

Approaching Listening and Speaking Skills Using Online to Facilitate Interactive Learning from Students' Perspectives

Puteri Rohani Megat-Abdul-Rahim^{1*}, Sheema Liza Idris², Zarinatun Ilyani Abdul Rahman³,
Mohamed Syafiq Ya Shaq⁴, Nur Farhana Nasir⁵

^{1,2,4}Academy of Language Studies, Universiti Teknologi MARA,
Perak Campus, 32610 Seri Iskandar, Perak, Malaysia
proha572@uitm.edu.my
sheema@uitm.edu.my
moham381@uitm.edu.my

^{3,5}Academy of Language Studies, Universiti Teknologi MARA,
Tapah Campus, 35400 Tapah Road, Perak, Malaysia,
zarinatun@uitm.edu.my
nfarhana@uitm.edu.my
*Corresponding Author

<https://doi.org/10.24191/ajue.v17i2.13400>

Received: 10 March 2021

Accepted: 5 May 2021

Date Published Online: 6 June 2021

Published: 6 June 2021

Abstract: Teaching and learning process is constantly transforming due to the ever-increasing globalization. In the educational sector the use of information and communication technology (ICT) is constantly changing due to the increasing trend in globalization. This has resulted in the change and transformation the facet of education in this 21st century. The various usage of technologies and other forms of learning materials that have been extensively used has created a medium where students able to be interactive because it is learner centred, and the environment of online learning is more open and flexible. However, several studies showed that students prefer traditional classroom more because they would prefer face-to-face communication with their instructor. Thus, this study intends to explore the perspective of learning listening and speaking using online among L2 learners. A total number of 102 university students at UiTM Perak Branch took part in this study. They were instructed to answer a set of questionnaires which was created using google document. From the findings the students reported that they do see the benefits of online learning. In addition, they found learning through this interactive medium as interesting and provide them space to progress at their own pace in learning. However, this does not portray students' eagerness in which may be due to several factors. This study is hoped to able to highlight the positive aspects of using online as an alternative to the traditional way of teaching listening and speaking.

Keywords: Interactive Learning, Listening Skill, Online Learning, Second language learners, Speaking Skill.

1. Introduction

Technology permits learners to have seamlessly interaction with peers and lecturers regardless of time and space and it has become an essential tool in teaching and learning process (Nor Hapiza Mohd Ariffin & Saliza Ramly, 2017). This can be seen with the increasing number of online classes being offered. Nevertheless, the role of technology is not only restricted to online learning; technology too is applied in classroom setting. The surge of technology in classroom learning has influenced and transformed the process of teaching and learning. Until recently for listening and speaking classes although the two skills are deemed vital to language learning, as compared to traditional language

classes there had been fewer online language classes on teaching speaking and listening (Paul Manman, 2006). This notion has also influenced the perception that these two skills are best taught using the traditional learning.

According to Anealka Aziz (2018) and Shopova (2014), in education online learning has gradually taken a center stage. They further stated that online learning offers exclusive rewards to students during the learning process. As a result, in many countries there is a shift in the instruction of learning, more schools and higher institutions of learning move to online learning from the traditional or face-to-face classroom settings. Nonetheless, several studies reported that students do encounter challenges on online learning (Tsai, 2009; Matthew & Chung, 2021; Rahiem, 2021; Sim, Sim & Quah, 2021) and face negative effects on their performance in learning when using this platform (Davies & Graffs, 2005).

Lee (2001) stipulated that in terms of learning styles and preferences, it is necessary for the instructor to gain insight from the perspective of students on using online because in the mode of learning students need time to adjust to the new learning environment and challenges, they may face. For some learners, the challenges may arise as they make adjustment to deploy a diverse style in learning in the new platform. This is obvious especially to students who are not as skilful as their other counterparts in using technology. As a result, this may be problematic especially to students in adjusting when employing technology during the learning process (Baharun, Razi, Abidin, et al., 2017; Kearns, 2012; Lee, 2001). In addition, there are students who prefer to study with peers and their teachers in class (Crim & Reio, 2011). They reported that the students may get frustrated and experience stress and anxiety if they needed immediate assistance to seek clarification when they face problem from the teacher or peers that may arise (Heirdsfield, Walker, Tambyah & Beutel, 2011). This may affect their performance and their perception on using technology to learn. On the other hand, students are more likely to be successful in online learning, when their multimedia preferences and learning style matched with the online course materials (Surjono, 2015).

Although, some may appreciate online learning due to its convenience and cost, some may experience challenges that may hinder their progress in learning. Therefore, this study aims to explore online learning on listening and speaking among second language learners.

This study addressed two research questions which are:

1. What are the student's perspectives on learning speaking and listening skills using online?
2. What are the student's levels of readiness using online to learn speaking and listening?

2. Conceptual Framework

This study employed Davis's (1989) conceptual framework Technology Acceptance Model (TAM). TAM has been used for its versatility in determining the factors that influence students on MOOC. The model of TAM is illustrated below in Figure 1. Under this TAM, two elements which are used to determine the behavioural intention of the students when employing technology are perceived usefulness and perceived ease of use. These two elements illustrate how the two factors may influence the reaction or action of the students throughout the learning process. Perceived usefulness refers to the students' assumptions on how technology will aid him or her throughout the learning process, while perceived ease of use refers to the standard level of efforts by the users when employing the technology. Based on these two elements the researchers used them as a lens to determine how the students perceive the use of MOOC in their listening and speaking class.

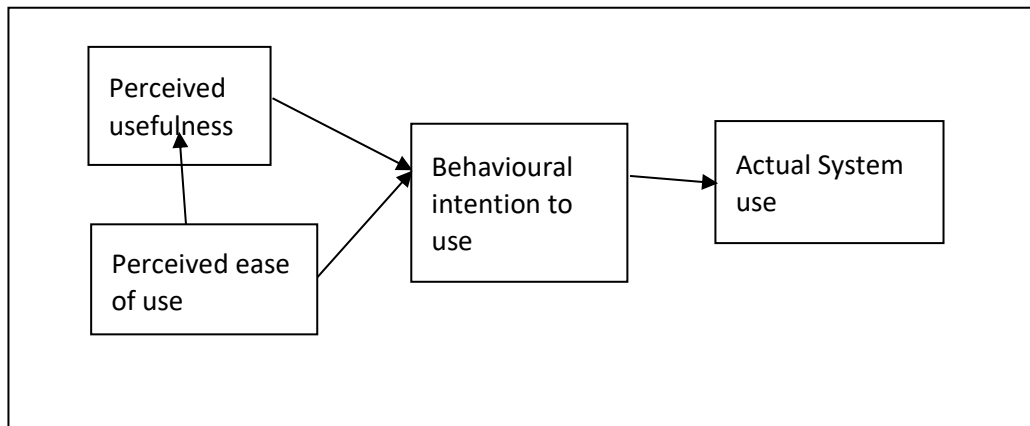


Fig. 1 TAM Model

3. Literature Review

A few studies have revealed that when students are able to use online learning strategies effectively it will lead to successful academic achievement (Artino & Jones, 2012; Shih, 2005). Online learning is one of the most advanced and fast-growing trends in education nowadays. It has the potential of reaching learners all over the world and offers abundant of educational resources in multiple media such as MOOC, podcast, website, padlet etc (Huang, 2016). Additionally, online learning also supports both asynchronous communication and real time learning between instructors and learners or among learners themselves. As pointed out by Noor and Aziz (2020), normally MOOC has an M-track which allows administrators to monitor and facilitate the platform to be used by learners. This would enable the instructor and the lecturer to monitor the progress of the learners. Besides, the flexibility of MOOC platform enables learners to adjust their learning according to time and level of performance. When learners are given the opportunity to control their interaction with media, their learning can be optimised. Participants or learners need to be supported through a structured developmental process and be prompted through their reflection. Apart from that, online learning has been shown to have many benefits if authentic activities are included in it (Herrington, Oliver & Reeves, 2003). Moreover, Richardson and Swan (2003) promoted online learning than traditional educational environment as it is more cost effective and has suitable method. In addition, it also offers occasions and avenues for more learners to have a limitless education.

Nevertheless, students have different views with regard to online learning. For instance, Huang (2016) in his study found that majority of the students reported that they were more likely choose blended mode as compared to either face to face or online learning alone. In addition, Rodrigues and Vethamani (2015) found that students do find it more convenient using online to learn speaking despite poor internet connection. They further asserted that students seem to understand the importance of innovation in classrooms which does help them to acquire new knowledge and improve their speaking skills (Moya, 2015). However, some students view this platform as troublesome as they need time to adjust especially with limited Internet access (Kearns, 2012; Lee, 2001). Some students reported they prefer face-to-face learning as they can easily refer to their instructor or lecturer when they need to address their understanding of the subject matter (Heirdsfield, Walker, Tambyah & Beutel, 2011).

Engagement in learning provides students the opportunity to experience learning in a stimulated manner. When students are engaged, they absorb learning better. Nonetheless, in a normal traditional classroom, students are not given ample opportunity to engage in the learning process. This may be due to several factors such as limited time given in the class, curriculum requirement etc. Currently, the demand to use information and communication technology (ICT) in the educational sector has changed the process of learning, teaching, and training especially in the era of globalization (Jabeen & Thomas, 2015). Thus, the traditional way of learning is often seen as stagnant and may lose the interest of students to learn the target skills in the language. The mechanistic experience in a traditional way of learning hinders students from experiencing learning in an engaging manner. This may be due to different

learning styles preferred by students. Hence, instruction of learning has begun to shift from face-to-face classroom settings to online learning mode (Settha Kuama & Usa Intharaksa, 2016).

Paul Man-man (2006) in his study highlighted the strategies used to develop listening and speaking skills among students in Hong Kong. He proposed ELT podcasts to be used for intensive and extensive listening activities. Previously podcasting was meant for conveying information and entertainment only but later educators realize its potential as a medium for language teaching and learning. The earlier studies conducted on this also highlighted the pros of using podcasts in language learning as a tool to incite the interest of learners in listening to English and to expose them to native speakers' speeches (Paul Man-man, 2006). Since teaching speaking in a large class sometimes seems difficult, therefore podcast can be utilized by the students to produce their own recording (individually and group) that can be listened afterwards. He further asserted that online learning platform minimizes the feeling of uncomfortable among the learners since it permits students to be active behind the scenes. Learners claimed that online learning would be easier for whose speaking skill is not good because they do not need to 'speak' in online environment (Heng & Linda, 2003). This is supported by Paul Man-man (2006) in which less confident learners would also benefit from this as it reduces the anxiety brought in real time interaction.

Several studies also show that integration of technology plays a vital tool for learning because it facilitates learning as well as provides opportunity for students to engage in learning (Li, 2016; Settha Kuama & Usa Intharaksa, 2016; Wang, Liu, & Fu, 2015). There have been a considerable number of studies illustrating the learning platform where teacher-supported in online learning which is obtained through discussion forums and participation with classmates able to promote effective learning than the usual face to face teaching methods (Wang, Liu, & Fu, 2015; Li, 2016). This is probably because the learners think that these materials are flexible, interesting, and entertaining.

However, a considerable number of research has shown that some students reported that they experience several challenges on the use of technology when learning (Ellen Chung, Geetha Subramaniam, Laura Christ Dass, 2020; Sayadian & Lashkarian, 2010). According to some studies, lack of social interaction is perceived as the greatest barrier to online learning (Heng & Linda, 2003; Muilenburg & Zane, 2005). Learners who indicated themselves as not being able to learn well using online had the highest barrier rating. In contrast, those with highest level of comfort and confident using online learning perceived lower barrier for social interaction. In addition, administrative/instructor issues, learners' motivation and time/support for studies are also identified as barriers to online learning. Meanwhile lack of technical skills and academic skills are considered as very low obstacles to online learning by learners. Even though most students claimed that they enjoyed using a computer and surfing the web, some of them found it difficult to motivate themselves to begin the online learning lecture (Maltby & Whittle, 2000; Norliza Ghazali, et al., 2020).

Thus, the aim of this research is to examining students' perceptions of online learning may provide a better perspective for the language instructors of the students' learning process. In addition, by gaining the perspective from the students the instructors can assist and facilitate the students to overcome challenges and anxiety they might face using online learning.

In sum, by gaining perspective from the learners on the employment of online learning to facilitate listening and speaking skills, the lecturers are able to approach the use of online learning better and also can improve the students' online learning experience in order to fulfil their needs.

4. Method

This study employed a quantitative method to obtain response to questions on relationships within measurable variables to gain a better perspective of a phenomenon (Leedy, 1993). Through this method, data from the participants were obtained using a structured questionnaire. Besides being a valuable method of collecting a wide range of information from a bigger number of populations, this type of questionnaire contains closed questions which can produce qualitative data using the patterns and trends (Cohen, Manion & Morrison, 2000).

The data were collected from 102 respondents of various Diploma and Degree courses in UiTM Perak Branch. UiTM Perak Branch was established in 1985 and the campus is located in Seri Iskandar, Perak along the Ipoh-Lumut road and there is another branch which is in Tapah. Among others, these respondents were majoring in Quantitative Surveying, Estate Management, Fashion Design, Fine Art,

Architecture, Accountancy, Computer Science, and Applied Science, which are offered in both campuses of this university. The respondents were required to complete a number of compulsory English Language courses throughout their study. These students were required to take three English language proficiency courses. The sampling procedure used in this research was convenient sampling as the respondents were taking English courses during the period of study.

For this study, the platform used to approach the teaching of listening and speaking online is through MOOC. MOOC is an online learning website where students are able to access the specific courses featured in the website. The listening and speaking were taught separately to ensure that the students were given ample time to grasp the teaching. The students were exposed to listening and speaking for 10 weeks consecutively. They were allowed to go in the MOOC platform outside of class hours to practice the tasks on their own. The learning pace provided allowed the students to choose and be flexible in their learning. The instructor will provide feedback as they progressed gradually throughout the semester.

A set of questionnaire, which was adopted from Song, Singleton, Hill, Myung Hwa Koh (2004), was employed. Some changes were made to the questions to fit the objectives of the study as well as to meet the suitability of the participants after a pilot test was conducted. In this research, a pilot test on 40 respondents to generate reliability items in the questionnaire. Johnson and Christensen (2013) define pilot study as a small-scale study to assist in examining the reliability of the questionnaire. However, there were only 30 sets questionnaire had been returned. The acceptable Cronbach's Alpha value in this study was between 0.7 and below 1. Nunnally (1994) asserted that Cronbach's Alpha minimum value is 0.7 for reliability. All the items were run using SPSS version 24 and were positively, and significantly correlated to each other, with p value < 0.01. The findings from the pilot study showed that all the sections scored above 0.7, hence it is considered acceptable internal consistency reliability.

The questionnaire was divided into four sections (as shown in Table 1). Section A contains questions on the respondents' demography; Section B comprises of questions on the respondents' perspectives on learning Listening skills online; Section C deals with the respondents' views on learning Speaking skills online; and Section D captures the respondents' overall perceptions on online learning. The questionnaire was distributed by using the Google form application.

Table 1: Research Instrument Details

Section	Types of questions posed
Section A	Respondents' Demography - Age, gender, Faculty, Programme
Section B	Respondents' perspectives on learning Listening skills online - Using five scales ('Strongly Agree', 'Agree', 'Neutral', 'Disagree', and 'Strongly Disagree') Samples of the questions: - 'Learning Listening online is enjoyable', - 'Learning Listening online is effective', - 'Learning Listening online is easy to understand',
Section C	Respondents' views on learning Speaking skills online - Using five scales ('Strongly Agree', 'Agree', 'Neutral', 'Disagree', and 'Strongly Disagree') Samples of the questions: - 'Learning Speaking online is enjoyable', - 'Learning Speaking online is effective', and 'Learning Speaking online is easy to understand'.

Section D

Respondents' overall perceptions on online learning

Sample of the questions:

- 'Online learning is convenient',
- 'Online learning is challenging',
- 'Online learning allows me to learn at my own pace',
- 'Online learning encourages self-learning', and
- 'Online learning requires a constant internet access.'
- Another statement asked the respondents to indicate their own Online learning experience in five scales ('Very Satisfactory', 'Satisfactory', 'Neutral', 'Unsatisfactory', and 'Very Dissatisfactory')
- the last statement required the respondents to specify whether they will recommend Online learning to their friends or not in three scales ('Yes', 'No', 'Unsure').

5. Results and Discussion

Figure 2 displays the participants' perception of listening skill using online. Generally, the majority of the participants reported they enjoyed learning online. 74% of the participants indicated they enjoyed learning using the online medium instruction. Only 21% said otherwise, while 23% chose neutral as their response. This was consistent in the findings obtained in the pilot study conducted earlier. The pilot study results obtained displayed that majority of the students (80%) preferred this online medium because they were given the opportunity to go into the platform and do the listening practice on their own and at their own pace, while only 20% reported that they preferred face to face method.

To the statement on effectiveness in using online, 68% of the respondents agreed that this type of learning is effective to them. Only 30% remained neutral, while 21% stated otherwise. In addition, the majority of the students (54%) reported that learning using this medium made learning easier. Only 38% remained neutral. Overall, the majority of the participants found online learning as effective.

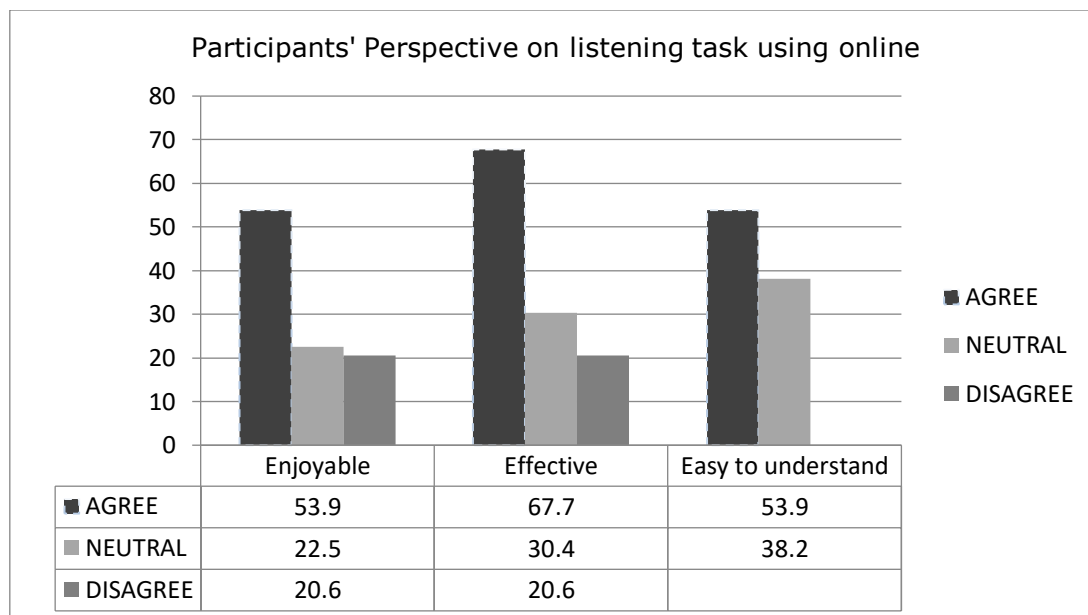


Fig. 2 The participants' perspectives on listening task using online

In Figure 3, the respondents showed a positive inclination on using online for speaking skill. More than half of the respondents agreed that speaking skill can be enhanced through online. 72% stated that they found learning speaking online is fun, while only 22% of the respondents thought otherwise. In addition, 60% reported found learning speaking online is effective, compared to their counterpart who disagreed with the statement which constituted 30%. Followed by 58% indicated that when learning speaking online, they would be able to understand the lesson better and, only 32% reported otherwise. It can be deduced that the majority of the respondents portrayed a positive perception on speaking task through this method of learning. The findings showed similar results of previous studies on using online to facilitate speaking skill such as Paul Man-man (2006) and Rodrigues and Vethamani (2015).

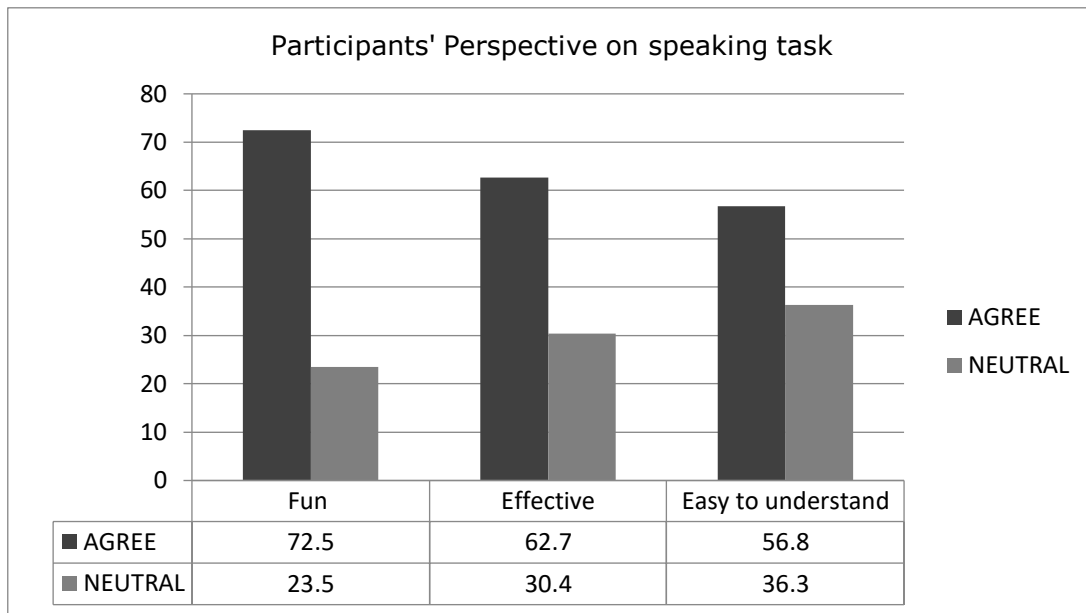


Fig. 3 The participants' perspectives on speaking task using online

Figure 4 displays the findings on the respondents' view on online learning. Overall, they admitted the benefits of using online in the language classroom. 62% reported online learning is convenient, only 32% thought otherwise. 70% said learning online allowed them to learn at their own pace, while 25% disagreed with the statement. The findings showed that the majority of the participants reported that online learning is convenient as it permitted them to adjust their learning at their own pace. This substantiates the claim made by Wang, Liu, and Fu (2015) and Li (2016). The respondents acknowledged the positive sides of using the platform to learn and different from the traditional way of studying.

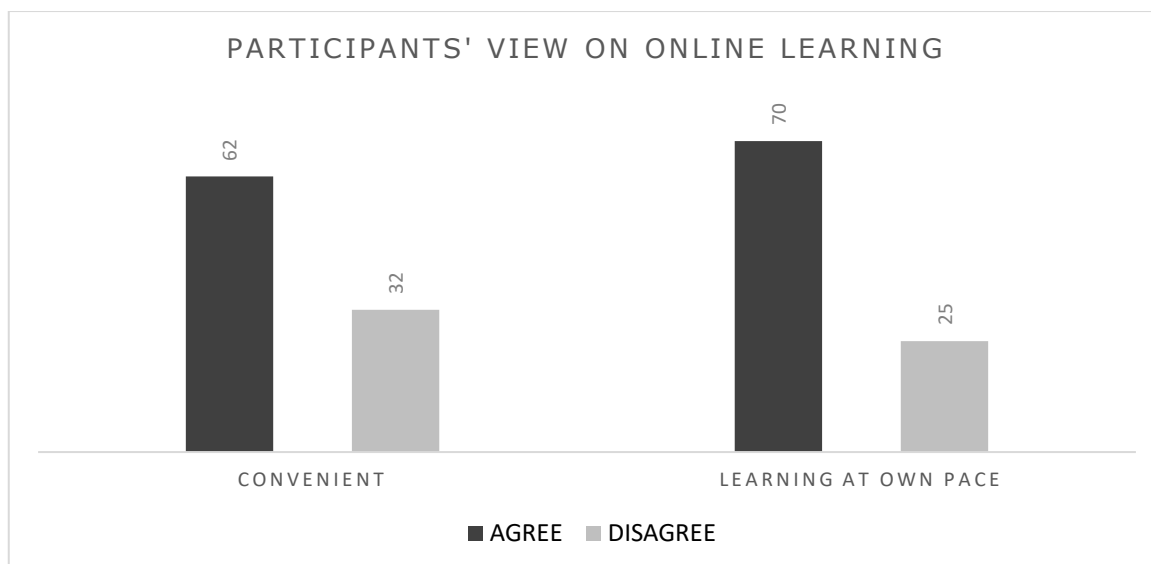


Fig. 4 The participants' view on online learning

Figure 5 shows the participants' level of readiness using online learning for both listening and speaking skills. To the statement on their eagerness of using the online learning the majority that is 55% stated they were not eager, compared to their counterparts where only 40% said they were eager. To the statement whether they would recommend this online learning to their friends, 47% said they would and, 49% said it is possible. It can be inferred that the most of the respondents do not deny the benefit of online learning and how online learning be able to be employed in their language classroom. However, the majority expressed that they are not eager in using online to learn both skills. Thus, it can be deduced that although the students reported a positive view using online learning to acquire speaking and listening skill and would recommend online learning to their friends, the majority are still apprehensive in using online to learn both the skills. This may be due to several factors such as their English language proficiency level, internet access, readiness to use technology (Paul Man-man, 2006; Sayadian, & Lashkarian, 2010).

From the findings it can be deduced that overall, the participants enjoyed learning using this method. In addition, they reported that is effective to learn using this method. The findings substantiate the claim made by Paul Man-man (2006) that online learning is effective to facilitate listening skills. In addition, this is in accordance with Jabeen and Thomas's (2015) study that learner's proficiency in listening skill can be enhanced through online learning.

Besides, the findings illustrated that the majority of the respondents showed a positive attitude in using online for their speaking skill. In addition, the participants claimed that learning through this method is effective. This supports the study by Levis et al. (2016) that speaking through online learning has some benefits from other forms of learning instruction such as allowing students to hear the way native pronounce certain words. This type of exposure will enable the students to improve their pronunciation.

The results illustrate that the majority of the participants have a positive attitude on online learning. They claimed online learning provides a convenient way of learning. The findings support the claim made by Kulik and Fletcher (2016) and Suraya Masrom et al. (2020) online learning is not only flexible but it also allows individuals to adapt to learning capacity and learner differences. They further asserted this may lead to a better and more efficient learning. Additionally, computer self-efficacy on perceived ease of using online learning do influence the students' behavioural intention in learning (Ibrahim et al., 2017). When students view the learning process as positive, they will show a positive behaviour in wanting to learn (Lucas, 2004).

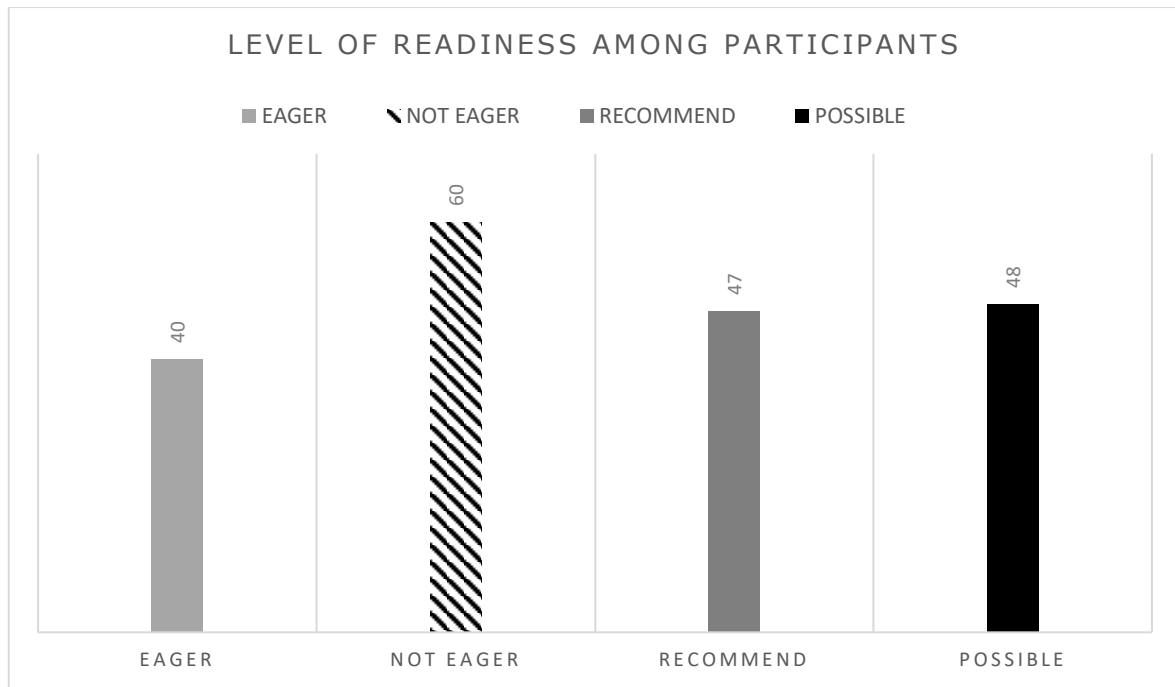


Fig. 5 The participants' level of readiness using online

However, the results for the participants' level of readiness showed a conflicting response from the participants. Although, most of the participants reported they would recommend and a considerable number of the participants also reported that they would possibly recommend this learning approach to their friends, a majority of the participants claimed that they are not ready to use online learning compared to their other counterparts. The results support several studies on students' readiness in using online learning (e.g Kearns, 2012; Tsai, 2009). Using online learning may be a challenge to students. As aptly put by Maltby and Whittle (2000) and Tsai (2009), the students may face difficulties and challenges that they may never experience like Internet anxiety and computer fear in a traditional setting of teaching and learning. Computer anxiety is more likely to have a negative impact on learners' attainment which may hinder the students' readiness in learning through this approach (Aydin, 2011). All of these factors may influence the participants' readiness in using online learning. Thus, that is why there is a difference in attitude in using online although the participants do claim there are benefits in employing such approach in the learning process. Additionally, instructors of online learning too need to be pedagogically equipped when employing technology in classroom (Puteri Rohani Megat-Abdul-Rahim, 2011).

4. Limitation of the study

As in any research, this study is also subjected to limitation. The study has not considered other factors, which may contribute to students' performance such as intelligence, language ability and students' background. Besides, the participants of the study is limited only to UiTM Perak. It is advisable to have respondents from other UiTM branches. In addition, the study only used survey to obtain data. To recapture an understanding of the students' responses, a qualitative approach such as interview and observation will likely give a better perspective and understanding from the students' views when using online platform to learn listening and speaking skill.

5. Conclusion

As a conclusion, online learning has a room in today's classroom. However, the lecturer or the instructor has to be flexible and provide strategies to students in tackling this approach of learning. In addition, the lecturer needs to be more aware on the students' readiness in using online learning. With

the correct application of technology, a lecturer is able to facilitate learning in a more engaging manner which allows students to be creative and take charge of their own learning. Providing online to students give them the opportunity to engage in learning a creative manner which is achieved by designing multiple forums for them to interact, discuss and being creative enable them to prosper and be innovative thinkers. As a result, the students' divergent thinking skills are developed which are deemed pertinent in the 4.0 Industrial growth. Besides, novelty of this medium of learning is it can be explored from the student's perspective; one way to arouse the students' desire in learning is through interesting visuals or stories openers that can be introduced to students as they enter the class. Therefore, this medium of learning through online navigates technology challenges as well as enhances students' learning a target language.

6. Acknowledgement

We would like to thank UiTM Perak Branch for giving us support to submit the findings of the study.

7. References

- Chen, S. J., & Chen, S. M. (2007). Fuzzy risk analysis based on the ranking of generalized trapezoidal fuzzy numbers. *Applied Intelligence*, 26(1), 1-11.
- Anealka, Aziz Hussin. (2018). Education 4.0 made simple: Ideas for teaching. *International Journal of Education and Literacy skills*, 6(3), 92-98.
- Artino, A. R., & Jones, K. D. (2012). Exploring the complex relations between achievement emotions and self-regulated learning behaviors in online learning. *The Internet and Higher Education*, 15(3), 170-175.
- Aydin, S. (2011). Internet anxiety among foreign language learners. *Tech Trends*, 55(2), 46-54.
- Baharun, N., Razi, N. F., M, Abidin, R. Z., Musa, N. A. C., Mahmud, Z. (2017). Measuring students' understanding in counting rules and its probability via e-learning mode: A rasch measurement approach. *Journal of Fundamental of Applied Science*, 9(6S), 429-441.
- Cohen, L., Manion, L. and Morrison, K. (2000). *Research methods in education* (5th Edition). London: Routledge Falmer.
- Crim, S. J., & Reio, T. G. (2011). Social presence in an online learning environment. *Encyclopedia of information communication technologies and education integration*, 656-673.
- Davies, J., & Graff, M. (2005). Performance in e-learning: Online participation and student grades. *British Journal of Educational Technology*, 36(4), 657-663.
- Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *Management Information Systems Quarterly*, 13, 319-340.
- Ellen Chung, Geetha Subramaniam, Laura Christ Dass. (2020). Online Learning Readiness Among University Students in Malaysia Amidst Covid-19. *Asian Journal of University Education*, 16(2), 45-58. DOI: <https://doi.org/10.24191/ajue.v16i2.10294>
- Heirdsfield, A., Walker, S., Tambyah, M., & Beutel, D. (2011). Blackboard as an online learning environment: What do teacher education students and staff think? *Australian Journal of Teacher Education*, 36(7), 1.
- Heng, Y. K. & Linda, L. L. (2003). A Case Study of Chinese Student's Attitudes Towards Their First Online Learning Experience. *Educational Technology Research and Development*, 51(3):95-102
- Herrington, J., Oliver, R. & Reeves, T. C. (2003). Patterns of Engagement in Authentic Online Learning Environments. *Australian Journal of Educational Technology*, 19(1), 59-71.
- Huang, Q (2016). Learners' perceptions of blended learning and the roles and interaction of f2f and online learning. *ORTESOL Journal*, 33, 14-33.
- Ibrahim, R., Leng, N. S., Yusoff, R. C. M., Samy G, N., Masrom, S., Rizman, Z. I. (2017). E-learning acceptance based on technology acceptance model (tam). *Journal of Fundamental. Applied Sciences*, 9(4S), 871-889.
- Jabeen, Shazi Shah & Thomas, A. J. (2015). *Effectiveness of online language learning*. Proceedings of the World Congress on Engineering and Computer Science, 1, WCECS 2015, October 21-23, San Francisco, USA

- Johnson, B., & Christensen, L. B. (2013). *Educational research: quantitative, qualitative and mixed approaches*. Thousand Oaks: SAGE Publications.
- Kearns, L. R. (2012). Student assessment in online learning: Challenges and effective practices. *Journal of Online Learning and Teaching*, 8(3), 198.
- Kulik, J. A., & Fletcher, J. D. (2016). Effectiveness of intelligent tutoring systems: A metaanalytics review. *Review of Educational Research*, 86(1), 42-78.
- Lee, M. G. (2001). Profiling students' adaptation styles in web-based learning. *Computers & Education*, 36 (2), 121132.
- Leedy, P. D. (1993). *Practical research: planning and design*. New Jersey: Prentice-Hall.
- Li, E. (2016). The Study on Higher Vocational English O2O Teaching Experiment from the Perspective of MOOC. *Journal of HUBEI Correspondence University*, 29, 136-137.
- Levis, J. M., Sonsaat, S., Link, S., & Barriuso, T. A. (2016). Native and nonnative teachers of L2 pronunciation: Effects on learner performance. *TESOL Quarterly*. 1-38 (Early View).
- Lucas, R. W. (2004). *The creative training idea book: Inspired tips and techniques for engaging and effective learning*. New York: AMACOM.
- Maltby, J. R., & Whittle, J. (2000). Learning programming online: Student perceptions and performance. In *Proceedings of the ASCILITE 2000 Conference*. Southern Cross University, 9-14th December 2000.
- Masrom, S., Ismail, S. R., Norazmi Anas, Abdullah Sani Abd Rahman (2020). Self-regulated learning with massive open online course (MOOC) for the fundamentals of data structure course: A descriptive analysis. *International Journal of Advanced and Applied Sciences*, 7(10), 95-101.
- Matthew, V. N. & Chung, E. (2021). University Students' Perspectives on Open and Distance Learning (ODL) Implementation Amidst Covid-19. *Asian Journal of University Education*, 16(4), 52-60. <https://doi.org/10.24191/ajue.v16i4.11964>
- Moya, Juan José Tiscar, J.J. T (2015). *Improving speaking skills through the use of a blog*. Unpublished Masters Thesis. Retrieved http://repositori.uji.es/xmlui/bitstream/handle/10234/130125/TFM_014_T%C3%ADscarJ.pdf?sequence=1
- Muilenburg, L. Y. & Zane L. B. (2005). Student Barriers to Online Learning: A Factor Analytic Study. *Distance Education*, 26(1), 29-48.
- Norliza Ghazali, Mohamad Sahari Nordin, Arnida Abdullah, Ahmad Fauzi Mohd Ayub (2020). The relationship between students' mOOC-efficacy and meaningful learning. *Asian Journal of University Education*, 16(3), 89-101. Doi.org/10.24191/ajue.v16i3,11071.
- Noor, H. M., & Aziz, A. (2020). M-Track: Progress Tracking System for MOOC Development. *Asian Journal of University Education*, 16(1), 85. doi:10.24191/ajue.v16i1.8985
- Nor Hapiza Mohd Ariffin, Saliza Ramly. (2017). Factors affecting students' utilization of learning management system: A case study. *Journal of e-learning*, 7, 55-74.
- Nunnally, J. C. (1994). *Psychometric Theory*. (3rd ed.). New York: McGraw-Hill.
- Paul Man-man Sze (2006). Developing students' listening and speaking skills through ELT podcasts. *Education Journal*, 34(2), 115-134.
- Puteri Rohani Megat-Abdul-Rahim. (2011). The use of ICT among university lecturers: A pedagogical perspective. *Malaysian Journal of ELT Research*, 7(2), 1-32.
- Rahiem, M. D. H. (2021). Indonesian University Students' Likes and Dislikes about Emergency Remote Learning during the Covid-19 Pandemic. *Asian Journal of University Education*, 17(1), 1-18.
- Rodrigues, P. D. & Vethamani, M. E. (2015). The impact of online learning in the development of speaking skills. *Journal of Interdisciplinary Research in Education (JIRE)*, 5(1), 43-67. Retrieved <https://pdfs.semanticscholar.org/f67b/b14cb396373f3bfed09678f71125c6515097.pdf>
- Sayadian, S., & Lashkarian, A. (2010). Investigating attitude and motivation of Iranian university learners toward English as a foreign language. *Contemporary Issues in Education Research*, 3(1), 137-147.
- Settha Kuama & Usa Intharaksa (2016). Is online learning suitable for all English language students? *PASAA*, 52, 53-82.
- Shih, Y. C. D. (2005, July). *Taiwanese EFL learners' online language learning strategies*. In *Advanced Learning Technologies, 2005. ICALT 2005. Fifth IEEE International Conference on* (pp. 1042-1046). IEEE.

- Shopova, T. (2014). Digital literacy of students and its improvement at the university”, *Journal on Efficiency and Responsibility in Education and Science*, 7(2) (pp.26-32).
- Sim, S. P-L., Sim, H. P-K., & Quah, C-S. (2021). Online Learning: A Post Covid-19 Alternative Pedagogy for University Students. *Asian Journal of University Education*, 16(4), 137-151. <https://doi.org/10.24191/ajue.v16i4.11963>
- Song, L., Singleton, E. S., Hill, J. R., Myung Hwa Koh (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *The Internet and Higher Education*, 7(1), 59-70.
- Surjono, H. D. (2015). The effects of multimedia and learning style on student achievement in online electronics course. *Turkish Online Journal of Educational Technology-TOJET*, 14(1), 116-122.
- Tsai, M. J. (2009). The model of strategic e-learning: Understanding and evaluating student e-learning from metacognitive perspectives. *Educational Technology & Society*, 12(1), 34-48.
- Wang, S., Liu, J., & Fu, W. (2015). A study on the content-based college ESP instruction under the background of MOOC era. *China Educational Technology*, 98-120.