

Online Classroom: Polytechnic Students' Perceptions

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Abstract

The spread of the Covid 19 pandemic has affected various sectors. Education is one of the hard-hit sectors. Nevertheless, teaching and learning have not stopped but is now taking online classroom as an alternative form. The Malaysian government has urged all the learning institutions, including polytechnic, to implement online teaching. Students have attended the online classrooms since implementing the first Movement Control Order (MCO 0.1) in 2020. This study aims to explore students' perceptions of the online classroom. Data collected using a set of questionnaires and non-probability sampling techniques was used to select the students from Polytechnic Kota Kinabalu (PKK) and Polytechnic Metro Betong Sarawak (PMBS) to explore the relationships between perceiving the use, perceived usefulness and user's satisfaction regarding online classroom. The result shows online classroom is useful to submitting the assignment, help lecturers provide feedback and suggest this method to another subject. Students were very satisfied with the online classroom during the covid 19 pandemic.

Keywords: Online classroom, Online Education, COVID-19

Background of the Study

The Corona disease 2019 (COVID19) was first identified in the Wuhan Province of the People's Republic of China in December 2019. By March 2020, the World Health Organization announced that this disease had gone from an epidemic to a pandemic, with close to 200,000 cases in 146 countries and about 6,500 deaths. The government immediately reacted by putting in place some preventive measures. The other actions were immediate closure of all establishments and the suspension of face-to-face teaching. Furthermore, the Minister recommended that all facets of digital education (digital work environments, virtual classrooms, OLCs to name just these) and teleworking be implemented immediately and obligatorily in all institutions of higher learning in Malaysia.

To implement the recommendations mentioned above, an online classroom was adopted by most of the lecturers in the Polytechnics in Malaysia. This application or tool for online education was widely practised. It is paperless and time-saving. It users in create classes, distributing assignments, communicating and staying organized (Ardiana, 2016; Iftikhar, 2016). Besides, this free web-based learning platform helps simplify teaching activities from creating materials, distributing them and grading the learning results, and synchronise the Google Suite for Education to all Google Suite services like Google Docs, Gmail, and Google Calendar. As a free product of the digital industry providing numerous benefits to facilitate

virtual learning was doubtfully the most used application during the period in question for online education.

The popularity of online classrooms is increasing rapidly. However, limited studies explore the effectiveness of online classrooms practised in polytechnic. Shaharane, Jamil & Rodzi (2016) analysed online classroom active learning activities. They used Technology Acceptance Model (henceforth, TAM) to study the effectiveness of the activities posted on the platform. In a similar study, Espinosa, Estira & Ventayen (2017) evaluated a Learning Management System (LMS) and found that cost was the primary reason for its adoption. In another study, Liu & Chuang (2016) conducted action research in Taiwan in which they used online classrooms with the integration of a peer tutor mechanism for 6th Grade students. Their findings revealed that students held a positive perception regarding online classrooms. Azhar & Iqbal (2018) observed that the lack of research on online classrooms, specifically in developing countries, has prompted further investigation of this tool's effectiveness. This study explores the students' perceptions of the effectiveness of online classrooms in the polytechnic during the COVID-19 lockdown period. In this vein, it provides answers to the following question: What are the learners' perceptions of the effectiveness of an online classroom? The researcher hopes that the findings of this study can help inform policymakers, educationists and teachers and the effectiveness of online classrooms.

Technology Acceptance Model (TAM)

TAM was developed by Davis (1985) to explain computer usage behaviour. He suggested that three variables can explain user motivation: Perceived Ease of Use (PEOU), Perceived Usefulness (PU), and Attitude toward using the system. A user's Attitude towards a system is a significant determinant of whether the user will use or reject the system. In turn, the user's Attitude is influenced by two crucial beliefs: perceived usefulness and ease of use, with the latter, directly affecting the former. Both beliefs are hypothesised to be directly influenced by the system design characteristics represented by X1, X2 and X3 in Figure 1 below.

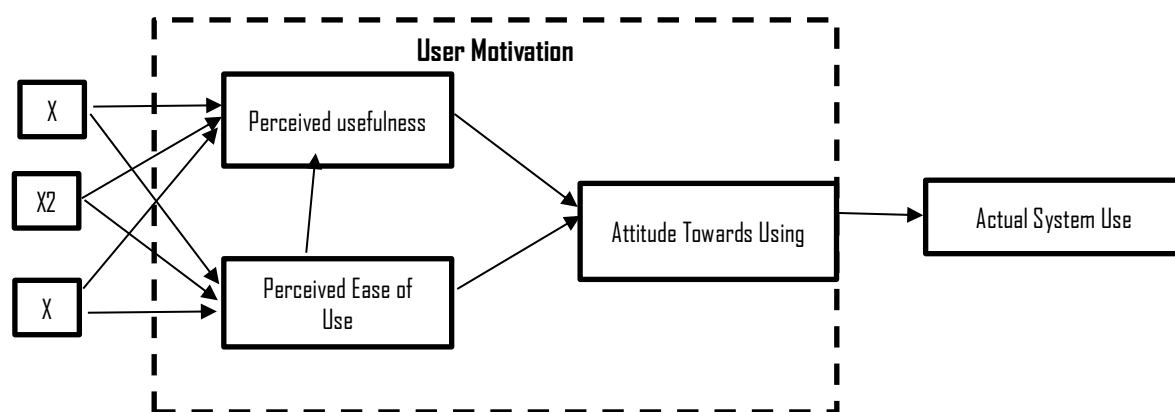


Figure 1. Original TAM was proposed by Fred Davis (Davis, 1985, p.24)

Davis (1989) during later experimentation stages, refined his model to include other variables and modified the relationships that he initially formulated. In the same line, other researchers (Venkatesh & Davis, 2000; Lee, Kozar & Larsen, 2003;

Legris, Ingham & Colletette, 2003; Ma & Liu, 2004; King & He, 2006; Sharp, 2006; Yousafzai, Foxall & Pallister, 2007) would apply and propose several additions to TAM, such that over time, TAM evolved into a leading model in explaining and predicting system use. As Chutter (2009) puts it, "TAM has become so popular that it has been cited in most research dealing with user acceptance of technology". Therefore, this model aims to explain and predict the acceptability of particular information technology.

Methodology

As stated above, this study examined learners' perceptions of the effectiveness of online classrooms. To gain insight into the matter under investigation (Gall, Gall & Borg, 2006), the researcher used a probability sampling technique to explore the relationships between perceived ease of use, usefulness, and users' satisfaction with online classrooms. Two hundred eighty-eight students who took part in online classes during the period in question participated in this study. This study uses a questionnaire to collect the quantitative data. The Statistical Package for Social Sciences (SPSS) analysed the data. The SPSS has been used extensively among researchers to analyse quantitative data in various research fields, including business. They were made up of 170 female students and 168 male students who had accepted using the Internet at least once a day. Each participant provided answers to a questionnaire containing their perceptions of the issue. These questions consist of three variables: ease to access, perceived usefulness, and satisfaction with the online classroom. The items were measured using a five-point nominal Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Before distributing the questionnaire, two experts reviewed them to ensure the validity of their contents. These experts were selected based on their online teaching and learning field expertise. With some recommendations made by the experts, the researcher made minor modifications involving paraphrasing, deleting items, rephrasing sentences and renumbering items. It is worth mentioning that a Likert type question on average of how often the Internet is accessed was asked in the first part of the questionnaire to identify the level of information and communication technology usage among the respondents. This question had five answer options ranging from never to many times a day. All participants confirmed that they use the Internet at least once a day considered in this study.

Results

In this section, findings are presented to answer the main question investigated (what are the learners' perceptions of the effectiveness of online classrooms?). It is broken down into four different subsections made up of the participants' opinions on ease of access, perceived usefulness, communication and interaction and their overall satisfaction regarding the effectiveness of online classrooms.

Ease of Access

Here, the data present and discuss the participants' opinions on signing on to the online classroom, accessing the course material, sending and receiving the assignment, navigating the system, and understanding the system. Table 1 below summarises the finding for the variable Ease to Access.

Table 1: Ease of access

No.	Item	Mean	SD	Strongly Disagree /Disagree	Neither	Strongly Agree/ Agree
1	Signing on to the Online Classroom	4.04	0.809	1.8	22.5	75.8
2	Accessing course material	4.07	0.759	1.4	21.1	77.5
3	Sending and receiving the assignment	4.14	0.770	1.8	18.2	80.0
4	Submitting assignment	4.16	0.784	2.8	15.4	81.8
5	Navigating the system	3.96	0.789	1.4	27.7	70.9
6	Easy to understand the system	3.86	0.883	5.6	25.6	68.8

Based on Table 1, the highest score is 81.8 % of the participant who agreed that submitting assignments was easy, followed by 80% who agreed that easy to send and receive commissions. Concerning accessing the course material, 77.5% of the participants strongly agreed, and 75.8% strongly agreed that signing on to an online classroom was easy. However, the lowest score is 68.8%, strongly agreed that it was easy to understand the system. Overall, the online classroom agreed and was satisfied with an online classroom for variable ease to access.

Perceived Usefulness

This section provides findings on how the participants perceived the usefulness of an online classroom. Contrary to the previous case, the participants responded to how easily they accessed the online classroom. The participants here provided answers to how they perceived the usefulness of the online classroom. Table 2 shows the summarised findings.

Table 2: Perceived Usefulness of online classroom

No.	Item	Mean	SD	Strongly Disagree /Disagree	Neither	Strongly Agree/ Agree
1	The quality of the learning activity was excellent.	3.79	0.876	6.7	27.0	66.3

2	The online classroom is an excellent medium for social interaction (lecturer vs students and student vs student), as demonstrated by this activity.	3.73	0.892	7.4	30.5	62.1
3	The online classroom helps me to submit my assignment on time.	3.78	1.009	10.9	24.2	64.9
4	The course activities help me examine issues, evaluate new ideas, and apply what I have learned.	3.88	0.856	4.6	25.3	70.2
5	The feedback provided by the lecturer was helpful.	4.09	0.786	1.4	19.3	79.3
6	The grading system in the online classroom helped in monitoring my performance and understanding the current topic discussed.	3.86	0.827	4.6	27.4	68.1
7	The subject objective, assessment and content were consistent with the aid of the Online classroom.	3.91	0.820	3.2	26.7	70.2

As shown in Table 2 above, the highest score is 79.3 % of respondents strongly agreed respectively that the feedback provided by lecturers was helpful, items the course activities helped me to examine issues, evaluate new ideas, and apply what I have learned and the subject objective, assessment and content were consistent with the aid of Online classroom shown 70.2% respondent are agreed with the statements. The lowest score is 62.1%. The online classroom is an excellent medium for social, as demonstrated by this activity. Overall, students are delighted with the variable perceived usefulness of online classrooms.

Student's Satisfaction

In this vein, four items were put at their disposal to exploit. The findings are summarised in table 3 below.

Table 3: Student's Satisfaction

No.	Item	Mean	SD	Strongly Disagree /Disagree	Neither	Strongly Agree/ Agree
1	The subject met my personal goal through the medium introduced	3.88	0.774	2.5	29.1	68.4

2	I would recommend that this learning method be applied to another appropriate subject.	3.87	0.824	3.9	25.6	70.5
3	The online classroom is my first choice in e-learning compared to others.	3.75	0.978	7.4	29.8	62.8
4	I like the Online classroom as a learning initiative and motivation booster.	3.72	0.960	8.1	30.2	61.8

As indicated in Table 3 above, 70.5% of respondents agree with the statement that I would recommend this method of learning to be applied to another appropriate subject, and 68.4% agreed that the issue met my personal goal through the medium introduced. The lowest score is 61.8% refers to statements that I like the Online classroom as a learning initiative and motivation booster. Overall, the student is satisfied with using the online classroom as a new norm in the teaching and learning process.

Discussion

As seen from the presentation of our findings above, the students were largely pleased with the Online classroom as a tool for online learning. However, based on the participants' feedback (and our reflections), several issues have been identified when choosing an Online classroom as a tool for online learning. These issues do not only provide a framework that will be useful to educators concerning pedagogical practices that make good use of this tool but may also be particularly useful for learners using it as an e-learning tool.

The first issue to be considered by educators is *accessibility*. As observed by Heggart k. & Yoo J. (2018), "students will not willingly use a learning platform perceived as 'clunky' or difficult to use". They further suggest that "such platforms also need to be both device and browser agnostic, so that students can access them from laptops, desktops, tablets or even mobile phones". For this reason, learners' overall perceptions of the effectiveness of the Online classroom were largely positive. However, educators should ensure that they provide the learners with adequate feedback in online classrooms. In this study that 20.8% of the participants strongly disagreed that feedback provided by lecturers was helpful. In line with Mualim, M., Ma'rufah, D. & Sartika, E. (2019), some students had difficulties understanding the material since the lecturers only provided the materials and tasks without much instruction.

For this reason, lecturers should encourage *collaboration* between them and the learners and among learners as a group. Besides, some students were affected by the technical problem of using their devices is running the programme. Moreover, the Internet network made it difficult for them to access the online classroom, and as a result, submitting assignments and downloading the materials were seriously hampered.

Considering that most of the participants in this study agreed that they would recommend this learning method to continue even after the period in question, academic stakeholders need to organise workshops to explain the 'how' of using online learning tools such as online classrooms. Such seminars should explain how the "thoughtful use of Online classroom might improve teaching and learning outcomes (Heggart k. & Yoo J., 2018). In addition, it is equally essential that studies be conducted to investigate teachers' perceptions of the effectiveness of online classrooms as a tool for online teaching.

Conclusion

This paper sought to explore the polytechnic students' perceptions of the effectiveness of online classrooms. Our investigation covered a period of two months and ten days (March 21, 2020, to July 31, 2020), during which all learning was done online. The study adopted Davis' (1985) Technology Acceptance Model (TAM) as a basic framework to explore relationships between perceived ease of use, perceived usefulness and users' satisfaction regarding online classrooms. Results indicated that overall, students were satisfied with the online classroom, and as such, it was an effective online learning/teaching tool during the period in question. This finding is consistent with the results of previous studies on learners' perceptions of the effectiveness of online classrooms (Azhar & Iqbal, 2018) and the application of online classrooms as a tool for online education (Shaharanee, Jamil, & Rodzi, 2016).

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