

Title: Solving the complexity of heterogeneity data on learning environment using ontology

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Abstract: Distributed and various systems on learning environment are the current issues to produce big data and heterogeneity data problem. Heterogeneity on learning environment is about numerous learning applications and various learning information to support a learning process in educational institutions. There are a lot of relationships are formed between elements on learning environment. The elements on learning environment consist of learning data, learning applications, data sources, learning concept, and data heterogeneity aspect on learning environment. These elements are interrelated and produce complex relationship between each other. A complex relationship problem between elements on learning environment makes a process of analysis and identification difficult to be done. Existing method to drawing this heterogeneity problem make confuse and misunderstanding readers. To solved this problem, researcher using ontology knowledge to describe and draw a semantic relationship that represent the complexity of data relationship on learning environment. The result of this analysis is to develop ontology knowledge to solve heterogeneity data problem specific in complexity relationship on learning environment. This result can give better understanding to the readers about complex relationship between elements on learning environment.