

The Insights of Online Teaching Readiness among Novice Teachers

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Abstract

Pandemic crisis has made a change to the teaching environment from classical pedagogy to the new technique of teaching. Conducting an online class give a different experience to all teachers around the globe. The main issue of the teachers' readiness and the institutions to face the transition of teaching become a question. This study aimed to investigate the skill level in using online teaching tools among the novice teachers and how they handle the issues and challenges during the implementation using online platform. A survey was carried out and analyzed using combination quantitative and qualitative method. The results show almost half of the participants were not ready for the transition and lack of the knowledge to use the online tools. To encounter the challenges faced during online teaching, the solutions suggested mostly rely on the teacher's effort, student's self-motivation, parents' support, the supply of quality internet facility and gadgets. The challenges and solutions should be made known to the society. This study highlighted the importance and the need to improve teaching and learning techniques in online learning. These findings can benefit to educators and teachers in creating a successful and healthy environment for online learning in the country.

Keywords: Online Teaching, Teaching Tools, Novice Teachers, Challenges, Online Learning

Introduction

Due to pandemic crisis, most of the education institutions around the globe has transitioned to online teaching and learning method. The pandemic situation has speed up the transition process from the traditional face-to-face to online teaching and learning method. Impact from the situation, all teachers and institutions are scrambled to restructure the curriculum, study plan and teaching materials in order to ensure the continuity of the classes (Zha & He, 2021). Furthermore, all teachers are struggling to attend the training to learn new relevant and reliable technology that will be deployed for online classes. In the first place, this abrupt transition has burdened the teachers, students, parents and institutions. Based on the feedback from students, they feel isolated because limited communication with their clique and they get less attention from their teacher during class hour (Zha & He, 2021).

Moreover, the online teaching method has overlooked on humanising approach during delivering the course content (Mehta & Aguilera, 2020). Some of the disabled students are not recognised by the teacher. The study had discovered that teaching method played an important role to make sure no student should be left behind during the class hours. The students had better reflection during the class hours in the traditional face-to-face teaching and learning method (Zha & He, 2021). Moreover, there are a lot of physical activities that could be conducted. The activities are such as laboratory work, sport and arts activity. However, the transition from face-to-face to online teaching and learning method had limited to such courses or activities. This situation occurred because of limited tools that are available to be deployed to conduct the classes (Zha & He, 2021). According to the authors, there is no one tool that is able to fit every teaching and learning requirement such as for subject that involved laboratory session. In addition, the online teaching tools are not focused on the disabled students such as deaf and mute (Mehta & Aguilera, 2020).

Currently, there is no teaching tools that can fit to all teaching requirements. Most of the tools had specific main function. For instant, Google classroom is an online platform where teachers can place the class announcement or instruction, notes, link of the files or videos. Google Jamboard is an online tool where teachers can use it as a blackboard or white board. To use the Google Jamboard, teachers need to have a special tool such as stylus pen. Google Meet is an online video conference platform where the teachers and students can meet online together. Teachers can deliver the course content live and have a real time response from the students through Google Meet. Based on the explanation and examples, it is shown that the teachers and students are required to install several tools in order to support teaching and learning activities. However, the advance technologies and tools do not guarantee the satisfaction in online course delivery and learning. According to Zha & He (2021), the communication and interaction in online teaching unable to come naturally. This has shown the online teaching required a new method or approach to ensure there is an engagement between teacher and students during class hours. The method will attract the students to stay in the class until the end. But the main issue is, which of the existing proposed online teaching methods are reliable to be deployed? Therefore, this study had conducted a survey to look into the insights of young generation teachers on the issue and challenges faced during online teaching in Malaysia education institutions. Results and findings from the study are extensively discussed in this paper. The objectives of this study are:

- i) to investigate the skill level in using online teaching tools among the novice teachers
- ii) to investigate the practical experience of novice teachers in handling the issues and challenges during the implementation of online teaching.

The structure of the paper is as follows: The first section discusses the educational issue that happened due to COVID-19 pandemic as well as the objective of the study. A literature review on the challenges faced in online learning is presented in the second section. The third section presents the methodology of this study. The findings and discussion of the survey that was conducted are discussed in fourth section. The conclusion of this study and some suggested future works are presented at the last section.

Literature Review

Since the COVID-19 pandemic attacked in 2019, teaching and learning process has changed from face-to-face (F2F) to online method. Many teachers have replicated the F2F method to online (TeachOnline.CA, 2020). Then, they had discovered that the method they had performed was not right. They need to consider all possibilities that might happen to the

students to access to the course. The main factor was the infrastructure on the student's side, where some of the students stay at the location with intermittent internet connection and others might not have internet connection. This issue has forced the teachers and institutions to change the strategy of delivery method.

Zha and He (2021) has deployed Process-Oriented Guided Inquiry Learning (POGIL) method to deliver the course as online. The implementation of the method has focused on group task and readiness assurance technique. The aims of the technique are targeting on student interaction, student equity and participation, and student readiness. According to Zha and He (2021), in the group task students were divided into small groups consist of 4 persons per group. Each student in a group had unique role to play. This situation is to disallow a sleeping partner in the group. Moreover, the students took turn to play each different role. In this way, the different opinion or perspective from each student could be collected in the discussion session. The implication from the activity was every student will speak up their idea and everybody in a group will get involved in the activity. This kind of activity can be conducted using online tool such as Zoom meeting. During the Zoom meeting, the students can be divided into a small discussion group by using the function provided in the tool. However, this activity can never be conducted smoothly if the student had a very weak internet connection. Moreover, this activity is also difficult to be conducted if one or several students in a group had disability such as deaf or mute. The communication between them will be disrupted because the normal students unable to understand the sign language. Therefore, Mehta and Aguilera (2020) had conducted a study on humanising pedagogy for online teaching and learning. Based on the report, the authors had an experience conducting a class that has a deaf student in the class. In the first place, the existence of the student was not realised by them. Later the existence of the student was found when the authors asked the students to introduce themselves through online via the Flipgrid tool. However, the deaf student had difficulty to use the tool because the student unable to receive the verbal command. This situation made the teacher and other students realised the existence of the deaf student. Hence, the authors had changed from the normal video presentation used for teaching to a new video presentation by embedded caption, sign, facial and body language in the video in order to express emotion. Impact from the implementation, the deaf student was able to continue the class without any issue. The method used by the authors has been defined as a humanising pedagogy for online teaching and learning.

In different cases, Kilgour et al (2019), had conducted a study to discover the threshold in the online teaching and learning pedagogy. According to the author, teachers have difficulty to adapt the online teaching and learning environment because they are unable to run counter from the common habits in the non-online environment. Hence, to develop the confident and competency among the teachers, it is important to understand the threshold concepts in online environment. The threshold concepts have been defined by King and Felten (2012) in which the concept is a challenge for learners and to indicate the learners point level of learning (Kilgour et al., 2019). Furthermore, the study has been conducted to three universities. One of them was a public university in United State. Another two universities were in Australia, one was a public university, and one was private university. The outcome from the study stated that the online pedagogy is not like a non-online teaching and learning pedagogy. There are several challenges that need to be considered in order to make the online pedagogy successful. The challenges are not limited to the teacher, it also includes the preparation and course design where it must align with the online pedagogy environment, delivering method used during online courses, and communication and engagement between

teacher and students. In such cases, Lawrence (2020) has studied culturally responsive online pedagogy.

Generally, by upgrading or downgrading the lesson plan is a typical method did by the teachers in order to ensure the engagement during the class hours. Inserting the humour elements during delivering the lesson to get the students attention mentally and physically during the class hours is another alternative method proposed by the Balakrishnan (Balakrishnan, 2021). In addition, explaining the unfamiliar topic in 20 to 30 minutes will make the students loss their focus especially when the class session is conducting in online environment. Hence, the teachers should apply the break session although the class was conducted in online environment. The implementation can be in any techniques such as the teachers can have a funny guessing game, tell a joke, talk about the current trending topics, or shows them a funny clips or video. These sense of humour elements can attract student's attention back in the class. Later, the joy of learning can be continued. Based on the report, teachers and student's engagement during the class hours is the issue and focus concerned by the author. According to this study, issue concerned by the author is a critical issue because the students are easy to lose focus in the class when they have less supervision from their teachers. Online teaching and learning environment are very challenging when the teachers need to focus more on engaging the students instead of delivering the course contents. As a saying goes, less is more. Making students understand the topic one bit at a time is more effective than splurging the whole breadth of contents only to confuse the students even more. On the other hand, the presence of the teacher in the online classroom is able to increase the student confident level (Steele et al., 2019). Furthermore, social presence and positive vibe relationship in the online classroom between the teacher and students are able to produce a comfort environment during class hours. By injecting the humour element and human touch during delivering the lesson will increase the engagement for the students staying in the class until the end of the session. The study had reported this method is able to mediate academic immaturity among the student especially to the fresh students. However, according to Steele et al. (2019), this technique can be defined as a best practice in the online teaching, but it is unable to be called as a pedagogy. Thus, the question occurred after reading the report:

1. What is the online pedagogy?
2. Does the online pedagogy theory exist?

In different cases, Miller in 2015 had defined a Massive Open Online Course (MOOC) as an online pedagogy. The issues concerned in the report are: does the MOOCs represent the quality of the online teaching? Is the MOOCs being able to make the students stay and learn effectively? A study has been conducted by the author in order to discover the quality and effectiveness of the online teaching using MOOCs. The result from the study reported that it is unable to evaluate the quality of the learning via MOOCs. Furthermore, the MOOCs do not provide the social presence of the teacher and less support to student. This situation has made the learning process become less effective compared to the online learning through the video conference. In addition, it is less than 10% of the enrolled students have completed the course (Kumar & Kumar, 2020). Moreover, in the environment without the presence of the teacher or live discussion on certain topic, the students were unaware whether their study is on-the-track until they received the final result from the enrolled course. The situation has given a bad impression and invited the negative perception from the students and finally demotivating the students to enrol to the MOOCs courses. Based on the discussion, this study

has summarised that the MOOCs is not the best online pedagogy. The feeling to be in the classroom, listen to the teacher and interact with other students is the common mentality and behaviour of the most students. The feeling wants the social presence and human touch during learning hours is a main reason why there is less students enrolled to MOOCs courses (Kumar & Kumar, 2020).

Regarding the discussion on pedagogical content knowledge (PCK), the report in Rapanta et al (2020) focused on designing and organising learning activities and assessment to the online learning requirements. Several pedagogies related to online learning that were highlighted in the study are intelligent pedagogy, distributed pedagogy, engaging pedagogy, agile pedagogy and situated pedagogy. In general, the pedagogies require the students to be an active learner, require redesigning or restructure the curriculum of the course content to align with the industrial demand, require collaborating with the local communities or industries and require to diverse the contents or instructions delivery techniques and student's assessment method. Furthermore, as stated in the report, teacher presence and social presence are a must in online environment in order to tackle the needs of the students regarding the course. However, as a teacher must entertain and align all the needs according to the learning outcome for each course. Based on the report, this study has discovered by exposing the students with the current or real-world situation that related with the discuss topic, letting them have a small group of meeting and encourage them to emphasis their idea to the topic are great techniques to let them learn individually and build up their own understanding to the topic or subject. It is important to train the student to learn individually because that ability is a must to be in the online learning environment. In the online learning environment, the student will learn individually and construct the understanding to the topic or subject alone. The teacher just facilitates them along the journey of learning process and expose them to the situation or case study that related to the topic or subject. At the end, the student will have their own understanding to the topic or subject. Variety of understanding from every student to the discuss topic shows the positive impact. It is an opportunity to create the debate session to the topic in order to highlight the different perspectives from different students. Outcome from the activity will help the student to build their self-confident and respect others opinion.

Based on discussion, most of the articles published the best practice to conduct the online class. There are less articles reported on the best online pedagogy that can be practised by the teacher to conduct online class. Therefore, TeachOnline.CA (2020) had listed 7 important keys to develop a new pedagogy which is reliable to align the new pedagogy with the online teaching environment. The keys mentioned to develop a new pedagogy are:

1. Blended learning.
2. Collaborative approaches to the construction of knowledge.
3. Use of multimedia and open education resource.
4. Increase student control, choice and independence.
5. Anywhere, anytime and any size of learning.
6. A new form of assessment.
7. Self-directed and non-formal online learning.

All mentioned keys have been considered and influenced by 4 main factors, which are a new demand of a knowledge-based society, new student expectations, new technologies and the fast-changing world of work (TeachOnline.CA, 2020). Furthermore, an online article titled Best Practice: Online Pedagogy was published on the website Tech Remotely from

Harvard University. The article highlighted the best practice to teaching online. According to the article, the basis of teaching remains the same regardless the class is in online or offline (F2F) environment. The forms of teaching interaction may change from the normal interaction which means F2F to online interaction where the interaction occur via the social media or messaging applications. The most important is focus to the pedagogy but not the medium (Tech Remotely). As a summary, the article has highlighted the most reliable and effective practice to conduct the online class.

The preliminary finding based on the discussion is: no superlative online pedagogy can be applied by the teacher. Most of the studies have focused on realistic techniques and methods to be applied in the current pandemic situation. However, the reality challenge of conducting online class is beyond our expectation. Stated by BH Online, students' absenteeism is the most critical issue faced by the teachers (BH Online, 2021). According to the report, the factors contributing to the students' absenteeism were: students have no devices to attend or access to the online class, students had no motivation or no interest to attend the online class or students had less supervision while staying at home because their parents were busy working from home. Therefore, no matter how advances the technology is and how good the teaching style of the teacher is, there is no guarantee where the student will be attracted to attend the online class. Moreover, most of the proposed pedagogies and techniques are focusing on the curriculum development and teaching style. There is no pedagogies or techniques that discussed on how to attract student to enter the online class. Therefore, this study had conducted the survey to Institute of Teacher Education in order to collect their opinion on managing the online classes. Further discussion regarding the conducted studied will be placed in next section.

Methodology

A survey was created and conducted using a Google Form. The survey aimed to investigate the level of readiness to all novice teachers who faced the transition in teaching environment from traditional teaching method to online learning. The population of the study is novice teachers from Institute of Teacher Education. The survey was distributed to the Institute of Teacher Education, which is Teacher Education Campus Tun Hussein Onn, Johor, Malaysia. A total of 35 novice teachers were selected as respondents through purposive sampling. The survey consists of 3 parts. The first part is about the brief information regarding the participants. The second part is about the awareness of the participants regarding the online teaching tools and their skill level in using the tools. The third part consists of open-ended questions based on the case study created by the authors. The survey has been conducted and the link of the Google form was opened for 8 days starting from 4 of July 2021 until 11 of July 2021. The data was then collected and analysed using both quantitative and qualitative method.

Results

A total of 35 respondents participated in this study. Among the respondents, 77.1% are female and 22.9% are male. On the other hand, 60% of the respondents' age are in between 18 to 24 years old. The remaining 40% are in between 25 to 35 years old. The main idea for collecting their gender and age is to analyse the finding where this study believes that the feedback from the respondents is influenced by their gender and age. In other words, the feedback is representing their maturity and readiness to be a teacher. Moreover, 68.6% of respondents are teachers of the Islamic / Moral studies, 42.9% are teachers of the language's

studies and the remaining of 2.9% are teachers of Mathematics, Music, Arts, Health studies and Design and Technology subject, respectively. The following section presents the results of the teachers' awareness of online teaching tools and the challenges faced by novice teachers during online teaching.

Skill Level of Novice Teachers in Using Online Teaching Tools

In this section, the skill level among novice teachers in using online tools for online teaching are discussed. The skills are categorized in 5 categories, namely (1) online video conference platform, (2) online classroom management system, (3) online file management system, (4) online assessment tool and (5) online documentation tool.

Table 1 shows the comparison results on the skill level in using the online video conference platform. In general, the commonly used platform to conduct online class are Google Meet, Zoom Meeting and Cisco Webex. From the results, it is found that Google Meet is the most well-known video conference platform among the novice teachers where 82.9% of them were able to use this tool well. About a third of them (34.3%) knew well on using Zoom Meet. There are only 5.7% of the respondents can use Cisco Webex confidently.

Some supporting tools such as Google Jamboard and Goggle Slide can be used when conducting online class. The function of Google Jamboard is similar to the physical whiteboard in physical classroom. Google Slide is a tool that can be used for presentation in online class. The results shows that majority of the respondents can use Google Slide (88.6%) and about half of the respondents can use Google Jamboard (51.4%). The lack of use on Google Jamboard could be due to not every novice teacher bought the drawing tablets or stylus pen that need to be used while using Google Jamboard.

Table 1

Skill Level in Using Online Video Conference Platform

	Able (Optimal use)	Somewhat able	No ability	Do not know this tool	Total
Google Meet	82.9%	17.1%	-	-	100%
Zoom Meeting	34.3%	48.6%	14.3%	2.9%	100%
Cisco Webex	5.7%	42.9%	25.7%	25.7%	100%
Google Jamboard	20%	31.4%	20%	28.6%	100%
Google slide	54.3%	34.3%	11.4%	-	100%

The skill level among the novice teachers in using the online classroom management system is shown in Table 2. The results shows that all the respondents have the skill in using Google Classroom where majority of them (88.6%) has the advance skill in using it. Based on the result, not all the respondents knew about Microsoft Teams. There are 2.9% of them could not manage Microsoft Teams and another 2.9% of them did not know about this system. However, the results shows that the novice teachers could handle at least one type of the online classroom management system.

Table 2

Skill Level in Using Online Classroom Management System

	Able (Optimal use)	Somewhat able	No ability	Do not know this tool	Total
Google Classroom	88.6%	11.4%	-	-	100%
Microsoft Teams	45.7%	48.6%	2.9	2.9	100%

Table 3 summarizes the skill level among the respondents in using the online file management system. Google Drive and Microsoft One Drive are two common systems available for novice teachers. From the results, it shows that most of them (80%) could use Google Drive well for online file management while there are only 20% of them knew well on using Microsoft One Drive. The results also shows that not all novice teachers know how to use these tools. There are 2.9% of them has no ability to use Google Drive while there is a total of 34.3% of the respondents either has no ability to use or do not know about Microsoft One Drive. To address this issue, training related to online file management system could be provided to the novice teachers.

Table 3

Skill Level in Using Online File Management System

	Able (Optimal use)	Somewhat able	No ability	Do not know this tool	Total
Google Drive	80%	17.1%	2.9%	-	100%
Microsoft One Drive	20%	45.7%	20%	14.3%	100%

Table 4 shows the results of the skill level among the novice teachers in using the online assessment tool. The results shows that less than half of the respondents know how to use ProProf Quiz Maker and Exam.net. There is a total of 74.3% of them do now know how to use ProProf Quiz Maker while a total of 71.4% of them has no knowledge on using Exam.net. The lack of knowledge and skill in using these online assessment tool could be further investigated whether these tools are suitable for teacher to conduct the online assessment.

Table 4

Skill Level in Using Online Assessment Tool

	Able (Optimal use)	Somewhat able	No ability	Do not know this tool	Total
ProProf Quiz Maker	14.3%	11.4%	31.4%	42.9%	100%
Exam.net	8.6%	20%	25.7%	45.7%	100%

There are many online tools that could help teachers in documentation and other purposes. In this survey, a few online tools namely Google Docs, Google Sheets, Google Forms, Microsoft Forms and K-12 Education Tools are investigated. These tools can be used to monitor homework submission, attendance tracking, students' evaluation, data collection and documentation. Table 5 summarizes the results of the skill level among the novice teachers in using these online documentation tools. The results show that majority of the respondents can use Google Docs, Google Sheets and Google Forms. Only 20% of them has no ability to use Google Sheets. From the results, it is found that Microsoft Forms and K-12 Education Tools are less well-known among the novice teachers. There is a total of 48.6% of them were not able to use Microsoft Forms while a total of 62.8% of them could not use K-12 Education Tools.

Table 5

Skill Level in Using Online Documentation Tools

	Able (Optimal use)	Somewhat able	No ability	Do not know this tool	Total
Google Docs	62.9%	37.1%	-	-	100%
Google Sheets	25.7%	54.3%	20%	-	100%
Google Forms	71.4%	28.6%	-	-	100%
Microsoft Forms	22.9%	28.6%	22.9%	25.7%	100%
K-12 Education Tools	8.6%	28.6%	25.7%	37.1%	100%

Practical Experience of Novice Teachers in Using Online Teaching Tools

In this section, practical experience of novice teachers in using online teaching tools were investigated. Figure 1 presents the online applications that the teachers used during online teaching. According to the teachers' preference, Google Classroom and Google Meets are two applications that are frequently used by teachers. Next two popular applications are WhatsApps and Telegram. From the survey, the respondents also experienced the use of other online applications such as YouTube, Google Docs, Microsoft Teams, Google Jamboard, Google Slides, Google Sheets, Facebook and Zoom Meeting as shown in Figure 1.

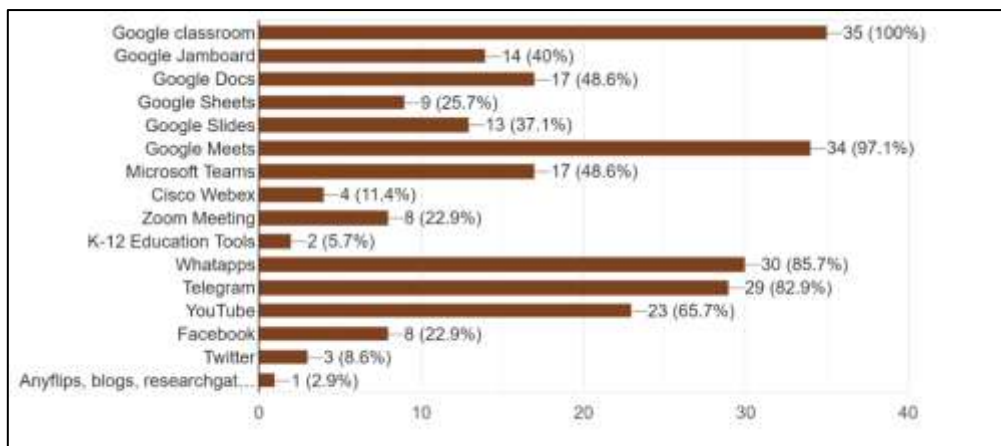


Figure 1. Use of Teaching Tools in Online Class

To assess students' performance, the method that was used in traditional face-to-face assessment might not be applicable to online class environment. Based on the novice teachers' practical experience, they opined that quizzes and assignments are the suitable ways to conduct the online assessment (Figure 2). Only very few respondents (8.6%) agreed that examination with written answer was the suitable online assessment method.

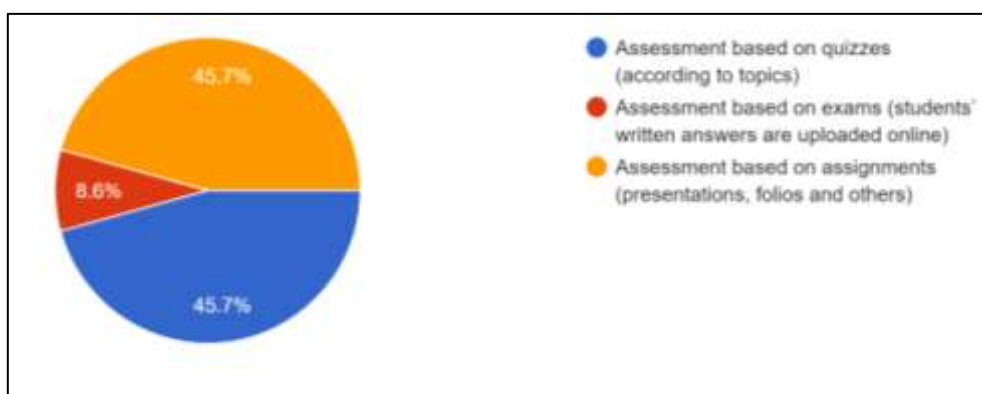


Figure 2. Teachers' Preference of Suitable Online Assessment Method

Challenges and Issues during Online Teaching

During online class, many challenges are faced by teachers. The challenges ranges from the impact of teacher's career to issues related class management. In this section, open-ended questions were designed to investigate how teachers solved the challenges during online teaching.

Table 6 summarizes the opinions and suggestions from teachers based on the educational issues due to current situation. The issues are: (1) How does the current situation impact on teacher's career? (2) What are the suggestions to education institutes in the country to ensure no students are left behind in gaining knowledge in online class?

In general, the novice teachers opined that the new way of online teaching gave them an opportunity to develop ICT knowledge. To ensure that all students continuing to have equal chance for online education, the suggestions given by the teachers are mainly focused on internet facilities, gadgets, education system, parents' support and students' inspiration. All parties played important roles to make the online learning successful.

Table 6

Educational Issues due to Current Situation

Issues	Teachers' opinion
1. How does the current situation impact on teacher's career?	<ul style="list-style-type: none"> • Gain new knowledge of ICT • Busy and packed work life • Satisfying • Some teachers do not have sufficient gadget • Not really have impact on career, students' achievement is more important
2. What are the suggestions to education institutes in the country to ensure no students are left behind in gaining knowledge in online class?	<ul style="list-style-type: none"> • Supply the necessary gadget and internet facility to teachers and students who are lack of it • The quality of internet connect is the key • Have a new system that allows teachers to carry out online class in a flexible, comfortable, creative and proactive way • Give support to Akademi Youtuber Guru Malaysia • Encourage parents to focus the importance of education by attending seminar or contact parents personally • Inspire students to not giving up in education • Improve educational materials on social media, TV Pendidikan

Another open-ended question was asked whether the novice teachers are ready to teach online and their reasons. Figure 3 summarizes the result on the readiness of teacher to teach online. It is found that more than half of the respondents (57%) confident with the new way of teaching while 37% of them gave the opposite opinion. The remaining 6% of the respondents are not sure on their readiness. The novice teachers who gave positive answer on this issue gave the reasons: (i) Being a responsible teachers will overcome whatever obstacles and able to teach online, (ii) There are many types of applications that are easy to use for online teaching, (iii) They like this teaching method.

Other the other hand, the respondents who felt not ready to teach online gave the reasons: (i) Internet coverage is not good, (ii) Do not know well on students in online class, (iii) Need to improve on online teaching skills first, (iv) Prefer face-to-face class because it is easier to know students understanding level.



Figure 3. Teachers' Readiness to Teach Online

Table 7 shows the percentage of respondents according to gender and age regarding their readiness to teach online. From the result, it shows that similar trend for both gender where about half of female respondents (59%) and also half of male (50%) respondents gave positive response that they are ready to teach online.

However, for novice teachers who are older (25-35 years old), more teachers (64%) are confident and ready to teach online. Compared to younger teacher (18-24 years old), about half of them (52%) are ready for online teaching. This shows that their maturity would influence the readiness of teachers in online teaching.

Table 7

Teacher's Readiness in Online Teaching According to Gender and Age

	Gender		Age	
	Female	Male	18-24	25-35
Yes	59%	50%	52%	64%
No	37%	38%	43%	29%
Not sure	4%	13%	5%	7%
Total	100%	100%	100%	100%

Various challenges appeared during online teaching. Table 8 summarizes the action taken by teachers to overcome the issues related to class management. The first issue is to overcome the problem of absenteeism among students in online class. Generally, teachers tackled the absenteeism issue by two means, that are prevention and punishment. To prevent the students from absent the class, teachers seek corporation from parents to monitor their child's class schedule, motivate students and find out the root cause for students who cannot attend the class. On the other hand, teachers also focus on students' discipline to punish those who absent the class.

For the second issue related to class management, teachers creatively applied various methods to motivate students stay connected in online class. The methods were: always alert student by calling their name in online class, keep track on students' attendance, increase communication with students through WhatsApp or Telegram, encourage students participating in question-and-answer session in online class as well as create fun activities, quiz and game for students.

The third issue is related to the problem of some students were unable to follow online class due to certain reasons. The actions taken by teacher to overcome this issue were:

provide module, materials and recording video to students, preparing enough homework for students to practise and catch up the lesson, monitor tightly on the students' progress through WhatsApp or Telegram.

Table 8

Various Issues Related to Class Management

Issues	Actions taken by teacher to overcome the issue
1. How to overcome absenteeism issue among students?	<ul style="list-style-type: none"> • Request student to give reason for absent and help them to solve the issue • Motive students to realize the importance of attending class • Being a strict teacher and focus on students' discipline • Use carrot-and-stick method to reward those who attend class and punish those who absent the class • Give offline homework and recording video to students • Provide class schedule to parents to monitor their children
2. How to motivate students stay connected in online class?	<ul style="list-style-type: none"> • Always call student' name in the class • Use WhatsApp or Telegram that take less data usage to make two-way communication with students • Use voice message to contact students • Create fun activities, quiz and game in the class or after the class • Build a reward board • Take attendance to keep track on students • Advise students to on camera during live online class • Always create question and answer session in the class
3. How to solve the problem of students cannot follow online class?	<ul style="list-style-type: none"> • Give module to students • Upload materials and recording video in Google Classroom • Pay more attention and given enough homework to them • Follow up with the students to know their learning progress through WhatsApp or Telegram

Findings and Discussion

In this study, the skill level among novice teachers in using online tools are investigated. The results show that all respondents have skills in using at least one tool in online video conference platforms, online classroom management systems and online documentation tools. This shows that the novice teachers are able to execute online teaching with the

necessary tools.

This finding is also similar to Jothinathan et al (2021) in which a small-scale study of primary students raised concerns about the accessibility of online teaching during emergency remote teaching (ERT) and they are highlighting the need to revise the appropriate support system for students with special needs in fully online and online learning environments.

The result also found that some respondents has no ability or did not know about at least one tool in online file management systems and online assessment tools. The lack of knowledge and skill in using these online tools does not imply the incompetency of the respondents. In fact, the necessity or the priority of using the tools probably do not exist. Therefore, further investigation and strategies could be conducted on the suitability of these tools for online teaching. However, there is no harm if training session to be provided to the teachers if these tools are indeed useful.

From the practical experience of novice teachers, it is found that they were using many types of online teaching tools when executing the work. Among the popular applications are Google Classroom, Google Meets, WhatsApp and Telegram. These applications are easy-to-use and commonly available. The advance of technology has indeed helped teaching to move from face-to-face to online easily in 21st century. The findings from Nasution (2022) revealed four key trends on educational technology in Indonesia. There are about most researched on topic online learning during the COVID-19 pandemic; library research was the most widely used in research method; Google Classroom and WhatsApp were the most widely used learning platform; and lastly the trend of combining multiple learning platform in online learning. These key findings also suite to this study on practical experience using online teaching tools.

To encounter the challenges faced during online teaching, the solutions mostly rely on the corporation from four parties, namely teacher's effort, student's self-motivation, parents' support and the supply of quality internet facility and gadgets. Research by Siddiky (2022) indicates that the association between the COVID-19 pandemic and the changes of several psychological and behavioural conditions of the students are statistically significant which can rely on the outcome of this study.

The skill level of using online teaching tools as well as challenges faced during online teaching as presented in this study focus on normal students who were following normal education system. There is another group of students with disability who needs equal attention in online teaching. More efforts need to put in when teaching disabled students especially to include humanising pedagogy for online teaching and learning to this group of students. Probably different types of online tools are needed for students with different disability. This could be another gap in online education that needs to be filled in to ensure all students including disabled students obtain quality education in online learning.

The findings suggest corresponds to study of a high-low-readiness instructor profile study by (Tondeur et al., 2019). The authors discovered two profiles based on TPACK self-efficacy as well as some markers of institutional efforts to help teacher educators. Scherer et al (2021) argue on inconsistency instructor profiles in readiness and suggested two implications; first, online teaching learning readiness in higher education may not be uniform across all dimensions, and even if the facilitating conditions are ideal, teachers assigned to this profile may still require highly personalized support to improve their self-efficacy and teaching presence, such as through mastery experiences or professional development as mentioned by (Rapanta et al., 2020; Tschannen-Moran & Hoy, 2007).

Conclusion

As a conclusion, this study has discovered several issues regarding online teaching among the novice teachers. Lack of skill to use and utilise the existing online teaching tools. Currently, no specific online teaching pedagogy can be used, limitation of infrastructure especially internet connection, no specific method to control and supervise the students during online class, time constraint for teachers to learn a new thing and difficulty to recognise disable students. These highlighted issues have given an opportunity for all researchers to conduct a study in order to figure out the reliable solution. There are several research gaps that need to be further investigate for a better future in teaching and learning. Therefore, the study suggests that the institutions should set up an educational guidance and counselling centre for students or educators affected by the pandemic or any other critical situation. Hence, these challenges and solutions should be made known to the society in order to create a successful and healthy environment for online learning in the country.

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