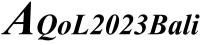
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Online English Courses to ODL: Instructors' perspectives and implications in higher education

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Abstract

The rapid shift from traditional face-to-face instruction to virtual platforms has fundamentally reshaped higher education, including English courses. Post-Covid-19, online learning has proven to be a sustainable, long-term option. This study examines the perspectives of 46 Malaysian higher-education instructors delivering online English courses. The study has three objectives: identifying challenges in online teaching, exploring instructors' perceptions of digital tools and resources, and investigating views on transitioning to a fully-fledged Open and Distance Learning (ODL) mode. Findings highlight technical issues as the primary concern accompanied by varied perspectives. Addressing these challenges and optimizing digital tools and resources can enhance ODL quality.

Keywords: Higher education instructors; English courses; Open and Distance Learning;

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1.0 Introduction

The rapid shift from traditional in-person teaching to virtual platforms has critically reassessed pedagogical methods, particularly in English courses. The post-pandemic landscape has demonstrated that online learning is no longer a temporary fix but a sustainable long-term option. Understanding instructors' experiences delivering online English courses is vital, especially in higher education.

Like many nations, Malaysia experienced this transition to online education during the pandemic. While challenging, it showcased the potential of online platforms for education and emphasized the need to explore the challenges and opportunities in online English courses in Malaysian higher education. This study focuses on the perspectives of instructors actively involved in delivering these courses.

This transition has exposed a significant research gap in understanding instructors' experiences and perspectives in online teaching, particularly in the context of Open and Distance Learning (ODL). ODL relies heavily on digital tools and resources, demanding coordination, cooperation, and a shift in perspective for successful adoption (Raju et al., 2021). Existing literature does not comprehensively explore how Malaysian higher-education instructors perceive challenges, assess digital tools' utility, and envision the

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transition of traditional online English courses to fully-fledged ODL incorporating various digital tools and resources. Furthermore, the Higher Education Ministry's introduction of hybrid and flexible learning systems in Malaysian universities underscores the need to gather instructors' insights into ODL environments. Henceforth, there is an imperative for thorough research focusing on ODL within Malaysian higher education, providing insights and support systems to embrace the transition by facilitating effective ODL implementation.

1.1 Research objectives

The research encompasses three primary aims: identifying challenges inherent to online teaching and learning, examining instructors' perspectives regarding digital tools and resources, and inquiring into instructors' attitudes surrounding the transition toward a comprehensive ODL paradigm.

2.0 Literature Review

2.1 Open and Distance Learning (ODL)

The concept of ODL is quite comprehensive. As Gosh et al. (2012) outlined, ODL encompasses two key aspects: Firstly, it involves teaching primarily conducted by instructors physically separated from the learners. Secondly, it aims to enhance accessibility and adaptability across multiple aspects, including access, curriculum design, and other structural elements. The long history of ODL in Malaysia can be traced back to the 1950s when Stamford College offered correspondence courses. The offering of ODL courses in Malaysian public universities started in the 90s when it was first initiated by Universiti Sains Malaysia (USM) in response to a directive from the Ministry of Education. It was then followed by other public universities, such as Universiti Teknologi MARA (UTM), Universiti Kebangsaan Malaysia (UKM), Universiti Utara Malaysia (UUM), as well as Malaysian private universities, such as Universiti Telekom (UNITELE), and Universiti Tun Abdul Razak (UNITAR) (Ali et al., 2006).

ODL has garnered significant interest in the present era due to the growing demand for tertiary education, particularly among working adults. As Malaysia aims to become a global higher education hub, ODL emerges as a crucial strategy to compete locally and internationally. ODL provides diverse lifelong learning and flexible education opportunities for a wide demographic, from recent school graduates to employed individuals.

2.2 Basic Operating System of ODL Institutions

ODL requires educators to effectively incorporate technology into teaching for student engagement. Language instructors face the dual challenge of technology and content delivery, creating obstacles in adapting to diverse language education needs. Educators from this era generally exhibit a positive stance towards ODL and the integration of technology into their teaching methods, as documented by Rezaei and Meshkatian (2017). Since the onset of COVID-19, numerous digital tools have become accessible to Malaysian higher-education instructors. They can select from various meeting platforms, including Google Meet, Zoom, WebEx, and Microsoft Teams. The primary platform is Learning Management Systems (LMS). While free educational resources are abundant, a meticulous transition from traditional classrooms to online learning is essential. To ensure practical course objectives and equitable content delivery, maintaining high-quality technology in the design of ODL English courses is paramount.

2.3 Previous studies on Open and Distance Learning (ODL)

Previous research in the field of ODL has predominantly focused on the challenges faced by students (Daud et al., 2022; Rajab, Gazal & Alkattan, 2020), and coping strategies (Li & Che, 2022) during the COVID-19 pandemic as well as their opinions on online teaching methods and its overall impact (Adnan & Anwar, 2020; Demuyakor, 2020). Recent studies in this domain have primarily centered on challenges faced by higher education institutions regarding online learning during Covid-19 (García-Morales, Garrido-Moreno & Martín-Rojas (2021), evaluating faculty preparedness for online teaching and examining their professional adaptability (Cutri & Mena, 2020), investigating effective instructional approaches for university instructors during unique circumstances (Bao, 2020), and seeking expert perspectives on pedagogical content knowledge related to online learning to support non-expert university educators (Rapanta et al., 2020). Malaysia is not an exception in this regard. Most conducted studies have primarily concentrated on the difficulties associated with implementing online learning, as noted by Nassr et al. (2020). In a closely aligned investigation within the Malaysian context, Bahar, Wahab, and Ahmad (2020) examined the challenges instructors face in Malaysian universities.

Moreover, Nair and Nesamany (2021) delved into the perceptions of 20 English language teachers concerning online teaching approaches during the pandemic. Their findings indicated a correlation between various categories of digital tools and the advantages derived from the utilization of these educational resources for both educators and students. Meanwhile, Halamy, Kamarudin and Mohsin (2021) highlighted the importance of the careful selection of technology tools by educators in ODL. Nevertheless, the existing body of literature in this domain is relatively sparse both in terms of quantity and regarding the potential transition of English courses into fully-fledged ODL mode after the post-pandemic. Consequently, the researchers were motivated to undertake a study exploring the challenges the higher education instructors confronted, their viewpoints concerning digital tools and resources specifically within the context of technology integration in ODL, and their attitudes on the full adoption of ODL modality for English courses.

3.0 Methodology

The present study can be viewed through the Technology Acceptance Model (TAM) lens. TAM by Davis (1989) can serve as a robust theoretical framework for examining and understanding the factors influencing the adoption and acceptance of digital tools and resources in the context of the study of online English courses within Malaysian higher education. Focusing on digital tools and resources is essential because they are integral to effective online language instruction and critical drivers in transitioning to a fully-fledged ODL mode. Instructors' perspectives on these tools and resources provide valuable insights into how higher education institutions can harness technology to create engaging and successful ODL language courses. By relating the study to TAM, we can explore how instructors' perceptions and experiences align with this well-established model widely used to explain and predict technology adoption in educational settings.

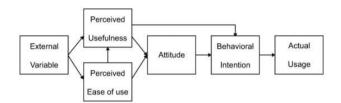


Fig. 1: Technology Acceptance Model (TAM) by Davis 1989 (Source: Adapted from Davis, 1989)

The study employed a mixed-methods approach, combining qualitative and quantitative data collection methods. The online questionnaire comprised demographic data and both close-ended and open-ended questions. The adapted questionnaire (Nair & Nesamany, 2021; Bahar, Wahab & Ahmad, 2020) primarily utilized a survey with a 4-point Likert scale (ranging from 1 for "Strongly disagree" to 4 for "Strongly agree") distributed online in Google Form via email to instructors from various Malaysian higher education institutions, totaling 46 participants. Instructors with qualifications in English language teaching were selected primarily due to the heightened expectations of stakeholders during the transition to a comprehensive ODL model for English language teaching.

Quantitative survey data were subject to descriptive analysis and presented in tabular format to illustrate the frequency distribution of choices and responses pertaining to instructors' experiences and perspectives on the transition to ODL. Concurrently, qualitative data derived from open-ended questions underwent thematic analysis to elucidate the factors influencing instructors' viewpoints regarding this transition (Braun & Clarke, 2006). The questionnaire provided a structured framework to assess instructors' perceptions and experiences with online English course delivery, including digital tools and resources. Additionally, an open-ended question inquired about instructors' qualitative insights into future trends in online English courses.

4.0 Findings

4.1 Challenges inherent to online teaching and learning

Table 1 presents the problems faced during online learning classes based on the instructors' self-observation. Most instructors experienced more than one problem in online teaching and learning. Technical difficulties and limited student interaction had the most problems faced by the instructors during online learning classes, with 80% and 78%, respectively. Limited student interaction and collaboration, and challenges in maintaining student motivation and discipline shared the same numbers (70%). 27% of the instructors experienced difficulty in assessing students' understanding and progress. Only 4% faced other problems, like internet connection and students' readiness.

Table 1. Problems faced by English language instructors during online learning classes	
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No	Challenges	Responses		
1	Technical difficulties	37 (80%)		
2	Lack of student engagement	36 (78%)		
3	Limited student interaction and collaboration	32 (70%)		
4	Difficulty in assessing students' understanding and progress	27 (59%)		
5	Challenges in maintaining student motivation and discipline	32 (70%)		
6	Others	2 (4%)		
(Source: Author, 2023)				

4.2 Instructors' perspectives regarding digital tools and resources

Instructors employed a wide range of digital tools and resources in their teaching practices. Specifically, over 75% of instructors used online collaboration tools, video conferencing platforms, and online educational resources and websites. Additionally, 65% of instructors utilized Learning Management Systems (LMS), and half incorporated social media platforms for educational purposes. Among the digital tools and resources used, instructors have expressed less preference for virtual whiteboards or interactive whiteboard software, language learning apps, and other resources, including but not limited to PowerPoint slides, YouTube videos, and Telegram.

Table 2. Digital tools an	d resources the instructors used	in online teaching and learning

No	Challenges	Responses
1	Learning Management System (LMS)	30 (65%)
2	Video conferencing platforms (e.g., Google Meet, Zoom, Microsoft Teams)	35 (76%)
3	Online collaboration tools (e.g., Google Docs, Slack)	37 (80%)
4	Language learning apps (e.g., Duolingo, Rosetta Stones)	3 (7%)
5	Virtual whiteboards or interactive whiteboard software	6 (13%)
6	Online educational resources and websites	36 (78%)
7	Social media platforms for educational purposes	23 (50%)
8	Other	2 (4%)

(Source: Author, 2023)

Five distinct aspects were examined and detailed in Table 3. In the first item, it was observed that a minimal proportion of instructors encountered difficulties in employing the online tools and resources referenced in the preceding section. Specifically, 63% agreed, while 33% strongly agreed with their familiarity with handling these online tools and resources. In contrast, item 2 garnered mixed responses, with 46% agreed, 13% strongly agreed, 37% disagreed, and 2% strongly disagreed. Item 3, on the other hand, indicated that 48% agreed, while an identical proportion strongly agreed, and a mere 2% of the instructors disagreed and strongly disagreed. Regarding item 4, the results demonstrated that more than half of the instructors agreed (52%), while 24% expressed strongly agreed, 22% disagreed, and a marginal 2% strongly disagreed. Notably, although most instructors exhibited favorable attitudes towards using digital tools and resources in online language instruction, a significant proportion, 72%, remained of the opinion that further skill enhancement and advancement in online teaching and learning were requisite. Conversely, the remainder exhibited differing perspectives, with 22% agreeing, 4% disagreeing, and 2% strongly disagreeing with this notion.

Table 3. Perceptions of the use of digital tools and resources in online language instruction, and its Impacts on online teaching and learning

No	Statements	SD	D	А	SA	
1	I am familiar with the use of online tools and resources selected in SECTION A (Q3).	1 (2%)	1 (2%)	29 (63%)	15 (33%)	
2	I can keep the students engaged in the online English courses.	2 (4%)	17 (37%)	21 (46%)	6 (13%)	
2		()	()	()	()	
3	I think that the digital tools and resources used in teaching and learning are useful, interesting, and interactive.	1 (2%)	1 (2%)	22 (48%)	22 (48%)	
4	I can handle online classroom management effectively due to the					
	challenges mentioned in SECTION A (Q1).	1 (2%)	10 (22%)	24 (52%)	11 (24%)	
5	I think there is a need for upskilling and upgrading in dealing with					
	online teaching and learning.	1 (2%)	2 (4%)	10 (22%)	33 (72%)	
(Source: Author: 2023)						

(Source: Author, 2023)

4.3 Instructors' attitudes surrounding the transition toward a comprehensive ODL paradigm

Table 4 revealed that reasons influencing the instructors' perspectives about the future trend of English courses transitioning to an ODL mode can be categorized into two themes. Among the various factors discussed, the feedback from instructors highlights that technology and support systems (considered external factors) are the most pertinent to the current study. These reasons supported the notion that technology plays a crucial role in transforming future English courses into a comprehensive ODL mode.

Table 4. Reasons influencing th	ne instructors' perspectives al	bout the future trend of English p	proficiency courses transitioning	to an ODL mode

_	No	Themes	Codes (Reasons)	
	1	Technology	Tech-savvy, technology advancement, upskilling, stable LMS, help from online tools, many online resources, advancement in technological tools, fully-equipped resources and learning tools, the advancement of ICT, the rise of alternative learning apps, digital tools can be as interactive as a face-to-face class	
_	2	Institutional support	Training needed, upskilling, professional development, time-to-time training, support system	
	(Source: Author, 2023)			

Inquiries regarding the factors underpinning instructors' perspectives concerning technology integration within the ODL paradigm revealed noteworthy responses. Approximately 50% of the instructors agreed that online English courses held the potential for a comprehensive transformation into a fully-fledged ODL mode. An additional 17% of respondents strongly disagreed, 26% disagreed, and 7% strongly disagreed with this viewpoint. Furthermore, 46% of instructors agreed that the ODL approach could benefit students, and 17% strongly agreed with this perspective. Conversely, 30% disagreed, and 7% strongly disagreed. Despite the challenges previously deliberated upon in preceding sections, it is noteworthy that more than half of the respondents expressed a desire to transition current online English courses into a fully-fledged ODL mode. Specifically, 43% of participants agreed with this transition, and 15% strongly agreed. In contrast, 26% disagreed, while another 15% strongly disagreed.

Table 5. Instructors' perspectives towards technology adoption and instructional design within the ODL framework
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No	Statements	SD	D	A	SA
1	I believe it is possible to turn online English courses into ODL.	3 (7%)	12 (26%)	23 (50%)	8 (17%)
2	I believe the ODL approach is beneficial to my students.	3 (7%)	14 (30%)	21 (46%)	28 (17%)
3	I wish to transform current online English courses into an ODL	7 (15%)	12 (26%)	20 (43%)	7 (15%)
	mode				

5.0 Discussion

5.1 Challenges inherent to online teaching and learning

The study's findings yield significant insights by illuminating challenges encountered by instructors during the implementation of online teaching and learning. Examining these challenges is a proactive measure to mitigate and prevent similar issues that may arise while transforming English courses into a fully-fledged ODL mode. Among these challenges, technical difficulties emerge as particularly concerning, signaling a pressing need for targeted solutions to ensure the quality of future ODL endeavors in English courses. This holds paramount importance, given the pivotal role attributed to technology within ODL, wherein instructors and learners rely extensively on integrating digital tools and resources to facilitate effective course design and delivery.

5.2 Instructors' perspectives regarding digital tools and resources

The study delved into the instructors' perceived usefulness of digital tools and resources in online language instruction. The findings indicate that instructors hold varying perceptions of the usefulness of digital tools and resources in enhancing online teaching and learning. While many recognize the potential benefits, such as improved engagement and learning outcomes, some may have reservations or see limitations in certain contexts. These perceptions are closely tied to instructors' beliefs about the impact of these tools and resources. Instructors who perceive digital tools and resources as highly useful tend to strongly believe in their positive influence on online teaching and learning quality. It is noteworthy that, despite recognizing the usefulness of digital tools and resources, most instructors emphasized the significance of enhancing their skills and capabilities for effective online teaching and learning. Thus, understanding and aligning these perceptions with instructors' teaching goals can be pivotal in maximizing the effectiveness of technology integration in English courses ODL.

5.3 Instructors' attitudes surrounding the transition toward a comprehensive ODL paradigm

Importantly, instructors' attitudes are aligned with their intentions to adopt technology. Instructors who perceived positive views toward technology and institutional support are more inclined to embrace the ODL. The usefulness of the digital tools and resources in the ODL context further encourages the instructors' willingness to accept the possibility of a fully-fledged ODL English course. This signifies that the instructors are open-minded towards transitioning a conventional English course into a fully-fledged ODL mode underpinned by their unwavering confidence in technological advancements and institutional support by their respective academic institutions. This aligns with Musa et al. (2020) that a few considerations are needed for a practical ODL approach; Information and Communication Technology (ICT) and technology support system are two. Che Yusof, Chinnasamy and Faizal (2023) asserted that challenges educators face in deploying digital technology systems have repercussions on the education system and student interactions. Therefore, the identified critical factors are crucial for developing future English courses in a fully-fledged ODL mode.

6.0 Conclusion and Recommendations

The study's findings underscore the intricate nature of technology adoption within the higher education sector. The successful integration of technology in online language instruction and the transition to a comprehensive ODL mode requires a multifaceted approach. This entails recognizing and mitigating challenges encountered by instructors, the alignment of perceptions regarding the usefulness of digital tools and resources, and providing robust institutional support. These elements collectively contribute to cultivating a conducive atmosphere for effective technology adoption. Future research should continue to investigate the various aspects of related areas. Overall, the findings drawn from this study carry profound implications for higher educational institutions and policymakers as they navigate the ever-changing landscape of online education. This knowledge equips them with the means to make informed decisions and devise effective strategies to enhance the quality of teaching and learning experiences in ODL mode.

This study has several limitations that offer opportunities for future research. Firstly, the study exclusively focuses on instructors mostly within the context of public universities in Malaysia. Future investigations could expand the scope to encompass instructors in private universities within Malaysia and extend to international settings on a larger scale. Secondly, the small samples gathered at this preliminary stage, constrained by a limited time frame, allow researchers to refine the methods and research design before commencing a larger-scale study. This research employs the online distribution of open-ended questions due to practical constraints. Future studies may consider conducting in-depth interviews, facilitating a more comprehensive and insightful exploration of the subject matter. Moreover, there is potential for future research to delve deeper into various facets, including assessing the extent to which instructors integrate digital tools and resources into ODL courses, teaching strategies, self-instructional materials, institutional capacities, and the effectiveness of an ODL course, thereby enriching the academic discourse in these areas.

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Paper Contribution to Related Field of Study

The study's outcomes suggest essential guidance for leveraging and enacting Open and Distance Learning (ODL) within the Malaysian higher education system.

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References

Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. Journal of Pedagogical Sociology and Psychology, 2(1). https://doi.org/10.33902/JPSP.

Ali, A., Fadzil, M., & Kaur, A. (2006). Open and distance education in Malaysia. Southeast Asian Ministers of Education Organization Regional Open Learning Centre (SEAMEO SEAMOLEC) 2006.

Bahar, N., Wahab, S. N., & Ahmad, N. D. (2020, December 1). Understanding Challenges Faced in Online Teaching and Learning Among Malaysian Universities' Instructors During COVID-19 Pandemic. IEEE Xplore. https://doi.org/10.1109/econf51404.2020.9385474

Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. Human Behavior and Emerging Technologies, 2(2), 113–115.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Che Yusof, A., Chinnasamy, S., & Faizal, S. (2023). COVID-19 Pandemic and Online Distance Learning (ODL) Issues among Malaysian Secondary School Teachers. International Journal of Academic Research in Business and Social Sciences, 13(4). https://doi.org/10.6007/ijarbss/v13-i4/16677

Clark, A. (2022). What are the advantages of distance education? - Classcraft Blog. Resource Hub for Schools and Districts. https://www.classcraft.com/blog/advantagesof-distance-education/

Cutri, R. M., & Mena, J. (2020). A critical reconceptualization of faculty readiness for online teaching. Distance Education, 41(3), 361–380. https://doi.org/10.1080/01587919.2020.1763167

Daud, K. M., Satimin, O., Sabri, S., Khairuddin, Z., & Johan, S. J. A. (2022). Identifying Challenges and Risk Factors During Online Distance Learning (ODL) among Malaysian University Students. International Journal of Academic Research in Business and Social Sciences, 12(12). https://doi.org/10.6007/ijarbss/v12-i12/15553

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340.

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/ojcmt/8286

García-Morales, V. J., Garrido-Moreno, A., & Martín-Rojas, R. (2021). The transformation of higher education after the COVID disruption: Emerging challenges in an online learning scenario. Frontiers in Psychology, 12, 1–6. https://doi.org/10.3389/fpsyg.2021.616059

Ghosh, Saima & Nath, Joyshree & Agarwal, Shalabh & Nath, Asoke & Chaudhuri, A. (2012). OPEN AND DISTANCE LEARNING (ODL) EDUCATION SYSTEM: PAST, PRESENT AND FUTURE – A SYSTEMATIC STUDY OF AN ALTERNATIVE EDUCATION SYSTEM. Journal of Global Research in Computer Science. 3. 53-57.

Halamy, S., Kamarudin, N., & Mohsin, M. (2021). Instructional Technologies Facilitating Open Distance Learning: Environment, Interaction, and Academia. ESTEEM Journal of Social Sciences and Humanities, 5(1), 116–125. https://ir.uitm.edu.my/id/eprint/46609/1/46609.pdf

LI, J., & Che, W. (2022). Challenges and coping strategies of online learning for college students in the context of COVID-19: A survey of Chinese universities. Sustainable Cities and Society, 103958. https://doi.org/10.1016/j.scs.2022.103958

Mohamed Radhi, N. A. (2023, June 4). MoHE to introduce hybrid, flexible learning system at universities: Khaled [Review of MoHE to introduce hybrid, flexible learning system at universities: Khaled]. New Straits Times. https://www.nst.com.my/news/nation/2023/06/916471

Musa, A. H., Rosle, A. N., Baharuddin, F. N., & Ibrahim, S. S. (2020). The Effectiveness of Online Distance Learning (ODL) Approach in University: A Respond of Covid-19 Pandemic Crisis. International Journal of Academic Research in Business and Social Sciences, 10(9). https://doi.org/10.6007/ijarbss/v10-i9/7986

Nair, S. D., & Nesamany, S. S. (2021). TEACHER PERCEPTION OF ONLINE TEACHING APPROACHES DURING THE PANDEMIC COVID-19. Asian Journal of Social Science Research, 3(2), 20–38. https://doi.org/10.5281/zenodo.8063275

Nassr, R. M., Aborujilah, A., Aldossary, D. A., & Aldossary, A. A. (2020). Understanding education difficulty during COVID-19 lockdown: Reports on Malaysian university students' experience. IEEE Access, 8, 1–1. https://doi.org/10.1109/access.2020.3029967

Rajab, M. H., Gazal, A. M., & Alkattan, K. (2020). Challenges to Online Medical Education During the COVID-19 Pandemic. Cureus. https://doi.org/10.7759/cureus.8966Bishop, K., & Said, I., (2017). Challenges of Participatory Qualitative Research in a Malaysian and Australian Hospital. Asian Journal of Environment-Behaviour Studies, 2(4), 1-11.

Raju, R., Md Noh, N. H., Ishak, S. N. H., & Eri, Z. D. (2021). Digital Tools Acceptance in Open Distance Learning (ODL) among Computer Science Students during COVID-19 Pandemic: A Comparative Study. Asian Journal of University Education, 17(4), 408. https://doi.org/10.24191/ajue.v17i4.16194

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, 2(1). https://doi.org/10.1007/s42438-020-00155-y

Rezaei, S. & Meshkatian, M.A. (2017). Iranian Teachers' Attitude towards Using Social Media and Technology to Increase Interaction amongst Students inside or outside the Classroom. Theory and Practice in Language Studies, Vol. 7, No. 6, pp. 419-426, June 2017 DOI: http://dx.doi.org/10.17507/tpls.0706.02.

Tichapondwa, M., Dlitt, P., & Gregoriose, B. (2016). CONFIGURATION OF OPEN AND DISTANCE LEARNING IN NEW ENVIRONMENTS. European Journal of Research and Reflection in Educational Sciences, 4(4). https://www.idpublications.org/wp-content/uploads/2016/04/Full-Paper