

Reading Group Roundup

Why Use Reading Groups?

The belief that reading is essentially a process of saying the words rather than actively constructing meaning from texts is widespread among many students. For instance, one of the students we interviewed looked surprised when he was asked to describe the topic discussed in a section of text he had just read.

“I don’t know what it was about,” he answered, with no sense of irony, ***“I was busy reading. I wasn’t paying attention.”***

(Schoenbach, et al.; Reading for Understanding)

The Intelligence Fallacy

I read and
understand

=

I am smart

I read and don't
understand

=

I am stupid

Building a Classroom Conversation about Making Sense of Text

- Declare that the reading fallacy is false
- Talk about making sense of text and strategies that successful readers use
- Thinking aloud: show what good readers do
- Use reading groups to keep the conversation going

Introducing “thinking aloud”

Thinking Aloud

Geologists like Wehrenberg divide rocks into three main categories, based on how the rocks formed. Rocks that form from a volcano's hot lava or from magma deep within the Earth are called igneous rocks. If the magma or lava cools quickly, smooth glassy rocks can be born. If the magma cools slowly, the minerals have time to grow into crystals. The more slowly the magma cools, the larger the crystals grow. Figure 1 shows a chunk of diorite with both dark and light colored crystals.



Figure 1

How to set them up

(BRING A SAMPLE SET OF MATERIALS SO WE COULD TRY IT)

Book Excerpt: Lesson Organization

Begin by reading sections of the book excerpt individually. As you read, mark sentences with the following codes:

! This is important

✓ I knew that

x This is different from what I thought

? I don't understand

You don't have to mark every sentence!

Coding Example

There is no single “strongest muscle in the body,” ^X
because strength can be measured in many ways! The
soleus, in the leg, exerts the most force at one time.
The heart comes in first for endurance. The masseter [?]
gives the most pull for its size.

A Reading Group Procedure

1. All members read the first part of the passage and code ✓, ?, !, and x.
2. The leader asks each group member to share anything that was confusing (marked ? or X)
3. The group should try to figure out what the confusing idea/sentence/word means.
4. If the group **can't** figure it out, the Emergency Manager flags down the instructor for help.
5. After all confusing points have been addressed, repeat the procedure for part 2.
6. Finally, the group works together to answer “The Big Question.”

Introducing Reading Groups

Begin with coding. Have students code at least one text before starting reading groups. Model coding (in a think-aloud) for the class.

When you're ready for groups:

- Break your text into short sections (about 200-300 words).
- introduce the roles and procedure to the class.
- Have a group come to the front to model the procedure for the first section of text.
- Rest of class, in groups, does remaining sections of text.
- On the first day, learning the procedure will be the focus (not the content).

Reading Group Management

Requires active, rapid management

Provide “role notecards” for students to hold

Make it easier to participate than not to participate

- Where are you in the procedure? Ok, what comes next? Who needs to do that? When I come back I expect to see...
- Remove group members who persist in not participating. They must code and answer the question individually.
- Likewise, watch for students who would “take over” and do the work for the group. (Model for them.)

Interacting on Reading Strategies

Join in with groups that are going well and those that are struggling.

- What exactly is confusing you?
- How did you figure that out?
- What can you tell about that word? Is that enough?
(Provide background knowledge if needed)
- What can you tell from that diagram that you didn't get from the words?
- I wonder if re-reading this section would help.

It Gets Easier!

It may take several tries for your students to become comfortable with the procedure and be able to focus more deeply on the content.

You will get more comfortable (and skilled!) and interacting with the groups in a way that guides reading skills.

Remember, this has the power to *transform* how your students interact with academic text. It's worth it.

Deepening the
conversation with
specific skills

You are Your Best Source: Pay Attention to your Thoughts as You are Reading

How do you know if you understand what you are reading?

What do you do to process the words as you read them?

If you have trouble understanding, how do you try to solve it?

First Skill: Identifying when you have a problem

- Noticing if you are understanding
- Pinpointing the problem
- Identifying conflicts with existing ideas

Strategy: Addressing background gaps

- (You help by starting with an exploration)
- Talk about background gaps with your students
- Discuss the possibility of starting with something easier
 - Remember how important having enough background is to reading? If you keep encountering sentences you can't understand, you may not know enough to read that text.
 - Try to figure out what you need to know and ask someone about it.
 - Try reading something simpler on the topic (a children's book or website) and then return to the text.

Strategy: Study diagrams and illustrations

In some books, the pictures are just there to be pretty. Not in science! Diagrams and illustrations often have more information than the words, and may show it more clearly.

Look over the diagrams before you read.

When the words talk about a diagram (like when it says “see figure 3.2” stop and study the figure.

Strategy: Finding the meaning of new science words

Example	Explanation
Soil can be washed away by runoff. Runoff is rain water that collects and moves across the ground.	The sentence after the term provides a definition.
Rain water that runs across the ground, called runoff, ...	The new term is signaled with the word <i>called</i> .
Soil can be washed away by runoff, which means rainwater that runs across the ground.	The definition is signaled with the phrase <i>which means</i>.

Finding the meaning of New Words

Example	Explanation
Runoff, or rain water that runs across the ground, ...	The word <i>or</i> after a comma indicates that the word and phrase mean the same thing.
Soil can be washed away by runoff. This movement of rain water across the ground ...	This is the trickiest situation. The text doesn't directly say what the word means, but implies it by using the word and the definition close together.

In short, the meaning of a SCIENCE word is usually found just *before* or *after* the word is used for the *first* time.

Strategy: The Interruption Construction

Some erosion, such as the movement of glaciers or the force of a tropical storm, is hard to stop.

Some erosion, , is hard to stop.

The “interruption” adds extra information. Try reading the sentence without the interruption, and then add it back in.

Strategy: Use Signal Words

- To predict what the text is going to do
- To identify important information
- (Helps with writing, too!)

Example

“Penguins, however, are built for swimming and diving.”

What kind of information probably came before this sentence? After it?

Strategy: Signal Words for Compare and Contrast

Comparison Signal Words
In the same way
Just like
Just as
Likewise
Also
Similarly

Contrast Signal Words

However

In contrast

On the other hand

Conversely

Whereas

But, yet, while*

* Sometimes indicate a contrast

Contrast Example

Most birds are built for flying, with lightweight, hollow wing bones. Penguins, however, are built for swimming and diving. They have heavy bones that make their wings work like flippers.

What's the signal word?

What two things are being contrasted?

What makes them different?

Strategy: Signal Words for Examples and Lists

Examples
For example,
Like
Such as
To illustrate
For instance
e.g. (stands for the Latin <i>exempli gratis</i> and means for example)

Signal phrases for Lists

Signal	Example
Statement with a number	There are 4 main differences between monocots and dicots.
A statement followed by a colon	Use all of your senses: taste, touch, hearing, smell, and sight.

- This may seem very obvious. But the point is, when you see these signals, it should pose a question in your mind: what are the four main differences? Or what are the senses? Then you should be reading to answer that question.

Strategy: Picture It In Your Head

When a description is given, with no illustration, try to see if you can picture it in your head.

For example:

Penguin feathers are organized in a pattern called countershading. When they swim, the black feathers on their backs help them hide from any predators looking down from above at the dark ocean water. Similarly, the white feathers on their bellies blend into the light of the sky if they are viewed from above.

To really understand this passage, you would need to picture what the penguin and its environment look like from above and below.

Strategy: Talk yourself through it

Science books can be complicated. They often have lots of new information in each sentence. After you read a section, say back to yourself what you understood. A good way to start is to say “Ok, so this means that...”

This is a type of thinking aloud, with a focus on what the main ideas are.

Thank you for your participation!
