Culturally-based Adaptive Learning and Concept Analytics to Guide Educational Website Content Integration

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Abstract

In modern learning environments, the lecturer or educational designer is confronted with the multi-nationality of the students, which requires special considerations. That is, taking cultural aspects into account, having dynamic adaptation of the content to the current context, using adaptive learning paths, and integration of dynamical content analysis before delivery. We discuss the motivation for such adaptive systems via two scenarios and illustrate afterwards our design for a system to present learning content based on dynamically determined learning paths consistent with learner-profiles. This permits multi-cultural learning scenarios to be offered while respecting the cultural norms and ethics of learners without the need for special segregation of learners or learning content.

Keywords: cross-cultural education, adaptive learning paths, concept analysis, dynamic content selection.