

1-1-1985

Illustrative Aids Improve Reading

Thomas E. Skruggs
Utah State University

Margo A. Mastropieri
Utah State University

Follow this and additional works at: https://scholarworks.wmich.edu/reading_horizons



Part of the Education Commons

Recommended Citation

Skruggs, T. E., & Mastropieri, M. A. (1985). Illustrative Aids Improve Reading. *Reading Horizons: A Journal of Literacy and Language Arts*, 25 (2). Retrieved from https://scholarworks.wmich.edu/reading_horizons/vol25/iss2/7

This Article is brought to you for free and open access by the Special Education and Literacy Studies at ScholarWorks at WMU. It has been accepted for inclusion in Reading Horizons: A Journal of Literacy and Language Arts by an authorized editor of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.

ILLUSTRATIVE AIDS IMPROVE READING

Thomas E. Scruggs, Margo A. Mastropieri
EXCEPTIONAL CHILD CENTER, UTAH STATE UNIVERSITY, LOGAN, UTAH

If the saying is true that "a picture is worth a thousand words" we can logically expect pictures to be very helpful in facilitating reading comprehension. In fact, research has shown that pictures can and do increase comprehension, but only under certain conditions. Many pictures, for example, serve merely as a decorative function, either to make the text more saleable or to promote interest on the part of the reader. These pictures have not been seen to increase comprehension.

In many cases, however, pictures or illustrations have helped readers understand more adequately. These have been reviewed in detail by Levin (1981). A positive use of illustrations we wish to describe here is the use of "spatial organization" (e.g., maps) to provide a visual reference for prose content. It has been seen that map-like illustrations of events in the passage can increase comprehension by providing a spatial framework on which the reader can "hook" new information. Schwartz and Kulhavy (1981) manipulated the type of map-like illustration learners reviewed while they read related prose passages. One group of learners saw a map which contained features from the prose passage in a spatially organized fashion; another group viewed a map which contained the identical features listed randomly along the outside edge of the map. Learners who viewed the spatially organized map not only recalled more information from the passage that was directly related to the features on the map, but also recalled more information not directly related to the map features.

It is important to note that although the feature-related information was taken directly from the passage, the location of the features on the map was not critical information for the learner to know. In other words, the fact that the features from the story were given in a spatially organized format was more important than where the features were located. This finding has also been seen with learning disabled as well as gifted students (Mastropieri, Peters, Kulhavy, & Lee, 1982; Mastropieri & Scruggs, 1983).

It has also been seen that in the absence of provided illus-

trations, readers can draw their own "maps" to increase their comprehension of the passage. Dean and Kulhavy (1981) found that learners who were required to construct their own map-like device while listening to a story recalled substantially more information from the story than learners who were not instructed to draw a map.

Thus it appears that at least two methods can be used by teachers to assist their students in recalling more information from prose content. First, teachers could present information from a covered passage in a spatially organized map. If the class, for example, was about to read a story which describes a girl living on a tropical island, the teacher might draw on the chalkboard or overhead projector features from the story (village, river, mountain) in a spatially organized format. Even if the features are not located exactly where the author intended, comprehension of the story would probably increase. Also, maps for non-fiction areas such as biology can be drawn to increase comprehension. Different classes of vertebrates, shown in a spatial relationship can be drawn, for example, before the class reads a chapter on vertebrates.

Second, students can be instructed to construct their own maps while reading a passage. Since a picture of the feature seems to aid comprehension more than the label, student should be helped to draw simple pictures or representations of the feature and locate them in a map-like format. These procedures may be extremely helpful to students having difficulty with reading comprehension. Examples of the kind of drawings students could be encouraged to create are shown in Figures 1 to 3.

In summary, one specific form of illustration which has been found to increase comprehension is a spatially organized map, which can be drawn either by teachers or students. The reasons such maps benefit comprehension are uncertain and have even sparked some debate concerning the manner in which information is encoded. It is clear, however, that the use of spatially organized maps does facilitate the recall of related prose content. Since this is a relatively simple and inexpensive instructional tool for teachers to manipulate, we recommend that teachers use maps to increase recall of reading material.

On the following two pages, we present typical examples of what students (or teachers) might do to enhance comprehension while reading. Drawings do not have to be sophisticated, only the spatial organization must be carefully and accurately done. This is an aspect of reading skills improvement to which we need to give more consideration!

Figure 1. "Map" of a story about a fictional island.

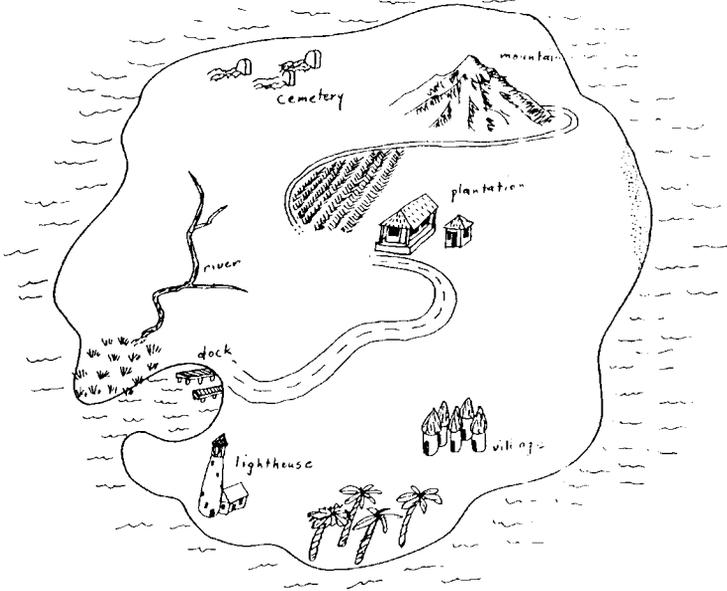


Figure 2. Drawing of a mystery story.

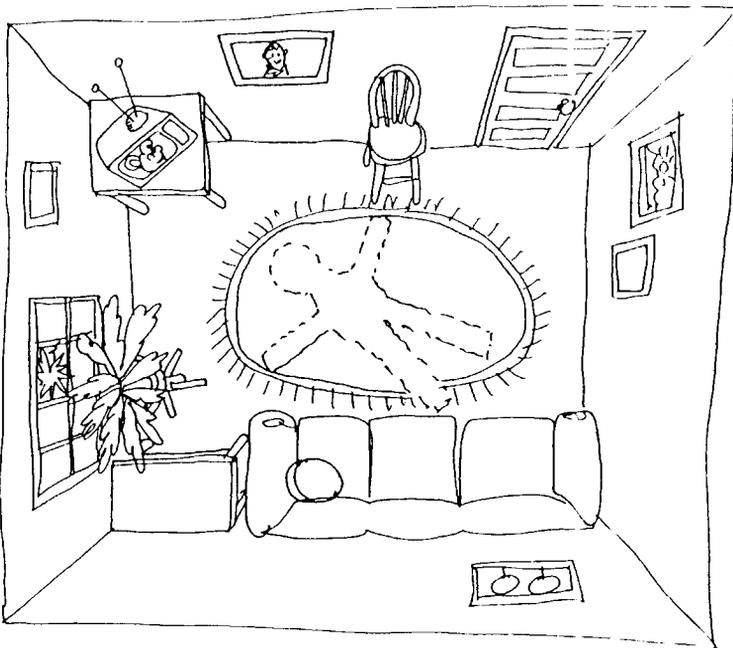
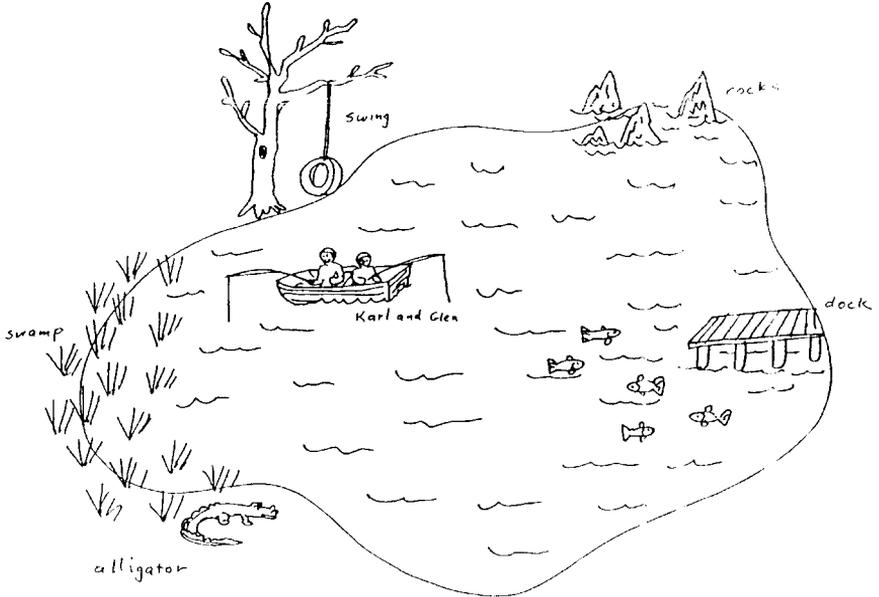


Figure 3. Drawing of a fishing story.



REFERENCES

- Dean, R.S. & Kulhavy, R.W. Influence of spatial organization in prose learning. Journal of Educ. Psych., 73, 57-64, 1981.
- Levin, J. R. On functions of pictures in prose. In F. J. Pirozzolo & M.C. Wittrock (eds.), Neuro-psychological and cognitive processes in reading. New York: Academic Press, 1981.
- Mastropieri, M. A., Peters, E. E., Kulhavy, R. W., & Lee, B., Maps as schema for prose recall with mildly handicapped learners. Paper presented, Western Psych. Conf., Sacramento, CA, 1982
- Mastropieri, M. A. & Scruggs, T.E. (1983). Maps as schema for gifted learners. Roeper Review, 6, 107-111.
- Schwartz, N., & Kulhavy, R. W. (1981). Map features and the recall of discourse. Contemporary Educational Psychology, 6, 151-158.