Augmenting Educational Material with Knowledge Graphs

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Abstract. Knowledge graphs represent information in a highly structured and semantically enriched form that allows for advanced querying, reasoning, and information integration. They enable a more intelligent and meaningful analysis of information by focusing on how things are related and by supporting knowledge discovery. Combined with visual interfaces, users are equipped with powerful means to interactively explore information and gain new knowledge from it. This talk will shed light on the power and potential of knowledge graphs in educational contexts. It will reflect on how knowledge graphs can be derived from educational material and effectively support learners in reasoning, sense-making, and understanding.

Keywords: knowledge graph, information analysis, knowledge discovery, visual interface, interactive information exploration, education, learner support.