

DIALOGUE: Implications of the bilingual experience for cognition and literacy



Everyone agrees that knowing other languages, in addition to our mother tongue, opens doors for us to communicate with people from other cultures and increase our learning opportunities. But what is behind this complex mechanism that enables us to acquire and use more than one language in our daily lives? To what extent does being able to speak more than one language affect our mind and brain? How does the experience of mastering more than one language impact literacy development in children studying in bilingual schools?

These are some of the questions that the American researcher Judith Kroll, from the University of California, Irvine, and I tried to answer in the event “Dialogues between

Science and Education” promoted by the UNESCO Chair of Science for Education in Brazil, which took place on March 23, 2023 at the headquarters of the Instituto D'Or de Pesquisa e Ensino (IDOR), in Rio de Janeiro.

Although most of the world's population can communicate in more than one language, studies on the cognitive effects of bilingualism are, in general, quite scarce and recent. In addition, there is a lot of apprehension on the part of the educational community about the impact that an experience of using more than one language can bring to children, both in Brazil and in other countries. Despite this, what research shows is that learning and using more than one language, at any age, positively modifies cognition and brings important positive consequences for the individual.

In terms of language use, it is known today that the two (or more) languages in the minds of bilingual individuals are always active and in interaction, which generates a constant “competition” between them. Even in completely monolingual communication contexts, which require the individual to use only one of their languages, this dynamic of interaction remains and the two languages are influenced by each other all the time. In other words, bilinguals never “turn off” one of their languages. This means that not only is the additional language always being influenced by the mother tongue, but the mother tongue is also affected by the other languages that we may have in our repertoire.

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Studies reveal that our mother tongue is always open to modifications resulting from the development of an additional language, from very initial stages of learning, regardless of the level of proficiency in the additional language or the initial age of acquisition. The dynamics of this interlinguistic interaction, however, varies according to the experiences of the individual, that is, it will be determined by a series of factors, such as how the person learns and uses their languages, with whom they interact and how often, if schooling takes place in one or more languages, among others. Obviously, the quantity and quality of

communicative interactions to which the individual is exposed vary enormously and it is precisely this variability that makes bilingualism such a rich, diverse and interesting experience.

Taking this scientific evidence into account, together with the accelerated expansion of the number of bilingual schools in Brazil, it is important to consider the effects that a bilingual experience entails for the development of reading and writing in children. The doubts and questions that parents and educators have about bilingual literacy, although recurrent, are not trivial. There is great insecurity about which methodologies are most appropriate to help children in this process.

In the book entitled 'Literacy in monolingual and bilingual contexts', my colleague Ubiratã Alves and I propose a reflection on the development of reading skills by children, considering both situations in which this process occurs solely in the mother tongue and in cases where there are two languages involved. In our work, we argue that it is essential to recognize that the development of biliteracy is characterized by the co-activation of linguistic and cognitive processes. In other words, all the child's linguistic knowledge will be activated during the process of reading development, in any language, even when, for pedagogical or even political reasons, the child receives instruction in only one of their languages. It is not a question of simply proposing that skills developed in the mother tongue be used in the development of literacy in an additional language. What the scientific evidence suggests is that there is a kind of common linguistic and cognitive repertoire of skills that underlie literacy in the mother tongue and in the additional language – and it is this repertoire that will regulate the use of any written code that the child may activate.

Therefore, the knowledge and skills related to reading, which are developed from the exposure and use of the additional language, will contribute to the development of related skills in the mother tongue. Likewise, biliteracy practices that take place in the mother tongue also influence the development of the child's additional language, since these influences are bidirectional. In this sense, the separation between the child's languages, which is often promoted at school, for example, when the additional language is taught only in the reverse shift, or when a teacher states that the child needs to "forget his or her indigenous heritage language to become literate in Portuguese", is completely arbitrary and unrealistic. The co-activation of the two languages happens automatically in the child's mind, regardless of any expectations or external interference made by the teacher.

To sum up, we can state that throughout life, language processing in bilingual individuals will reflect these interactive dynamics between their languages. For this reason, it is possible to contribute to the development of reading and writing skills in one language – be it the mother tongue or the additional language – from activities developed in the other. In this sense, pedagogical practices aimed at bilingual children or children who are immersed in bilingual schooling contexts should always consider the children's real linguistic experience, prioritizing interventions aimed at the development of reading and writing based on what students already know and are capable of doing in their languages, rather than trying to deny the existence of part of their linguistic repertoire.