

Rapport
de recherche
PROGRAMME ACTIONS CONCERTÉES

**Exploiter les connaissances des enfants sur les relations entre
les mots afin d'améliorer l'orthographe au Québec francophone:
Étude expérimentale et d'intervention**

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HOW CAN WE IMPROVE CHILDREN'S ABILITY TO SPELL IN FRENCH?

Do we really need to know how to spell anyway? With all the spellcheckers that are available today, why spend too much time learning to spell correctly? It turns out that many studies have shown a link between the ability to spell words correctly, and the ability to write easily, to communicate effectively, and to read and comprehend text. With the importance of literacy in modern society, there is a strong link between literacy and success, both professionally and personally. Spelling well plays a fundamental role in becoming a literate adult. Unfortunately, spelling ability among children in Quebec has been steadily declining in the past decades (Jalbert, 2007). The principal goal of this research project was to test a teaching method to improve children's ability to spell in French. We wanted to know whether a particular approach to learning about words would help children spell correctly, and also to find out whether this method would be more effective in earlier school years, or later, when children have had more language experience. In the following pages, I describe the rationale for the study, our teaching method and approach, as well as the results of the training on children's spelling ability. Finally, based on this work, I discuss potential solutions to the problem of declining spelling ability in Quebec children.

RATIONALE

Learning to spell is a complex, multi-dimensional task, requiring the integration of meaning, grammar and broader language skills and the successful development of spelling ability is an integral component of children's overall learning and academic achievement. As such, children's spelling performance provides an indication of their more general developing language abilities and vocabulary, as well as a sensitive gauge of their emerging literacy skills. Despite the

important role of spelling to literacy acquisition, research tends to focus solely on reading development and in contrast to the breadth of literature examining the development and instruction of reading skill, spelling development has not been extensively researched. Thus, neither the processes that underlie spelling skill, nor the most effective ways of instructing it are thoroughly understood.

Understanding the process of learning to spell has become particularly important in Quebec, where a widespread decline in children's spelling ability has become apparent (Jalbert, 2007). Written French has certain complex features that are likely contributing to the difficulties experienced by these children. For one, French has a one-to-many mapping of sounds-to-orthography, so the same sound may be written in a number of different ways. To spell correctly, children must select the appropriate letter pattern to represent a given sound from many plausible options. For example, the letter pattern *eau* is read as the sound /o/, however, the sound /o/ can be written in a variety of ways, including *au*, *aux*, *o*, *ot*, *os*, *ô* among others. Additionally, silent letters are common in written French, such as in *candidat*, which ends in a silent *t*, so accurate spelling involves learning parts of words for which there is no overt pronunciation to use as a guide. These nuances of written French serve as obstacles for children as they learn to spell, and many children are not able to overcome them.

In this project, we investigated the role that morphological knowledge plays in the ability to spell. Morphological knowledge refers to the ability to recognize and process sub-lexical units in language, for example, recognizing that the word 'reheatable' is made up of three sub-parts, the prefix 're', the stem 'heat', and the suffix 'able.' Children who have greater morphological awareness are better able to spell words correctly (Deacon, Kirby, and Bell-Casselmann, 2009; Sénéchal, 2000).

However, much less is known about morphological skills and writing ability in French (Sénéchal, 2000; Sénéchal et al., 2006; Pacton & Deacon, 2008). Because French has richer morphology than English, its role in spelling is likely to be even more important for children learning French.

The goals of the current project are to understand children's morphological knowledge and its relationship to spelling ability in the primary school years in Quebec. Specifically, the research team examined the role that morphological knowledge plays in the acquisition of French spelling skills in 3rd- and 5th grade students. We then used the information gained to develop an intervention to see if teaching children about morphology would improve their spelling.

THE INTERVENTION

Children in grades 3 and 5 took part in the intervention. The children were divided into two groups, one which received instruction explicitly focused on the morphological structure of the words to be learned (Morphology group), the other receiving instruction focused on the meanings of the words (Vocabulary group). For example, the Morphology group was taught that there are two parts to the word *finlandais*, namely the stem *finland* and the suffix *-ais*, while the Vocabulary group was taught that the word *finlandais* describes something or someone that comes from the country, *Finland*. The intervention was given during 10 weekly sessions, each lasting one hour.

PRINCIPAL RESULTS

Following the intervention, we retested the third and fifth graders on spelling, and a wide range of other reading and writing measures. The children who had been taught about the components of words, namely those in the Morphology training group, outperformed the children taught the meanings of words. The

improvements in spelling after the 10 week intervention were seen for both boys and girls, for allophones and francophones, and even for children who were having difficulty with spelling. We then went back six months later to see if the children remembered what they had been taught. In fact, the children remembered surprisingly well.

RELATIONSHIP OF THE PROJECT TO THE NEEDS EXPRESSED IN THE CALL FOR PROPOSALS

The research project directly addresses two of the priority axes identified in the call for proposals. The main goals of this research project are essentially twofold; 1) to elucidate the relationship between children's oral language and their ability to spell in French; and 2) to develop effective teaching tools to improve children's written French. The first goal directly addresses Axis 2.2. By examining both children's implicit knowledge of morphology and their ability to use this knowledge explicitly, we were able to clarify the direct link between morphology in oral language and its role in written language skills, specifically spelling.

The second goal directly addresses Axis 4.1. The intervention study was designed to create the most effective interventions that capitalize on the relationship between children's oral morphological knowledge and their written language skills. These intervention strategies may ultimately rely on explicit teaching of morphology, or on implicit exposure to morphologically complex words. The intervention study will be done in close cooperation with teachers, leading to effective methods that will be translated into practice.

Results from this project have implications from understanding basic processes of language development through to practical application and policy changes.