Multiple-Meaning Word Learning: An Intervention Study

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INTRODUCTION

Multiple-meaning words are ubiquitous in both spoken and written language (Johnson, Moe, & Baumann, 1983), but are more difficult for children to learn than single meanings (Backscheider, Gelman, Martínez, & Kiewiski, 1999; Casenhiser, 2005; Mazocco, 1997). Learning multiple-meaning words might facilitate overall vocabulary growth and reading comprehension (Nelson & Stage, 2007). Currently, the most effective and efficient method for teaching multiple meanings of words is unknown.

PURPOSE

To compare two interventions for learning multiple-meanings of words: joint-presentation where the meanings are taught at the same time and separate-presentation where a second meaning is taught only after the first meaning has been learned.

Research Question: When teaching two meanings of multiple-meaning words, does joint- or separate-presentation result in more efficient learning of meanings, as measured by the number of sessions to criterion?

METHODS

Experimental Design: An adapted alternating treatments design was used to compare joint-presentation and separate-presentation conditions.

Participants: Four typically-developing children with normal receptive and expressive language skills, normal intelligence, and normal hearing completed the study.

Sample Intervention Scripts:

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint</td>
<td>A cat</td>
<td>A dog</td>
</tr>
<tr>
<td>Separate</td>
<td>A cat</td>
<td>A cat</td>
</tr>
</tbody>
</table>

RESULTS

Reliability: For the intervention, a second observer reviewed experimenter trials, showing pictures and said each line of the script and child tasks (i.e., looked at the pictures and repeated the words) for an average of 44% of the sessions for each child (range=33-51%). Procedural fidelity was at least 89% for both experimenter and child tasks. For the probes, a second observer reviewed at least 35% of the sessions for each child. Inter-observer agreement averaged 98% (range=95-99%).

A functional relation was determined independently for each child by comparing the number of sessions required to reach criterion in each condition.

• Both joint- and separate-presentation conditions increased students' learning of target meanings of multiple-meaning words.

• Three of the four children reached mastery of learned meanings in the separate-presentation condition before the joint-presentation condition.

SUMMARY

This study used an adapted alternating treatments design to compare two interventions for teaching multiple-meaning words to young children: joint-presentation (two meanings of a word were taught at the same time) and separate-presentation (a second meaning was taught only after a first meaning had been learned). Three of the four children learned all the target words in both conditions. Three of the four children reached criterion in the separate-presentation condition prior to the joint-presentation condition.

FUTURE DIRECTIONS

• Compare joint- and separate-presentation methods in young children with hearing loss.

• Investigate whether a relationship exists between how quickly children learn multiple-meaning words and their preference for the joint- or separate-presentation method.

KEY REFERENCES


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Note. The number of target words was reduced from 6 to 4 per set for Child B and Child D after sessions 24 and 21, respectively.