

# Literacy Activities and Their Associations with First Graders' Reading Performance in Two Transparent Orthographies

eTale 2022



The aim of the study was to analyse literacy instruction activities and their association with the reading performance of first graders in Estonia and Finland, two countries that have similar orthographies and education systems but differ in the onset of formal reading instruction. The results showed that there were more similarities than differences between the countries in literacy instruction activities. The results highlight the importance of responsiveness to students' needs in early school years literacy instruction.

**Authors: Jenni Ruotsalainen, Piret Soodla, Eija Räikkönen, Anna-Maija Poikkeus, Eve Kikas & Marja-Kristiina Lerkkanen**

Source: Ruotsalainen, J., Soodla, P., Räikkönen, E., Poikkeus, A.-M., Kikas, E. & Lerkkanen, M.-K. (2020). Literacy instruction activities and their associations with first graders' reading performance in two transparent orthographies. *Compare: A Journal of Comparative and International Education*,

The aim of the study was to analyse literacy instruction activities and their association with the reading performance of first graders in Estonia and Finland, two countries with similar orthographies and education systems but who differ in the onset of formal reading instruction. The results showed that there were more similarities than differences between the countries in literacy instruction activities. However, the slopes of reading performance development among Finnish beginning readers sharply differed from those of other readers in both countries with respect to the content of literacy instruction. The results highlight the importance of responsiveness to students' needs in early school years literacy instruction.

- Reading proficiency requires the development of both decoding and comprehension skills as well as instructional practices that address both.
- Estonia and Finland have languages with transparent orthographies, and in both countries, students enter school at the age of seven.
- Their difference is that the onset of formal reading instruction takes place in kindergarten in Estonia but in first grade in Finland.
- Despite the later onset of instruction, Finnish students on average reach the same level of reading fluency and reading comprehension as their Estonian peers by the end of first grade.
- Instruction in first grade has been shown to have a greater impact on students' reading skills than instruction in other grade levels.
- The need for balanced instructional practices that support both the development of students' foundation-level code-focused (CF) skills of decoding and reading fluency and the broad advancement of meaning-focused (MF) comprehension skills has been widely acknowledged.

- Yet, analyses of the effects of specific instructional practices at these differentiated levels from classroom observations are rare.

## **Emerging literacy skills**

- The Simple View of Reading (SVR; Gough and Tunmer, 1986), a widely used theoretical account on reading, suggests that reading comprehension is a composition of efficient decoding skills and linguistic comprehension.
- Linguistic comprehension and vocabulary develop through informal and formal exposure to interactions throughout one's life, whereas acquiring the ability to decode words is a more rapid process where students must master a limited number of letter-sound combinations and the alphabetic principle.
- Typically, in transparent orthographies the acquisition of decoding skill takes place soon after reading instruction has begun.

## **Literacy instruction in first grade**

- The sensitivity of the teacher to take a student's skills into account and tailor the instruction has been shown to contribute to the development of reading skills.
- A heavier emphasis on the development of CF skills, for example through letter knowledge, phonological awareness and decoding tasks is commonly needed in the beginning of the first school year, whereas the focus may later shift towards incorporating more MF activities.
- The three dimensions of framework and observational coding scheme of literacy instruction:
  1. Context (e.g. whole vs. small group instruction)
  2. Management (e.g. teacher vs. child managed direction of attention)
  3. Content of instruction

- The present study centres on the content of literacy instruction.
- CF activities aim at providing support for early decoding and spelling skills, such as blending phonemes or doing spelling exercises, and later practicing reading fluency.
- MF activities seek to support students' comprehension skills via meaning-based discussions and reading comprehension tasks, for example.
- Because the Estonian and Finnish languages have highly transparent orthography (almost perfect phoneme-grapheme correspondence), reading instruction is phonics-based.
- After the first phonemes are introduced to students, phonemic assembly and progress toward full mastery of accurate decoding are relatively easy for beginning readers.



## **The study**

The present study examines the instructional activities during literacy lessons in Estonia and Finland and their associations with students' reading performance during the first school year.

Research questions:

1. How is literacy instruction implemented in the observed Estonian and Finnish classrooms in first grade spring?
2. How are the amounts of time used for CF vs. MF literacy instruction contents in Estonian and Finnish classrooms associated with the students' reading performance (fluency and comprehension) in the spring of first grade? Are these associations similar for students with

different entry-level reading fluency?

**The participants** consisted of 33 classroom teachers (21 from Estonia, 12 from Finland) and a total of 569 students from 33 first grade classrooms. Observations in the classrooms were carried out in first grade spring (April). The literacy lessons were coded with respect to the duration of the contents of instructional activities following the Individualising Student Instruction (ISI) classroom observation system developed by Connor et al. (2009). The codings assigned in each category were summarised under the broader categories of CF and MF activities and non-instructional activities. Students' reading skills were assessed using group-administered tests in the classrooms in first grade autumn (reading fluency) and first grade spring (reading fluency and reading comprehension).

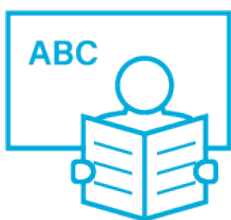


## Findings

- In every classroom, some non-instructional activities ( $M = 26.13\%$ ,  $SD = 9.05\%$ ) and a large proportion of MF activities ( $M = 54.72\%$ ,  $SD = 19.62\%$ ) were observed.
- CF activities were observed in 30 out of the 33 (90.91%) classrooms, and their proportion was smaller than that of MF activities ( $M = 22.10\%$ ,  $SD = 15.64\%$ ).
- Listening and reading comprehension was observed more in Estonia than in Finland.
- Individualised work was observed solely in Finland.
- Students' reading fluency and reading comprehension showed moderate to strong correlations at within level and in Estonia also at between level.
- In Finland, an especially strong correlation was found

between the amount of CF activities in the observed literacy lessons and students' reading fluency in first grade spring.

- At the within level, students' reading fluency and reading comprehension were significantly associated with each other.
- In Estonia, the amount of CF or MF instruction was not associated with the students' level of reading fluency.
- In the Finnish sample, the amount of both CF and MF activities was associated with the students' level of reading fluency: a high amount of CF activities and a low amount of MF activities were associated with a higher level of reading fluency among the students.
- For Finnish students whose reading fluency was one standard deviation below the mean in first grade autumn, the amount of CF activities seemed to matter: the Finnish beginning readers tended to have better reading comprehension if they were exposed to high rather than low amounts of CF activities.
- The Finnish beginning readers' reading comprehension tended to be poor if they were exposed to a high amount of MF activities.



## Conclusions

- More similarities than differences in literacy instruction between Estonia and Finland were found, but the analyses of the associations with students' reading performance revealed some country-specific interaction effects.

- Estonian teachers spend more classroom time on listening and reading comprehension activities.
- Individualising practices when teaching basic literacy skills were found only in Finland.
- This pattern of findings appears to reflect teachers' adapting their instructional strategies to the different phases of students' formal literacy learning careers.
- The amount of either CF or MF activities did not associate with the level of reading fluency or comprehension among Estonian students, nor did it have any additional effect on students' first grade spring performance when students' entry-level reading fluency was considered.
- Among Finnish students, a high amount of CF activities was associated with higher levels of reading fluency and better reading comprehension among students with low entry-level reading fluency.
- Overall, students spent more time on MF activities than on CF activities in first grade spring.
- Yet, CF activities are important as there is variation in students' reading performance and there are still students who are learning to decode in first grade spring and hence need support.
- In early years literacy instruction, students need ample support and exposure to literacy content and instruction adapted to their skill levels.
- This is especially important for readers with low reading fluency skill, who thus need more support with coding skills.