

# THE BEHAVIOR OF TVET STUDENTS TOWARDS ONLINE LEARNING DURING COVID-19

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**Abstract:** The COVID-19 pandemic has caused the biggest disruption in the education system in history, affecting nearly 1.6 billion students in more than 190 countries and all continents. Physical learning delays in educational institutions and other learning spaces have affected 94 percent of the world's student population. This scenario has opened up space for educational institutions to introduce online learning. Because the online learning situation is still new among some students, the effectiveness of learning has not yet been identified. Therefore, the objective of this study is to identify the behavior of IPTA students towards online learning. The location chosen is in one of the educational institutions in Sabah, namely Kota Kinabalu Polytechnic. Questionnaires were distributed using simple sampling techniques. A total of 119 students participated. The data were then analyzed descriptively using SPSS v.22. The results of the analysis found that overall, based on students' feedback on online learning, there are still many students from Sabah IPTA who have difficulty learning online. To make learning more effective, improvements need to be implemented over time.

**Keywords:** *Online learning, Politeknik, Covid-19*

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## Introduction

Before the Covid-19 pandemic, almost all the learning institutions are only exposed to the traditional method of learning which is face-to-face learning in the classrooms. Although there are institutions which had begun implementing blended classrooms, face-to-face and online, there are still many who continue to proceed with the old methods (Dhawan, 2020). However, in order to stop the spreading of the Covid-19 disease which had made a huge impact onto the entire world has badly interrupted the state of the educational systems (Dhawan, 2020). As shown in Figure 1, many students have been affected from the Covid-19 pandemic (De Giusti,2020). The situation puts a strain on the education system around the world and forced education to take place through online-learning and teaching. To ensure its continuation throughout the closure of schools, it has become utmost importance for world leaders everywhere that most of them cross over to the usage of ICT whereby teachers need to employ online teaching methodology.

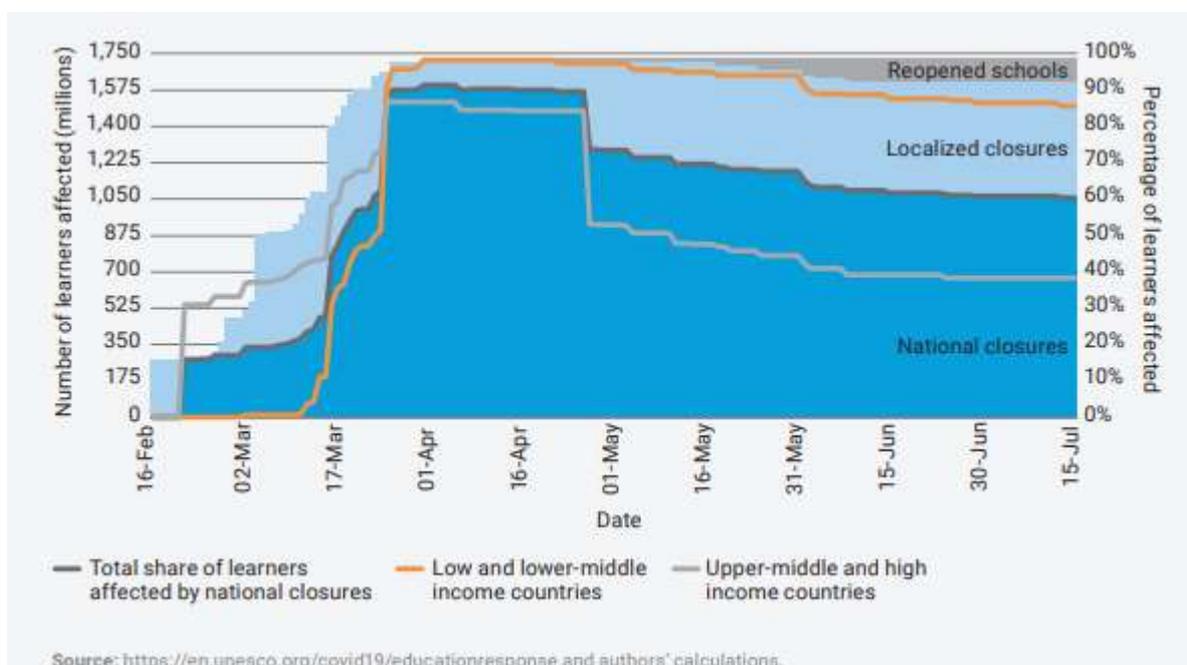


Figure 1: The number of affected from the closing of educational institutions (De Giusti,2020)

Many academic institutions which refused to change their approach of traditional pedagogy had no other choice but to adapt fully to online teaching and learning. They believe that the online learning system is not effective. Based on Loeb (2020) on the comparison of online classes and normal classes, online classes are not very effective for most students. However, for different locations it varies. Thus, the objective of this research is to identify the behaviour of the students of Kota Kinabalu Polytechnic towards online learning. The opinions from this article will help to understand the current scenario and improvements can be conducted to refine the online educational systems or e-learning modes during the Covid-19 pandemic crisis.

## Literature Review

The Covid-19 pandemic has changed almost the entire landscape of education. At higher education institutions, online learning is introduced where lectures and online platforms or known as e-learning is recorded or done live (Firman, 2020). European Commission (2001) explained e-Learning is learning using new multimedia technology and internet to improve the quality of learning with easy access to facilities and services including exchange and a wide set of collaborations. Online e-Learning also refers to the usage of information communication and technology to access teaching and learning resources online. Generally according to Abbad et al (2009), online learning can mean all learning can be electronically activated. Several researchers define online learning as using the internet or web-based (LaRose et al, 1998; Keller & Cernurud, 2002).

Due to the Covid-19 pandemic, there have been a few universities suspend learning and teaching for an uncertain period of time due to the lack of informational technology (IT) infrastructure for the students and academic staff (De Giusti, 2020). Similarly, to the situation in India, in certain states without an internet connection, the government had to use a more traditional method which had a mix of television programs and educational radio along with the distribution of printed materials. According to De Giusti (2020), based on the UNESCO-UNICEF observations estimated long-distance learning in a high-earning country covered over 80-85 percent while the number declined less than 50% in a low-income country. The huge declination was due to the digital gap. In addition, it had lesser access to basic home essentials such as electric; a lack of technology infrastructure and low digital proficiency among students, parents and teachers.

In most countries, examinations had been postponed; changed to a continuous assessment or alternative method such as online assessments and final exams. The continuous assessment initiative approach has gained a lot of attention. Through the leaning system on the internet, student development can be observed by a cell-phone. Despite the effectiveness, online learning is still a research in some countries. According to Loeb (2020), direct learning is more effective than online learning. Direct learning allows communication between the educator and learners which creates emphasis and social benefits in turn helps to motivate students. A few researchers such as Ahn and McEachin (2017) and Hart et al. (2019) also found that online learning is less effective and can bring negative effects in contrast to direct or face-to-face learning and they will choose to improve their grades in face-to-face

Online learning, which can also be classified as e-learning, is more flexible in education (Hodges et al., 2020). In addition, learning materials in e-Learning are easier to access anywhere regardless of time and boundaries while containing various reference sources, including interesting attractions in terms of multimedia and graphics in E-Learning. Learning online is now becoming easier to use and the development of the global era and the digital age of information (Najib, Bakar & Othman, 2017). However, according to Pollard & Hillage (2001), not all students or organizations enjoy the benefits of E-Learning. To improve the newly introduced online learning system and ensure e-Learning can be used widely and independently ineffective service among students, studies related to student behaviour need to be known.

## Methodology

This is a quantitative research. A quantitative approach is used in the research because detailed information and a sample group is needed to generalise and make comparisons on the wanted target groups. A descriptive research study is a research about describing characteristics of individuals or certain groups (Kothari, 2009).

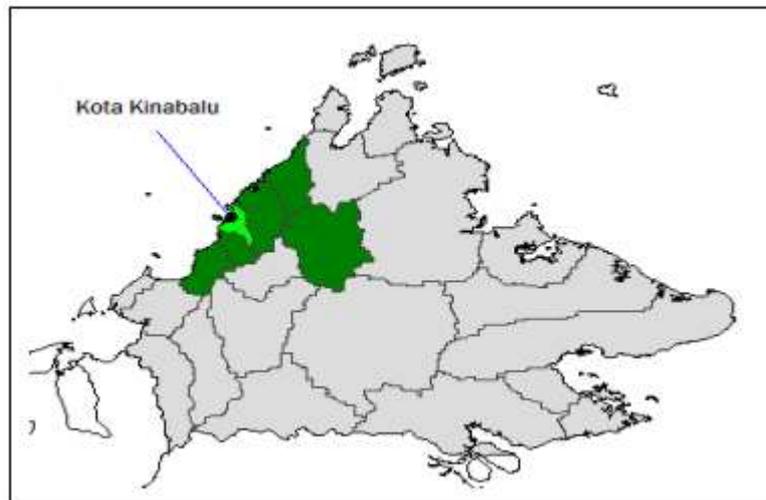


Figure 1: Research Location

This study was conducted among students of Kota Kinabalu Polytechnic, Sabah, as shown in Figure 1. The selection of this sample because online learning among Polytechnic subjects is sudden, and no previous exposure, coupled with internet coverage problems in Sabah, are often reported in mass media. The sampling used for data collection was a simple sampling technique. Of the 150 students selected, a total of 119 students provided feedback. Participating respondents were from students currently involved in online learning. The study items were adaptations from research by Davis (1989), as shown in Table 1. The data collected will be analyzed descriptively using SPSS v.22 software.

Table 1: Research item

Item code	Item details
ONL1	I am often confused using online learning applications
ONL2	I often make mistakes while using online learning applications
ONL3	Communicating using online applications is often disappointing
ONL4	I always have to read the user manual when using online learning applications
ONL5	Interaction using online learning applications needs a lot of mental strength
ONL6	Online learning application systems always have unexpected problems
ONL7	I feel it is difficult to use online learning applications
ONL8	Online learning application systems are awkward and not flexible for interaction

## Research Results

### Demographic

Table 2: Respondents' background

	Item	n	%
CGPA	2.00 - 2.99	17	14.3
	3.00 - 3.65	48	40.3
	3.67 - 4.00	27	22.7
	Semester 1 (no CGPA)	27	22.7
Type data	Post-paid	17	14.3
	Pre-paid	87	73.1
	Both	15	12.6
Quota Data	10GB - 15 GB	6	5.0
	15GB - 20 GB	6	5.0
	1GB - 5GB	48	40.3
	21GB - 30 GB	4	3.4
	6GB - 9GB	20	16.8
	Unlimited	35	29.4

Based of the demographic analysis shown in Table 2, the majority of the respondents are from among students with good academic achievements with 40.3 percent obtaining a CGPA of 3.00 and 3.67. Besides that, the type of subscription most of the students are using is prepaid (73.1 percent). It was also found a few students obtain a pre-paid plan and post-paid (12.6). As for the internet data quota, the majority use between 1GB to 5GB which is about 48 percent of them.

### Research Item Analysis

Table 3: Descriptive analysis

Item	Level of agreement					Mean	Standard deviation
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
ONL1	10 8.4	22 18.5	51 42.9	25 21.0	11 9.2	3.04	1.05
ONL2	9 7.6	23 19.3	39 32.8	39 32.8	9 7.6	3.13	1.06
ONL3	11 9.2	25 21.0	40 33.6	26 21.8	17 14.3	3.11	1.17
ONL4	11 9.2	22 18.5	48 40.3	24 20.2	14 11.8	3.07	1.11
ONL5	9 7.6	3 2.5	31 26.1	39 32.8	37 31.1	3.77	1.15
ONL6	3 2.5	7 5.9	28 23.5	33 27.7	48 40.3	3.97	1.05

ONL7	5	17	54	30	13	3.24	0.97
	<i>4.2</i>	<i>14.3</i>	<i>45.4</i>	<i>25.2</i>	<i>10.9</i>		
ONL8	8	21	42	33	15	3.22	1.09
	<i>6.7</i>	<i>17.6</i>	<i>35.3</i>	<i>27.7</i>	<i>12.6</i>		

\* *Italicized numbers refer to values in percentages.*

The questionnaire in this research contains 13 items. The respondents' level of agreement was measured on a 5-Likert scale with the following: 1: Strongly disagree, 2: Disagree, 3: Neutral, 4: Agree, and, 5: Strongly agree. The mean interpretation is divided by three, 1.00-2.33 (low), 2.34-3.67 (medium) and 3.68-5.00 (high) (Lapammu & Mahamod, 2018). To obtain the reliability of the questionnaire's research items, internal consistency measures were calculated using the Cronbach Alpha method. The Cronbach Alpha value obtained is 0.831 for 8 research items. These values indicate the items have a high level of reliability (0.8-1.00) (Ahdika,2017). Based on the item analysis shown in Table 1, the item obtaining the highest score is item ONL6 (scoring a mean of 3.97 which is the highest level) for "Online learning application systems always have unexpected problems". This often occurs because online learning needs a strong internet (Kassim && Ahmad, 2010). Next is followed by ONL5 (the mean score of 3.77) about "Interaction using online learning applications needs a lot of mental strength". This is supported by Arkorful and Abaidoo (2014) who find E-learning is a method of education which requires a high attention and focus from students as it is long-distance, limited interaction or communication. Therefore, it needs a strong inspiration and skill to manage time. Meanwhile, the third highest scoring item is OML7 with a mean score of 3.24 which is "I feel it is difficult to use online learning applications". Without a doubt, the difficulties faced by the students during online learning involves the group of educators themselves (Yusup, 2012). Sometimes online learning is not immediate interaction but for a later time, such as the usage of e-mails (Almosa & Almubarak, 2005; Algahtani, 2011), the advantage for students being they could study at any suitable time while the disadvantage is they will not receive the reply immediately from their teachers and classmates (Almosa & Almubarak, 2005).

## Conclusion

This article explains the behaviour of students from higher learning institutions towards online learning during the Covid-19 pandemic. The findings of this research proves there are advantages and disadvantages of online learning. Overall, based on the response by students on online learning, there still many students from Public Universities in Sabah who faced difficulties to learn online. This situation makes online learning ineffective in comparison to learning in class. Even a research from John Hopkins University show students with poor internet connection at home learn less than they did in a classroom (Loeb, 2020). At the moment, due to the Covid-19 pandemic, there is not much choice than to learn other than in cyberspace which students can access the classes and exercises, and interact with the lecturers. However, the learning system needs to improve from time to time with consideration of the students' and educators' difficulties faced.

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