

Writing argumentative texts: The effects of electronic outlining on students' writing product and process

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Writing argumentative texts: The effects of electronic outlining on students' writing product and process

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Abstract

Writing is an important and complex skill that can be enhanced by effectively using writing strategies that help monitoring the writing process (e.g. Kellogg, 1988). This study focuses on using electronic outline-tools as a specific support for a planning strategy. Previous research shows positive effects of outline-tools on students' writing performance (de Smet e.a., 2011). However, less is known about how these effects are achieved. To understand how electronic outlining influences writing, the three main components of the writing process – planning, translating and reviewing - (Flower & Hayes, 1981) serve as a starting point in our study. Focus is not only on final writing products but also on the orchestration of the writing process. This leads to the following research question: What is the effect of using an electronic outline-tool on students' (a) writing performance, (b) organisation of the writing process and (c) perceived mental effort?

It is hypothesized that a pre-planning strategy such as outlining reduces students' on-line planning and reviewing. Students may use their outline as a guide while elaborating their texts while students without outlines need to consider content, structure and formulations more extensively while writing. This might increase perceived mental effort.

In this study, a combined within- and between-subjects design was used. In total 95 tenth-grade students wrote two argumentative texts with or without an outline-tool. Self-report data on perceived mental effort and the organisation of the writing process was supplemented by detailed process-data collected via the keystroke logging programme Inputlog (Leijten & Van Waes, 2006).

Preliminary analyses show that electronic outlining positively influenced writing performance. Using an outline-tool significantly improved the presentation of the argumentative structure. Process data suggest that outlining increased total writing time, but no outline effect was found on students' planning and reviewing. However, further analyses of the logging data will enable focusing more explicitly on the different stages of the writing process. By dividing the process in ten equal intervals, we will describe the evolving process in consecutive observations. Finally, self-reports show no outline effect on students' perceived mental effort. Nevertheless, mental effort decreased when repeatedly using the same writing strategy.

Keywords: electronic outlining, argumentative writing, writing process, text structure