

Exploring the Influence of Socio-Demographic Factors on Online Facilitator Performance: Insights from Open University Malaysia

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Article Info:

Received: 20 Dec 2023; Revised: 01 Feb 2024; Accepted: 20 Feb 2024; Available Online: 20 Feb 2024

Abstract

Gaining a good understanding of how socio-demographic factors influence online facilitators' performance holds the key to unravelling the complexities of teaching and offering guidance to the institution to better meet students' learning needs. This has particular significance for Open University Malaysia, where the majority of e-tutors hail from diverse backgrounds, further compounding the complexity of the situation. Despite receiving training and direction, these e-tutors' effects on their students' learning experiences remain unclear. To address this issue, a study was conducted to determine the influence of socio-demographic factors such as gender, academic qualifications, years of tutoring experience, and professional affiliations on the teaching performance of e-tutors. The study gathered demographic information from 587 e-tutors at Open University Malaysia through an online survey and evaluated their performance using student feedback gathered through another online survey. The data was analysed by utilising statistical methods. The study found that none of the socio-demographic factors examined significantly influenced the e-tutors' performance. However, it should be noted that less than 20% of the students evaluated the performance of their e-tutors, limiting the amount of data available on tutor performance. Although this study did not find any significant influence between the socio-demographic factors of the e-tutors and their performance, additional research is required to investigate this relationship in depth. The findings from this study provide some food for thought on recruiting e-tutors in the future.

Keywords: online evaluation, online facilitation, online teaching and learning, online tutor performance, open and distance learning, socio-demographic factors

1. Introduction

It is well-known that online teaching offers several advantages over traditional teaching, including the ability to reach a larger audience, enhanced student access to course content, and improved course quality (Schifter, 2000). Within the context of online education, online teaching serves as the conduit by which online facilitators deliver course content and interact with their learners in the virtual learning environment. As a result, the popularity of online education has surged in recent years thanks to technological advancements, making it a viable alternative to traditional teaching methods. In terms of market size and growth, the online education market is expected to reach US\$167 billion this year and US\$240 billion by 2027 (Statista, 2023). The onset of the COVID-19 pandemic in 2020 and the resulting global lockdowns imposed to stem the spread of the virus further contributed to the growth of online education.

Prior to the pandemic, Open University Malaysia (OUM) leveraged blended learning to deliver diploma, undergraduate, and postgraduate programmes to its adult learners spread throughout the country. Learners had the opportunity to meet with their tutors in person during face-to-face sessions held at the university's learning centres throughout Malaysia and continue their discussions online with their tutors in between tutorial sessions via the university's online learning platform, myINSPIRE. However, due to the pandemic, OUM, like many other education providers, had to transition from the blended learning mode, which offered learners a fixed number of face-to-face sessions with their tutors, to the fully online learning mode. This necessitated the appointment of online facilitators or instructors, who are known as e-tutors at OUM. As a result, existing face-to-face tutors were appointed as e-tutors. The majority of OUM's e-tutors involved in online teaching are part-timers. In terms of socio-demographics, such as gender, academic degrees, professional affiliations, and tutoring experience, they represent a diverse cohort.

To teach effectively in an online setting, instructors or facilitators require both technological proficiency and personal motivation (Bonk, 2006). Successful online facilitators prioritise facilitating student engagement and interactions through collaboration and active communication in the online course (Palloff & Pratt, 2013). To become an online facilitator, one must acquire a basic understanding of the key principles or skills, as emphasised by Albrahim (2020). Two of these principles are related to technological and pedagogical know-how. Drawing inspiration from these research findings, the training sessions for new e-tutors are designed to create awareness in the following key areas: online facilitation skills, pedagogical techniques, basic technological proficiency, personal motivation, navigating the myINSPIRE portal, and conducting e-tutorials. These training sessions are mandatory for all newly appointed e-tutors at OUM to ensure that they are adequately prepared to fulfil their responsibilities. In addition, briefings are conducted at the beginning of every semester to update all e-tutors on the latest teaching and learning developments at OUM. These briefings also serve as a platform for e-tutors to raise concerns on matters related to online facilitation and e-tutoring.

The extent to which socio-demographic factors influence the actual online performance of e-tutors at OUM remains an open question at the moment. Furthermore, the extent of this impact on online e-tutor performance may differ with the socio-demographic factors involved. For example, seasoned e-tutors may have a simpler time adjusting to new technology and teaching methods, causing them to feel more at home facilitating and conducting online lessons, likely leading to better online performance. In contrast, e-tutors with less teaching experience or those from brick-and-mortar institutions may lack familiarity with the technological tools required to effectively deliver content in a virtual space. In addition, it is unknown how gender may influence the performance of e-tutors. While e-tutors with a higher level of education may have a deeper understanding of the subject matter, this may not necessarily mean that they are better at facilitating that knowledge online nor that they have effective online teaching skills. Conversely, individuals affiliated with academic institutions may already have prior teaching experience and effective teaching techniques to perform better as e-tutors. Industry practitioners, on the other hand, have first-hand experience and practical knowledge in their field, but these do not necessarily make them better e-tutors, as online teaching is much more complex as it involves effectively conveying information, engaging with learners, and helping them to understand and apply the materials.

This study aims to understand how socio-economic factors influence the performance of OUM e-tutors to better meet students' learning needs and to offer some insights on the future recruitment of e-tutors. The outcome and findings of the study can be used by the institution to improve the current practice of recruitment and hiring of external tutors.

2. Literature Review

In the past, socio-demographic factors have been studied in the context of the teaching competencies of face-to-face instructors/educators. For instance, demographic variables have been hypothesised to have a significant impact on the instructors' teaching competencies (Sengottuvel & Aktharsha, 2015).

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According to Sa'adatu (2014), demographic factors can serve as motivational tools that enhance teachers' competencies and improve their performance, leading to successful teaching outcomes. Instructors' qualifications, teaching experience, and age are critical factors in that they can either facilitate or hinder their teaching competencies (Dong et al., 2015). In addition, Prensky (2001) emphasised that age has a relationship with teaching competencies, particularly with regard to the use of advanced technology in teaching practices.

According to Sala (2002), while instructors' qualifications refer to their subject-matter expertise, their age is associated with emotional competencies that can assist them in maintaining a sense of equilibrium while instructing. Kant (2014) found that gender did not have a significant impact on the teachers' role performance. However, age and teaching experience were positively associated with job performance, indicating that as teachers grow older and more experienced, they become more proficient in their role. The author postulated that this could be due to the teachers gaining more confidence in their profession over time. The study also found that teachers with higher educational qualifications displayed better role performance, as they had a greater sense of responsibility towards their profession.

Amadi and Allagoa (2017) found that factors such as teachers' age, qualifications, and experience in teaching significantly influence their ability to manage a classroom effectively. In contrast, the study found that gender does not substantially impact this effectiveness. This underscores the vital role of educators in imparting values to students and the importance of socio-demographic factors in the educational process. On the other hand, research by Bibi and Khurshid (2021) indicated that an online instructor's qualifications and years of teaching experience contribute to their teaching competencies. However, the study noted that the instructor's age and the number of professional training events they attended did not significantly affect their teaching effectiveness.

As e-learning has gained more traction for its unparalleled access to knowledge and skill development, there has been a significant rise in the demand for skilled online instructors to facilitate online learning (Bao, 2020). Online instructors and facilitators play an important role in fostering an online environment that is non-threatening, engaging, meaningful, and rewarding. Furthermore, their role is vital for learners to carry out complex tasks (Peacock et al., 2020). Besides, OUM has long adopted the Community of Inquiry Model (COI) (Garrison et al., 1999) into its blended delivery model. According to the COI model, the interplay of the three main components, namely, social, cognitive, and teaching presence, is key to creating a rewarding educational experience for learners. It is imperative for online instructors and facilitators to understand these aspects and perform their online roles effectively to cultivate a teaching presence as outlined in the COI model that would enrich the educational journey of their learners.

Prior studies had concentrated on wider topics like how technology is used, designing curriculums, and keeping students engaged, instead of looking into what makes e-tutors effective. (Hrastinski, 2019). As a result, limited work has focused on how socio-demographic factors influence e-tutors' online performance. This study, therefore, aims to fill the existing gap in the literature by investigating the influence of socio-demographic factors and the online performance of e-tutors. Moreover, it represents the first study of its kind conducted in Malaysia, making it particularly relevant to ODL providers in the region.

The objective of this study is to explore the influence of socio-demographic factors (age, academic qualifications, gender, and professional affiliation) on the online performance of e-tutors at OUM.

Consequently, the study is guided by the following research questions (RQ) and hypothesis (Ho):

- RQ 1: To what extent does gender influence online tutor performance?
- Ho1: Gender does not influence online tutor performance.
- RQ2: Do e-tutors' academic qualifications influence their online performance?
- Ho2: e-Tutors' academic qualifications do not influence their online performance.
- RQ3: Do e-tutors' years of teaching experience at OUM influence their online performance?
- Ho3: e-Tutors' years of online teaching experience at OUM do not influence their online performance.
- RQ4: Do e-tutors' professional affiliations influence their online performance?
- Ho4: The type of organisation an e-tutor is affiliated with does not influence their online performance.

3. Research Method

The research used a quantitative approach where data was collected and analysed through a survey instrument distributed to all OUM e-tutors. The survey was distributed using Google Forms during the May 2022 academic semester. The survey received responses from 587 out of 750 e-tutors, resulting in a response rate of 78%. The questionnaire developed for this survey consisted of items on the sociodemographic variables such as gender, academic qualifications, professional affiliation and years of tutoring experience with OUM.

Assessment of the online performance of each e-tutor was calculated from the "Learner Evaluate Tutor" (LET) scores, which are submitted by learners. However, it is not obligatory for learners to evaluate their e-tutors but they are encouraged to do so. OUM's myINSPIRE learning platform system allows each learner an opportunity to evaluate the performance of their e-tutors at the end of the semester by filling up the LET forms online. The LET evaluation form consists of 17 items that are grouped into 3 categories: (i) the e-tutor's teaching skills during e-tutorials, (ii) the e-tutor's content knowledge, and (iii) the e-tutor's online facilitation skills. Learners rated each of the 17 items on a 5-point Likert scale with choices ranging from "strongly agree" to "strongly disagree", which reflect how they thought their e-tutor performed in the semester. The learners evaluated how their e-tutor performed based on these 3 categories. The final LET score was the cumulative total sum of all 17 items' ratings. For this study, 17 % of learners evaluated their e-tutors.

Data analysis was carried out using the SPSS software. Inferential statistics employed analysis of variance (ANOVA) and t-test to compare the LET scores between the different groups under each sociodemographic factor. Also, the probability value p was tested at the 95% confidence interval, with a threshold of $p \le 0.05$ established for testing statistical significance.

4. Findings and Discussion

4.1. Findings

In this survey, a total of 587 e-tutors participated, and Tables 1-5 present their socio-demographic characteristics. From Table 1, it can be seen that the majority of respondents were female, with 303 (51.6%) female participants compared to 284 (48.4%) male participants.

Table 2 illustrates that the majority of tutors possess a master's degree, with 359 (61.2%) holding this qualification, while 212 (36.1%) have a doctorate degree. Only a small percentage of 16 tutors (2.7%) hold a first degree, which is the minimum qualification required to become an OUM tutor.

Table 3 provides a summary of the tutors' years of experience working with OUM, with 146 (24.9%) having less than 5 years of experience, 149 (25.4%) having 6-10 years of experience, 168 (28.6%) having 11-15 years of experience, and 124 (21%) having 16-20 years of experience.

Table 4 shows the number of years of working experience of OUM tutors, with 69 (11.8%) having less than 10 years of experience, 195 (33.2%) having 11-20 years of experience, 113 (19.3%) having 21-25 years of experience, and 210 (35.8%) having more than 25 years of experience.

Table 5 displays the organisation the tutors are affiliated with, with the majority of tutors (255, 43.4%) affiliated with private universities. Meanwhile, only 136 (23.2%) are employed by public universities, 36 (6.1%) are with IPGs, 99 (16.9%) are attached to non-academic institutions, and 61 (10%) are retired.

Table 1. Average LET scores for e-tutors based on gender

	N	Mean	Std. Deviation	Std. Error
Male	284	89.48	6.51	0.39
Female	303	89.10	6.59	0.38
Total	587	89.29	6.55	0.27

Table 2. Average LET scores based on e-tutors' academic qualifications

	N	Mean	Std. Deviation	Std. Error
Bachelor's degree	16	91.03	4.30	1.08
Master's degree	359	89.34	5.96	0.31
PhD/DBA or its equivalent	212	89.07	7.56	0.52

Table 3. Average LET scores based on e-tutors' years of experience with OUM

	N	Mean	Std. Deviation	Std. Error
Less than 5 years	146	89.20	6.52	0.54
6-10 years	149	90.21	6.16	0.50
11-15 years	168	88.46	7.66	0.59
16-20 years	124	89.39	5.18	0.46

Table 4. Average LET scores based on e-tutors' years of working experience

	N	Mean	Std. Deviation	Std. Error
Less than 10 years	69	88.41	7.29	0.87
11-20 years	195	89.60	5.96	0.43
21-25 years	113	89.05	6.24	0.59
More than 25 years	210	89.43	6.98	0.48

Table 5. Average LET scores based on e-tutors' job affiliation

	N	Mean	Std. Deviation	Std. Error
IPTS/Private University	255	88.56	6.61	0.41
IPTA/Public University	136	89.87	5.18	0.44
IPG	36	89.32	6.39	1.07
Non-	99	89.75	6.56	0.66
academic/industry/others				
Retired	61	90.21	8.67	1.11

RQ1 To what extent does gender account for the variances in online tutor performance?

From Table 1, the mean LET score for female tutors (M=89.48, SD=6.51) was found to be slightly higher than that of their male counterparts (M=89.10, SD=6.59). An independent sample (t-test) was performed to determine whether there was a statistically significant difference between the mean LET scores of male and female tutors.

According to Table 6, Levene's test is not significant, as evidenced by a *p-value*> 0.05, indicating that equal variance can be assumed. Based on gender, the results of the *t*-test indicate that at the 95% confidence level, there was no statistically significant difference between the mean LET scores of both male and female tutors (t = 0.70, df = 585, (p = 0.49)). So, the gender of the tutor does not influence online performance. Therefore, the null hypothesis, HO1 was confirmed.

Table 6. T-test for male and female tutors based on average LET scores

Levene's Test of Equality of Variances

Average LET scores	F	Sig.	t	df	Sig.(2-tailed)
Equal variances assumed	0.022	0.881	0.696	585	0.486
Equal variances not assumed			0.697	583.328	0.486

RQ2 Do e-tutors' academic qualifications influence their performance?

Table 2 shows the mean LET scores of tutors categorized according to their academic qualifications. The assumption of homogeneity of variance was evaluated using Levene's test and it was found to be violated:

F (2,584) =3.53, p=0.03. This is not surprising given that the sample sizes differed rather sharply. Since the assumption of homogeneity is violated, we chose a less sensitive test, namely, the Brown-Forsythe Fratio. The results show no statistically significant difference between tutors' LET scores and their academic qualifications, F(2,163.86)=0.88, p=0.42. This suggests that tutors' academic qualifications do not influence their performance. The researchers can, therefore, conclude that the null hypothesis HO2 was confirmed.

RQ3 Do e-tutors' years of teaching experience at OUM influence their performance?

The assumption of variance was evaluated and found to be acceptable using Levene's test, F(3,583) = 2.39, p = 0.07. The ANOVA (Table 7) was not statistically significant, F(3,583)=1.912, p=0.126. Thus, the differences in the LET scores are not significant, indicating that tutors' years of teaching experience at OUM do not influence their performance. We can conclude that the null hypothesis HO3 was confirmed.

Table 7. ANOVA of LET scores of tutors and their years of teaching experience at OUM

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Between Groups	244.751	3	81.584	1.912	.126
	Within Groups	24876.797	583	42.670		
	Total	25121.547	586			

RQ4 Do e-tutors' professional affiliations influence their performance?

Upon conducting Levene's test, it was found that the assumption of variance was met, F(4,582) = 1.534, p = 0.191. The ANOVA analysis (Table 8) turned out to be statistically insignificant, F(4,582) = 1.486, p = 0.205. There is no statistically significant difference between tutors' job affiliations and their average LET scores, confirming the null hypothesis HO4.

Table 8. ANOVA of LET scores of tutors based on their job affiliations

		Sum of				
Model		Squares	df	Mean Square	F	Sig.
1	Between Groups	253.965	4	63.491	1.486	0.205
	Within Groups	24867.582	582	42.728		
	Total	25121.547	586			

4.2. Discussion

In the previous section, we explored the influence of various socio-demographic factors on the online performance of e-tutors in facilitating e-learning at OUM. The findings revealed no statistically significant relationship between the factors and the online performance of the e-tutors. Here, we discuss the possible outcomes by considering factors such as adult learners' self-directed learning, the complex nature of online tutoring, and other relevant considerations.

A likely reason for the absence of any significant influence by e-tutors' gender and academic qualifications could be the inherent nature of adult learners. They are known to have greater intrinsic motivation for self-study and hence, exhibit greater autonomy in their learning (Knowles, 1984). OUM adult learners, like their contemporaries in other ODL institutions, are more likely and willing to take ownership over their own studies and study at a pace that is most convenient and best suited for them. Besides, OUM learners also rely on online learning resources provided by the university for their self-study. If these do not suffice, they can access a plethora of freely available online resources related to the courses they are taking. In other words, once learners assume full control of their educational journey, the academic qualifications or gender of their e-tutors are of little consequence to them. This may explain why the

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study found that the academic qualifications and gender of e-tutors did not significantly impact their online performance.

Moreover, regardless of whether in a virtual setting or a physical classroom, an e-tutor's high level of academic qualification does not guarantee that they can teach better. It can be argued that effective teaching and facilitation demand a unique skill set that is not always reflected in academic qualifications. Furthermore, whether in traditional face-to-face or online settings, instructors or facilitators/tutors must possess a skillset that includes the essential attributes of effective teaching, including the requisite skills and an inherent passion for education.

As a result, when it comes to online instruction and facilitation, it is always more than just having advanced degrees or formal education. The crux of the matter is e-tutors' understanding and skill sets in three specific areas, namely, online pedagogy, technology-mediated communication, and their ability to apply them online. These unique skills can compensate for any disparities in formal academic credentials. After all, close to 50% of e-tutors in this survey have been with OUM for more than a decade as face-to-face tutors. By attending trainings organised by the university over the years, it is likely that e-tutors may have received sufficient exposure to these requisite skills to apply them in their online instruction. From this perspective, it becomes more evident why there does not seem to be a significant correlation between the academic degrees e-tutors have and how well they perform in an online environment. It appears that the key to being an effective online facilitator comes down to having a blend of the right know-how and talents, not just a list of degrees or certifications.

The findings of this study also suggest no clear link between the number of years an individual has been an e-tutor and their effectiveness in that role. Traditional teaching experience does not automatically equip a person for success in an online setting; technological proficiency is a must-have. This involves altering one's teaching methods, communication styles, and classroom management techniques to meet the requirements of online teaching. E-tutors who honed their craft in physical classrooms may find themselves at a disadvantage if they have not mastered the skills essential for online teaching. Thus, the shift from conventional to virtual classrooms calls for a paradigm shift in teaching strategies. Even for experienced e-tutors with many years of teaching experience under their belts, making the transition to a fully digital platform can be daunting, potentially offsetting the advantage of their years of teaching experience. Therefore, the length of teaching experience may not significantly contribute to their effectiveness in the online environment.

This study has brought to light a noteworthy finding: job affiliations of e-tutors does not influence their performance in the online teaching environment. As previously discussed, this observation may be attributed to the inherent self-directed nature of adult learners at OUM. These individuals tend to take charge of their own learning journeys, relying more on the wealth of online resources provided by the university for self-study purposes than on their e-tutors. Besides, in OUM's blended mode of learning model, 80% of the learning falls on self-managed learning. Consequently, the specific job title or affiliation of the e-tutor might be less relevant for them, as their primary focus remains on the content and tools available through OUM's myINSPIRE learning platform.

Indeed, it appears that the competence of e-tutors in the virtual space is less about their job affiliations and more about the skills they offer in their roles at OUM. While job affiliations may give some context, what truly distinguishes effective e-tutors are their inherent abilities in online pedagogy, adeptness in using technology for communication, and facilitation of online discussions. These skills enable them to guide learners in the virtual domain, regardless of their formal job affiliations.

In simpler terms, what the findings seem to indicate is that how good an e-tutor is at guiding students online depends more on their personal teaching abilities as opposed to their professional affiliations. It really boils down to the skills they already accumulated, not so much their professional background. This idea aligns with the view that e-tutors, regardless of their professional backgrounds, can be a vital cog in the wheel in driving online learning at the institution. Their knowledge in teaching over the Internet and using technology in education really makes a difference.

The insights from this study challenge the current emphasis on academic degrees as a primary criterion for the recruitment of e-tutors. Even though this appears contrary to established practice, OUM might benefit by reassessing its current criteria for the recruitment of e-tutors. There is obvious merit to the institution from valuing an individual's enthusiasm and capability to engage and inspire students, particularly in diploma and first-degree courses. It opens the possibility that educators without academic degrees could contribute significantly as e-tutors. This approach calls for recognition of potential in candidates beyond their formal academic credentials, fostering a more inclusive and diverse approach to educational excellence.

Such a change in recruitment policy could potentially work in OUM's favour. Financially, it could result in reduced expenditure for the institution. Additionally, it could create a new pathway for talented individuals who might otherwise be overlooked for not possessing the required academic qualifications. This represents a step towards a more holistic and equitable recruitment system where the focus is on the person's ability to inspire and educate, rather than just the academic qualifications they hold.

To get a more holistic understanding of how e-tutors can optimise their online performance to benefit learners, future research could explore a wider range of factors beyond what was examined here. The results from such research will be extremely useful to OUM in designing structured training programmes to enhance the capacity of future e-tutors. Ideally, such a programme would provide targeted guidance and better equip e-tutors to deal with the online learning environment. The outcomes of the research should catalyse a continuous cycle of improvement in e-tutor capabilities, fostering an environment where they can consistently deliver their best for OUM's online learners.

Furthermore, as mentioned earlier, learners at OUM are not mandated to evaluate their e-tutors, though they are strongly encouraged to do so. Given that only a fraction of students typically engaged in this evaluation, the data for analysis was somewhat restricted. This might have also constrained the analysis, perhaps explaining why socio-economic factors did not influence the online performance of e-tutors.

5. Conclusion

The findings of this study indicate that the online performance of OUM e-tutors is not significantly influenced by socio-demographic factors such as gender, academic qualifications, years of teaching experience, or job affiliations. The unique characteristics of adult learners' self-directed learning, the specialised training provided by the university, the complex nature of online tutoring, and other related considerations may have offset the influence of these factors on online performance. However, it was not obligatory for learners to evaluate the online performance of their e-tutors. As a result, less than 20% of students did so, limiting the amount of data available on tutor performance. Although this study found no significant influence of socio-demographic factors on the online performance of e-tutors, further exploration is warranted. Additional research, particularly employing a mixed-method approach, is necessary to uncover relevant data not captured in this study. Such a study may reveal additional factors influencing effective online facilitation. Finally, conducting a mixed-method approach could deepen OUM's understanding of the dynamics involved in e-learning environments. Finally, by adopting a more human-centred approach to e-tutor recruitment, OUM not only stands to achieve cost savings, but at the same time be in a position to recruit previously overlooked talent. Such a move towards a more inclusive and equitable recruitment system prioritises a person's capacity to inspire and educate, transcending the limitations of traditional academic qualifications.

References

Amadi, E. C., & Allagoa, I. C. (2017). Demographic variables as determinants of teachers' effectiveness in classroom management in secondary schools in Rivers State, Nigeria. *International Journal of Innovative Development & Policy Studies*, 5(4), 65-70, https://seahipaj.org/journals-ci/dec-2016/dec2017/IJIDPS/full/IJIDPS-D-8-2017.pdf

- Albrahim, F. A. (2020). Online teaching skills and competencies. *Turkish Online Journal of Educational Technology-TOJET*, 19(1), 9-20, https://files.eric.ed.gov/fulltext/EJ1239983.pdf
- 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, https://doi.org/10.1002/hbe2.191
- Bibi, M., & Khurshid, F. (2021). The demographic variables as the predictors of the teaching competencies of online instructors in the universities of Pakistan. Asia Proceedings of Social Sciences, 7(1), 5-9, https://doi.org/10.31580/apss.v7i1.1716
- Bonk, C. (2006). Online teaching in an online world. Bloomington, IN: CourseShare.com. http://www.publicationshare.com/docs/faculty_survey_report.pdf
- Dong, Y., Chai, C. S., Sang, G. Y., Koh, J. H. L., & Tsai, C. C. (2015). Exploring the profiles and interplays of preservice and in-service teachers' Technological Pedagogical Content Knowledge (TPACK) in China. *Journal of Educational Technology & Society*, 18(1), 158-169, https://repository.nie.edu.sg/bitstream/10497/17325/1/ETS-18-1-158.pdf
- Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. The internet and higher education, 2(2-3), 87-105. https://doi.org/10.1016/S1096-7516(00)00016-6
- Hrastinski, S. (2008). Asynchronous and synchronous e-learning. Educause quarterly, 31(4), 51-55.
- Kant, R. (2014). A study of effect of demographical factors on role performance of secondary school teachers in India. Merlana International Journal of Education (MIJE), 4(2), 109-121. http://dx.doi.org/10.13054/mije.14.20.4.
- Knowles, M. (1984). The adult learner: a neglected species. Gulf Publishing.
- Palloff, R. M., & Pratt, K. (2013). Lessons from the virtual classroom. International Journal of Information and Communication Technology Education, 10(2), 93-96.
- Peacock, S., Cowan, J., Irvine, L., & Williams, J. (2020). An exploration into the importance of a sense of belonging for online learners. *International Review of Research in Open and Distributed Learning*, 21(2), 18-35. https://doi.org/10.19173/irrodl.v20i5.4539
- Prensky, M. (2001). Digital natives, digital immigrants part 2: Do they really think differently? On the Horizon, 9(6), 1-6, http://dx.doi.org/10.1108/10748120110424816
- Sa'adatu, S. L. (2014). Relationship between demographic factors and the performance of teacher education. *International Letters of Social and Humanistic Sciences*, (08), 140-147, https://www.mcser.org/journal/index.php/mjss/article/view/2351/2326
- Sala, F. (2003). Leadership in education: Effective UK college principals. *Nonprofit management and leadership*, 14(2), 171-189. http://dx.doi.org/10.1002/nml.28
- Schifter, C. C. (2000). Faculty motivators and inhibitors for participation in distance education. Educational technology, 40(2), pp.43-46.
- Sengottuvel, A., & Aktharsha, U. S.(2015). Teacher effectiveness and professional competency in school education. *International Journal of Management*, 6(1), 181-190, https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=b57a3e35a531224802fbba52200d01d15 8952c42
- Statista (2023). Online education worldwide. https://www.statista.com/outlook/dmo/eservices/online-education/worldwide.