

Online Learning Experience of Malaysian University Students During Covid-19 Pandemic

Khairunesa Isa

Senior Lecturer of Social Science
Center for General Studies and Curriculum
Universiti Tun Hussein Onn Malaysia
Johor, Malaysia
nesa@uthm.edu.my

Sarala Thulasi Palpanadan

Senior Lecturer of Language Studies,
Centre for Language Studies
Universiti Tun Hussein Onn Malaysia
Johor, Malaysia
sarala@uthm.edu.my

Nurliyana Md Rosni

Research Assistance of Social Science
Center for General Studies and Curriculum
Universiti Tun Hussein Onn Malaysia
Johor, Malaysia
n.liyanarosni@gmail

Nor Shela Saleh

Jabatan Sains Sosial
Universiti Tun Hussein Onn Malaysia
86400, Parit Raja, Batu Pahat, Johor, Malaysia
norshela@uthm.edu.my

Mohd Shafie Rosli

School of Education,
81310 Universiti Teknologi Malaysia
shafierosli@utm.my

Abstract

The Covid-19 pandemic has changed traditional teaching and learning worldwide to an online platform that includes lab activities and event mobility programs. Thus, it is vital to investigate the online learners' performance during the new norms period. Both public and private university students in Malaysia comprising 403 respondents took part in this study. The frequencies and percentages were used to analyze the data. The findings indicated that the students' performance in online learning was at a low level (mean = 2.96) which included student's technical competencies (mean = 2.94), social competencies with the instructor (mean = 2.98), social competencies with classmates (mean = 2.97), and communication competencies (mean = 2.96). Overall, the findings pointed out that the student's performance during the virtual space was at an average level.

Keywords

Student experience, online learning, student enhancement, Malaysian university, Covid-19

1. Introduction

Towards the end of 2019, the Covid-19 pandemic outbreak threatened most of the countries in the world. The epidemic had a major implication in many sectors including the sector of education. Since the outbreak of the pandemic, most of the teaching and learning activities have been replaced by online method completely. Apparently, the online method has been seen as a right platform to continue the objective of 'The National Agenda of Education'. Despite any situation that happened, the National Agenda of Education has to keep functioning to ensure that the goal and purpose of the education system are achieved and to equip our students holistically to succeed in the 21st century, with all of the opportunities and challenges that this new era presents (Borrego et al., 2012).

The spread of Covid-19 pandemic makes the medium of teaching and learning to change at school level and even in the higher educational system. The Statement of the Ministry of Higher Education number 1/2020 clarifies that the center of higher education needs to make modifications to its teaching methods and existing learning to fully online methods including teaching activities and practical learning (MQA, 2020). According to Malaysia Qualification Accreditation (MQA), the Higher Education Provider (HEPs) can make modifications to components of teaching and learning completely and it should be subject to the willingness of the students, availability of teaching staff, resources, and infrastructure in the institution of higher education (Dodge and Kendall, 2004).

1.1 Problem Statement

The online learning experience has opened up space for educational technology and increasing the demand for Internet services (Medina, 2018). Although various considerations have been taken by the HEP in improving this effort however, this learning experience must be observed in the context with more focus so that the outcomes of this learning can be fully assessed. Online learning has implications on individuals' experience with regard to urban or rural areas. In this situation both students and teachers (or lecturers) face the same experience. There are many factors contributing to the experiences during online teaching and learning activities such as the readiness of students, the accessibility of the internet, affordability to get gadget such as laptop or smartphone etc.

Karasmanaki and Tsantopoulos (2021) found that the reality during on-line teaching and learning activities include that there are students who need to help families in their daily affairs, there is residential environment which is not conducive, there are lack of communication technologies such as ownership of smartphones and accessories devices with less technology that do not support learning. Supporting families' business affect students' concentration during their lecture hours. At the same time, most of the students actually spend more time doing their home activities than academic activities.

From another point of view, Agormedah et al. (2020) found that some parents were concerned about the limitations of the online teaching and learning activities such as poor internet accessibility and unable to have own laptop. According to Dhawan (2020), online learning is largely influenced by technology, student attitudes, motivation, and flexible time. Meanwhile, Ministry of Human Resources (2020) in their report has identified several challenges in implementing online teaching and learning and among them include access to Internet facilities, lack of computer or mobile phone facilities, unconducive learning atmosphere as well as the effectiveness of self-control based student learning.

The problem of online learning needs to be observed from various angles such as no interaction between student and the lecturer (or teachers), low motivation to involve in discussion during class, no morale support from families and lecturers (or teachers) as well. Besides the various website references provided, students are confused and bored to find the reference (Pongkijvorasin and Talerngsri Teerasuwannajak, 2019). According to Carver (2014), the effectiveness of an online course is not just about changing the material or traditional teaching into an electronic format, but it involves coordinating factors and organizing student characteristics, preparation by instructors as well as construction of teaching strategies. The readiness of lecturer or teacher handling online class (passive or interactive) also gives an experience to students. Therefore, this study attempts to investigate the online learners' performance during these new norms using four factors which are technical competencies, social competencies with instructor, social competencies with classmates, and communication competencies. The factors are defined based on the conceptual model's description as shown in Figure 1.

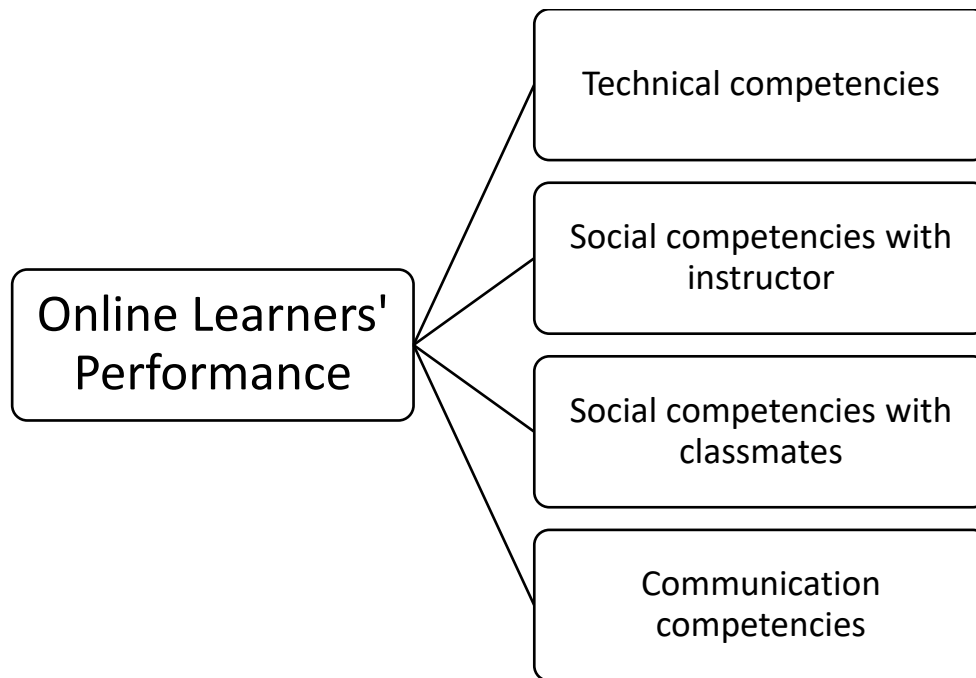


Figure 1. Research Framework

2. Literature Review

Online learning is defined as an approach to the teaching and learning process and has also been categorized as the use of information technology to improve the quality of education. According to Santoso et al. (2014), e-learning is a transformation of conventional approach of teaching and learning into new norms in a digital period. The implementation of online learning during the outbreaks of Covid-19 pandemic looks like it is in line with Industrial Revolution 4.0 phenomena where most of the routine in life had changed to technology based approach.

Several studies have been conducted to review the challenges faced by teachers while implementing online learning during the Covid-19 pandemic. The main challenge faced by the lecturers or instructors is related to their skills in using the ICT tools which still need to improved. Agreeing with this, (Chung et al. (2020) found in their study that 29 percent of teachers are still less skilled in implementing online learning due to the issue of teachers' competence in handling learning using internet-based technology. According to (Isa and Latiff (2018), student perception on internet accesibility and their readiness to use it were at average level as well.

Anderson (2004) defined e-learning as networked learning. Other competencies that have been examined include communication competencies, social competencies and self-efficacy. According to Ally and Stauffer (2008) internet is needed to access teaching materials and communicate with students during the online learning process. The interaction that arises between student-lecturer-student is another prove that the academic session been running succesfully. However, a study conducted by Saleh et al. (2020) found that the satisfaction of student interaction with lecturers was at satisfactory level meanwhile, the level of interaction among classmates was not at satisfactory level.

Several academics argue that the computer-mediated communities are incapable of fostering substantive and genuine personal interactions, as well as true social bonds. According to a study, online groups constitute a new type of social occupation (Kavada, 2020). Mayer et al. (2001) claims that the theory of e-learning describes the cognitive science principles of useful multimedia-based learning with educational training tools. By using e-learning, the students can benefit from enhanced shared learning approaches and the interactive learning process (Perez-Prado and Thirunarayanan, 2002). Furthermore, Perez-Prado and Thirunarayanan (2002) identified four key characteristics of

how technology might help students learn more effectively in the classroom. Active participation, participation in groups, regular interaction and feedback, and finally, linkages to real-world perspectives are the four keys.

One more importance point that has been discovered by researcher is the communication competencies. Online teaching and learning environments are unconstrained and dynamic, where the credit goes to the growing information and communication technology, interaction, and real-time information. Online learning has been shown to assist students enhance their communication abilities in the literature (Cerezo, 2004; Hill et al., 2015; L'Ecuyer et al., 2015). This is due to the distant education where the synchronous applications are very useful for brainstorming and group work (Racheva, 2018). Students can engage in a variety of individual or group activities with the best feeling or more convenient than face to face communication. The review also suggests (by Foronda et al., 2016) that online platform could be used as a strategic direction for interprofessional communication training in the future.

3. Methods

This study was conducted in Malaysian Universities which consisted of public and private universities. It involved 403 respondents from first to final year study. Respondents were selected randomly through the distribution of questionnaire via Google form. The questionnaire had five sections where four sections were used to measure students' technical competencies, Social Competencies with instructor, Social Competencies with classmates, and Communication Competencies. In demography section the items involved were regarding the age, gender, year of study, and types of university. The data were analyzed using SPSS 20.0. The distribution of frequencies and percentages were analyzed using descriptive statistics. Mean score findings were interpreted using descriptive statistical findings interpretation as proposed by Jamil (2002) which is highlighted Table 1. Meanwhile, the values of Alpha Cronbach are presented for each construct as shown in Table 2

Table 1. Mean Score Interpretation

Mean Score	Interpretation
1.00 – 2.33	Low
2.34 – 3.66	Average
3.67 – 5.00	High

Table 2. Reliability Statistics

	Alpha Cronbach's	No. Of Item
Factor 1	.893	6
Factor 2	.857	5
Factor 3	.882	5
Factor 4	.861	4
Overall	.885	26

4. Data Collection

Table 3 shows the 403 students' responses from both Malaysian public and private Universities who were selected randomly to participate in this study. A total of 256 out of 403 respondents were females and the rest were males (n = 147). Based on the analysis, majority of the respondents were between 20 – 25 years old (n=380) and most of them were first year students (n=264). Majority of the respondents were from public university and only 14 students were from private university in Malaysia.

Table 3. Respondents' Demographic Data

Item		Frequency	Percent
Gender	Male	147	36.5

	Female	256	63.5
Age	<19 years old	17	4.2
	20-25 years old	380	94.5
	26-30 years old	4	1.0
	>31 years old	2	0.4
Years of study	First	264	61
	Second	86	21.3
	Third	52	12.9
	Final	19	4.7
University	Public	389	96.6
	Private	14	3.4
	Total	403	100

5. Results and Discussion

Table 4 shows the analysis of respondents' performance using online platform during their academic activities such as while having class and tutorial. Based on analysis, the finding showed that student's performance during online academic activities was at average level with the mean value of 2.96 where it consisted of technical competencies (mean = 2.94), Social Competencies with instructor (mean = 2.98), Social Competencies with classmates (mean = 2.97) and Communication Competencies (mean = 2.96). This finding was in line with Ishak et al., (2020) and M. Kaviza (2020) which found that the readiness of student in online learning was at average level. It can be assumed that students were ready to attend their academic activities via online although the Higher Education Provider (HEP) did not fully conduct the e-learning classes such as virtual classrooms, lecture conferencing, and problem based learning (PBL). According to (Nugraha et al., 2020), online learning has advantages such as being able to minimize time and effort so it will help the students carry out any other activities after the classess like helping their parents, doing their part time jobs or proceeding with their hobbies. However, Salim and Isa (2021) found out that even though the students were ready for online learning, they still preferred conventional classess using face to face method because they still felt lack of confidence.

Table 4. Mean Score of Respondents' Performace Using Online Platform during Academic Activities

No.	Item	Mean	Standard Deviation
Factor 1 : Technical Competencies			
1.	I have a sense of self confidence in using computer technologies for specific tasks.	3.01	.654
2.	I am proficient in using a wide variety of computer technologies	2.86	.660
3.	I feel comfortable using computers	3.04	.694
4.	I can explain the benefits of using computer technologies in learning.	3.00	.603
5.	I am competent at integrating computer technologies into my learning activities.	2.87	.679
6.	I am motivated to get more involved in learning activities when using computer technologies	2.88	.759
		2.94	.546
Factor 2: Social Competencies with instructor			
7.	I ask necessary questions to my instructor.	2.95	.633
8.	I initiate discussions with the instructor.	2.80	.663
9.	I seek help from instructor when needed.	3.06	.626
10.	I inform the instructor timely when unexpected situations arise.	3.02	.650

11.	I express my opinions to instructor respectfully.	3.07	.641
		2.98	.512
Factor 3 : Social Competencies with classmates			
12.	I develop friendship with my classmates.	3.00	.736
13.	I pay attention to other students' social actions	2.83	.763
14.	I apply different social interaction skills depending on situations.	3.01	.673
15.	I initiate social interaction with classmates.	2.92	.704
16.	I interact socially with other students with respect.	3.11	.660
		2.97	.584
Factor 4: Communication Competencies			
17.	I am comfortable expressing my opinion in writing to others.	2.86	.746
18.	I am comfortable responding to other people's ideas.	3.06	.647
19.	I am able to express my opinion in writing so that others understand what I mean.	2.96	.713
20.	I give constructive and proactive feedback to others even when I disagree.	2.96	.670
		2.96	.584
Overall		2.96	.473

Table 5 shows that the level of students' technical competency was at average level (mean = 2.94) while having online academic activities. Besides, most of the respondents stated that they felt comfortable using computers during the session (item 3, mean = 3.04) and had a sense of self confidence in using computer technologies for specific tasks (item 1, mean = 3.01). Apart from that, the mean score for the respondents who could explain the benefits of using computer technologies in learning also showed an average score at 3.00 (item 4). This finding showed that respondents could easily join the academic activities session because they had at least the basic technical knowledge in using computer or laptop and are familiar with internet application. Technical knowledge became one of the most important skill that students needed to have because Zalat et al. (2021) in their study found that the technological skills of giving the online courses increased the educational value of the user's experience. In addition, our routine nowadays is influenced by lots of technology developments such as live streaming, virtual and augmented reality, online banking, and many more (Ismail, 2020).

Table 5. Students' Technical Competencies

No.	Item	Mean	Standard Deviation
Factor 1 : Technical Competencies			
1.	I have a sense of self confidence in using computer technologies for specific tasks.	3.01	.654
2.	I am proficient in using a wide variety of computer technologies	2.86	.660
3.	I feel comfortable using computers	3.04	.694
4.	I can explain the benefits of using computer technologies in learning.	3.00	.603
5.	I am competent at integrating computer technologies into my learning activities.	2.87	.679
6.	I am motivated to get more involved in learning activities when using computer technologies	2.88	.759
Total		2.94	.546

As shown in Table 6, the level of respondents' social competency was at average with the mean score of 2.98. This findings was proven when the data showed that the respondents would express their opinions to instructor respectfully

(item 11, mean = 3.07) and they asked for help from the instructor when they needed during their academic activities session (item 9, mean = 3.06). To show their respect and politeness, the respondents would inform the instructor timely when unexpected situations arose during the academic activities session (item 10, mean = 3.02). This finding highlighted that the respondents had good manners in social interaction even when the teaching and learning session was conducted virtually. Based on one of the study conducted by Dewanti et al. (2016), there was a relationship between the social skills and the use of gadget as smartphone on the students' achievement (from SMA Negeri 9 Malang). In terms of social competencies, Merrell and Gimpel (2014) stated that the ability of the students' social skills could be seen from the good relationships with peers in the behavior of offering help to others.

Table 6. Students' Social Competencies with instructor

No.	Item		
Factor 1 : Social Competencies with instructor		Mean	Standard Deviation
7.	I ask necessary questions to my instructor.	2.95	.633
8.	I initiate discussions with the instructor.	2.80	.663
9.	I seek help from instructor when needed.	3.06	.626
10.	I inform the instructor timely when unexpected situations arise.	3.02	.650
11.	I express my opinions to instructor respectfully.	3.07	.641
	Total	2.98	.512

The findings showed that respondents' social competency with classmates was at average level with mean score value of 2.97. This was proven when respondents said that they interacted socially with other students with respect that indicated a high mean score of 3.11 (item 16). To ensure their academic activities proceeded smoothly, the respondents stated that they tried the best way to develop friendship with their classmates as shown on item 12 (mean = 3.00), therefore, they agreed that they had to apply different social interaction skills depending on situations (item 14, mean = 3.01). Two-way communication between the lecturers and students was important to ensure that the content of the subject was delivered effectively. According to Mathieson (2012), communication should also be constructive as it builds upon ideas and work from others, as well as assists others in learning. The details of the mean score for students' social competencies with classmate is shown in Table 7.

Table 7. Students' Social Competencies with Classmate

No.	Item		
Factor 1 : Social Competencies with Classmate		Mean	Standart Deviation
12.	I develop friendship with my classmates.	3.00	.736
13.	I pay attention to other students' social actions	2.83	.763
14.	I apply different social interaction skills depending on situations.	3.01	.673
15.	I initiate social interaction with classmates.	2.92	.704
16.	I interact socially with other students with respect.	3.11	.660
	Total	2.97	.584

Table 8 presents the overall data of the respondents' communication competency during their academic activities session via online which was at average level with the mean value of 2.96. This is proven with the items which stated that having good communication competencies when they are able to express opinion in writing so that others understand the meaning (item 19) and giving constructive and proactive feedback to others even when one disagrees (item 20) and has an average score mean of 2.96. In line with that, the respondents agreed that they felt comfortable responding to other people's ideas (item 17, mean = 3.06) even if sometimes they did not know each other or never

met before. Indirectly this data showed that students were matured enough to interact with others when they could communicate effectively with anyone they met via online. In line with this, Abuhassna et al. (2020) and Abuhassna and Yahaya (2018) concluded that the feeling of cooperation that learners' shared with their fellow students affected their reaction concerning their collaboration with their peers.

Table 8. Communication Competencies

No.	Item		
Factor 1 : Communication Competencies		Mean	Standart Deviation
17.	I am comfortable expressing my opinion in writing to others.	2.86	.746
18.	I am comfortable responding to other people's ideas.	3.06	.647
19.	I am able to express my opinion in writing so that others understand what I mean.	2.96	.713
20.	I give constructive and proactive feedback to others even when I disagree.	2.96	.670
Total		2.96	.584

6. Conclusion

The study revealed that the performance of student competencies during online academic activities was at average level. Considering the fact that nowadays online learning has been a main medium in teaching and learning therefore, the readiness among lecturers or instructors and students need to be paid more attention. For the sake to boost student motivation and encourage them to take part actively during academic session, the diverse platform of learning need to be implemented. More hands-on projects can be divided among students so that they can explore by themselves effectively. According to the findings, technical competencies, social competencies with instructors, social competencies with classmates, and communication competencies at the higher education should be improved. University educators should hold seminars and employ a variety of instruments, as well as analyze the didactical principles of university education, in order to assist students in enhancing their skills. However, it was the role of the student to take an active role in the learning process by sharing ideas, reacting to colleagues, and expressing their thoughts and opinions through online learning.

References

- Abuhassna, H., Al-Rahmi, W.M., Yahya, N., Zakaria, M.A.Z.M., Kosnin, A.B.M., Darwish, M., Development of a new model on utilizing online learning platforms to improve students' academic achievements and satisfaction. *Int. J. Educ. Technol. High. Educ.* 17, 1–23. 2020.
- Abuhassna, H., Yahaya, N., Students' utilization of distance learning through an interventional online module based on Moore transactional distance theory. *Eurasia J. Math. Sci. Technol. Educ.* 14, 3043–3052, 2018.
- Agormedah, E.K., Henaku, E.A., Ayite, D.M.K., Ansah, E.A., Online learning in higher education during COVID-19 pandemic: A case of Ghana. *J. Educ. Technol. Online Learn.* 3, 183–210, 2020.
- Ally, M., Stauffer, K., Enhancing mobile learning delivery through exploration of the learner experience, in: *Fifth IEEE International Conference on Wireless, Mobile, and Ubiquitous Technology in Education (WMUTE 2008)*. IEEE, pp. 128–132, 2008.
- Anderson, T., Towards a theory of online learning. *Theory Pract. online Learn.* 2, 109–119, 2004.
- Borrego, M., Froyd, J.E., Hall, T.S., Ministry of Education Malaysia (2012) "Malaysia Education Blueprint 2013-2025," CEE B. Ser. 68, 2012.
- Carver, D.L., Analysis of student perceptions of the psychosocial learning environment in online and face-to-face career and technical education courses. Old Dominion University, 2014.
- Cerezo, N., Problem-based learning in the middle school: A research case study of the perceptions of at-risk females. *RMLE Online* 27, 1–13, 2004.
- Chung, E., Subramaniam, G., Dass, L.C., Online Learning Readiness among University Students in Malaysia amidst COVID-19. *Asian J. Univ. Educ.* 16, 46–58, 2020.
- Dewanti, T.C., Widada, W., Triyono, T., Hubungan antara keterampilan sosial dan penggunaan gadget smartphone

- terhadap prestasi belajar siswa SMA Negeri 9 Malang. *J. Kaji. Bimbing. dan konseling* 1, 126–131, 2016.
- Dhawan, S., Online learning: A panacea in the time of COVID-19 crisis. *J. Educ. Technol. Syst.* 49, 5–22, 2020.
- Dodge, L., Kendall, M.E., Learning communities. *Coll. Teach.* 52, 150–155, 2004.
- Foronda, C., MacWilliams, B., McArthur, E., Interprofessional communication in healthcare: An integrative review. *Nurse Educ. Pract.* 19, 36–40, 2016.
- Hill, M., Sharma, M.D., Johnston, H., How online learning modules can improve the representational fluency and conceptual understanding of university physics students. *Eur. J. Phys.* 36, 45019, 2015.
- Isa, K., Latiff, A.A., Internet Browsing Trends among Malaysians during Movement Control Order (MCO) Period. *Int. J. Emerg. Technol. Eng. Res.* 8, 2018.
- Ismail, M.N., 2020. Cabaran kepimpinan dalam pengurusan pembelajaran digital. *J. Refleksi. Kepemimp.*
- Karasmanaki, E., Tsantopoulos, G., Impacts of social distancing during COVID-19 pandemic on the daily life of forestry students. *Child. Youth Serv. Rev.* 120, 105781, 2021.
- Kavada, A., Creating the collective: social media, the Occupy Movement and its constitution as a collective actor, in: *Protest Technologies and Media Revolutions*. Emerald Publishing Limited, 2020.
- L’Ecuyer, K.M., Pole, D., Leander, S.A., The use of PBL in an interprofessional education course for health care professional students. *Interdiscip. J. Probl. Learn.* 9, 6, 2015.
- Mathieson, K., Exploring student perceptions of audiovisual feedback via screencasting in online courses. *Am. J. Distance Educ.* 26, 143–156, 2012.
- Mayer, J.D., Salovey, P., Caruso, D.R., Sitarenios, G., Emotional intelligence as a standard intelligence, 2001.
- Medina, L.C., 2018. Blended learning: Deficits and prospects in higher education. *Australas. J. Educ. Technol.* 34.
- Merrell, K.W., Gimpel, G., Social skills of children and adolescents: Conceptualization, assessment, treatment. Psychology Press, 2014.
- Ministry of Human Resources, National Education Policy 2020.
- MQA, Higher Education Provider [WWW Document]. MQA. URL <https://www.mqa.gov.my/pv4/bm/index.cfm>, 2020.
- Nugraha, R.V., Ridwansyah, H., Ghozali, M., Khairani, A.F., Atik, N., Traditional herbal medicine candidates as complementary treatments for COVID-19: a review of their mechanisms, pros and cons. *Evidence-Based Complement. Altern. Med.* 2020.
- Perez-Prado, A., Thirunarayanan, M.O., A qualitative comparison of online and classroom-based sections of a course: Exploring student perspectives. *EMI. Educ. Media Int.* 39, 195–202, 2002.
- Pongkijvorasin, S., Talerngsri Teerasuwannajak, K., A study of farmer’s decision and incentive scheme to reduce highland maize farming in Thailand. *Int. J. Agric. Sustain.* 17, 257–270, 2019.
- Racheva, V., Social aspects of synchronous virtual learning environments, in: *AIP Conference Proceedings*. AIP Publishing LLC, p. 20032, 2018.
- Saleh, N.S., Rosli, M.S., Bakar, T.A., Ali, A.M., Isa, K., Exploring Students Satisfaction Towards Online Learning In The Midst Of Covid-19. *Innov. Teach. Learn. J.* 12, 2020.
- Salim, S.A., Isa, N.A.F.M., The Relationship between Culture and E-Learning Adoption among UTHM Students. *Res. Manag. Technol. Bus.* 2, 176–188, 2021.
- Santoso, H.B., Isal, R.Y.K., Basaruddin, T., Sadita, L., Schrepp, M., in-progress: User experience evaluation of Student Centered E-Learning Environment for computer science program, in: *2014 3rd International Conference on User Science and Engineering (i-USER)*. IEEE, pp. 52–55, 2014.
- Zalat, M.M., Hamed, M.S., Bolbol, S.A., The experiences, challenges, and acceptance of e-learning as a tool for teaching during the COVID-19 pandemic among university medical staff. *PLoS One* 16, e0248758, 2021.

Biography / Biographies

Khairunesa Isa, PhD, is an Associate Professor in the Center for General Studies and Co-curricular at Universiti Tun Hussein Onn Malaysia. She received his Ph.D. in Human Resource and Development from the University Teknologi Malaysia (Skudai, Johor) in 2012. From 2013 to 2021 she served as academia involved in teaching, research, consultation and publication. Her research interests consist of Human Resource and Development, Social Transformation and Development, Leadership and Organization, University-Community Engagement.

Sarala Thulasi Palpanadan is a writer, researcher, English language lecturer, and teacher trainer. She earned her PhD degree in TESL from Universiti Teknologi Malaysia. She has conducted many trainings and programmes for teachers in Malaysia and language programmes to help students from schools, colleges and universities to improve their English proficiency. She specializes in TESL, mixed method research, writing instruction, and teacher training.

She has designed courses and manuals for teacher professional development and language improvement for both pre-service and in-service teacher trainings. Currently, she teaches English and research at the Center for Studies, Universiti Tun Hussein Onn Malaysia. She has published books and articles in reputed nation and international indexed and refereed journals.

Nurliyana Md Rosni is currently a research assistance in the Center for General Studies and Co-curricular at Universiti Tun Hussein Onn Malaysia. She graduated with Master of Electrical Engineering (M.Eng) in 2020 at the Universiti Tun Hussein Onn Malaysia. Previously, she was a research assistance in Microelectronics and Nanotechnology-Shamsuddin Research Centre (MiNT-SRC).

Nor Shela Saleh is a senior lecturer at Malaysia's Universiti Tun Hussein Onn. She has a Bachelor of Science, a Master of Science (Human Resource Development), and a Doctor of Philosophy (Management). Throughout her tenure as a university academia, she was involved in writing, publishing, and research. Her specialties include social sciences, general studies, management, and human resources.

Mohd Shafie Rosli is a senior lecturer at Malaysia's Universiti Teknologi. He has a Bachelor of Science degree in Computer Science and Education (Chemistry). He is also pursuing a Doctorate Degree in Educational Technology. Throughout his tenure as a university academia, he was involved in writing, publishing, consulting, research, and supervision. Among his specialties are educational technology, chemistry education, and information and communication technology.