# A study on the implementation of remote learning: Malaysian students' struggles and suggestions for improvement

**Muhammad Noor Abdul Aziz[1], Nurliyana Bukhari[1], Nurahimah Mohd Yusoff[1], Yusnidah Ibrahim[2], Abdul Malek Abdul Karim[1], Mohd Isha Awang[1], Aspalila Shapii[1]**

[1]School of Education, Universiti Utara Malaysia, Bukit Kayu Hitam, Malaysia
[2]School of Business and Social Sciences, Albukhary International University, Kedah, Malaysia

| Article Info | ABSTRACT |
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| | This study seeks to explore Malaysian undergraduates' perspectives on the implementation of remote learning in their university during the period of the movement control order (MCO). Since teaching and learning activities have been impacted by the pandemic, it is imperative to consider students' perspectives on carrying out classes via the online platform as many studies claim that the pandemic has disrupted teaching and learning activities. A total of 1,028 undergraduate students participated in this voluntary study by answering an open-ended survey sent out to their student email addresses during the MCO period that restricted students and lecturers from going to the university. The qualitative responses from the students were critically analyzed for thematic patterns. The four themes emerging from the data provide future teaching and learning plans that should embed self-learning techniques that could aid students if a similar predicament should hit us in the future. Course instructors can use this information to design future lessons that could assist their learners better.<br><br> |

*Corresponding Author:*

Muhammad Noor Abdul Aziz
School of Education, Universiti Utara Malaysia
Sintok, 06010 Bukit Kayu Hitam, Kedah, Malaysia
Email: matno@uum.edu.my

## 1. INTRODUCTION

The COVID-19 pandemic has affected the global world in every facet of our lives. Apart from altering practices in economy and politics [1], it does not spare the world of education whereby teaching and learning have been conducted remotely [2]. Learners around the world have high hopes that the disruption which was brought about by the pandemic could be lessened to a minimal level. They have been voicing out their frustration and highly hoping that the movement control order (MCO) is lifted and they can be back on campus to continue their studies as usual. What they can expect is everything should be done by obeying the standard operating procedures (SOP) in the new norm.

Likewise, universities in Malaysia adopted the remote learning approach when the country was imposed with the MCO that restricted citizens from crossing state and district borders. Hence, the whole university teaching and learning system went into a total online mode which offered synchronous and asynchronous options. Rigorous online training was carried out to enrich and enhance lecturers' competencies and knowledge on using the online platform for teaching, learning, supervision, and research [3]. As for students, they were forced to use an online platform to communicate with their instructors and peers in completing the assignments and class tasks [4].

Students were having difficulties reaching out to their lecturers due to poor bandwidth of internet reception [5]. It became one of the biggest challenges for them which disrupts learning and makes them fall into depression. Other than that, students find it difficult to contain their attention in online classes for long as they have classes back-to-back, and to top it up, assignments seem to pile up and affect them mentally [6]. As such, this study seeks to explore the views of university students on the implementation of remote learning and its effectiveness with the hopes that a better teaching plan can be developed and utilized in assisting the challenges during remote learning.

## 2. THEORETICAL BACKGROUND
### 2.1. Remote learning

The world is still managing the deadly COVID-19 virus. The virus has also been mutating and new variants are attacking the world. Since the pandemic has gone into multiple waves, measures to contain the virus are still being investigated and implemented constantly. Even though efforts to curb the spread of the virus are rigorously taken, the number of cases has been skyrocketing in many parts of the world with an escalation of death cases too. As a result, many sectors especially the education sector remain closed and are run remotely. Since most countries worldwide have imposed the MCO, remote learning has become the new norm. Kamal *et al.* [7] deliberated that the teaching and learning processes have been transformed into remote instruction with a learning-from-home approach. Remote learning can be defined as a temporary instructional delivery shift to an alternate delivery mode in catering to the crisis circumstances [8]. From the definition, it is clear that any alternative delivery method is considered a remote learning method that can be implemented synchronously or asynchronously. Some examples of remote learning are distance learning, blended learning, e-learning, and mobile learning.

In Malaysia, the crucial criteria for remote learning are social distancing and considering the location of the learners as well as the ongoing learning opportunities during the lockdown period [9]. Becker *et al.* [10] felt that it is pivotal that educators pay close attention to remote learning for students who are struggling as it may disrupt learning if prompt assistance is not provided for them. In addition, there has been a rise in mental health issues among students during the pandemic when remote learning was implemented by their educational institutions to ensure learning to take place. Horita *et al.* [11] explained that even though depression rates were lower among first year students as compared to their seniors, they still experienced high academic distress due to the fact that they had to acclimate to an unfamiliar e-learning atmosphere. This has invited various learning problems such as lack of knowledge in using and adapting to learning portals as well as submitting online assessments with low internet bandwidth.

On another note, the use of technology has been amplified with the strike of the pandemic. What people believe was difficult previously became a norm in this 'new norm'. Lecturers and students join online learning platforms such as WebEx and Google Meet almost daily to interact and carry out teaching and learning activities. Remote learning allows more room for personalized learning where students can approach teachers via online tools such as chat boxes and forums to clarify thoughts and enhance understanding [12]. The biggest challenge while conducting remote learning would be student engagement issues [13]. Lecturers must work creatively in making learning fun and engaging by including fun and interactive tasks that can also assess their learners' progress. This can be done by understanding their students' learning styles and preferences.

### 2.2. Learning styles

In managing learning during the pandemic, educators must revisit the learning styles of their learners. Literature prominently suggests that educators maximize the learning process to embrace students' learning styles [14]. Even though the authors have proven that their students prefer auditory learning styles, educators must take note of students' learning styles and their effects on their metacognitive awareness, especially during the times of pandemic [15]. It is evidently shown in the literature that student–content engagement strategies, such as screen sharing, summaries, and class recordings, are identified as the most effective strategy [16] while there is a large number of students who still prefer the blended learning approach [4]. Factors such as unstable internet connection, the extra financial burden for the internet data purchase as well as time management and impediment in focusing while learning online for a longer period of time were among the themes that emerged from studies abroad in relation to remote learning [17]. A student's learning style is characterized as a combination of cognitive, emotional, and physiological traits that suggest how he or she may learn. Therefore, it is timely to look at the implementation of remote learning from the perspective of the students as they are also equally receiving the impact of remote learning.

## 3.    RESEARCH METHOD

This survey employed a qualitative methodology through the open-ended survey distributed to the students' email addresses. The open-ended survey required the students to answer 2 questions that were related to remote learning for courses that they were enrolled in semester 2 when the pandemic hit, and remote learning commenced. The questions were on the problems faced by the students and their suggestions to ease their struggles during remote learning.

The use of a qualitative research methodology enables participants to openly discuss their personal perceptions and experiences, allowing the researchers to obtain a better knowledge of their practices [18]. It was informed in the email that this survey was not compulsory to be answered [19] and it was totally the students' choice to answer. This was to generate an honest response from the students and to garner data that could help highlight the core of the issue. The email was sent to all the undergraduate students via their email addresses and they were guaranteed that their responses remain anonymous so that the researchers could garner honest data which could be beneficial for everyone. A total of 2,533 responses from undergraduates was received but the screening was done purposively to select those which had qualitative comments in it. 1083 responses were used for the purpose of this study. Bogdan and Biklen [20] recommended that the data be transcribed verbatim. Audit trails were used to ensure dependability and confirmability, with an external auditor checking the transcriptions for accuracy. The data were then imported into ATLAS.ti version 9 which is a qualitative data analysis software that allows researchers to employ open-coding methods and assign codes. The researchers used thematic analysis to analyze the data. It was then categorized and related using axial coding to create the themes. The researchers held four WebEx meeting sessions to aggregate the emergent themes and finalize them based on the main objective of the study, which was to explore the views of university students on the implementation of remote learning and its effectiveness. Upon the discussion and agreement from the experts, the categories were grouped together to generate four themes.

## 4.    RESULTS
### 4.1.  Theme 1: Internet issues

This was the biggest challenge faced by almost 600 students of the total participants in this study. Most of them pointed out that their residential area was not equipped with good internet reception which resulted in them having difficulties joining synchronous lessons. The verbatims were among the common ones mentioned by students in response to the internet connection.

> "*The problem I always face is loss of internet connection and sometimes my laptop is problem*" (S23)
> "*Poor internet connection when online classes*" (S755)
> "*My Wi-Fi sometimes has problem*" (S1021)
> "*I don't have internet connection at home. I go to town weekly to check email*" (S861)
> "*I have limited data to access internet*" (S927)

The scenario faced by the students in their hometown was not aiding their remote learning if it is fully carried out via online mode. It was also reported that many students lived in areas where internet reception was partial, and it disrupts learning. The students suggested that they were allowed to go back on campus for learning as the campus is a closed institution. They could stay on the campus and also save themselves from contracting the virus since the campus is in a safe zone. They also suggested that the university provides internet access via dealing with telecommunication companies who are willing to help the students in learning.

> "*Wi-Fi speed need to be provided if possible. University can discuss with Telco companies to provide help on this matter*" (S223)
> "*Can let students watch video and provide questions/quiz via google forms*" (S81)
> "*University can provide internet subsidies*" (S61)
> "*Can post learning materials to students in rural*" (S1128)

### 4.2.  Theme 2: Learning engagement issues

A big number of students also griped that they easily lost focus at home as there were many distractions from siblings and other family members while online classes were going on. This has to be given attention as their learning matters most. Apart from that, they also experience a lack of support from their classmates resulting in them not being able to cope with class tasks.

"*Most of the time, I have to spend time for house chores, attending to my younger siblings and neighbors who come to my house*" (S751)

"*My siblings disturb me during my class*" (S28)

"*I have to help learning for my younger sisters*" (S872")

"*My environment is noisy with little children playing around. I cannot concentrate*" (S113)

"*It is quite hard to understand when learn through online rather than face to face or going to physical class*" (S1088)

"*Group assignment is unfair and requires more effort as some groupmate tends to disappear, ignore or neglect their responsibilities*" (S24)

"*Other problem is irresponsible student during group assignment. They tend to keep quiet during online discussion*" (S5)

The dilemma faced by our students is the reality of online learning that needs to be catered to and understood by the lecturers. The issue of classroom engagement with peers and instructors arose as a dilemma on the students' side. They found that there is a decrease in their communication with the instructors as compared to face-to-face classes they have had previously. Among the suggestions by students to tackle the learning engagement issue is constant monitoring by lecturers, peer assessment, and group-by-group coaching sessions.

"*Lecturer should monitor group work always. Can call group leaders to find out about the progress*" (S898)

"*One way to make sure everyone involve in group work is peer check. Group members will give marks for cooperation. Then, everyone will contribute*" (S357)

"*I like when my lecturer give consultation for every group. That time I will tell my problem in group when friends don't help*" (S121)

The suggestions by the students are practical and can be employed by instructors in engaging students in completing the assignments in groups effectively.

### 4.3. Theme 3: Financial issues

This is an undeniable issue communicated by 137 students who were from struggling families. They had problems purchasing data for their internet and also securing a proper gadget which became a hindrance in online learning.

"*I had to use some money to buy the data Internet plan because we don't have Wi-Fi at home.*" (S496)

"*I need financial help to buy a new laptop and buy internet bill when I study at home and sometimes, I don't have internet access to finish my assignment and join online class*" (S360)

"*I need to pay for a strong Internet. I got kicked out of Webex all the time and I am not happy as I have lagged connection*" (S129)

The students gave their opinions in relation to this issue. They suggested that the university provides help or at least finds support to help them financially. These suggestions by students can be taken into consideration by the university to alleviate their financial burdens.

"*The university can waive some expenses such as accommodation, transportation and library fees. This can help students' financial ability to purchase online data for online studying. The school can also provide assistance to help students in need to purchase some electronic equipment for the study*" (S167)

"*I hope the university will return back like 10% of our fees so it will help us to manage the purchase of data*" (S180)

"*Maybe can reduce in the usage of data during class. For example, not every day having class, maybe in a week, one subject can have only one day for class. Wednesday and Sunday class, we can either choose only Sunday or Wednesday to have class, and the other day can upload some PowerPoint slides for reference*" (S183)

"*I hope the university can sponsor the data for online classes by deducting the fees spend for the Inasis and bus for this semester*" (S203)

### 4.4. Theme 4: Assessment issues

Since most of the courses adopted a full coursework assessment as opposed to the previous 60% coursework and 40% final exam, students find it burdensome to complete all the assignments within the stipulated period.

*"There are tests with unreasonable time allocation, it works for me but students with serious internet connection problem might lose mark for that."* (S238)
*"Lots of assignment and so little time. Lecturers keep sending message to send assignment but no questions asked if we can do it"* (S573)
*"Unreasonable quizzes since no final exam. I could not cope with the quizzes"* (S459)

The students suggested that ample time is given for them to complete the assignments. It is imperative to reconsider the assignment load on the students to prevent burn out and drop out cases among students.

*"We must be given extra time to complete the assignments and quizzes as there are plenty of them now"* (S208)
*"I think should be revised again and reduce the quantity that is given per subject. Instead, a comprehensive better quality exam material should be prepared so students are still challenged at the same time with better mental preparation"* (S2019)
*"Hopefully, we will be given assignments that is suitable for each student according to their limited internet resources which may differs"* (S2035)

## 5.    DISCUSSION

From the analysis, it is evident that students are struggling and coping with several challenges which impede their learning processes. Since teaching and learning activities in the universities have gone online, immediate, and meaningful support should be provided to the students in assisting them in coping with the challenges they face. As much as internet reception issues are concerned, there are efforts being made by higher learning institutions to engage in partnership with telecommunication companies to provide subsidized sim cards for students to use during the remote learning period with good internet coverage. This is in line with the triple helix effort to improve and elevate the quality of education [21], [22]. With effort shown by the university to assist learning during times of crisis, it will motivate the students to join online classes and participate in learning and teaching activities. More effort should be drafted and carried out by the administration of the universities with collaboration from the ministry of higher education in ensuring smooth learning while students are learning from home.

Student disengagement in online learning is a serious issue that must be paid attention to. If this issue is not attended to, it might escalate to a worse scenario since everything involving learning is online in today's world. Literature suggests that student engagement is one of the important factors for successful learning and student improvement [23]. To assist learners, instructors can provide synchronous and asynchronous materials while taking into consideration that internet reception is a problem for a large group of learners. By having this consideration, students who have internet problems can still access the learning activities at their own pace. This effort will reduce stress among the students as stated in the report by Organisation for Economic Co-operation and Development (OECD) [24]. One of the themes that emerged from the data showed that the learners are stressed over the discomfort at their own homes. This is a psychological problem that is disrupting their learning. Instructors provided emotional support and unceasing motivation for their learners to aid them in their struggle for learning at home. Parental and family support is imperative in the context of online learning as the learners are at home with their family members [25]. The family members should understand their roles in supporting the learner with their learning process.

Since financial issues emerged as one of the themes in this current study, it is paramount for educators to take this issue seriously. Care-based moral development and interaction as proposed by Carol Gilligan are timely to be implemented where lecturers take into consideration students' dilemmas and predicaments [26] and offer help where and when possible, by alerting the students' affairs department on the need to provide immediate assistance for the struggling students. The pandemic may have affected students' lives in multiple ways and it is a collective effort from the university to assist them. The university can alert governmental and non-governmental agencies to give a helping hand financially to affected students so that it eases their burden [27], [28]. Apart from financial aid, Universiti Utara Malaysia has also provided free laptops and other gadgets for students who come from poor and struggling families to assist them during the remote learning period. This commendable effort is practiced by other higher education institutions in the country.

Since most of the teaching activities are carried out online, the teacher-learner relationship plays a vital role in the success of learning. Previous studies showed that strong job satisfaction comes along with this positive relationship [19], [20]. Both the teachers and students are in the setting of their homes and are struggling in managing teaching and learning. If this partnership is made positive with them supporting one another, a better success rate can be achieved during remote learning. Empathy is one of the key components that need to be practiced by lecturers especially during times of crisis [29], [30]. With empathy shown to students, eases their problems and motivates them to engage during the online learning period. There are various ways that were suggested by the students in this current study as described in the data analysis such as fun and engaging activities and breakout sessions. In relation to assessment load, it is the lecturer's discretion and empathy that are highly expected and appreciated by the students since many courses adopted full coursework mode instead of final examinations. As such, it increases the ongoing assessment load on the students and instructors [31]. Lecturers can be creative in designing assessments by considering the inclusion of AI and video-based assessment to ease the students understanding as well as achieve the needs of course learning outcomes [32], [33].

## 6. CONCLUSION

There are three main conclusions that can be drawn. Firstly, students are indeed in a challenging period in their studies and assistance should be provided to get them going for quite a long time since COVID-19 is still lingering around us with new variants emerging every now and then. Remote learning may become one of the elements in the new normal as to date this paper was submitted for publication, and students in higher education are mostly still studying from home. Continuous effort must be put into enhancing remote learning strategies to ensure dropout cases decrease and quality teaching and learning are practiced. Secondly, a teaching and learning guide can be drafted and implemented to maneuver the learning process during the times of the pandemic. This guide can be used by teachers and also learners to inform them of the new mode of learning, teaching, and improved assessment plans. Universiti Utara Malaysia has successfully planned the Remote Learning Guidebook which is the product of this research to assist and guide lecturers in carrying out teaching, learning, and assessment activities successfully. Finally, support from parents or guardians is imperative in ensuring the success of remote learning. Since students are at home, tangible care and understanding from parents should come deliberately in assisting their learning process. It is a collective effort to make sure the transition from face-to-face learning to remote learning. It may be new for the Malaysian education system, but it is feasible if it is planned and carried out accordingly.

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## BIOGRAPHIES OF AUTHORS

**Muhammad Noor Abdul Aziz** 🆔 🟦 🆂🅲 🔵 is a Senior Lecturer in School of Education at Universiti Utara Malaysia. His research interests are in the area of curriculum, pedagogy, classroom assessment and English as a second language. He can be contacted at email: matno@uum.edu.my.

**Nurahimah Mohd Yusoff** 🆔 ⑧ SC 🔵 is a Professor in Universiti Utara Malaysia. She is currently the Director of Academic Excellent Development Unit. Her expertise is in Curriculum and Instruction. Her vast experience is in curriculum development, teacher education and professional teacher development. She can be contacted at email: nura@uum.edu.my.

**Yusnidah Ibrahim** 🆔 ⑧ SC 🔵 is a Professor in Al Bukhary International University. Her expertise is in finance and banking. Her vast experience is in Islamic finance and banking, corporate finance, actuarial science and small business finance. She can be contacted at email: yusnidah.ibrahim@aiu.edu.my

**Abdul Malek bin Abdul Karim** 🆔 ⑧ SC 🔵 is a Professor of Instructional Technology at the School of Education, Universiti Utara Malaysia. He is currently the Director of UUM Information Technology (UUMIT). His current research interests include the use of interactive technologies for remote learning, how people of different ages approach technology, the ethical issues in online education and student's ability to adapt from face-to-face instructor training to computer-based training in a virtual classroom environment. He can be contacted at email: malek@uum.edu.my.

**Mohd Isha Awang** 🆔 ⑧ SC 🔵 is an Assoc. Prof and the Head of Department in School of Education, Universiti Utara Malaysia. The focus of his research is on Educational Assessment, Teacher Quality and Language Education. He can be contacted at email: isha@uum.edu.my.

**Aspalila Shapii** 🆔 ⑧ SC 🔵 is an Assoc. Prof in the School of Education, Universiti Utara Malaysia. She is a teacher trainer and researcher in the field of English Language curriculum design and teaching approaches especially student-centered learning. Her research interest is in the area of classroom interaction, learning strategies and teaching approaches. She can be contacted at email: aspalila@uum.edu.my.

**Nurliyana Bukhari** 🆔 ⑧ SC 🔵 is a senior lecturer in School of Education, Universiti Utara Malaysia. Her research focuses on issues of fairness in testing, technology integration in assessment, language testing and assessment, assessment design, validation, psychometric estimation, and understanding learners. She can be contacted at email: nurliyana.bukhari@alumni.unsg.edu.