

Possible Sentence: An Update

- David W. Moore
Arizona State University-West
 - Sharon Arthur Moore
Arizona State University-West
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Students encounter unfamiliar vocabulary during subject matter reading assignments on a regular basis. Indeed, the general purpose of most reading assignments in subject matter classrooms is to introduce students to new concepts and vocabulary. The problem is that students generally need help acquiring such information. Instruction is needed to help students understand the meanings of new terms and the relationships among those terms. Possible Sentences is a technique that teachers can use to provide this instruction. The following updates an earlier description of this technique by Moore and Moore (1986). It refines the rationale and conclusion and presents some supportive research evidence.

Rationale

The main purpose of Possible Sentences is to prepare students for a reading selection. This is done by focusing students' attention on the key vocabulary of a to-be-read passage. Students infer the meanings of these key terms by examining the way they are presented in the passage. Thus, Possible Sentences concentrates on student understandings of (a) passages, (b) individuals words, and (c) the strategy of using context to determine word meanings.

The components of Possible Sentences are based on several learning principles. First, students predict the contents of a passage. When students become involved making predictions this way, motivation to read is aroused, attention is focused, and prior knowledge is activated. In other words, students who are engaged in Possible Sentences benefit by wanting to learn from a passage, knowing what to look for, and being aware of what they already know about the topic. Additionally, predictions allow teachers to evaluate students' familiarity with certain concepts prior to instruction. Such activities indicate students' entry levels into a task. The tendency of prediction activities to accomplish these outcomes has been discussed extensively (Moore, Readence, & Rickelman, 2000; Stauffer, 1969).

Students also justify their responses during Possible Sentences. The predictions students make before reading are evaluated afterwards; students cite specific parts of the passage in attempts to either support or refute their predictions. Producing and justifying responses this way allow classroom interactions to move from recitations, wherein teachers already know correct answers, to discussions, in which teachers might or might not have single correct answers in mind. Opportunities for discussion are important because students generally need to explain or elaborate on what they read in order to increase their proficiencies, yet this activity rarely occurs in classrooms (Langer, Applebee, Mullis, & Foertsch, 1990). Discussions also have been shown to be valuable aspects of

vocabulary (Stahl & Clark, 1987) and passage comprehension instruction (Gallagher & Pearson, 1988).

Finally, students attend to relationships among terms during Possible Sentences. Noting the connections among key words seems to elicit more active thinking about word meanings than defining words individually. When reading, students use the word relationships supplied by the author (i.e., the context) to improve their word knowledge. Using context is a worthwhile vocabulary strategy, although its power varies with writing types and student abilities (Graves, 1986, 2006). When writing Possible Sentences, students actively think about the connections between terms. Learning activities that have students write in conjunction with reading typically are more productive than those that have students read only (Langer & Applebee, 1987; Langer & Fliham, 2000).

Procedure

There are four steps in a Possible Sentences lesson. In the first step, the teacher lists key terms of a passage that are defined adequately by their context. These target words are presented to the class, and each word is pronounced several times. In step two, a student pairs any two words on the list and dictates a sentence using them. The teacher writes the sentence on a chalkboard or on an overhead transparency and underlines both words from the list. The sentence is written exactly as the student dictates, even if the information it contains is not accurate. This exact transcription is necessary for the evaluation phase that occurs later. Another student then pairs any two words on the list and uses them in a sentence. Students may use words already placed in previous sentences if they wish, but eventually they should include each word on the list in at least one sentence. The teacher continues recording sentences until a specified time period elapses, until a specified number of sentences have been created, or until students can produce no more.

In step three, students read the passage for the purpose of checking the accuracy of their classmates' statements. Then, with the passage available for reference during step four, the sentences generated prior to reading are evaluated: which ones are accurate? which ones need further elaboration? which ones cannot be validated because the passage did not deal specifically with them? This evaluation calls for careful reading and directed discussion. The original sentences that prove to be inaccurate should be rectified or else omitted in accordance with the information clarified during this step.

Finally, after evaluating and modifying the original sentences, the teacher may call for new ones. As these new sentences are dictated, other students may challenge them as inaccurate, unknowable, or incomplete and then quickly check the text for confirmation. The final, acceptable statements then should be copied into the students' notebooks or folders.

Example

The above section provides a general description of Possible Sentences; what follows are sample components of a Possible Sentences lesson that was based on a passage about the movement of valley glaciers. The sample components of this lesson are sequenced below as they would occur in an actual situation. First, the target words are presented; second, students produce "possible sentences;" third, the assigned passage is read; and fourth, final modified sentences are created.

Target Words

iceberg

Jean Louis Agassiz

Muir Glacier

terminal moraine

valley glacier

Possible Sentences

Jean Louis Agassiz discovered Muir Glacier.

There are many icebergs in the Muir Glacier.

An iceberg floats in the ocean, and a terminal moraine is on the ground.

Icebergs come from terminal moraines.

Muir Glacier was formed by a terminal moraine.

Assigned Passage

Movement of Glaciers

The movement of apparently solid ice down valleys is somewhat like the flow of rivers. The process has been studied by many scientists. Jean Louis Agassiz, the great Swiss-American naturalist who first proposed the idea of the great Ice Age, drilled holes in a row across a glacier and erected flags in them. His survey of the positions of the flags showed not only that the glacier moved forward, but also that the center moved faster than the sides.

Ground-up material are carried in the glacial ice and dropped at or near the edge of the glacier where melting occurs. These material make up the terminal moraine—a ridge at the ice margin—and other glacial deposits.

Where valley glaciers move into the sea, they break off in great blocks or icebergs. The great Muir Glacier of Alaska fills a basin of about 350 square miles. It moves out into the sea along a two-mile front, with an ice cliff from 250 to 300 feet high. The glacier extends hundreds of feet below sea level and may yield icebergs 1,000 feet thick. (J. V. Dodge and W. R. Dell, Eds. Britannica Junior Encyclopedia, vol. 6. Chicago: Encyclopedia Britannica, 1964, p. 355)

Final Modified Sentences

Jean Louis Agassiz studied *valley glaciers* and learned that their centers moved faster than their sides.

Some *icebergs* that break off *Muir Glacier* are 1,000 feet thick.

An *iceberg* floats in the ocean, and a *terminal moraine* is on the ground.

Valley glaciers form ridges of land that are called *terminal moraines*.

Two points should be considered while inspecting the preceding Possible Sentences sample. An important point is that the original reading passage on glaciers was included here in order to demonstrate how the five target words were chosen. The criterion for target words is that they comprise “key vocabulary with clear defining context.” As can be seen by referring to the original passage, the five terms selected for this sample lesson are key, or essential, to understanding the major points of the passage. Additionally, the meanings of these terms are explicitly stated or else directly implied by the defining context. In other words, the five terms were chosen because they were important to the

passage and because students could be expected to figure out their meanings through the use of context.

It should be noted also that the dictated sentences reveal some pertinent information about the participants in this activity. Specifically, most of the original sentences contained inaccurate information, but all of them were credible. This credibility suggests that the students' conceptual backgrounds were appropriate for this passage and that the students were prepared to accommodate the new information. In addition, the accuracy of the students' final sentences provides evidence that the meaning and the relationships of the five terms were identified correctly.

Comments

Some evidence supporting the effectiveness of Possible Sentences has been reported. Stahl and Kapinus (1990) found this activity to benefit fifth-grade students' written recall of expository passages and long-term understanding of word meanings. They concluded that Possible Sentences was a simple and effective approach for prereading preparation and vocabulary instruction. To be sure, more studies would help identify the conditions when Possible Sentences is effective and what outcomes to expect. In addition, Possible Sentences shares many features of other key word prediction activities such as Plausible Stories (Blanchard, 1988), Story Impressions (McGinley & Denner, 1987; Albanese, 2003), and Semantic Mapping (Heimlich & Pittelman, 1986) that have been shown to promote learning.

There are some pitfalls in directing students' attention to context that teachers should realize before planning Possible Sentences lessons. First, take great care to choose key terms that have meanings that can be readily grasped from the context. Although context can provide substantial information to readers about the meaning of unknown words, it does not provide such information invariably. Deighton (1959) best summarized this condition with his statement, "While context always determines the meaning of a word, it does not necessarily reveal that meaning" (p. 2). For example, the three sentences displayed below contain an uncommon technical word, felodese, along with an identical number of surrounding words, ten, to make up the immediate context. However, these sentences clearly vary according to the amount of direct defining context that they provide:

1. His felodese totally shocked some people and merely surprised others.
2. Some people resort to felodese to escape from their problems.
3. Felodese, or suicide, is the ultimate form of deliberate self-destruction.

As can be seen, sentence 3 is devoted entirely to explaining the uncommon term that it contains. There is practically no ambiguity about the meaning of felodese. By the same token, sentence 2 substantially constrains possible meanings of the new term, but it does not give away the meaning of the word. As mature readers know, people can resort to a variety of licit and illicit activities to escape from their problems. Sports, television, day-dreaming, drugs, gambling, and fighting are all possible synonyms for felodese within the context of sentence 2. And finally, sentence 1 provides practically no direct clues about the meaning of the uncommon word. Readers would be able to "use context" to determine the meaning of felodese only if there were additional defining clues available

in other sentences. Thus, select only unfamiliar words that are embedded in relatively clear defining contexts when contextual activities such as Possible Sentences are carried out. The five terms selected from the sample passage on glaciers meet this criterion.

A second caution about directing students' attention to context deals with levels of experience. In Possible Sentences words are defined according to authors' and students' statements; reading, writing, and talking predominate. Although this level of experience is important and often the only way a term can be apprehended, other activities that help students understand vocabulary at more personal, concrete levels are desirable. For example, students might explore the parts of a flower (e.g., stamen, pistil, anther, filament, petal) by illustrating them, by dissecting and labeling a real flower, by delineating pictures of flower parts, and by sharing observations of various plants. Films, pictures, simulations, and real experiences typically make concepts vivid and memorable. Teachers who provide such experiences enrich students' understanding and retention of the vocabulary they encounter through reading.

In sum, the teaching technique described here, Possible Sentences, is intended to help readers independently determine meanings and relationships of unfamiliar terms in content passages. It is a structured language activity that is designed to motivate students, set purposes for reading, and review learnings following the reading. The primary steps in this teaching technique call for students to dictate "possible sentences" that contain at least two target words, read the passage from which the words were selected, and then evaluate and modify the original sentences. Before conducting a Possible Sentences lesson, teachers should be certain that the target words are clearly defined by their context. In addition, follow-up instruction should be provided for students after they apprehend word meanings from context so that those meanings are related to students' experiences and understandings.

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