



Gestures & Vocabulary

Andrä, C., Mathias, B., Schwager, A. et. al. (2020). Learning foreign language vocabulary with gestures and pictures enhances vocabulary memory for several months post-learning in eight-year-old school children. *Educational Psychology Review*, 32, 815–850.

<https://doi.org/10.1007/s10648-020-09527-z>

Eskildsen, S.W., & Wagner, J. (2015). Embodied L2 construction learning. *Language Learning*, 65(2), 268-297. <https://onlinelibrary.wiley.com/doi/pdf/10.1111/lang.12106>

Macedonia, M. (2019). Embodied learning: Why at school the mind needs the body. *Frontiers in Psychology*. <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.02098/full>

Macedonia, M., & W. Klimesch. (2014). “Long-term effects of gestures on memory for foreign language words trained in the classroom.” *Mind, Brain, and Education*, 8(2), 74–88. <https://doi.org/10.1111/mbe.12047>

Macedonia, M. (2014). Bringing back the body into the mind : gestures enhance world learning in foreign language. *Frontiers in Psychology*.
https://soeg.kb.dk/permalink/45KBDK_KGL/1f0go08/cdi_doaj_primary_oai_doaj_org_article_d20518751d0145f39599df202b53040a

Mavilidi, M., Chandler, P., Cliff, D., & Paas, F. (2015). Effects of integrated physical exercises and gestures on preschool children’s foreign language vocabulary learning. *Educational Psychology Review*, 27.

<https://link.springer.com/article/10.1007/s10648-015-9337-z>

Rowe, M. L., Silverman, R. D., & Mullan, B.E. (2013). The role of pictures and gestures as nonverbal aids in preschoolers’ word learning in a novel language.” *Contemporary Educational Psychology*, 38(2), 109–117. <https://doi.org/10.1016/j.cedpsych.2012.12.001>

Tellier, M. (2008). The effect of gestures on second language memorization by young children.” *Gesture*, 8 (2), 219–235.

https://www.researchgate.net/publication/32222945_The_effect_of_gestures_on_second_language_memorisation_by_young_children

Toumpaniari, K., Loyens, S., Mavilidi, M.F. et al. (2015). Preschool children’s foreign language vocabulary learning by embodying words through physical activity and gesturing. *Educational Psychology Review* 27, 445–456.

<https://doi.org/10.1007/s10648-015-9316-4>

<https://link.springer.com/content/pdf/10.1007/s10648-015-9316-4.pdf>

Physical Activity and Vocabulary

Liu, F., Sulpizio, S., Kornpetanee, S., & Job, R. (2017). It takes biking to learn: Physical activity improves learning a second language. *PLoS ONE* 12(5).

<https://doi.org/10.1371/journal.pone.0177624>

Gestures and Grammar

Boieblan, M. (2022). Enhancing English spatial prepositions acquisition among Spanish learners of English as L2 through an embodied approach. *International Review of Applied Linguistics in Language Teaching*. <https://doi.org/10.1515/iral-2021-0151>

Suñer, F. & Roche, J. (2021). Embodiment in concept-based L2 grammar teaching: The case of German light verb constructions. *International Review of Applied Linguistics in Language Teaching*, 59(3), 421-447. <https://doi.org/10.1515/iral-2018-0362>

Movement and VR

Fuhrman, O., Eckerling, A., Friedmann, N., Tarrasch, R., & Raz, G. (2021). The moving learner: Object manipulation in virtual reality improves vocabulary learning. *Journal of Computer Assisted Learning*, 37(3), 672–683. <https://doi.org/10.1111/jcal.12515>

(see also Suñer 2021 in Gestures and Grammar section)

Qualitative Studies/Reports on Theater in Classrooms

Barrientos, Y.Y., et al. (2022). Movimiento corporal y aprendizaje del inglés: Significados afectivos de los infantes. *Revista ProPulsión: interdisciplina en Ciencias Sociales y Humanidades*, 4(1). <https://ojs.revpropulsion.cl/index.php/revpropulsion/article/view/81>

Bérodot, S. (2014). Actividades teatrales en ELE: la sistematización del idioma a través de la creación. *Diálogos latinoamericanos*, 22.

<https://tidsskrift.dk/dialogos/article/view/113143/161797>

Greenfader, C.M., & Brouillette, L. (2013). Boosting language skills of English learners through dramatization and movement. *The Reading Teacher*, 67(3), 171–180.

<https://doi.org/10.1002/TRTR.1192>

Lizasoain, A., et. al. (2012). Estudio descriptivo y exploratorio de un taller de introducción a las técnicas teatrales para la enseñanza/aprendizaje de una lengua extranjera. *Estudios Pedagógicos*, 38(2), 157-167.

https://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0718-07052011000200007

Physical Education / CLIL (Content and Language Integrated Approach)

Coral, J., Urbiola, M., Sabaté, E., Bofill, J., Lleixà, T., & Vilà Baños, R. (2020). Does the teaching of physical education in a foreign language jeopardise children's physical activity time? A pilot study. *International Journal of Bilingual Education and Bilingualism*, 23(8), 839-854. [10.1080/13670050.2017.1407289](https://doi.org/10.1080/13670050.2017.1407289)

Kyriaki, E. & Laskaridou, C. (2017). Physical education through CLIL: Teaching movement vocabulary to young learners. *Research Papers in Language Teaching and Learning*, 8, 51-62.

https://www.researchgate.net/publication/313472821_Physical_Education_through_CLIL_Teaching_movement_vocabulary_to_young_learners

Salvador-García, C., Chiva-Bartoll, O., & Colomer-Diago, C. (2020). The effect of bilingual Physical Education on students' Physical Activity. Things are not always as they seem. *Cultura, Ciencia y Deporte*, 15(43), 53-61. <https://doi.org/10.1080/13670050.2019.1639131>

Relevant Neuroscience Studies Linking Movement and SLA

Schmidt-Kassow, M., Kulka, A., Gunter, T.C., Rothermich, K., & Kotz, S.A. (2010). Exercising during learning improves vocabulary acquisition: Behavioral and ERP evidence. *Neuroscience Letters* 482, 40–44. <https://doi.org/10.1016/j.neulet.2010.06.089>

Winter, B., Breitenstein, C., Mooren, F.C., Voelker, K., Fobker, M., Lechtermann, A., et al. (2007). High impact running improves learning. *Neurobiology of Learning and Memory*, 87, 97–609. <https://doi.org/10.1016/j.nlm.2006.11.003>

Relevant L1 / Movement Studies

Kosmas, P. & Panayiotis, Z. (2020). Words in action: investigating students' language acquisition and emotional performance through embodied learning, *Innovation in Language Learning and Teaching*, 14(4), 317-332. <https://doi.org/10.1080/17501229.2019.1607355>

Mullender, M.J., Hartman, E., de Greeff, J.W., Doorlaard, S., Bosker, R.J., & Visscher, C. (2016). Physically active math and language lessons improve academic achievement: a cluster randomized controlled trial. *Pediatrics*, 137(3). <https://doi.org/10.1542/peds.2015-2743>

Background

Asher, J.T. (1969). The Total Physical Response approach to second language learning. *The Modern Language Journal*, 53(1), 3-17. <https://www.jstor.org/stable/322091>