Abstract

An Educational Data Portal (EDP) play important role in teaching and learning as it contains useful resources. Every big educational institutions such as university shall build an EDP soon or later. The aim of this study is to utilize Big Data solutions in building a Dashboard for an Education Data Portal. The proposed EDP is envisioned to be a core tool for all students and learning agencies, providing support for many types of views and content/instructional resources to allow effective data-driven decision-making for students, teacher and the public, based on recent standards. It supports many features such as accessibility of data and content anywhere, scalability, extensibility of functionality, and extensibility of the technology architecture to support integration with the Shared Learning Infrastructure (SLI). The Data Dashboard is highly scalable and extensible architecture that will grow, if necessary, to meet the needs of students, and educators.
A Dashboard of an Education Data Portal using Big Data Solutions

- Rosnaini Mahmud, Mohd Arif Hj Ismail, Fadzilah Abdul Rahman, Nurzatulshimah Kamarudin, Aisyatul Radhiah Ruslan, Teachers’ Readiness in Utilizing Educational Portal Resources in Teaching and Learning, Procedia - Social and Behavioral Sciences, Volume 64, 9 November 2012, Pages 484-491
- Wagner Kolberg, Pedro de B. Marcos, Julio C. S. Anjos, Alexandre K. S. Miyazaki, Claudio R. Geyer, Luciana B. Arantes, MRSG — A MapReduce simulator over SimGrid, Parallel Computing, Volume 39, Issues 4–5, April–May 2013, Pages 233-244, ISSN 0167-8191,
A Dashboard of an Education Data Portal using Big Data Solutions

- Jiong Xie, Yun Tian, Shu Yin, Ji Zhang, Xiaojun Ruan, Xiao Qin, Adaptive Preshuffling in Hadoop Clusters, Procedia Computer Science, Volume 18, 2013, Pages 2458-467, ISSN 1877-0509, http://dx.doi.org/10.1016/jprocs.2013.05.422. (http://www.sciencedirect.com/science/article/pii/S1877050913005656)
- Judith Hurwitz, Alan Nugent, Dr. Fern Halper, and Marcia Kaufman , &quot;Big Data For Dummies&quot;, Wiley and sons Inc, 2013
- Paul C. Zikopoulos, Chris Eaton, Dirk deRoos, Thomas Deutsch, George Lapis, &quot;Understanding Big Data&quot;, IBM, 2011

Index Terms
Computer Science
Information Sciences

Keywords
Big Data; MapReduce; Hadoop; Educational Data Portal