

Social Semantic Web-Based Analytics Approach to Support Lifelong Learning

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Abstract : The purpose of this paper is to describe how learning analytics approaches based on social semantic web techniques can be applied to enhance the lifelong learning experiences in a connectivist perspective. For this reason, a prototype of a system called *SoLearn* (Social Learning Environment) that supports this approach. We observed and studied literature related to lifelong learning systems, social semantic web and ontologies, connectivism theory, learning analytics approaches and reviewed implemented systems based on these fields to extract and draw conclusions about necessary features for enhancing the lifelong learning process. The semantic analytics of learning can be used for viewing, studying and analysing the massive data generated by learners, which helps them to understand through recommendations, charts and figures their learning and behaviour, and to detect where they have weaknesses or limitations. This paper emphasises that implementing a learning analytics approach based on social semantic web representations can enhance the learning process. From one hand, the analysis process leverages the meaning expressed by semantics presented in the ontology (relationships between concepts). From the other hand, the analysis process exploits the discovery of new knowledge by means of inferring mechanism of the semantic web.

Keywords : connectivism, learning analytics, lifelong learning, social semantic web

Conference Title : ICEL 2019 : International Conference on e-Learning

Conference Location : Dublin, Ireland

Conference Dates : June 27-28, 2019