



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

International Journal of Current Research

Vol. 16, Issue, 04, pp.28052-28056, April, 2024

DOI: <https://doi.org/10.24941/ijcr.46890.04.2024>

RESEARCH ARTICLE

IMPACT OF TEACHER E-READINESS ON USER-SATISFACTION LEADING TO E-LEARNING ACCEPTANCE IN HIGHER EDUCATION

¹Bhaskar Das and ²Dr. Jyoti Kumari

¹PhD Scholar candidate, Banasathali Vidyapith, Rajasthan

²Assistant Professor, Department of Education, Banasthali Vidyapith, Rajasthan

ARTICLE INFO

Article History:

Received 24th January, 2024

Received in revised form

09th February, 2024

Accepted 25th March, 2024

Published online 30th April, 2024

Key words:

User Satisfaction, Teacher E-Readiness, higher Education, E-Learning, Multiple Linear Regression.

*Corresponding author:

Tarun Kumar

ABSTRACT

In the context of India, the surge in popularity of e-learning, especially prompted by the COVID-19 pandemic, highlights the need to explore how learners perceive and accept this mode of education. The existing literature on this subject in India is limited, particularly in relation to teacher e-readiness relation to user-satisfaction. This study adopts an empirical research methodology, analyzing data from 62 e-learners of higher educational institutes in India engaged in various e-learning formats, including higher education, re-skilling, online skill certifications, institutional training, and hobby and language-related learning. The research framework is grounded in the Unified Theory of Acceptance and Use of Technology model and the End User Computing Satisfaction model. The collected data is subjected to multiple linear regression analysis using SPSS. The study's outcomes reveal a significant association of teacher e-readiness towards user satisfaction, thereby influencing the acceptance of e-learning in India. This research contributes theoretically to the understanding of factors influencing e-learning acceptance. Moreover, the findings and recommendations hold practical implications for educational providers, corporate entities in the education industry, and policymakers.

Copyright©2023, Bhaskar Das and Jyoti Kumari. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Bhaskar Das and Dr. Jyoti Kumari. 2023. "Impact of Teacher e-readiness on user-satisfaction leading to e-learning acceptance in higher education". *International Journal of Current Research*, 16, (04), 28052-28056.

INTRODUCTION

Online learning, also known as electronic learning, involves the dissemination of knowledge using advanced technologies like mobile phones, webinars, and tablets. The global advancement of educational practices has been supported by online learning, which has evolved to offer learning opportunities for everyone (Kem, 2023). The research study focuses on measuring the user satisfaction among the students of higher education with objectives of

- Focus on items of user-satisfaction in e-learning
- For use across a variety of e-learning platforms
- To explore the relationship between end-user computing satisfaction and independent variable of teacher e-readiness.

Existing Literature: (Akaslan and Law 2011) in a study titled "Measuring Teacher's Readiness for E-Learning", done in an online and blended environment, investigated the higher educational institutions (HEI) readiness for e-learning. Data collected through a survey of questionnaire which were returned by 289 participants mainly comprising of teachers and researchers was computed vide descriptive and inferential statistics.

The Survey questionnaire consisted of 41 questions across 3 segments of investigation 1/ E-Readiness, 2/ E-Acceptance, 3/ E-Training. E-Readiness sections. The result of the study revealed that the teachers of higher education showed positive attitude and confidence towards adoption of e-learning. Also while the teacher's e-readiness seems to be sufficient, their attitude need strengthening for adoption of e-learning. A research study was conducted by (Gay 2016) to assess their levels of e-readiness in the journey of course delivery including pre-course, during-course and post-course at the online campus. 208 online instructors participated in the survey which was conducted online and their response data were analysed. Results revealed only 72.6 % were individually e-ready with internet connection for dedicated time period, regular in using e-technologies for communication, self-motivated and independent learners, and positive towards accepting and using new technologies while overall 90.6 % cohort were e-ready. The results identified characteristics of e-teachers / instructors in the online environment and can be used for comparing levels of e-readiness across institutions. The study validates the relationship of teacher e-readiness with user-satisfaction in e-learning. (Geng et al 2019), in a study conducted in blended and hybrid environment investigated self-directed learning and technology readiness in blended online learning environment.

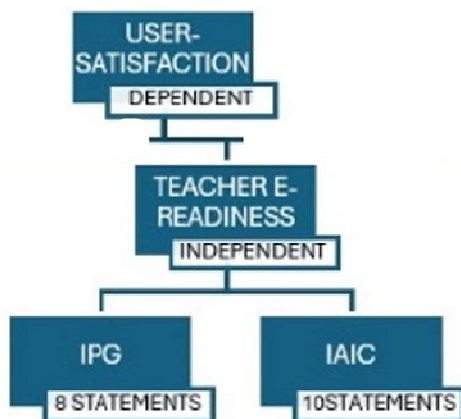
In this study two groups are formed one from blended learning environment and another set from non-blended learning environment. 96 UG students from blended learning (BL) and 111 UG students from non-blended learning (NBL) participated in the research. Results indicate self-directed learning and technology readiness have a positive influence on learning motivation in BL environment thus leading to satisfaction and intent of use. Learning motivation is found positively influencing the social presence in BL teaching environment. Technology readiness is important role in impact of teaching in the BL learning environment. The study evidenced that e-readiness positively influences online learning. In a research study conducted by (Yang and Xu, 2023) across 5914 students and 1752 instructors of e-learning, the results indicated three valuable components in e-learning including teacher presence and skill, teacher-student interaction and practicing problem solving activities. The review of literature revealed that the research studies has emphasized the importance of user-satisfaction as key to E-learner motivation and intention to use learning platforms in future. Also the literature review pointed that factor of teacher e-readiness is related to e-learner satisfaction. With online learning environment becoming the new normal, E-Learner satisfaction is set to play a significant role in both motivation and intention to continue to use online learning platforms. Given these scenario, there are no significant research done on the teacher e-readiness to online learning in Indian context and this is the gap that I would contribute to through my proposed research study.

METHODOLOGY

Regression analysis is a statistical method used to examine the relationship between one dependent variable and one or more independent variables. In the context this study, which aims to explore the impact of teacher e-readiness on e-learner satisfaction in higher education, regression analysis can be a valuable tool for assessing the strength and nature of these relationships. Dependent Variable (DV): The dependent variable in this study is "User-Satisfaction." This is the variable the research is trying to predict/understand based on the independent variable.

Independent Variables (IV): 1) Teacher E-Readiness

In this study, internal consistency reliability was assessed using Cronbach's alpha coefficient. Cronbach's alpha measures the extent to which items within a measurement instrument are correlated.



A higher alpha coefficient indicates greater reliability and internal consistency among the items. Analyzing the correlation of teacher e-readiness towards online learning through satisfaction. Six different constructs formed the basis of the survey that was conducted amongst 62 respondent students who have pursued or are pursuing online learning courses of short (upto 3months) to long term (6months and beyond) or continuous online courses. Total 18 items formed from the constructs were included in the survey as (IPG-8, IAIC-10).

Data analysis and Results

The survey is aimed to assess the teacher e-readiness towards online learning user satisfaction.

Sample Description: A total of 62 respondents participated in the survey, comprising students enrolled in education institutions offering online learning courses. The sample represented diverse academic disciplines and varying levels of familiarity with online learning platforms.

The statistical analysis of the respondents in the research study are detailed below:

Frequency Table:

Online course duration: The prerequisite of participation in the survey was completion of online courses of short-term duration (3 months), long-term duration (6 months), continuous online learning or all the options. The outcome of the research study shows students participants included 46.8% of short-term online course duration, 25.8% long-term online course duration, 6.5% from continuous online courses and 21% from all online course options.

	Frequency	Percent	Valid Percent	Cumulative Percent
Short term course	29	46.8	46.8	46.8
Long term course	16	25.8	25.8	72.6
Valid Continuous Online Learning	4	6.5	6.5	79.0
All	13	21.0	21.0	100.0
Total	62	100.0	100.0	

Gender: Gender analysis of the students participation in the research study shows 53.2% participation by males and 46.8% by female students.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	33	53.2	53.2	53.2
Female	29	46.8	46.8	100.0
Total	62	100.0	100.0	

Educational Institution's category: Students participation in the research study shows 3.2% from government-run, 48.4% from privately-run, 1.6% from autonomous and 46.8% from EdTech online education platforms thus evidencing and increased presence of opportunity in this sector.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Government	2	3.2	3.2	3.2
Private	30	48.4	48.4	51.6
Autonomous	1	1.6	1.6	53.2
EdTech Platform (Coursera/Khan Academy)	29	46.8	46.8	100.0
Total	62	100.0	100.0	

Discipline: The majority of the participating students in the research study comprising of 40.3% are from Fashion education background, with 22.6% from business, 16.1% from others- denoted by 8 (medical, pharmacy, armed forces, skill development, etc), 8.1% from commerce, 4.8% from humanities, 3.2% from science and engineering and 1.6% from architecture & interior streams.

	Frequency	Percent	Valid Percent	Cumulative Percent
Business	14	22.6	22.6	22.6
Fashion	25	40.3	40.3	62.9
Architect-Interior	1	1.6	1.6	64.5
Commerce	5	8.1	8.1	72.6
Valid Humanities	3	4.8	4.8	77.4
Science	2	3.2	3.2	80.6
Engineering	2	3.2	3.2	83.9
8	10	16.1	16.1	100.0
Total	62	100.0	100.0	

Location: Region wise segregation of the research study samples shows participation of 66.1% from Delhi NCR, 1.6% from Northern India, 3.2% from Western India, 3.2% from Southern India and 25.8% from online participants.

	Frequency	Percent	Valid Percent	Cumulative Percent
Delhi NCR	41	66.1	66.1	66.1
Northern India	1	1.6	1.6	67.7
Western India	2	3.2	3.2	71.0
Valid Southern India	2	3.2	3.2	74.2
Online	16	25.8	25.8	100.0
Total	62	100.0	100.0	

Accessibility of online learning: The devices in use for undertaking online courses as stated by the participating students shows 56.5% on laptop or desktop, 43.5% on laptop, desktop & mobile while no one chose mobile as an option for undertaking online courses.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid on laptop or desktop	35	56.5	56.5	56.5
on both laptop-desktop & mobile	27	43.5	43.5	100.0
Total	62	100.0	100.0	

Internet proficiency: Among the participants of the research study majority comprising of 48.4% each identified their proficiency skills in internet as experts and intermediate which implies that the skill set is already acquired at the higher education level while 3.2% identified themselves as beginners.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Expert	30	48.4	48.4	48.4
Intermediate	30	48.4	48.4	96.8
Beginner	2	3.2	3.2	100.0
Total	62	100.0	100.0	

RESULTS

The Cronbach's alpha coefficient for the measurement instrument used in this study was calculated to assess its reliability. The value of Cronbach's alpha ranges from 0 to 1. A coefficient closer to 1 indicates high internal consistency among the items in the instrument. In overall scale of all 62 respondents in research study, Cronbach's alpha value of .952

suggests that the measurement instrument used in this study demonstrates high internal consistency. Table with details as illustrated below.

	N	%
Valid	62	100.0
Cases Excluded ^a	0	.0
Total	62	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	N of Items
.952	86

For Instructor/Teacher presence and guidance in online course (IPG), Cronbach's alpha value of .872 suggests that the measurement instrument used in this study demonstrates high internal consistency. Table with details as illustrated below.

IPG

	N	%
Valid	62	100.0
Cases Excluded ^a	0	.0
Total	62	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	N of Items
.872	8

For Instructor/Teacher ability in internet-based course (IAIC), Cronbach's alpha value of .914 suggests that the measurement instrument used in this study demonstrates high internal consistency. Table with details as illustrated below.

IAIC

	N	%
Valid	62	100.0
Cases Excluded ^a	0	.0
Total	62	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	N of Items
.914	10

Correlation: Total 18 items formed from the 2 constructs were included in the research survey as (IPG-8, IAIC-10). The result outcome is discussed here.

		Correlations								
		Overall_Shu_Sat	IPG1	IPG2	IPG3	IPG4	IPG5	IPG6	IPG7	IPG8
Overall_Shu_Sat	Pearson Correlation	1	.582 ^{**}	.599 ^{**}	.244	.648 ^{**}	.613 ^{**}	.677 ^{**}	.484 [*]	.502 [*]
	Sig. (2-tailed)		.000	.000	.056	.000	.000	.000	.000	.000
IPG1	Pearson Correlation	.582 ^{**}	1	.568 ^{**}	-.244	.676 ^{**}	.481 [*]	.584 [*]	.532 [*]	.621 [*]
	Sig. (2-tailed)	.000		.000	.056	.000	.000	.000	.000	.000
IPG2	Pearson Correlation	.599 ^{**}	.568 ^{**}	1	.166	.603 ^{**}	.796 ^{**}	.534 [*]	.495 [*]	.598 [*]
	Sig. (2-tailed)	.000	.000		.198	.000	.000	.000	.000	.000
IPG3	Pearson Correlation	.244	-.244	.166	1	.192	-.068	.076	.084	.024
	Sig. (2-tailed)	.056	.056	.198		.136	.600	.560	.517	.853
IPG4	Pearson Correlation	.648 ^{**}	.676 ^{**}	.603 ^{**}	.192	1	.667 ^{**}	.686 ^{**}	.532 [*]	.632 [*]
	Sig. (2-tailed)	.000	.000	.000	.136		.000	.000	.000	.000
IPG5	Pearson Correlation	.613 ^{**}	.481 [*]	.765 ^{**}	-.068	.667 ^{**}	1	.584 [*]	.440 [*]	.558 [*]
	Sig. (2-tailed)	.000	.000	.000	.600	.000		.000	.000	.000
IPG6	Pearson Correlation	.677 ^{**}	.584 [*]	.534 [*]	.076	.686 ^{**}	.584 [*]	1	.617 ^{**}	.646 [*]
	Sig. (2-tailed)	.000	.000	.000	.560	.000	.000	.000		.000
IPG7	Pearson Correlation	.484 [*]	.532 [*]	.495 [*]	.084	.532 [*]	.440 [*]	.617 ^{**}	1	.703 ^{**}
	Sig. (2-tailed)	.000	.000	.000	.517	.000	.000	.000	.000	
IPG8	Pearson Correlation	.502 [*]	.621 [*]	.598 [*]	.024	.632 [*]	.558 [*]	.646 [*]	.703 ^{**}	1
	Sig. (2-tailed)	.000	.000	.000	.853	.000	.000	.000	.000	.000
N		62	62	62	62	62	62	62	62	62

** Correlation is significant at the 0.01 level (2-tailed).

Construct-I: Instructor/Teacher presence and guidance (IPG)

E-learner satisfaction is positively correlated with instructor presence and guidance. This suggests that as instructor presence and guidance increase, E-learner satisfaction also increases. This indicates the importance of this factor in enhancing E-learner satisfaction. Results are detailed in the correlation chart as below:

		Correlations										
		Overall_Thu_Sat	IAC1	IAC2	IAC3	IAC4	IAC5	UNCB	IAC7	IAC9	UNCB	IAC10
Overall_Thu_Sat	Pearson Correlation	1	.498*	.603*	.426*	.598*	.623*	.621*	.598*	.645*	.769*	.953*
	Sig. (2-tailed)		.000	.000	.001	.000	.000	.000	.000	.000	.000	.000
	N		62	62	62	62	62	62	62	62	62	62
IAC1	Pearson Correlation	.498*	1	.720*	.544*	.631*	.711*	.662*	.647*	.623*	.641*	.639*
	Sig. (2-tailed)			.000	.000	.000	.000	.000	.000	.010	.007	.062
	N			62	62	62	62	62	62	62	62	62
IAC2	Pearson Correlation	.603*	.720*	1	.642*	.704*	.727*	.618*	.612*	.602*	.644*	.652*
	Sig. (2-tailed)				.000	.000	.000	.001	.000	.000	.000	.000
	N				62	62	62	62	62	62	62	62
IAC3	Pearson Correlation	.426*	.544*	.642*	1	.513*	.691*	.540*	.294	.397*	.473*	.410*
	Sig. (2-tailed)					.000	.000	.000	.028	.002	.000	.001
	N					62	62	62	62	62	62	62
IAC4	Pearson Correlation	.598*	.631*	.704*	.513*	1	.647*	.421*	.361*	.374*	.389*	.401*
	Sig. (2-tailed)						.000	.001	.004	.003	.002	.001
	N						62	62	62	62	62	62
IAC5	Pearson Correlation	.623*	.711*	.727*	.691*	.647*	1	.654*	.634*	.622*	.654*	.626*
	Sig. (2-tailed)							.000	.000	.001	.000	.001
	N							62	62	62	62	62
IAC6	Pearson Correlation	.621*	.662*	.618*	.612*	.602*	.618*	1	.388*	.448*	.535*	.498*
	Sig. (2-tailed)								.002	.000	.000	.000
	N								62	62	62	62
IAC7	Pearson Correlation	.598*	.645*	.612*	.602*	.644*	.654*	.634*	1	.693*	.601*	.681*
	Sig. (2-tailed)									.000	.000	.000
	N									62	62	62
IAC8	Pearson Correlation	.645*	.623*	.602*	.602*	.647*	.421*	.448*	.663*	1	.782*	.720*
	Sig. (2-tailed)								.000		.000	.000
	N										62	62
IAC9	Pearson Correlation	.769*	.641*	.644*	.473*	.389*	.494*	.525*	.601*	.792*	1	.810*
	Sig. (2-tailed)								.000	.000		.000
	N											62
IAC10	Pearson Correlation	.953*	.639*	.652*	.410*	.401*	.408*	.436*	.663*	.792*	.810*	1
	Sig. (2-tailed)								.000	.000	.000	
	N											

*. Correlation is significant at the 0.01 level (2-tailed).
 *. Correlation is significant at the 0.05 level (2-tailed).

Construct-II: Instructor/Teacher ability in internet-based course (IAC). E-learner satisfaction is positively correlated with instructor’s ability in internet-based course. This suggests that as instructor’s ability in internet-based course increase, E-learner satisfaction also increases. This indicates the importance of this factor in enhancing E-learner satisfaction. Results are detailed in the correlation chart as below:

CONCLUSION

The survey provided valuable insights into the teacher e-readiness towards online learning. Both of 2 constructs shows positive correlation towards online learning. This further indicates that the e-learning teachers/instructors should be able to make course requirements clear; encourages and communicates important timelines to the e-learners and comments on the assignments timely; also apply right instructional techniques and suitable methods in course; facilitates discussions for in-depth learning among e-learners and continuously upgrades his/her technical skills.

REFERENCES

Abdurrahman, D. T., Owusu, A., & Bakare, A. S. 2020. Evaluating factors affecting user satisfaction in university enterprise content management ECM systems. *Electronic Journal of Information Systems Evaluation*, 231, 1-16.

Adeyinka, T., & Mutula, S. 2010. A proposed model for evaluating success of WebCT course content management system. *Computers in Human Behavior*, 266, 1795–1805.

Agbo, F. J., Olawumi, O., Oyelere, S. S., Kolog, E. A., Olaleye, S. A., Agjei, R. O., Olawuni, A. 2020. Social media usage for computing education: The effect of tie strength and group communication on perceived learning outcome. *International Journal of Education and Development using Information and Communication Technology*, 161, 5-26.

Akaslan, D., & Law, E. L.C. 2011. Measuring teachers’ readiness for e-learning in higher education institutions associated with the subject of electricity in Turkey. 2011

IEEE Global Engineering Education Conference EDUCON.

Alexander, S. 2001. E-learning developments and experiences. *Education and Training*, 434/5, 240-248.

Anthony Jnr, B. 2024. Examining Blended Learning Adoption Towards Improving Learning Performance in Institutions

Asoodar, M., Vaezi, S., & Izanloo, B. 2016. Framework to improve e-learner satisfaction and further strengthen e-learning implementation. *Computers in Human Behavior*, 63, 704–716.

Bates, T. 1997. *Restructuring the university for technological change*. Murdoch University.

Beluce, A. C., Oliveira K. L., 2016, Scale of strategies and motivation for learning in virtual environments. *Revista Brasileira de Educação* v. 21 n. 66

Bertea, P. 2009, Measuring Students’ Attitude Towards E-Learning. A Case Study. In *Proceedings of the 5th International Science Conference: eLearning and Software for Education eLSE*, Bucharest, 09-10 April, 2009.

Chen, T., Peng, L., Yin, X., Rong, J., Yang, J., & Cong, G. 2020. Analysis of user satisfaction with online education platforms in China during the COVID-19 pandemic. *Healthcare*, 83, 200.

Chow, N.C., Chien, H.M., Yeh, I.J. 2016, Examining the critical factors affecting learning finance online. *Revista de cercetare [i interven]ie social*, 2016, vol. 53, pp. 232-248

Darab, B., & Montazer, G. A. 2011. An eclectic model for assessing e-learning readiness in the Iranian Universities. *Computers & Education*, 563, 900–910.

Fadhel, I. E. I., Idrus, S. Z. B. S., Abdullah, M. S. Y., Ibrahim, A. A. E. A., Omar, M., & Saad, S. 2019. Nias-Mukalla web based systems success measurement and student’s satisfaction evaluation based on security factor of systems quality engineering theory ISO 25010 and other factors. *Independent Journal of Management & Production*, 106, 2102-2123.

Gay, G.H.E. An assessment of online instructor e-learning readiness before, during, and after course delivery. *J Comput High Educ* 28, 199–220 2016.

Geng, S., Law, K. M. Y., & Niu, B. 2019. Investigating self-directed learning and technology readiness in blending learning environment: *Revista de universidad y sociedad del conocimiento*. *International Journal of Educational Technology in Higher Education*, 161, 1-22

Hung, W.-H., Chang, L.-M., Lin, C.-P., & Hsiao, C.-H. 2014. E-readiness of website acceptance and implementation in SMEs. *Computers in Human Behavior*, 40, 44–55.

Kem, D. 2023. Implementing E-Learning Applications and Their Global Advantages in Education. In *Handbook of Research on Learning in Language Classrooms Through ICT-Based Digital Technology* pp. 117-126. IGI Global.

Keramati, A., Afshari-Mofrad, M., & Kamrani, A. 2011. The role of readiness factors in E-learning outcomes: An empirical study. *Computers & Education*, 573, 1919–1929.

Khanna, M. 2020, May 11, India’s Internet Usage Increased by 40 Percent in COVID-19 Lockdown, Says Report. *India Times*. Retrieved from <https://www.indiatimes.com/technology/news/india-internet-usage-increased-by-40-percent-in-covid-19-lockdown-says-report-512955.html>

Lazar, I. M., Panisoara, G., & Ion, O. P. 2020. Digital technology adoption scale in the blended learning context

- in higher education: Development, validation and testing of a specific tool. PLoS One, 157
- Liaw, S. S., Huang, H. M., & Chen, G. D. 2007. Surveying instructor and learner attitudes toward e-learning. Computers Education, 494, 1066–1080.
- Long, P., Limbu, Y. B., Bui, T. K., Nguyen, H. T., & Pham, H. T. 2019. Does e-learning service quality influence e-learning student satisfaction and loyalty evidence from Vietnam: Revista de universidad y sociedad del conocimiento. International Journal of Educational Technology in Higher Education, 161, 1-26
- McGill, T. J., & Hobbs, V. J. 2008. How students and instructors using a virtual learning environment perceive the fit between technology and task. Journal of Computer Assisted Learning, 243, 191-202.
- Meenakumari J 2021, Response to demands from society through Education 5.0 in Indian education system, Times of India
- Mejía-Madrid, G., Llorens-Largo, F., & Molina-Carmona, R. 2020. Dashboard for evaluating the quality of open learning courses. Sustainability, 129, 3941
- Meng-Hua, L., Ming-Chien, H., Wen-Hsu Hsian, Won-Fu, H., Mai-Lun Chiu, & Shen-Tsu, W. 2019. Teaching ecosystem design: Teachers' satisfaction with the integrated course service system. Education Sciences, 93
- Mohammadi, H. 2015. Investigating users' perspectives on e-learning: An integration of TAM and IS success model. Computers in Human Behavior, 45,359–374.
- Motaghian, H., Hassanzadeh, A., & Moghadam, D. K. 2013. Factors affecting university instructors' adoption of web-based learning systems: Case study of Iran. Computers & Education, 611, 158–167.
- Ozkan, S., & Koseler, R. 2009. Multi-dimensional students' evaluation of e-learning systems in the higher education context: An empirical investigation. Computers & Education, 534, 1285–1296.
- Panda, S., & Mishra, S. 2007. E-learning in a mega open university: Faculty attitude, barriers and motivators. Educational Media International, 444, 323–338.
- Safsouf, Y., Mansouri, K., & Poirier, F. 2020. An analysis to understand the online learners' success in public higher education in Morocco. Journal of Information Technology Education: Research, 19, 87-112
- Sanjay Sabestian, Founder & CEO - ECS Global | Sustainability | Education Management – Growth, LinkedIn
- Stacey, E. 2007. Collaborative learning in an online environment. International Journal of E-Learning and Distance Education, 142, 14-33.
- Stacey, E. 2007. Collaborative learning in an online environment. International Journal of E-Learning and Distance Education, 142, 14-33.
- Yang, C., & Xu, D. 2023. Predicting student and instructor e-readiness and promoting e-learning success in online EFL class during COVID-19 pandemic: A case from China . Plos one, 185, e0284334-e0284334
