

Student's Online Learning Level during the Pandemic from the Perspective of Lecturers in a Teacher Training Institute



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ABSTRACT: COVID-19 has been declared as a pandemic, an epidemic of a disease that spreads so widely across the world. Thus the Malaysian government has enforced the Movement Control Order (MCO) effective 18th March 2020 to curb the spread of the virus which includes the closure of all educational institutes. In order to ensure that all teaching and learning process (T&L) continue smoothly, the Teacher Education Institute or locally known as Institut Pendidikan Guru (IPG), has adopted the online T&L platforms to deliver lessons. This study was conducted to identify the IPG lecturers' perspective of student teachers' online learning level during the pandemic. It also explores the support required by the lecturers in implementing online T&L. This study used a quantitative approach which is supported by qualitative findings. The sample of the study were 806 IPG lecturers who were given questionnaires in the form of 5-point Likert Scale items and open ended questionnaires. The finding of the study indicated a high level of students' learning with mean scores exceeding 4.0 for all items where the highest mean was for the item 'students attend online classes' (mean=4.49, SD=0.77). The qualitative analysis of the open ended questions showed that IPG lecturers needed support in the form of internet access, guidance and training to utilise the online platforms for T&L, and technical and moral support to help increase students' level learning. The results of the study implicate that both the lecturers and students need to strive harder to familiarise themselves with this new situation and to ensure that the online T&L runs smoothly and effectively

KEYWORDS: Movement Control Order (MCO), pandemic, teaching and learning, online teaching and learning, students' learning level, support needed by lecturers.

INTRODUCTION

The World Health Organisation (WHO, 2020) has declared COVID-19 as a pandemic on the 11th March 2020. As number of cases kept increasing in Malaysia, the government has implemented the Movement Control Order (MCO) which began in the 18th March to curb the spread of the virus. During the MCO, all Malaysians are prohibited doing activities outside of their homes which includes going to school or lectures, work or carry out any activities outside their house. This closure has affected all educational institutes including the Teacher Education Institute of Malaysia or locally known as Institut Pendidikan Guru (IPG) as face-to-face interactions were no longer allowed during the MCO. As IPG has always strived for excellence, the Rector of IPG has instructed that all the 27 IPG campuses were to carry out their T&L process fully online. To ensure the smooth transmission of lessons, guidelines were given for the implementation of the online classes.

STATEMENT OF THE PROBLEM

The spread of COVID-19 is a global crisis that has resulted in the inability for educational institutes to conduct conventional or face-to-face classes that have been carried out before. This challenges affected both teachers/lecturers and students as they needed to adapt to the new norms that require the T&L process to be conducted online. According to Hodges, Moore, Lockee, Trust & Bond (2020), T&L during the pandemic created a stir among lecturers who are less proficient in technology because they needed a longer time to master the delivery of lessons via computers, smart phones and the internet. The transition of teaching from face-to-face mode to online mode also requires a change in learning culture among the students (Basilaia & Kvavadze, 2020).

Before the pandemic, online T&L was just an option in IPG but with enforcement of MCO, it has become a necessity. Prior to the pandemic situation, lecturers were familiar with the online T&L as all universities have online learning T&L platforms which were mainly used to upload lecture notes, giving and handing up assignments, and were used in line with the face-to-face interactions (Selvanathan, Nor Atikah & Nor Alyani, 2020). However, when classes were carried out totally in the online mode, the main issue faced is the availability of good internet access among the students (Anuar, 2020). Norazilawati, Noraini and Nik Azmah (2013) in

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their study, also mentioned that internet access is one of the biggest barriers especially in rural schools where internet access is limited, thus preventing the use of information technology (IT) optimally. Mohamad Shatar (2020), also stated that online learning at the university level has not yet reached the maximum level because face-to-face methods has always been an option. This new situation requires lecturers to be well prepared with their online T&L materials before implementing their online classes as well as improving their skills in IT, online pedagogy and online assessment.

One of the challenges faced by the lecturers and students of IPG is that the courses were taught in accordance to courses outlines prepared for face-to-face interactions or blended learning, not to be fully implemented fully online. The MCO started on the 13th week of the second semester of the academic year, all campuses were immediately closed and students were instructed to return to their respective homes. Regardless to the situation, the T&L process were to continue until the end of the semester, with lecturers suddenly reverting to conducting the classes fully online in contrast to the face-to-face interaction before this. In the short duration of time, lecturers needed to find the most suitable platforms, strategies and approaches to conduct the online classes, conduct formative and summative assessments, give tasks and feedbacks online.

The online T&L mode during the pandemic is totally a new situation experienced by both lecturers and students. Thus to implement online T&L effectively, there are a few aspects that needed to be achieved by both parties such as the selection of appropriate platforms for T&L, online communication style, students' guidance and online assessment. As T&L online is not a norm in IPG, some issues might arise during its implementation. Thus, this study on students' online learning level during the pandemic aimed to seek and create a quality ecosystem for learning, not to compare the students' performance before and after the pandemic (Hodges et al., 2020).

PURPOSE OF STUDY

The purpose of this study was to find out students' level of learning when undergoing T&L online. It also hoped to explore the support needed by lecturers to conduct online classes successfully. It is also hoped that the results of this study will provide the necessary information on students' learning so that the online T&L process can be implemented optimally in the future using various online platforms.

LITERATURE OVERVIEW

The implementation of online learning has been practiced for quite some time in developed countries. It is believed that T&L on online mode is has various benefits and advantages. A study conducted by Vanderbilt University in the United States in 2015, found that almost 92% of respondents comprising of multi-field students and faculties agreed that online learning is at least as effective, if not better than conventional T&L. Only about 3% of the respondents still needed the face-to-face T&L method, while the remaining nearly 5% of respondents are neutral. The finding indicates that online learning mode is the best option of today's students especially in unprecedented situations like T&L during the Covid-19 pandemic. Public and private institutions of higher learning including IPG have no other option but to use the online T&L to ensure that the syllabus can be delivered the best way possible and students' learning sessions are not delayed.

However, previous studies has indicated several difficulties faced by students when undergoing online classes. The study conducted by Norfarahi, Mohd Isa and Khadijah (2020) at polytechnic in the southern zone in Malaysia shows that the students' main challenges was to allocate time to attend the online classes and to complete assignments. The online tasks given by the lecturers take longer time to complete and students' commitment plays an important role for its success (Bralic & Divjak, 2018). Hazwani, Noor Raudhiah and Norziah (2016), stated that online learning mode is similar to a lifelong learning mode which students find difficult as it also involves the aspects of time and place to study. The quality of T&L is also one of the issues in online learning among students and educators. Many instructors/educators do not know how to track or measure the effectiveness of their online T&L sessions. The changes in the learning environment through online mode make students feel more distracted, difficult to focus on their learning, feel lonely and frustrated as well as feeling isolated being away from their peers, hence decreasing their learning effectiveness and satisfaction (Zaborova & Markova, 2016).

Nevertheless, a number of researchers who supported online learning stated that distance learning is effective and can be made more effective than face-to-face learning (Shachar & Neumann, 2003). It was reported in their study that content delivery instructions may not have a high impact on learning outcomes, but the content itself, methods and techniques of teaching, communication and learning support are more important for students learning satisfaction. An instrument indicator should be used or produced so that instructors will be able to measure the level of their students' learning and understanding in order for online learning to be more effective.

Garland (2007) identified several challenges in the situational context, where poor learning environment at home and time are the main issues. The learning environment at home is different when compared to schools as the learning situation at school is more

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formal than at home. Learning in schools can also produce a more meaningful and effective learning. As for time issue, students felt that tasks and assignments given by lecturers during online classes needed longer time than expected for them to complete. This led to the student's failure to allocate the time required to complete all the task or assignments given. Yusup (2012), stressed that teachers need to have three elements to carry out effective online T&L that need to be integrated into their teachings which are the elements of technology, pedagogy and content.

Students' involvement during online learning is often seen as passive. Without a conducive environment such as in school, classroom settings and situations or even peers, learning at home is not fun and is carried out in isolation, quietly and with the feeling of loneliness. The feeling of silence, isolated and marginalised causes students to lose motivation to continue learning and this causes a deterioration in focusing while T&L sessions are being carried out online. One of the negative factors about online T&L is the limited communication needed between lecturer and student to create a good rapport between them as compare to the face-to-face interactions. Several studies reported that students felt isolated and quiet when they were instructed to learn online using a computer (Rosenberg, 2001). Some students take it easy when learning online, some do not attend classes at the specified time and some enter to attend classes but do not respond to the questions presented by the teacher and are inactive during the discussion activities. Students' negative practices during online learning have been identified and associated with low levels of computer knowledge and skills, concerns about digital technology and computer hardware problems, low level of learning skills, low motivation and inability to do things on their own without a helping hand (Rosenberg, 2001).

Face-to-face communication is slightly different than online communication. While online learning requires communication, there are some students who feel that it cannot be carried out effectively because there are times when the internet line is unsatisfactory and video conferencing communication could not run smoothly. Good communication is essential to ensure effective T&L. This is clearly stated in a study conducted by Ginger, Ismail and Baharudin (2017) that good communication is essential for effective online T&L. Communication between lecturer and student is quite limited during online sessions that it eliminates the feeling of good relationship between them (Money & Newlin, 2001). Lecturers and students will only communicate when there is time available and have to wait for feedbacks between them.

In conclusion, several problems have arised when the T&L processes are being conducted online. Therefore, this study is crucial as it reviews the level of students online learning from the perspective of lecturers as well as to review the support needed by lecturers to conduct effective online T&L during the pandemic.

METHODOLOGY

This study used the quantitative approach and was conducted using cross sectional survey design through questionnaires that were distributed online (Cresswell, 2012). The survey method was chosen because it is useful when the researcher wanted to collect data on phenomenon that are not directly observed and it could provide accurate information from large groups using small samples.

A total of 806 respondents responded to the online survey, representing the overall population of 2,648 IPG lecturers throughout Malaysia. The survey was administered online using Google Forms as the questionnaire instrument is made up of 5-point Likert scale items and open ended items. The questionnaire is made up of three sections which are the respondent's profile, online student learning and support needed by lecturers in implementing online classes. Quantitative data obtained from the questionnaire was analyzed descriptively (frequency and percentage) to answer the objectives of the study on the level of variables studied based on respondent's demographics. Meanwhile the open ended items were analyzed qualitatively manually by coding, categorising and organised thematically. The research findings were reported in the form of numbers and percentages displayed in the forms of tables and graphs.

FINDINGS OF THE STUDY

Respondents Demographics

Table 1 shows the profile of 806 IPG lecturers who were involved in this study. A total of 804 lecturers responded to the survey questionnaire where a total of 403 respondents (50.0%) were male and 401 respondents (49.8%) were female.

The highest number of respondents in this study were between the ages of 51-60 years old with a total number of 542 respondents (67.2%). A total of 238 respondents (29.5%) were between 41-50 years old and 26 respondents (3.2%) were between 31-40 years old. In terms of academic qualifications, the highest number of respondents were those with master's degree with a total of 559 respondents (69.4%), followed by 215 respondents (26.7%) with Doctor of Philosophy degree and 31 respondents (3.8%) with bachelor's degree.

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Table 1: Respondent's Profile

Backgrpund		Frequency (N)	Percentage, %
Gender	Male	403	50.0
	Female	401	49.8
	<i>Missing value</i>	2	0.2
	Total	806	100.0
Age	31-40	26	3.2
	41-50	238	29.5
	51-60	542	67.2
Total		806	100.0
Academic Qualification	PhD	215	26.7
	Master's degree	559	69.4
	Bachelor's degree	31	3.8
	<i>Missing value</i>	1	0.1
	Total	806	100.0

RESULTS

The findings aims to answer the following objectives:

Objective 1: To identify the lecturers' perspective of students' learning level while undergoing online T&L.

The variable were analysed descriptively using mean, percentages, standard deviation and the overall learning level was based on Nunally & Berstein (1994) score interpretation as shown in **Table 2**.

Table 2: Mean Score Interpretation (Nunally & Berstein, 1994)

		Mean	
Scale	1.0-1.9	2.0-3.9	4.0-5.0
Level	Low	Medium	High

The aspects of online student learning was obtained through the online questionnaire. The questionnaire aimed to get a clearer picture of the students' learning from the lecturers' perspectives. Students' online learning levels are shown in **Table 3** as mean scores and level interpretation.

The findings show that all aspects of student learning are at the level High. The highest mean score is for the items 'all students attend my online classes' (mean = 4.49, SD=0.77), followed by 'lecturers having the skills to communicate online' (mean=4.48, SD=0.63), 'proficient in finding information online' (mean= 4.47, SD=0.67) and the lowest is 'students attended classes right on time' (mean = 4.12, SD=0.90).

Table 3: Student's online learning

Aspect	Mean	SD	Level
1 All students attend my online classes.	4.49	0.77	High
2 Students attended classes on time.	4.12	0.90	High
udents are able to adapt to the changes in the implementation of T&L.	4.33	0.76	High
4 Students are actively involved in T&L sessions.	4.17	0.81	High

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5 Students have skills to search for information online.	4.47	0.67	High
6 Students are able to complete assignments given through online T&L sessions with lecturer's guidance.	4.4	0.67	High
7 Students have the skills to communicate online.	4.48	0.63	High
8 Students are motivated to participate in the online T&L sessions.	4.32	0.73	High

The findings in **Table 3** shows that students could follow online T&L sessions conducted by lecturers well. Based on the lecturers' responses, all students attended their class at the specified time. This contradicts with a previous research findings (Rosenberg, 2001) which said that there are students who take it easy on learning online and do not attend classes at the specified time. This finding implies that IPG has provided students with discipline and responsibility to manage their own learning. The results also indicated that students can adapt well to the changes in T&L during MCO and were actively engaged during the online classes. They were also motivated to participate in the T&L sessions. This finding also contradicts with a previous researches finding that implicate that students' engagement of online classes is seen as passive.

In conclusion, even though face-to-face communication differs from online communication, the results of the study indicated that IPG lecturers agreed that students have the skills to communicate well during online T&L. This is in contrast to the study conducted by Halias et al. (2017) that found that some students felt that communication could not be carried out effectively due to unsatisfactory internet lines which resulted in poor communication during video conferencing and breaking sounds.

Objective Study 2: To explore the support needed by lecturers when implementing T&L online

This part will discuss the findings of the study that answer the second objective. The data was collected through open ended survey and was analysed qualitatively to enable the researcher to explore the type of support required by lecturers in implementing T&L online. Out of the total of 806 lecturers who responded to the questionnaire, 487 lecturers responded to open ended questions, indicating that more than half of the IPG lecturers needed supports to conduct the online classes. The response to this open ended question was coded and categorized as shown **Table 4**.

Table 4: Support needed by lecturers to conduct T&L online

Category	Total	Percentage %
1. Internet access	208	42.7
2. Sharing session /Guidance	150	30.8
3. Assessment	6	1.2
4. T&L materials	37	7.6
5. Platform	21	4.3
6. Technical	24	4.9
7. Hardware	17	3.5
8. Moral support	24	4.9
TOTAL	487	100.0

Internet access

The findings showed that during the T&L process, 208 of the lecturers (42.7%) needed the support in the form of internet access, 150 lecturers (30.8%) needed sharing session/guidance to improve their online teachings. A total of 37 lecturers (7.6%) needed T&L materials to support their online classes while 24 lecturers (4.9%) required technical and moral support to conduct online classes. In addition, 21 lecturers (4.3%) who responded also need the flexibility to choose the suitable platforms to support their online classes. A total of 17 lecturers (3.5%) need support in the form of hardwares and only 6 lecturers (12%) need support to conduct assessment online.

The results of the study shows that lecturers needed internet access most to support their online sessions, either for themselves or for their students. This is because online classes could only run smoothly when both parties have good internet access. To enable lecturers to interact well with the students synchronously during Google Classroom or Google Meet, the large amount of data is needed. This is clearly displayed in their responses to the open ended questionnaires shown below;

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"The government needs to provide greater internet speed.... especially in remote rural areas".

"More stable internet access for me to use Google Classroom with all my students".

"A better internet connection is required, the provision of various materials in order to meet the needs of the diverse students in terms of achievement level and skills".

"Greater internet access and GB are required because Google Classroom and Google Meet require lots of data especially when all 24 students have to interact simultaneously".

The responses above indicate that internet access, internet signal's strength and stability, and adequate internet data are aspects that needed to be improved in order for the online classes to be conducted successfully. Good internet access is crucial especially for the students. Lecturers were aware that students living in areas with poor internet connection have problems following the online classes effectively, especially classes that were conducted synchronously using platforms like Google Meet, Zoom and Skype. Thus large amount of internet data, stable and fast internet connections are required by both lecturers and students to ensure that the T&L process are conducted successfully.

Sharing sessions / Guidance

The findings of the study also indicate that lecturers need guidance and training to conduct online classes successfully. As classes are implemented online, the T&L process must be delivered in a variety of ways in order to make it interesting, meaningful and eventually the objectives of the lesson could be achieved. Thus lecturers needed support to use suitable platforms to diversify activities as described in their responses below;

"Courses on how to conduct online T&L must be given systematically and exposures on the use of various latest media technology is much needed".

"Online teaching step by step. Needs a lot of courses on how to handle digital tools".

"I need an online face-to-face T&L courses on how to use Google Classroom at the advanced level".

"Guidance and sharing of T&L materials like videos and more advanced online materials like quizziz, kahoot and mentimeters is required".

The respondents stated that they needed training or courses, and continuous guidance in order to make their T&L process more attractive and thus be able achieve the learning objectives. Their responses are as follow;

"Lecturers need continuous training to online T&L, such as using Google Classroom or appropriate digital tools optimally when using the online applications or platforms".

"I need continuous guidance from the expert".

"I need expertise advice on using applications that I am less proficient".

"I need help from colleagues for T&L and information sharing".

T&L materials and platforms

The results also showed that lecturers required support in terms of T&L materials to use in their classes such as to use interactive applications or platforms, construct creative and interesting online activities, and easy access to e-journals from local and foreign universities. Lecturers also needed guidance on how to manage various digital materials. In addition to using Google Classroom as recommended by IPG, lecturers also needed to be given the freedom to choose platforms and applications that are more suitable for each individual class that they are teaching. A more suitable or student-friendly platform is also required as an alternative for students with internet problems at home. This is clearly illustrated in their responses to the open ended questionnaire below;

"I need platforms that are student friendly as well as internet for students in the remote areas of Sabah and Sarawak. Students complained the internet line is very weak and they often get disconnected during class".

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"I need help using the appropriate digital platform for T&L".

"No matter what medium is used for T&L, let us choose... and don't force us to use one medium only".

The above statements clearly shows that lecturers needed to be given the freedom to use the platforms that are most suitable and they are comfortable with during T&L.

Moral Support

The findings also indicate that lecturers needed moral support from administrators, students and families, which includes emotional and mental support as shown in their responses below;

"Not too burdened with other tasks as online T&L takes a long time to prepare, as lecturers also need time to learn to teach on these online platforms".

"Moral support from the administrator because conducting online classes is quite exhausting".

"Cooperation not to pressure us because sometimes there are technical disruption due to bad internet connection".

"I need to have a more flexible time to complete my job".

Technical and Hardware

Lecturers also required technical support when implementing online classes as technical problems will affect the T&L process, especially when administering online assessment. Besides that, they also needed up-to-date materials in the form of computer hardwares, speakers and microphone that could support the latest T&L platform or applications to conduct the online T&L classes successfully. This is clearly stated as in their responses below;

"My children were able to help me with technical problems because they were at home during the MCO. In the future, I need to be more knowledgeable".

"I need support and technical assistance when there are problems online especially during online assessment to be able to trouble shoot errors".

"ICT hardwares of my laptop is somewhat outdated. Need to format again but the store is closed. Internet access is unstable".

"Better computer facilities. IPG or the government should provide financing to purchase new computers quickly and easily".

"Appropriate device specifications, licensed software, good internet access coverage throughout Malaysia".

The findings of this study clearly show that IPG students have a high level of learning in the online sessions during the pandemic. However, the findings of qualitative data indicated that lecturers and students faced many difficulties due to internet access. This is in line with previous findings which stated that the main issue faced during online T&L is internet access, which is one of the biggest barriers especially for schools in the rural areas as limited internet access disrupt the use of ICT during T&L (Norzilawati et al., 2013).

The findings also found that lecturers needed support in terms of guidance, technical assistance and emotional support. This is in line with Mohamad Shatar's (2020) study, which stated that online learning at university level has not reached the maximum level since face-to-face method with the students remains an option. This situation requires lecturers to be prepared with teaching materials before implementing online learning and must improve skills in information technology, pedagogy and online assessment (Mohamad Shatar, 2020).

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The anxiety of IPG lecturers conducting online T&L is in line with the findings of the study by Hodges, Moore, Lockee, Trust & Bond (2020), which states that T&L during the pandemic raises concern among lecturers who are less proficient in the aspect of technology because they needed longer time to master the media delivery based on computers, smartphones and the internet. It also agrees that the transition from face-to-face mode to online learning mode also requires a change in learning culture among the students (Basilaia & Kvavadze, 2020).

In conclusion, in order to ensure that online T&L can be implemented well and effectively, all parties must be proactive by providing various courses related to ICT. The pandemic period requires all IPG lecturers to make sacrifices both materially and spiritually to ensure that they can carry out their responsibility to produce competent and skilled teachers towards achieving a world class status.

DISCUSSION

The findings generally show that the T&L process runs smoothly in IPG with a relatively high learning level among the students teachers. From the perspective of lecturers, students were punctual in attending classes and were able to adapt themselves well to the changes of T&L during the pandemic. The lecturers also agreed that students were actively involved, have the skills to find information online and were motivated to participate in online T&L sessions. In addition, the lecturers also agreed that students have the skills to communicate online. The results also indicate that the lecturers are able to guide students to complete assignments they gave through online T&L sessions.

However, some lecturers were found to have some difficulty and needed support in certain aspects. The main support required by both lecturers and students were to have good internet access. Since online T&L relies entirely on the internet connectivity, a large amount of internet data as well as stable internet are crucially required. This is to enable lecturers to interact well with all students synchronously during Google Classroomn, Google Meet or other suitable platforms. In addition, lecturers also faced problems, required technical support and guidance, and needed up-to-date ICT equipments to run their online classes.

The implication of this study is that modules needed to be developed in order to give guidelines for lecturers to conduct online classes so that they could implement them in their online classes as effectively as in the developed countries. Lecturers should be continuously assisted through guidance, in-service training and courses to improve their skills in online pedagogy, and be given courses or hands-on workshops continuously to improve their ICT skills. They should also be given assistance in the form of technical services and consultation, and support in the form of computer hardwares so that they would be able to conduct the online classes effectively. Programmes for lecturers need to be planned and implemented to address their shortcomings in order to improve their professionalism and enable them to implement online T&L effectively and without anxiety.

SUMMARY

The findings and discussion of this study, can be part of the literature for online T&L researches. As part of a professional group, the IPG lecturers need to be competent in overcoming the challenges of implementing T&L online to ensure that lessons are delivered effectively. As the pandemic is a new and unprecedented norm, we recommend further studies to be conducted by examining factors or other aspects that affect online T&L process. The researcher also suggest a future study to be conducted on the issues and challenges faced by lecturers/educators and students during the online T&L so that remedial actions could be taken to overcome them for online T&L to be successfully implemented.

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