

Reasons to learn a language: 'grey' literature¹, **empirical evidence²** and relevance to British teenagers

Main source: Woll, B., & Wei, L. (2018). *Cognitive Benefits of Language Learning: Broadening our perspectives*. Final Report to the British Academy.

¹ 'Grey literature', in grey font, includes reports, policy documents, and articles in the serious media/press, which are not reviewed for quality by other researchers (i.e., peer-reviewed);

² 'Empirical evidence', in orange font, is from studies that have collected data and are peer-reviewed.

	Reasons Learning a language...	Evidence available	Relevance (to UK 11-14 year old language learners)
Cross-curricular benefits	improves overall academic performance	Some empirical evidence, but context is dual language immersion education with speakers of other languages learning English. Most stories relate to reading skills in US immersion education	
	improves first language literacy	Some empirical evidence, e.g., Murphy et al. (2015) found Spanish helped English literacy more than French; but predominantly, research contexts are early dual language immersion, Most stories relate to reading skills in US immersion education	
Neurological impairment	delays dementia / slows brain-ageing	Some evidence from bilinguals and also two studies among old adult foreign language learners. http://www.medicalnewstoday.com/articles/315260.php?utm_source=TrendMD&utm_medium=cpc&utm_campaign=Medical_News_Today_TrendMD_0 http://www.telegraph.co.uk/news/health/news/10869619/Learning-a-second-language-in-adulthood-can-slow-brain-ageing.html	
	recovery from stroke	Documents don't specify if with bilinguals or second/foreign language learners.	
Therapy	makes your brain bigger	One document refers to language training programme, another to bilinguals having more 'grey matter' –they link to peer-reviewed research.	

ain	improves the way your brain works	These two stories relate to L2 learning, all ages, and are linked to peer-reviewed journal articles. http://news.psu.edu/story/334349/2014/11/12/research/learning-languages-workout-brains-both-young-and-old https://www.theguardian.com/education/2014/sep/04/what-happens-to-the-brain-language-learning	
C o g n i t i v e b e n e f i t s	improves attention and mental alertness	There is evidence that studying a new language improves attention and mental alertness after only a week of intensive study, an improvement which is maintained with practice. These cognitive improvements were found in all age groups (18-78 years), but were not found in a control group studying another subject intensively (Bak et al., 2016) Effects in this story about attention are for bilingual children in classrooms showing an enhanced ability to ignore extraneous noise and focus attention as well as enhanced mental agility. https://www.sciencedaily.com/releases/2012/04/120430152033.htm http://www.bbc.com/news/education-29599177	
	positively enhances creativity;	As well as research linking enhanced creativity with early bilingualism, a few studies suggest a potential relationship between second/foreign language learning and creativity. Analyses indicate a strong positive correlation between creative flexibility, fluency, originality and L2 learning (with strongest effects for creative flexibility). The reasons for these correlations are unclear (and so the relationship may not be directly 'causal'). Cognitive benefits may be attributed to processes of language switching (as in bilingualism) or the rigorous practice and study involved in language learning.	
	cognitive flexibility / multi-tasking;	Substantial body of work linking bilingualism with cognitive flexibility BUT not focused on second/foreign language learning, and other studies found counter-evidence suggesting no or little link.	
	memory;	Stories relate to bilinguals.	
	problem-solving;	Stories relate to bilinguals.	
	decision-making;	Second language learning starting from junior or high school and is linked to peer-reviewed journals https://news.uchicago.edu/article/2012/04/25/thinking-foreign-language-helps-economic-decision-making	
	metalinguistic awareness;	This study claims an advantage from L2 learning at school, and cites peer-reviewed journals but focus is immersion education: https://www.psychologytoday.com/blog/life-bilingual/201401/cognitive-advantages-second-language-immersion-education	
	auditory perception;	Stories relate to bilinguals.	

	executive function (controlling where attention is oriented and inhibiting stimuli)	There is substantial evidence about benefits to executive functioning of being bilingual, but a recent large-scale review (Lehtonen et al, 2018) did not find systematic support for these advantages. Also, the outcome measures used are not always obviously applicable to 'real-world' situations. Most stories concern bilingual babies or very young children. Those that relate to L2 school learning cite social media sources, not research. https://newsinhealth.nih.gov/2012/06/bilingual-effects-brain https://medicalxpress.com/news/2012-08-languages-benefits-low-in-come-children.html	
So ci al c o g n i t i o n	is related to empathy	The evidence suggests that empathy supports successful L2 learning (Guiora et al., 1972, Kleinmann, 1977, Mishan, 2005), BUT little empirical evidence to suggest that particular L2 learning approaches engender empathy which in turn would support L2 learning. All stories relate to bilingual babies and young children.	
	enhances global identity	Research on the consequences on global outlook of language learning is negligible. Opinion piece (no references): http://www.telegraph.co.uk/education/educationopinion/11241713/Learning-languages-opens-up-new-horizons.html This article refers to peer-reviewed journals: https://www.theguardian.com/commentisfree/2015/apr/27/world-view-learn-another-language	

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