

Are You Ready to Learn? Secondary School Pupils' Perspectives on Online Learning Readiness

Diana Ipan^{1,2}, Parilah Mohd. Shah², Jai Shree Bipinchandra³

¹SMK Ulu Balingian, PPD Selangau, Sarawak, Malaysia, ²Fakulti Pendidikan, Universiti Kebangsaan Malaysia, Bangi, Malaysia, ³Institute of Teacher Education, Malaysia³

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Abstract

Teachers and students have to continue teaching and learning remotely via various platform including video conferencing apps and social media applications due to Covid-19. Although the majority of adult learners are generally prepared for online teaching, there are not enough studies done on the readiness level of younger learners. Therefore, the study attempted to identify the online learning readiness level among secondary school pupils and the obstacles that hindered them during remote learning. The researcher had adopted a survey research design and employed an Online Learning Readiness Scale (OLRS) questionnaire to investigate 30 secondary school pupils' online learning readiness in a district in Sarawak. In addition, the respondents were asked to identify the obstacles that they faced during online learning. The study found that the respondents showed generally high readiness in online learning. The respondents showed the highest readiness in online communication self-efficacy and the least readiness in learner control. The study was crucial as it would provide better understanding on pupils' perspectives on online learning which in turn would help responsible parties to identify pupils' strengths and weaknesses in online learning. Further studies should be done regarding ways to improve younger learners' engagement in online learning in order to optimise their online learning experience as Malaysia is heading towards industrial revolution 4.0.

Keywords: Online Learning Readiness (OLR), Online Learning Readiness Scale (OLRS), Online Learning, Secondary School Pupils' Online Learning Readiness

Introduction

As the whole world is critically hit by Covid-19 pandemic, our education system has abruptly shifted to online learning from the conventional face-face teaching and learning. Although we have been practising blended learning using technology for decades, it is not similar to online learning. Blended learning is defined by Allen and Seaman (2010) as a combination of both face-to-face and online learning instructions, whereas online learning is heavily dependent on the use of the internet without face-to-face interactions (Means et al., 2013).

In dealing with the unseen threat, schools in Malaysia have undergone at least three phases of pengajaran dan pembelajaran di rumah (PDPR) or teaching and learning at home since March 2020. The teaching and learning have been done through various platforms such as Google Meet and Zoom, whereas for schools with poor coverage, the teaching and learning are carried out asynchronously through social media platforms such as WhatsApp and Telegram. Martin et al (2019) stated that in tertiary education, the practice of online learning is well accepted and it has been practiced for about 20 years. However, at primary and secondary school levels, this practice is relatively new. With no proper training and upskilling for online teaching pedagogies, teachers are struggling to come up with new ideas to cope with the current situation in such a short time. As teachers are not well-prepared with the knowledge and skills in online learning pedagogies, pupils' learning experience may not be optimised due to poor interaction between pupils and teachers. Teachers' lack of preparation in online teaching also may cause their instructions to become ineffective or unclear. Teachers may lack the know-how to manage online learning as most training institutions do not offer trainee teachers with courses related to online learning (McAllister & Graham, 2016).

With the absent of teachers, students may tend to slack off in their learning as there is no one to monitor and guide them. Although their parents are at home, they may be busy attending to their work and errands which leave children with no one to supervise their learning. As studies shown that younger learners have poor control over their own learning (Hung et al., 2010; Chung, 2020; Chung, 2020), there is a need for parents and teachers to come up with solutions to help children take more responsibility in managing their own learning. On the other hand, most current studies showed that mature students are generally positive with online learning (Hung et al., 2010; Chung, 2020; Chung, 2020;) and there are evidence which show a positive relationship between students' academic performance (Cigderm & Ozturk, 2016) and emotional intelligence (Engin, 2017) with their online learning readiness. However, these studies only involve students at higher learning institutions who have better control over their own learning. While teachers may have no problems in adapting to the sudden shift in teaching and learning, the question remains whether secondary school students are ready for online learning although it has been over a year we are battling this pandemic. Therefore, the aims of the current study were to identify the level of online learning readiness of secondary school pupils and the challenges that might arise during online learning.

Literature Review

Online Learning

The concept of online learning varies according to different scholars. Conrad (2002); Benson (2002); Carliner (2004) defined it as the learning experience which can be obtained using digital medium whereas Oblinger and Oblinger (2005) defined it as purely online learning as a way to differentiate it from distance learning and e-learning. Meanwhile, Means et al (2009) defined the term as a process that occurs partly or wholly online. Therefore, it is safe to say that online learning occurs wholly over the internet using various technological tools and devices.

The use of online learning has become popular over the decades especially among mature learners due to its vast advantages. Online learning would surely benefit those who are only able to study at their pace (Muthuprasad, 2019) especially for working people who

want to pursue their education to a higher level. Other than the convenience of time, online learning also has given learners the autonomy to manage their own learning from the traditional teacher-centred approach especially in the tertiary level of education (Ituma, 2011) which is in line with the 21st century classroom where the learning has become more student-centred and learners have to take responsibility on their own learning. Regardless, learners have to possess online learning readiness in order to receive the advantages of online learning as some of the dimensions such as self-directed learning and computer / internet self-efficacy have been proven to improve learners' academic performance (Cigderm & Ozturk, 2016).

Online Learning Readiness

The concept of online learning readiness was introduced in 1998 in the sector of technical vocational education and training (TVET) in Australia by Warner et al. Among the dimensions proposed which affect learners' online learning readiness include their confidence and competence in using the internet for communication, ability to participate in independent learning and their choices for the medium of delivery. Following the introduction of the concept, several studies (McVay, 2000, 2001; Smith et al., 2003; Smith, 2005; Hung et al., 2010) had been conducted to evaluate and validate the diverse dimensions of online learning readiness. However, since online learning concerns higher learning education, all of these studies were only conducted with university students (Chung et al., 2020).

In 2000, an instrument consisting of 13 items was created by McVay as a mean to validate the online readiness notion proposed by Warner et al. (1998). It identified two factors which might affect online learning readiness, namely attitudes and behaviours of learners. It was then followed by an exploratory study with 107 respondents conducted by Smith et al. (2003) to examine the inventory. Based on the study, it was found that "self-management of learning" and "comfort with e-learning" were the predictors for online learning readiness. The McVay's questionnaire was further tested by Smith (2005) in Australia and was proven to have useful application in determining learners' choices and attitude towards learning using online medium.

Computer and Internet Self-Efficacy

Learners' ability and perceptions on the use of technology and digital tools are crucial aspects when it comes to online learning as the lessons are conducted via the internet (Hung et al., 2010), hence why it is important for students to have both computer and internet self-efficacy. Having self-efficacy would allow students to manage their own behaviour and surroundings and as well as driving them for success (Bandura, 1986, 1989, 1997) which is crucial for online learning as students have to take full responsibility of their own learning without the presence of teachers. Therefore, the ability to use computers and the internet effectively will definitely benefit students as they engage fully in online learning. By having computer self-efficacy, learners would be able to seek for solutions and handle their situations using computers (Marakas et al., 1998; Compeau & Higgins, 1995), for instance, simply by downloading or uploading their homework. Therefore, individuals who possess computer self-efficacy are able to improve their learning performance (Jacobsen & Anderson, 2016; Haddad & Taleb, 2016; Chen, 2017) as they are able to maximise the use of a computer in learning.

In addition to that, having internet self-efficacy would be a bonus to students who enrol in any online courses as it would enable them to solve tasks using the internet and assist them in completing and managing online tasks (Eastin & LaRose, 2000). This is supported by a study conducted by Kuo and Belland (2019) to examine the correlation between African American undergraduates learning performance and their computer and internet self-efficacy where they found that the three aspects were positively correlated. Based on the research, respondents were likely to perform well in their learning when they were confident in using both computers and the internet.

Online Communication Self-Efficacy

Apart from computer and internet self-efficacy, there are two other areas which have to be taken into consideration by researchers when it comes to online self-efficacy which include social interaction and learning (Shen et al., 2013). The lack of self-efficacy among learners who are undertaking online courses could be detrimental to their academic performance and had resulted in the increase of drop-out rate when compared to conventional teaching and learning (Ali & Leeds, 2009). Mastering self-efficacy is a crucial aspect especially in online learning as social isolation due to lack of interaction between students and teachers may hinder their learning (Cho & Jonassen, 2009; Cho et al., 2010)

In order for an effective online learning to occur, it is important for teachers to build a conducive environment for learners to communicate and interact with them (McVay, 2000) as the learning process requires two-way communication. It should be noted that online communication differs from real life communication as it involves more written than spoken form (Dwiyanti et al., 2020). Learners therefore should possess effective online communication abilities as it would help them to comprehend online learning's culture and communicative language and enable them to engage in learning processes (Demir, 2015).

Learners' acceptance of a course is also highly affected by their online communication self-efficacy as it would improve their motivation and satisfaction towards the subject (Yilmaz, 2017). On top of that, it is crucial for students to be able to ask questions as it would help them to understand the learning content better (Hung et al., 2010). Therefore, by having self-efficacy in online communication, pupils are able to communicate better with their friends and teachers over the internet.

Learner Control

Kraiger and Jerden (2007) defined learner control as the ability of students to choose the ways to learn and the content of their learning. Therefore, learner control is one of the crucial aspects in online learning as students have to manage their own learning independently. Online learning may be tricky as it differs from the conventional classroom since students have the freedom to learn at their own pace (Hung et al., 2010). Learner control also refers to their participation level and how they sequence the lesson in response to the tasks (Coomey & Stephenson, 2018). In other words, students can take control of their own learning for instance by allocating how much time to accomplish a task or planning on how to solve a task. By having control over their own learning, learners would be able to achieve their learning objectives and have autonomy on how they want to learn (Hung et al., 2010) whether by deciding on how many videos to watch or when to stop or pause them (Hannafin, 1984; Reeves, 1993).

Allowing students to have autonomy over their own learning has been proven to improve their academic performance. A study conducted by Ozogul et al (2013) on 334 students in the US found that the respondents who were allowed to choose their preferred animated peer-model performed better academically compared to their counterparts who were not offered to make choices. The freedom to choose which model to use had significantly impacted the respondents' motivation as well as satisfaction. Hence, the study suggested that students who are given the opportunity to make choices on how to learn are able to improve their autonomy and self-efficacy which would lead to them improving their learning outcomes.

However, online learning is not without its faults. One of the downsides of online learning may include poor learner control as learners' age may affect their level of control. Younger learners may have difficulties in managing their online learning as they are not matured yet. A study conducted by Jung et al (2018) to study the influence of instructional design on learner control found that older learners were likely to possess higher learner control compared to their younger counterparts. Hence, parents' intervention is needed for younger learners to monitor and guide them during online learning.

Self-Directed Learning

Another important aspect of online learning is self-directed learning (SDL) where learners have to be responsible for their own learning by monitoring their learning progress and managing their own learning without relying on other people (Knowles, 1975; 1990). Self-directed learning was originally designed for mature learners and learning situations involving out of classroom context (Saks & Leijen, 2014). Therefore, a person who can direct his or her own learning is expected to be able to be independent in executing, organising and accomplishing his or her own learning (Jossberger et al., 2010). Self-directed learning is beneficial in this respect as students have the freedom to use any resources available on the internet which include various apps, videos and reading materials (Lasfeto & Ulfa, 2020). Hence, with the flexibility of the internet and vast resources available online, learners are able to manage their studies independently.

Studies also have proven that learners who possess SDL would perform well in their learning (Lasfeto & Ulfa, 2020; Cazan & Schiopcal, 2014). Due to the nature of online learning, it is crucial for teachers to maintain good interactions with their students by having meaningful interaction and carefully designing structure to provide a strong base of a learning community (Choy & Quek, 2016). A study conducted by Kan'an and Osman (2015) in Qatar involving 83 secondary school students on the correlation between their science scores and self-directed learning readiness found a significant relationship between the two variables. This study proposed that it is crucial for students to have self-directed learning in order for them to perform well in their learning.

Motivation for Learning

Students' motivation in online learning has gained interest among scholars as more and more studies are done in the related field (Ucar & Kumtepe, 2020) which indicates the importance of motivation in ensuring successful and meaningful learning. Motivation could be the key to ensure students' active participation in a lesson as it would act as a drive to keep students' attention and involvement in a particular lesson (Dörnyei, 2020). Therefore, educators and

curriculum designers alike should strive for a learning environment that would keep students involved actively in the lessons.

In the present situation, students may be losing motivation as they are unable to communicate with teachers in person as the teachers' presence act as a crucial aspect in motivating students to keep their engagement in an online setting (Baker, 2010; Mese & Sevilen, 2021). Several other factors which may affect students' motivation in online learning include the discrepancy between content and expectations (Mese & Sevilen, 2021) and the lack of interaction (Paulus & Scherff, 2008).

Past Studies on Online Learning Readiness

A study conducted by Hung et al (2010) in Taiwan had created a five-dimension online learning readiness scale which included broader aspects compared to the previous questionnaire used by Smith et al (2003); Smith (2005) on the Readiness for Online Learning which focused on comfort with e-learning and self-management of learning. Using a confirmatory factor analysis, five factors had been identified which included online communication self-efficacy, computer or internet self-efficacy, self-directed learning, motivation for learning and learner control. Based on the study which was conducted on 1051 college students, it was found that the respondents scored the least in learner control and the highest in computer or internet self-efficacy. It was also found that older respondents scored higher in online communication self-efficacy, self-directed learning and motivation for learning compared to their younger counterparts.

A similar study conducted by Chung et al (2020) also found similar results. The study which was done to investigate the online learning readiness of 91 respondents from a higher learning institution in Sarawak found that they scored the lowest in learner control and the highest in computer and internet self-efficacy which is similar to the study done by Hung et al. (2010). The study also found that older respondents score higher in learner control compared to their younger counterparts. In terms of online learning challenges, the study found that the respondents were facing difficulties to go online due to the lack of internet access.

Another study conducted by Chung et al (2020) on 399 university students in Malaysia in response to the current pandemic showed that they were mostly ready to study online. This study also found that older respondents were more ready compared to younger respondents. The result of the study also agrees with Hung et al (2010); Chung et al (2020) where learners' readiness was the lowest for learner control and the highest for computer and internet self-efficacy. In terms of gender, female respondents were found to be more ready than their male counterparts. The study also found that the older respondents were facing difficulties in terms of internet access, whereas the younger respondents were facing difficulties in understanding the content of the learning.

Studies were also done to investigate the correlation between online learning readiness and other areas such as emotional intelligence. A study conducted by Engin (2017) at Uludag University in Turkey on 95 respondents to investigate the correlation between the level of emotional intelligence and online learning readiness found a positive relationship between the two variables. Social skills which was one of the sub-elements of emotional

intelligence was found to be highly correlated with online learning readiness. In addition, one of the online learning readiness sub-dimensions, learner control was also found to be positively affected by self-control, another element of emotional intelligence.

In another study, online learning readiness was also found to be positively affected by students' online learning attitude (Hergüner, 2020). The study was conducted using the Turkish adaptation of the online learning readiness scale developed by Hung et al (2010) and the online learning attitude scale provided by Usta et al (2016). Therefore, the findings of the study suggested that teachers should help students to improve their online learning attitude in order to boost their online learning readiness.

Based on the first three studies, it could be said that age played a major factor in determining students' readiness level in online learning. Students might have no difficulties in using technological tools in their learning. However, younger students were still lacking the ability to control their own learning (learner control) when studying online. Meanwhile, internet accessibility posed as the biggest challenge among university students when it came to online learning.

Methodology

A survey research design had been chosen by the researcher in conducting the present study. Story and Tait (2019) stated that surveys were mostly used in of social science including other fields involving medical researches. The present study was carried out in a small district in Sarawak where they are only 22 primary schools and one secondary school in the district. The study was conducted at the secondary school which takes about 30 minutes ride from the nearest town. The school is located in suburban area and the population is mainly Iban people. Due to its geographical location, the site of the study lacks basic facilities such as water and electricity supplies. The school also has poor internet access and the residents have to go to nearby town or by the roadside if they want to use the internet. For the present study, the researcher had adapted convenience sampling by giving a survey questionnaire to 30 Form 5 pupils. The survey was given randomly to six pupils from each Form 5 class. The researcher chose Form 5 pupils as the sample of the research survey because the global health crisis might put their academic performance in jeopardy since they would be sitting for the national examination (SPM) soon.

A survey questionnaire proposed by Hung et al (2010) was adapted by the researcher for the current study. The researcher included all the five criteria of online learning readiness which were computer/internet self-efficacy, online communication self-efficacy, learner control, motivation for learning and self-directed learning. Under each dimension, there were three to five statements which made up to 18 statements which the respondents had to respond to. The researcher also had included another 8 statements related to the challenges adapted from Chung et al (2020) which pupils might encounter during online learning. The online learning readiness items employed five likert scales ranging from (1) strongly disagree, (2) disagree, (3) neutral, (4) agree or (5) strongly agree. For items related to challenges, the respondents were allowed to tick more than one answers which were related to their present situations.

In Section A, the respondents were required to fill in their background information like race and gender. In Section B, the respondents were asked to state whether they agree or disagree with a statement using the five-likert scale. There were 18 question items related to online learning readiness for Section B. For Section C, the respondents had to choose the challenges that they faced when studying online. The respondents were given eight choices of challenges and they were allowed to choose more than one answers. The items on online learning readiness and challenges that were encountered by the respondents were shown in Table 3.1 and Table 3.2.

Table 3.1

Items for online learning readiness scale

Domain		Item
Computer/Internet Self-Efficacy	B1	I feel confident in performing basic functions of Microsoft Office programs
	B2	I feel confident in my knowledge and skills of how to manage online learning
	B3	I feel confident in using the internet to find information
Online Communication Self-Efficacy	B4	I feel confident in using online tools to communicate with my teacher
	B5	I feel confident in expressing my thoughts through online text messages/posting comments in WhatsApp/Google Classroom ect.
	B6	I feel confident in posting questions in online discussion
Learner Control	B7	I can manage my own learning progress while learning online
	B8	I am not distracted by other online social activities (Insta, FB etc) while learning
	B9	I repeated/replay the online learning materials based on my needs
Motivation for Learning	B10	I am open to new ideas when learning online
	B11	I am motivated to do online learning
	B12	While learning online, I learn to improve from my previous mistakes
	B13	I like to share my ideas with my friends while learning online
Self-Directed Learning	B14	I am able to carry out my own study plan while learning online
	B15	I seek assistance when facing learning problems from teachers and friends
	B16	I manage my time well while learning online
	B17	I set up my personal online learning goals for each lesson
	B18	I have a high expectation for my learning performance

Table 3.2

Challenges encountered by students when doing online learning

No	ITEMS
1.	Internet connectivity
2.	Too many different online learning methods used by different teachers
3.	Limited broadband data
4.	Slow personal laptop, devices
5.	Difficult to focus due to distractions from my surroundings
6.	Lack of motivation due to absence of face to face contact with friends and teachers
7.	Difficult to understand the content of the subjects
8.	Lack of technical skills in using online learning

The researcher had created a survey questionnaire using Google Form to be distributed through WhatsApp to the selected respondents in order to comply with the SOP during the pandemic. After the respondents received the link, they were given 30 minutes to one hour to answer the questionnaire. The respondents were given at least one hour to answer the questionnaire since they might experience poor internet connection at their longhouses. Then the researcher downloaded the results of the survey through Google Form and transferred the data into Microsoft Excel to be analysed.

For the data analysis, the researcher had used SPSS version 26 to analyse the information using descriptive analysis. In order to find the overall online learning readiness of the respondents, the researcher had calculated the central tendency and the spread of data using descriptive analysis. The researcher also used descriptive analysis to find the mean score of each dimension and each statement of the online learning readiness scale to identify the level of readiness of respondents in each dimension. For Section C, the researcher had calculated the percentage and frequency of each item and the outcome was presented using a table.

Findings

This section will report on the findings of this study. It is divided into four sections which include the demographic profile of the respondents, Form 5 pupils' online learning readiness, challenges encountered by pupils when studying online and conclusion.

Demographic Profile

The respondents' gender profile is shown in Table 4.1. Based on the table, there were a total of 30 respondents which were made up of 9 (30%) male students and 21 (70%) female students.

Gender of the respondents Table 4.1

	Frequency	Percent
Male	9	30.0
Female	21	70.0
Total	30	100.0

Table 4.2 shows the race of the respondents. Based on the table, 21 (70.0%) respondents were Bumiputera, 8 (26.7%) respondents were Chinese and only 1 (3.3%) participant was Malay.

Table 4.2

Race of the respondents

	Frequency	Percent
Bumiputera	21	70.0
Chinese	8	26.7
Malay	1	3.3
Total	30	100.0

Form 5 Students' Online Learning Readiness

Table 4.3 shows the overall online learning readiness of Form 5 students in a suburban school in a district in Sarawak. In the table, the respondents' online learning readiness for each dimension is presented using mean scores and standard deviations. The researcher calculated the mean score of each aspect by dividing the numbers of items with the sum of scores of all items in each respective aspect. Based on Table 4.3, the mean score of each dimension is between 3.58 and 3.91 on a 5-point Likert scale. The results showed that the respondents' readiness to participate in online learning were moderate to high based on the interpretation of mean score by Pallant (2010) as shown in Table 4.4.

According to Table 4.3, the highest mean score among the five dimensions of online learning readiness scale was for online communication self-efficacy which was at 3.91. This means that the respondents were confident in interacting with their teachers via technological devices. Meanwhile, the lowest mean score among the five dimensions of online learning readiness was for learner control which was at 3.58. The score indicated that the respondents had moderate control in managing their online learning.

Table 4.3

Form 5 Students' Overall Online Learning Readiness

Items	Mean	SD
Computer & Internet Self Efficacy	3.7778	.46595
Self-Directed Learning	3.7067	.52715
Learner Control	3.5778	.69444
Motivation for Learning	3.7750	.52666
Online Communication Self-Efficacy	3.9111	.58022

Table 4.4

Interpretation of mean score

Mean score	Interpretation
1.00 - 2.33	Low
2.34 - 3.67	Intermediate
3.68 - 5.00	High

Table 4.5 shows the mean scores of each item in each dimension of the OLRs proposed by (Hung et al., 2010). The highest score for computer and internet self-efficacy was 4.40 for item 3 '*I feel confident in using the Internet to find information*'. This showed that the respondents were more confident in using the internet to find extra resources for their studies compared to using the computer for common functions to do their work (3.40). The respondents were also less confident with their skills and knowledge in handling their learning using the Internet.

For the second dimension which is self-directed learning, the highest mean score was 4.27 for item 5 '*I seek assistance when facing learning problems from teachers and friends*'. The respondents agreed that they would ask for their teachers' or friends' whenever they encountered a problem during online learning. Meanwhile, the lowest mean score was 3.30 for item 4 '*I am able to carry out my own study plan while learning online*'. Here, we could see that the respondents lacked the skills in managing their online study. The respondents were also uncertain of their time management skills and their ability to set up personal goals when doing online learning.

For the third dimension which is learner control, the mean scores of all items were less than 4. This showed that the respondents had moderate to high control over their learning online as they were studying on their own and they might be easily distracted by social activities online. The respondents also had moderate control over their online learning progress management which could jeopardise their academic performance if they slacked off as the teachers were not there to monitor their students' learning progress.

Meanwhile, for the fourth dimension which is motivation for learning, the highest mean score 4.00 was for item 15 '*I like to share my ideas with my friends while learning online*'. It showed that the respondents were more motivated to join online learning because they were able to interact with their peers by sharing ideas. The respondents were also highly motivated to do join online learning and learn from their mistakes during online learning. However, they show moderate readiness in accepting new ideas when learning online.

For the fifth dimension which is online communication self-efficacy, the highest mean score was 4.10 for item 16 where most of the respondents agreed that they were more confident to interact with their teachers using online tools. The respondents also showed high level of readiness when it came to expressing their thoughts or asking questions during online discussion.

Table 4.5

Form 5 students' online learning readiness for each dimension

No	QUESTION ITEMS	Mean	SD
Computer/Internet Self-Efficacy			
1.	I feel confident in performing basic functions of Microsoft Office programs	3.40	.814
2.	I feel confident in my knowledge and skills of how to manage online learning	3.53	.776
3.	I feel confident in using the internet to find information	4.40	.621
Self-Directed Learning			
4.	I am able to carry out my own study plan while learning online	3.30	.837
5.	I seek assistance when facing learning problems from teachers and friends	4.27	.583
6.	I manage my time well while learning online	3.43	.817
7.	I set up my personal online learning goals for each lesson	3.63	.718
8.	I have a high expectation for my learning performance	3.90	.803
Learner Control			
9.	I can manage my own learning progress while learning online	3.57	.817
10.	I am not distracted by other online social activities (Insta, FB etc) while learning	3.43	.971
11.	I repeated/replay the online learning materials based on my needs	3.73	.907
Motivation for Learning			
12.	I am open to new ideas when learning online	3.50	.820
13.	I am motivated to do online learning	3.77	.774
14.	While learning online, I learn to improve from my previous mistakes	3.83	.834
15.	I like to share my ideas with my friends while learning online	4.00	.643
Online Communication Self-Efficacy			
16.	I feel confident in using online tools to communicate with my teacher	4.10	.607
17.	I feel confident in expressing my thoughts through online text messages/posting comments in WhatsApp/Google Classroom ect.	3.83	.834
18.	I feel confident in posting questions in online discussion	3.80	.714

Challenges Encountered by Students when Studying Online

Table 4.6 shows the challenges that were faced by pupils when studying online. The biggest challenge encountered by Form 5 pupils during online study was internet connectivity (76.7%). Meanwhile, 63.3% or 18 out 30 respondents claimed that they lack the motivation to join online classes due to the absence of face-to-face interaction with their teachers and friends. 60% or 18 respondents also thought that it was difficult to understand the content of the subjects, whereas other 53.3% or 16 respondents were not able to focus during online learning because they were distracted by their surroundings. Out of the eight challenges students might face during online learning, only 16.6% or 5 respondents felt that the number of online learning methods used by teachers and slow gadgets hindered their online learning

experience. Meanwhile, 30% or 9 respondents felt that limited broadband data and the lack of technical skills in online learning posed as challenges when studying online.

Table 4.6

Challenges encountered by Form 5 students when studying online

No	ITEMS	Frequency	Percentage (%)
1.	Internet connectivity	23	76.7
2.	Too many different online learning methods used by different teachers	5	16.7
3.	Limited broadband data	9	30.0
4.	Slow personal laptop, devices	5	16.7
5.	Difficult to focus due to distractions from my surroundings	16	53.3
6.	Lack of motivation due to absence of face to face contact with friends and teachers	19	63.3
7.	Difficult to understand the content of the subjects	18	60.0
8.	Lack of technical skills in using online learning	9	30

The results of the study indicated that the respondents' level of readiness in online learning was generally high except for learner control which was moderate. In terms of challenges of online learning, poor internet connection had been identified as the biggest hindrance by respondents.

Discussion

Based on the analysed data, it was found that the respondents displayed generally high readiness in online learning. The data suggested that the respondents showed greater readiness in terms of online communication self-efficacy and the least readiness in learner control. The respondents were generally ready to search for information online (computer and internet self-efficacy) and ask for helps from their peers and teachers (self-directed learning) when facing problems. In addition, the respondents were ready to share ideas with their friends (motivation for learning) and were more confident to interact with their teachers online (online communication self-efficacy). In terms of challenges that they faced during online learning, it was the lack of internet access which posed as the biggest obstacle followed by the lack of motivation, difficulty to understand the content and inability to focus.

Form 5 Students' Online Learning Readiness

Based on Table 4.3, the mean score of each dimension was between 3.58 and 3.91 on a 5-point Likert scale which showed that the respondents were generally ready to participate in online learning. Online learning phenomenon is quite new especially for secondary school students. However, as digital natives they may be able to cope with the sudden shift in the education system during the global health crisis. Due to the recent pandemic, schools in Malaysia have abruptly shifted from the conventional face-to-face classroom to fully online. Although they were generally ready for online learning, the respondents were still lacking in learner control probably because of the abrupt and unprecedented change. Hence, it may take time for them to get used to the culture of online learning which differs from conventional learning (Dwiyanti et al., 2020).

In this study, the respondents displayed higher readiness in online communication self-efficacy. This finding contradicted with the study done by Chung et al (2020) where the respondents scored the highest in computer and internet self-efficacy. This is perhaps due to the different level of exposure in using computer and internet in the teaching and learning processes. A similar study conducted by Chung et al (2020) to investigate UiTM students' online learning readiness also showed the same result. This showed that matured students are able to handle the use of computer and internet better when compared to secondary school pupils who may only use technology occasionally for their school works prior to the pandemic. Moreover, secondary school pupils may yet to master how to express themselves using online communication tools as they need to be able to understand the culture of online learning and communicative language in order for them to have good online communication self-efficacy (Demir, 2015).

The study also found that the respondents were moderately ready in terms of learner control. The mean score which is 3.58 indicated that the respondents had some control in managing their online learning. This could be due to the absent of face-to-face interaction between them and the teachers. Therefore, learners need to have control over their participation and abilities to handle a task given (Corney & Stephenson, 2018). Without proper monitoring from the teachers or parents at home, students may tend to lose focus due to the high number of distractions when they are going online. The result of this study was similar to the study done by Chung et al (2020); Chung et al (2020) on 91 respondents from UiTM Sarawak and 399 university students in Malaysia respectively where the respondents scored the lowest in learner control in both studies. This highlights the need for educators to inculcate learner control among pupils to enable them to identify effective ways to assist their independent learning progress (Kraiger & Jerden, 2007).

In addition, the respondents' age also might have contributed to the neutral attitude towards online learning (Hung et al., 2010; Lee et al., 2016) as they were less exposed to the use of the Internet in the school especially due to the school's geographical location which is in suburban area where there was lack of internet connection. A study by Chung et al (2020) on university students also found that younger students showed lesser readiness in online learning in terms of their internet and computer self-efficacy when compared to their senior counterparts. As pupils are still in the process of transitioning from the use of pen and paper to electronic devices and the internet to do their assignments, they may need extra time to adjust with the change.

Challenges Encountered By Form 5 Pupils when Studying Online

In the current study, the majority of the respondents suggested that poor internet access was the biggest obstacle that they faced in online learning. The finding of the study was similar to the studies done by Chung et al (2020) on 91 respondents in a higher learning institution in Sarawak. Hence, there is a need for relevant parties to provide funding for internet facilities especially in suburban and rural areas in Sarawak. With poor internet access, students in the rural areas may not be able to improve their academic performance and there is a big chance that they would be left behind academically and socially by their peers in the city. Until more funding is made for the development of facilities, the lack of internet connectivity would remain as an issue in online learning (Chung et al., 2020).

Conclusion

This study was conducted to identify the online learning readiness level of Form 5 pupils in a district in Sarawak and the challenges that they might face while undergoing online learning. The study had found that pupils were generally ready for online learning. Regardless, their readiness in terms of learner control was still moderate. Meanwhile, the lack of internet connection was found as the biggest hindrance during online learning. Looking at the current situation, there is a dire need for teachers to keep pursuing new online learning pedagogies in improving their teaching skills. The findings of the study suggested that more attention should be given to both primary and secondary school pupils as they have never involved in an entirely online learning prior to the emergency health crisis. Nonetheless, the study only focused on Form 5 pupils in a school in Sarawak. Since the pandemic shows no sign to end anytime soon, more studies should be done regarding secondary and primary school pupils' online learning readiness in order for teachers, curriculum developers and teacher training institutions to come up with better solutions to improve students' online learning experience.

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