It's official: Learning languages makes you smarter

October 6 2011

New research has shown that learning a language may subtly change, and possibly improve, the way we think.

Academics from Newcastle and York universities say that Education Secretary Michael Gove's statement that learning languages makes people smarter has a sound scientific basis.

The language we speak represents the world in a certain way. For instance, the English language teaches us that pink is not the same colour as red, and grey is not the same as black, whereas blue is just one colour, regardless of its lightness.

But different languages represent the world differently. For instance, in Italian there are two colours corresponding to the English blue: celeste is light (literally: sky-coloured) blue, and blu is dark blue, similar to the distinction between pink and red. So when an English speaker learns Italian he must learn to think about colours differently in order to use the correct word.

Professor Vivian Cook, Newcastle University (pictured), and Dr Benedetta Bassetti, University of York, are editors of Language and Bilingual Cognition (Psychology Press, 2011) and have spent several years investigating the benefits of knowing two languages.

"We already knew that learning another language improves our knowledge of our mother tongue, and thanks to the work of Professor

Ellen Bialystok and others, we also knew that bilingualism has positive effects on the brain at both ends of life," said Professor Cook.

"Young children develop theory of mind earlier if they know two languages, and in older people, bilingualism can postpone the onset of dementia."

However, the researchers wanted to take this a step further to see if knowing two specific languages could actually be a form of 'mind-training', and discovered that much research shows that being bilingual did literally change the way people see the world.

Early last century linguist Benjamin Whorf was the first to say that western languages make us see reality in a set way, and therefore learning other languages could be beneficial because it would free our minds from such linguistic constraints.

The positive effects of bilingualism are largely due to the fact that learning a new language involves embracing new concepts that are not represented in our own mother tongue, or are different in the two languages. "If I ask you to think of 'lunch', you'll probably think about a sandwich with crisps," explained Dr Bassetti. "If I ask an Italian to think of pranzo - Italian for 'lunch' - he'll think of a dish of pasta followed by meat and vegetables."

So what would you think if you were an English speaker and you learnt Italian? Probably something in-between, such as a dish of pasta with some crisps.

"There is a lot of evidence that bilinguals think 'in-between' monolingual speakers of their two languages, somehow merging the two views of the world represented in their two languages," added Professor Cook. "But sometimes they also create new concepts that do not come from either of

their languages such as pasta with a cup of tea, which neither an English nor an Italian speaker would think of."

Just minimal exposure to another language can change the way people think, even about time. In the 1970s, researchers discovered that for English-speaking children, time goes from left to right. By contrast, Arab children think in the opposite way, and those just learning English represented time in both directions.

And the positive effects are not limited to children. "It is a common preconception that languages should be learnt early in life, as early as possible," said Dr Bassetti. "But research shows that learning a language can change the way people think at any age."

She found that Italian speakers consider foxes prettier and softer than German speakers, whereas Germans consider mice prettier and softer than Italian speakers. This happens because the fox is grammatically feminine in Italian and masculine in German, and the mouse is masculine in Italian and feminine in German. Those who knew both languages had no bias, as their perception was not based on grammar.

Provided by Newcastle University