

Teaching practices and text comprehension in students during the transition from the first to second stage of school

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Summary

Introduction

Children acquire their elementary reading and text comprehension skills at primary school. Good reading skills is not only essential in the context of language sub-skills, but it is the basis of academic success in all subjects (Cain & Oakhill, 2007). According to the OECD results in PISA 2009 (Programme for International Student Assessment), Estonian students came 10th among OECD countries in reading comprehension skills and even higher, fifth, among European countries (Tire et al., 2010).

Despite these high results in international studies, there are still students who have difficulties with age-appropriate text comprehension (Henno et al., 2007; Soodla & Kikas, 2010; Tire et al., 2010). Some children who struggled with text comprehension had satisfactory or even good reading skills (Lervåg & Aukrust, 2010). Among poor performers there are children with very different abilities (Cain & Oakhill, 2006), and their prevalence is higher in the case of low abilities (Reynolds & Turek, 2012). In addition to varying abilities, differences in text comprehension have also been found between boys and girls, mostly in favour of girls (Logan & Johnston, 2010; Tire et al., 2010).

There is no common agreement on which abilities and skills are most essential in text comprehension. Verbal skill has been considered a good indicator of text comprehension (Berninger et al., 2006; Echols et al., 1996; Pečjak et al., 2011). Vocabulary and previous knowledge play an important role in text comprehension (Broek & Espin, 2012; McKeown & Beck, 2004). What makes a text easier to comprehend is some knowledge of semantics, syntactic and grammatical constructions (Cain & Oakhill,

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2007, 2011) and the skill to process and extrapolate information (Krashen, 1982; Lenneberg, 1967).

Previous research has shown contradictory results – there are references to the persistence of text comprehension problems (Kim et al., 2009; Nation et al., 2010), but also to their change with the times (Mooij & Driessen, 2008; Männamaa & Kikas, 2010; Phillips et al., 2002). At the same time, a reliable profile of skills and abilities that predict difficulties with text comprehension has not been found (Watson et al., 2003).

Teacher's practices play a significant role in shaping student reading skills (Foorman et al., 2006; Perry et al., 2007). As the purpose of reading is somewhat different in each school stage – in primary school the focus is on acquiring the basic vocabulary and elementary reading skill, in basic school on comprehending the text and getting information in various subject areas – it is important to use different practices to develop the students' reading skills (Gleason & Ratner, 2009).

The aim of the current longitudinal study was to examine the development of student reading comprehension and verbal abilities at the first and second stage of basic school (grades 1–6) and to evaluate the influence of teaching practices on this development. The following six goals were set for the study.

1. To analyse the relationships between text comprehension tasks and verbal skills.
2. To determine the extent to which reading comprehension varies between boys and girls.
3. To assess primary school teachers' preferences in regard to teaching practices.
4. To determine the stability and change in student reading comprehension profiles over a year.
5. To investigate the stability and change in the subgroups of teachers with different teaching practice profiles.
6. To analyse the impact of teaching practices on student reading comprehension performance.

Method

This study is part of a larger research project (Toomela, 2010), where six hundred and nine primary school students and their teachers ($N = 36$) participated in the longitudinal study. All students studied in regular classes according to the Estonian National Curriculum for Basic School and Upper Secondary School (Vabariigi Valitsus, 2007). The students'

reading comprehension was assessed using *Language competence tests* (LCTs) and their verbal abilities using *The Word Guessing Test* (WGT) at the beginning of grades 4 and 5.

The LCT was used to examine the students' semantic awareness and their ability to find and integrate information from the text (Uibu et al., 2010; Uibu & Tropp, 2013). The WGT measured the children's verbal ability, verbal reasoning and integration of verbal information (Männamaa et al., 2008). In this test the child's task was to infer the name of a concrete or abstract concept by three of its given characteristics.

Teachers' preferences for different teaching practices were measured using *Teaching practices questionnaires* in grades 3 and 4 (Uibu et al., 2010). The questionnaire covered three areas of teaching practices, focusing on the promotion of the mechanical acquisition of knowledge and skills, developing critical thinking and comprehension and comprising activities that enhance integration and the practical application of knowledge in students. Both variable and person-oriented approaches to the data analysis were employed (Bergman et al., 2003; Cohen et al., 2007).

Major results and discussion

Proficiency in reading comprehension is considered an important factor for cognitive development and school effectiveness. We examined the development of reading comprehension, verbal abilities and semantic awareness in mother tongue when moving from the first school stage to the second. Using variable and person-oriented approaches in data analysis, differences were found at the group level as well as between subgroups of students with different reading comprehension profiles and subgroups of teachers with different teaching practice profiles.

We found that generally the students who had higher verbal abilities achieved higher results in reading comprehension and word recognition. In addition, students' semantic awareness related more strongly to their verbal ability than their ability to find information in the text, and integrate and interpret information. Previous research has also found that verbal skills are relevant in acquiring vocabulary and differentiating between the meanings of words (Cain & Oakhill, 2011; Saxton, 2010). Verbal skills and semantic competence, in contrast, are connected with the skill to comprehend text at a lower level, e.g. to recognise information in the text, and at a higher cognitive level, e.g. to analyse and interpret text (Pečjak et al., 2011).

In line with earlier studies (Logan & Johnston, 2010; Sinka, 2008) we found that girls exhibited higher results in major fourth grade tasks (verbal ability, reading comprehension and word recognition) and in all fifth grade tasks. To promote boys' reading comprehension it is essential to use texts that are suited to their interest and cognitive level as well as use different reading strategies and practices.

The students' text comprehension and verbal skills may be very different and change in time, i.e. we can see different combinations of text comprehension and verbal skills in fourth as well as fifth grade students. Although several researchers have confirmed the stability of text comprehension (Juel, 1988; Kim et al., 2009; Phillips et al., 2002), the stability does not apply to all students in our sample. Individual differences in stability and change can be found in the students' abilities and also the components of text comprehension and their relationship. Thus, text comprehension is not a one-way process: the results of all students may not improve in time; there are students whose results fall. At the same time, extreme changes in text comprehension during a one-year period are rare.

Students, whose teachers did not use various teaching practices in the lessons, did not achieve good results in text comprehension and verbal abilities tests. When increasing teaching practices that develop students' lower cognitive skills, their text comprehension skill improves. The students, whose teachers' preference of different teaching practices was low, had lower results as a rule. These teachers did not adapt or vary teaching in accordance with the students' cognitive development.

Keywords: reading comprehension, verbal abilities, teaching practices, longitudinal research