

PORTFOLIO COMMITTEE NO. 3 – EDUCATION REVIEW OF THE NEW SOUTH WALES SCHOOL CURRICULUM

4 November 2020

Question on Notice: Could you submit on notice the evidence of the link between mandatory foreign languages and the development of cognitive skills. Foreign language is normally seen within the prism of getting jobs, Asian immigration and so forth, but I have not heard of this development of cognitive skills as an element. So if there is evidence to that effect could you submit it on notice?

1. Fernandez, S

Promoting the benefits of language learning

Report to the Department of Education and Training

Research Unit for Multilingualism and Cross cultural Communication at the University of Melbourne

<https://www.education.vic.gov.au/Documents/school/teachers/teachingresources/discipline/languages/benefitslangu.pdf>

*While many countries in the European Union are moving towards ‘mother-tongue plus two foreign languages’, introducing languages from the earliest years of primary education, languages continue to struggle to gain legitimacy as a key learning area in many primary and secondary schools across Australia. Substantial barriers remain to recognition and acceptance of the unique contribution language study makes to the education of young people. There exists a pervasive lack of awareness or even deep seated misunderstanding of the **concomitant cognitive benefits, benefits to first language literacy**, and intercultural insights and understandings which language learning can provide.*

2. Lo Bianco, Joseph

National Policy on Languages Canberra, Australian Government Publishing Service, 1987, pp 1-10, 14-15, 18, 189-203

http://www.multiculturalaustralia.edu.au/doc/lobianco_2.pdf

(p.5) It is in Australia's national interests to develop the linguistic resources of its people and integrate these skills with other broad national goals.

3. Bialystok E, Craik FI, Luk G

Bilingualism: consequences for mind and brain

Trends Cogn Sci. 2012 Apr;16(4):240-50.

[https://www.cell.com/trends/cognitive-sciences/fulltext/S1364-6613\(12\)00056-3?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1364661312000563%3Fshowall%3Dtrue](https://www.cell.com/trends/cognitive-sciences/fulltext/S1364-6613(12)00056-3?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1364661312000563%3Fshowall%3Dtrue)

Our conclusion is that lifelong experience in managing attention to two languages reorganizes specific brain networks, creating a more effective basis for executive control and sustaining better cognitive performance throughout the lifespan.

4. The British Academy

Cognitive Benefits of Language Learning: Broadening our perspectives Final Report to the British Academy February 2019

<https://www.thebritishacademy.ac.uk/documents/287/Cognitive-Benefits-Language-Learning-Final-Report.pdf>

There is evidence that studying a new language improves attention and mental alertness after only a week of study, an improvement which is maintained with practice. These cognitive improvements were only found in those learning a second language, not in those learning another subject, and were found in all age groups (Bak et al., 2016). After one week of intensive study, improvements in attention were found in groups participating in intensive courses, but only those learning a second language were significantly better than those not involved in any courses. This improvement was found for all ages, from 18 to 78 years.

5. Buchberger, Irina

Struggle for Diversity of Languages in a Harmonising European Context: New Tasks for Teacher Education. PUB DATE 2000-04-00 NOTE 15p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 24-28, 2000)

<https://files.eric.ed.gov/fulltext/ED442773.pdf>

At a micro-level new cognitive theories and the results of brain research emphasise the cognitive benefits of plurilingualism and the new teaching methods in teaching/studying/learning foreign languages. In addition, it is worth mentioning that in most European countries important mass media are supporting the language policy mentioned and have contributed to a better understanding of new insights of cognitive and brain research. (Cf. GEO 1999; Spiegel 1997)

6. Nicoladis, E; Charbonnier, M; Popescu, A

Second Language/Bilingualism At An Early Age with Emphasis on Its Impact on Early Socio-Cognitive and Socio-Emotional Development

University of Alberta, Canada, University of Padova, Italy (October 2016)

<http://www.child-encyclopedia.com/sites/default/files/textes-experts/en/614/second-languagebilingualism-at-an-early-age-with-emphasis-on-its-impact-on-early-socio-cognitive-and-socio-emotional-development.pdf>

Studies have also shown that bilingual children achieve higher scores than monolinguals on a number of tests of cognitive ability, including mental flexibility,¹³ non-verbal problem-solving tasks,¹⁴ understanding the conventional origin of names,^{15,16} distinguishing between semantic similarity and phonetic similarity¹⁷ and capacity to judge the grammaticality of sentences.

7. Barac, R; Bialystok, E; Castro, D; Sanchez, M

The Cognitive Development of Young Dual Language Learners: A Critical Review

Early Child Res Q. 2014 4th Quarter; 29(4): 699–714

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4180217/>

... these findings demonstrate a robust bilingual advantage in executive control that is apparent as early as the first year of life, holds across various language pairs, and is distinct from the effects of culture, immigration history, and language of instruction. Although bilingual children outperformed monolinguals on a variety of executive control tasks assessing different executive function components, this advantage is relatively more robust for inhibitory control and cognitive flexibility, and less so for working memory, which has been explored to a lesser extent.

8. Deák, G. Interrelationship of Language and Cognitive Development

Sage Publications (2014)

http://quote.ucsd.edu/cogdevlab/files/2014/09/Deak_Ency_Lang_Dev_Relation_Lang_Cog_Dev_2014.pdf

There is evidence that bilingualism is associated with better performance in other cognitive abilities. Some studies have compared mono- and bilingual children on executive function tasks.

When socioeconomic (SES) status is controlled, some bilingual children perform better on these tasks. One theory is that bilingual children must regularly switch between languages or rapidly activate different codes based on their interlocutor's language, and this demand accelerates the development of executive functions.