The Impact of Integrating ICT in Malay Foreign Language Teaching and Learning

Mazlina Ahmad¹, Roswati Abdul Rashid¹, Noor Rohana Mansor¹, Maryani Ahmad², Cho Min Sung², Eizah Mat Hussain³, Nurul Ain Chua Abdullah¹

¹Universiti Malaysia Terengganu
²Hankuk Foreign Studies University
³Universiti Malaya
mazlinaahmad@umt.edu.my

Abstract. COVID-19 affects 213 countries and territories around the world. This pandemic prompts substantial negative repercussions on social, health, economic, education, and tourism domains. New norms of life activities are designed as a solution so that life can be continued as before. This situation includes the education field, whereby various methods are created so that the progression of learning and teaching can be carried out even in limited circumstances. An imperative solution was chosen to integrate ICT into this field. Thus, the ICT applications in teaching and learning were the researchers’ focus of attention. This research centred predominantly on Malay foreign language teaching and learning that must adapt and renew itself to be compatible with the ICT. The goal of this study was to examine the impact of ICT and highlight the positive effects of it in order to keep up with the prevailing situation of the coronavirus COVID-19 pandemic. The writing of this paper was based on research focusing on Malay foreign language teaching and learning using ICT. Studies revealed that the application of ICT in language learning begins to get recognition from educators. Although there are some strengths in integrating the ICT on the other, it still holds considerable vulnerability which requires improvements to be made in order to meet teaching and learning requirements. Therefore, this study further illustrated the level of impact of integrating ICT in the education as a source of reference to the educator and education apps developer who created more sophisticate apps and fulfilled the demand of education. This analysis too would become a reference to literature review in extemporising the quality of teaching and learning in Malay foreign language.

Keywords: Malay Foreign Language, Teaching and Learning, ICT

1. Introduction

The educational landscape presently has evolved, following the COVID-19 pandemic that afflicts the world today. This change does not only concerns the education sector but all sectors in the world too. In January 2020, the World Health Organization (WHO) declared a pandemic situation due to the transmission of a new type of Coronavirus that caused the COVID-19 pandemic. In line with the declaration of this plague, all countries closed all sectors, including the education domain. The movement to close the education sector causes all schools and universities to close to break the chain of transmission of this dangerous epidemic. Consequently, the face-to-face teaching and learning method that was practised for a long time must be stopped during the Movement Control Order (MCO), which started on 18 March 2020. With the help of information and communication
technology (ICT) facilities that are digitally interactive and are one of the learning mediums, it can be used to help the teaching and learning process more productively. This is because, through the application of ICT, it can blend various forms of stimuli including text, voice, images, graphics and animation and can build inter-activity abilities that can excite students and support the advancement of student learning. Digital interactive methods through the use of ICT is one of the teaching techniques that can be employed by lecturers in teaching the Malay language for foreign speakers. Many lecturers consider that such digital interactive techniques or methods can attract foreign speakers to learn and understand the Malay language, thus advancing their communication abilities.

The question is, how can such a method be applied in the process of teaching and learning the Malay Language to foreign speakers? Indeed, there were many preceding studies such as Zamri and Mohamed Amin [1] Abdul Rasid Jamian et al [2], Nor Hafidah Ibrahim et al [3], Noraihan Mat Daud [4] and many others that argued about this, but they only discussed the importance and effectiveness of using interactive methods that lead to specific applications such as google meet, Webex, and zoom. Hence, this study focused on several forms of ICT that can certainly be applied by all universities in teaching and learning. Realistically, learning methods using ICT were routinely used in teaching especially language teachings in developed countries, such as the United States, Japan, and Western European countries including Turkey to provide additional practice in mastering four skills, namely, reading skills, speaking and listening as well as grammar in addition to problem-solving [5] The rapid development of technology leads to the use of various applications in language teaching.

2. Malay as a Foreign Language
In Malaysia, the teaching and learning of the Malay language in Institutes of Higher Education (IHE) is in line with the Education Act, which requires all international students in Malaysia to study the Malay language. Various studies were conducted to improve the mastery of Malay language among international students. Although Malaysia welcomes many international students, the study showed that they are still weak in the mastery of the Malay language, especially in terms of communication. According to [6] the Malay language programme must be designed comprehensively and covers all aspects of the Malay language knowledge such as vocabulary, grammar, cultural aspects include a system of values, ideas and others as well as current social constraints in Malay. [7] for example, noted that the central barrier students and teachers teaching the Malay language in South Korea is the absence of reference material, whether in print or other forms of conventional, which eventually reduces students’ interest to learn Malay. In this case, relevant teaching strategies and materials need to be better planned. It is consistent with the results of a study conducted by [8] that suggested, strategies and interest in learning have a very vital relationship. Thus, the use of ICT is regarded as one of the strategies that can draw and benefit students in language learning and this study also gains a place among language researchers, especially in the online learning atmosphere that takes place in education today due to the COVID-19 epidemic. Educators must broaden teaching strategies according to the contemporary context. The adoption of ICT in language learning is not something innovative because ICT was used for the teaching of language subjects since the 1960s [9] and was adopted for learning purposes for the past four decades.

3. Application of ICT in Teaching English as a Foreign
Teaching the Malay language is influenced by ICT, although the Malay language lessons only involve mastering the language skills, which seems quite difficult for foreign speakers to master. Additionally, there are still some concerns that transform the effectiveness of teaching. These quandaries include the mastery of necessary skills such as the Malay language’s oral, reading and writing. At a higher level, some students cannot understand a simple text that is read even when they have learned the Malay language up to two semesters. Consequently, the use of ICT in the teaching of the Malay language is seen as an effort to give the corresponding impact on the problems faced. Apart from functioning as the latest teaching aids, the use of ICT is perceived as an initiative that can alter the perception of students towards learning the Malay language.

Among the teaching methods that can be applied is the process of teaching and learning grammar using a Computer-Based Instruction approach. Based on the criticisms made by [10] they proposed an alternative technique in the teaching and learning of grammar based on teaching aids for the Malay
Language subject, namely the use of software engineering program technique usage with words registration of antconc words and corpus. The study decided that the technique provided a variety of linguistic information to students primarily related to language systems such as sentence reconstruction (e.g. sentence formation, clauses and sentences) and examined the dynamics of a sentence. This method does not only benefit native the Malay Language speakers but can also be appropriated by foreign speakers who learn the Malay Language in enriching vocabulary and constructing simple sentences. The most crucial thing is the ability of students to integrate any form of technology to improve their Malay Language proficiency. Technological devices that include a variety of digital devices such as computers, tablets, Multitouch screens, interactive whiteboards, mobile devices, cameras, DVDs and music players, audio recorders, VCRs, VHS tape recorders and cassette players, light tables, projectors and microscopes [11] is suitable for use in the teaching and learning process. Therefore, ICT should be part of the teaching and learning process. Cultivating the use of ICT in Learning and Facilitation (L&P) should be enhanced through courses, provide computer facilities and integrate ICT in the curriculum adopted. Interactive media that refers to digital materials including software programs, television programming, e-books, the internet and others [12] is also increasingly used in education. All of these tools make it easier for international students to learn language skills and hold a variety of ways to interact and think actively in the circumstances created through digital technology such as computer games, mobile phones and the virtual world.

The impact of technology on education was proven through earlier studies. [13, 14, 15, 16, 17, 18]. It provides an opportunity for students and lecturers to diversify teaching and learning methods. Studies also proved that the use of information and communication technology (ICT) in language learning gains popularity among language researchers nowadays. Technology-assisted language teaching began to be used to improve student achievement and mastery in language. According to [3] the use of digital and interactive technology is like the use of the internet, such as downloading YouTube application videos, video recording display, applications using iPad and also including the use of learning applications such as e-learning. In this regard, the study of [19, 20] explained that learning using multimedia is more practical and fitting to be applied in any subject and even very easy to use to explain something in a learning session. Creative educators will often look for ideas in teaching and think of interesting teaching aids to stimulate students’ interest and thus creates interest in the learning process.

The study of [21] also proved that students exhibit positive behaviour when using digital teaching aids such as multimedia software compared to the use of conventional teaching aids such as the use of picture cards and textbooks. Thus, the application of ICT proffers attractiveness to students, therefore stimulating students’ interest, and this coincides with the concept of 21st-century teaching.

In the context of learning the Malay language as a foreign language, video production is one very effective ways to help students practice the pronunciation, intonation and style. It is evident in the study attended by [22] which concerned a video kit that contains 11 themes culture. Results confirmed that international students who learn the Malay language through video kit showed a positive response. It was because the video kits were used repeatedly for students to practice the correct pronunciation while learning the Malay culture in communication.

Furthermore, this study is supported by [23] which maintained that the internet and smartphones contributed to students’ interest in learning the Malay language. A total of 66% of the informants agreed and strongly agreed that the delivery of teaching methods using smartphones and the internet was effective and managed to attract international students to learn the Malay language while another 11% did not agree. This study also showed that a total of 68% of students think that the strategy of using smartphones and the internet improved their communication skills. At the same time, this matter also stimulates and helps students’ language skills, whether in the form of written or oral communication. The total percentage evidence this for strongly agree and agree was as much as 77%. These findings provided the impression that through the facilities of ICT, students are free to seek as much information and explore aspects of the Malay language despite being out of formal learning institution.

Furthermore, studies on the use of e-learning also gain attention from language researchers. One of the learning websites known as e-Learning is used in the teaching and learning process either at the primary, secondary or tertiary level nowadays. E-Learning is a teaching and learning process that uses
electronic networks (LAN, WAN or Internet) that convey content, information and also interact through it. Internet, intranet, satellite, audio-video tape, interactive tv fan CD-ROM are some of the electronic media used to practice eLearning.

A study by [24] demonstrated that learning using e-learning is more powerful and enjoyable. Thus, it helps students overcome the problem of weakness in terms of vocabulary mastery and self-skills. [25] asserted that the elements of graphic design, text, colour and sound could make students give full attention as learning takes place in addition to the content of the syllabus that meets the interests of students. The use of multimedia software such as DVDs or interactive CDs can have a positive impression on students’ understanding of their learning process. The software available in e-learning allows students to be actively involved in the learning process in developing language cognitive. The reality is, some educators always use e-learning, but many also use it when necessary. The pedagogical and andragogic process occurs when IHE students study virtually using the specified syllabus manual. Students and lecturers gain experience interacting, communicating and watching videos in building robust teaching in an effective L&F process. This situation demonstrates that online L&F as the central platform in the education system has stimulated the improvement of information technology (IT) skills among students and educators. The nature of e-learning is very interactive that facilitates communication between students and educators. For international students, the principal element that they need is sufficient reference resources or appropriate teaching materials and other aids. Other significant products include e-Pedoman (for grammar, and spelling) and e-Rujukan such as dictionaries, thesauruses, and terms. The Malay language magazine quotes and conversation recording (audio or video) in a real situation is also essential to be provided so that international students can also appreciate the atmosphere and the situation of natural language. This will make the learning of the Malay language more interesting by using e-learning.

In the context of learning the Malay language as a foreign language, there are four primary skills required, namely listening skills, speaking skills, reading skills and writing skills. All these elements are covered in one technology that is e-learning. E-learning applications in speaking skills can be seen in various situations such as speeches, lectures, speeches, debates, forums, interviews, conversations between parents and family members, listening to songs, poetry, seloka, pantoum, gurindam, news, watching dramas, and movies. The need to listen to this can happen anywhere according to purpose, whether in social interaction, gaining entertainment or information and knowledge. In addition to practising learning skills, students can also practice pronunciation through the videos shown.

All these situations can be recorded, including audio and video and loaded in the e-learning system, thus facilitating students’ access to the topics discussed. It can be the primary reference for students because they can hear the pronunciation correctly and repeatedly. After listening, students will present or recite the material heard with correct pronunciation, intonation, style and rhythm. Furthermore, E-learning can help prepare before teaching in the classroom. In an attempt to complete this learning process, training and assignments are required. For each topic in the e-learning software, students can access the training at any time to test their level of understanding through the practice of listening to passages and conversations. The effectiveness of this ICT is proven through the study of Aisyah et al., (2012) which declared that developments in multimedia technology open up more significant opportunities in changing the way of learning, obtaining and applying the information in science. According to [26, 27] multimedia allows educators to apply various teaching techniques, while students are given the opportunity to move more actively in a learning session.

According to [24] she affirmed that the ICT-based teaching and learning process covers a wide range of objectives and uses an interactive approach to enable the learning process to be carried out independently. Through self-learning or the model of blended learning has become a pedagogical method in today’s Institutes of Higher education (IHE). In the context of e-Learning interactive learning, the learning approach actively moves towards the continuous flow of two-way information between its users, between users and users through computers or between students and lecturers (Kamus Dewan dan Pustaka, 2013). This learning concept allows students to organise programs and utilise this interactive learning that saves energy and time to produce quality and effective self-learning.

Besides being used to learn the Malay language, integration of ICT is also relevant to learn any language whatsoever because of the nature of foreign language learning requires repetitive practice.
primarily involves the designation. [28] gave a detailed description of computer language games, especially those based on websites, in addition to listing almost all available and adapted for the use of Arabic language learning. From another perspective, he also presented a self-developed language game, and implemented in the Arabic L&F using the ADDIE model. Student feedback was recorded after using the game. At the end of the study, it was found that the students’ response was positive, and computer language games were helpful for students in learning Arabic more efficiently and effectively.

Besides, the study of [29] in their research on the development of e-Learning in a university in Indonesia discovered that e-Learning application facilitates the process of learning. It is because it can be done anywhere and anytime. Technology makes it more straightforward for learners to recognise and develop an understanding of learning [30] The use of technology to support students in learning a second language is the right choice to develop [31].

4. Summary
Based on the literature review completed, the integration of ICT in learning the Malay language as a foreign language has yet to be fully explored. Nevertheless, there are indications of a necessary and successful usage of ICT as a language learning tool. In Malaysia, the boom in international students numbers in institutions of higher learning (IHE) reveals a very significant improvement. Thus, the integration of ICT either through e-learning or any other method, is considered worthwhile and flexible. It allows notes and tutorials to be available on the internet as well as lectures. In addition to saving costs, time and energy of full-time or part-time university students, the integration of ICT can also contribute to flexible teaching and learning atmosphere. Generally, learning now is seen from a more comprehensive outlook where the adoption of technology especially the internet in learning is increasingly widespread at various levels of education whether, in primary schools, secondary schools and Institutions of Higher Learning and starts to become more dominant.

5. Conclusion
Interactive learning plays a position in enhancing student learning through the experience of doing self-exploration according to various teaching and learning approaches, and discoveries during the problem-solving process. Since lecture notes and tutorials can be delivered in asynchronous and synchronous communication; hence, the communication media has revolutionised the fashion students and teachers (tutors) do research, read and write. Nowadays, multiple methods of researching, reading and writing involve concepts such as hypertext and collaborative writing. In adult learning, technology is integrated as a method for the delivery of knowledge and task instructions so that it enables adults to have the privacy to do exercises while being able to develop the concept of self-directed learning that can be adapted to individual modes.

Technology also changes the generation and is a form of social relationships when software programs are enhanced. It improves the interactivity, communication, adaptability, sharing and the learning experience. Ergo, technology constitutes a modern world society that interacts with each other and is powerful not only as a communication tool but also as an educational tool. Besides, extensive partnerships can encourage individuals, including academics, to share curriculum and resources around the world. The approach and design of learning are expected to continue to change in the 21st century, especially in the COVID-19 situation, which is uncertain when it will end. Thus, it necessitates that online learning continues for the next few semesters. Currently, the world encounters many learning processes that occur through online discussions, listening to podcasts, watching YouTube, attending lectures or online webinars, reflections on social media such as Blogs and Wikis, browsing websites, and many other forms of online collaboration and cooperation. This growth is supported by developments in more sophisticated and efficient technological equipment such as tablet computers and mobile phones.

References
[1] Zamri Mohammad, & Mohamed Amin. (2008). Teknologi Makanat Dan Komunikasi Dalam Pengajaran Dan Pembelajaran Bahasa Melayu. Shah Alam: Karisma Publications Sdn. Bhd.
[2] Abdul Rasid Jamian, Norhashimah Hashim & Shamsudin Othman. (2012). Multimedia Interaktif Mempertingkatkan Pembelajaran Kemahiran Membaca Murid-Murid PROBIM. *Jurnal Pendidikan Bahasa Melayu*, 2(2), 46-53.

[3] Nor Hafidah Ibrahim, Norzaliza Ghazali, & Melor Fauzita Md. Yusoff. (2016). Multimedia Interaktif Mempertingkatkan Pengajaran Dan Pembelajaran Kursus Bahasa Melayu Pengurusan (SBLM 1053) Dalam Kalangan Pelajar Universiti Utara Malaysia. *Proceeding of ICECRS*, 583-586.

[4] Noraihan Mat Daud. (Editor). (2018). *Bahasa Melayu Untuk Penutur Asing: Isu Dalam Pengajaran Dan Pembelajaran*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

[5] Gündüz, N. (2005). Computer Assisted Language Learning. *Journal of Language and Linguistic Studies*, 1, 193–214.

[6] Mardian Shah Omar, Azman Rahmat, Yusfarina Mohd Yussof. (2017). Menyulam Budaya Dalam Pengajaran Bahasa Melayu Penutur Asing. *Jurnal Linguistik* Vol. 21(2) Disember: 81-92.

[7] Hasnah Mohamad & Junaini Kasdan. (2012). Pengantarabangsaan bahasa Melayu: peluang dan hambatan, dalam Zaharani Ahmad, Chun Tai-Hyun &Kim Jang-Gyem (peny.) Pengantarabangsaan bahasa Melayu di Korea: Isu, cabaran dan cadangan. Seoul: Hankuk University Foreign Studies Press.

[8] Nor Zuhidayah Muhrul Zulkifli & Siti Saniah Abu Bakar. (2016). Hubungan Antara Strategi Pembelajaran Bahasa Melayu Dengan Motivasi Dalam Kalangan Pelajar Di Jerman. *Pendeta Journal of Malay Language Education and Literature*. Jil. (7): 85-94.

[9] Warschauer, M., & Healey, D. (1998). State Of The Art Article Computers And Language Learning: An Overview. *Language Teaching*, 31, 57–71.

[10] Hishamudin Isam, Mashtoh Abd. Mutalib, & Faizah Ahmad. (2016). Korpus Ke Bilik Darjah: Tatacara Pengendalian Teknik Pengajaran Dan Pembelajaran Tatabahasa Berbantu Komputer. *Proceeding of ICECRS, International Seminar on Generating Knowledge Through Research*. UUM-UMSIDA, 25 – 27 Oktober 2016. Universiti Utara Malaysia, Malaysia.

[11] Buckleitner, W. 2009. “What Should a Preschooler Know about Technology?” Early Childhood Today. [www2.scholastic.com/browse/article.jsp?id=3751484](http://www2.scholastic.com/browse/article.jsp?id=3751484)

[12] Abu Yazid Abu Bakar. (2016). “Digital Classroom”: An Innovative Teaching and Learning Technique for Gifted Learners Using ICT. *Jurnal Creative Education*. Volum 7, hlm 55- 61.

[13] Basoz, T., & Cubukeu, F. (2014). The Effectiveness Of Computer Assisted Instruction On Vocabulary Achievement Feryal Cubukcu. *Mevlana International Journal of Education*, 4(1), 44–54.

[14] Beechler S., & Williams S. (2012). Computer Assisted Instruction And Elementary ESL Students In Sight Word Recognition. *International Journal of Business and Social Science*, 3(4), 85–92.

[15] Bicer, D., & Ramazan, Ş. (2007). Comparison Of Computer Assisted Language Learning Software Before Investment. *The Online Journal of Distance Education and E-Learning*, 1(4), 1–9.

[16] De Witte, K., Haelermans, C., & Rogge, N. (2014). The Effectiveness Of A Computer-Assisted Math Learning Program. *Journal of Computer Assisted Learning*, doi:10.1111/jcal.12090.

[17] Jarvis, H., & Achilleos, M. (2013). *From Computer Assisted Language Learning (CALL) To Mobile Assisted Language Use (MALU)*.

[18] Sowunmi, O., & Aladejana, F. (2013). Effect Of Simulation Games And Computer Assisted Instruction On Performance In Primary Science. *The 2013 WEI International Academic Conference Proceedings*, 10–15.

[19] Doyle, M. (2007). *Learning Language Through Information Technology*. Educational Technology, 30(7).

[20] Azizi Yahaya. (2007). *Menguasai Penyelidikan Dalam Pendidikan*. Kuala Lumpur: PTS Profesional Publishing Sdn. Bhd.
[21] Norizan Abdul Razak. 2000. *Penggunaan Teknologi Maklumat Dalam Pengajaran Dan Pembelajaran Bahasa: Menangani Perubahan*. Bangi: Universiti Kebangsaan Malaysia.

[22] Junaini Kasdan, Yusmaniza Mohd Yusoff, Nor Hashimah Jalaluddin & Hasnah Mohamad. 2018. Pembangunan Kit Video Pembelajaran Bahasa Melayu Penutur Asing Berteraskan Budaya. *PENDETA Journal of Malay Language, Education and Literature* 9: 144–157.

[23] Mardian Shah Omar dan Mashrom Muda. (2018). Kemahiran Komunikasi Penutur Asing: Aplikasi Pendekatan Telefon Pintar dan Internet. *Malaysian Journal of Communication* Jilid 35(4) 2019: 353-367.

[24] Eristi, S. D., & Belet, S. D. (2010). Teachers’ An Students’ Opinion About The Interactive Instructional Environment Designed For Bilingual Turkish Primary School Students In Norway. *Turkish Online Journal of Qualitative Inquiry*, 1(1), 3034.

[25] Latifah Abdul Majid, Wan Nasyrudin Wan Abdullah, & Nurul Hidayah Ahmad Zakhi. (2012). Penerapan Nilai Murmi Dan Pembentukan Jati Diri Kanak-Kanak Prasekolah Melalui Penggunaan Multimedia. *Journal Hadhari Special Edition*, 51-56.

[26] Jamalluddin Harun & Zaidatun Tasir. 2000. *Pengenalan Kepada Multimedia*. Kuala Lumpur: Venton Publishing.

[27] Zamri Mahamod & Nur Aisyah Mohamad Noor. 2011. Persepsi Guru Tentang Penggunaan Aplikasi Multimedia Dalam Pengajaran Komponen Sastera Bahasa Melayu. *GEMA Online Journal of Language Studies*, 11 (3): 163-177. Bangi: Universiti Kebangsaan Malaysia.

[28] Muhammad Sabri, Sahrir. (2013). *Al-Al’ab Al-Lughawiyyah Al-Muhwasabah fi Ta’alum Al-Lughah Al-‘Arabiyyah Li Al-Natiqin bighayriha bayna Al-Nazariyyah wa Al-Tatbiq: Al-Jami’ah Al-Islamiyyah Al-‘Alamiyyah bi Maliziya Namuzajan*. *Journal of Faculty of Dar Al Uloom*. 28 (June). Egypt: Minia University, Cairo.

[29] Khamidah, K dan Triyono, R.A. 2013. “Pengembangan Aplikasi E-Learning Berbasis Web dengan PHP dan MySQL Studi Kasus SMPN 1 Arjosari”. *Indonesian Jurnal on Networking and Security (IJNS)*. Volume 2 Nomor 2. ISSN 2302-5700.

[30] Ivan, Sevo., dkk. 2016. The New Approach on Distance Learning Suported by Knowledge Bases and Semantic Web. *International Journal of Education, Learning and Development*. Volume 4 No. 2. ISSN 2054-6297.

[31] Nomass, Bassma Basheer. 2013. The Impact of Using Technology in Teaching English as a Second Language. *English Language and Literature Studies*. Volume 3 Nr 1. ISSN 1925-4768.