

Perceptions of Students with Special Needs towards Online Learning during COVID-19 Pandemic: A Case Study in Polytechnic Seberang Perai

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ABSTRACT

The pandemic that changed the whole course of world is Covid-19 during the virus outbreak in December 2019. Malaysia government take immediate actions on preventing the spread of the virus. Every sector of educational system was halted and begin to be conducted via online for every level of institution from primary to higher educations. Polytechnics in Malaysia are one of the higher institute on following the new procedure on conducting teaching and learning via online. The new method of studying is still being in acceptance process for both educators moreover, students. This case study examines the perception and readiness of students, which have special needs on accepting the new norm of learning without the traditional method of face-to-face learning. The study involves of six students from various departments in Polytechnic Seberang Perai. This quantitative study was conducted by giving out online questionnaires to these students. The data gathered from this study was analysed using the SPSS software to get descriptive statistic (frequency, percentage and mean). The results of this study shows that while the student finds that they are accepting the new norm of learning method, the students with special needs still prefer on traditional method of learning. This is due to various reason from interactions among lecturers and peers, infrastructures to self-studying. The findings of the study may help the institutions to make the online teaching and learning process better to accommodate the need of all students from different backgrounds.

INTRODUCTION

On 31 December 2019, World Health Organization (WHO) reported a cluster of cases of pneumonia in Wuhan, Hubei Province. According to Wuhan Municipal Health Commission, China a new novel coronavirus was eventually identified on that province. WHO convened a Research and Innovation Forum on COVID-19, attended by more than 400 experts and funders from around the world, which included presentations by George Gao, Director General of China CDC, and Zunyou Wu, China CDC's chief epidemiologist. On 11 March 2020, WHO officially declared COVID-19 a pandemic. They are deeply concerned both by the alarming levels of spread and severity, and by the alarming levels of inaction and also the high rises of fatalities among the citizens.

Because of the outbreak of this Covid-19 pandemic, it has affected various sectors around the world. All the countries over the world immediately takes an action to prevent this pandemic in their country. Therefore, in Malaysia, the Government has decided to implement the Movement Control Order (MCO) starts on 18 March 2020 until 31 March 2020 in the first phase for nationwide. The movement control is still being implemented until to this day and will be continued with different phases and levels until the whole citizen is being injected with vaccines. This control order is made under the Prevention and Control of Infectious Diseases Act 1988 and the Police Act 1967. One of the movement control act is where the closure of all public and private higher education institutions (MOE) as well as training skills institutes, nationwide. This includes of all the Polytechnics in Malaysia.

Problem Statement

During this movement control, the traditional teaching of face -to -face teaching and learning activities had to be put in halt and carried out entirely by online during the implementation period of PKP (Ehwan Ngadi, 2020). Educators as well as the students need to adapt and prepare to ensure the teaching and learning via online can be succeeded during this period. The online teaching involves of usage of the digital platforms such as CIDOS, Microsoft Teams, Google Classroom, Zoom, Meet and many others. To be able to success with the online teaching and learning method, both parties, which is educators and students, must give their full commitment and cooperation during the implementation of this new method. Research suggests that to succeed in online learning, learners must be able to motivate themselves, manage their time wisely, take responsibility for their own learning, and participate in the give-and-take of electronic discussions (Collett, 2000). Adapting to the online environment can be a challenge for both lecturers and students alike (Jaques & Salmon, 2007). When the normal students are having difficulties in adapting online teaching and learning, the challenges are quite high for students with special needs such as those with hearing disabilities, those who are visually impaired, those with speech impediments, the physically disabled, and those with learning disabilities. Zhang (2010) who believed that academic institutions should play their roles in providing fair and equal services to every student emphasize this. Thus, this study aims to examine the perception of students with special needs towards e-Learning during COVID-19 movement control period in Seberang Perai Polytechnics.

Objectives

In this study, the researcher has stated three (3) research objectives that is focused on the title of this study. The objectives are first, to identify the perception on online learning experiences among the student. Second objective is to identify the perception of the students on the ease of online learning infrastructures, while the third is to identify the perception of the students between face-to-face learning and online learning.

LITERATURE REVIEW

e-Learning is defined as learning that makes use of Information and Communication Technologies (ICTs). However, the rapid development of technology today has had a huge impact on almost all systems around the world. According to Ahmad Zaki, et al, (2014) certain applications or software either online or offline is one form of technology or can also be said to be a product produced by technology. In line with the development of this sophisticated world of education, online learning in teaching and facilitation is quite an importance. Nowadays, the learning materials are easier to access quickly and fast anywhere regardless of time and boundaries. Moreover, the online learning materials also contains a variety of interesting reference sources.

According to Ministry of Higher Education in Malaysia, (MoHE) Teaching and Learning activities must be conducted online until 31 December 2020. All the face -to -face-learning activities or any classroom teachings are not permitted. However, exemptions are given to five (5) categories of students who need to return to campus in stages to implement online teaching and one of the categories is, students with special needs who follow the Technical and Vocational Education and Training (TVET) program at Polytechnics and Community Colleges. These are the students who need face -to -face guidance to implement the teaching and learning due to learning difficulties which are allowed as early as 1 August 2020. Then, it still goes under the semester guidelines and the institute and students consent to be back to the campus, as they have to look up on the COVID-19 cases of that place. All the institute have to make sure it is safe enough to start back face-to-

face teaching and learning for the students as well as takes consideration on the course if it needs any hands on or not.

The concern is higher on the students with special needs during this time of lockdown. For persons with disabilities, education is a vital part of their lives, enabled them to read and write to speak in English language, to find a job, and involved in making decisions along with their family members (Singal et al. 2015). A policy in Implementation Guidelines Inclusive of People with Disabilities in Higher Education Institutions has been published under the Malaysia Education Development Plan (MEB) 2013-2025. One of the inclusive policy is where priorities are given in all higher education both in public and private institutions to ensure the continuation of facilities and support systems to be provided to students with disabilities. Ministry of Women, Family and Community Development through the Department Social Welfare has classified people with disabilities into seven main categories of disability, which is hearing disabilities, visual impairment, physically dependent, learning disabilities, speech impairment, mentally challenged and multiple disabilities.

In line with this policy, Polytechnic Seberang Perai has accepted the challenge and have taken eleven (11) students with special needs to continue their studies here. Out of the 11 students, only six students with special needs are still in Polytechnics and follows the new norm of teaching and learning during the movement control act. The others were in their final semester and doing their industrial training. Thus, a study was conducted to get the perception of these six (6) students on their acceptance of the new teaching and learning method, which is by online.

METHODOLOGY

This study is a quantitative study that uses descriptive survey method. Quantitative methods allow data to be collected and analysed to produce information and knowledge about opinions, attitudes and practices (Gall, M, Gall J.P and Borg, 2007). This survey method is the most popular method used in various fields. This study examines the perceptions of students with special needs towards online learning during covid-19 pandemic. The study sample consisted of six (6) students of Seberang Perai Polytechnic. It consists of one (1) student in Pra-Diploma Sains program, one (1) students of the Diploma in Finance and Banking program, as well as four (4) students of the Diploma in Information Technology program.

According to Mohd. Majid Konting (2004), research instruments are important to achieve the objectives of a study and it is a measuring tool used to measure the variables studied. Questionnaires are the main instrument used to collect data in this study. The questionnaires were built using online Google form accordance to the control movement period. The questionnaire consists of four (4) parts, which is, (Part A) Demographic Information, (Part B) Online Learning Experience, (Part C) Online Learning Infrastructures and (Part D) Comparison on Face-to-Face Learning and Online Learning. This online questionnaire are based on a five-point Likert scale is the only instrument used in this study. This five-Likert scale were used to identify the views and evaluations of the respondents on the items that were asked. The data collected were analysed using the Statistical Package for Social Science (SPSS) version 24.0 to obtain a mean score for each items.

FINDINGS, DISCUSSIONS AND SUGGESTIONS

Students' perceptions of online learning were measured from three aspects, which is, online learning experiences, online learning infrastructures and perceptions between face-to-face

learning and online learning. This study used and refers to the interpretation of the mean score presented by Moidunny (2009) as in Table 1.

Table 1 Mean Score Interpretation

Mean Score	Interpretation
1.00 – 1.80	Very Low
1.81 – 2.60	Low
2.61 – 3.20	Medium
3.21 – 4.20	High
4.21 – 5.00	Very High

Analysis Findings on Student Demographic

This section describes the general demographic profile of the respondents consisting of gender, age, race, semester, department, types of disability, computer skills and experience in online learning before pandemic. Table 2 shows that one respondent (17%) is a female student and five respondents (83%) is male students. The range of respondent's age where two students (33%) are 22 years old, two students (33%) are 23 years old and two students more (33%) are 24 years old respectively.

For the race status, only one respondent (17%) is a Chinese student while the others (83%) are Malay students. The respondents are from various departments in Seberang Perai Polytechnics, where one student (17%) is from Commerce Department, another one student (17%) is doing his Pra-Diploma Sains, while the others four students (67%) are from Information Technology Department. The respondents are from different semesters too, where one student (17%) is from second semester, two students (33%) are from third semester, two students (33%) are from fourth semester and the balance one student (17%) is from fifth semester.

The respondents are students with special needs where two students (33%) has hearing disability, one student (17%) has learning disabilities, one student (17%) has physical disabilities and two students (33%) has sight disability.

A question on their basic computer skills were asked where four students (67%) stated that they have good skills, one student (17%) stated they have moderate skills while one more students (17%) stated has weak skills.

A question was asked to obtain the information whether the respondents have any experiences with online learning before the pandemic in the campus showed that four students (67%) stated they never had any experiences while two students (33%) stated that they have previous experiences on online learning.

Table 2 Profile on Student Demographic (n6)

Items	Frequency	Percentage
Gender		
Male	5	17
Female	1	83
Age		
22	2	33
23	2	33
24	2	33
Race		
Malay	5	83
Chinese	1	17
Department		
Commerce	1	17
Information Technology	4	67
Pra-Diploma Sains	1	17
Semester		
2	1	17
3	2	33
4	2	33
5	1	16
Disabilities		
Hearing	2	33
Learning Disabilities	1	17
Physicals	1	17
Sight	2	33
IT Skills		
Good	4	67
Moderate	1	17
Weak	1	17
Online Learning Experiences		
No	4	67
Yes	2	33

Analysis Findings to Identify the Perception on Online Learning Experiences Among the Student

To achieve objective one, the data was analysed based on descriptive statistics that is the mean to see the average score of students' perceptions towards online learning. Based on the data that has been analysed, it shows that the respondents have significant interest and able to adapt in online learning. For item number 1, 2, 3, 5, 6,7,8,9 and 10, shows an overall mean range of 3.33 to 4.33. The high score of the mean obtained shows that, latest generation are able to quickly adapt to new technologies thus the new learning method is quite interactive for them. Moreover, the demographic aspects of student, which belongs to the generation Z is quite used with online technologies thus, have some basic level of knowledge on how to use them.

The only item that has medium mean score of 3.17 is item number 4, which is about the easiness of doing group assignments or discussion online with groupmates, has medium score. This can concluded based on each student's attitude and responsibilities on doing their part of work during the group assignments. Students with special needs always have difficulties on having friendship among their peers (Ladd & Le Sieur, 1995; Stoneman, 1993). They may co-operate in order to complete an activity together or in-group work but in the break a differentiation was observed, as students with disabilities are rejected or neglected and often-bullied (Geisthardt et al., 2002). This might one of the issues where proper discussion could not be made among groupmates as some special needs students might find it hard even to find a group itself.

Polytechnic lectures especially those, which has special needs in their class need to be extra cautions. They can make a plan to create groups and divide the students themselves to make sure no students are being neglected during group work task. A time-to-time feedback is important to make sure students with special needs are being involved together and not being isolated or ignored. As been discussed above, this new method of learning needs full commitment and cooperation during the implementation from all parties. If any parties failed to do their responsibilities, then it might will cause trouble to the others. Polytechnics can promote the new culture of learning and give guidance to all the students let alone newcomers or senior students on how to change their attitudes on accepting to online learning and treat all students equally regardless of their background. Sometimes, some of the students does not cooperate because they do not know how to do their part and does not know the right channels to ask help. Here Polytechnics play an important part on addressing the issues that experienced by the students and can come up with a good plan to help the students in need.

Table 3 Perception on Online Learning Experiences among the Student

No	Item	Mean	Interpretation
1	I interact more with lecturers now by online learning.	3.33	High
2	I feel that my technical skills have increased since attending online classes	3.50	High
3	I feel there are more active interactions among classmates.	3.33	High
4	I feel that group assignments are easier done by online discussion with groupmates.	3.17	Medium
5	I always ask feedback on certain hard topics to the lecturers during online class.	3.67	High
6	I feel confident using multiple online platforms given by lecturers to do my assessment.	4.17	High
7	I can always follow the lectures and instructions given by lecturers	3.50	High
8	I feel like online classes are intellectually challenging.	4.33	High
9	I can handle doing individual assignments alone.	4.00	High
10	I always gets constructive feedbacks from classmates whenever I ask something on studies.	3.33	High

Analysis Findings to Identify the Perception of the Students on the Ease of Online Learning Infrastructures

To achieve objective two, the data was analysed based on descriptive statistics that is the mean to see the average score of students' perceptions on the ease of online learning infrastructures. Based on the data that has been analysed, it shows that the respondents obtained high score mean for item number 2 to 5, which is 3.50 – 4.17. This shows that the students have network data and laptops for their studies. The students also have comfortable learning environment during the online method implementation. This is maybe due to the parent's supports towards students with special needs, as they need more care and help compared to others. Item number one has the medium mean score average of 2.83. This means, the respondents have some financial constraints on preparing themselves on having all the utilities for the online learning. This is norm as the lockdown of the pandemic and the sudden shift to online modes left most of us unprepared. Parents prepared their kids and send them to institute where they can access to all the facilities provided there. Little do we know that the pandemic will make impact on social distancing, quarantines, isolation measures, campus closure, border closures, and travel restrictions (QS, 2020). Thus, to prepare all facilities in a no time, will be always a burden to the students, as we

also have to consider on their family demographic lifestyles. Thus, Polytechnics need also need to consider and comes out with a plan on tackling how the students are coping with the situation emotionally and financially, and what they were expecting by way of support measures from the institute.

Table 4 Perception of the Students on the Ease of Online Learning Infrastructures

No	Item	Mean	Interpretation
1	I have no financial constraint on online learning; (buying laptops, internet, phone)	2.83	High
2	I have sufficient data to access all the classes per day for whole semester	4.17	High
3	I have good laptops and/or printers to help in study material	3.50	High
4	I have good network connection for online classes for any time of the day	3.67	High
5	I have comfortable learning condition at home/staying place.	4.00	High

Analysis Findings to Identify the Perception of the Students' Perceptions between Face-To-Face Learning and Online Learning

To achieve objective three, the data was analysed based on descriptive statistics that is the mean to see the average score of students' perceptions between face-to-face learning and online learning. Based on the data that has been analysed, it shows that the respondents prefer face-to-face learning method compared to online. This is not a new thing as a study in the UK reported the students preferred face-to-face teaching and learning experience, even they are high in computer literacy (Orton-Johnson, 2009). The mean score obtained shows a high value mean of 4.17 to 4.67. The highest item with mean value of 4.67 is where respondents prefer face-to-face learning as they can have guided response from lecturers. They can clarify directly if they have any doubts on doing assessments be it individual or group tasks. This is true as stated in previous study that online learning can lack feedback for both students and instructors (Atchley et al., 2013).

Students with special needs always needs more time on understanding certain topics or concepts. Thus, a face-to-face interaction prepare a better room for the students to directly discuss or query teacher on the spot. The lectures, in the other hand have to be always extra prepared for their classroom environment teaching as they have special need students in that class. Studies show that teachers do want students with special needs in their classroom; however, they do not feel prepared to fully address the educational needs of these students (Walsh, Megan, 2018). Thus, Polytechnics managements should give the opportunity to the lecturers to learn more about how to create successful inclusive classrooms and be taught or give courses on how to teach or assist students with special needs in their classroom.

Table 5 Perception on Online Learning Experiences among the Student

No	Item	Mean	Interpretation
1	I would prefer face-to-face interaction methods on teaching & learning to understand more on the subjects.	4.33	High
2	A classroom environment is better in terms of communication and discussion with classmates.	4.17	High
3	I prefer face-to-face guided response from lecturers on doubts and clarification on doing assessments be it individual or group tasks.	4.67	High

CONCLUSION

From the results of the study conducted, researcher can conclude that the perception of students with special need on the implementation of online learning in the era of the Covid-19 pandemic is still at a moderate level. This study also shows that, while the students of special needs can adapt to the new method of learning and have positive attitude on welcoming it via online, they still prefer face-to-face interactions as it helps them more on understanding the course better. This is because traditional classroom teaching provides real-time face-to-face instruction and students can ask questions directly. The lecturer also can give immediate response and more flexible content delivery based on the student's feedback. However, as time passes by, the students regardless will eventually adapt the new method of learning. With the pandemic still going on, the new normal of adapting of computer-based training will be necessary for the education system for the coming years. Thus, the readiness and commitment of lecturers and students is also quiet important to ensure that the teaching and learning activities in this new norm can be implemented in the best way for the beneficial of both parties. Lecturers also need to be equipped with proper training to be prepared to teach and understanding the necessity of the students with special needs in their classroom in future.

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