Early Second Language Learning at School Can Boost Creativity

Valeria Agostini, Ian Apperly, Andrea Krott

University of Birmingham, United Kingdom

VXA675@student.bham.ac.uk; i.a.apperly@bham.ac.uk; a.krott@bham.ac.uk

An early start into second language learning is often considered important for a future mastery of the target language. But it has also other advantages. The presence of two languages in the mind has been shown to be beneficial to general cognitive skills. Children growing up bilingual display advantages in cognitive control measures, demonstrating superior abilities in control over attention (Yang et al., 2011) and switching between rules (Bialystok & Martin, 2004). Young bilinguals have also shown enhanced fluency and flexibility of thinking during creative production (Leikin et al., 2014). We investigated the impact of early L2 learning at school on divergent thinking abilities. We recruited three groups of monolingual children aged 4-5 from reception classes in Primary schools in England. One group (N=32) attended bilingual schools, another group (N=29) had weekly L2 classes, and a third control group (N=38) did not have any L2 education. Groups were matched by SES, verbal ability, and non-verbal reasoning skills. We tested the children in a divergent thinking task, as well as selective attention and switching ability, in the first few months of the school year and 24 weeks later. Children in bilingual education outscored the control group in fluency and flexibility of creative thinking at the second (but not first) testing point. Weekly L2 learners showed a small advantage as well, but this was not significant. No differences were recorded in originality. In contrast, both groups of L2 learners showed enhanced development in switching skills compared to non-L2 learners. Although selective attention and switching skills were associated with divergent thinking scores, these could not explain bilingual school children's creativity advantage over non-L2 learners. These results suggest that even a limited weekly exposure to a L2 has an impact on children's switching abilities, but a more substantial immersion in a bilingual environment is needed to boost creative fluency and flexibility.

References

- Bialystok, E., & Martin, M. M. (2004). Attention and inhibition in bilingual children: Evidence from the dimensional change card sort task. *Developmental Science*, 7(3), 325–339. https://doi.org/10.1111/j.1467-7687.2004.00351.x
- Leikin, M., Tovli, E., & Malykh, S. (2014). Bilingualism and Creative Abilities in Early Childhood. *English Linguistics Research*, 3(2), 217–231. https://doi.org/10.5430/elr.v3n2p54
- Yang, S., Yang, H., & Lust, B. (2011). Early childhood bilingualism leads to advances in executive attention: Dissociating culture and language. *Bilingualism*, 14(3), 412–422. https://doi.org/10.1017/S1366728910000611