

Teacher Trainee Student Challenges while Attending Online Synchronous Learning during Pandemic Covid-19

¹Dahlia Janan ²Zulkifli Osman ³Alizah Lambri ⁴Razali Ayob ⁵Punaji Setyosari

¹²³⁴Universiti Pendidikan Sultan Idris, Malaysia

⁵Universitas Negeri Malang, Indonesia

Corresponding Author: dahlia@fbk.upsi.edu.my

ABSTRACT:

This study examined the challenges of an online synchronous learning environment towards teacher trainee students. A full online synchronous learning environment approach implemented due to pandemic Covid-19. Nineteen students participated in the study. Qualitative interview data collected about the teacher trainee student challenges while going through the online synchronous learning environment. The data analyzed via thematic content analysis. The findings show that the challenges faced by the teacher trainee student were (a) internet access, (b) technology problems, (c) computer literacy, (d) course content coverage, and (e) personal problems. Implications of the findings and future research recommendations are also presented.

Keywords:

Teacher Trainee Student. Challenges Using Online Learning, Online Synchronous Learning Environment. Covid-19.

Article Received: 18 October 2020, Revised: 3 November 2020, Accepted: 24 December 2020

Introduction

There is no denying that the coronavirus epidemic causes a disease known as COVID-19 has changed lives dramatically around the world. The Covid-19 pandemic has posed a major challenge to higher education communities around the world. Certain challenges are urgent and unexpected request that face-to-face university courses previously taught online. These changes undoubtedly created challenges for faculty members who have to teach in front of computer screens, and their students will have to stay at home and take courses over the internet. These new norms of online synchronous learning environment one way or another bring new sorts of challenges to the lectures and students. According to UNESCO (2020), 43% (706 million) of learners have no internet at home. Based on UNESCO's data this study, therefore, focuses on challenges faced by teacher trainee students in Malaysia while attending online synchronous learning.

Background

The Malaysian government has launched *Pelan Pembangunan Pendidikan Malaysia 2015-2025 (Pendidikan Tinggi)* / Malaysia Education

Development Plan (Higher Education) – PPPM (PT) with the aims to transform their education system to face the new global challenges. PPPM (PT) outlines 10 Jumps to achieve system aspirations and students' aspirations. This surge will encourage excellence persistent in the higher education system. The ninth jump of PPPM (PT) is known as Global Level Online Learning (GOL). GOL is an important catalyst for Malaysia to achieve its goals in terms of access, quality, and higher education efficiency. Apart from GOL, PPPM (PT) also mentioned the rapid development of Massive Open Online Courses in Malaysia. As the only education university in Malaysia, Universiti Pendidikan Sultan Idris (UPSI) has responded to the government's call by offering a few online courses. However, compared to face-to-face courses offered by UPSI, the proportion of online courses is still low. The outbreak of COVID-19 was unexpected and it forced UPSI to launch an online synchronous and asynchronous learning environment. Teaching and learning via synchronous and asynchronous learning environment conducted at universities in Indonesia such as Universitas Negeri Malang. Data on comparative study is intended and publish in future paper.

Context of the study

This paper will focus on the challenges of teachers trainee students attending a pedagogy course called Teaching, Technology, and Assessment via synchronous learning environment. This course aims to prepare the students with skills in lesson preparation and teaching through the presentation of micro and macro-teaching. The preparation of the micro and macro teaching sessions will allow the students to master major aspects of teaching processes such as stating the learning outcomes and using appropriate assessment tools and methods to evaluate learning outcomes. To prepare the micro and macro and macro-teaching session the students have to teach in a mock and a real environment. The mock environment is where the teachers' trainee students have to do a teaching simulation in the university micro-teaching laboratory and their friends become the students. Next, the teachers' trainee students also have to teach in the real school environment. They will have to request permission to teach in the school. This six-credit course also incorporates a customized learning model that combined face-to-face teaching and blended learning to improve the quality of teaching and learning by increasing the level of student connectivity and involvement. The blended learning for this course involved student uploaded micro- and macro-teaching recorded video so that face-to-face discussion between the lecturer and teachers trainee student can be done in the lecture room. This model of teaching is recognized as blended synchronous sessions, which allow online and on-campus students to participate in activities together in real-time (Zydnya, Warner & Angelone, 2020; Bower, Lee, & Dalgarno, 2017; Maake & Tranos, 2019; Auriacombe & Vyas-Doorgapersad, 2019; Athiyaman & Magapa, 2019).

Focus of the Study

The sudden emergence of COVID-19 disrupts the existing teaching and learning environment. Within a few weeks, university management has

to transfer all available courses online. These sudden changes involve redesign of the current curriculum from face-to-face to online, changing the teaching and learning methods to an online synchronous and asynchronous learning environment and redesign of the assessment method from exam to a special project. These alterations generate challenges to the whole university system especially for numbers of the lecturer who are lacking online teaching experience and have a short period to master the knowledge preparing teaching materials such as audio and video contents. On one side, students also face challenges during an online synchronous and asynchronous learning environment (Basir & Abdul Halim, 2020). Hence, this paper will focus on the challenges faced by teachers trainee student attended a pedagogy course called *Teaching, Technology, and Assessment* via synchronous learning environment. The information regarding these students' impediment will help the university to structure effective instructional strategies to ensure the effectiveness of online education.

Learning challenges

Based on the interview of nineteen teacher trainee students, the current paper present four major challenges. The challenges are widespread form the internet access, technology problems, computer literacy, content understanding, time management, family disruption technical skill, technical problem, personal problem, self-esteem face by the students.

Internet Access

The majority of the teacher trainee student mentioned their major challenge is with internet access. The main problem with internet access was the connection is slow and they are unable to follow the course successfully. 100% of the participant in this study stay at their hometown during the pandemic of Covid-19. Most of these participants stay in the rural area where the internet connection was very slow. Apart from that, internet access costs a lot of money to the

participants. Some of them said their parents pay a fixed monthly rate for their internet connection, while others mentioned they have to pay on their own charges for the time they spend online. Due to the financial delinquent, these participants have limited by the amount of internet access they can afford, hence their participation in online programs becomes a problem when attendance to the online course made compulsory. These participants feel their failure in the course not because of their academic ability but mainly cause of internet access and financial situation.

Technology Problems

The technology problem refers to the types of computer own by the participants. 100% of the participants own a computer, nevertheless, most of them own an old computer and at times, they have a problem when the computer that they own is not compatible with all the new software that they have to use in order to prepare their micro and macro-teaching videos. According to the participants, they would not be facing this problem if they were on campus as they can go to the university computer lab or borrow their friend's computer. Apart from that during the pandemic almost all computer shops are close and very difficult for them to get their computer repaired. This has created tremendous pressure for the participants.

Computer Literacy

Lack of computer literacy is a major issue among the participants. Although they have the knowledge to operate basic programs such as Microsoft Word and PowerPoint, however, they are not able to handle programs to create video and video editing software in order to prepare their micro and macro-teaching videos. According to the participants, they also have difficulties editing photos and audio to create an online teaching aid while preparing their micro and macro-teaching videos. Another major problem to the participants was to get used and master the usage of online synchronous video conferencing

software such as Microsoft Teams, Google Meet, Cisco Webex, and Zoom, which requires different sorts of skills. The problem getting tight when different lecturers used different video conferencing software and they end up have to understand how to use all the video conferencing software.

Course Content Coverage

The participants feel the course content coverage is less while getting lectures through online synchronous video conferencing classes. While the lecturer trying to consider the human limitation or time span that they are able to focus during the online synchronous video conferencing class, on one side the participants feel the course content was not fully covered within the short one to one and half hours per class) online synchronous video conferencing class. Apart from considering the human limitation factor, the lecturer also thinking about the amount of money the students have to pay to buy credit for them to spend online. However, according to participants although the lecturer has prepared extra notes via online platforms such as *Padlet*, they still feel face-to-face lectures cannot be replaced. They also mentioned they missed the after face-to-face lecture "chitchat" with the lecturer that most of the time add up their understanding of the lecture content.

Personal Problems

Personal problems also hinder the participants to fully participate during online synchronous video conferencing class. Since 100% of the participants lived with their parents during the pandemic Covid-19, most of their personal problems arise within the household problems. Almost all of the participants mentioned that they were juggling with time management. Although all of the participants were very committed students they still find difficulties with their time management. The participants mentioned at the time they feel pressured when the time to do the household work clashes with their online synchronous video

conferencing class. According to them, it is a problem to make their parents understand that they have to be in front of the computer when their parents need help. Apart from that, some of the participants came from low social income group and they only have a computer in the house. Since, pandemic Covid-19 almost all levels of schooling including primary, secondary and tertiary level using a computer either synchronous or asynchronous to do or hand in their work. Hence, the participants mentioned that they have to share the computer with their siblings. They also mentioned tension would build up in the house when a few of their siblings have attended online synchronous class at the same time.

Discussions

The findings of this study show five major challenges including (a) internet access, (b) technology problems, (c) computer literacy, (d) course content coverage, and (e) personal problems. Although, these five challenges almost the same as other studies but the factors that contribute to the challenges are different.

The current research findings shows internet access is the major challenges for the participants during the online synchronous learning through the systematic literature review, this finding matched with other research findings such as Allam et al (2020); Basilaia et al (2020); Demuyakor (2020); Dhawan (2020); Gilbert (2015); Musingafi1 et al (2015); Rapanta et al (2020); Singh & Thurman (2019); Swan (2017); Woodcock, Sisco, & Eady (2015).

Current research findings show the problem of internet access was caused by the location where the participants live which mostly in the rural area. This finding also supported by Dhawan (2020) in her research found that small cities in India also facing internet access. Participants in current research have mentioned they have a financial problem to buy internet access. During the pandemic Covid-19, the Malaysian government has imposed Movement Control

Order, the participants are unable to use the public internet service during this time. This finding also found by Rapanta et al (2020), mentioned due to the outbreak, students cannot go to local libraries or other public places to use the free Internet service.

The current research finding also shows technology problem affect the participants to participate successfully in the online synchronous learning. Nevertheless, the technology problem definition in the current research is very narrow to the problem the participants facing their computer capability. Whereas other research such as Bao (2020); Demuyakor (2020); Dhawan (2020); Rapanta et al (2020); Swan (2017) and Woodcock, Sisco, & Eady (2015) have found more crucial technology problem including bandwidth or the strong internet connection, lack of support from educational technology teams and technology related to software usage.

The third research findings show the importance of computer literacy to enhance the effectiveness of the participants to participate in online synchronous learning. Computer literacy in the current study included the ability to use software for either composing a text or editing audio or video and using different hosts for participating in online synchronous learning. Allam et al (2020) mentioned the impotence of computer literacy, which related to the level where students able to work independently to complete the Online Distance Learning activities. Li, & Lee (2016) in their research found a significant positive relationship between computer literacy and online learning attitudes. Hence, it is crucial to support the student with computer literacy before online synchronous learning going to be implemented this is because they lack computer literacy can affect students achievements.

The fourth findings related to course content coverage. The participants of the current research feel they have less course content coverage during

online synchronous learning. This course content coverage also mentioned in Demuyakor (2020) and Dhawan (2020) research. Dhawan (2020) thinks online content is all-theoretical and does not let students practice. Demuyakor (2020) mentioned issues that are of great concern to students part-taking in the online is the effectiveness and credibility of course content for online learning. Course content coverage in the form of extra notes on the *Padlet* also has to consider whether it is suitable in the sense of readability level (Janan & Wray, 2014). This is because materials that shared with the student without an appropriate readability level might damage their interest to read the material (Wray & Janan, 2013a & 2013b). The findings that show the participants think the after face-to-face lecture discussion with the lecturer could be solved by implementing coaching teaching methods where the lecturer can implement various of a teaching position that will make the students feel the content coverage is full filled (Ariffin & Janan, 2017). One the hand another approach that can effectively covered the content delivering would be authentic approach (Osman et al (2016 & 2019). One more factor should be consider is type of assessments. Writing project is one of an effective way as assessment. Good rubric can help to assessment students work (Noor, Janan & Arshad, 2020).

The fifth challenge mentioned in the current research was not found in other research related to the online synchronous learning environment. Hence, the finding regarding personal problems would be new knowledge or has happened elsewhere but has not been a report in a research paper. The authors feel challenges related to personal problems are very important this is because the participant cannot function or participate successfully during online synchronous learning as their mind is under pressure.

Implications and further research

The researchers would like to draw implications, especially from the fifth finding as it is very

important to look into household problems before implementing an online synchronous learning environment. The government and universities should do further research on ways to educates parents or resource courses regarding online teaching and learning processes so that parents can understand and support their children.

Conclusion

This paper concludes with five challenges of the online synchronous learning environment through the analysis of interviews with nineteen teacher trainee students undertaking pedagogy courses. The first challenge is internet access, followed by technology problems. The third challenge is computer literacy, fourth is course content coverage and the fifth is personal problems. Although there is preparation for the students and lecturers to conduct an online synchronous learning environment, nevertheless it was seen not much of attention given to supporting parents to understand the online synchronous learning environment.

Reference

- [1] Allam, S. N. S., Hassan, M. S., Mohideen, R. S., Ramlan, A. F., & Kamal, R. M. (2020). Online Distance Learning Readiness During Covid-19 Outbreak Among Undergraduate Students. *International Journal of Academic Research in Business and Social Sciences*, 10(5), 642–657.
- [2] Ariffin, N. A., & Janan, D. (2017). Keberkesanan Kaedah Pengajaran Bersama Dalam Meningkatkan Pencapaian Penulisan Karangan Murid Tingkatan 4 /The Effectiveness of Coaching Teaching Methods in Improving Writing Achievement of Form 4 Students. *PENDETA: Journal of Malay Language, Education and Literature*, 8, 59 - 65. <https://doi.org/10.37134/pendeta.vol8.6.2017>
- [3] Athiyaman, A., & Magapa, T. (2019). Market Intelligence From The Internet: An

- Illustration Using The Biomass Heating Industry. *International Journal Of Economics And Finance Studies*, 11(1), 1-16.
- [4] Auriacombe, C. J., & Vyas-Doorgapersad, S. (2019). Critical considerations for the role of governments in the interface between good governance and sustainable development in developing countries.
- [5] Basilaia, G., Dgebuadze, M., Kantaria, M., & Chokhonelidze, G. (2020). Replacing the classic learning form at universities as an immediate response to the COVID-19 virus infection in Georgia. *International Journal for Research in Applied Science & Engineering Technology*, 8(III).
- [6] Basir, N., Ab Rahim, I. S., & Abdul Halim, M. Z. (2020). Analysis of sociological behaviour based on the theory of interactionism through data statistics of the Covid-19 case in Malaysia. *PENDETA: Journal of Malay Language, Education and Literature*, 11, 11-31. <https://ejournal.upsi.edu.my/index.php/PENDETA/article/view/3601>
- [7] Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Hum Behav & Emerg Tech*. 2020;2:113–115. <https://doi.org/10.1002/hbe2.191>
- [8] Bower, M., Lee, M. J. W., & Dalgarno, B. (2017). Collaborative learning across physical and virtual worlds: Factors supporting and constraining learners in a blended reality environment. *British Journal of Educational Technology*, 48(2), 407-430. <http://dx.doi.org/10.1111/bjet.12435>
- [9] Demuyakor, J. (2020). Coronavirus (COVID-19) and Online Learning in Higher Institutions of Education: A Survey of the Perceptions of Ghanaian International Students in China. *Online Journal of Communication and Media Technologies*, 10(3), e202018. <https://doi.org/10.29333/ojcm/8286>
- [10] Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems* 2020, Vol. 49(1) 5–22.
- [11] Gilbert, B. (2015). "Online Learning Revealing the Benefits and Challenges". *Education Masters*.
- [12] Janan, D., & Wray, D. (2014). Reassessing the accuracy and use of readability formulae. *Malaysian Journal of Learning and Instruction*, 11(1), 127-145.
- [13] Li, L., & Lee, L. (2016). Computer Literacy And Online Learning Attitude Toward Gsoe Students In Distance Education Programs. *Higher Education Studies*, 6(3), 147–156.
- [14] Musingafii, M., Mapuranga, B., Chiwanza, K., Zebron, S., (2015). Challenges for Open and Distance learning (ODL) Students: Experiences from Students of the Zimbabwe Open University. *Journal of Education and Practice*. ISSN 2222-288X. Vol.6, No.18, 2015.
- [15] Maake, B. M., & Tranos, Z. U. V. A. (2019). A Serendipitous Research Paper Recommender System. *International Journal Of Business And Management Studies*, 11(1), 39-53.
- [16] Noor, N., Janan, D., & Arshad, M. (2020). Validasi terhadap rubrik sebagai alat pengukuran penulisan ilmiah melalui penskoran sendiri pelajar terhadap tugas. *Malaysian Journal of Learning & Instruction*, 17(1), 185-189.
- [17] Osman, Z., Sarudin, A. Janan, D., and Omar, A. (2016). The Effectiveness of Authentic Approach in Improving on Students' Essay Writing. *PENDETA Journal of Malay Language, Education and Literature* Jilid 7, 142-155.
- [18] Osman, Z., Sarudin, A. Janan, D., and Omar, A. (2019) 'The teaching of Malay essay writing based on an authentic approach, *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*. Vol. 8, No. 7S2, pp. 175-181.

- [19] Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning Activity. *Postdigital Science and Education*. <https://doi.org/10.1007/s42438-020-00155-y>
- [20] Shahbudin, M. S. I. (2020). Social Media Users' Panic Against Covid Virus 19. *PENDETA: Journal of Malay Language, Education and Literature*, 11, 1-10. <https://ejournal.upsi.edu.my/index.php/PENDETA/article/view/3579>
- [21] Singh, V., & Thurman, A. (2019). How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018). *American Journal of Distance Education*, 33(4), 289–306.
- [22] Swan, J.S, (2017). The Challenges of Online Learning Supporting and Engaging the Isolated Learner. *Special Issue: Business Management*. 2017 Vol. 10 No. 1
- [23] UNESCO (2020). *Startling digital divides in distance learning emerge*. <https://en.unesco.org/news/startling-digital-divides-distance-learning-emerge>
- [24] Woodcock, S., Sisco, A. & Eady, M. (2015). The learning experience: Training teachers using online synchronous environments. *Journal of Educational Research and Practice*, 5 (1), 21-34.
- [25] Wray, D., & Janan, D. (2013a). Readability revisited? The implications of text complexity. *Curriculum Journal*, 24(4), 553-562.
- [26] Wray, D., & Janan, D. (2013b). Exploring the Readability of Assessment Tasks: The Influence of Text and Reader Factors. *Multidisciplinary Journal of Educational Research*, 3(1), 69-95. doi:10.4471/remie.2013.04.
- [27] Zydneya, J. M., Warner, Z., & Angelone, L. (2020). Learning through experience: Using design based research to redesign protocols for blended synchronous learning environments. *Computers and Education*. Volume 143, January 2020, 103678.