

Theresa Kruse/Ulrich Heid

LEARNING FROM STUDENTS

On the design and usability of an e-dictionary of mathematical graph theory

Abstract We created a prototype of an electronic dictionary for the mathematical domain of graph theory. We evaluate our prototype and compare its effectiveness in task-based tests with that of Wikipedia. Our dictionary is based on a corpus; the terms and their definitions were automatically extracted and annotated by experts (cf. Kruse/Heid 2020). The dictionary is bilingual, covering German and English; it gives equivalents, definitions and semantically related terms. For the implementation of the dictionary, we used LexO (Bellandi et al. 2017). The target group of the dictionary are students of mathematics who attend lectures in German and work with English resources. We carried out tests to understand which items the students search for when they work on graph-theoretical tasks. We ran the same test twice, with comparable student groups, either allowing Wikipedia as an information source or our dictionary. The dictionary seems to be especially helpful for students who already have a vague idea of a term because they can use the resource to check if their idea is right.

Keywords Dictionary use; specialised languages; terminology; terminography; mathematics

References

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