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# Does reading literacy instruction vary according to language or culture?

## Similarities and differences in English-, German- and French-speaking education systems in PIRLS 2016


### SUMMARY

- PIRLS 2016 data from eight education systems were used to examine how teachers from three different language groups (English, German and French) differed in their teaching of reading literacy.
- Frequent practices commonly used in the three groups included traditional surface-level activities, such as reading silently or aloud, and locating information in a short narrative text.
- Patterns of differences were observed among education systems regarding students' involvement in the more complex construction and integration reading tasks that lead to deep text understanding.
- Teaching reading practices differed substantially between the three linguistic/cultural groups, but were rather similar within the large group of English-speaking education systems that participated in PIRLS 2016.
- Depending on the education system, students were exposed to substantial differences in terms of reading activities or teaching strategies.


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### IMPLICATIONS

- Reading comprehension can be enhanced through different teaching practices, and explicit teaching of reading comprehension strategies has proven to be effective in improving reading literacy.
- In English-speaking systems, effective practices for establishing reading literacy seem well implemented, but there is still room for more consistent implementation in German-speaking and French-speaking education systems.

## INTRODUCTION

In the field of reading, most of the attention goes to early reading instruction, namely methods to teach decoding skills in grades 1 and 2. Research evidence about effective reading comprehension teaching is less well known, especially among practitioners, policymakers, and the general public. Nevertheless, there is broad research evidence showing that an explicit teaching of reading strategies (including modeling and scaffolding) is effective in enhancing students' reading comprehension skills and especially beneficial for struggling readers (Duke et al., 2011; McLaughlin & DeVoogd, 2018; McNamara, 2007; RAND Reading Study Group, 2002).

As noted by McLaughlin and DeVoogd (2018, p. 95), literacy educators can and should play an active role in teaching the students a variety of reading comprehension strategies, including "predicting, questioning, visualizing, making connections, monitoring, summarizing, and evaluating". However, research has shown that even when there is knowledge about effective teaching of literacy strategies, these teaching strategies are rarely implemented in the majority of classrooms (Duke et al., 2011). That said, there has been only limited research into how different language groups implement and teach such strategies.

According to the Kintsch (2004) model, which has emerged as the dominant model in conceptualizing both cognitive processes involved in reading comprehension and pedagogical practices to foster comprehension, skilled readers build text representations at three levels: a surface level focused on words and phrases, a construction level, "in which textual information activates the reader background knowledge," and an integration model, in which the activated knowledge and the information from the text "are integrated in a coherent mental representation of the text" (McLaughlin & DeVoogd, 2018, p. 86). This is why text comprehension is often viewed as the result of an interaction between a reader, a text and a context (RAND Reading Study Group, 2002).

Fortunately, the teaching practices and activities investigated in the IEA's Progress in Reading Literacy Study (PIRLS) questionnaires can be related to these surface, construction and integration levels. Using PIRLS data, this brief aims to examine differences in reading strategies and their outcomes among English-, French-, and German-speaking education systems. Specifically, this brief addresses the following questions:

- Is the explicit teaching of reading strategies better implemented in some education systems?
- Which types of material are used for reading?
- Which tasks are used to assess reading comprehension?
- Does teaching for reading literacy differ between groups of education systems?

## DATA AND ANALYSIS

PIRLS is a cyclical survey conducted under the auspices of the IEA, assessing students' reading literacy in their fourth year of schooling every five years (see www.iea.nl/pirls). Here, we examined PIRLS 2016 data resulting from the teachers' questionnaire (see https://timssandpirls.bc.edu/pirls2016/questionnaires/downloads/P16_TQ.pdf). In each cycle of PIRLS, extended information about learning contexts is collected, for instance about teaching practices, opportunity-to-learn, allocated time, and preservice and in-service teacher training.

The goal of our study was to search for similarities and differences in reading literacy teaching and assessment practices in three groups of education systems. Each group had a shared language and cultural characteristics, including pedagogical traditions in a broad sense. Our investigation included all education systems in which English, French or German was the main language of instruction. For the sake of clarity, and as there were seven English-speaking education systems, here we present only the results of three English-speaking education systems[1]. The three English-speaking education systems that we selected performed well in PIRLS 2016 (Ireland 567, Ontario 544, and USA 549 test points), as did French-speaking Québec (547), and German-speaking Austria (541) and Germany (537). Conversely, the French-speaking education systems of France (511) and Belgium (497) performed below average compared to other European/Western systems.

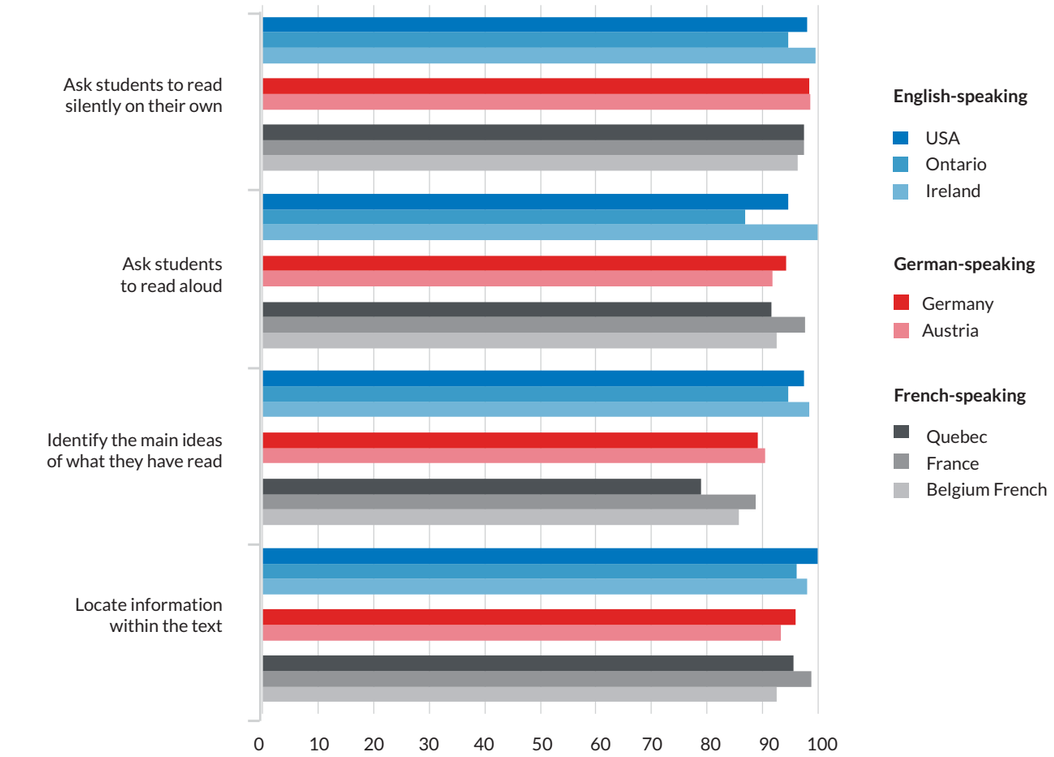
We analyzed questions about teaching strategies, types of reading material, and types of activities/assessments in reading. Only descriptive statistics (frequencies) were used to establish percentages of students frequently (i.e., at least once a week) exposed to the activities or teaching practices.

## RESULTS
### TEACHING FOR READING LITERACY

Some reading activities were commonly used in all three groups (see Figure 1), namely "Identify the main idea," "Locate information within the text," "Ask students to read silently on their own," and "Ask students to read aloud". These activities are rooted in pedagogical tradition, and are mainly exercise or practice. They cannot be considered as in-depth teaching of reading comprehension skills, and most are best described as surface-level activities

1 Data and figures for all English-speaking education systems are available in the online Appendix (click here).

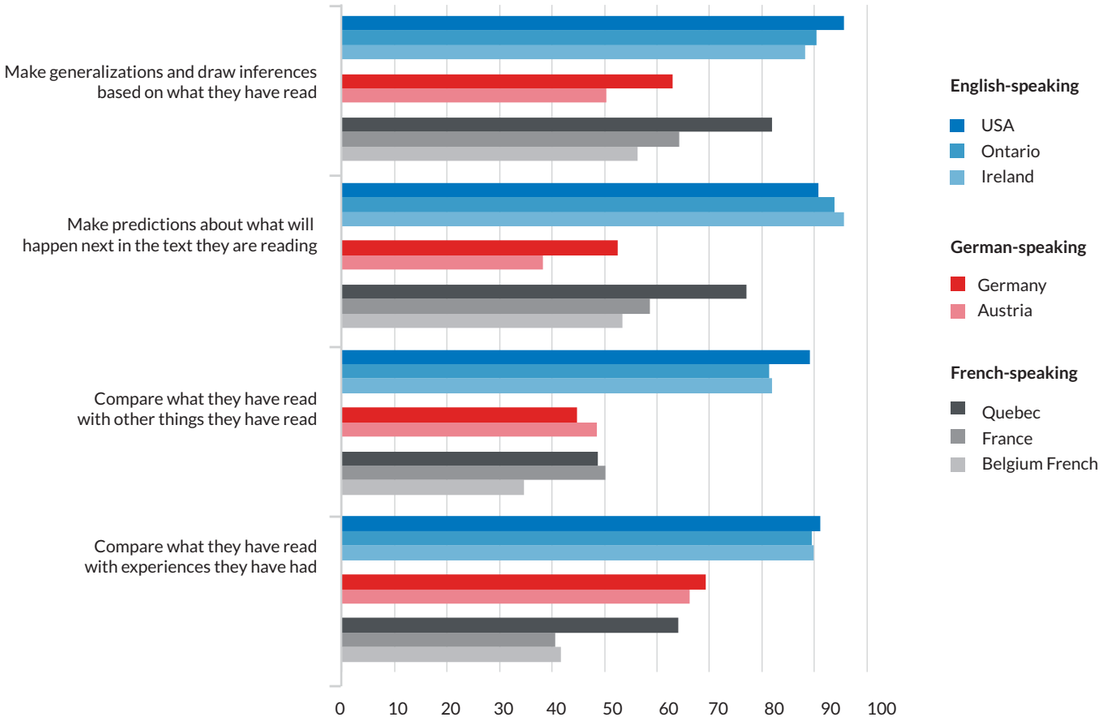
*Figure 1: Percentage of students exposed at least once a week to the following reading activities*




Source: PIRLS 2016 International Database (https://timssandpirls.bc.edu/pirls2016/international-database/index.html).


Other tasks, such as "draw inferences" or "make predictions," and "compare with experience or other tasks" are more complex reading tasks that require from the reader at least some construction or integration of prior knowledge and text information (Figure 2).

*Figure 2: Percentage of students exposed at least once a week to reading tasks involving construction and integration reading processes*




Source: PIRLS 2016 International Database
(https://timssandpirls.bc.edu/pirls2016/international-database/index.html)
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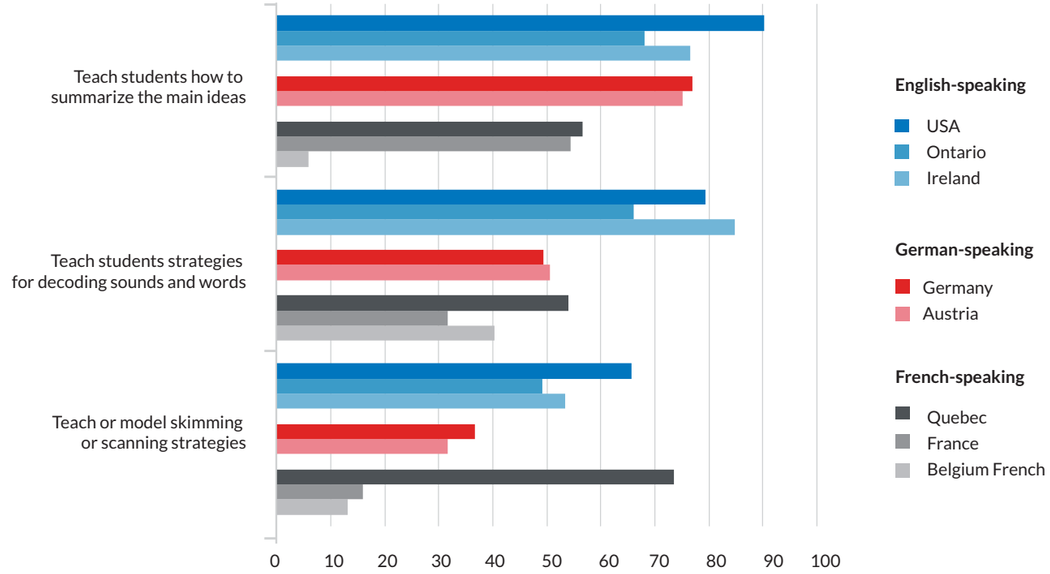
Finally, three items, namely "Teach or model skimming or scanning strategies," "Teach students how to summarize the main idea," and "Teach students strategies for decoding sounds and words" refer explicitly to teaching and/or strategies, meaning that students have been taught specific reading skills or strategies (Figure 3).

*Figure 3: Percentage of students exposed at least once a week to an explicit teaching of reading strategies*




Source: PIRLS 2016 International Database
(https://timssandpirls.bc.edu/pirls2016/international-database/index.html).
Copyright © 2017 IEA.

For the more complex reading tasks and explicit teaching of reading strategies quite substantial differences were observed between the groups of education systems (Figures 2 and 3). In the group of English-speaking systems, students were very often exposed (between 80–100% of students at least once a week) to complex reading tasks such as "Make generalizations and inferences," "Make predictions about what will happen next," "Compare what they have read with other things they have read," and "Compare what they have read with their experience". In other education systems, these types of reading activities were noted to be far less frequent, with less than half of the students exposed once a week, and for some items in some systems, at far lower rates. In addition, variation was not random: students in English-speaking systems were systematically more frequently involved in complex reading tasks and explicit teaching than in German- and French-speaking education systems. Interestingly, Québec fell between the groups, being closer to the French-speaking systems for some aspects, and closer to the American education systems (Ontario and USA) for others. This mixed situation may be because, in Québec, language and culture are not aligned: from a linguistic point of view, French is the language of instruction in Québec, but from a cultural point of view, it could be argued that Québec's culture and influences are more American.

One item deserves special attention, namely "Teach students strategies for decoding sounds and words": while this explicit teaching was common practice in the three English-speaking systems (Ireland, Ontario and the USA), it was not frequent in French-speaking systems, especially in Belgium-French (40% of students), in France (30%) and in German-speaking systems (around 50% of students in Austria and Germany). As German has much more transparent spelling than English and French, one argument could be that by grade 4 most of the students no longer really need this systematic training. However, in French, as well as in English, matching sounds and letters can be challenging; many grade 4 students are still struggling with the requisite decoding skills and need support. In English-speaking systems, students are obviously provided with a continuing explicit teaching until grade 4, while this does not appear to be the case in the French-speaking systems.

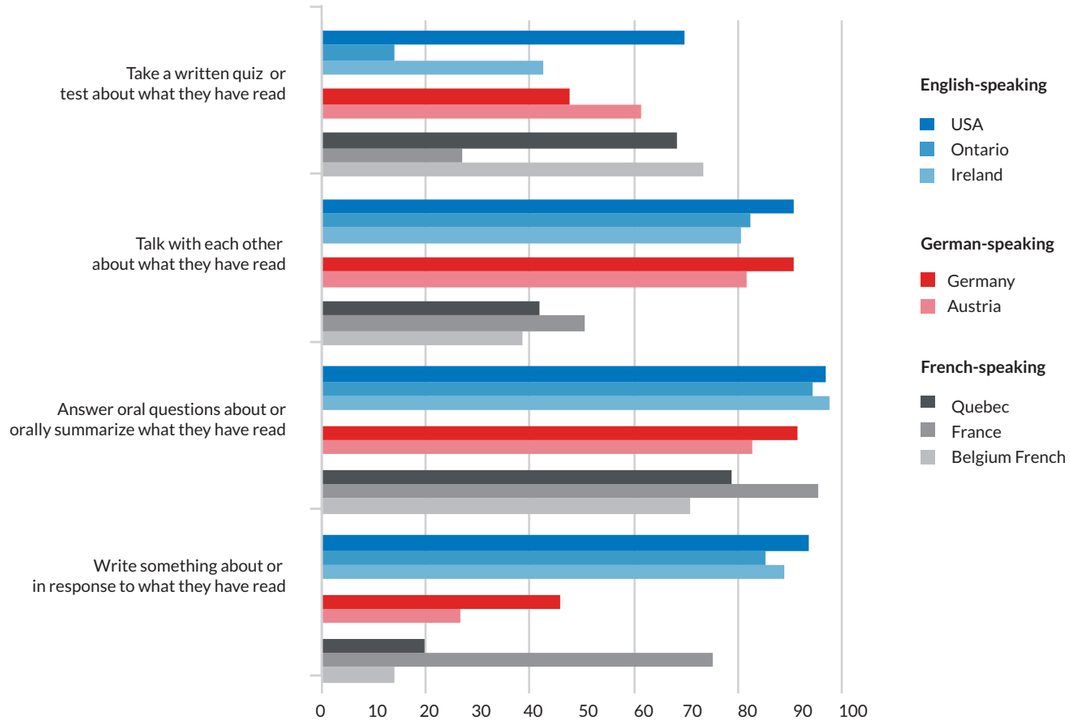
## ASSESSMENT PRACTICES

In the PIRLS assessment, about half of the questions are multiple choice while the other half are open-ended. How familiar students are with both types of questions can influence the way they handled the reading tasks and how successful they were in undertaking the assessment.

Again contrasting patterns were observed regarding assessment practices (Figure 4). In the three groups, most of the students were frequently asked "oral questions or to orally summarize."

Regarding the three other assessment practices, substantial variations were observed: the interactive practice of "talking with each other" was frequently implemented in English-speaking and German-speaking systems (≥ 80% of students), but was less frequent in French-speaking systems (only 40–50% of students). In terms of written assessments, the "written test or quiz" was very unusual in Ontario and in France, somewhat more frequent in Ireland and in the German-speaking systems, and frequent in Belgium-French, the USA and Québec.

*Figure 4: Percentage of students who are asked to do the following at least once a week after having read a text*




Source: PIRLS 2016 International Database (https://timssandpirls.bc.edu/pirls2016/international-database/index.html).



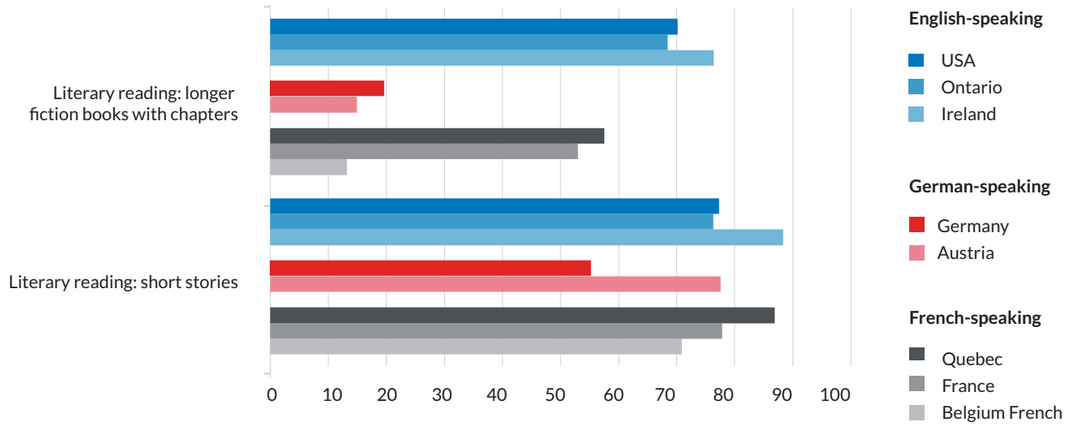
On the contrary, the practice of "writing something about or in response to the text" was common practice in the English-speaking systems and in France, less frequent in Germany (around 50%), not common in Austria and Québec, and even less frequent in Belgium-French. Using writing to develop reading skills seems more prevalent in English-speaking systems; this is a highly recommended practice, not only as a method of assessment but as an effective way to foster reading comprehension (McLaughlin & DeVoogd, 2018).

## READING MATERIAL

Short literary texts were commonly used (> 70% of students) in all systems, except in Germany. Conversely, students were frequently exposed to longer fiction texts in the three English-speaking systems (≥ 70% of students), moderately exposed in France and Québec (around half of the students), and rarely exposed to longer texts in Austria, Belgium and Germany (10–20% of students).

One characteristic of the PIRLS assessment is that all texts by design have the same length. Even if texts of around 1000 words cannot be considered as long for that age group, standards can vary between education systems. In some education systems, students are clearly much more familiar with reading longer texts in a school context than in others (Figure 5).

*Figure 5: Percentage of students who read the following types of text at least once a week*




Source: PIRLS 2016 International Database (https://timssandpirls.bc.edu/pirls2016/international-database/index.html).


## DISCUSSION

Our investigation found that a limited number of teaching practices were shared by the eight education systems on which our study focused. Typically the most common ones were more traditional practices: reading silently, reading aloud, answering oral questions, locating information, and reading short fictional texts. This set of activities does not require students to engage in goal-oriented and strategic reading. Further, the implementation of these activities in classrooms cannot be related to an explicit teaching of reading strategies. Finally, these activities do not require the reader to engage with the text, connect his/her background knowledge with text, reach a deep understanding of the text, or monitor his/her comprehension, the cornerstone processes of current interactive models of reading (McLaughlin & DeVoogd, 2018).

Regarding more complex reading activities or explicit teaching of strategies, some clear-cut differences were observed between the education systems. For example, the teaching practices closer to explicit instruction of reading strategies were more common in English-speaking education systems, and to some extent in Québec, than in German- or French-speaking systems. In the three English-speaking systems, students seem to have more opportunities to learn, or exposure to longer texts and to teaching practices aimed at developing deep understanding, going beyond a superficial understanding of the text. In these systems, students were encouraged to draw inferences, compare texts with other reading materials or relate reading to their experience, to make predictions and learn to browse a text. By comparison, in the lowest scoring education system that we examined (French-speaking Belgium), pupils had limited exposure to effective teaching of reading strategies and limited experience with more demanding texts.

The extent of the differences in teaching reading approaches between the three linguistic/cultural groups was unexpected, as were the similarities in practices within the groups, especially within the English-speaking and French-speaking groups (with the variable exception of Québec). Additional analyses performed on other education systems interestingly showed that all English-speaking systems, without exception, demonstrated the same pattern of very consistent teaching practices. Meanwhile, among other groups, such as “romance language” countries, Nordic countries or Eastern European countries, we found that within-group variations in teaching practices were large; this is an interesting result that merits further investigation.

## POLICY IMPLICATIONS

This study illustrates how international comparative studies can provide policymakers with relevant information that goes beyond simple rankings. We found that, depending on the education system, students were exposed to substantial differences in terms of reading activities or teaching strategies. Making comparisons with what other education systems do can be inspiring for national or regional policymakers.

Reading comprehension is not just a matter of intelligence or practice. It can be enhanced through different teaching practices, as evidenced by decades of research into reading instruction. The most effective and promising approaches are those that explicitly teach students how to go beyond the surface of the text, and construct and integrate their prior knowledge with information from the text. These include:

- Explicit teaching of reading comprehension strategies, involving modeling, scaffolding and gradual release of responsibility, aiming at student autonomy.

- Interactive practices, such as reciprocal teaching and reading circles in which students share and discuss their understanding of texts.

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## FURTHER READING AND RESOURCES

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International Literacy Association (https://www.literacyworldwide.org/) publications and resources (https://www.literacyworldwide.org/get-resources/journals).

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The International Association for the Evaluation of Educational Achievement, known as IEA, is an independent, international consortium of national research institutions and governmental agencies, with headquarters in Amsterdam. Its primary purpose is to conduct large-scale comparative studies of educational achievement with the the aim of gaining more in-depth understanding of the effects of policies and practices within and across systems of education.



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