, driving, sitting with family or on bed." The significant difference between participants' results in variable (7) on questionnaire. Strongly agree recorded the highest percentage which is 57.1% followed by Agree which 21.4%. Therefore, the significant difference in favor of agree that students can attend virtual classes while they are at work, driving, sitting with families or laying on bed due to the high of the percentages. Thus, this result is considered to be negative impacts to EFL students because they do not concentrate on virtual classes properly during the lecture due to their own works.

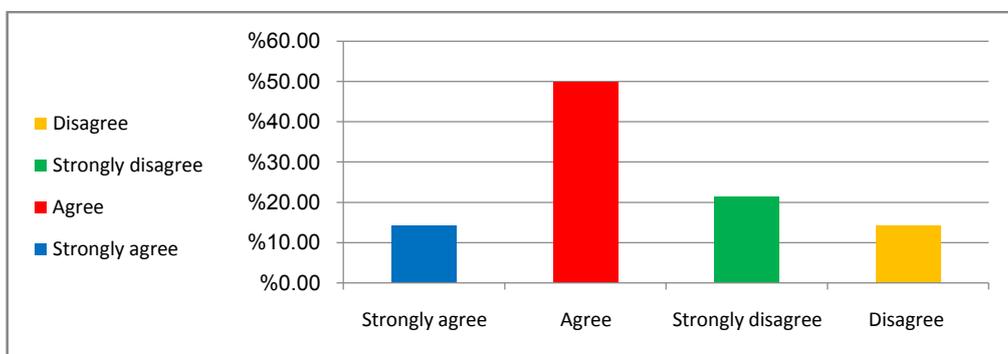


Figure 8. *The disconnection of internet while taking online virtual classes or examinations.*

Students faced repeated disconnection of internet while taking online virtual classes or examinations which is Questionnaire Statement No. 8 has a high significant difference between participants' results in variable (8) on Questionnaire. Survey results revealed that 14.3% is recorded for Strongly Agree and 50% for Agree, thus, 64.3% of university students' consensus agree that students faced repeated disconnection of internet while taking online virtual classes or examinations due to all students enter the virtual classes at the same time. Moreover, students may live far from internet antennas that is why the internet network is weak. Therefore, this result support negative impact of online virtual classes to EFL students due to COVID-19.

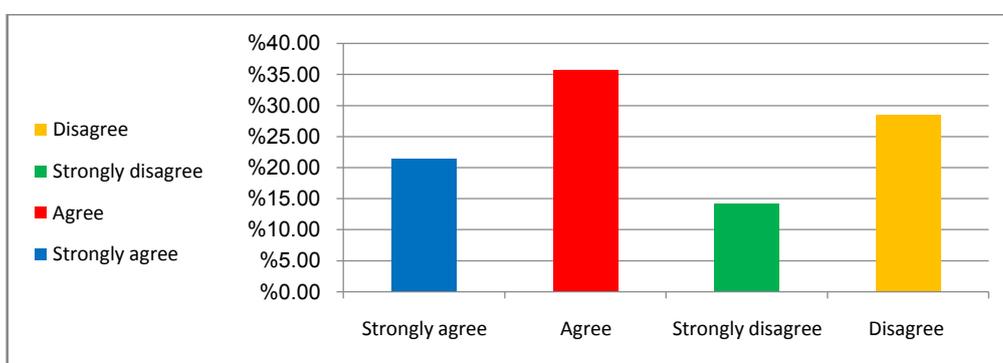


Figure 9. Using more devices in taking online examinations

Based on statistics, Questionnaire statement number 9, i.e., I used more than one device in taking online examinations to look for the questions' answers, revealed that there is a significant difference between participants' results in variable (9) on questionnaire. The result demonstrated that there is highest percentage for agree and strongly agree which are 57.1%, whereas 14.3% for strongly disagree and 28.6% for disagree. Therefore, 57.1% of the students' consensus agree that they used more than one device in examinations to look for the questions' answers. Therefore, online virtual classes have negative impact to EFL students because most of them use other devices in taking final online examinations.

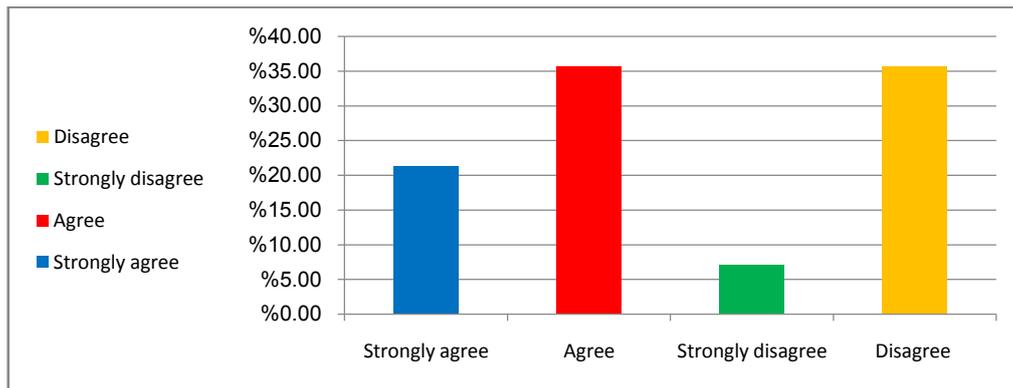


Figure 10. *The difficulty of guessing Multiple choices questions for the online examinations*

Based on statistics, Questionnaire statement number (10), i.e., Multiple choices were difficult for me to guess than surfing in the internet or electronic references while taking the online exams, revealed that there is a significant difference between participants' results in variable No. 10 on questionnaire. The result demonstrated that there is highest percentage for Strongly agree which is 21.4% and 35.7% for agree. Therefore, 57.1% of the students' consensus agree that Multiple choices were difficult for them to guess, surfing in the internet or electronic references while taking the online exams. This consensus supports the positive impacts to EFL students towards online virtual classes.

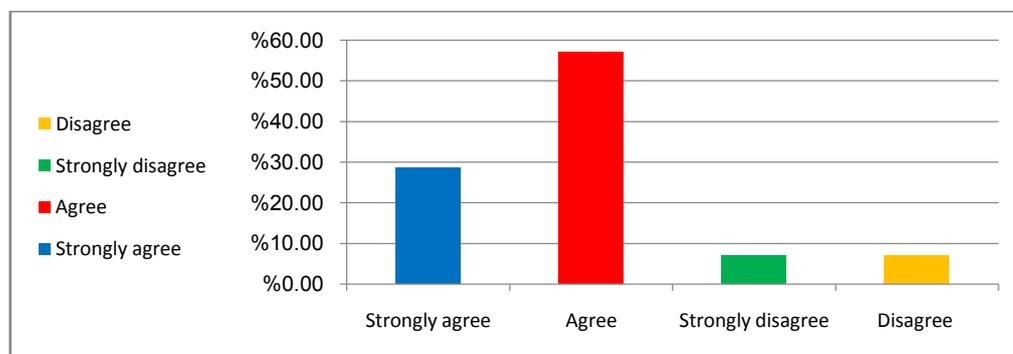


Figure 11: *Satisfaction of online virtual learning outcomes.*

Results of the survey showed that questionnaire statement number (11) which is " I am satisfied with online virtual learning outcomes." The significant difference between participants' results in variable No. 11 on questionnaire. Agree recorded the highest percentage which is 57.1% followed by strongly disagree which 28.6%. Therefore, the significant difference in favor of agree that students are satisfied with online virtual learning

outcomes due to the high of the percentages. Thus, the EFL students' outcomes have impacted positively to distance learning due to COVID-19 crisis.

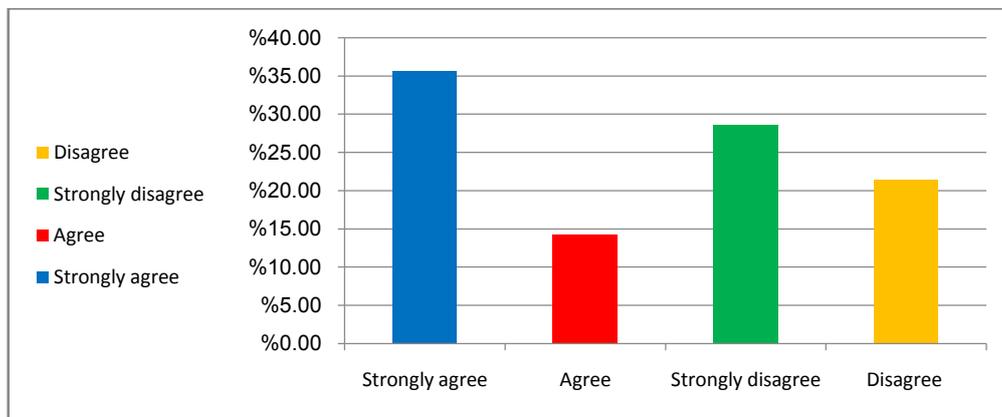


Figure 12: *Lacking of writing skill in Online Virtual classes and examinations.*

Online virtual classes do not help me improve writing skill which is Questionnaire Statement No. 12 has a high significant difference between participants' results in variable (12) on Questionnaire. Survey results revealed that 35.7% is recorded for Strongly Agree and 14.3% for Agree, thus, 50% of university students' consensus agree that Online Virtual classes do not help me improve writing skill due to most of students use the manner of copy and paste to answer the open questions. Moreover, the time allotted to the questions is not enough to write much on an electronic page. Therefore, this result supports the negative impact of distance learning on EFL students due to COVID-19.

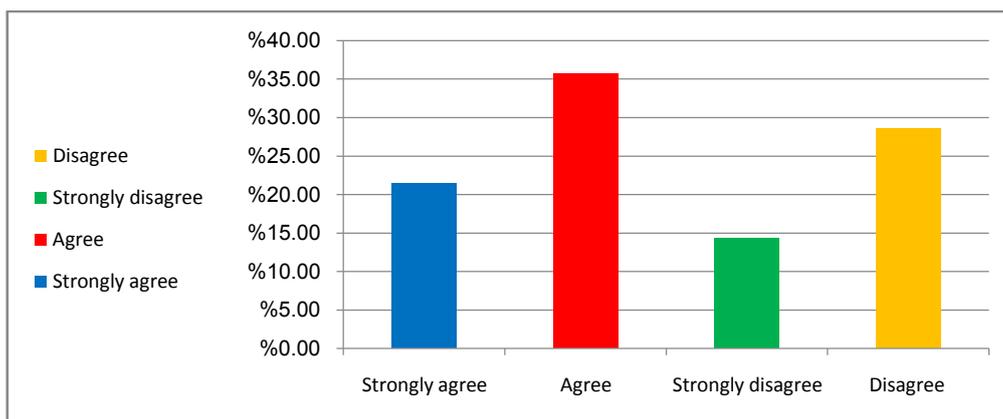


Figure 13: *Lacking of speaking skill in Online Virtual classes*

Based on statistics, Questionnaire statement number 13, i.e., Online Virtual classes do not help me improve speaking skill, revealed that there is a significant difference between participants' results in variable (13) on questionnaire. The result demonstrates that there is

highest percentage for agree which is 35.7% and 21.4% for strongly agree. Therefore, 57.1% of the students' consensus agree that Online Virtual classes do not help them improve speaking skill. This consensus supports the negative impacts of distance learning to EFL students towards online virtual classes due to lack of practicing speaking during the lectures.

Referring to the questionnaire, which was: what are the positive and negative impacts of distance learning to EFL students due to COVID-19 crisis. The subjects' responses of this study as follow: Their positive impacts of distance learning due to COVID-19, fall into the following:

- 1- Multiple choice is appropriate assessment measure in distance learning.
- 2- The teachers should deliver their lectures online virtual classes even if the schools and universities reopen after COVID-19 pandemic because they motivate students more than direct learning.
- 3- Distant learning and online virtual classes are effective teaching methods for EFL students.
- 4- The students should check the internet an hour before taking up the distant virtual classes or taking distant final examinations to avoid the network disconnection.
- 5- Teachers should give more time for EFL students during online virtual classes so that they can write and edit their writing.
- 6- Teachers should give EFL students more time to discuss and debate the topics while online virtual classes.

The study subjects negative impacts of distance learning are fall into the following:

- 1) The open questions are not appropriate assessment methods in distance learning.
- 2) The students should not do anything while taking up virtual classes or taking distant final examinations in order to avoid mental distraction.
- 3) EFL students practice copy and paste from other documents and references which they do not help them to improve writing skill.
- 4) There is little time devoted to writing skill in distance learning.
- 5) There is a lack of exposure to English Speaking skill during virtual online classes.
- 6) The EFL students should not use more than one device to surf the internet or seek for the answer from references when taking distant final examinations to avoid cheating.
- 7) The distant final examinations should be more restricted and monitored to avoid cheating.

- 8) EFL students' results have inflation in the grades because there is no direct control for Final examinations.
- 9) English lecturers spend more time in preparing online lectures than direct classes

5. DISCUSSION

The preceding analysis suggests some characteristics and influences of distance learning among Saudi students at university stages. The EFL students did not seem to have much opportunity to deal with distant learning due to coronavirus pandemic. Various reasons were noted, such as, the students did not check the internet connection an hour before the distant virtual classes or distant final examinations. Therefore, they experienced internet or network disconnection, either disappearance of lecturers' voice or students' voice as a result of poor disconnection of internet and a factor that impede would them to complete lectures or examinations successfully.

The main positive impacts to EFL learners' in distant learning are: 1) Multiple choice is appropriate assessment measure in distance learning, and; 2) The lecturers delivered their lectures on online virtual classes properly and effectively due to COVID-19 pandemic, and; 3) The distance learning motivated students more than direct learning. 4) EFL students are satisfied with online virtual learning outcomes because they get high grades due to distant learning and there is no monitoring or control in online examinations.

Another positive distant learning impact is online virtual classes are effective teaching methods, most students need to attend and enter the virtual classes from their tablets, laptops or desktops, even if they are busy doing something else. They do something else besides attending lectures, not like direct teaching where the lecturers have classroom management and all students pay attention to the lecturers. In contrast, distance learning has negative impact to EFL students, that is, it is one cause of mental distraction.

Most of the respondents pointed clearly the gap between writing in direct methods of learning and writing distant learning. The respondents found it difficult to write a paragraph on online examinations because they are afraid that time is not enough to complete the online examination. Therefore, most of students use copy and paste from the references and documents to finish earlier. They forget that university stage is more different than other stages. Every individual student depends on himself/herself in writing.

Lack of exposure to speaking and debates on online virtual classes, was a real problem impeded mastery over English and distance learning. Most of the respondents believed that there is little time devoted to writing skill in distance learning. There was a little awareness of importance of writing not to use copy and paste, most of the respondents agreed that the EFL students should use more than one device to surf the internet or seek for the answer from references when taking distant final examinations. They do not give their best to write or think critically while expressing their own opinions. Notwithstanding, there are many writing tasks that need critical thinking and view their opinions, EFL students still copy and paste the model set of writing from references and documents. Thus, distance learning has impacted negatively to EFL students.

There are many negative impacts of distance learning to EFL students. Most of students attend the online virtual classes/lectures while working, driving, laying on bed or doing anything beside the online lectures or classes which lead to students' mental distraction.

Another negative impact of distance learning, friends and relatives helped students answer tasks and the final examinations questions. The students rely most on others and they do not do their best to complete their own tasks by themselves. Moreover, the open questions are not appropriate assessment methods in distance learning because it helps students to practice copy and paste.

Despite distant learning has great impact to Saudi students in trying to learn English, especially in writing, speaking, and doing assignments and taking examinations, they show deep interest of distance learning. Most importantly, all the students showed awareness of the significance of distance learning as compensation to complete the school year due to COVID-19 pandemic.

6. CONCLUSIONS

Although most of Saudi EFL students at colleges and universities understand the importance of distance learning as a global methods, that may help them to get good opportunities in future, the findings of this study indicates clearly that distant learning has positive and negative impacts to EFL students due to COVID-19. This impacts needs serious treatment including all aspects of teaching methods, online network and learners.

The lecturers should devote enough time to the EFL learners to practice speaking and writing. They should draw great attention to teach the four skills, reading, writing, speaking and listening, in a balanced way via distant learning. Lecturers should adopt an approach and work hard to raise EFL learners' ability through distant learning and direct learning and trying to catch up the latest developments in the field of teaching English methods due to COVID-19. In addition, they should encourage EFL learners to take part in virtual classes and motivate them while delivering online virtual classes or the lectures. A much better pedagogical approach to teach English language is Communicative Language Teaching like speaking and writing.

The advocates of this approach contend that activities that involve real communication promote learning activities in which language is used for carrying out meaningful tasks. This promotes learning language and it is meaningful to the learners and encourages learning. The practice of using one device in lecture or examinations is also shown to be quite effective in writing and not deficient. Thus, distant learning has impacted EFL students due to COVID-19. And it will be an effective method in the future learning. It will stand side by side with direct learning and modern learning.

REFERENCES

- 1) Alarabia (2020), Saudi Arabia-Suspended-education-in-Algattif, retrieved from <https://www.alarabiya.net/ar/saudi->
- 2) Archambault, L. and Crippen, K. (2009) 'K-12 distance educators at work: Who's teaching online across the united states', *Journal of Research on Technology in Education*, 41(4), 363-391. <https://doi.org/10.1080/15391523.2009.10782535>
- 3) Anastasiades, P. S. *et al.* (2010) 'Interactive Videoconferencing for collaborative learning at a distance in the school of 21st century: A case study in elementary schools in Greece', *Computers and Education*, 54(2), 321-339. <https://doi.org/10.1016/j.compedu.2009.08.016>
- 4) Argaam. (2020). 'List of Actions and measures for learning during the of Emergency Enforced on Saudi Arabia. Retrieved from <https://www.argaam.com/ar/article/articledetail/id/1354753>
- 5) Azzi-Huck, K. & Shmis, T. (2020). Managing the impact of COVID-19 on education systems around the world: How countries are preparing, coping, and planning for recovery. Retrieved from: <https://blogs.worldbank.org/education/managing-impact-COVID-19-education-systems-around-world-how-countries-are-preparing>.

- 6) Basilaia, G., & Kvavadze, D. (2020). Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia. *Pedagogical Research*, 5(4), em0060. <https://doi.org/10.29333/pr/7937>
- 7) Dawadi, Saraswati; Giri, Ram; Simkhada, Padam (2020): Impact of COVID-19 on the Education Sector in Nepal - Challenges and Coping Strategies. Sage Submissions. Preprint. <https://doi.org/10.31124/advance.12344336.v1>
- 8) Eldeeb, R., A. (2014). Students' perceptions to e-learning. *IOSR Journal of Research & Method in Education*, 4(3), 33-36.
- 9) Holmes, B., & Gardner, J. (2006). *E-Learning: Concepts and Practice*. London: SAGE Publications.
- 10) Keller, C., & Cernerud, L. (2002). Students' perceptions of e-learning in university education. *Journal of Educational Media*, 27, 1-2.
- 11) Kenkel, C. S. (2011). Teaching presentation skills in online business communication courses. *MERLOT Journal of Online Learning and Teaching*, 7(3), 412–418. Retrieved from http://jolt.merlot.org/vol7no3/kenkel_0911.htm
- 12) Mamattah, R., Selorm (2016). Students' perceptions of e-Learning. (Master program Adult Learning and Global Change), Linköping University, Linköping.
- 13) Mislinawati, V., M., & Nurmasyitah. (2018). Students' perceptions on the implementation of e-learning: Helpful or unhelpful? Paper presented at the 6th South East Asia Design Research International Conference.
- 14) Mitchell, V. W., & Bakewell, C. (1995). Enhancing Oral Presentation Skills Through Peer Review. *Learning Without Doing*, Vol. 26, pp. 353–36.
- 15) Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011) 'E-Learning, online learning, and distance learning environments: Are they the same?', *Internet and Higher Education*. <https://doi.org/10.1016/j.iheduc.2010.10.001>
- 16) Popovici, A., & Mironov, C. (2014). Students' perception on using eLearning technologies. *Procedia - Social and Behavioral Sciences*, 180, 1514 – 1519.

- 17) Qi, W. (2017) 'Evaluating a virtual collaborative environment for interactive distance teaching and learning: A case study'. *Smart Innovation, Systems and Technologies*, 11-18. https://doi.org/10.1007/978-3-319-50212-0_2
- 18) Sintema, E. J. (2020). Effect of COVID-19 on the Performance of Grade 12 Students: Implications for STEM Education. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(7), em1851. <https://doi.org/10.29333/ejmste/7893>
- 19) Smart, K., L., & Cappel, J. (2006). Students' perceptions of online learning: A comparative study. *Journal of information technology education*, 5, 201-219.
- 20) Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education: Research*, 157-190.
- 21) Swan, K. (2019). Research on online learning. Research Center for Educational Technology Kent State University.
- 22) UNESCO. (2020). *UNESCO Report, 'COVID-19 Educational Disruption and Response'*. Retrieved from <https://en.unesco.org/covid19/educationresponse/>
- 23) Walker, P. G. T, Whittaker, C., Watson, O., et al. (2020). 'The Global Impact of COVID-19 and Strategies for Mitigation and Suppression'. *Imperial College London*. <https://doi.org/10.25561/77735>