

7 - Discourse and Argumentation in Science Education | Empirical

SP - (16622) - DESCRIBING AND EXPLAINING: HOW TO SUPPORT WRITING LAB REPORTS IN PHYSICS CLASSES

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Short Abstract

International studies showed that writing in science classes enhances students' content knowledge. Such results have not been established for German speaking countries, yet. While international studies focus on discourse and text structure studies in German speaking countries mainly aim for improving the means of expression. The impact of these two kinds of support to writing on students' writing abilities and their content knowledge in the topic of electric charge, current and voltage is investigated comparing two intervention groups in grade eight at comprehensive schools in North Rhine-Westphalia (NRW), Germany. Students are requested to write a lab report that requires different linguistic-cognitive actions such as DESCRIBING and EXPLAINING, which can be practiced as separate text procedure. Using the same genre teaching and learning cycle one group focuses on the specific action patterns of the text procedures, the other on the linguistic means of expression. Building on our poster contribution at ESERA 2019 in Bologna, the presentation presents the intervention and its results between the pre- and post-test.