An Analysis of Metaphor Teaching Methods
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Background

- Many studies have shown that metaphor comprehension in children improves with grade level (Billow, 1975; Brasseur & Jenner, 1989).
- Other studies have shown that the type of metaphor can also have an effect on how fast metaphors are learned (Gibbs, 1987).
- Metaphors are unrelated to their literal meanings, such as “flick the bucket” and are generally harder for children to understand.
- Transparent metaphors can be derived from their literal meanings, such as “skating on thin ice” and are easier for children to learn.
- This study attempts to:
  1. Test the hypothesis that presenting metaphors pictorially will have a greater effect on comprehension than presenting them contextually or on their own.
  2. Test the hypothesis that transparent metaphors will have higher comprehension than opaque metaphors at all grade levels and that higher grade levels will have better comprehension overall.

Methods

Twelve kindergarteners, ten second graders, and twelve fourth graders from Wilder Elementary School in Green Bay, Wisconsin participated in this study. The students were randomly assigned to the with-context condition, with-picture condition, or no-context, no-picture condition.

Eleven metaphors were chosen for testing. For the with-context condition, a sentence was created in order to put the metaphor into context in terms of its figurative meaning. For the with-picture condition, an image was generated which depicted the figurative meaning for each metaphor which was presented simultaneously with the metaphor. The no-context, no-picture condition simply consisted of the metaphors on their own. In all conditions, after each metaphor was presented, the students were asked to explain what they thought the metaphor meant.

The students were tested individually by the researcher. Their responses were scored for each figure of figurative understanding based on the four-point rating system suggested by Douglas & Peil (1979): (1) No response, or “I don’t know.” (2) A literal response (3) Transitional response (4) A completely figurative response.

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Examples of Stimuli

Transparent Metaphors

- Bite off more than you can chew.
- When Mary saw that Santa came, she jumped for joy.

Opaque Metaphors

- Raining cats and dogs.
- Under the weather.

Results

Figure 4. A main effect was found for presentation type of opaque metaphors, F (2, 34) = 18.77, p < .01, shown in the figure above. No effect was found for presentation type in the transparent metaphors, F (2, 34) = 2.86, p = .08. The With-context condition received the highest scores for opaque metaphors, followed by the With-picture condition, and finally the No-picture, no-context condition.

Discussion

Presentation of metaphors across grade levels:

- As grade increased understanding improved.
- Fourth graders had the highest mean scores, followed by the second graders and finally the kindergartners.
- Use of context and pictures greatly increased the understanding of metaphors across all grade levels.

Types of metaphors (transparent vs. opaque):

- The with-context condition and with-picture condition did improve understanding in terms of opaque metaphors.
- As the grade level increased, the differences between scores in terms of presentation condition lessened.
- For transparent metaphors, both the kindergartners and fourth graders followed a pattern similar to the opaque metaphors in that scores improved as the condition went from the no-context, no-picture condition to the with-context condition to the with-picture condition.
- The second graders had the highest scores for the with-context with the with-context condition, than the no-context, no-picture condition, and finally the with-picture condition. These results could be due to the limitation of the number of subjects tested considering the mean scores for the second graders across presentation conditions for the transparent metaphors were very close.

An interesting topic for future research in regards to this study would be to see whether the personal characteristics of children would affect metaphor understanding in terms of the presentation condition. For example, would an auditory learner have more accurate responses when presented with the with-context condition over the with-picture condition? It would also be interesting to look at these same results would occur with second-language learners.

References