Original Paper

Why So Silent During Online Sessions? A Case of Two Public Universities

V. Gooria, A. C. Gokhool & U. Bhunjun Gokhool

Open University of Mauritius, R éduit, Mauritius

Abstract

The Covid-19 pandemic has forced educational institutions to review their mode of teaching and learning. All educational institutions in Mauritius, have shifted to online learning and teaching since 2020 and this mode is still pertaining. However, with this situation, many benefits have been observed, together with the challenges and one of them is the low participation level of learners during online classes. The study has been undertaken in two public institutions to determine the reasons why learners do not participate during online classes and on the other side, the challenges faced by tutors to conduct the online classes. At times, harnessing the power of silence is not that easy in virtual classes as tutors are not physically in the same room with all groups. To achieve the set objectives, a quantitative survey method in the form of a questionnaire was administered digitally to learners from two higher education institutions and their respective tutors. Exploratory factor analysis (EFA) revealed that the non-participation of learners and the problems they face during online sessions have three common underlying factors, namely anxiety, lack of technological skills and lack of engagement with tutors. This study also provides recommendations for better management of online sessions, interactions with more engaged online activities and prepare learners' well-being in any kind of educational crisis.

Keywords: Student engagement, Anxiety, Online Teaching and Learning, Higher Education, Covid-19 pandemic

Introduction and Background

Online learning and teaching have been presented in the education sector for several years and have gained more popularity since the Covid 19 Pandemic in 2020. Many higher education institutions have shifted to online teaching and learning (OTL) to cater for the needs of their learners and teachers. The pandemic and resultant movement to online OTL have made academics more adept at managing and valuing the technology devices of the digital era, for lifelong learning, and for assisting students with their activities in virtual learning processes (Singh, U.G. & Gooria, V. 2021). Enrolment in online courses has been growing more rapidly in recent years (Seaman et al., 2018) due to an expanded environment that enables individual users to retain control over time, speed, location, and interactions with teachers and other learners. The tools of online communication have changed and the minds of young generations are no longer wired to engage with bullet points on a slide for their learning. In today's classroom, many of us think in narrative but expect to consume interactive contents with inspiring interactions between learners and instructors. Understanding the difference between online and offline learning is critical to an educator's skill on how to entertain learners and stir their excitement, especially during longer hours of online classes. Therefore, it is crucial to provide the best vehicles for teaching and learning especially after the crisis of Covid-19 pandemic. Hence, there are many challenging factors for learners to participate online as highlighted by researchers (Kara, M., Erdoğdu, F., & Kokoç, M., & Cagiltay, K., 2019). Online learning includes the use of internet-based technology in learning and the delivery of online classes to learners (Efriana, 2012). As part of online learning, tutors and learners conduct the learning at the same time but can be located in different places. They use synchronous online teaching tools such as together through platforms like Zoom, Google Meet, Blackboard and WhatsApp. Bolliger and Martin (2021) also designed components of online courses through synchronous, asynchronous and bichronous systems. According to Martin and Bolliger (2018), online learning is categorized into three main types of interactions which are learner to learner, learner to instructor and learner to content and all the three interactions need to occur to create a successful learning adventure.

Virtual classroom and readiness for Online Teaching and Learning (OTL)

The virtual classroom is an important component which allows live interactions between the learners and tutors during online teaching and learning. As per Racheva (2013), a virtual classroom which is part of online learning, allows learners and tutors to communicate and explain ideas and has several advantages in terms of distance, timing and cost. According to Carey (2020), conducting an online class requires more than just allocating a zoom account to a tutor. The latter should be able to engage the learners to ensure success of the online classes. According to Muthuprasad, T, Aiswarya, S., Aditya, K.S & Jha G.K. (2021), several factors contributed to the readiness for online learning such as motivation for learning, self-directed learning, learner control, computer and internet self-efficacy and online communication self-efficacy. In case of online sessions, a learner needs to be motivated to attend the sessions, able to communicate with the tutor and also has acquired IT skills to be able to navigate through the online platforms. Key elements in motivating students is teacher's support, guidance and feedback and they have a crucial role to play in the Self Directed Learning process but students have to demonstrate self-disciplined, collaboration and self-management (Gooria, V., Appavoo, P. Bhunjun U. & Gokhool, A.C, 2021). Online learning can be difficult for some learners and therefore, interactions with them in virtual classrooms need to be planned carefully and should be interactive or else learners will lose interest in their learning. Wahid S.S., Pedersen G.A., Ottman K., Burgess A., Gautam K., Martini T., Kohrt B.A. (2020) stated that learners need to adapt to the use of online platforms during their online courses and that tutors need to adopt an exciting style of teaching to get learners engaged during the online sessions. For example, as per Illieva (2019), tutors can evaluate the work of the learners during the online class to keep them engaged. Furthermore, Sun and Chen (2016) agreed that factors such as competencies required to use technology, engaging with peers in the online learning settings and social presences are important to online learning. To achieve successful OTL, teachers should have sufficient hardware, technical skills and access to the internet. Hasyim, N., Arismunandar, Butarbutar, R. Ramli, A.M & Malik Nur, I.D., (2024) Teachers should be well prepared during online teaching and provide feedback and clear instructions to the learners.

Theoretical framework for Student Engagement

Student engagement has three widely accepted dimensions: behavioral, cognitive and affective (Chapman, 2002; Fredricks, J. A., Filsecker, M., and Lawson, M. A. 2016; Mandernach, 2015). Each dimension has indicators (Fredricks, J. A., Blumenfeld, P. C., and Paris, A. H. 2004), or facets (Coates, 2007), that manifest each dimension. Behavioral engagement refers to active responses to learning activities and is indicated by participation, persistence, and/or positive conduct whereas cognitive engagement includes mental effort in learning activities and is indicated by deep learning, self-regulation and understanding. Affective engagement is the emotional investment in learning activities and is indicated by positive reactions to the learning environment, peers, and teachers as well as a sense of belonging. Furthermore, Bond and Bedenlier (2019) present a theoretical framework for engagement in online learning that combines the three dimensions of engagement and the types of interactions that can influence learners in the short- and long-term outcomes. The types of interactions are based on components present in the student's immediate surrounding or microsystem, and are largely based on Moore's three types of interactions: teachers, peers and curriculum. However, the authors add technology and the classroom environment as influential components because they are particularly important for online learning.

Barriers to Online teaching and learning (OTL), Student Silence and Communication

Overcoming barriers to online learning such as poor time management or lack of familiarity with technology can be the secret to success. Barriers to online learning commonly highlighted from research are poor time management, lack of motivation, lack of support, technical difficulties, cost and many more (Covey, C. 2024). According to Muthuprasad et al. (2021), OTL are affected by several elements like learners might feel isolated and not motivated, technical problems with the online platforms, not planning properly their sessions and tutors not properly trained. Dhull and Arora (2019) mentioned that if learners and tutors do not have sufficient knowledge and awareness on the use of

online platforms, this will result in several problems. Learners might feel isolated as stated by Muthuprasad et al. (2021) and their academic performance will be affected due to poor communication and stress. As per Karademir, A., Yaman, F and Saatcioğlu, O (2020), lack of self-discipline, unstable internet connection, stress and anxiety contributed to barriers to online learning. Learners were stressed and anxious during online sessions and therefore could not participate fully with the tutors and peers. Other issues with online learning were learners being less responsive online and low learners" attendance. According to Chung, E., Subramaniam, G. & Dass, L.C. (2020), learners' low level of confidence affected their online learning engagement. They did not participate actively in online classes as they were not confident enough and at times did not attend the online classes at all. In a study by Roy, D., Tripathy, S., Kar, S. K., Sharma, N., Verma, S. K., and Kaushal, V. (2020), learners in a medical school requested to have face to face classes instead of online classes even if they had good internet connection and were technology savvy. Efriana (2021) found that learners could not engage in online learning properly due to unstable internet connection based on their geographical location. The author also noted that tutors are not prepared enough for online learning and do not have the appropriate ICT skills. Some tutors do have the required ICT skills but do not know how to conduct an online class. This is in line with Atmojo and Nugroho (2020), who found that tutors lacked experience and knowledge in conducting online sessions and this resulted in poor organisation of learning activities. Ying, Y.H., Siang, W.E.W. & Maslawati, M. (2021) observed that many learners do not find online learning too efficient since it does not provide the physical interaction with tutors or peers and there is no obligation to attend the online classes. Since learners have the choice to switch off their camera or mute their mic, the tutors may not know if the learners are really attending the online sessions. Kerras and Essayahi (2022), in their study conducted in Spain noted that a common issue concerning online learning was linked to the level of concentration of the learners. The learners had difficulty in concentrating for hours in front of a screen and gradually lost interest in the online classes, especially, the classes consist of a large number of learners where there is low level of participation. As per the authors, the screen acts like a barrier between the learner and the tutor and this hinders the good flow of communication. Student may remain silent or choose to be silent learners rather than take turns. The general term for students' silence is communication apprehension (Nurjamin, A et al, 2023). Once communication has been affected with a learner, for example, due to poor signal or misunderstanding, the rest of the class will tend not to communicate with the tutor. However, communication can be restored if the tutor is well equipped in terms of skills and knowledge about online learning. Mogavi, R.H, Zhao, Y., Haq., E.U. & Ma, X. (2021) also agreed on the fact that learners fail to remain focused during online classes and that staring at screens for a long period of time is tiring for the eyes. Since the tutors are not supervising the online classes, many learners would get distracted by browsing social media or watching YouTube videos or even messaging their friends. Besides since learners are mostly at home during online classes, they would lie on their beds or have their food and these lead to the lack of focus from the learners. The authors also noted several problems with online learning in their study among their learners. Many learners stated that incentives such as participation points were missing in order to promote participation during online classes. Furthermore, learners claimed that tutors were not helpful during the online classrooms and needed more training on how to use the online platforms. This reduced the interaction between the tutors and the learners. On the other hand, tutors stated that online classes activities are too time consuming compared to face-to-face sessions as some learners are not participating or are not familiar with how technology works. However, in his study, Guti érrez, R. (2016) observed that the rate of retention concerning learning under the online setting was higher than the normal classroom.

Traditional Learning and Connectivism in the new Teaching and Learning theories

Siemens (2005) proposed a new theory of learning, called connectivism, specific to the digital age. As opposed to other learning theories, connectivism emphasizes the link between the learner and various knowledge sources: other people, groups sharing the same interests, the internet and learning management systems. The new theory tries to surpass behaviourism, constructivism and socio-constructivism, the theory of information processing, via inclusion. Learning effectiveness shall thus turn into a function of the three entities and of their inter-relations, in a didactic approach centred on the student, the essential element being 'the one who studies'.

There is always the other way of doing something, by comparing advantages and disadvantages of both ways. Even though technology has brought things closer and easier for everyone, the traditional way of doing and getting things still remains preferable for many people. Besides classroom and blackboard there are more differences between connectivist learning and traditional learning. Learners participating in connectivist learning, experience different scores, different methods and a different lifestyle compared to those enrolled in institutions. Learning in a traditional classroom which by some learners is considered beneficial because they can interact with the teacher and their classmates. This is true especially for learners who find it better to interact face-to-face and prefer activities and group work. The possibility of asking questions and receiving an immediate response from their teacher is important since it makes learners feel more active and develop lifelong contacts, memories and experiences that humanize the educational experience in a way that online learning does not. Some learners need to feel sure that what they do is correct and that they are going in the right direction, so they need feedback to keep them moving. In addition, traditional classroom learning provides learners with a fixed schedule and specific periods dedicated to learning. In traditional schools and classrooms so-called "brick and mortar" people are comfortable with classroom structure and sometimes don't want to deviate from it. If you turn in a paper and have a question about grades or comments, you can usually talk to the teacher and analyze body language. In online learning- as we addressed in this paper as connectivism it is sometimes harder to gauge effective communication and you may have to wait until you get an answer or explanation. While many learners relish new advances in technology, others are not as comfortable with technology and prefer paper and pencil-based methods. For these learners, the familiarity and comfort of traditional schools is an advantage. Traditional classes may be a better fit for learners with limited resources and limited computer access. Considering that most adults have jobs to earn for their studies, sometimes it is difficult to find time for personal study between working hours and computer meetings, or have no sufficient knowledge in technology, so that learners in this situation prefer schedule classes first and other school activities.

Discussions on the advantages and disadvantages of online learning opposed to traditional education have been based on a variety of parameters. Talebian, S. Movahed, H. & Rezvanfar, A. (2014) indicate that face-to-face education depends on time and place. Coincidentally, enrolment in online courses has been growing more rapidly in recent years (Seaman, J.E., Allen, I.E., & Seaman, J., 2018) due to an expanded environment that enables individual users to retain control over time, speed, location, and interactions with teachers and other participants. According to Kara et al., (2019), there are still factors challenging learners to participate in distance education properly. Simonson, M. (2019) discussed the equivalency theory, which helps instructors provide learners with materials equivalent to, instead of identical to, materials handed out in traditional classrooms. Tseng and Chu (2010) have analyzed the relationship between the methods of learning and the outcomes of economics courses. They found that the online platform is vital for better learning and, therefore, preferable to the conventional way of learning. McCarty, T., Brayboy, B., Datnow, A., & Hamann, E. T. (2013) have examined the performance of learners in microeconomics introductory classes. They found that learners in online classes had an average final grade slightly higher than the average class grades. Clark (2020) states that in the near future, use of portable devices will expand learning using virtual and augmented reality, which will offer a more robust studying environment. The digital age requires new concepts about how learning happens. The theory of connectivism argues that knowledge is spread through a network of connections; thus, learning consists of the ability to construct and navigate those networks (Downes, 2020). Although connectivism focuses on where information is obtained and how learners communicate on the Internet, rhizomatic learning focuses on how learners access the network and seek knowledge as an innovative search for understanding.

Methodology

Two sets of questionnaires were administered to learners and tutors respectively for this study. The items used in designing the questionnaire were based on several previous research papers dealing with online teaching and learning. The questionnaire set for the learners included two parts: the demographic information and the measurement items, the latter including a mix of Likert scale statements, multiple-choice questions, closed-ended questions, as well as two open-ended questions in order to have more insights concerning attending online sessions. For the questionnaire concerning tutors, the

set of questions were divided into 3 sections: demographics, the conducting of online sessions and activities during online sessions. Pilot tests were conducted among 10 learners and 5 tutors before administering the final questionnaires and no major issues were identified. To test the reliability of the questionnaires, Cronbach's alphas were calculated and found to be varying between 0.637 and 0.868 for learners (four constructs) and 0.898 for tutors. The questionnaires were administered via Google Forms for both learners and tutors using convenience sampling, since the researchers were familiar with their target audiences, namely learners and tutors. The learners who participated in the survey were studying at undergraduate and postgraduate levels from two public tertiary institutions. The survey for tutors was conducted among tutors who lecture at undergraduate and postgraduate levels in either one or both of these public tertiary institutions. Both the learners and the tutors were actively involved in online learning and teaching using online platforms such as Zoom, Google Meet, Microsoft Teams, Skype and Blackboard. Consent from participants was sought before participating in the survey and data was collected over a period of one month. In terms of response, around 800 completed online questionnaires were received from learners and 30 from tutors. Data was then analysed using the IBM SPSS Statistics software.

Findings and discussions

Data testing consisted of reliability and construct validity testing to respectively test the internal consistency of the questionnaire and verify whether statements representing the main research constructs showed unidimensionality (Shaar N.A., Hasan, N.A., Mohamed, R., Sabri, M., 2013).

Table 1. Results of reliability testing

	Number of items	Cronbach Alpha Coefficient
Learners		
Participation	9	0.868
Main Features Used	5	0.637
Problems Encountered	7	0.743
Reasons for Non-Participation	7	0.773
Tutors		
Preferences and practices of tutors	20	0.898

Reliability testing (**Table 1**) of the four constructs in the learners' questionnaire and the single construct in the tutors' questionnaire showed that all Cronbach Alphas were between 0.6 (Malhotra, 2019) and 0.95 (Karandashev & Evans, 2019), thus confirming that both measuring instruments were internally consistent.

Construct validity testing of the same five constructs, using Bartlett's test of sphericity (Abraham and Barker, 2014) in SPSS, yielded *p*-values that were all significant at the 1% level, meaning that the constructs were well-defined. Additionally, sample adequacy tests via the Kaiser-Meyer-Olkin test gave statistics that were above 0.5 (Field, 2015), indicating that the data accommodated for the use of advanced multivariate statistical techniques like factor analysis.

Table 2. Results of construct validity and sample adequacy tests

	Bartlett test of Sphericity (Validity)		KMO-statistics
	χ^2 -statistic	p-value	(Sample adequacy)
Learners			
Participation	3597.070	< 0.001	0.898
Main Features Used	493.062	< 0.001	0.692
Problems Encountered	1219.385	< 0.001	0.742
Reasons for Non-Participation	2390.363	< 0.001	0.680
Tutors			
Preferences and practices of tutors	531.116	< 0.001	0.558

Demographics

Table 3. Demographic profile of learners (n = 806)

Variables	Attributes	Frequency	Percentage
Gender	Male	210	26.1
	Female	596	73.9
Age group (years)	18 - 20	58	7.2
	21 - 30	436	54.1
	31 - 40	217	26.9
	41 - 50	74	9.2
	Above 50	21	2.6
Institution	Open University of Mauritius	783	97.1
	University of Technology, Mauritius	23	2.9
Programme enrolled for	Bachelor's	692	85.9
	Master's	114	14.1
Year of study	Year 1	313	38.9
	Year 2	189	23.5
	Year 3	281	35.0
	Year 4	21	2.6

Table 4. Demographic profile of tutors (n = 30)

Variables	Attributes	Frequency	Percentage
Gender	Male	21	70.0
	Female	9	30.0
Age group (years)	20 - 30	1	3.3
	31 – 40	12	40.0

www.stslpress.org/journal/iecs	International Education and Culture Studies		Vol. 4, No. 4, 2024	
	41 – 50	10	33.3	
	51 – 60	2	6.7	
	61 - 70	5	16.7	
Highest qualification	Bachelor's	1	3.3	
	Master's	20	66.7	
	PhD	8	26.7	
	Other	1	3.3	
University*	Open University of Mauritius	28	93.3	
	University of Technology, Mauritius	11	36.7	
Number of years working as	18 - 20	10	33.3	
lecturer	21 – 30	10	33.3	
	31 - 40	3	10.0	

Exploratory factor analysis was also conducted to unveil the underlying

41 - 50

Problems encountered by learners during online sessions

- Reasons for learners' non-participation during online sessions
- Preferences and practices of tutors during online sessions

In all three cases, five data assumptions for the factorability of items were duly tested and satisfied, namely whether

7

33.3

- 1. Some correlation coefficients exceeded 0.3 in the correlation matrix (Zeynivandnezhad, F. Rashed, F. & Kanooni, A., 2019)
- 2. The Kaiser-Meyer-Olkin (KMO) statistic for sample adequacy was greater than 0.5 (Field, 2015).
- 3. Bartlett's test of sphericity for construct validity was significant (p < 0.05).
- 4. The diagonal elements of the anti-image correlation matrix were higher than 0.5 (Hauben, M. Hung, E. & Hsieh, W.Y., 2017)
- 5. All communalities were at least 0.4 (Eaton, K., Stritzke, W. G., & Ohan, J. L., 2019).

The extraction of factors was carried out by way of principal components analysis, with Varimax rotation, in SPSS. Kaiser's (1974) criterion, as cited in Williams, B., Brown, T., & Onsman, A. (2012), was initially used to extract factors with eigenvalues of at least 1.

Problems Encountered by Learners

Two factors explaining 60.701% of the cumulative variance were initially extracted, but Cattell's scree plot showed that there could be four factors. Thus, factor analysis was re-run with the number of factors to be extracted fixed at 4. The four extracted factors (Table 5) explained a cumulative variance of 86.050%, suggesting an excellent model.

Table 5. Results of exploratory factor analysis (problems)

Factors (% variance explained; eigenvalue)	Problems encountered during online sessions	Factor loading
F1: Technical Issues	Internet Connection	.904
(26.692%; 2.629)	Online Platform not responding as per normal	.822
F2: Lack of Interaction	The sessions are not interactive	.853
(25.119%; 1.013)	Tutors' inadequate skills of using the online platform	.815
F3: Lack of Technological Skills	Do not know how to use the features of the	.936
(17.422%; 0.787)	online platform	
F4: Anxiety	Feeling nervous during online sessions	.959
(16.817%; 0.734)		

The four factors were identified as *Technical Issues*, *Lack of Interaction*, *Lack of Technological Skills* and *Anxiety*. Reliability analysis was then carried out for the first two factors only (since the remaining two factors had only one item) to ensure that they are unidimensional. The Cronbach Alpha coefficients, means and standard deviations are given in **Table 6** below.

Table 6. Summary of extracted factors (problems)

Factors	Number of items	α	Mean	SD
Technical Issues	2	0.755	2.86	1.05
Lack of Interaction	2	0.662	2.94	1.11
Lack of Technological Skills	1	-	1.88	1.08
Anxiety	1	-	2.36	1.37

It is observed that the reliability coefficients were high for *Technical Issues* (0.807) and moderate for *Lack of Interaction* (0.662), still showing that the factors were unidimensional. Despite all the means being less than 3, on a scale of 1 to 5, results showed that the major problem for learners was *Lack of Interaction* (M = 2.94, SD = 1.11), followed by *Technical Issues* (M = 2.86, SD = 1.05). *Anxiety* (M = 2.36, SD = 1.37) was also felt during online sessions, but to a relatively lesser extent, whereas *Lack of Technological Skills* (M = 1.88, SD = 1.08) was a minor problem.

The research focused on digital learning environments has identified various challenges for learners, such as technical problems, lack of community, motivation, self-regulation, self-efficacy, and social anxiety.

• Reasons for Learners' Non-Participation

The three extracted factors (**Table 7**), which explained 83.512% of the cumulative variance, were named *Anxiety*, *Lack of Technological Skills* and *Lack of Student Engagement*.

Table 7. Results of exploratory factor analysis (non-participation)

Factors (% variance explained; eigenvalue)	Reasons for non-participation during online sessions	Factor loading
F1: Anxiety	I fear the reaction of my classmates if my answers are	.913
(35.307%; 3.041)	wrong	
	I fear the reaction of the tutors if my answers are wrong	.909
	I feel embarrassed to ask questions	.863
F2: Lack of	I do not know how to use the microphone option	.941
Technological Skills	I do not know how to use the chat option	.936
(26.798%; 1.721)	1	
F3: Lack of Student Engagement	The sessions are not engaging	.885
(21.678%; 1.083)		
	The tutors do not give us the opportunity to participate in online sessions	.811

Their Cronbach Alpha coefficients, means and standard deviations are shown in Table 8 below.

Although both institutions have moved towards more online delivery, the findings suggest that anxiety may be having on students is appropriate. It showed that students always prefer to be silent and same is categorized as psychological aspects of language anxiety, which can be a lack of confidence. Social anxiety is conceptualized as an emotional disorder that may impede achievement in higher education. According to Giacumo & Savenye (2020), students participating in digital education are not anonymous to university staff or other students in the cohort being studied and this means that interactions within common elements of online courses such as discussion boards or other online tools through which students contribute responses visible to university staff and/or peers are prone to producing social anxiety at a level that impedes participation and hence lowers the educational effectiveness of these tools.

Table 8. Summary of extracted factors (non-participation)

Factors	Number of items	α	Mean	SD	
Anxiety	3	0.889	2.76	1.09	
Lack of Technological Skills	2	0.913	1.56	0.71	
Lack of Student Engagement	2	0.675	2.31	0.98	

The reliability coefficients were superb for Anxiety (0.889) and Lack of Technological Skills (0.913), but moderate for Lack of Student Engagement (0.675). Results showed that the main reason for the non-participation of learners during online sessions was Anxiety (M = 2.76, SD = 1.09), followed by Lack of Student Engagement (M = 2.31, SD = 0.98). Lack of Technological Skills (M = 1.56, SD = 0.71) was a relatively uncommon reason for non-participation.

• Preferences and Practices of Tutors

Five factors were extracted, explaining 78.714% of the cumulative variance. They were labeled as *Effective Teaching Strategies*, *Motivation and Encouragement to Participate*, *Online Teaching and Learning Skills*, *Preference for Online/Blended Learning* and *Time Management*.

Table 9. Results of exploratory factor analysis (preferences and practices)

Factors (% variance explained; eigenvalue)	Reasons for non-participation during online sessions	Factor loading
F1: Effective	I always plan my online sessions	.923
Teaching Strategies	I always update my learning materials	.888
(32.666%; 8.790)	I tend to analyse the last session for improvement during the next session	.886
	I tend to use real-life examples during my sessions	.756
F2: Motivation and Encouragement to	I always look for ways to engage learners during my online sessions	.883
Participate (13.859%; 3.256)	I always find ways to motivate my learners during my online sessions	.846
	I encourage learners to participate by chat or talking to me during the online sessions	.817
	I encourage my learners to participate in online activities during my sessions	.770
	I encourage my learners to ask questions during the sessions	.768
	My learners are often silent during the online session	629
F3: Online Teaching and Learning Skills	I observe that the majority of the learners attend my sessions	.829
(12.078%; 1.336)	I am able to run the online session smoothly	.698
	The University has provided me with adequate training to conduct online sessions	.601
	Self-directed learning skills is more important for learners during online teaching	.497
F4: Preference for Online/Blended	I find online sessions more interactive than face to face sessions	.914
Learning	I prefer online sessions than face to face sessions	.893
(11.485%; 1.270)	I prefer blended session than conventional face to face session	.727
	I find online sessions more convenient in terms of location	.624
F5: Time	I normally give a small break during my online sessions	.801
Management (8.625%; 1.091)	I feel that my learners have self-management skills when they experience online learning	.504

Their Cronbach Alpha coefficients, means and standard deviations are shown in Table 10 below.

Table 10. Summary of extracted factors (preferences and practices)

Factors	Number of items	α	Mean	SD
Effective Teaching Strategies	4	0.938	4.33	0.79
Motivation and Encouragement to Participate	6	0.802	4.13	0.78
Online Teaching and Learning Skills	4	0.747	3.82	0.83
Preference for Online/Blended Learning	4	0.791	3.06	0.97
Time Management	2	0.602	3.20	1.01

The reliability coefficients of the five extracted factors varied from moderate (0.602) to superb (0.938). The above figures show that tutors laid most emphasis on *Effective Teaching Strategies* (M = 4.33, SD = 0.79) and *Motivation and Encouragement to Participate* (M = 4.13, SD = 0.78). To a lesser extent, they also gave importance to *Online Teaching and Learning Skills* (M = 3.82, SD = 0.83). *Time Management* (M = 3.20, SD = 1.01) and *Preference for Online/Blended Learning* (M = 3.06, SD = 0.97) figured low in tutors' list of priorities.

Conclusion and Future Research

Readiness, effective teaching and learning strategies, better management of online sessions, interactions with more engaged online activities to help and prepare learners' well-being in any kind of educational crisis are recommended. From the outcome, anxiety, lack of technological skills and lack of engagement with tutors are the main reasons for the non-participation of learners. Encouraging learners to take more active roles in collaborative learning and teaching and use of more engagement-based questions/activities must be tackled diligently. It is clear that we need to empower learners to reflect upon their learning and from this process of metacognition, they take onus of their learning, build and sustain a motivation to learn. These philosophies need to be integrated into the course development through the learner management system. All classroom activities need to address learner's fears about learning and judgment by both educators and peers. However, teaching diverse learners in different learning contexts is one of the major challenges and to place the importance of student engagement to the learning experience and build confidence in their community of learning must be addressed as future research.

References

- Abraham, J., & Barker, K. (2014). Sustaining young people's enrolment intentions in relation to physics: Development and validation of a tool. *Australian Journal of Educational & Developmental Psychology, 14*, 93-116
- Alrafi, A. (2009). Technology Acceptance Model. In A. Alrafi (Ed.), Information Systems Adoption: A study of the technology acceptance model. *VDM Verlag*, 1-12.
- Atmojo, A. E. P., & Nugroho, A. (2020), EFL Classes Must Go Online! Teaching Activities and Challenges during COVID-19 Pandemic in Indonesia. https://doi.org/10.18326/rgt.v13i1.49-76
- Bolliger, D. U., & Martin, F. (2021). Critical design elements in online courses. *Distance Education*, 42, 352-372. https://doi.org/10.1080/01587919.2021.1956301
- Bond, M., & Bedenlier, S. (2019). Facilitating student engagement through educational technology: towards a conceptual framework. *J. Interact. Media Educ.* 2019:11.
- Carey, K. (2020). Is everybody ready for the big migration to online college? Actually, no. *The New York Times*. https://www.nytimes.com
- Chapman, E. (2002). Alternative approaches to assessing student engagement rates. *Practical Assess. Res. Eval.*, 8, 1–7.
- Chung, E., Subramaniam, G., & Dass, L. C. (2020). Online Learning Readiness Among University

- Students in Malaysia Amidst Covid-19. *Asian Journal of University Education*. https://doi.org/10.24191/ajue.v16i2.10294
- Clark, T. (2020). The 4 Stages of Psychological Safety. Oakland: Berret-Koehler Publishers, Inc.
- Coates, H. (2007). A model of online and general campus-based student engagement. *Assess. Eval. Higher Educ.*, 32, 121–141.
- Covey, C. (2024). Barriers to Online Learning. The Hub Press. Athabasca University.
- Dhull, I., & Arora, S. (2019). Online Learning. *Astronomy*, *3*(8), 32-34. https://www.researchgate.net/publication/332833360_Online_Learning
- Downes, P. (2020). Reconstructing Agency in Developmental and Educational Psychology—Inclusive Systems as Concentric Space. New York, NY: Routledge.
- Eaton, K., Stritzke, W. G., & Ohan, J. L. (2019). Using Scribes in Qualitative Research as an Alternative to Transcription. *The Qualitative Report*, 24(3), 586-605. https://doi.org/10.46743/2160-3715/2019.3473
- Efriana, L., (2012). Problems of online learning during Covid-19 Pandemic in EFL classroom and the solutions. *Journal of English Language Teaching and Literature (JELITA*).
- Field, A. (2015). Discovering Statistics Using IBM SPSS Statistics. 4th ed. SAGE Publications, Inc. New York, NY, USA.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: potential of the concept, state of the evidence. *Rev. Educ. Res.*, 74, 59–109. https://doi.org/10.3102/00346543074001059
- Fredricks, J. A., Filsecker, M., & Lawson, M. A. (2016). Student engagement, context, and adjustment: addressing definitional, measurement, and methodological issues. *Learn. Instruct.*, 43, 1–4.
- Giacumo, L. A., & Savenye, W. (2020). Asynchronous discussion forum design to support cognition: Effects of rubrics and instructor prompts on learner's critical thinking, achievement, and satisfaction. *Educational Technology Research and Development*, 68, 37–66. https://doi.org/10.1007/s11423-019-09664-5
- Gooria, V., Appavoo, P., Bhunjun, U., & Gokhool, A. C. (2021). Self-Directed Learning: Readiness of Secondary School Students in Mauritius. Radical Solutions for Education in Africa, Open Education and Self-directed Learning in the Continent. *Springer Nature Singapore Pte Ltd.* https://doi.org/10.1007/978-981-16-4099-5
- Guti érrez, R. (2016). Strategies for Creative Insubordination in Mathematics Teaching, Mathematics Education: *Through the Lens of Social Justice*, 7(1).
- Hasyim, N., Arismunandar, Butarbutar, R. Ramli, A. M., & Malik Nur, I. D. (2024). Mind mapping of teachers' readiness for online teaching and learning: A Reflective Study of Urban and Suburban areas. Cogent Education. *Taylor & Francis*. https://doi.org/10.1080/2331186X.2023.2292864
- Hauben, M., Hung, E., & Hsieh, W. Y. (2017). An exploratory factor analysis of the spontaneous reporting of severe cutaneous adverse reactions. https://doi.org/10.1177/2042098616670799
- Illieva, B. (2019). Mapping Australian Higher Education. *Grattan Institute*. (Online). http://grattan.edu.au/report/mapping-australian-higher-education-2014-15/
- Kaiser, H. (1974). An index of factorial simplicity. Psychometrika, 39, 31-6.
- Kara, M., Erdoğdu, F., & Kokoç, M., & Cagiltay, K. (2019). Challenges faced by adult learners in Online Distance Education: A Literature Review. *Open Praxis*, 11(1), 5–22.
- Karademir, A., Yaman, F., & Saatçioğlu, O. (2020). Challenges of higher education institutions against COVID-19: The case of Turkey. *Journal of Pedagogical Research*, 4(4). http://dx.doi.org/10.33902/JPR.2020063574
- Karandashev, V., & Evans, N. D. (2019). Quadrangular love theory and scale: Validation and

- psychometric investigation. Journal of Methods and Measurement in the Social Sciences, 10(1), 1-35.
- Kerras, N., & Essayahi, M. L. B. (2022). Education and COVID-19: Learning Arabic Language and Perspectives. *The Electronic Journal of e-Learning*, 20(1), 36-52.
- Malhotra, K. N. (2019). Marketing research, An Applied orientation, 7th edition. Pearson.
- Mandernach, B. J. (2015). Assessment of student engagement in higher education: a synthesis of literature and assessment tools. *Int. J. Learn. Teach. Educ. Res.*, 12, 1–14. https://doi.org/10.1080/02602938.2021.1986468
- Martin, F., & Bollinger, D. U. (2018). Engagement Matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online Learning Journal*, 22(1). https://doi.org/10.24059/olj.v22i1.1092
- McCarty, T., Brayboy, B., Datnow, A., & Hamann, E. T., (2013). The Anthropology of Educational Persistence: What Can We Learn from Anthropology to Improve Educational Opportunities and Outcomes for Underserved Students? (*Final Report*). Learning and Teacher Education, Digital Commons, Commissioned by the Educational Credit Management Corporation (ECMC) Foundation. *The Anthropology of Educational Persistence Thought Collective*.
- Mogavi, R. H, Zhao, Y., Haq., E. U., & Ma, X. (2021). Student Barriers to Active Learning in Synchronous Online Classes: Characterization, Reflections, and Suggestions. *ACM Conference on Learning* @ Scale. https://doi.org/10.1145/3430895.3460126
- Muthuprasad, T., Aiswarya, S., Aditya, K. S., & Jha, G. K. (2021). Student's perception and preference for online education in India during Covid-19 pandemic, Social Sciences & humanities, Open *Elsevier*, 3(1).
- Nurjamin, A., Nurjamin-Rahayu, L., Fajriah Nur, Y., & Berliana Sari, D. (2023). Turn-Taking and Preferring Silence in Synchronous EFL Online Classroom Interaction. *International Journal of Society, Culture & Language (IJSCL)*.
- Racheva, V. (2013). What is a virtual classroom?. (Online) Available from: https://www.vedamo.com/knowledge/what-is-virtual-classroom/. (Accessed: 24 November 2022).
- Roy, D., Tripathy, S., Kar, S. K., Sharma, N., Verma, S. K., & Kaushal, V. (2020). Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian J. Psychiatr.* 51, 102083. https://doi.org/10.1016/j.ajp.2020.102083
- Seaman, J. E., Allen, I. E., & Seaman, J. (2018). Grade Increase: Tracking Distance Education in the United States. *Babson Survey Research Group*. Retrieved from: https://onlinelearningsurvey.com/reports/gradeincrease.pdf
- Shaar N. A., Hasan, N. A., Mohamed, R., & Sabri, M. (2013). Financial Literacy: A study among the university students. *Interdisciplinary journal of contemporary research in business*, 5(2), 279-299.
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology & Distance Learning*, 2, 3-10.
- Simonson, M. (2019). Teaching and Learning at a Distance, Quarterly Review of Distance Education. *EBSCO*, 20(3), 31-43.
- Singh, U. G., & Gooria, V. The COVID-19 Effect on Mauritian Higher Education Global Trends in Management, IT and Governance in an E-World. *Alternation African Scholarship Book, Series.* 07, 215-241. https://alternation.ukzn.ac.za/Files/books/series/07/aasbs-07-2021.pdf
- Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education: Research*, 15, 157-190. Retrieved from http://www.informingscience.org/Publications/3502
- Talebian, S., Movahed, H., & Rezvanfar, A. (2014). Information and Communication Technology (ICT)

- in Higher Education: Advantages, Disadvantages, Conveniences and Limitations of Applying E-learning to Agricultural Students in Iran. *Procedia Social and Behavioral Sciences*, *152*, https://doi.org/10.1016/j.sbspro.2014.09.199
- Tseng, & Chu, L. C. (2010). The benefits of meditation vis-à-vis emotional intelligence, perceived stress and negative mental health. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 26(2), 169–180. https://doi.org/10.1002/smi.1289
- Wahid, S. S., Pedersen, G. A., Ottman, K., Burgess, A., Gautam, K., Martini, T., & Kohrt, B. A. (2020) Detection of risk for depression among adolescents in diverse global settings: protocol for the IDEA qualitative study in Brazil, Nepal, Nigeria and the UK. *BMJ Open*, 10(7), https://doi.org/10.1136/bmjopen-2019-034335
- Williams, B., Brown, T., & Onsman, A. (2012). Exploratory factor analysis: A five-step guide for novices. *Journal of Emergency Primary Health Care*, 8(3), 1–13.
- Ying, Y. H., Siang, W. E. W., & Maslawati, M. (2021). The Challenges of Learning English Skills and the Integration of Social Media and Video Conferencing Tools to Help ESL Learners Coping with the Challenges during Covid-19 Pandemic: A Literature Review. *Creative Education*, 12, 1503-1516. https://doi.org/10.4236/ce.2021.127115
- Zeynivandnezhad, F., Rashed, F., & Kanooni, A. (2019). Exploratory Factor Analysis for TPACK among Mathematics Teachers: Why, What and How. *Anatolian Journal of Education*, 4(1).