Delivery of semantically diverse learning objects to learner’s context

By

Yevgen Biletskiy

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The wide proliferation of the Internet and ever-increasing IT capabilities of people who use it has caused data to often be stored in data storages with fundamentally different semantics, and attempts to integrate such data frequently result in semantic incompatibility that inhibits data exchange. One of the examples of this problem is e-Learning. Due in part to the fact that many learning objects (such as university curricula, course descriptions, course web-pages, textbooks, lecture notes, presentations, figures, pictures, etc.) are created in various parts of the world and across many cultures, their integration can result semantic conflicts caused by different languages, measurement systems, graphic notations, course requirements and structure, learning scenarios, etc. Due to the semantic diversity of learning objects built within different cultural contexts, the delivery of these objects to learners is not effective. The proposed integration of a large number of existing learning objects involves the development of a system of information interchange between different feature standards through the development and implementation of a new e-Learning delivery technology, based on the approach of meta-context mediation, which improves the effective integration of semantically diverse learning objects, adapts their contents to specific cultural contexts of learners and facilitates their delivery.