



Universiteit Utrecht

Improving the writing skills of students in the upper elementary grades: An intervention study

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Aim of our project

Improving the writing performance of students in the upper elementary grades (grade 4-6).

Through:

- 1 The development of a teaching program for writing, including assessment tools
- 2 Professional development of teachers
- 3 Testing the effectivity and the transferability of the teaching program



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Triggers for the study

At the end of elementary school a majority of students perform below the desired level

Time and attention devoted to writing are limited in the average classroom

Only a minority of schools use effective instructional practices

Inspectorate for the Education, 2010



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What makes learning to write so difficult?

Cognitive overload caused by:

1. many cognitive activities simultaneously
2. double challenge of writing and learning to write at the same time

— Meta-analysis: effective instructional practices

Intervention category	Average effect
Goal setting	2.03 ***
Strategy instruction	0.96 ***
Feedback	0.88 *
Text structure instruction	0.76 ***
Peer interaction	0.59 **
Revision	0.58
Evaluation	0.43
Prewriting	0.13
Process approach	-0.25
Grammar	-0.37

Note:

*** $p < .001$,

** $p < .01$,

* $p < .05$



a program for teaching writing

Focus of instruction

1. Writing strategies: *general approach for writing tasks, based on phases of the writing process*
2. Text structure instruction: *criteria for good texts, depending on communicative goal and intended audience*
3. Goal setting: *regulating own writing process by monitoring progress in relation to goals*



a program for teaching writing

Mode of instruction

1. Modeling by teachers and peers
2. Model texts
3. Explicit instruction and (guided) practice
4. Feedback by teacher, peers & self
 - To understand the effect of a text on a reader
 - To effectively rewrite texts



a lesson program for writing

Aim of the study

How effective is *Tekster* in improving the writing performance of students in grades 4 to 6 of elementary school?

A large scale intervention study

Participants

1420 students from 60 classes (grade 4-6) and 27 schools

Design

Switching replication design with 2 waves en 3 measurement occasions

	M1	M2	M3
Wave 1	Intervention program	Regular program	
Wave 2	Regular program	Intervention program	

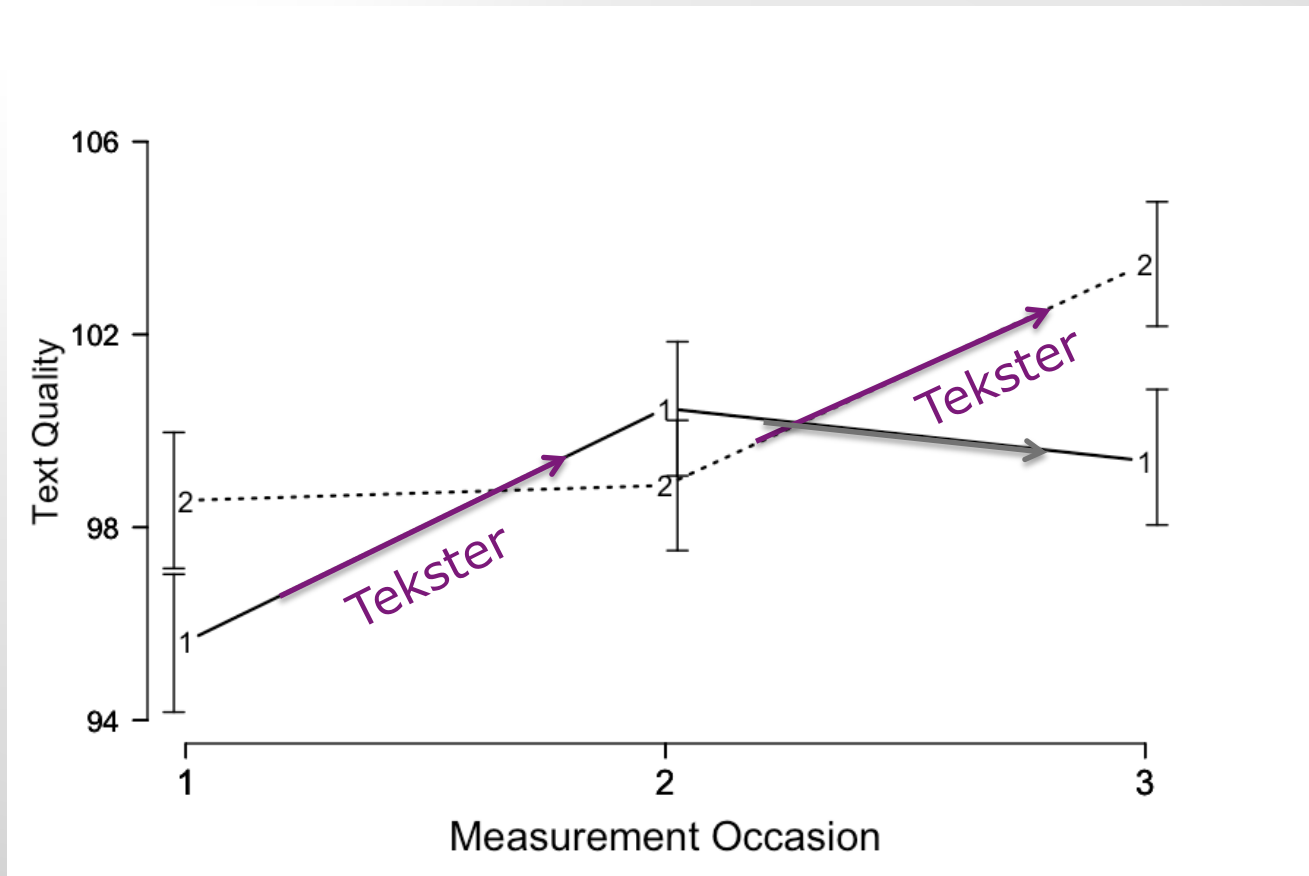
— Measurement of writing proficiency

At each measurement occasion students' writing skills were assessed with 3 types of texts: descriptives, persuasive letters and narratives.

Text quality was holistically rated by juries of three independent raters, using a continuous scale with five benchmarks.

Reliability of jury ratings across tasks was high $\rightarrow \rho = .89$

Effect of intervention on writing scores



Effect of the intervention: significant interaction between wave and measurement occasion

- effect was the same for students in wave 1 and 2
- effect maintained over time

Conclusions

The intervention program improved students' writing scores with 4.70 points across grades.

Effect size = 0.33

The effect might seem low, but:

1. Tested in a very large sample
→ generalizable over students, teachers *and* tasks
2. Average improvement in writing skills across grades was 8 points
→ students' writing improved by more than half a grade after a two-month intervention program



a promising approach to writing!

Benefits for different kinds of students:

- For students in grade 4 to 6
- For students with low and high writing proficiency

Can be implemented relatively easy in daily classroom practice:

- In a natural setting: teachers implemented the program in their own classrooms
- “teacher-proof”: teachers were able to work with the program after only a short training



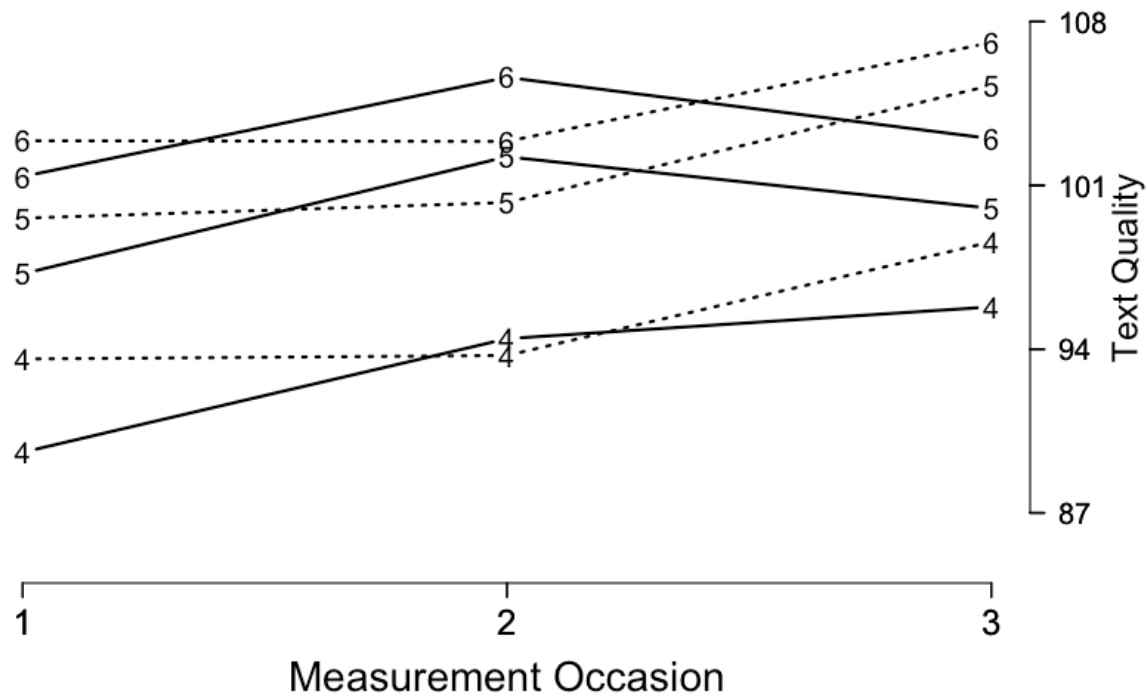
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— Differences between grades





Rating scale for persuasive essays

