Abstract

The increasing popularity of E-Learning has invented new terms to education, as Virtual Classroom Learning, where students can interact with the professors from their home. Virtual learning is an effective alternative to traditional classroom learning. Virtual learning provides the methodologies and solutions such as distance learning and hybrid classes. It will have a significant impact on the educational environment in the upcoming days. One way to implement virtual classroom is using cloud computing. Cloud computing is an emerging new computing paradigm for delivering computing services. This computing approach relies on a number of existing technologies, e.g., the Internet, virtualization, grid computing, Web services, etc. Cloud computing is a construct that allows us to access applications that actually reside at a
location other than our computer and it is highly scalable and use virtualized resources that can
be shared by all the users. In this paper it is argued that cloud computing is likely to be one of
those opportunities sought by the educational institutes that cannot afford much money (due to
its flexibility and pay-as-you-go cost structure with improvements in efficiency and flexibility of
education). Cloud computing is an excellent alternative for educational institutions which are
especially under budget in order to operate their information systems effectively without
spending more for the computers and network devices. For big institutes, Cloud computing
helps to cut operational and capital costs and let IT departments focus on strategic projects
instead of keeping the datacenter running.

References

- Deepanshu Madan, Ashish Pant, Suneet Kumar, Arjun Arora, "E-learning based on
  Cloud Computing" in International Journal of Advanced Research in Computer Science
  and Software Engineering
- Nabil Sultan, "Cloud computing for education: A new dawn?" in International
  Journal of Information Management
- Paul POCATILU, "Cloud Computing Benefits for E-learning Solutions" in
  Oeconomics of Knowledge, Volume 2, Issue 1, 1Q 2010
- Md. Anwar Hossain Masud, Xiaodi Huang, "An E-learning System Architecture
  based on Cloud Computing" in World Academy of Science, Engineering and Technology
  62 2012
- Case Study in Schools, IT, and Cloud Computing The Agility for 21st Century eLearning
  by Intel Education
- Frank Doelitzscher, Anthony Sulistio, Christoph Reich, Hendrik Kuijs and David Wolf,
  "Private Cloud for Collaboration and e-Learning Services: from IaaS to SaaS"
- Bo Dong, Qinghua Zheng, Jie Yang, Haifei Li, Mu Qiao, "An E-learning Ecosystem
  Based on Cloud Computing Infrastructure" in Ninth IEEE International Conference on
  Advanced Learning Technologies 2009
- Dong Xu, "Cloud Computing: an Emerging Technology" in 2010 International
  Conference On Computer Design And Applications.

Index Terms

Computer Science  Cloud Computing
Cloud-based Education: For improving Efficiency, Cost and Convenience

**Keywords**
- Cloud Based Learning
- Virtual Learning
- Virtual Classroom
- Software As A Service
- Cloud Computing

E-learning.