

# Cloud Computing based E-Learning System for Collaborative and Blended-Learning Environment

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**Abstract:** *In recent years cloud computing technologies managed and changed the way applications are going to be developed and accessed in various E-learning platforms. Now days the use of collaborative and blended learning applications has been notably supported by cloud computing environment. Cloud computing provides a very low cost services to different academic institutions to access learning applications through mobile devices ,laptops and desk top computers. In this paper we present a solution that is based on cloud computing which is used for building a virtual environment both for teaching and learning. We present an interactive, modifying and monitoring educational or course contents. The environment and the design proposed can also be used as a platform for exploring and sharing new ideas as well as for designing integration of different pedagogical approaches for both teaching and learning.*

**Keywords:** Cloud computing, blended learning, collaborative learning, Active learning

## REFERENCES

- [1]. Ahmed AL-Hunaiyyan and Salah Al-Sharhan, "The Design ofMultimedia Blended e-learning Systems: CulturalConsiderations", Kuwait, IEEE Conference on Signals Circuitsand Systems (SCS), November 2009, pp. 1-5.
- [2]. Balasundaram, S.R., "Securing Tests in E-Learning Environment", ACM- Computing and Security, February
- [3]. 2011, pp. 624-627.
- [4]. Bo Dong, QinghuaZheng, Jie Yang, Haifei Li and Mu Qiao, "An E-learning Ecosystem Based on Cloud Computing
- [5]. Infrastructure" , IEEE International Conference on Advanced Learning Technologies, August 2009, pp. 125-127.
- [6]. Chun-C hia Wang, Wen-Chang Pai and Neil Y. Yen,"A Sharable e-Learning Platform Based on Cloud Computing ,IEEE – Computer Research and Development(ICCRD), Vol.2, May 2011, pp.1-5.
- [7]. Djenic, S., Krneta, R. and Mitic, J. "Blended Learning of Programming in the Internet Age", IEEE transactions on
- [8]. Education, Vol. 54, No. 2, May 2011, pp.247-254.
- [9]. Hui Ma, ZhongmeiZheng, Fei Ye and Sanhong Tong "The Applied Research of Cloud Computing in the Construction of Collaborative Learning Platform under E-learning Environment", IEEE Computer Society, Vol. 1, November 2010, pp.190-192.
- [10]. Janine G. Moura1, Leônidas O. Brandao and Anarosa A. F. Brandao, "A Web-Based Learning Management System with Automatic Assessment Resources", IEEE–Frontiers in Education Conference, January 2008, pp. 1-6.
- [11]. Jing Cai, Yueliang Zhou and GaofengRuan, "Learning Activities Design of a Blended Learning Course Based on
- [12]. Public Internet", China, ICETC, IEEE Conference on Education, Technology and Computer (ICETC), June 2010, pp.297-299.
- [13]. John Bersin, "The Blended Learning Book: Best Practices,Proven Methodologies, and Lessons Learned", San Francisco,CA: Pfeiffer, 2004.

- [14]. ManopPhankokkruad and KuntpongWoraratpanya, “Web Services for Learning Management Systems: Communication Architecture”, IEEE 9th Malaysia International Conference on Communications, March 2010, pp. 403-408.
- [15]. Mohssen M. Alabbadi, “Cloud Computing for Education and Learning: Education and Learning as a Service (ELaaS)”, IEEE International Conference on Interactive Collaborative Learning(ICL2011), Slovakia, September 2011, pp.589-594.
- [16]. RaymindY.K.Lau, Rachael, K.F. Ip, Chan, M.T., Ron Chi-WaiKwok, Sharon W.M.Wong, and Johnny C.F. So and Eva Y.W.Wong, “Podcasting : An Internet-Based Social Technology for Blended Learning”, Hong Kong, IEEE Computer Society, May/June 2010, pp.33-41.
- [17]. Rui Cheng, “Research of Blending Learning Making Use of Web2.0 Tools”, IEEE International Conference on Information Engineering (ICIE), July 2009, pp.466-469.
- [18]. Valerie Monfort, MahaKhemaja, NouhaAmmari and FayssalFehli “Using SaaS and Cloud computing For “On Demand” E Learning Services”, IEEE–Advanced Learning Technologies, September 2010, pp.663-665.
- [19]. Yang Huixin, “Development of Blended Learning Modes and Its Practice in Computer Aided Language Learning”, China, IEEE International Conference on Information Science and Engineering (ICISE), December 2010,pp.2021-2024.
- [20]. Zhong Hu and Shouhong Zhang, “Blended / Hybrid Course Design in Active Learning Cloud at South Dakota State University”, South Dakota, IEEE International Conference on Education Technology and Computer (ICETC), Vol.1, June 2010,pp.63-670.