

## COLLABORATIVE STRATEGIC READING INITIAL PD 2015

WELCOME!

**C**ollaborative **S**trategic **R**eading

WORKING TOGETHER

USING STRATEGIES

UNDERSTANDING  
WHAT YOU READ

### AGENDA: 8:30-3:00

8:30-9:00	Introductions/Intro to CSR
9:00-9:45	Preview
9:45-10:00	Break
10:00-10:45	Click and Clunk
10:45-11:30	Gist
11:30-12:30	Lunch
12:30-1:00	Questions
1:00-1:30	Review
1:30-1:45	Break
1:45 – 3:00	Cooperative Learning/Trying CSR/Questions



WHY CSR?

### WHY SHOULD WE TEACH READING COMPREHENSION ACROSS THE CONTENT AREAS?

Observations of classrooms show that little to no time is devoted to explicit strategy instruction to support reading comprehension.

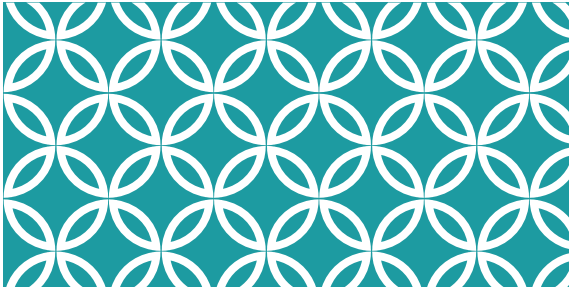
"Students were prompted to generate the types of ideas that might occur to strategic readers as they read, but were not actually taught the strategies themselves, how to use them or the utility of the strategies" (Pressley, 2006, p. 299).

### ACTIVITY : READING COMPREHENSION IN CLASSROOMS

1. Read *Transcript 1: A discussion of 'Eleven'* and jot down notes as you go.
  1. What do you notice?
  2. What seems to be working?
  3. What aspects can be improved upon?
2. Discuss briefly with a partner.
3. Debrief as a group.

## COMMON CORE EMPHASIS

- Regular practice with complex texts and their academic language, emphasis on expository and non fiction.
- Grow vocabularies through a mix of conversation, direct instruction, and reading.
- Reading, writing, and speaking grounded in evidence from texts, both literary and informational.
- Focus on students' ability to read carefully and grasp ideas based on evidence in the text.
- Students should be able to answer a range of text-dependent questions, whose answers require inferences based on careful attention to the text.
- In history/social studies, science, and technical subjects students independently build knowledge in these disciplines through reading and writing.



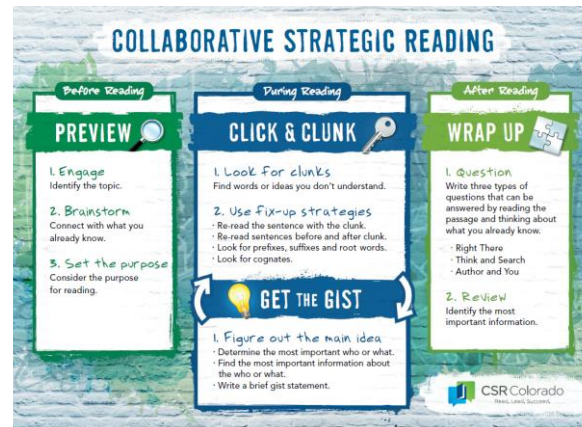
## COLLABORATIVE STRATEGIC READING (CSR)

## CONSIDERING ENGLISH LEARNERS

### What is Language Development? A Working Definition

"Language development occurs in subject area classrooms when teachers carefully scaffold language and content learning, and where students work and talk together. ELLs learn language as they engage in meaningful content-rich activities (projects, presentations, investigations) that encourage language growth through perception, interaction, planning, research, discussion, argument, and co-construction of academic products. Acceptance of "flawed" language supports growth in communication and participation in disciplinary learning."

(iii, Conference Overview: <http://ell.stanford.edu/>)



## CSR IN ACTION



## ACTIVITY: CSR MUSINGS

- What did you see in the video that you would like to see in your classroom?
- Are there aspects that seem challenging?



## PREVIOUS RESEARCH ON CSR (SOME)

Study	Design	Participants & Setting	Effect Sizes
Klingner, Vaughn, & Schumm (1998)	Quasi-experimental: Intact classes randomly assigned to condition (CSR or Typical)	4 <sup>th</sup> grade students in large, culturally and linguistically diverse inclusive classrooms at a range of achievement levels	$d = .44$ for total sample*
Klingner, Vaughn, Argiello, Hughes, & Ahwee (2004)	Quasi-experimental: Intact classes randomly assigned to condition (CSR or Typical)	4 <sup>th</sup> grade students in large, culturally and linguistically diverse inclusive classrooms at a range of achievement levels	$d = .19$ for total sample*; .25 for high-achieving students; .51 for low-achieving students; .38 for students with LD
Vaughn, Klingner, Swanson, Boardman, Roberts, Muhammed, & Stillman-Spisak (2011)	Experimental: Classes randomly assigned to condition (CSR or Typical) (teachers taught both CSR and TYP sections)	7 <sup>th</sup> & 8 <sup>th</sup> grade students in diverse language arts or reading classrooms, with a focus on struggling readers	$g = .12$ for total sample*; .36 for struggling readers
Boardman, Klingner, Buckley, Annamma, & Jensen (2015)	Experimental: Classes randomly assigned to condition (CSR or Typical) (teachers taught both CSR and TYP sections)	6 <sup>th</sup> -8 <sup>th</sup> grade students in diverse science & social studies classrooms, with a focus on ELLs and struggling readers	$g = .18$ for total sample*

## CSR: MATERIALS

**Online toolkit** offers PD modules and teacher resources, including rubrics for providing feedback, videos of CSR in-action, lesson planning templates, intro strategy mini lessons and much more.

[toolkit.csrscolorado.org](http://toolkit.csrscolorado.org)

### CSR Learning Log

Students keep track of learning "as it happens" and provide a springboard for follow-up activities. Logs support all students to be active participants.

## STUDENT FLIP BOOKS INCLUDE FIX UP STRATEGIES, COMMON PREFIXES, SUFFIXES, AND ROOTS, COGNATES, QUESTION TYPES.



## CSR Expert Roles

## CSR: TEXT SELECTION

Consider your purpose for reading. A key purpose should be understanding text.

CSR was primarily designed to be used with expository text.

Initially, select reading material that is conducive to strategy application. Such material is characterized by:

- Main ideas present (not just lists of information).
- Providing context that helps students connect information.
- Interesting and meaningful.

The best texts for CSR are integrated into your curriculum or units of study.

- Text book sections, primary source materials, articles

Divide text into about three sections (usually one day of reading or about 50 min).


## EXAMPLE TEXT: EARTH FRIENDLY FABRICS

**Earth-Friendly Fabrics**  
Emily Sohn

**SECTION #1** Shopping for clothes involves tricky decisions about fit, color, style, and price. And if a growing number of companies have their way, you'll soon start checking labels for another key detail: environmental impact. Earth-friendly fabrics are in. It's already possible to buy shirts made from bamboo and socks made from corn. Shopping malls of the future might also carry clothes made from chicken feathers or rice straw.

The companies that make such fabrics are interested in sustainable development. This means trying to provide things that people need while protecting natural resources and preserving **endowments**.

"A fully sustainable business would be one that creates no negative impact on the environment," says Gordon Ramsay. Scientists are now looking for new ways to make fabrics for clothes that are good both for your image and for Earth.



Clothes made from Earth-friendly fabrics may soon hang in your closet.

**SECTION #2** **Born in the lab** Making clothes and shoes traditionally involves harsh chemicals and lots of energy. Some fabrics, such as cotton, leather, and wool, begin as plants or animal parts. But that doesn't mean they're gentle on the environment. Cotton plants, for instance, are often smothered with noxious chemicals to keep away bugs and weeds.

Other fabrics are born in laboratories, where scientists create molecules called polymers and make synthetic, human-made materials such as Polyester. Textile companies weave or knit synthetic threads into fabrics that are remarkably silky, sturdy, and quick to dry. The problem, from an environmental viewpoint, is that most synthetic fibers are made from petroleum, which must be extracted from the ground. Accessing, transporting, and processing oil is expensive, and the supply is limited. Still, petroleum-based materials appear in exercise clothes, shoe soles, plastic zippers, buttons, dyes, and thousands of other products.

To overcome this reliance on petroleum, some companies have experimented with creating materials from substances such as corn sugar, then weaving the resulting threads into fabrics. Other companies have developed products from recycled materials.

**SECTION #3** **Clothes from waste** In the past few years, scientists have figured out how to make **garments** out of cornstarch, chicken feathers, and rice straw (part of the rice plant). All three are **biodegradable** products that usually end up in the trash. "We already have a problem with how to get rid of these waste products," Yang says. "Instead, let's use them to make beautiful materials." The process involves chemical reactions that break down the raw materials into fibers, followed by cleaning. The scientists then spin the fibers into yarn, which they use

## CSR: STUDENT GOALS

To increase conceptual learning and the acquisition of content knowledge in ways that maximize students' involvement.

To enhance ELLs' language acquisition and increase opportunities to use academic language.

To increase academic self-efficacy.

To provide access to the general education curriculum for struggling readers and students with disabilities.

To enhance reading comprehension for all students, and particularly struggling readers.

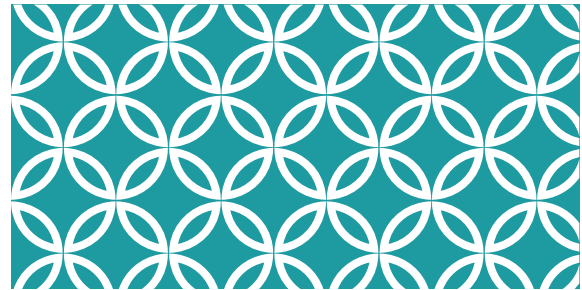
## CSR: TEACHER GOALS

Increase response opportunities for students during teacher-led whole group instruction.

Increase student-to-student interaction through student-led cooperative learning groups.

Provide feedback to students that:

- Reinforces content learning.
- Encourages high quality reading strategy use.
- Promotes peer collaboration.



## CSR STRATEGIES: PREVIEW



### What is CSR Preview?

5-10 minutes

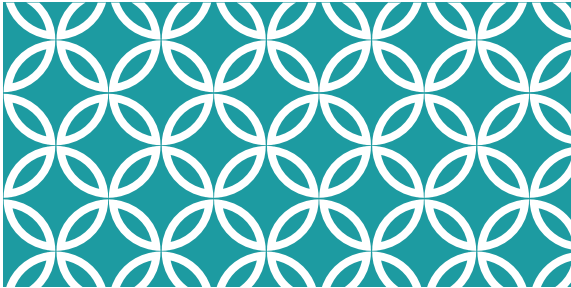
1. Teacher states the topic.
2. Students brainstorm and write what they already know. Students share with their partner or group.
3. Teacher builds background knowledge.
4. Teacher may choose to present important vocabulary and concepts.
5. Teacher states the purpose for reading.

## WHEN IS PREVIEW USED?

Preview occurs once, before reading.

## WHY IS PREVIEW IMPORTANT?

- Pre-teaching key vocabulary:
- Provides explicit instruction, with visuals and other tools to contextualize learning
- Increases the number of exposures to key terms
- Draws attention to important ideas
- Brainstorming to access background knowledge:
- Activates schema that aides understanding and memory
- Helps students make connections.
- Alerts the teacher to students' misconceptions.
- Building background knowledge:
- Is important when students lack information.
- Is a critical teacher role.



### PREVIEW: GUIDED PRACTICE *EARTH-FRIENDLY FABRICS*



#### 4. Present 1 - 3 important proper nouns or key vocabulary concepts.

- Use visuals or demonstration.
- Point out terms in text.



**biodiversity** =  
variety of life on  
earth

## FILL IN THE BLANKS

The problems that confront **p** in raising **ch** from **in** to adult life are not easy to \_\_\_\_\_. Both **f** and **m** meet with many **di** in their concern for satisfactory **pro** from the **e** stage to later life. It is important that young **ch** have plenty of **s** and good **f** for healthy growth. **B** and **g** should not occupy the same **b** or sleep in the same **r**. They are often afraid of the **d**.

## PREVIEW



#### 1. State the topic and connect to class content or curriculum.

- "Today's topic is: Earth friendly fabrics. We have been studying earth's resources. Today we will learn about clothing that protects earth's resources."

#### 2. Brainstorm:

- "What do you already know about fabrics that are earth friendly." OR
- "What kinds of activities are earth friendly?"

#### 3. Build background knowledge as needed.

- "Earth friendly clothes don't harm the earth and we'll learn about how that happens today." [show example...].

#### 5. Set the Purpose (connect to unit goal/CLO)

"As you read, consider how earth friendly fabrics can protect earth's resources."

## WHICH WORDS SHOULD YOU PRE-TEACH?

- Biodiversity (key concept)

In **Social Studies**:

- Sustainable development (key concept; discipline specific academic language)

In **Science**:

- Molecules or Polymers (discipline specific academic language)

In a classroom with **English Learners**:

- Fabrics (May be **unfamiliar to ELs**; also has a false cognate which can be confusing—*fabrica* means factory in Spanish.)
- Earth-friendly (culturally specific; key concept)

## LESSON CONNECTION



Read/Skim the article, **Stop Googling. Let's Talk.**  
Consider why you might ask students to read this text...Work on your own or with a partner.

1. What is the purpose for reading this article?  
\* [make one up]
2. Come up with a brainstorm prompt that will *help students connect with the purpose*.
3. Consider words you might pre-teach.

Be prepared to share!

## HOW DO I WRITE A BRAINSTORM PROMPT?

- Basic brainstorm prompt:

- \*What do you already know about [topic]?

- Lesson on the merging of humans and technology:

- 1. *What do you know about the increasing ability of technology?* (requires students to make a **content connection**) or
- 2. *How can technology make your life easier?* (allows students to make a personal connection to the content).

- Brainstorm is a low stakes entry into the topic:

- EVERYONE makes a connection to something they know related to the topic.
- EVERYONE shares with a partner or their small group.



## RECAP: TEACHER'S ROLE IN PREVIEW

1. Help students access relevant background knowledge and make connections with previous learning and their everyday lives.
2. Build background knowledge important for understanding content.
3. Consider leading a more in-depth preview at the beginning of a new unit or long reading.
4. Introduce key ideas, vocabulary, or important proper-nouns.
5. Ask students to share their ideas with a partner or in their CSR small groups after brainstorming.
6. Monitor closely and provide feedback as needed when students brainstorm.
7. Set the purpose for reading by connecting to unit goal/CLO.

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CSR STRATEGIES:  
CLICK AND CLUNK



## WHY DOES UNDERSTANDING BREAK DOWN?

- Text is too difficult
  - e.g., Sentence structure, vocabulary, unfamiliar content
- You aren't paying attention
  - e.g., Tired, preoccupied, adolescent 😊, noisy or stressful environment
- You aren't interested in what you are reading
- You don't know why you are reading

## WHAT HELPS?



### Metacognition = Thinking about Thinking

- Monitoring understanding
- Selecting an action
  - What? How? Why? When?
- Taking action

## WHAT IS CLICK AND CLUNK?



Click (cruise control):

- When you understand what you read, everything "clicks" along smoothly.

Clunk (traffic jam):

- When you don't understand what you read, "clunk," you stop. When you get to a clunk, use the fix-up strategies to figure out what the word or phrase means.

### Steps for Click and Clunk



1. While reading, monitor your understanding.
2. After reading a section of text, stop and identify any words or ideas that you do not understand (clunks). Write your clunks in your learning log.
3. Work with your group to use fix-up strategies to figure out the meaning of the unknown words or ideas. Circle the strategy(ies) in your learning log.
4. Put the definition back in the sentence to be sure it makes sense.

## WHEN IS CLICK AND CLUNK USED?

Click and Clunk is used during reading.

Students stop and find the meaning of their clunks *at the end of each section of text*.

## WHY IS CLICK AND CLUNK IMPORTANT?

Monitoring understanding and identifying clunks is a metacognitive skill essential for comprehension.

Click and Clunk helps students to be more active, engaged readers.

Good readers use different strategies to figure out the meaning of words and difficult ideas while reading.

## VOCABULARY INSTRUCTION AND CSR CLICK AND CLUNK

Note:

- Teaching students to use fix-up strategies is just one part of vocabulary instruction.
- Vocabulary instruction is most effective when teachers provide explicit instruction, offer multiple meaningful opportunities for practice, and actively involve students in the process.

## CLUNK CRITERIA: WHAT IS A CLUNK?

A clunk is:

- A word or concept you don't know how to define in the context of the reading

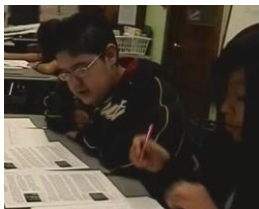
A clunk is NOT:

- A proper noun
- A word you know but don't read correctly (e.g. "sergeant")
- A word with a definition that is provided in the text

the move was troubled from early on. As money poured in to build the new city, rumors of **corruption** flew. People said

**corruption** dishonest or illegal practices, especially involving money

## CLICK AND CLUNK IN ACTION



### CLICK AND CLUNK EXAMPLES: WORD CLUES

In the early days, gold was **transported** in wagons. (#1, #3)

The Department of Motor Vehicles requires a **thumbprint** to get a driver's license. (#3)

Students should **participate** during class. (#4)

## FIX-UP STRATEGIES

1. Reread the sentence with the clunk and look for key ideas to help you figure out the word. Think about what makes sense.
2. Reread the sentence before and after the clunk, looking for clues.
3. Break the word apart and look for word parts (prefixes, suffixes, or words) or smaller words you know.
4. Look for a sign that makes sense.

Strategies  
#1 & #2 use  
context  
clues

Strategies  
#3 & #4 use  
word  
analysis

### CLICK AND CLUNK EXAMPLES: CONTEXT CLUES

➤ In the summer, the birds **molt**, or lose their feathers. (#1)



➤ Peregrine falcons are **raptors**, or birds of prey. (#1)

➤ A snake's body is very **supple**. It can bend easily. It can fit in small spaces. (#2)



## COMMON PREFIXES

Un-	Not, opposite of	Unwilling, unmanageable
Re-	Again	Return, redo
In-, im-, ir-, ill-	Not	Inaccurate, immaculate, irresponsible, illegitimate
Dis-	Not, opposite of	Disagree, disrespectful
En-, em-	Cause to	Enable, embrace
Non-	Not	Nonsense
In-	In or into	Inside, interior



## COMMON SUFFIXES

-ion	Act of	Rebellion
-able, -ible	Capable of	Sensible
-er	One who does	Swimmer
-est	Most	Largest
-full	Full of	Careful
-less	Without	Careless
-ly	Like, similar to	Motherly
-ment	State of	Encouragement
-ous	Full of	Wondrous

## COMMON ROOTS

astro	Star	Astronaut
cardio	Heart	Cardiac
demos	People	Democracy
dyna	Power	Dynamic
geo	Earth	Geology
magni	Great, big	Magnificent
Man(u)	Hand	Manuscript
Mono	One	Monotone
Tain/Ten	Hold	Container

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### TEACHING STUDENTS TO USE FIX-UP STRATEGY 4: COGNATES

- Cognates are words in two languages that share a similar meaning.
- 30-40% of words in English have a related word in Spanish.
- Lots of languages have cognates in English (e.g., Arabic).
- Teaching students to recognize cognates supports comprehension.
- Not all words that look the same have similar meanings. Always check for false cognates.
- Fix-up strategy #4 is only used with students who speak a language other than English.

(Colorin' Colorado, 2007)

## EXAMPLES OF COGNATES

English	Spanish	Definition
capital	capital	A city or town in which government leaders and others meet and work.
communication	comunicación	Sharing ideas with others
community	comunidad	A place where people live and work near each other
desert	desierto	A dry place with very little rainfall.
invention	invención	Something that has been created for the first time
island	isla	Land that has water all around it

Cognate resource: [www.cognates.org](http://www.cognates.org)

## EXAMPLES OF FALSE COGNATES

English	Spanish
globe	globo (balloon)
pie	pie (foot)
rope	ropa (clothes)
soap	sopa (soup or pasta)
large	largo (long)
exit	éxito (success)
embarrassed	embarazada (pregnant)

When Luisa looked at the **globe**, she was surprised to see that Antarctica was so large.

## ENGLISH LEARNERS IN SOCIAL STUDIES FIGURING OUT CLUNKS



## OVERHEARD IN A CLASSROOM:

Text selection (middle school science):

*The fisherman of Minamata began protesting against Chisso Corporation in 1959. They demanded compensation, and that Chisso quit dumping toxic waste.*

Daniel: What does compensate mean?

Alex: I am not sure, but I know what "recompensa" means in Spanish — it means to pay back someone when you hurt them.

Daniel: Oh so you think they wanted money from the company?

Alex: Yeah that makes sense. I guess it's pretty cool to be bilingual.

## ACTIVITY: CLUNK PRACTICE

Is there a middle ground between an obsession with aging and an intelligent commitment to a healthier lifestyle? How much time, money, energy, and angst should we devote to the fight against **senescence**?



Fix-up strategy?

## CLUNKS: LESSON PLANNING ACTIVITY

1. On your own, review *Stop Googling. Let's Talk*.
2. Underline words that your students might identify as clunks.
3. Discuss with a partner:
  - Note the fix-up strategy(ies) that could be used to figure out the meaning of the words.
  - Note words that cannot be figured out with a fix-up strategy.
  - Which words might you pre-teach?



## THE TEACHER'S ROLE IN HELPING STUDENTS ACQUIRE NEW VOCABULARY WITH CSR

- Help students be "ok" with finding clunks.
- Prepare a list of possible clunks to offer students if they struggle to find their own. If they can define the word, it is NOT a clunk.
  - 1, 2, 3, & 4
  - Many students become overly reliant on context clues.
- Support students to use a variety of fix-up strategies
- Encourage students to use their group members as resources.
- Listen in on groups and check students' learning logs:
  - check for misunderstandings
  - revisit common clunks as needed
- Review key vocabulary words during whole-class wrap-ups.
- Ask students to do follow-up activities in class or as homework to reinforce key words.

## TEACHING CLUNKS: "I DON'T HAVE ANY CLUNKS!"

Don't *think* they have any clunks

- Sometimes student think they know a word because it sounds familiar: Help students understand that a clunk is a word you can't define.
- Sometimes students aren't reading carefully enough to find clunks: Help students practice finding clunks.

Don't want to *look* like they don't know

- Good readers have clunks: Model and reinforce your own clunks. Create a safe environment.

Just don't have any clunks...

- Check the reading level: Readings that are too easy or too difficult may yield few clunks.



CSR STRATEGIES:  
GET THE GIST



## WHAT IS GET THE GIST?

★ Get the Gist is a main idea strategy.

### Steps to Get the Gist

1. Name the "who" or "what" the paragraph is mostly about.
2. Identify the most important information about the "who" or "what".
3. Write the gist in *about* 10 words.

## WHY IS GET THE GIST IMPORTANT?

People do not remember everything they read.

Good readers process individual ideas but remember just the most important parts—the main ideas of what they read (and perhaps some interesting details)

During reading, strong readers:

- Implicitly generate a gist after each paragraph.
- Make inferences and connections between paragraphs. (Pressley, 2006)

## WHEN IS GET THE GIST USED?

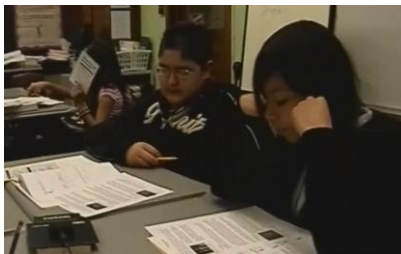
Get the Gist is used during reading.

Students stop and find the meaning of their clunks and then figure out the gist *at the end of each section of text*.

## WHY IS GET THE GIST IMPORTANT FOR ALL STUDENTS, INCLUDING ELLS?

Scaffolds comprehension  
Increases memory  
Involves higher level thinking  
Increases metacognition  
Provides a purpose for reading  
Allows teachers to monitor comprehension

## GET THE GIST IN ACTION




### THE DISCOVERY OF HELIOBACTER PYLORI

BY DIANA J. ARYA

Have you ever felt pain in your stomach? Most of the time, stomach pains are temporary and go away quickly. The pain from peptic ulcer: the most common type of ulcer, is very different. People who have peptic ulcers feel a sharp burning sensation in or near their stomach. They often do not want to eat, and have a difficult time sleeping at night. This burning sensation intensifies directly after meals, and, sometimes involves vomiting. People all over the world suffer from peptic ulcers.



Most Important Who or WhatImportant InformationGist


**The Discovery of Helicobacter Pylori**  
By Diana J. Arya

Have you ever felt pain in your stomach? Most of the time, stomach pains are temporary and go away quickly.

The pain from peptic ulcers, the most common type of ulcer, is very different. People who have peptic ulcers feel a sharp burning sensation in or near their stomach. They often don't want to eat, and have a difficult time sleeping at night. This burning sensation intensifies directly after meals, and sometimes involves vomiting. People all over the world suffer from peptic ulcers.



## ACTIVITY: GET THE GIST



Assign a Gist Expert and use the role card to facilitate Gist writing for Section II – Earth friendly fabrics.

- Each person writes his/her own gist individually.
- Be sure to SHARE and DISCUSS your gists.

Select one gist or re-write a group super gist.

- Be prepared to share.

## STUDENTS' GISTS: SECTION II

1. Scientists use synthetic fibers are made from petroleum extracted from the ground.
2. Some companies recycle while others use chemicals, materials and other stuff.
3. Many other companies make clothes that hurt the earth, but earth friendly fabrics help the earth.
4. Clothes and shoes involves chemicals and energies but now involves corn sugar.

Use "gist" language

Teach students to evaluate quality of gists

Justify thinking using text

## AVOID PITFALLS: GIST

Write a gist for the following paragraph.

Sloths have long gray or brown hair that blends in well with the surrounding environment, making it difficult for predators, such as the jaguar, to see them. They eat leaves and buds. A sloth's gestation period is almost six months. They do most things upside down: eat, sleep (an average of 15 hours per day), mate, and give birth. The probable maximum sloth lifespan is between 30 and 40 years.

## TEACHING GIST

Be sure text has main ideas (remember the "sloth").

Teachers should prepare gists for each section prior to the lesson.

Teachers should evaluate the quality of gists.

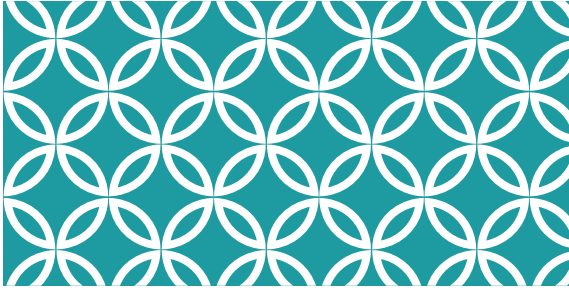
Gists should be complete sentences.

Don't start gists with: This section is about...

Teachers or students get too hung up on 10 words or less. A few more is okay.

Encourage discussion. Students need to say why gists have the most important information using the text as evidence.

Struggling readers benefit from hearing lots of examples from teachers and peers as they learn how to distinguish main idea from details.



## CSR STRATEGIES: WRAP-UP



### WHEN IS WRAP UP USED?

Wrap Up occurs only once during a CSR lesson, after students have finished reading the day's text.



## What is Wrap up?

### 1. Question Generation:

- Think of important questions and write them in your learning log.
- Write questions and answer questions.
- **Ask and answer questions with your group.**

### 2. Review:

- Think about what you just read.
- Write the most important ideas from the passage.
- **Share with your group. Provide evidence to support your ideas.**
- Teacher leads a whole class wrap-up.

### WHY DO A WRAP-UP?

- Asking and answering questions helps students to identify main ideas, summarize text, monitor their understanding, integrate information from different parts of the text, apply higher-level thinking skills (e.g., making inferences), and remember what they read.
- Teaching students to review the most important information they learned helps them to remember what they have read. Asking students to justify their responses helps students to be more active, engaged readers and requires higher level thinking.



Question Type	Skill Practiced
<b>Right There:</b> Answer is "right there" in the text.	Remembering facts Learning new content Focusing on most important information
<b>Think and Search:</b> Answer is found in more than one place in the text.	Remembering information Learning new content Remembering several events in a sequence Integrating information Synthesizing information
<b>Author and You:</b> The answer is in the text and in your head.	Writing and answering inference questions (e.g. What does the passage suggest about the use of land?) Making connections



## WHY IS QUESTION GENERATION IMPORTANT FOR ALL STUDENTS, INCLUDING ELLS?

Figure 4. Student language functions categorized by Bloom's Taxonomy

### Question generation:

- Provides opportunities to use academic language, including new vocabulary learned in the passage.
- Promotes higher level thinking.
- Helps students review the content they have learned, aiding memory.
- Supports the use of text structure to find information.
- Helps students gain a sophisticated understanding of the text through different levels of questioning.



### What's That Smell?

Have you ever remembered something with your nose? Maybe the smell of hot dogs gets you daydreaming about being at a baseball game. Or the smell of burnt marshmallows reminds you of a night around a campfire. Scientists know that the sense of smell can trigger powerful memories. Wouldn't it be cool to somehow bottle those memories? That's exactly what perfumer Mark Crames tries to do. His company, Demeter Fragrance, makes more than 200 scents.

Perfume scented with your favorite memory.



"Imagine every smell in the world as a musical note," Crames told TFK. "We try to combine those notes to make a melody." He has created perfumes inspired by Play-Doh, thunderstorms, and even earthworms!

(From: *Time For Kids: World Report*, May 2, 2008, Volume 13, Issue 26)

### QUESTION ANSWER RELATIONSHIPS (QAR): QUESTION TYPES

**Right There:** The answer is easy to find in the reading. The words used to make up the question and the words used to answer the question are right there in the same sentence. Answering "right there" questions is usually easy and requires little thinking or effort.

*Q: According to the author, baseball might remind you of what smell?*

*A: The smell of hot dogs might remind you of baseball.*

(University of Texas Center for Reading and Language Arts [UTCLRA], 2003; Blachowicz & Ogle, 2001; Bos & Vaughn, 2002; National Institute for Literacy [NIFL], 2001; National Reading Panel [NRP], 2000; Raphael, 1996)

## WHAT'S THAT SMELL?



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### QUESTION ANSWER RELATIONSHIPS (QAR): QUESTION TYPES

**Think and Search:** The answer to the question is in the reading. The answer is made up of information that comes from more than one sentence or paragraph. You have to put together information from different parts of the reading to find the answer.

*Q: How did the scientists and perfume makers work together?*

*A: Scientists know smells are related to memories and so the perfume maker decided to make those scents into perfumes you can buy.*

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## QAR QUESTION TYPES (CONT.)

**The Author and You:** The answer to the question is not in the reading. Think about what the author tells you and what you already know. Connect to purpose/essential question/CLO.

*Q: What would persuade you to buy a memory perfume?*

*A: I would buy a perfume if it smelled like a root beer float because I used to drink them with my grandmother and that is a memory that I have a strong connection to.*

[\*connected to LA unit's essential question related to persuasion]...

## QUESTION GENERATION USING QUESTION STEMS

Question stems provide a scaffold for question generation.

Examples:

- What is \_\_\_\_\_?
- What was the turning point in \_\_\_\_\_?
- Who was \_\_\_\_\_ and what did he (or she) do?
- What were some of the reasons for \_\_\_\_\_?
- What were some of the problems faced by \_\_\_\_\_?
- Why is \_\_\_\_\_ a good or a bad thing?
- Why do you think \_\_\_\_\_ happened?

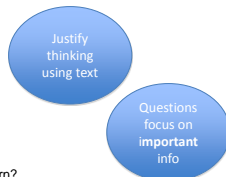
## EXAMPLES OF STUDENT QUESTIONS

### Proficient

What are three items used to make organic yarn?  
 What's the difference between organic clothes and man-made clothes?  
 Why might some companies not want to provide earth friendly fabrics?

### NOT Proficient

Who is involved with this?  
 Where do people make clothes?  
 Where is this taking place?  
 Who wrote this article?



## REVIEW IN ACTION



## LESSON PLANNING PRACTICE



Use Earth Friendly Fabrics and the Question Stems, and the Cue Cards.

Write one question and the answer (count off by threes) in your learning log.

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## REVIEW

### Review Strategy

1. Review your learning log and *think* about the most important information from the passage.
2. *Write* the most important one or two ideas from the reading. Use complete sentences.
3. *Share* your ideas and say why your ideas are the most important (provide evidence).
4. The teacher provides a whole class wrap up.
  - Review content.
  - Make connections.
  - Review strategies.

## WHOLE CLASS-WRAP UP

Ask students to share review statements.

Provide a quick summary.

Connect to learning objectives.

Follow up with a short activity that focuses on content or strategies...or both!

## REVIEW: ACTIVITIES TO REINFORCE CONTENT LEARNING

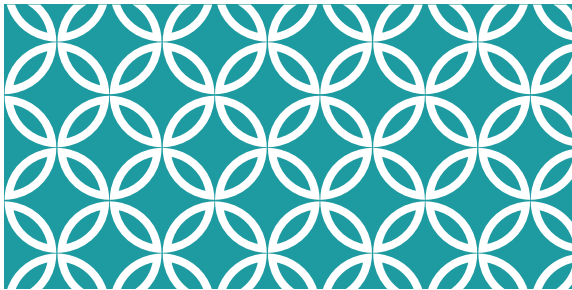
Revisit learning objectives.

Have students write a longer summary of the text or use another writing activity.

Create a concept map connecting concepts in this reading or connecting these concepts with other topics in your curriculum or unit of study, such as an essential question or big idea.

Provide additional information about important vocabulary terms. For example, create a vocabulary web with the term "Sustainable Development."

Play a game with the questions or give a "quiz" using student generated questions.



## COOPERATIVE LEARNING

## REVIEW: ACTIVITIES TO REINFORCE STRATEGIES

Focus on one strategy and conduct a mini-lesson.

- For example, you might highlight the gists from one section and reinforce information contained in high quality gists.
- Or, identify key clunks students had and discuss which fix-up strategies were used to solve the clunks.

Have students review their learning logs before handing them in to be sure that all information is included and done well.

Have students debrief about the functioning of their group by identifying one thing they did well and one thing they need to work on next time. Share with the class.

Use Send a Problem or Numbered Heads Together to review key responses.

## Cooperative Learning vs. Group Work

### Cooperative Learning

Students are strategically placed in groups (in CSR, heterogeneous groups).

Each member has an assigned role.

Group task is very specific.

Each individual is responsible for his/her own learning and group learning.

Students utilize more higher-order thinking skills than they could have accessed by themselves.

### Group Work

Students work on their own assignments while sitting at the same table.

Students placed randomly in groups.

Group roles and tasks undefined.

Only individual or only group accountability.

Each student does less work than they would have done on their own.

## CSR COOPERATIVE LEARNING STRUCTURE:

When students have learned the CSR strategies, a typical class looks like this:

Students are seated in heterogeneous groups of about 4 students.

- Groups are **predetermined** by the teacher.  
(DRA, Access, TCAP/PARCC, Interims/Benchmarks, Management)
- Each student is assigned a CSR role.
- Students have Learning Log and pencil ready

The teachers guides the group through the preview.

## CSR COOPERATIVE LEARNING STRUCTURE:

When it is time to read, students use their cue cards to guide them through the CSR process.

- First, the leader begins by asking someone in the group to read. Reading is generally out loud in small groups
- Other students perform their guiding roles.

When students have completed their small group wrap up, the teacher brings the class back together to do a brief whole group wrap up.



## CSR- COLLABORATIVE LEARNING & CLASSROOM MANAGEMENT

CSR supports classroom management skills.

Routine and structure are built in to many aspects of CSR.

Provide direction at the beginning of class.

The important thing is having a routine so CSR flows smoothly like everything else.

Group work expectations must be clear and used consistently.

### EXAMPLE: CSR BEGINNING CLASS ROUTINE

Directions:

- 1 Hold questions until after you have completed your job.
- 2 Look at the group list on the wall and determine what group role you have.
- 3 Once you know your group role, do the job listed below.
  - ✓ LEADERS: Make sure everyone completes the top of the Learning Log and the "Warm Up" question.
  - ✓ CLUNK EXPERT: Move the desks for your group into a group of 4.
  - ✓ GIST EXPERT: Get the role cards and table materials and make sure each card goes to the right person.
  - ✓ QUESTION EXPERT: Get a reading and a Learning Log from my desk for each group member.

## POSSIBLE CSR RULES

Talk only to the members of your group.

Talk only about CSR.

Use "6-inch voices."

When you have a question, have the leader raise his or her hand to get help from the teacher.

## GET READY: ROLES

Assign roles in group of 4.

Review your role card and discuss in your group.

How do the roles work together?

## GO: TRYING CSR



- Get ready to try CSR all the way through.
- In your group of 4, you will need:
  - The Coming Merging of Mind and Machine* text
  - Learning log
  - Cue cards
- The presenter will lead the preview.**

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

Today's Topic Merging mind and machine

Before Reading: Preview

Brainstorm: Connections to prior knowledge

- What do you know about the increasing ability of technology?
- (How can technology make your life easier?)

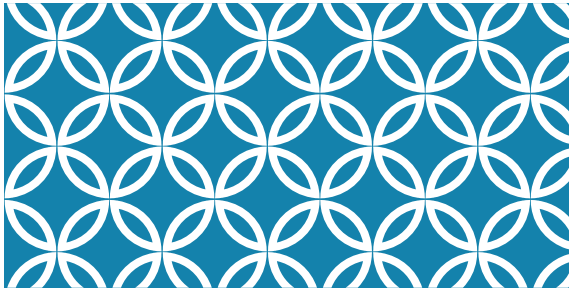
Key Vocabulary

merge= to combine or blend



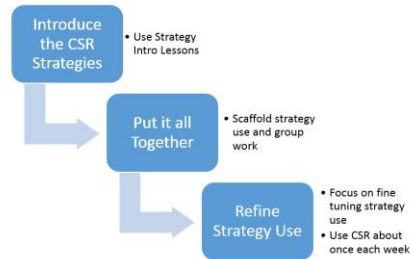
Purpose:

Understand how technology influences our lives now and in the future



## SUPPORTING CSR IMPLEMENTATION IN YOUR CLASSROOM

### CSR PROGRESSION



### USING THE CSR ONLINE TOOLKIT

The Online Toolkit is FREE for all teachers.

The first time you use the Toolkit, create an account.

Teachers new to CSR take the online course (all modules).

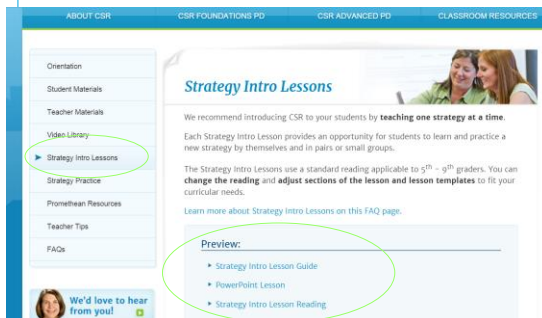


<http://toolkit.csrsolorado.org/>

### USING THE TOOLKIT: SOME EXAMPLES. TO REVIEW PREVIEW — SEE CSR FOUNDATIONS PD: PREVIEW



### FOR PREVIEW INTRO LESSON FOR STUDENTS — GO TO CLASSROOM RESOURCES: STRATEGY INTRO LESSONS



### PREVIEW INTRO LESSON



\*Includes student handouts and lesson guide

## NOTES ON USING THE ONLINE TOOLKIT

### Who can use the Toolkit?

- All teachers (and anyone else who is interested) can use the toolkit.
- Teachers who have not attended a face-to-face CSR PD MUST go through the online learning modules.

### How do I use the Toolkit myself?

- Visit the Advanced Modules.
- Download resources, see examples of teachers and students, find additional ideas to fine tune instruction, review material...

## ONLINE TOOLKIT (CONT.)

### How can I use the Toolkit with my colleagues?

- Create a study group. Teachers do one module on their own, try a strategy with students, and then come back to discuss.
- Teachers do modules together in groups, with a facilitator to answer questions.
- Watch video examples together and discuss.
- Use the modules as a coaching tool. Suggest portions of the Toolkit to review.

## WHAT IS NEXT FOR YOU??

Share with a partner. What makes sense for this year?

What are you excited to take back to your classroom?

How will you collaborate?

What additional support do you need?



WHAT QUESTIONS DO YOU HAVE???

THANK YOU!  
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