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

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Sample

<table>
<thead>
<tr>
<th>5th graders</th>
<th>9th graders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hauptschule</td>
<td>Hauptschule</td>
</tr>
<tr>
<td>Realschule</td>
<td>Realschule</td>
</tr>
<tr>
<td>Gymnasium</td>
<td>Gymnasium</td>
</tr>
</tbody>
</table>

N_{\text{min}} = 240

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Considered components

Good texts adapt to the intended audience.

Good texts emphasize the relations of idea.

Good texts contain differentiated vocabulary addressing relevant concepts.

- partner orientation
- creation of coherence
- vocabulary knowledge

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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

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Approximation of intelligence

- **concentration**
  - Writing requires sustaining concentration.
  - \( \rightarrow d2 \)

- **working memory**
  - Writing requires holding and transforming information.
  - \( \rightarrow \) digit span, listening span, Corsi Block-tapping task

- **reading ability**
  - Dealing with writing tasks requires reading comprehension at a certain reading rate.
  - \( \rightarrow SLS \)

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Cues for composition

**instruction**
“How to cook pasta”

**report**
“How did the accident happen?”

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

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Empirical levels

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Cues for partner orientation

- naming objects
- assuming spatial perspectives

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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.
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

**GENRES**
- narrative/report
- instruction/description
- argumentative text

**WRITING LITERACY**
- partner orientation
- creation of coherence
- vocabulary knowledge

**GENERAL COGNITIVE ABILITY**
- concentration
- working memory
- reading ability

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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 $\preceq$ 9th grade]
   The subcomponents’ influence on text quality decreases with time spent (or maybe wasted) in school.

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Some implications

If [subcomponents $\rightarrow$ text quality] ✓
Then the assumption ‘one thing at a time’ should be rethought.

If [subcomponent a ⊥ subcomponent b] ✓
Then the complexity of writing tasks could be reduced by training the subcomponents separately.