Subcomponents of students’ writing literacy across different text genres

Michael Becker-Mrotzek, Jörg Jost & Joachim Grabowski
DGfS Jahrestagung 2011, Göttingen
Initial point of study

- Writing literacy: ability to produce texts
  - the focus lies on genres in school/genre-specific teaching of writing
- Cross-genre abilities are rather neglected in didactical concepts (= research deficit)
- Identifying subcomponents of writing literacy -> didactical impact for teaching and learning writing in school
Goals

- Identifying subcomponents of writing literacy
- Looking for relevant abilities across genres
- Identifying pre-linguistic cognitive abilities
- Developing adequate teaching concepts
Sample

- Total of participants: 363
- Total of complete data sets: 286

<table>
<thead>
<tr>
<th></th>
<th>5th graders</th>
<th>9th graders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hauptschule</td>
<td>Realschule</td>
</tr>
<tr>
<td>Hauptschule</td>
<td>45</td>
<td>51</td>
</tr>
<tr>
<td>Realschule</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>Gymnasium</td>
<td>41</td>
<td>41</td>
</tr>
</tbody>
</table>

n = 286
Considered subcomponents

Good texts adapt to the intended audience.

Good texts emphasize the relations of idea.

Good texts contain differentiated vocabulary addressing relevant concepts.

- partner orientation/audience design
- creation of coherence
- vocabulary knowledge
Empirical levels

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

**WRITING LITERACY**
partner orientation/audience design  creation of coherence  vocabulary knowledge

**GENERAL COGNITIVE ABILITY**
concentration  working memory  reading ability
Approximation of intelligence

**concentration**
Writing requires sustaining concentration.

**Test d2**

**working memory**
Writing requires holding and transforming information.

**Tests** digit span, listening span, Corsi Block-tapping task

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

**Test** „Salzburger Lese Screening“ (SLS)
Partner orientation

naming objects

assuming spatial perspectives
Coherence

Choose the correct proposition.

□ 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.
Coherence

Choose the correct proposition for the following comic strip.

Welcher Satz passt zu der Geschichte?

1. Der Sohn läuft in Bild 2 weg, weil es gefährlich ist.
2. Der Sohn läuft in Bild 2 weg, weil er Angst vorm Vater hat.
3. Der Sohn läuft in Bild 2 weg, um Wasser zu holen.
4. Der Sohn läuft in Bild 2 weg, anstatt Wasser zu holen.
Writing ...

... an instruction
“How to cook pasta“

... a report
“How did the accident happen?“

... an argumentative text
“Who is to blame for the accident?“
Question

Do the subcomponents partner orientation, creating a coherent path in texts and vocabulary knowledge have an overarching effect on text quality throughout the different types of genres?

That is:

Do these subcomponents of students‘ writing literacy become operative in the three genres assessed in our study?
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 \( \nleq \) 9th grade]
   The subcomponents’ influence on text quality decreases with time spent (or maybe wasted) in school.
A first insight into data

**Instruction**

“How to cook pasta”
A first insight into data report

“How did the accident happen?”

Unfallbericht

Der Fahrer des roten Autos wollte über die Straße gehen, dann ist das rote Auto gegen das blaue Auto gefahren.

Am 27.03.2010 fand an der
Barmenestr. ein Unfall statt bei dem
drei Autos einander gegenanler gefahren
sind. Ein Fußgänger stand auf der linken
straßenseite und berichtete den Unfall.
Als ein Rennfahrer die Straße übergaben
setzte wollte vorsicht zwei Autos die
kontrolle und rasten ineinander
Evaluation of students’ texts

• Evaluation of students‘ texts is guided by a set of linguistic criteria (-> indicators of text quality)

• Benchmark texts exemplify both positive and negative parameter-values in students‘ texts
Linguistic criteria

• Requirements on linguistic criteria:
  – suitable for cross genre-analyses
  – fulfilled in students‘ texts for texts being ...
    • a good example (token) of the text genre (type)
    • designed for readers and oriented on readers‘ requirements
    • coherent, i.e. providing a path for coherence
    • adequate respective the use of vocabulary in text
  – qualified as indicators of text quality
Global Evaluation

• Kind of „overall estimation“ of the text
  – Guiding question:
    • Does the text achieve its primary intentions (primary illocution/text function)?

• Following some ideas for testing writing skills as provided by the U.S. National Assessment of Educational Progress at Grades 8 and 12 NAEP
  – a students’ text is seen as a draft
  – global (scalar) evaluation of texts
Benchmark text

- **Global evaluation**: the text does not achieve its primary function (to report on how the accident happened)

„A cyclist is going to pass the street. (At this moment) a car is coming. *He saw the cyclist and *drifts off the street. The car driver causes an accident.“
Analytical evaluation

• The analytical evaluation is guided by linguistic criteria (indicators for text quality)

• Kind of „careful examination“
  – attributes on the surface of text that play an important role for the text achieving its primary function(s) (Nussbaumer/Sieber 1994)
  – Guiding question:
    • Does the text offer those attributes that are necessary for a reader to recognize a coherent path in the text?
Analytical evaluation

- Evaluation of students’ texts – text genre “report“
  - Situation (freeze image)
    - Does the text give a clear prospect of the setting and of the situation of the accident?
      - Actors/participants: involved people, cars, bicycle
      - Localization of the participants of the accident
        - Minimum demand: position of writer, position of cars and position of bike is described
Criteria specific evaluation

– ’Dynamization‘ (animated image)
  • *Does the text give readers an idea of the chronological order of the accident, and of the connexity of elements (e.g. causality)*
    – *movements and moving direction of cars and of the bicycle*
      » *use of verbs to describe movements*
      » *use of adequate collocations (text pattern)*
    – *coherent description of what happened*
      » *use of cohesion markers*
      » *use of chronology markers*
      » *etc.*
"The 15th of May an accident happened at Luxemburg Street. I was standing on the left side of the street, waiting for ..."
Instead of giving a conclusion ...

• Global and analytical evaluation of text quality
• What are significant linguistic criteria in texts which can serve as indicators for the quality of
  – designing a text for readers
  – signalizing a coherent path in the text
  – using adequate lexis
Subcomponents of students’ writing literacy across different text genres

www.bmbf.schreibkompetenz.com