

Cloud computing services and its Effect on tertiary education : Using google classroom

Alajmi, Qasim^a; Al-Nuaimy, Louay A.^b; Arul Jose, G. Jai^b; Mastan, Mohammed^b; Al-Sharafi, Mohammed A.^c

^a College of Arts Humanitas, A' Sharqiah University (ASU), Department of Education, Oman

^b Oman College of Management Technology, CS/MIS Department, Oman

^c Faculty of Computing, Universiti Malaysia Pahang, Lebuhraya Tun Razak, Gambang, Pahang, 26300, Malaysia

ABSTRACT

This paper examines the effectiveness of the Google Classroom App in learning for higher education institutions in Oman. The massive advancement in technology has contributed to changes in learning and delivery of learning resources in the classroom. Thus, it has saved the resources and reduced the cost of learning associated with the traditional learning model. The main goal of this paper is to investigate the students' perception about the cloud computing services accessibility, ease of use and usefulness by measuring the implementation effectiveness of Google Classroom as a mode of teaching. This study used quantitative approach mode to determine the effectiveness and the effect of using Google Classroom e-learning model, 225 completed questionnaires were analyzed using SPSS tool. Its evident that using Google Classroom for the learning is more effective and gained highest level of satisfaction among the learners. As a general result of this work students can use Google classroom in very comfortable and easy way really on the ability of online, remote, and time unconstrained conditions. The students also like to learn through the lecturer with the support of google classroom.

KEYWORDS

Cloud computing; E-Learning; Google Classroom; HEIs; ICT

REFERENCES

- [1] M. Britt, "How to better engage online students with online strategies," *College Student Journal*, vol. 49, no. 3, pp. 399-404, 2015, doi: ISSN-0146-3934.
- [2] C. Lee, "Handbook of Research on Cloud-Based STEM Education for Improved Learning Outcomes.," IGI Global.
- [3] C. Lee, " Handbook of Research on Cloud-Based STEM Education for Improved Learning Outcomes. ," IGI Global.
- [4] N. Selviandro and Z. A. Hasibuan, "Cloud-based e-learning: A proposed model and benefits by using e-learning based on cloud computing for educational institution," in *Information and Communication Technology-EurAsia Conference, 2013: Springer*, pp. 192-201.
- [5] P.-C. Sun, R. J. Tsai, G. Finger, Y.-Y. Chen, and D. Yeh, "What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction," *Comput Educ*, vol.50, no. 4, pp. 1183-1202, 2008.
- [6] Q. Alajmi, A. Sadiq, A. Kamaludin, and M. A. Al-Sharafi, "ELearning Models: The Effectiveness of the Cloud-Based ELearning Model over the Traditional E-Learning Model," in *8th International Conference on Information Technology, ICIT'2017, Aman, Gordan, 2017*, pp. 12-16, doi:10.1109/ICITECH.2017.8079909.
- [7] M. A. Al-Sharaf, R. A. Arshah, and E. A. Abu-Shanab, "Factors affecting the continuous use of cloud computing services from expert's perspective," in *TENCON 2017 IEEE Region 10 Conference, 5-8 Nov. 2017 2017*, pp. 986-991, doi: 10.1109/TENCON.2017.8228001.
- [8] M. Al-Zoube, S. A. El-Seoud, and M. F. Wyne, "Cloud computing based e-learning system," *International Journal of Distance Education Technologies (IJDET)*, vol. 8, no. 2, pp. 58-71, 2010.
- [9] Q. AlAjmi, R. A. Arshah, A. Kamaludin, A. S. Sadiq, and M. A. Al-Sharafi, "A Conceptual Model of E-Learning based on Cloud Computing Adoption in Higher Education Institutions," in *2017 International Conference on Electrical and Computing Technologies and Applications (ICECTA), Ras Al Khaimah, United Arab Emirates, 2017*, pp. 1-7, doi: 10.1109/ICECTA.2017.8252013.
- [10] D. Desplaces, C. A. Blair, and T. Salvaggio, "DO E-LEARNING TOOLS MAKE A DIFFERENCE?: Results From a Case Study," *Quarterly Review of Distance Education*, vol. 16, no. 4, p. 23, 2015.
- [11] A. H. Masud and X. Huang, "A novel approach for adopting cloud-based e-learning system," presented at the *Computer and Information Science (ICIS), 2012 IEEE/ACIS 11th International Conference, 2012*.
- [12] S. Vitkar, "Cloud based model for e-learning in higher education," *International Journal of Advanced Engineering Technology*, vol. 3, no. 4, pp. 38-42, 2012.
- [13] N. Jain, V. Sharma, and M. Malviya, "Reduction of negative and positive association rule mining and maintain superiority of rule using modified genetic algorithm," *International Journal of Advanced Computer Research*, vol. 2, no. 4, p. 6, 2012.
- [14] T. Zia, A. Zomaya, V. Varadharajan, and M. Mao, *Security and Privacy in Communication Networks: 9th International ICST Conference, SecureComm 2013, Revised Selected Papers*. Springer, 2013.