

How learning a second language influences young children's literacy in their first language

What this study was about

[The study](#) looked at whether learning a second language (L2) helps the development of children's literacy in their first language (L1), and whether a second language which 'sounds as it is written' and is 'written as it sounds' (grapheme-phoneme correspondence) helps with this more than a language which does not have such a close match.

What the researchers did

The study focussed on native speakers of English who had not yet had any L2 teaching in school. 120 children from nine schools in years 3 and 4 (ages 7 to 9) were allocated to one of three groups. The first group learned French (no close grapheme-phoneme match). The second group learned Italian (a close grapheme-phoneme match). The third group acted as a Control and did not learn a language (they were offered language lessons after the study had finished). Children learning French or Italian were taken out of class in small groups (5 to 20 children) and were taught by native speakers of that language for one hour each week for fifteen weeks. The lessons for both groups were closely matched, and focussed on learning vocabulary (very little grammar teaching).

Each session included activities in listening, speaking, reading and writing, and the L2 was used throughout. Activities included songs and games, worksheets, and a reading from an adapted version of a story by a well-known, child-friendly author. Words in the story similar to English words (cognates) or quite similar (near-cognates), or which could be readily guessed from the meaning of the story (context) were translated into French and Italian and presented as 'surprise words'; children had to guess / work out their meaning as the story was read aloud. Once a 'surprise word' had appeared in the L2, it always appeared that way until the end of the story.

The children's English reading and spelling were tested before and after the programme using a range of different tests: spelling single words, identifying initial sounds (alliteration), naming pictures at speed, identifying rhymes, changing sounds around to create new word combinations (spoonerisms), reading a one- or two-syllable word, reading non-words, and general reading ability. Children in the language groups were tested for listening reading, spelling, and their ability to make inferences in their respective languages after the programme. Tests were specially-designed and lasted 20 minutes.

What they found

Children's scores on listening, reading, and spelling in their respective languages were over 50% accurate, which showed that children learned a lot of language over the 15-week programme. Results of tests on L1 English showed that learning an L2 helped the children in the study with some of their English reading skills. The Italian group was the only one of the three groups whose reading accuracy score in English improved significantly over the 15 weeks. The French and Italian groups did better than the Control group on identifying initial sounds, but there was no difference on this test between children who learned French and children who learned Italian. On the rhyme test, the Italian group scored higher than both the French and Control groups. There was no difference between the children who learned French and the children who did not learn a language. This suggests that learning L2 Italian conferred an advantage to children in this group which helped them to identify rhyming words in L1 English. On the spoonerism test, the Italian group scored only a little higher than the French and the Control groups. Once again, there was no difference between the French and the Control groups. This result suggests that the children learning L2 Italian gained an advantage in their ability to process (deal with and manipulate) sounds. There were no differences in the scores of the three groups when it came to reading non-words.

In short, the Italian group scored higher than the French group on nearly all the tests. Only the children learning L2 Italian improved on L1 English single-word reading, aspects of dealing with and manipulating sounds (phonological processing), including initial sounds (alliteration), rhymes and spoonerisms. The children in the French group did not show any advantage over the children in the Control group, except on initial sounds. Although effects were small, they 'suggest a clear effect of L2 learning on L1 literacy' (p.17).

Things to bear in mind

The number of children in the study was small, and the length of the teaching programme (15 weeks) was quite short. There may have been some effect in taking children out of class.