

Introduction to the special issue on Writing-to-learn studies

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One stone, two birds?

As former teachers of Dutch Language in secondary education we originally put most of our research effort into improving the writing curriculum through intervention studies, which were informed by writing process studies, and which informed also process studies when writing process were dependent variables (Braaksma, Rijlaarsdam, Van den Bergh, & Van Hout-Wolters, 2004; Rijlaarsdam, 1986). We were aware of the large body of studies in another domain of writing research: writing-to-learn, which consists of mostly Anglophone movements related to topics such as writing across the curriculum (WAC) and writing in the disciplines (WID). However, we also read in a meta-analysis about the small effect sizes of such approaches (Bangert-Drown, Hurley & Wilkinson, 2004). We also knew that students in secondary education got more and more writing assignments per week, though not in their language lessons, but in the lessons of other academic subjects. We know that the development of writing competency takes time, requires deliberate effort and practice, so extra writing assignments in other lessons than the language lessons seem very welcome, especially when these would be more than mere assignments, without any instruction. From analyses of writing practice we learnt that in most cases, the writing in other lessons focused solely on text production, sometimes with some feedback, sometimes with a handout providing an intended structure of the paper. Assessment was mostly on content, such as the disciplinary knowledge presented. We were less sure that these kinds of assignments could contribute to the development of writing competence.

From then on, one of our research aims became to find ways to connect learning-to-write activities with writing-to-learn activities (Braaksma, Rijlaarsdam, and Janssen(2007); Braaksma, Rijlaarsdam & Van den Bergh (submitted); Kieft, Rijlaarsdam



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& Van den Bergh (2006, 2008); Kieft, Rijlaarsdam, Galbraith, & Van den Bergh (2007). We learnt that even when you know quite a lot about effective learning arrangements for learning-to-write, the theoretical and empirical literature on writing-to-learn does not provide fixed insights about what works and what should work in writing-to-learn. While writing is a complex and effortful process, using writing as a learning tool seems a bit paradoxical: why should we implement an effortful learning activity for knowledge creation? We also learnt from our own studies, that students seem to choose only one of the two task representations of the writing task: either a creating and sharing knowledge task, or improving their writing skill. Whether they learnt more in terms of content or writing skill, depended on the extent to which the course was adapted to their writing process preferences (Kieft, 2007). When students were supposed to learn content knowledge through the act of writing, this worked best when the learning arrangement was aligned with their process preference, that is, pre-planning via writing -- brainstorming, free writing -- or pre-planning via outlines or schemes. But when the course was intended to help them improve their writing skill, the alignment rule was different: students with an outspoken process preference improved their writing when the course provided opportunities to pre-plan via outlines and schema's, while students without an outspoken process style were better off with a course that allowed them to pre-plan via freewriting (Kieft, 2007). The relation between content learning improvement and writing skill improvement was a very weak one, a finding that was replicated by Braaksma, Rijlaarsdam and Van den Bergh (submitted). It seemed that we had to dismiss our 'one stone, two birds' idea, as an overly simplistic view, and had to search for more complex relations between learner variables, such as writing process style, learning arrangements, learning processes and learning outcomes (see Figure 1).

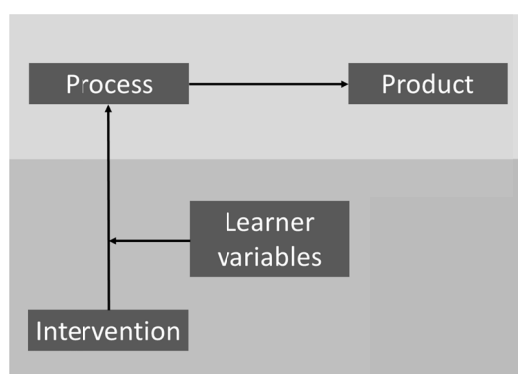


Figure 1. Complex interaction between learner variables, interventions, learning processes and learning outcomes (Figure adapted from <http://www.rtle.nl>).

One of the steps we took to gain more insight and to create opportunities to share theories and research findings, was to organize a symposium for members of the EARLI

SIG WRITING. This double symposium on intervention studies in writing-to-learn took place in August 2013 at the EARLI-Conference in Munich. To continue the discussion on this theme and to broaden the audience, we decided to distribute a call for a special issue in the Journal of Writing Research. The aim of the special issue was to present contemporary research about writing as a learning activity to provide an overview of effective use of writing (and meaning making processes) to enhance learning. We also wanted it to focus on the implications for educational practice: how can the results of the studies be applied in classrooms?

In the call we asked for papers that could address two themes, to cover the whole scheme in Figure 1:

1. Intervention studies in several disciplines that examine the effects of writing on *different learning outcomes* (e.g., historical reasoning, science learning, critical thinking).
2. Studies on *meaning making processes* that address constructing patterns of meaning while writing and can give insight into how the meaning making process is influenced by the language being written in and by the type of planning procedure that is used.

JoWR readers responded enthusiastically: 26 abstracts were submitted (20 related to the intervention studies theme and 6 on meaning making processes), reviewed and in some cases resubmitted and reviewed again by the guest editors. As a result of this selection process, the authors of 16 papers (11 on intervention studies and 5 on meaning making processes) were invited to elaborate their abstract and to submit their paper to JoWR. To avoid any appearance of conflict of interest, the submission of the papers to reviewers and the editorial decisions were overseen by Charles MacArthur. The result of this first review phase produced six papers (5 on intervention studies and 1 on meaning making processes) that were invited to submit a revised paper (all with major revisions). For some papers, a second revision phase was needed in which minor revisions had to be made.

We were honored that two prominent researchers in the field of writing and knowledge construction accepted our invitation to write a commentary on these six papers and to further develop the theory represented in Figure 1. Perry Klein focused on the effective ingredients of the interventions with respect to learning outcomes, while David Galbraith focused on the conditions necessary for writing to learn. We leave it to the reader to incorporate their insights in Figure 1, as there is no need to reiterate their thoughtful ideas here in the introduction.

All in all, almost two years after the double symposium at EARLI, the special issue is now available. We are proud to share with you the findings and scientific and educational implications of six papers that report studies on the effective use of writing to enhance learning, insightfully discussed by Klein and Galbraith. We would like to thank all the author teams, the discussants Klein and Galbraith, and JoWR editor Charles MacArthur, who supervised the whole project.

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