

Research Interests

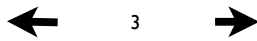
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Interests

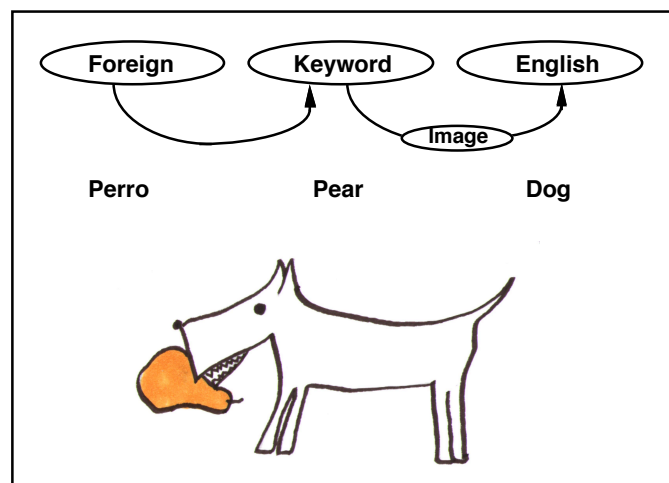
- Cognitive Psychology
- Memory and Learning
- Language Processes
- Skill - Expert/Novice
- Cognitive Neuroscience - Mind & Brain
- Research Methodology & Design
- Technology

Memory

- Improving Memory - Mnemonics
- Role of Prior Knowledge in Basic Memory Processes
- Keyword Mnemonic
- Auditory Picture Superiority Effect
- Long-term Retention of Knowledge & Skill
- Generation Effect



Keyword Method

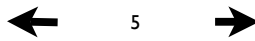
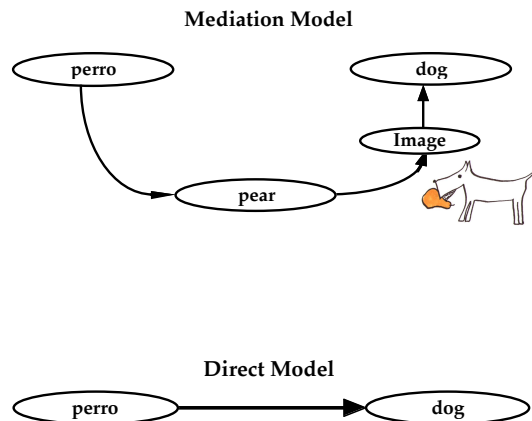


Involves first relating a foreign word (*perro*) to a similar sounding keyword (*pear*) and then relating the keyword to the English definition (*dog*) by generating an interactive visual image involving the two referents: e.g. "A dog eating a pear")



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After Extended Practice: How do we retrieve?

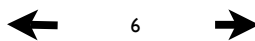


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Auditory Picture Superiority Effect

Sound Condition

Spoken Verbal Label



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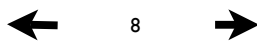
Learning & Cognitive Skill

- Cognitive Skill -- Expert-Novice Differences
- Improving Memory Skills
- Memory Skill -- e.g. Waiting Skills
- Metacognition



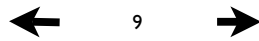
Language Processes

- Second Language Acquisition
- Vocabulary Acquisition (e.g. Spanish-English and Indonesian-English) using Mnemonic Techniques



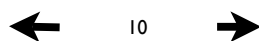
Research Methodology

- Protocol Analysis -- Verbal Reports in Psychological Research
- Verbal Reports -- Issues: Validity/Reliability; Think-alouds vs. Retrospective Reports
- Computer-Tools to Improve Collecting, Coding, and Analyzing Verbal Reports



Technology

- Using computers to improve Thinking, Learning, and Instruction
- Computer tools in data analysis and experiment authoring



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