## Vocabulary instruction in second language acquisition: The effects of iconic gestures on vocabulary retention

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The learning of vocabulary during second language acquisition appears to be facilitated by associating words with gestures (Allen, 1995; Kelly, McDevitt, & Esch, 2009; Tellier, 2008). Specifically, learning emblematic gestures with vocabulary words (Allen, 1995), learning and producing a gesture while repeating the words (Tellier, 2008), and using gestures to provide redundant information relative to the meaning of the word by the teacher (Kelly et al., 2009), have all been demonstrated to produce significant learning and retention when compared to learning words without gestures. The purpose of this study was to replicate the enhanced retention of new vocabulary words when paired with a gesture using instructional and testing procedures more consistent with the current pedagogical practices used in an American university. A second purpose of this study was to include a treatment group where the gestures were a part of the learning, but were paired with a word that has a meaning inconsistent with the implied meaning of the gesture (i.e., an "incongruent gesture").

Fifty-two students enrolled in four different sections of beginning Spanish served as participants for this study. Each Spanish section was given a different treatment condition (i.e., new word with a congruent iconic gesture, new word with congruent iconic gesture with verbal emphasis regarding the importance of the gesture for learning, new word with a mismatched iconic gesture, or new word with no gesture) while learning 30 new vocabulary items. Of the 30 vocabulary items, 10 were nouns, 10 were adjectives and 10 were verbs; all words were selected from the vocabulary list pertaining to the chapter being studied. All vocabulary was presented in a counterbalanced order to the participating groups. Four testing measures were recorded at different intervals after the treatments. All groups were given two rounds of word learning before being given a cued-recall quiz of 15 words immediately following the treatment. One week later, participants were given two more rounds of treatment at the beginning of the class period, then continued on with the regular class period, before being given a second cued-recall quiz of another 15 words at the end of the class period. Similar data from the participants' next exam as well as their final exam were also collected to serve as checkpoints for vocabulary retention over the course of the semester.

It was predicted that the groups receiving the congruent iconic gesture would demonstrate a higher percentage of correctly remembered vocabulary words than the group receiving the mismatched gesture or the no gesture control group across all assessment periods. Findings will be discussed in terms of relational processing (Hunt & McDaniel, 1993), and the importance of semantic organization in long-term memory (Tulving, 1983).

## References

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