SOA in Higher Education

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Service Oriented Architecture (SOA) is an architectural framework for distributed software system development. Software components are grouped as services which can be dynamically discovered and integrated over a network to achieve a common task or process. Unlike traditional methods for system design and coding, service software is developed by reusing and redeploying existing applications.

SOA has recently become popular in academia and in industry. However, the discussion of SOA and their services in academia tends to be 'technology oriented', and not too much work has been done in the practical application of SOAs. In industry, SOA has been widely used in business context (e.g. IBM is one of the main players in using SOA for developing business solutions). However, in the education domain, SOA has rarely been applied or investigated. The aim of our research focuses on exploring how service technologies can be best applied into education domain, to support the deployment and management of a university's e-learning resources.

Current stage of our research focuses on literature survey. A number of topics are still under investigation:

- SOA state of the arts
- The concept of 'Services'
- Understanding student learning
- Developments of educational applications