Influence of e-learning factors on student's learning during Covid-19 in Sultanate of Oman

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Abstract

Novel Coronavirus leads all the educational institutions to think of e-learning platforms to continue the education. E-learning tools are playing a crucial role during this pandemic, it aims to help instructors, and universities facilitate student learning during periods of university closure. The study attempts to examine the influence of e-learning factors on student's learning focusing on teacher, content, technology, student. A structured questionnaire was used to collect data from 249 bachelor students through a web-based survey at Arab Open University and was analyzed with various statistical tools which can be used to test the relationship between the variables. However, it was revealed that teachers, content, technology, and students play a significant role in the e-learning system. Through a stepwise multiple regression model, it was revealed that e-learning plays a significant role in knowledge enhancement and student learning. Further noted that gender, mode of study, program of study has a significant effect on e-learning factors. Students were exposed to the e-learning system and feel more confident and comfortable while working on it. It is therefore recommended that an e-learning environment can increase the learning potential of the students. e-learning is a good solution during this pandemic situation. Students should be motivated and satisfied with the instructor's support and course policies tend to perceive their learning outcomes higher. Both teachers and students have had to re-adapt the way they prepare, access, and engage with e-learning environment. Even though there are few challenges in adopting e-learning technologies, the educational institutions are supporting in all possible ways and provide an uninterpreted education to all the student community.

Keywords: *e-learning, Technology, Teacher, Student, Education*

1. Introduction

The worldwide outbreak of novel Coronavirus (COVID 19) remains a major health concern across the globe. The severe acute respiratory syndrome coronavirus has caused incredible destruction to individuals, institutions, and states (Badahdah, et al., 2020). It has and will have substantial economic, social, education and psychological impacts. Health, however, became the crucial concern that eclipses all other matters (Van den Broucke, 2020). Accordingly, every country's primary concern has become to diminish the spread of the virus and alleviate its effects on the society in general, and the most vulnerable communities (Osman, 2020). Compared to its small population, the Sultanate of Oman is one of the countries that were relatively being hit hard by COVID-19. On 24th February 2020, Oman confirmed the first case of Covid 19 (MOH, 2020). In response to a potential outbreak in the country, Royal directives

were issued to mobilize a national campaign through forming a Supreme Committee for COVID-19 and taking increasingly stringent measures to halt the virus outbreak in the country (Osman, 2020). Ministry of Education has announced that the closure of all the educational institutions in the country since March 2020 which led all the educational institutions to think of e-learning platform to continue the education.

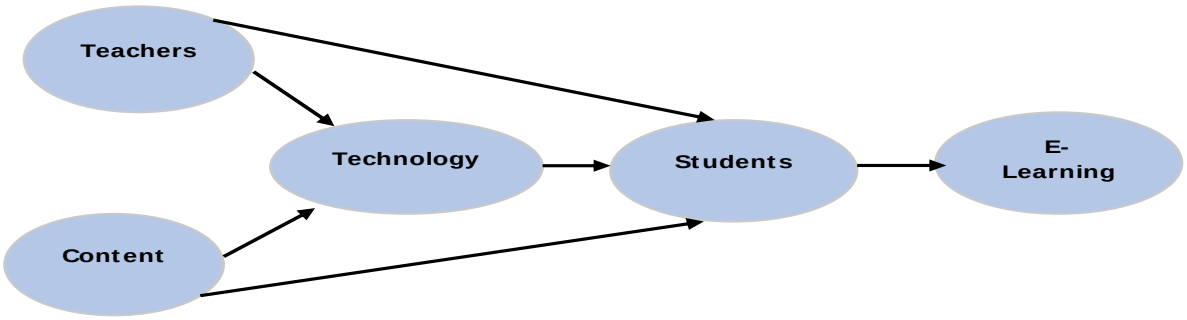
2. Rationale of the Study

A major part of the world is on quarantine due to the serious outbreak of this global pandemic Covid-19 and therefore many cities have turned into phantom cities and its effects can be seen in schools, colleges, and universities too (Dhawan, 2020). One year into the COVID-19 pandemic, close to half the world's students are still affected by partial or full closures of educational institutions, and over 100 million additional children will fall below the minimum proficiency level in reading because of the health crisis (Education: From disruption to recovery, 2021). In the initial stage of the closure, all the educational institution was struggling to find the options to deal with this challenging situation. These circumstances make us realize that scenario planning is an urgent need for academic institutions (Rieley, 2020). Several arguments are associated with e-learning. Accessibility, affordability, flexibility, learning pedagogy, life-long learning, and policy are some of the arguments related to online pedagogy. Flexibility is another interesting aspect of online learning; a learner can schedule or plan their time for completion of courses available online (Dhawan, 2020). According to the Commonwealth of Learning (2020), online learning is a process of learning and teaching based on the separation of the instructor and the learner in time and place under the mediation of technology delivery with the possibility of face-to-face interaction. Combining face-to-face lectures with technology gives rise to blended learning and flipped classrooms; this type of learning environment can increase the learning potential of the students (Dhawan, 2020). In Sultanate of Oman, Arab Open University is the pioneer in blended learning system. Transitioning from traditional face-to-face learning to online learning can be an entirely different experience for the learners and the educators, which they must adapt to with little or no other alternatives available (Pokhrel & Chhetri, 2021). E-learning tools have played a crucial role during this pandemic, helping schools and universities facilitate student learning during the closure of universities and schools (Subedi et al., 2020). The government also recognizes the increasing importance of online learning in this dynamic world. The severe explosion of Corona Virus disease can make us add one more argument in terms of online learning, that is, online learning serves as a panacea in the time of crisis (Dhawan, 2020).

3. Objectives of the Study

1. To examine the influence of the e-learning factors on student's learning
2. To analyze e-learning in relation to the teacher, content, technology, student
3. To examine the influence of the e-learning on knowledge enhancement
4. To understand the benefits and challenges faced by students in e-learning during Covid 19.
5. To explore the policy implication of use of e-learning at university level

4. Conceptual Model



E-learning refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance (Rosenberg, 2001). The use of suitable and relevant pedagogy for online education may depend on the expertise and exposure to information and communications technology (ICT) for both educators and the learners. Some of the online platforms used so far include unified communication and collaboration platforms such as Microsoft Teams, Google Classroom, zoom etc., which allow the teachers to create educational courses, training, and skill development programs (Petrie, 2020). Students can learn anytime and anywhere, thereby developing new skills in the process leading to life-long learning (Dhawan, 2020). Effective online instructions facilitate feedback from learners, make learners ask questions, and broaden the learner horizon for the course content (Keeton, 2004). It is highly important that students focus on the content rather than the delivery method. The system of e-learning refers to the tools by which students can gain access to content.

5. Materials and Methods

We conducted cross sectional web-based survey of bachelor students during the month of May 2021. The survey population of this study consist of students who are studying in Arab Open University, Sultanate of Oman. Convenience sampling method was used to draw 249 samples were considered for the study. The investigation was approved by the ethical committee in our university. The link of the questionnaire was sent to all the potential participants who are studying bachelor program in Arab Open University. The link was shared in every class through Microsoft Teams and WhatsApp. All the participants for this study were provided with the purpose of this study. The questionnaire and distributed to few sample populations for the pilot study and the reliability of the questionnaire was calculated with the help of Cronbach alpha and it was found to be 0.918 and the total numbers of questions were 35. The values were found to be in the range of 0.60 and 0.90, hence it might be suggested that all the scales met the reliability condition (Hair et al., 1998, p.118). The use of statistical distributions such as tables showing frequencies and percentages were adopted in the study. The hypotheses were analyzed with the help of step wise multiple regression, and MANOVA.

6. Participants

Table 1. Demographical Data

Description		Frequency	Percentage
Gender	Male	91	**37**
	Female	158	**63**
Mode of Study	Full Time	136	**55**
	Part Time	113	**45**
Program of Study	Business	144	**58**
	Information Technology	56	**22**
	Law	45	**18**
	Foundation	4	**2**
Level of Study	Fourth Year	59	**24**
	Third Year	77	**31**
	Second Year	74	**30**
	First Year	39	**15**

The sample (Table 1) consist of 249 students who are studying different (Business, Information Technology & Law) program in Arab Open University. The gender distribution was 37% male and 63% female students. The sample students were pursing 58 % in business program, 22% in Information Technology program and 18% in Law program. In terms of mode of study, 55% of the sample students were full time students and remaining 45% of them are pursuing part time program in the university. The student's level of study 24% of them are in fourth year of their study, 31% of them are in third year, 30% of students are in Second year and the remaining 15% of them are doing their first year.

7. Results

The researchers conducted four different step wise multiple regression analysis to satisfy the objectives of the study (1) to examine the influence of the e-learning on student's learning (Y) (Table 2), (2) to examine the influence of the Teacher, content Technology and Student on E-learning system (Y) (Table 3), (3) to examine the influence of the e-learning on knowledge enhancement (Y) (Table 4) and (4) to examine the influence of benefits and challenges on e-learning (Y) (Table 5) respectively. The tables display the unstandardized regression co-efficient (*B*), the unstandardized standard error of regression coefficients (*SE B*), the standardized regression coefficient (β), R^2, and *F for* changes in R^2.

Table 2 Ho: There is no significant impact of e-learning education on student's learning.

Variables	Model 1		
	B	**SE B**	**β**
Constant	.639	.487	
E-learn	1.224	.033	.917
R^2	**0.841**		

Adjusted R^2	**0.840**
F	1347.65
df	(1, 255)
Sig (P)	0.001

Unstandardized regression coefficient (B), the Unstandardized standard error of regression coefficients (SE B), the standardized regression coefficient (β)

The table reveals that E-learning variable is entered at Step 1 and predicts only 84% of Student's learning (R^2 = 0.841, F (1, 255) = 1347.65, p=0.001). The R^2 for the overall study on the above factor suggests that there is a high effect (84%) e-learning on student's learning. Model Equation: **Y = 0.639 +1.224 (E-learn).** This would suggest that e-learning plays a significant role on Student's learning.

Table 3 Ho: There is no significant impact of teacher, content, technology, student on E-learning system.

Variables	**Model 1**			**Model 2**			**Model 3**			**Model 4**		
	B	**SE B**	**β**	**B**	**SE B**	**β**	**B**	**SE B**	**β**	**B**	**SE B**	**β**
(Constant)	1.848	.359		-.787	.389		-1.197	.360		-1.300	.348	
Students	.682	.019	.915	.518	.022	.694	.363	.030	.487	.298	.032	.399
Teacher				.305	.029	.316	.261	.027	.270	.205	.029	.213
Technology							.228	.033	.277	.190	.033	.230
Content										.162	.036	.196
R^2	**0.837**			**0.888**			**0.907**			**0.914**		
AdjustedR^2	**0.836**			**0.887**			**0.906**			**0.912**		
F	1256.35			967.15			787			642.15		
df	(1, 245)			(2,244)			(3,243)			(4,242)		
Sig (P)	0.001			0.001			0.001			0.001		

Unstandardized regression coefficient (B), the Unstandardized standard error of regression coefficients (SE B), the standardized regression coefficient (β)

The table reveals that Student is entered at Step 1 and predicts only 83.6% of E-learning system (R^2 = 0.837, F (1,245) = 1256.35, p=0.001). When Teacher is entered at Step 2, there is 5% increase in predictive capacity (R^2 = 0.887, F (2,244) = 967.15, p=0.001). Then Technology is entered at step 3, there is 2% increase in predictive capacity (R^2 = 0.906, F (3,243) = 787, p=0.001). Finally, Content is entered at Step 4 there is an improvement in the model with 91.2% in predictability (R^2 = 0.914, F (4,242) = 642.15, p=0.001). The R^2 for the overall study on the four factors suggest that there is a high effect (91%) on e-learning system. Model Equation: **Y = -1.300+0.298(Students) + 0.205 (Teacher) + 0.190 (Technology) + 0.162(Content).** This would suggest that e-learning variables like student, teacher, technology, and content play a significant role on e-learning system.

Table 4 Ho: There is no significant impact of e-learning education on knowledge enhancement.

Variables	Model 1		
	B	**SE B**	**β**
Constant	1.556	.797	
E-learn	1.104	.054	.785
R^2	**0.616**		
Adjusted R^2	**0.615**		
F	410.78		
df	(1, 256)		
Sig (P)	0.001		

Unstandardized regression coefficient (B), the Unstandardized standard error of regression coefficients (SE B), the standardized regression coefficient (β)

The table reveals that E-learning variable is entered at Step 1 and predicts only 62% of knowledge enhancement (R^2 = 0.616, F (1, 256) = 410.78, p=0.001). The R^2 for the overall study suggest that there is a moderate effect (62%) of e-learning on knowledge enhancement. Model Equation: **Y = 1.556 +1.104 (E-learn).** This would suggest that e-learning plays a significant role on knowledge enhancement.

Table 5 Ho: There is no significant impact of benefits and challenges on e-learning.

Variables	Model 1			
	B	**SE B**	**β**	Sig (P)
(Constant)	2.715	1.230		.028
benefits	.870	.044	.787	.000
challenges	-.091	0.045	-0.080	.043
R^2	**0.679**			
Adjusted R^2	**0.676**			
F	265.44			
df	(2, 251)			

Unstandardized regression coefficient (B), the Unstandardized standard error of regression coefficients (SE B), the standardized regression coefficient (β)

The table reveals that E-learning variable is entered at Step 1 and predicts only 62% of knowledge enhancement (R^2 = 0.616, F (1, 256) = 410.78, p=0.001). Model Equation: **Y = 2.715 +0.870 (Benefits) – 0.091 (Challenges).** This would suggest that e-learning system has more benefits than challenges.

MANOVA Tests on Gender and E-learning factors

MANOVA is used to explore taking Gender as independent variable and E-learning factors like content, teacher, and technology as dependent variables to find the interactions among the dependent variable and also among independent variables. **Ho: There is no significant effect across the Gender and E-learning factors**

Table 6: Multivariate Tests[a] on Gender and E-learning factors

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Gender	Wilks' Lambda	.824	17.419[b]	3.000	245.000	.000	0.176

a. Design: Intercept + mode

b. Exact statistic

Table 7: Tests of Between-Subjects Effects on Gender and E- learning factors

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Gender	Teacher	880.302[a]	1	880.302	46.555	.000	0.159
	Content	973.500[b]	1	973.500	36.500	.000	0.129
	Technology	1021.131[c]	1	1021.131	38.595	.000	0.135
Error	Teacher	4670.445	247	18.909			
	Content	6587.857	247	26.671			
	Technology	6534.997	247	26.457			

a. R Squared = .159 (Adjusted R Squared = .155): b. R Squared = .129 (Adjusted R Squared = .125)

c. R Squared = .135 (Adjusted R Squared = .132)

Table 8: Estimated marginal means of Gender.

Dependent factors	Gender	Mean	Std. Deviation	N
Teacher	Male	20.6703	3.65165	91
	Female	16.7658	4.70149	158
	Total	18.1928	4.73097	249
Content	Male	20.8022	3.97274	91
	Female	16.6962	5.73703	158
	Total	18.1968	5.52172	249
Technology	Male	19.8571	4.45364	91
	Female	15.6519	5.50035	158
	Total	17.1888	5.51981	249

It is inferred from the table (6, 7 & 8) there is a significant difference between males and females when considered jointly on the E-learning variables, Wilk's A= 0.824, F (3,245) =17.419, p= 0.001, partial n^2 = 0.176. A separate ANOVA was conducted for each dependent variable with each ANOVA evaluated at an alpha level of 0.05. It is also observed from the table that there is a significant difference between males and females on Teacher F (1,247) = 46.55, p=0.001, partial n^2= 0.157; Content F (1,247) = 36.50 p=0.001, partial n^2= 0.129; and Technology F (1,247) = 38.595 p=0.001, partial n^2= 0.135. Further it is concluded from the table that estimated mean scores of Teachers, Content and Technology show males are scoring higher than females. Hence Ho is rejected. It shows that there is a **significant effect across the Gender and E-learning factors.**

MANOVA Tests on Mode of Study and E-learning factors

MANOVA is used to explore taking mode of study as independent variable and E-learning factors like content, teacher, and technology as dependent variables to find the interactions among the dependent variable and also among independent variables.

Ho: There is no significant effect across the mode of study and E-learning factors

Table 9: Multivariate Tests[a] on Mode of Study and E-learning factors

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Mode	Wilks' Lambda	.931	6.055b	3.000	245.000	.001	0.069

a. Design: Intercept + mode

b. Exact statistic

Table 10: Tests of Between-Subjects Effects on Mode of study and E- learning factors

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Mode of Study	Teacher	355.940[a]	1	355.940	16.924	.000	0.064
	Content	434.524[b]	1	434.524	15.060	.000	0.059
	Technology	316.077[c]	1	316.077	10.783	.001	0.042
Error	Teacher	5194.807	247	21.032			
	Content	7126.833	247	28.854			
	Technology	7240.052	247	29.312			

a. R Squared = .159 (Adjusted R Squared = .155)

b. R Squared = .129 (Adjusted R Squared = .125)

c. R Squared = .135 (Adjusted R Squared = .132)

Table 11: Estimated marginal means of Mode of Study.

Dependent factors	Mode	Mean	Std. Deviation	N
Teacher	Full Time	17.1029	4.59191	136
	Part Time	19.5044	4.57892	113
	Total	18.1928	4.73097	249
Content	Full Time	16.9926	5.80102	136
	Part Time	19.6460	4.80312	113
	Total	18.1968	5.52172	249
Technology	Full Time	16.1618	5.74678	136
	Part Time	18.4248	4.98355	113
	Total	17.1888	5.51981	249

It is inferred from the table (9, 10 & 11) there is a significant difference between full time and part time when considered jointly on the E-learning variables, Wilk's A= 0.931, F (3,245) =6.055, p= 0.001, partial n2 = 0.069. A separate ANOVA was conducted for each dependent variable with each ANOVA evaluated at an alpha level of 0.05. It is also observed from the table that there is a significant difference between fulltime and part time on Teacher F(1,247)=

16.924, p=0.001, partial n2= 0.064; Content F(1,247)=15.060 p=0.001, partial n2= 0.059; and Technology F(1,247)=10.783 p=0.001, partial n2= 0.042. Further it is concluded from the table that estimated mean scores of Teachers, Content and Technology show part time mode are scoring higher than full time mode. Hence Ho is rejected. It shows that there is a **significant effect across the Mode of Study and E-learning factors.**

MANOVA Tests on Program of Study and E-learning factors

MANOVA is used to explore taking program in which students are studying as independent variable and E-learning factors like content, teacher, and technology as dependent variables to find the interactions among the dependent variable and also among independent variables.

Ho: There is no significant effect across the program of study and E-learning factors

Table 12: Multivariate Tests[a] on Program of Study and E-learning factors

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Program	Wilks' Lambda	.856	4.346	9.000	591.549	.000	0.051

a. Design: Intercept + program

b. Exact statistic

Table 13: Tests of Between-Subjects Effects on Program of study and E-learning factors

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Program of Study	Teacher	432.840[a]	3	144.280	6.907	.000	0.078
	Content	271.740[b]	3	90.580	3.044	.029	0.036
	Technology	252.316[c]	3	84.105	2.821	.040	0.033
Error	Teacher	5117.907	245	20.889			
	Content	7289.617	245	29.754			
	Technology	7303.813	245	29.811			

a. R Squared = .078 (Adjusted R Squared = .067)

b. R Squared = .036 (Adjusted R Squared = .024)

c. R Squared = .033 (Adjusted R Squared = .022)

Table 14: Estimated marginal means of Program of Study.

Dependent factors	Program	Mean	Std. Deviation	N
Teacher	Business	17.3472	5.14723	144
	IT	18.1071	3.42546	56
	Law	20.8444	3.93097	45
	Foundation	20.0000	1.15470	4
	Total	18.1928	4.73097	249
Content	Business	17.6528	5.88743	144
	IT	17.7857	4.22854	56
	Law	20.4000	5.49959	45
	Foundation	18.7500	2.50000	4

	Total	18.1968	5.52172	249
Technology	Business	17.2986	5.58730	144
	IT	15.6250	5.00386	56
	Law	18.7778	5.75203	45
	Foundation	17.2500	1.50000	4
	Total	17.1888	5.51981	249

It is inferred from the table (12, 13 & 14) there is a significant difference between various program when considered jointly on the E-learning variables, Wilk's A= 0.856, F (9, 591) =4.346, p= 0.001, partial n2 = 0.051. A separate ANOVA was conducted for each dependent variable with each ANOVA evaluated at an alpha level of 0.05. It is also observed from the table that there is a significant difference between various program on Teacher F (3, 245) = 6.907, p=0.001, partial n2= 0.078; Content F (3,245) = 3.044 p=0.029, partial n2= 0.036; and Technology F (3,245) = 2.821 p=0.040, partial n2= 0.033. Further it is concluded from the table that estimated mean scores of Teachers, Content and Technology show law program are scoring higher. Hence Ho is rejected. It shows that there is a **significant effect across the Program of Study and E-learning factors.**

MANOVA Tests on Level of Study and E-learning factors

MANOVA is used to explore taking level in which students are studying as independent variable and E-learning factors like content, teacher, and technology as dependent variables to find the interactions among the dependent variable and among independent variables.

Ho: There is no significant effect across the level of study and E-learning factors

Table 15: Multivariate Tests[a] on Level of Study and E-learning factors

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Level	Wilks' Lambda	.970	.842	9.000	591.549	.578	.010

a. Design: Intercept + level

b. Exact statistic

Table 16: Tests of Between-Subjects Effects on Level of study and E- learning factors

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Level of Study	Teacher	90.368[a]	3	30.123	1.352	.258	.016
	Content	15.192[b]	3	5.064	.164	.920	.002
	Technology	61.648[c]	3	20.549	.672	.570	.008
Error	Teacher	5460.379	245	22.287			
	Content	7546.166	245	30.801			
	Technology	7494.480	245	30.590			

a. R Squared = .016 (Adjusted R Squared = .004)

b. R Squared = .002 (Adjusted R Squared = -.010)

c. R Squared = .008 (Adjusted R Squared = -.004)

Table 17: Estimated marginal means of Level of Study.

Dependent factors	Level	Mean	Std. Deviation	N
Teacher	First year	19.1282	3.85377	39
	Second year	17.8514	4.79350	74
	Third year	17.5974	5.04261	77
	Fourth year	18.7797	4.70901	59
	Total	18.1928	4.73097	249
Content	First year	18.5385	4.87662	39
	Second year	18.0405	5.10825	74
	Third year	17.9610	6.30464	77
	Fourth year	18.4746	5.44045	59
	Total	18.1968	5.52172	249
Technology	First year	17.7692	4.88532	39
	Second year	17.0811	4.97874	74
	Third year	16.5714	6.21422	77
	Fourth year	17.7458	5.63729	59
	Total	17.1888	5.51981	249

It is inferred from the table (15, 16 & 17) there is no significant difference between various levels when considered jointly on the E-learning variables, Wilk's A= 0.970, F (9, 591) =0.842 p= 0.598, partial n2 = .010. Hence Ho is accepted. It shows that there is **no significant effect across the Level of Study and E-learning factors.**

8. Discussion

E-learning usage and adoption among users is a challenging issue for many universities, both in developed and developing countries, but it is likely to be less of a concern in developed countries over the willingness of their students to accept and use the e-learning system, as significant progressive steps have already been taken, according to literatures (Almaiah et al., 2016). Eltahir (2019) indicated that the challenges of adopting e-learning system in developing countries, however, remain a reality due to the digital divide with the developing countries. E-learning tools are playing a crucial role during this pandemic, it aims to help instructors, schools, and universities facilitate student learning during periods of universities and schools' closure. Besides, most of these systems are free which can help ensure continuous learning during this Coronavirus pandemic (Almaiah, et al, 2020). There are n number of technologies available for online education but sometimes they create a lot of difficulties. These difficulties and problems associated with modern technology range from downloading errors, issues with installation, login problems, problems with audio and video, and so on (Dhawan, 2020).

The synchronous learning environment is structured in the sense that students attend live lectures, there are real-time interactions between educators and learners, and there is a possibility of instant feedback, whereas asynchronous learning environments are not properly structured. In such a learning environment, learning content is not available in the form of live lectures or classes; it is available at different learning systems and forums. Instant feedback

and immediate response are not possible under such an environment (Littlefield, 2018). The learners with a fixed mindset find it difficult to adapt and adjust, whereas the learners with a growth mindset quickly adapt to a new learning environment (Pokhrel & Chhetri, 2021).

Teachers should set time limits and reminders for students to make them alert and attentive. Efforts should be made to humanize the learning process to the best extent possible. Personal attention should be provided to students so that they can easily adapt to this learning environment (Dhawan, 2020). Educators must spend a lot of time in making effective strategies for giving online instructions. Educators or teachers in the form of facilitators face a lot of trouble while working on these technologies in the form of how to start using it when to use it, how to reduce distractions for students, how to hone students' skills via e-learning technologies (Dhawan, 2020). The use of e-learning environments to support teaching and learning has had great impact on the way content is developed and managed. In most cases, both teachers and students have had to re-adapt the way they prepare, access, and engage with educational matter (Mwanza & Engeström, 2005). E-learning should be designed in such a way that they are creative, interactive, relevant, student-centered, and group based (Partlow & Gibbs, 2003). E-Learning is rapidly becoming an essential component of Oman's educational process in all the universities and colleges and brings with it the most significant changes. With its rapidly growing workforce of adaptable and well-educated graduates, Oman could have a unique role to play with e-learning in the region (Muthuraman et al., 2020)

9. Conclusion

Teaching is moving online on an untested and unprecedented scale. Student assessments are also moving online, with a lot of trial and error and uncertainty for everyone. Many assessments have simply been cancelled. Importantly, these interruptions will not just be a short-term issue, but can also have long-term consequences for the affected cohorts and are likely to increase inequality (Burgess & Sievertsen, 2020). Students should be motivated and satisfied with the instructor's support and course policies tend to perceive their learning outcomes higher (Veerasamy et al, 2020). The survey conducted was very revealing of the attitude of the students for e-learning skills. There is a general positive attitude towards the e-learning among the student group. E-learning is a good solution during this pandemic situation. Even though there are few challenges in adopting e-learning technologies, the educational institutions are supporting in all possible ways and provide an uninterpreted education to all the student community. Further, this study can be conducted widely be carried out in all educational institutions across the country.

10.Reference

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