

A Study on e-Learning among Chinese International Students in Malaysian Universities during Covid-19 Pandemic

*Guan Yuchen, Chu Fuli, Xu Fei, Li Ying **

ABSTRACT

This articles is to study the electronic learning (e-learning) in Malaysia private university during Covid-19 pandemic. This articles is to investigate Chinese international students' attitudes to e-learning and to improve the self study skills. This descriptive research is to collect the data online among Chinese international students. With 105 samples in Malaysia, it is found that most Chinese students are interested in e-learning and and believe that e-learning can improve their skills and make them have wider knowledge. Although there are some issues they faced in the present e-learning in Malaysia university courses, the e-learning brought them social changes and different from the traditional learning, Chinese international students are satisfied with e-learning in the current e-learning in Malaysia university. Beside this, the laptop, tablet, and mobile are the preferred devices used in e-learning, and the Google meeting and Zoom are the favorite apps for the e-learning in Malaysia universities.

1. Introduction

1.1 Background of Study

Based on Ministry of Health Malaysia (MOH), Covid-19 spread in Malaysia starting from February 4, 2020 and quickly increased to 65,697 confirmed cases cumulatively in Malaysia

* Guan Yuchen, Xu Fei, & Li Ying, PhD Candidates; Chu Fuli, DBA student, Graduate School of Business, SEGi University

published in The Star newspaper (Joseph Kaos Jr & Jo Timbuong, Nov 30 2020). The Covid-19 pandemic in Malaysia has great influence on Malaysia common life and the academic life among students. According to EMGS (May 2020), international students were allowed to enrol and attend the online class in Malaysia universities and colleges. Hence, in this situation, the e-learning is quickly applied and used in Malaysia Universities among both local students and international students.

1.2 Problem Statement

In the process of e-learning during Covid-19 pandemic, the internet problems and the electricity problems occur among students (Subedi et al., 2020). Based on that research, there are about 48.1% students influenced by the electricity problems and 63.2% students influenced by the internet problems in Nepal. Based on Angelin Yeoh (2020), the lecturers and students are having the problems in the internet access on their online classes in Malaysia. Beside this, according Aboagye, Yawson, & Appiah (2020), there are some challenges on the social issues from e-learning, such as participating on group works and assisting others to perform in the e-learning. With these problems in e-learning, this study will investigate the Chinese international students' attitudes to e-learning in current Malaysia Universities.

1.3 Research objectives

- (1) To identify the current situation of using e-learning among Chinese international students in Malaysia.
- (2) To investigate attitude of Chinese international students in Malaysia to e-learning.
- (3) To recommend prospects toward using e-learning among Chinese international students in Malaysia.

1.4 Significance of Study

This study on the e-learning among Chinese international students, and it is significant for the students and the e-learning

development in Malaysia universities. With this descriptive study on e-learning among Chinese international students in Malaysia universities, the practical issues in the e-learning will be found and the proposed solutions will be given to improve the students' experiences on the e-learning. Beside this, with the e-learning study, the e-learning can be improved as a modern learning comparing to the traditional learning in classroom. With the issues and the proposed solutions to e-learning, the e-learning will be improved to a new stage of the development.

2. Literature Review

Electronic Learning (e-learning)

Electronic learning is defined as the learning which can be supported by the digital electronic tools or media (Hoppe et al., 2003). This is one of the digital learning that is facilitated by the technologies and makes the learning effectively by using the technologies (Kumar Basak, Wotto, & Belanger, 2018). According to Johnson & Brown (2017), the e-learning can reduce the costs and time among the learning, and this e-learning can offer the learning services by the greater learner controlling, more flexibility, and better customization. Piccoli, Ahmad, & Ives (2001) already compared and contrasted the e-learning with the traditional learning which is conducted by the face to face method, and there are many differences between the e-learning and the face-to-face traditional learning on the time, the places, the different technologies, the different interactions on learners and lecturers, and the different controlling in the learning.

On the e-learning, the attitudes from the learners are important and play important roles on the intention to use the e-learning technology (Hussein, 2017). During the Covid-19 crisis, the attitudes and the perceptions of students have been assessed achieve the transition and the transformation toward the e-learning in this specific Covid-19 pandemic (Guillasper, Soriano, & Oducado,

2020). At present, the e-learning becomes new normal in the academic learning in schools and universities (Purwanto, Ichsan, Gomes, Rahman, & Irwandani, 2020). This e-learning is an innovation in the learning and has great potential to be used in gaining knowledge in the future.

3. Methodology

This is a descriptive research to investigate e-learning in Malaysia Universities among Chinese international students during Covid-19 pandemic. The survey questions are adapted from Radha et al (2020), and the questions are in 5 Likert Scales shown in the appendix. Beside this, the convenience sample technique is applied and the online survey is processed during this Covid-19 pandemic in Malaysia. Then, the descriptive analysis will be conducted with the frequencies and percentage on the attitudes toward the e-learning from Chinese international students during Covid-19 pandemic.

4. Data Analysis and Findings

In this research, there are 105 respondents who are Chinese international students in Malaysia Universities to contributing to this e-learning study. With reliability test and the descriptive analysis, the attitudes of Chinese international students will be analyzed to study by e-learning in Malaysia universities.

4.1 Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
.808	11

On reliability test, there are 11 items related to attitudes of Chinese international students, and these questions are related the students' interests, contributions to skills improvement, satisfaction, usefulness in quarantine time, the knowledge improvement, the

importance on face to face in learning (Convert response), some issues in e-learning (Convert response), the positive attitudes to e-learning, knowledge wider, the E-learning importance, and the social change. The Cronbach's Alpha is 0.808 (more than 0.7), meaning a good reliability in the data. Then, with the item to total statistics, each Cronbach's Alpha is more than 0.7, and each item has contribution to total reliability results in this study.

Item-Total Statistics

	Scale Mean if Item	Scale Variance if Item	Corrected Item-Total	Cronbach's Alpha if
	Deleted	Deleted	Correlation	Item Deleted
Interested	37.4095	18.013	.588	.782
Skills_Improved	37.4095	18.321	.660	.780
Satisfied	37.8762	16.860	.443	.804
Useful in quarantine time	36.9524	19.623	.420	.799
Knowledge_Improved	37.7524	17.092	.598	.779
F2F Importance (Convert response)	39.0381	16.960	.504	.792
Issue faced (Convert response)	38.3238	19.260	.168	.838
Positive	37.3238	18.990	.600	.787
Knowledge Wider	37.3714	19.024	.572	.788
E-learning Importance	37.2667	18.986	.620	.786
Social change	37.2762	19.029	.564	.789

4.2 Descriptive Analysis

Q1: I am interested in e-learning.		
(N=105)	Frequency	Percent
Strongly Disagree	0	0%
Disagree	7	6.70%
Undecided	3	2.90%
Agree	79	75.20%
Strongly Agree	16	15.20%

For the students interests in e-learning, most are interested in

e-learning, just 7 (6.7%) students are not and 3 (2.9%) students are undecided.

Q2: E-learning improves my study skill.		
(N=105)	Frequency	Percent
Strongly Disagree	0	0%
Disagree	3	2.9%%
Undecided	8	7.6%%
Agree	81	77.1%%
Strongly Agree	13	12.4%%

On the e-learning to improve students' skills, most Chinese international students believe e-learning can improve their skills, with 13 (12.4%) students strongly agree and 81 (77.1%) students agree. Less Chinese students do not believe this, with 3 (2.9%) students disagree and 8 (7.6%) students are undecided.

Q3: I am satisfied with e-learning test (like Blackboard test).		
(N=105)	Frequency	Percent
Strongly Disagree	5	4.8%
Disagree	19	18.1%
Undecided	14	13.3%
Agree	54	51.4%
Strongly Agree	13	12.4%

On the satisfaction of e-learning, most students are satisfied with 54 (51.4%) students, and 13 (12.4%) students are strongly satisfied with e-learning in Malaysia during Covid-19 pandemic. Some are not satisfied, with 5 (4.8%) students are strongly unsatisfied and 19 (18.1%) students are unsatisfied.

On the usefulness of e-learning in the quarantine time, there are most Chinese international students believe that the e-learning is a useful tool to study in quarantine time, with 56 (53.3%) students

agreed with this useful tool, and 47 (44.8%) students strongly agreed with this statement.

Q4: E-learning makes my quarantine time a useful one.		
(N=105)	Frequency	Percent
Strongly Disagree	0	0%
Disagree	1	1%
Undecided	1	1%
Agree	56	53.3%
Strongly Agree	47	44.8%

On gaining knowledge, the e-learning can better improve knowledge comparing to traditional learning. On this statement, most students believed this, with 61 (58.1%) students agreed and 10 (9.5%) students strongly agreed, just less disagreed, with 13 (12.4%) students only.

Q5: It is better to improve knowledge through e-learning than traditional learning.		
(N=105)	Frequency	Percent
Strongly Disagree	0	0%
Disagree	13	12.4%
Undecided	21	20%
Agree	61	58.1%
Strongly Agree	10	9.5%

On the importance of face to face learning comparing with the e-learning, some students believed that the face to face is important in the learning, with 62 (59.1%) students agreed and 12 (11.4%) strongly agreed. Also there are some students who do not think that the face to face is important, with 16 (15.2%) students do not agree and 2 (1.9%) strongly disagreed.

Q6: I think Face to face learning is important for practical teaching.		
(N=105)	Frequency	Percent
Strongly Disagree	2	1.9%
Disagree	16	15.2%
Undecided	13	12.4%
Agree	62	59.1%
Strongly Agree	12	11.4%

On the e-learning, 35 students (33.4%) believed that there are some issues in e-learning and 3 (2.9%) strongly agreed with this statement. But 40 (38.1%) students do not think any issues in e-learning, 5 (4.8%) students strongly disagreed, and 22 (21%) students are undecided.

Q7: I faced some issues during e-learning.		
(N=105)	Frequency	Percent
Strongly Disagree	5	4.8%
Disagree	40	38.1%
Undecided	22	21%
Agree	35	33.4%
Strongly Agree	3	2.9%

Q8: I am positive towards e-learning.		
(N=105)	Frequency	Percent
Strongly Disagree	1	1%
Disagree	1	1%
Undecided	6	5.7%
Agree	82	78.1%
Strongly Agree	15	14.3%

On the positive attitudes toward e-learning, most students (82, 78.1%) have positive attitudes to e-learning and 15 (14.3%) students strongly hold the positive attitudes. Just less students with negative attitudes to e-learning.

Q9: E-learning makes my knowledge wider.		
(N=105)	Frequency	Percent
Strongly Disagree	0	0%
Disagree	1	1%
Undecided	12	11.4%
Agree	78	74.3%
Strongly Agree	14	13.3%

Most students believed that e-learning can make them have wider knowledge, with 78 (74.3%) students agreed and 14 (13.3%) students strongly agreed, but less students did not think e-learning makes them knowledge wider.

Q10: I think web-based teaching is important for a student.		
(N=105)	Frequency	Percent
Strongly Disagree	0	0%
Disagree	1	1%
Undecided	6	5.7%
Agree	79	75.2%
Strongly Agree	19	18.1%

On the importance of web-based teaching, most students 79 (75.2%) agreed with the importance of web-based teaching, and 19 (18.1%) students strongly agreed. Less students do not think the importance of web-based teaching, with 1 student disagreed, none strongly disagreed, and 6 students are undecided.

Q11: E-learning can bring a social change in Malaysia.		
(N=105)	Frequency	Percent
Strongly Disagree	0	0%
Disagree	1	1%
Undecided	8	7.6%
Agree	76	72.4%
Strongly Agree	20	19%

Most students think that the e-learning brings a social change in Malaysia, with 76 (72.4%) students agreed and 20 (19%) students strongly agreed. Less students disagreed and none strongly disagreed.

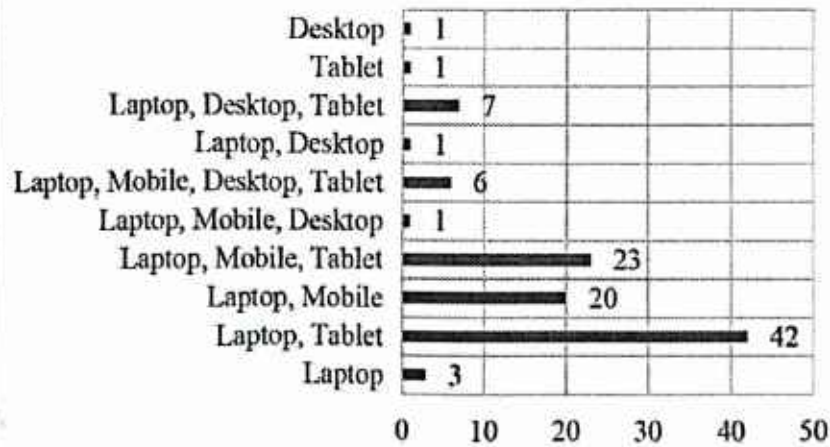
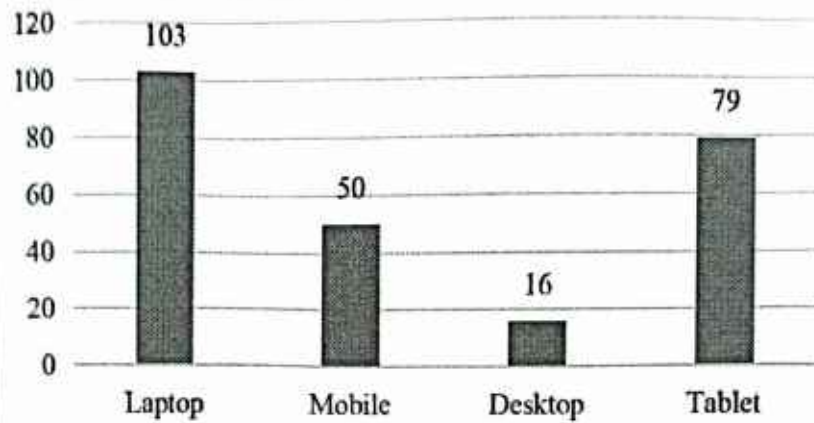
Q12: Which one do you prefer?

(N=105)	Frequency	Percent
Classroom learning	43	41
e-learning	62	59

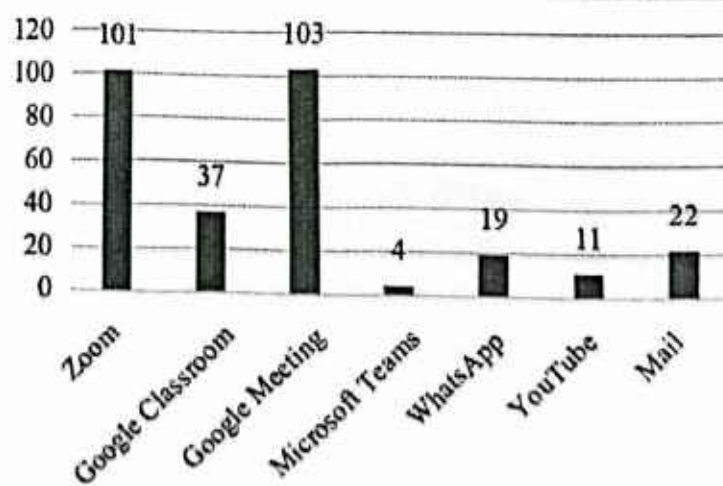
On the learning, there are 62 (59%) students preferring e-learning, and 43 (41%) students preferring the classroom learning. Hence, among these Chinese international students, there are more Chinese international students preferring the e-learning than the traditional learning in the classroom.

On the devices used in the e-learning, among 105 students, 103 students prefer laptops, 50 students prefer mobile, 16 students prefer desktop and 79 students prefer tablets. Some students use two devices or more than two devices in this study. There are 42 students used both tablets and laptops, 23 students using laptops, mobiles, and tablets, and 20 students using mobile and laptops in the e-learning among these Chinese international students. Less students just use the single devices in the e-learning.

Q13: The device you prefer to use for e-learning.



Q14: Which application tool do you prefer for e-learning.



On the applications used in the e-learning, the Zoom and Google Meeting are the most popular apps in e-learning, with 101 and 103 students among 105 students. Then, the Google Classroom, Whats-app, YouTube, and Mail are also used in Malaysia e-learning in Malaysia universities.

5. Findings and Conclusion

With the data analysis, it is found that most Chinese students are interested in e-learning and believe that e-learning can improve their skills and make them have wider knowledge. Although there are some issues they faced in the present e-learning in Malaysia university courses, the e-learning brought them social changes and different from the traditional learning, Chinese international students are satisfied with e-learning in the current e-learning in Malaysia university. Beside this, the laptop, tablet, and mobile are the preferred devices used in e-learning, and the Google meeting and Zoom are the favorite apps for the e-learning in Malaysia universities. Hence, it is recommended that e-learning can be improved and widely used in Malaysia universities and it is easily accepted by Chinese international students. In the future, e-learning will have contribution to the learning among students in Malaysia universities.

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8. Appendix: Survey

Note: If you are not Chinese international student in Malaysia, please kindly ignore this survey.

Kindly tick \checkmark for the statement based on your condition.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

	1	2	3	4	5
1. I am interested in e-learning.					
2. E-learning improves my study skill.					
3. I am satisfied with Blackboard test.					
4. E-learning makes my quarantine time a useful one.					
5. It is better to improve knowledge through e-learning than traditional learning.					
6. I think Face to face learning is important for practical teaching.					
7. I faced some issues during e-learning.					
8. I am positive towards e-learning.					
9. E-learning makes my knowledge wider.					
10. I think web-based teaching is important for a student.					
11. E-learning can bring a social change in Malaysia.					
12. Which one do you prefer? <input type="checkbox"/> Classroom learning <input type="checkbox"/> e-learning					
13. The device you prefer to use for e-learning. (Multiplies choices) <input type="checkbox"/> Laptop <input type="checkbox"/> Mobile <input type="checkbox"/> Desktop <input type="checkbox"/> Tablet					
14. Which application tool do you prefer for e-learning? <input type="checkbox"/> Zoom <input type="checkbox"/> Google Classroom <input type="checkbox"/> Google Meeting <input type="checkbox"/> Microsoft Teams <input type="checkbox"/> WhatsApp <input type="checkbox"/> YouTube <input type="checkbox"/> Mail <input type="checkbox"/> Others					