

Proposal paper presentation EARLI 2021

Authors

Kim Van Ammel – Koen Aesaert – Rielke Bogaert - Hilde Van Keer

Ghent University

Title

Teachers' knowledge and beliefs about reading comprehension instruction: differences across tracks?

Abstract

Although secondary school teachers' reading comprehension instruction is unquestionably related to their knowledge and beliefs, uncertainty remains about how they conceptualize effective reading comprehension instruction. Additionally, teachers' instruction, knowledge and beliefs are presumably different across educational tracks. Therefore, mapping secondary school teachers' knowledge and beliefs regarding reading comprehension instruction across different tracks is the main focus of this research. Qualitative as well as quantitative data were gathered from 86 9th-grade teachers. Quantitatively, teachers were queried about their generic and self-efficacy beliefs regarding explicit reading comprehension strategy instruction and about their frequency of implementing this. Additionally, their students ($N = 1934$) completed a standardized reading comprehension test. Data were analyzed using oneway ANOVA, cluster analysis, and multilevel regression analysis. Qualitatively, teachers were asked to describe how they aim to enhance their students' reading comprehension skills. Answers were rigorously analyzed using thematic analysis. The results reveal a state-of-the-art as to secondary school teachers' knowledge and beliefs regarding reading

comprehension instruction. Additionally, differences across teachers teaching in different educational tracks are uncovered, based on a combination of qualitative and quantitative data. Finally, this study unveils the relationship between teachers' beliefs regarding explicit reading comprehension strategy instruction and their students' reading comprehension scores, taking into account possible differential relationships across educational tracks. Implications for theory and practice will be discussed.

Extended summary

Aims: Although reading comprehension is a key competence contributing to both students' academic success and success beyond school (Taboada et al., 2009), recent studies indicate that a significant amount of secondary school students still struggles with it (e.g., OECD, 2019). In this respect, teachers are entrusted with the crucial task to foster their students' reading comprehension skills, in which explicit reading comprehension strategy instruction should take a central position (Duke et al, 2011). This reading instruction is unquestionably related to teachers' knowledge and beliefs. However, uncertainty remains about how secondary school teachers actually conceptualize effective reading comprehension instruction (Brevik, 2014), and direct relationships with student performances have rarely been investigated. Furthermore, in the context of secondary education, especially vocational students struggle with comprehending texts (OECD, 2019) and Brevik (2017) suggests that teachers differentiate their reading comprehension instruction according to the track they teach in. These differences in reading comprehension instruction might partially relate to differences in teachers' knowledge and beliefs (Behrmann & Souvignier, 2012). Consequently, three *research questions* are put forward:

1. What is the state-of-the-art as to secondary school teachers' knowledge and beliefs regarding effective reading comprehension instruction?

2. Do knowledge and beliefs regarding effective reading comprehension instruction differ between teachers of various educational tracks?

3a. Are secondary school teachers' beliefs regarding explicit instruction of reading comprehension strategies related to students' reading comprehension performance?

3b. Does this relationship differ between educational tracks?

Methodology: 86 9th-grade Dutch language teachers from 29 Flemish secondary schools participated.

Data were gathered via two approaches. First (quantitative part), a self-report questionnaire with Likert scales was administered to gain insight into teachers' generic beliefs concerning explicit instruction of reading comprehension strategies, their self-efficacy beliefs regarding explicit instruction of reading comprehension strategies and their self-reported frequency of implementing (based on De Smul et al., 2018). Teachers teaching in multiple educational tracks were asked to answer separately per track. Data were analyzed using one-way ANOVA and cluster analysis.

Furthermore, the teachers' 1934 9th-grade students completed a standardized expository reading comprehension test (CITO, 2013). Students' performance was related to their teachers' scores on the self-report questionnaire using multilevel regression analysis (i.e. students nested into classes nested into schools).

Second (qualitative part), an open-ended question about teachers' pedagogical content knowledge regarding reading comprehension instruction was adopted. Teachers were asked to describe how they aim to enhance their students' reading comprehension skills. Answers were rigorously analyzed using thematic analysis.

Findings: *Research question 1:* Quantitatively, teachers generally consider explicit instruction of reading comprehension strategies important and consider themselves competent to implement it. In contrast, lower scores are encountered as to the self-reported frequency of implementing explicit instruction of reading comprehension strategies. Cluster analysis distinguishes a group of teachers scoring high on all three scales (i.e. strategically-oriented teachers) and a group with overall lower

scores (i.e. strategically-neutral teachers), see Table 1. As to the qualitative results, several themes emerged from the data, see Table 2. Product-oriented instruction (i.e., with a strong focus on asking and evaluating content-related questions) appears prominent in teachers' responses. Nonetheless, also teaching reading strategies takes a central place in teachers' reported pedagogical content knowledge. However, teachers especially put forward a particular type of strategies (i.e., cognitive), whereas the literature recommends teaching a rich repertoire of reading strategies (Rogiers et al., 2020). As to strategy instruction, teachers refer to the importance of 'practicing' strategies with a variety of texts. On the other hand, modeling and scaffolding, considered crucial in comprehension instruction (Duke et al., 2011), are not referred to. Finally, the importance of reading motivation – pursued mainly by offering interesting texts - is remarkably often mentioned.

Research question 2: Quantitatively, significant differences across tracks are encountered. Teachers teaching in the vocational track consider explicit instruction of reading strategies less important in comparison with teachers teaching in the academic track. As to being part of either cluster, fifteen of the 21 teachers teaching in the vocational track are found to be in the strategically-neutral cluster. Considering teachers in the academic track, only four of the 26 are found to be in this latter cluster. As to the qualitative results, similar differences are detected. Teachers of academic-track students report to focus more on reading strategies. Moreover, they refer to a greater extent to components of explicit reading comprehension instruction, strengthening their larger focus on teaching the process of reading comprehension. On the other hand, teachers in the vocational tracks refer more to rely on providing a variety of texts and subsequently asking content-related questions.

Research question 3a: First, a completely unconditional two-level null model was evaluated with reading comprehension as dependent variable (Model 0; students at level 1, classes at level 2, schools at level 3), see Table 3. Afterwards, students' gender (reference category = boy) and home language (reference category = Dutch) and teachers' cluster (reference category = strategically-neutral cluster) were introduced as an independent variables (Model 1). The results indicate that

girls, students with Dutch as a home language and students of strategically-oriented teachers have significantly higher reading comprehension scores.

Research question 3b: After adding educational track and interaction effects with teachers' cluster to Model 1 (Model 2), the regression coefficient for teachers' cluster is no longer significant. Moreover, no significant interaction effects were detected. On the other hand, the regression coefficient for the technical and especially the vocational track is strongly significant, pointing to lower reading comprehension scores for students in these tracks.

Theoretical and educational significance: This study unravels teachers' pedagogical content knowledge and beliefs regarding reading comprehension instruction, its rarely-studied relationship with students' reading comprehension scores and moreover differentiates across educational tracks. The results might guide future studies about (the design of) educational interventions that aim to enhance reading comprehension, by taking into account teachers' existing knowledge and beliefs. Furthermore, this study highlights the theoretical and educational value of differentiating across educational tracks and focusing on the vulnerable group of vocational students.