Sharing Strategy: 3-Read

(See Teacher Summary Card, Student Summary Card)

The **3-Read Strategy** is, in its original form¹, a technique for helping learners make sense of a mathematics problem prior to trying to solve it. The technique is adapted here to help learners make sense of a learning intention (LI) and the corresponding success criteria (SC). The strategy was developed in response to the fact that reading about mathematics poses different requirements on the reader than reading narrative prose, due to specialized mathematical language and notation. This 3-read sharing strategy suggests reading a learning intention and success criteria three times, each time reading for a different purpose.

Particular Advantages

- Is a strategy that students can internalize and use independently
- Supports students with language-related difficulties
- Quick and easy to implement

How Does the Strategy Work?

- 1. **1st Read for context:** Have students read the LI and SC first for context and think about the question: **What's the LI about?**
- 2. Call on a couple of students to share what the LI is about. Take an opportunity to clarify or add in any missing pieces.
- 3. **2nd Read for content:** Have students read the LI and SC again, this time for content, and think about the question: **What am I supposed to learn?**
- 4. Call on a couple of students to share what they think they are supposed to learn in today's lesson. Clarify as needed.
- 5. **3rd Read for your focus:** Have students read the LI and SC a final time, this time for focus, and think about the question: **How will I show I've learned it?**
- 6. Call on at least one student to share how he or she knows they have learned the LI (focusing on the SC). Clarify as needed.

Example

Here's a sample LI and SC to illustrate this strategy:

LI: You can use rotations, reflections, translations, and dilations to determine if two shapes are similar.

SC 1: I can take two similar figures and describe a series of transformations that starts with one and results in the other.

SC 2: I can explain why I know the two shapes remain similar.

¹Adapted from Grace Kelemanik's "3-Read Strategy" for mathematics problems.

1st Read for context: What's the LI about?

Read the LI quickly to get a general understanding. What's the general math topic in this LI?

A student might say, "It's about shapes and geometry." This strategy then gives you an opportunity to clarify for this student that the LI is also about similar shapes and about using transformations.

A student also might say, "It's about rotations, reflections, translations, and dilations." This strategy then gives you an opportunity to clarify for this student that the LI is also about similar shapes.

2nd Read for content: What am I supposed to learn?

Read the LI a second time. This time, identify the idea you are supposed to learn. Restate the LI in your own words.

A student might say, "How to use rotations, reflections, translations, and dilations to figure out if shapes are similar."

3rd Read for your focus: How will I show I've learned it?

Now read the SC and pay special attention to what you're doing for each one. See if you can figure out when you'll be solving a problem, doing some calculations, or showing your work and when you'll be explaining or describing something.

A student might say, "I'm going to explain how I know two shapes are similar, and I'm going to use rotations, reflections, translations, and dilations on the shapes." This strategy then gives you an opportunity to clarify that the student will use the transformations to transform one shape into the other.

How Does the Strategy Support Formative Assessment?

Student ownership and involvement

- This strategy helps students understand the LI and SC so that they will be able to later evaluate their own learning against them.
- When students are given time to digest the LI and SC, there's greater opportunity for them to feel that it is manageable and therefore engage more in the lesson.

Learning intentions and success criteria

• Spending the extra time to read and interpret the LI and SC helps students understand that the LI defines the learning, and the SC serve as indicators of how that learning will be demonstrated.

Environment

• This strategy underscores the message that students are responsible for understanding what it is they are supposed to be learning and how they will demonstrate that learning.

How Might You Modify the Strategy, and Why?

If you are trying to have students internalize the 3-Read process, you may want to gradually have them do more and more of it independently. For example, as students get more familiar with this strategy, you may no longer need to pause to call on students in between each read. Students can do all three reads, then have a quick discussion for clarification.

Sharing Strategy: Clarification

(See Teacher Summary Card)

The **Clarification Strategy** is perhaps not as distinctive a strategy as some others, but it is worth mentioning, as it can be particularly useful when learning intentions or success criteria contain academic or mathematical language that you want students to understand and get accustomed to using. It involves highlighting particular words in the learning intention or success criteria that may have other ordinary-use meanings that differ from the academic or mathematical meaning, such as *behavior* (as in the *behavior* of a function), *even* or *odd* (as with numbers), or *regular* (as with shapes).

In this strategy, those words are discussed and directly compared and contrasted with their ordinary-use meanings, to draw whatever parallels exist between the two meanings or to clarify distinctions between the two meanings.

Particular Advantages

- Builds academic or mathematical language comprehension and use
- Supports students with language-related difficulties

How Does the Strategy Work?

- 1. Post the learning intention and success criteria for students to see and read them aloud to the students.
- 2. Point out particular academic or mathematical words and elicit students' descriptions of what the word means in ordinary usage.
- 3. Builds on and uses the students' descriptions of ordinary meanings to describe the academic or mathematical meaning, relating it in some way to the students' current understanding of the word(s).

For example, a teacher is trying to describe the meaning of *behavior* in the following learning intention for an eighth-grade Algebra class: *Understanding the behavior of the output values allows us to classify and write an equation for the data set.* When his students tell him that *behavior* means how you act, he uses that definition to explain that today's focus is not on the behavior of people as we ordinarily think but rather in the behavior of output values in the table. He goes on to explain what *behavior of output values* could mean, and he provides an example to clarify.

To view a brief video of a teacher using this strategy, go to CreightonMathFormative Assessment.

4. Finally, ask students either to talk with a partner about, or write down for themselves and then share out, their own paraphrased version of the learning intention or success criteria that has the specialized language.

Retrieved from the companion website for *Bringing Math Students Into the Formative Assessment Equation: Tools and Strategies for the Middle Grades* by Susan Janssen Creighton, Cheryl Rose Tobey, Eric Karnowski, and Emily R. Fagan. Copyright © 2015 by Corwin. Thousand Oaks, CA: Corwin, www.corwin.com

How Does the Strategy Support Formative Assessment?

Learning intentions and success criteria

• This strategy focuses students' attention on specific language in the learning intention and success criteria that is important for them to learn and eventually to use.

Eliciting and interpreting evidence

• This strategy provides the teacher with useful information about how students might be (correctly or incorrectly) trying to make sense of the learning intention and success criteria.

Environment

• This strategy underscores the message that students are expected to take responsibility to understand the learning intention and success criteria for the lesson.

Retrieved from the companion website for *Bringing Math Students Into the Formative Assessment Equation: Tools and Strategies for the Middle Grades* by Susan Janssen Creighton, Cheryl Rose Tobey, Eric Karnowski, and Emily R. Fagan. Copyright © 2015 by Corwin. Thousand Oaks, CA: Corwin, www.corwin.com

Sharing Strategy: Cover-Up*

(See Teacher Summary Card, Student Summary Card)

The **Cover-Up Strategy** involves a brief whole-class discussion about the learning intention (LI) and success criteria (SC) in which students first read then recreate, in their own words, the LI and SC. Notably, the LI and SC are read twice: first by the teacher, to allow the students to hear and read the LI and SC, and second by the students themselves. The strategy is based on the idea that having students rephrase the LI and SC in their own words will help them better understand what is stated in the LI and SC and better internalize the LI as a learning goal.

Particular Advantages

- Draws on multiple modes of learning as students read, hear, and talk about the learning intention together
- Develops stronger understanding and ownership of the learning intention as a goal of the lesson and the success criteria as a gauge for their learning

How Does the Strategy Work?

- 1. The teacher posts the learning intention and success criteria for students to see and reads them aloud to the students, once.
- 2. Students are now asked to reread the LI and SC to themselves, once.
- 3. The teacher then covers up the LI and SC and asks students to talk with a partner about what they are going to learn and how they will know they have learned it.
- 4. When students have had a few minutes to talk together, the teacher asks for volunteers to share one part of what they discussed. The goal is to accurately recreate the LI and SC in the students' own words, so the teacher records, for all to see, the various parts of the LI and SC that are mentioned in students' comments.
- 5. The teacher continues calling on students to add whatever parts they remember and understand of the LI and SC until everything is included or no additional ideas can be added. This provides important information to the teacher about what elements of the LI and SC do and do not make sense to students and what needs further clarification or discussion.
- 6. The teacher then uncovers the LI and SC and points out anything that wasn't included in the discussion, offering further clarification—or asking students to clarify—as needed.

How Does the Strategy Support Formative Assessment?

Student ownership and involvement

• This strategy ensures that students understand the goal of their learning, and the success criteria for gauging it, sufficiently that they will be able to later evaluate their own learning against the success criteria.

^{*}Our thanks to Ed Worcester of Waterville, Maine, for sharing this strategy with us.

Learning intentions and success criteria

• By having students rephrase the LI and SC in their own words, this strategy helps students to engage with the LI and SC enough to understand fully what they mean.

Eliciting and interpreting evidence

• A teacher can easily get valuable evidence about what students do and do not understand about the LI and SC.

How Might You Modify the Strategy, and Why?

For students who have difficulty recalling the LI and SC, the teacher may wish to give them an index card with the LI and SC listed on it. Students can hide or view the LI and SC by turning over the index card as needed.

Sharing Strategy: Think/Pair/Share

(See Teacher Summary Card, Student Summary Card)

The Think/Pair/Share strategy is a common instructional strategy that has uses in many learning contexts. Here, it is adapted for use in helping students more fully understand the learning intention and success criteria for a lesson.

Particular Advantages

- Gives more processing time to students who need it
- Is fairly efficient, time-wise, especially once students get used to seeing and working with the learning intention and success criteria.

How Does the Strategy Work?

1. **Think:** The teacher asks students to silently read the learning intention and success criteria. (Or the teacher may ask students to focus only on the learning intention initially.)

Students are instructed to think about:



- 2. **Pair:** Students then pair up with a partner to quickly share their thoughts about the two thinking questions.
- 3. **Share:** The teacher can ask for volunteers or call on several pairs of students to answer the questions.

How Does the Strategy Support Formative Assessment?

Student ownership and involvement

• This strategy ensures that students understand the learning intention and success criteria sufficiently to later evaluate their own learning against them.

Learning intentions and success criteria

• By having students briefly discuss the learning intention and success criteria, this strategy helps students to engage with them enough to understand fully what they mean.

Retrieved from the companion website for *Bringing Math Students Into the Formative Assessment Equation: Tools and Strategies for the Middle Grades* by Susan Janssen Creighton, Cheryl Rose Tobey, Eric Karnowski, and Emily R. Fagan. Copyright © 2015 by Corwin. Thousand Oaks, CA: Corwin, www.corwin.com

Eliciting and interpreting evidence

• A teacher can easily get valuable evidence about what students do and do not understand about the learning intention and success criteria.

Environment

• This strategy underscores the message that students are expected to take responsibility to understand the learning intention and success criteria for the lesson.

How Might You Modify the Strategy, and Why?

For students who might need a little more structure in the use of the strategy, a teacher could choose to first discuss together the question "Is there something else we've done in math class that this reminds you of?" to help students make the connection to a prior familiar experience. Then, the teacher could follow that with a brief think/pair/share about either the learning intention or the success criteria.

A teacher might also choose to explain the learning intention to clearly establish the focus for the lesson but then use the think/pair/share only on the success criteria.

What Are Some Considerations for Using the Strategy?

Think/Pair/Share is easy to implement, but without clarity about what to discuss together, students can quickly digress into personal conversations. Consider keeping the pair and share time brief and focused. This strategy is meant to be a quick introduction to the learning intention and success criteria, as you can always clarify them throughout the lesson as well.

Retrieved from the companion website for *Bringing Math Students Into the Formative Assessment Equation: Tools and Strategies for the Middle Grades* by Susan Janssen Creighton, Cheryl Rose Tobey, Eric Karnowski, and Emily R. Fagan. Copyright © 2015 by Corwin. Thousand Oaks, CA: Corwin, www.corwin.com