Fostering Reading “Empirically” – Help for Struggling Readers by Means of Cooperative Learning

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What Would Help Struggling (Pre)Adolescent Readers Most?

Concerning cognitive skills:
- direct/explicit instruction of cognitive skills like reading fluency, strategies, and comprehension (Winograd et al., 2010; Souvignier, 2012; Logan et al., 2011; Naumann et al., 2010; McGeown et al., 2012)
- repeated trainings to reinforce and automatize skills (Swanson, 1999, 2000; Morgan & Hoskyn, 1998; Therrien, 2004)
- cooperative learning (Blonk et al., 2006; 2012)

Regarding reading motivation:
- interesting texts
- autonomy which text to choose
- clear objectives why to read something
- cooperation with others (Schauf & Noordzij, 2010)

Some Principles of Our Approach That Address Motivation

- Framing story and metaphor: Reading is like climbing
- Conscious monitoring of progress by regular diagnosis of reading speed
- Fostering reading motivation through interesting expository texts about everyday-life topics with the opportunity to choose
- Three levels of texts

What Do Struggling Adolescent Readers Suffer From (Besides and Beyond Their Poor Reading Comprehension)?

- low reading fluency – their decoding is too slow, too inaccurate and they do not notice (enough) mistakes they make (Artelt et al., 2002; Hidi & Schauf, 1992; Retelsdorf et al., 2012)
- low use and awareness of adequate reading strategies (Artelt et al., 2002; Lau, 2009; Lau & Cleeve, 2002; Neumann et al., 2010; Stalder, 2013)
- low reading motivation (Artelt et al., 2002; Aubinsky & Willows, 1998; Lau & Cleeve, 2002; Law, 2009; Logan et al., 2011; Neumann et al., 2010; McGuigan et al., 2012)
- they even experience a (sharp) decline in reading motivation during secondary school (Archambault et al., 2010; Gottfried, 1990; Gutek et al., 2012b; Hamilton et al., in press; Philipp, 2010; Stalder, 2013)
- little, if any, explicit instruction concerning reading strategies with teachers as models and scaffolders in their regular classrooms (Brekke & Anærund, 2012; Gutek, 1990; Neumann et al., 2003; Stalder, 2010)

The Three Activities of the Approach (Done Three Times a Week for 12 Weeks with Role Changes in Every Single Activity)

Activity 1: Read Aloud and Retell
- Retelling what the text so far was about

Activity 2: Paragraph Shrinking
- Paragraph shrinking (at most 10 words)

Activity 3: Prediction
- Monitoring whether prediction was right

Predicting the content of the next 3 paragraphs

What ELLIPSE Is About and What We Want to Know

- Intervention study within 41 classrooms (grade 6 and 7, mostly struggling readers) with a pre, post, and follow-up design with randomized groups, funded by the Swiss National Science Foundation
- Three main research questions:
  1. Does our approach enhance reading fluency, knowledge of reading strategies and text comprehension of expository texts?
  2. Can we enhance several facets of reading motivation?
  3. Does the intervention lead to changes in the perception of the reading orientation in the preadolescents’ peer groups?

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Most of the accidents occur, task (e.g., task text knowledge achievement oriented) “The moon calendar was useful especially in former times. You could predict the tide. Additionally, it was important to know the current phase of the moon for huntsmen during the Stone Age. For religious purposes people needed the moon calendar, too. In the Islamic moon calendar the ninth month is Ramadan, the fasting month. For Muslims this is the most important phase of the year since a very long time.”

Implicit main idea: Moon calendars are suitable for different purposes.

### Results Concerning Research Question 1: Effects on Cognitive Variables – Reading Speed and Basal Comprehension (Cloze Task)

<table>
<thead>
<tr>
<th>Number of Words</th>
<th>Pre</th>
<th>Post</th>
<th>Pre Post</th>
<th>Comprehension</th>
<th>Pre Post</th>
<th>Comprehension</th>
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</tbody>
</table>

### Results Concerning Research Question 1: Effects on Cognitive Variables – Reading Comprehension and Knowledge of Reading Strategies

<table>
<thead>
<tr>
<th>For Knowledge Reading Strategies</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero effect on reading speed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zero effect on processing sentences</td>
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</tbody>
</table>

Analyses of the Data Obtained from the Adolescents

- **Note:** Results that are about to be reported refer to the time point (April 2013, immediately after the intervention) and the second time point (September 2012; immediately before the intervention)
- **Plan of analyses**
  - Repeated-measures analyses of variance
  - between-subject factor: experimental vs. control group
  - within-subject factor: measurement point 1 (before instruction) vs. measurement point 2 (after instruction)
  - Reporting Cohen’s $d$ (difference of means divided by pooled standard deviations, $d_{< .20}$ = small effect, $d_{.20 - .50}$ moderate effect, $d_{>.50}$ = big effect) (Cohen, 1988)

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Results Concerning Research Question 1: Effects on Intrinsic Reading Motivation and Reading Engagement

No significant effects on intrinsic motivation, but on reading engagement (teacher report)

Results Concerning Research Question 2: Effects on Intrinsic Reading Motivation

No significant effects on intrinsic motivation, but on reading engagement (teacher report)

Results Concerning Research Question 2: Effects on Extrinsic Reading Motivation

Tendency of small effects on some dimensions of extrinsic reading motivation

The Main Results at a Glance

- no effects on basic reading processes (reading fluency, processing of sentences) – even though adolescents practiced for several weeks (similar results are obtained by WWC Intervention Report on PALS, 2012) (c.f. MacMaster et al., 2005)
- modest gains in reading comprehension and knowledge about strategies (which has been documented by reviews from Slavin et al., 2008, 2009 – as well as from a meta-analysis on reciprocal teaching) (Rosenshine & Meister, 1994)
- unclear effects on motivational variables, that are based on self-reports – which seems to be normal state in studies that address adolescents’ reading motivation (Rosebrock et al., 2010; Streblow et al., 2007, 2012; Guthrie et al., 2012a)
- biggest gains in reading engagement (judged by teachers) – but teachers’ perceptions do not measure the same like self-reports about one’s own motivation (Guthrie et al., 2007; Wigfield et al., 2008)
- no effects on perceptions of reading orientation in the peer group

Discussion and Implications

- Preliminary results suggest that the intervention is not equally effective in every dependent variable and needs to be improved (WWC, 2012)
- rising questions concerning on how to engage adolescents meaningfully (Katz & Assor, 2007), to develop “dedication for reading” (Guthrie et al., 2012b) and to create effective reading instruction that combines cognitive and motivational elements – maybe the standard procedures even might have bored those adolescents
- enhancing reading motivation in struggling readers as a special challenge – little research beyond about CORI (Guthrie et al., 2007, 2012a, 2013), but a plethora of recommendations
- maybe instead of following mostly scripted programs another useful attempt would be to study either outstanding teachers (Wan et al., 2006) or to accompany teachers by a professional development approach (Juhl, 1996)