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

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ICLC 12 - University of Alberta, Edmonton
June 27, 2013
Gesture and Second Language Acquisition

- How do gestures affect the second language learner?
  - Conveyors of speech-related meaning
  - Enhance learning in general
  - Promote lexical learning

- Similarity between iconic gestures and memory representations
  - Connection between word and gesture helps memory
  - Information encoded in various ways makes it easier to retrieve
Background

  - Learning emblematic gestures simultaneously with French expressions leads to greater recall.

- Kelly et al. (2009)
  - Co-speech hand gestures help people learn and remember the meanings of new words in a new language.

- Tellier (2008)
  - Gestures enable children to better memorize vocabulary in L2 when they demonstrate active knowledge of the new words.
Problem…

Input does not mimic the reality of a second language classroom!

So…

▪ How does co-speech gesture affect the retention of words in a second language when there are…
  ▪ congruent gestures?
  ▪ incongruent gestures?
  ▪ no gestures?
Hypotheses

- Vocabulary taught with congruent gestures will elicit higher vocabulary retention than no gestures.

- Vocabulary taught with incongruent gestures will elicit lower vocabulary retention than no gestures.
Study Design

Subjects
- 60 participants
- 4 sections of Spanish 101

Procedures
- In-class vocabulary teaching demonstration
  - Two treatments one week apart
- Four testing measures:
  - Cued-recall quiz immediately following treatment
  - Cued-recall quiz 30 minutes after treatment
  - Chapter exam
  - Final exam
Methodology

10 Nouns
- Pantalla (*screen*)
- Micrófono (*microphone*)
- Ratón (*mouse*)
- ...

10 Verbs
- Dormir (*sleep*)
- Preferir (*prefer*)
- Jugar (*play*)
- ...

10 Adjectives
- Enfermo (*sick*)
- Triste (*sad*)
- Aburrido (*bored*)
- ...
Condition 1: Congruent Gesture

el teclado
Condition 2: Incongruent Gesture

contenido
Condition 3: Control Group

los audífonos
Condition 4: Congruent Gesture (with verbal emphasis about gesture)

enojado
Quiz 1
Quiz 2
Ch. Exam
Final Exam

Congruent Alone
Incongruent
No Gesture
Congruent plus Instructions
Discussion & Conclusion

- **Use of gesture helps vocabulary acquisition!**
  - Quiz 2 – effectiveness of gesture retention method
    - Just supplying gestures is not enough.
  - Loss of effect over time
    - Multiple effective learning methods
    - Increased importance of outcome
Future Directions

- Increase sample size
  - Congruent plus Instructions

- Condition 5 – Self-generated gestures
  - Will having student actively produce the gestures influence vocabulary retention?

- Nouns vs. Verbs vs. Adjectives
  - Are certain parts of speech more likely to be retained with or without gestures?
Thank you!

References:


