

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



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



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

Koster, M., Tribushinina, E., De Jong, P., & Van Den Bergh, H. (2015)



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 N	M2	М3
Wave 1	Intervention program	Regular program	
Wave 2	Regular program	Intervention program	n



Measurement of writing proficiency

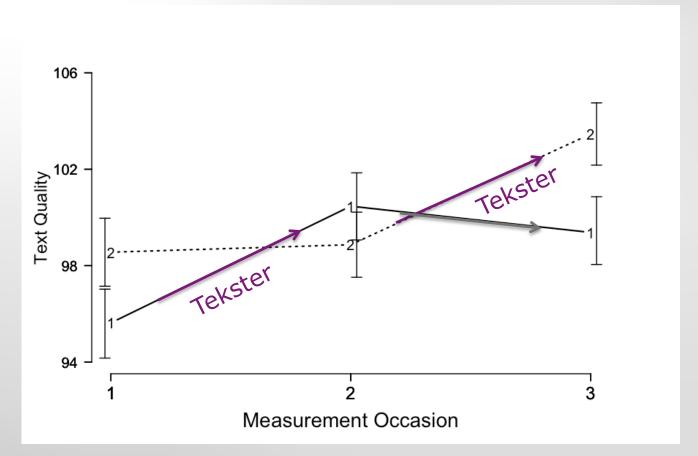
At each measurement occasion students' writing skills were assessed with 3 types of texts: descriptives, persuasive letters and narratives.

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:

- Tested in a very large sample
 → generalizable over students, teachers and tasks
- 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





www.tekster.nl

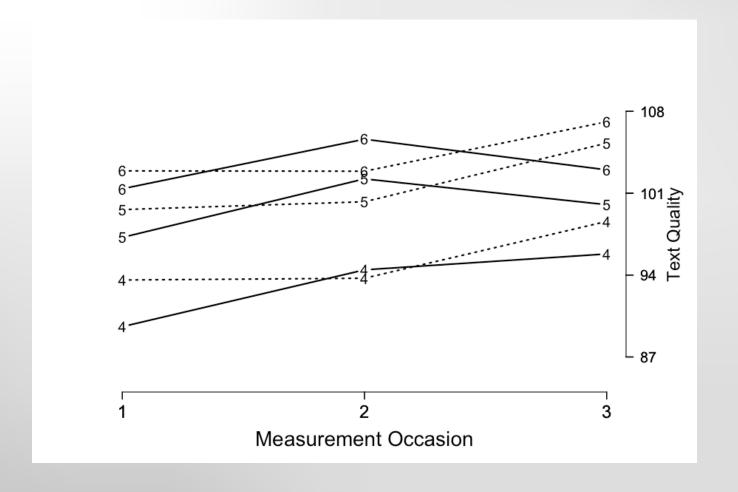
Twitter @teksterNL

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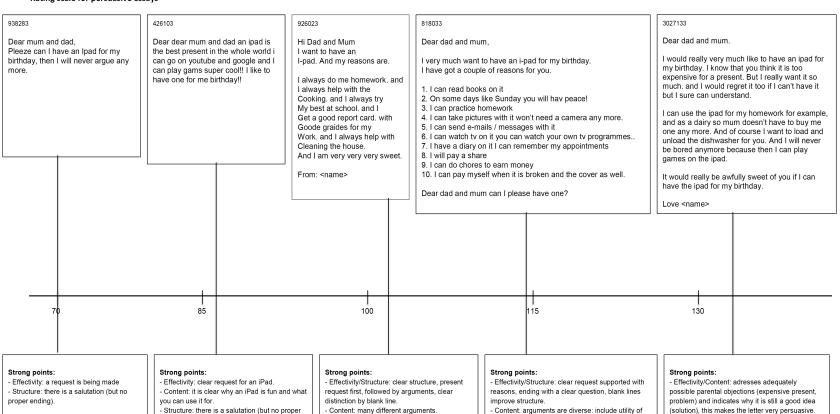
— Differences between grades







Rating scale for persuasive essays



- Weak points:
- Effectivity: the note is not persuasive, the fact that an iPad is expensive is not mentioned and there is only one argument (which has nothing to do with the iPad itself)
- Content: contains too little information, only one sentence.
- Language: one mistake (pleez).

- Structure: there is a salutation (but no proper ending).

Weak points:

- Effectivity: could be more persuasive by directly addressing parents, e.g. mentioning the problem/ asking a question. Student now mainly relates to emotions (e.g. dear dear; best present in the whole world)
- Content: no variation and elaboration in argumentation.
- Language: problems with capitals and punctuation (letter is basically one long sentence) and spelling, makes it hard to read.

- Structure: proper salutation and ending.

Weak points:

- Effectivity: problem (iPad is an expensive presen) is not mentioned explicitly.
- Content: arguments are not directly linked to
- Language: many spelling/capital/punctuation errors. Not much variety in the language used, excessive use of 'and' to connect sentences.
- iPad, advantages for student himself as well as for
- Language: parents are adressed directly.

Weak points:

- Effectivity: would be more persuasive if problem was mentioned explicitly(expensive birthdaypresent).
- Structure: letter is not signed; arguments are not linked but enumerated; this makes it less pleasant to
- Language: problems with longer sentences.

- Structure: contains salution and ending; clear division into paragraphs (problem, arguments,
- Language: parents are addresed directly and text contains adverbs to persuade even more (really/very much/awfully).

Weak points:

- Content: arguments would have been stronger with more elaboration and diversity.

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