



Subcomponents of writing literacy: Diagnosis and didactical support

A study in progress

Nicole Nachtwei, Michael Becker-Mrotzek &
Joachim Grabowski

Team members: Cologne: Dr. Jörg Jost, Matthias Knopp,
Hanover: Christian Weinzierl, Heidelberg: Markus Schmitt

Premises

- writing literacy: ability to produce texts
- focus on genres in school/ genre-specific teaching of writing
- cross-genre abilities are rather neglected in didactical concepts

Goals

- identify subcomponents of writing literacy
- look for relevant abilities across genres
- identify pre-linguistic cognitive abilities
- develop adequate tasks

Sample

5th graders

9th graders

Hauptschule	Realschule	Gymnasium	Hauptschule	Realschule	Gymnasium

Hanover
Cologne



$$N_{\min} = 240$$

Considered components

Good texts adapt to the intended audience.



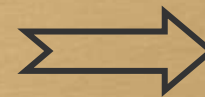
partner orientation

Good texts emphasize the relations of idea.



creation of coherence

Good texts contain differentiated vocabulary addressing relevant concepts.



vocabulary knowledge

Empirical levels

GENRES

narrative/report instruction/description argumentative text

WRITING LITERACY

partner
orientation

creation of
coherence

vocabulary
knowledge

GENERAL COGNITIVE ABILITY

concentration

working memory

reading ability

Approximation of intelligence

concentration

Writing requires sustaining concentration.

→ d2

working memory

Writing requires holding and transforming information.

→ digit span, listening span,
Corsi Block-tapping task

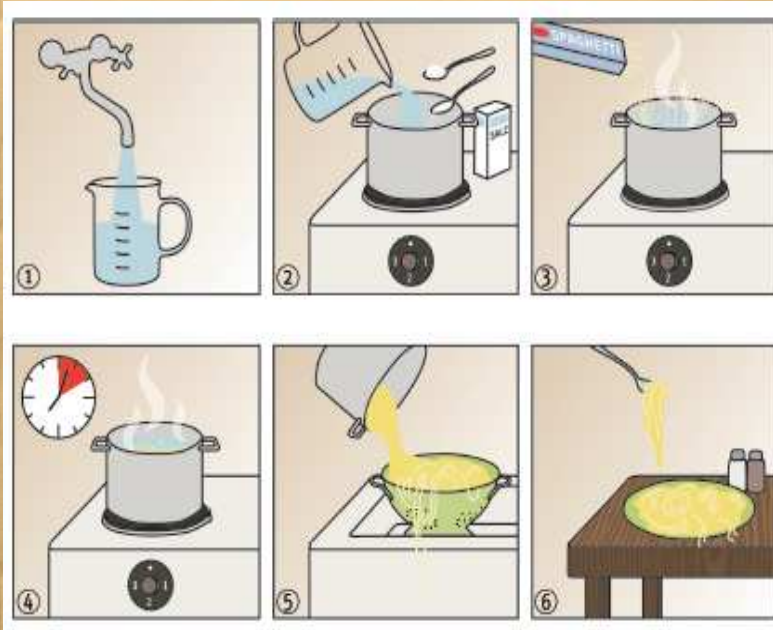
reading ability

Dealing with writing tasks requires reading comprehension at a certain reading rate.

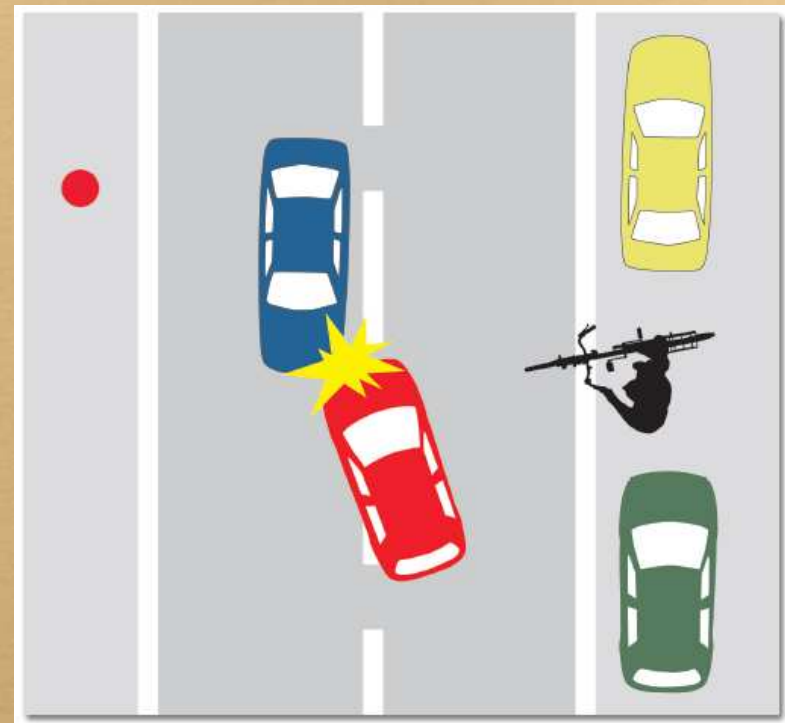
→ SLS

Cues for composition

instruction
“How to cook pasta”



report
“How did the accident happen?”



argumentative text
“Who is to blame for the accident?”

Empirical levels

GENRES

narrative/report instruction/description argumentative text

WRITING LITERACY

partner
orientation

creation of
coherence

vocabulary
knowledge

GENERAL COGNITIVE ABILITY

concentration

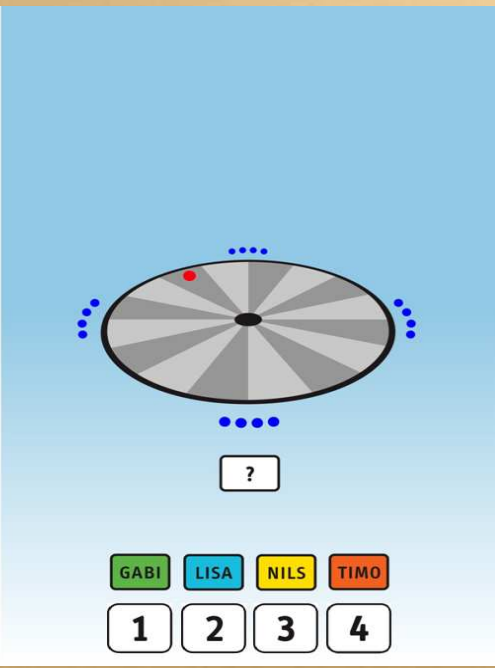
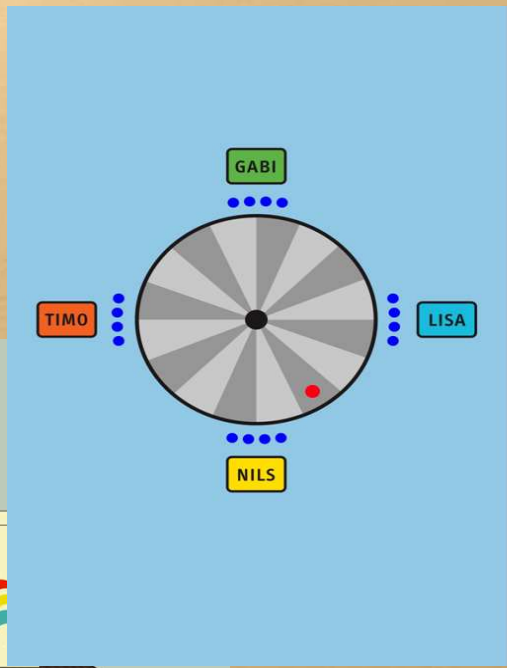
working memory

reading ability

Cues for partner orientation

assuming spatial perspectives

naming objects



Was wirst du deiner Mutter geben?

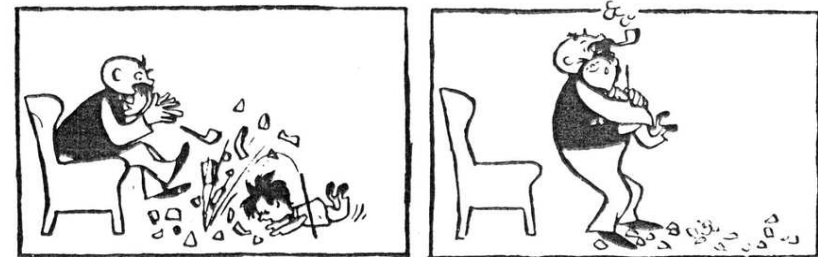
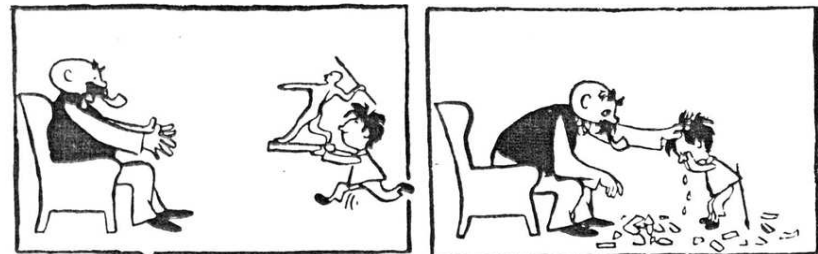
1 2 3

Cues for creation of coherence

understanding conjunctions

Choose the correct statement.

- The house is on fire, because the fire fighters are arriving.
- The fire fighters are arriving because the house is on fire.
- The fire fighters are arriving, although the house is on fire.
- The house will be on fire, if the fire fighters arrive.



1

Richtig

2

Falsch

judging the order of
pictures in picture stories

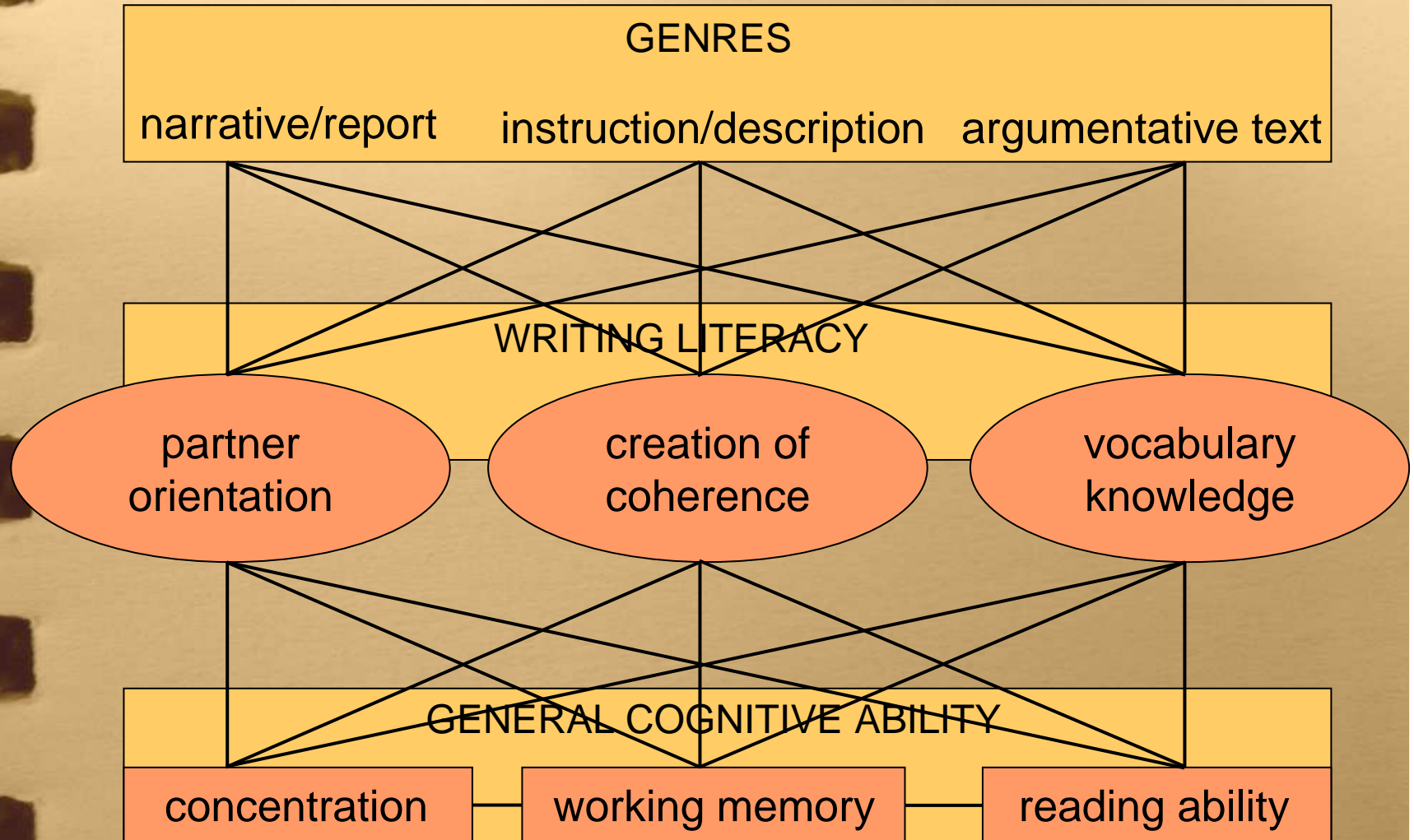
Guiding Question

Do the subcomponents have an overarching effect on text quality throughout the different types of genres?

That is:

Do the subcomponents become operative in the three assessed genres?

Assumed trans-genre correlations



Expectations

1. [subcomponents \rightarrow text quality]

The subcomponents predict text quality throughout the three assessed text types.

2. [subcomponent a \perp subcomponent b]

The subcomponents are rather independent from each other.

3. [5th grade \searrow 9th grade]

The subcomponents' influence on text quality decreases with time spent (or maybe wasted) in school.

Some implications

If [subcomponents \rightarrow text quality] ✓

Then the assumption 'one thing at a time' should be rethought.

If [subcomponent a \perp subcomponent b] ✓

Then the complexity of writing tasks could be reduced by training the subcomponents separately.

www.bmbf.schreibkompetenz.com



© Nicole Nachtwei 2010