



Languages for health

Can the cognitive benefits of 'bilingualism' overcome the 'English is enough' fallacy? Dina Mehmedbegovic and Thomas Bak change the narrative on language learning

Over the last two years, the EU Commission has been facilitating consultation events with a range of education and linguistics experts, with the aim of reviewing EU language policy and recommendations to member states. It is evident that, 16 years after the vision of education in 'mother tongue plus 2 languages' (MT+2) was shaped and agreed in Barcelona by EU leaders, this goal remains, for many, a distant vision.¹ In the UK, data on language learning in schools is not even available on the Eurostat site, and the only part of the UK committed to the 1+2 policy is Scotland.²

According to reports produced in the UK, such as the British Academy's 2013 'State of the Nation' report, the deficiency of language skills among the workforce is so severe that some large companies have started deleting language requirements from their job adverts and staff profile requirements, having to focus their business strategies on English-speaking countries only. According to 'State of the Nation', this creates "a vicious circle of

monolingualism". Without any doubt, this vicious circle rests on the dominance of English – unrivalled by any language in our history – with one in four people in the world competent in the language, resulting in a feeling of 'English is enough'.

Therefore, attempts to promote language learning in the UK need to use new and different arguments to those used in non-English-speaking countries. They need to focus not so much on the immediate advantages of learning a particular language, but more on the general benefits of language learning, multilingualism and active language use, independently of the specific languages involved. Such an approach could also lead to a positive re-evaluation of the role of languages spoken by migrant communities: once we acknowledge linguistic diversity as a benefit, rather than a burden (both to individuals and to society), all languages become valuable and worth preserving.

Until recently, most arguments for learning languages fell into two broad categories:

JUST THE TONIC

People with dementia learn a language through the social enterprise Lingo Flamingo

cultural (e.g. learning French leads to a better understanding not only of French but also English language and history) and economic (e.g. the value of learning German or, more recently, Chinese, as languages of powerful modern economies). However, over the last few decades, a new, third category of arguments started to emerge: the cognitive benefits of language learning and use.

Originally, most of the studies explored possible differences between monolingual and bilingual children, suggesting that bilinguals tend to perform better in metalinguistic tasks (understanding of languages), social cognition (including the notion of the 'Theory of Mind') and executive functions, particularly attention switching.³ However, over the last decade it has become clear that the effects of bilingualism are lifelong, leading to better cognitive functions in old age,⁴ a later onset

of dementia⁵ and better cognitive recovery after stroke.⁶ Indeed, in our 2013 study, we found a 4-5-year delay in the onset of dementia for people who speak more than one language. No currently available medication has a comparable impact. Bilingualism leads also to a later onset of MCI (Mild Cognitive Impairment, a precursor of dementia), and has a significantly stronger effect than formal education.⁷ Although the risk of developing aphasia after stroke does not differ between mono- and bilinguals, aphasia in bilinguals tends to be less severe.⁸

It is important to stress that bilingualism has been defined in most of these studies as the ability to communicate in more than one language, not necessarily to have a perfect command of them. This broader definition of bilingualism is not confined to simultaneous bilingual language acquisition in early childhood, but includes people who learn a second language in later life.

Indeed, learning new languages can lead to a measurable improvement in attention from early years to adulthood.⁹ Even a one-week intensive language course can lead to a measurable improvement in attention, and the effect is stable in those who practise at least five hours per week.¹⁰ This converging evidence documenting positive effects of language learning and bilingualism comes from different populations, countries, even continents, and different scientific methods.

However, in order to transform the research findings into practical policy, we need to change attitudes towards bilingualism and language learning. Last year, we examined the implicit assumptions underlying negative attitudes to bilingualism (among others, the 'monolingual default assumption' and the 'limited resources model') and offered an alternative concept of 'healthy linguistic diet'.¹¹

Healthy linguistic diet

Our Healthy Linguistic Diet approach facilitates a shift in thinking about learning another language as a key skill or an academic subject, to understanding that using two languages is a key ingredient in our cognitive development and wellbeing. We advocate an approach with the focus on developing lifelong habits of learning and using at least two languages, based on awareness that these types of activity will help to equip our brains for enhanced cognitive functioning from early years to advanced age.

Considering the big push for healthy lifestyles and healthy eating under the umbrella initiative Healthy Schools, the concept of a healthy linguistic diet should be integrated into this initiative. A Healthy Linguistic Diet has a real potential to contribute to the aims, outlined by the government, of raising achievement across the curriculum, improving long-term health, enhancing wellbeing and improving inclusion.

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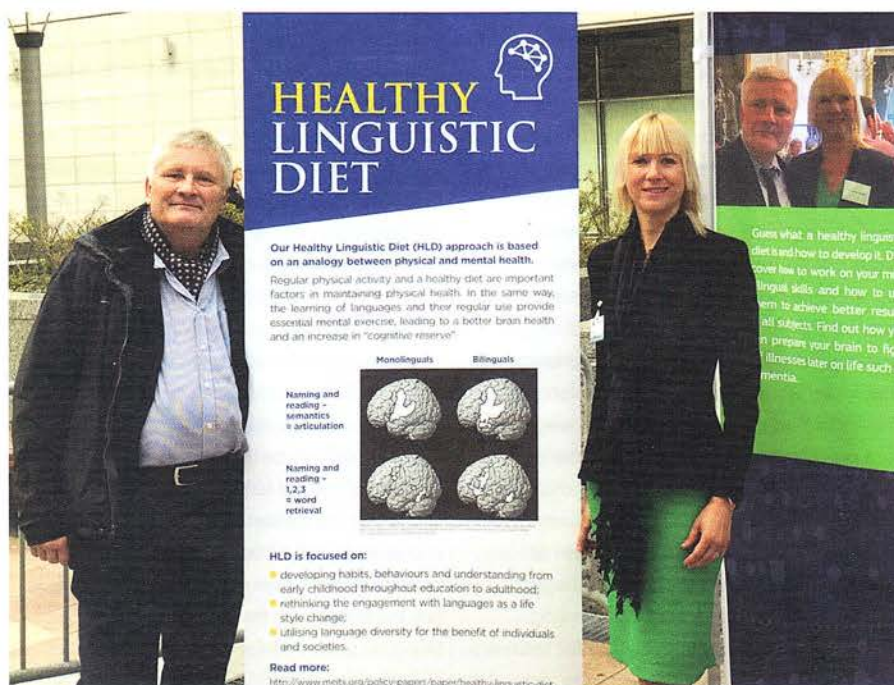
The second language can be acquired in childhood or adulthood. It is never too late to learn a language in order to benefit; in fact, language learning could become a popular and highly beneficial mental activity in retirement and there are trials to employ it as mental training in dementia patients. The pioneering social enterprise Lingo Flamingo (www.lingoflamingo.co.uk), for instance, offers language courses to patients with dementia.

The Healthy Linguistic Diet approach stresses regular use as more relevant than knowledge, as is the case with physical exercise: it needs to be regular and at a certain level of intensity to keep us fit. The transformation of Scoil Bhride, Dublin, from monolingual English-speaking school to plurilingual environment provides a good example of how the Healthy Linguistic Diet can be implemented in a school. It proves that everything we promote under the Healthy Linguistic Diet is realistic, doable and brings inspiring results. These include children writing texts in several languages, taking their own initiative to learn other languages, engaging parents and other family members, using multiple languages in classrooms to brainstorm and discuss concepts, and using an increasing diversity of expression, language forms and ways of thinking.

The unexpected result was that the status of Irish blossomed. Contrary to fears expressed by parents prior to adopting these innovative practices, more children started using Irish for communication. This new trend of using Irish also triggered a request from parents and non-teaching staff to learn Irish. Yet from our

EXERCISING THE MIND

Dina and Thomas present their research at the 2017 European Researchers' Night, Science for All, in Brussels (left); and (above right) language learning for dementia patients with Lingo Flamingo





perspective, the most important aspect was the regular oral and written use of multiple languages in the learning environment.

If you are a school leader or teacher in doubt about how to develop plurilingual approaches and a Healthy Linguistic Diet, the Scoil Bhríde (scoilbhríde.ie) case study shows how it can be done for the benefit of all: multilingual and monolingual children, parents, teachers and non-teaching staff.

On the other end of the spectrum, language learning is becoming an increasingly popular activity in later life and, in particular, in retirement. It plays an important role in University of the Third Age activities and has led to the emergence of thriving language cafés, such as Yaketyyak in Edinburgh (yaketyyak-languagecafe.co.uk), and projects such as Lingo Flamingo. Given the extremely modest effects of current pharmacotherapy in dementia, it can be expected that this sector might grow significantly in the near future.

An important feature that our approach shares with physical exercise and healthy diet is the insight that what counts is not a single factor – a certain type of movement, a single miraculous nutrient, a magic language or ‘optimal’ learning strategy. What counts is diversity and balance: being exposed to a number of different languages, listening to them, understanding and speaking them, using them in everyday life, learning to read and write in them – not necessarily all at the same time.

Our vision is to use the cognitive benefits argument as a way of overcoming language hierarchies, directly linked to language loss for

many children and adults who do not see the value of home languages, such as Bengali, Arabic and Polish. Whereas economic and cultural arguments for language learning are ruled by volatile and ever-changing market demands for certain languages, or their historical prestige, the cognitive benefits argument, by definition, grants all languages the same value.

The hundreds of languages spoken in the UK (233 in London alone), as well as across most of the modern world, offer an enormous linguistic potential. The current wave of immigrants could be seen as an opportunity to increase linguistic diversity rather than as a threat to monolithic monolingualism. However, in order to ensure that individuals – as well as society as a whole – benefit, we need to create an environment in which learning, maintaining and using this immense linguistic richness is encouraged and supported (including an education system in which exams and qualifications are not only available in high-prestige languages).

A better awareness of the health benefits of language learning could contribute to such a change in attitude. Our goal is to make the evidence on these benefits available and accessible to all stakeholders. Our open-access website is one of the steps in that direction. Please visit and get in touch with your comments and suggestions: healthylinguisticdiet.com.

The footnotes provide links to much of the recent research on the benefits of bilingualism, and have been highlighted as a useful guide.

Notes

1 See ‘Rethinking Language Learning in Europe’; bit.ly/2ovjmAd

2 See bit.ly/1z1YZKe

3 See, e.g. Bialystok, E (2009) ‘Bilingualism: The good, the bad, and the indifferent’. In *Bilingualism: Language and Cognition* 12:3-11; Kovács AM & Mehler J (2009) ‘Cognitive Gains in 7-month-old Bilingual Infants’. *Proceedings of the National Academy of Sciences*; bit.ly/2owwOUu

4 Bak, T H, Vega-Mendoza, M & Sorace, A (2014) ‘Never too Late? An advantage on tests of auditory attention extends to late bilinguals’. In *Frontiers in Psychology*, 5, 485; bit.ly/2FOAIR5

5 Alladi S et al (2013) ‘Bilingualism Delays Age at Onset of Dementia, Independent of Education and Immigration Status’. In *Neurology*, 81, 1938-1944

6 Alladi S et al (2016) ‘Impact of Bilingualism on Cognitive Outcome after Stroke’. In *Stroke*, 47

7 Ramakrishnan S et al (2017) ‘Comparative Effects of Education and Bilingualism on the Onset of Mild Cognitive Impairment’. In *Dementia and Geriatric Cognitive Disorders*, 44, 222-231

8 Paplikar, A et al (2018) ‘Bilingualism and the Severity of Poststroke Aphasia’. In *Aphasiology*, 1-15

9 Bialystok, E (1999), ‘Cognitive Complexity and Attentional Control in the Bilingual Mind’. In *Child Development*

10 Bak T H et al (2016) ‘Novelty, Challenge, and Practice: The impact of intensive language learning on attentional functions’. In *PLOS One*, 11(4)

11 Mehmedbegovic, D & Bak, T H (2017) *Healthy Linguistic Diet: The value of linguistic diversity and language learning across the lifespan*.

Multilingualism: Empowering Individuals, Transforming Societies (MEITS); bit.ly/2F2AK9y [Websites checked 16/3/18]