“Polyphonic analysis of discourse in collaborative learning, students’ explanations, and communities of practice”

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The main topics of the speech are the polyphonic model and the associated analysis method of discourse in the textual communication within collaborative learning groups and communities of practice. Threads of instant messenger (chat) utterances, discussion forums posts, and even gestural (non-verbal) interactions may be the subjects of the analyze. Computer support tools for the polyphonic analysis and for textual complexity analysis are provided by the PolyCAFe and ReaderBench systems, which use Natural Language Processing and Social Network Analysis. The polyphonic model of the discourse is based on Mikhail Bakhtin ideas of dialogism, inter-animation, ventriloquism, and polyphony. Applications and their assessment are presented for Computer-Supported Collaborative Learning and for the analysis of students’ explanations and text complexity.