Creating metaphors is the process of fostering deeper connections between two ideas or concepts. A metaphor is a statement that compares two things—without the word like or as (example: “Love is a Rose” or “The Brain is a computer”). In order to create metaphors, students have to recognize that there are some important similarities between the two ideas or concepts, and they have to recognize critical differences, as well, that may make the metaphor misleading or false. While the creation of metaphors often seems to be intuitive and can have almost a “magical” quality about it, in fact, the creation of metaphors relies on several underlying, teachable skills:

- Vocabulary skills
- Abilities to make connections to help bridge the concepts
- Creativity

“Using metaphors is letting students play with words,” states Brigid Schultz, Ed.D., assistant professor in the School of Education at Loyola University Chicago, who has done research using metaphors as an instructional strategy. “Metaphors free students to look at concepts in a way that other instructional strategies can’t,” Dr. Schultz reports. She continues, “It adds a level of depth to the understanding that students can’t get by just giving them the definition to a term.”

Teachers should consider helping students develop the skill of creating metaphors because of the following benefits:

- Encourages students to uncover similarities and differences by paying attention to salient features of the two concepts for which the comparison is made
- Helps students develop more complex patterns of thinking by making deeper connections between the two concepts
- Promotes deeper levels of vocabulary development by using richer language patterns
- Supports development of creativity and imaginative thinking that is needed for non-linear problem solving

Steps to implement

1. Start with having a good reason to create metaphors.

   Analyze the concepts and ideas that you will be teaching and see what ideas lend themselves to creating metaphors. The sample list from the “compare and contrast” materials applies to creating metaphors as well. (Available at www.luc.edu/ccse.)

2. Move from the concrete to the abstract.

   Show students a variety of teacher-constructed metaphors. Walk through the essential questions on the cognitive map for creating metaphors. “Think out loud” to demonstrate the thinking process while you create metaphors for a concept you are teaching. (Sample cognitive map for creation of metaphors is available at www.luc.edu/ccse.)

   Dr. Schultz suggests a “metaphor grab bag” as a strategy to help students practice the kind of thinking used in creating metaphors. Fill a shopping bag with common objects (i.e., Band-Aid, ice cream scoop, tennis ball). Using the concepts that you are trying to teach, have the students create a metaphor. For example, the character of Hester (from The Scarlet Letter) is _________ (an object from the bag) because _________. This concrete method will help students creatively link the character analysis with literal objects based on common characteristics to deepen the comparison process. Over time, the teacher can fade these supports to move to student-generated metaphors.

3. Provide instructional support for ongoing use of the creation of metaphors.

   When asking students to create metaphors, provide access to the cognitive map and graphic organizer to support this kind of work. These visual tools should also be posted to serve as reminders for students to use systematic methods to create metaphors. (Sample graphic organizer is available at www.luc.edu/ccse.)

   The process of creating metaphors starts with identifying the concept for which you would like to create the metaphor (Element 1 on the graphic organizer). For example, we might want to use democracy as a concept to serve as the basis of a metaphor. The next step is to identify the key characteristics about the idea that we want to express. For our example of democracy, we might list the key characteristics as follows:

   - Satisfying to people when it works
   - Very hard to accomplish
   - Demands that people work together
   - Heart of American history for more than 200 years

   After this step, the student should brainstorm the objects or activities that could possibly have the same key characteristics. Several examples would include: riding a tandem bike in the mountains, climbing a cliff or
sky diving. Next, we would choose one element and determine if it possesses the key characteristics (Element 2 on the graphic organizer). For example, we can see that sky diving may be satisfying when it works and hard to accomplish (the first two key characteristics) but that the third key characteristic may not be as relevant. If we look at riding a tandem bike in the mountains, there might be a better fit. In order to ride a tandem bike in the mountains, it is satisfying when it works, it is hard to accomplish and it demands that people work together. Therefore, we might say that democracy is a tandem bike ride in the mountains.

However, the creation of an apt metaphor depends most on the key characteristics that we want to express. For example, suppose that the key characteristic of democracy that we want to express in the metaphor is as follows (rather than the first set of key characteristics mentioned in the previous example): Form of government where each voice is heard and all agree to act on what the majority decides. We see that our original metaphor is misleading. We may have to choose other objects or activities to create a more fitting metaphor such as a chat room, coffee house or family. Again, we would repeat the process of determining which of these would best fit the key characteristics.

Pitfalls to avoid

Pitfall #1 — Superficial use of the strategy. Sometimes it is easy to engage in a strategy just because you know that it is a good strategy. It is better to be strategic and to use the strategy to achieve an instructional outcome.

Pitfall #2 — Being too abstract for the developmental level of the learner. As you start to think about using metaphors, keep in mind the developmental level of the learners with whom you are working. Don't avoid this strategy with younger thinkers. It is important to keep in mind that this can be a viable strategy for the younger thinker, but that it will have to be "scaffolded" from concrete experiences to more abstract examples. The use of the stepwise graphic organizer will help guide this process.

Pitfall #3 — Becoming frustrated with the process. Unlike the quicker success that you might experience with the "compare and contrast" strategy presented in the last issue of Notes, the "wins" may be a little slower with creating metaphors. Because this type of thinking is more complex, the likelihood that students will take a longer time to master this type of thinking is great. However, this type of complex thinking pattern is exactly what we want our students to form as a result of our instruction.

Pitfall #4 — Being afraid to use this strategy. Admittedly, using this strategy may not be comfortable for many teachers. When faced with creating metaphors, many people withdraw because, correctly or incorrectly, they associate it with unpleasant memories of logic problems found on standardized tests. Also, it is not a comfortable way for people to engage in the process of identifying similarities and differences because it requires greater tolerance of ambiguity. However, as Dr. Schultz reassures, "It may not even be your favorite strategy; however, research shows that it promotes lasting results in student thinking."

Implementing together
Suggestions for schools:
• Read and discuss the SOS article and support materials at a faculty meeting or team meetings. (Watch the Webcast together to spark discussion.) Use the questions on the cognitive map and the prompts on the graphic organizer to have fun creating examples of metaphors to get the feel for the thinking process you want your students to use. Conduct your own faculty "metaphor grab bag."
• In learning teams, go deeper. Examine the steps and the pitfalls. Select one or two concepts you are currently teaching about where you could use the strategy of creating metaphors to help students deepen their understanding.
• Post examples of student-created metaphors on an "Expanding Our Thinking" bulletin board in the school.
• At the next team meeting, share observations about using the strategy and its impact on learning. Refine and agree on actions for the next two weeks. Include all three skills used for the identification of similarities and differences: compare, contrast, metaphors. (See SOS issues for September and November.)
• Share actions taken and observations of impact on student learning at next faculty meeting.

Feedback invited
Feedback is invited from schools that use these materials. Contact the authors.

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