

Linked Data Driven Visual Analytics for Tracking Learners in a PLE

Motivation

Approach

- Understanding the learners, their behaviors and actions in PLE at TU Graz
- Processing and interpreting captured data
- Revealing hidden information important for PLE improvement

Goals

- Providing flexible data insights of PLE with focus on widgets, users and activities
- Knowledge based processing and visualization of captured PLE usage data
- Semantically enhanced data modelling for meaningful information retrieval
- Closing the learning analytics cycle

Using state of the art semantic technologies **RDF**, **OWL** and **SPARQL** with Activities and Learning Context ontology (Ontology framework by IntelLEO Project) as service infrastructure to interlink, describe, query and visualize domain knowledge about the PLE with focus on widgets, users and activities.



- Data source: Tracking module from Personal Learning Environment (PLE) TU Graz
- Use case: Data Analysis and Visualization

- Visual Analytics Tool a dashboard for PLE logs analysis and visualization
- Overview over active users, widget usage and activities

Results and future work

- Easily drawing conclusions about widgets popularity and quality
- User wise statistics of learning widgets
- Widget ranking and recommendation