



INTC

Illinois New Teacher Collaborative

2nd Annual Beginning Teacher

STEM Conference

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• Interactive Read Alouds

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Taking the Time to Read Aloud

Braun, P. 2010. Taking the Time to Read Aloud. *Science Scope*. 24 (45-49).

Teaching science in middle school is fraught with challenges.

The textbooks are dense with unfamiliar concepts, the vocabulary unique and difficult, and the students reticent to talk about the text (Fang 2006).

Often, the teacher does not have the necessary hands-on materials, and has no supplementary texts in the classroom.

Because there is so much to cover in the curriculum, every minute in class is valuable (Abell and Lederman 2007).

So, how can reading aloud to middle school students be a valuable use of time?

Short and Sweet Example

Think Turn & Talk

What do you know about song birds?

Zebra Finch Song

How do you think songbirds learn their
songs?

Anticipation Guide

Agree or Disagree?

Thumbs up? Or Thumbs down?

- Birds are born knowing their songs.
- Birdsong learning is much like language acquisition in children
- The brain of a young zebra finch is inactive during sleep
- Sleep plays an important role in learning in humans and other mammals

Listen to the Read Aloud

Songbirds *learn songs in their sleep*

Science Scope October 2010 Vol. 34 Number 2

Why read aloud?

- Expose students to vocabulary
- Provide a rich language environment
- Engage students in texts
- Focus students on a topic
- Build background
- Introduce author's style and language
- Show students you care
- As Goldstein said today...

Beginning Unit on Viruses and Their Effect on Humans

Newly discovered gut virus lives in half the world's population

Date: July 24, 2014

Source: San Diego State University

Odds are, there's a virus living inside your gut that has gone undetected by scientists for decades. A new study has found that more than half the world's population is host to a newly described virus, named crAssphage, which infects one of the most common gut bacterial species, Bacteroides. This bacterium is thought to be connected with obesity, diabetes and other gut-related diseases.

What do we need to learn so we can deal with viruses that live in our systems?

Germs

*Pox heard Nurse
coming before she arrived.*

*“Incubating time’s up,
Chickenpox 12,087-2!” she yelled.
“Time you learned how to be a proper germ!”*

Germs Make Me Sick
by Melvin Berger



Reading *Crispin* to 6th Graders

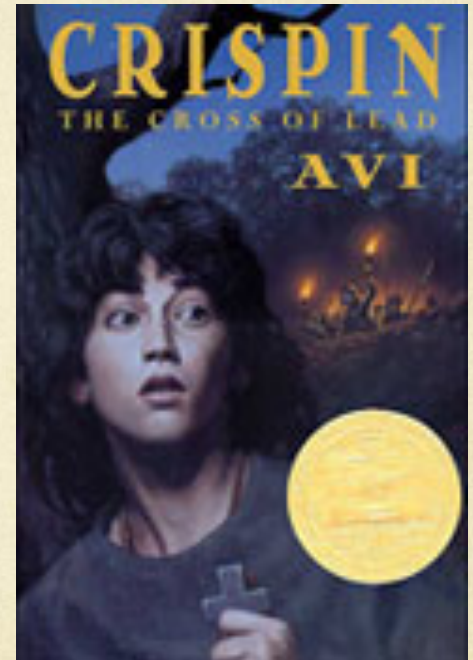
Avi writes:

Like a good number of folks who live in Denver, Colorado, my family and I often go up into the mountains. It can be a very long drive, so we listen to the radio, or music, or, one of our favorites things, lectures on history, literature, or art. One day we began to listen to a series of lectures about the late middle ages. The lecturer was Teofilo Ruiz, a brilliant historian who teaches at the University of California in Los Angeles.

I found the lectures so fascinating I was sure there was a story to be told, and I began to read more and more about that time. Out of this reading I found the story that would eventually become *Crispin: The Cross of Lead*.

In the course of writing the book I contacted Professor Ruiz, and we became good friends. He even read *Crispin* in manuscript and was able to point out some historical errors I had made. When the book was published, I dedicated the book to him.

Finally, when the news came that *Crispin* won the Newbery Award, he was among the very first people I called to share the news.



*The Canon: A Whirligig Tour of
the Beautiful Basics of Science*
Natalie Angier

pp. 113-14 The law of the conservation of energy, also known as the first law of thermodynamics...

Arrowhawk is one of the most beautiful books I have ever read aloud.

Written by Lola M. Schaefer, it is the story of a hawk struggling to survive.

The illustrations created by Gabi Swiatkowska using acrylic on cold-pressed paper are breathtaking.

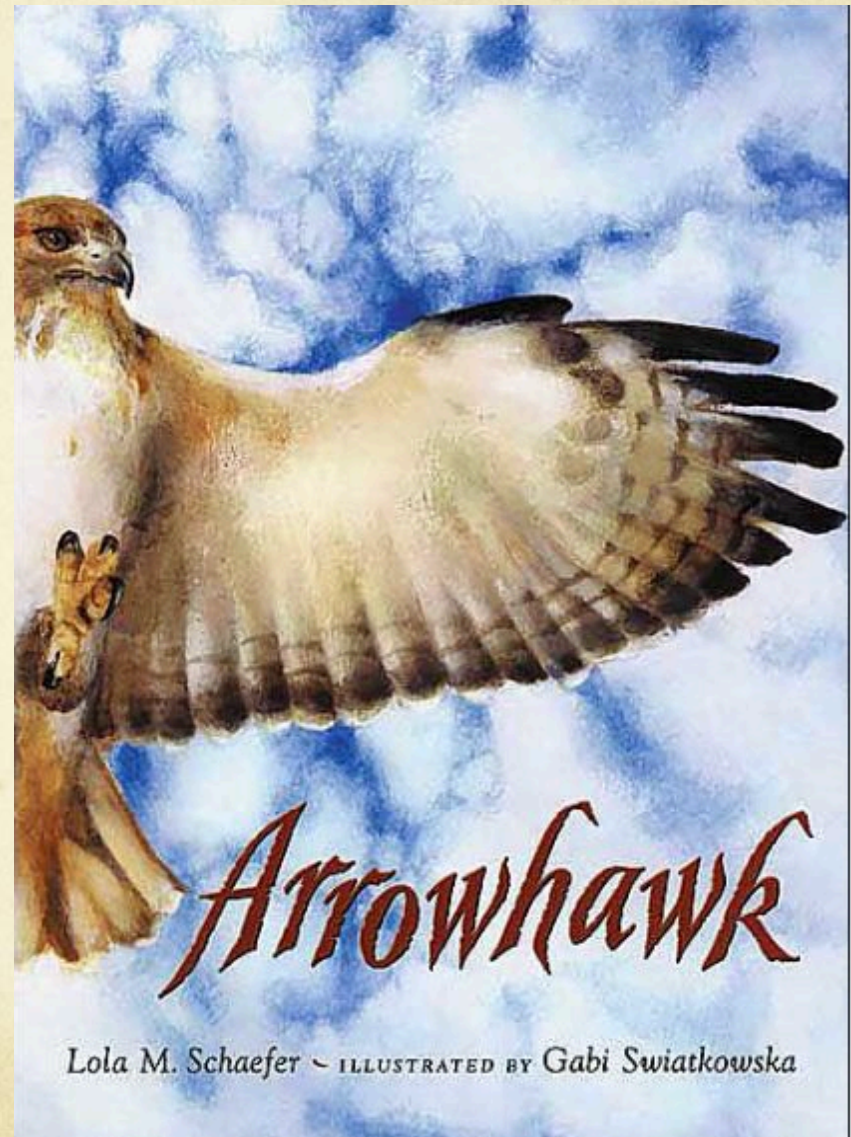
Students ignore the bell when I read this one.

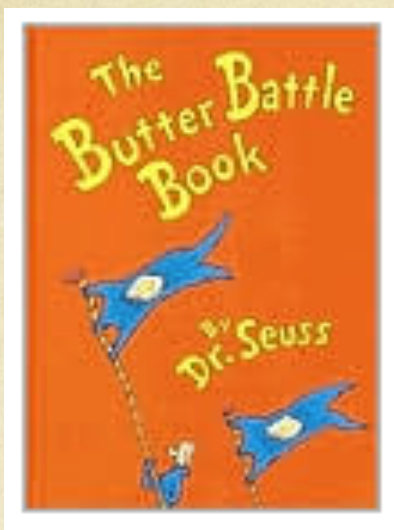
Listen to this text as I read aloud, stopping at several places to illicit responses from you.

Say something

Write something

Draw something





Societal Connection: We have many problems in our society today. One of them involves narrow mindedness, or group supremacy.

Prereading discussion: What personal, or societal connections are you aware of?

Oral Presentation of the story: via video, read alouds, or choral reading.

Transition: Now you have a chance to reflect on the concept of narrow mindedness or group supremacy, write a rough draft in response to the story. You may need to do research on historical, or current events. But for today, pool your group knowledge.

Math Stories to Share

Counting Crocodiles by Judy Sierra

How Many Feet in the Bed? By Diane Johnston Hamm

Multiplying Menace by Pam Calvert

The Greedy Triangle by Marilyn Burns

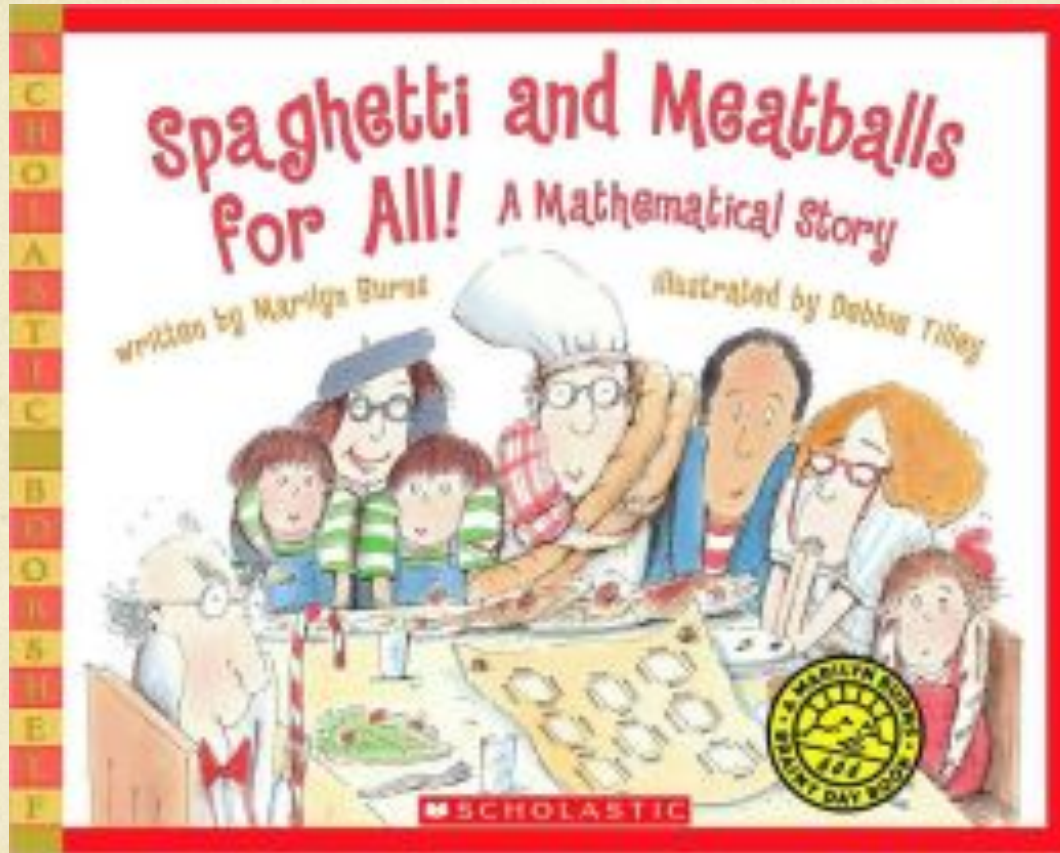
One Grain of Rice: A Mathematical Folktale by Demi

If You Hopped Like a Frog by David M. Schwartz

Saturn by Semour Simon

Spaghetti and Meatballs for All

by Marilyn Burns



Mrs. Comfort prepared enough meatballs for an army.

Decided to invite all her relatives for dinner.

30 relatives plus Mr. and Mrs. Comfort

32 relatives

We will need 8 square tables

We have 8 tables with 4 sides each. These should accommodate 32 diners.

2 arrive ... sit at any table and make yourself comfortable.

2 more ... want to sit with the first two, no problem.

4 more arrive...let's just push tables together

No no, that won't do...but they insisted.

6 more arrive...we have to sit all together so arrange the tables so they can all sit together

No no, that won't do...but they insisted.

Uncle Joe arrives alone.

Come join us at this table.

4 more of the relatives streamed in, but when they tried to find a seat, the table had only room for one more.

No no, that won't do...please rearrange the tables.

What do you think the relatives will do?

Aunt Maggie arrived with her husband and 9 children.

By this time Mrs. Comfort was really worried...how must the tables be arranged so all the relatives and Mr. and Mrs. Comfort can all sit to enjoy the 100 meatballs Mrs. Comfort prepared to share?

Really short read alouds...

27 ducks are marching to the pond. 5 lose their way, 13 return, and 9 of them make it to the pond. What happens to the rest of them?

Answer: None are remaining! ($27-5=22$, $22-13=9$, $9-9=0$!!!)

Read more at Buzzle:

<http://www.buzzle.com/articles/math-riddles-with-answers.html>

A frog fell into a hole that was $14\frac{1}{2}$ feet deep. He could jump 3 feet, but he slid back a foot each time he jumped. How many jumps does it take him to get out of the hole?

Answer: Every 3 feet jump accompanied by a 1 foot slide equals 2 feet high jumps each; at this rate, so the 7th jump, starting at 12 feet, brings him to 15 feet, which takes him out of the hole.

Read more at Buzzle:

<http://www.buzzle.com/articles/math-riddles-with-answers.html>

Read Aloud Text Set

Q is for Quark by David M. Schwartz

*BOMB: The Race to Build—and Steal—the
World's Most Dangerous Weapon* by Steve
Sheinkin

The Butter Battle Book by Dr. Seuss

Read Aloud Physics to 8th Graders

*The Effects of Reading Nonfiction Aloud on the Vocabulary
Acquisition of Middle School Students (Braun 2009)*

Pure read aloud...no interaction

Topics read aloud: Newton, Einstein, Basketball, Super
Heroes, Golf and ROLLER COASTERS

The Physics of Roller Coasters



The Physics of Roller Coasters



Vocabulary on Wordle



Research: Vocabulary Acquisition Rates...

Nagy, Anderson, and Herman (1987) review of studies

300,000 - 600,000 words read outside school

Reading 15 minutes a day in school, add 600,000 words

1,000,000 words

16,000 to 24,000 are unknown to students

Even with only 5% chance of learning new words in context, students will learn from 800 to 1200 words a year.

There isn't enough time in a day...

Nagy et al (1987) also reported that children learn between 3,000 and 5,000 words a year.

Direct instruction cannot possibly account for the large numbers of words students learn in a year.

There isn't enough time in the day or school year to teach so many words. (Word a day? 10 words a week? Vocabulary in content areas. New words in literature?)

SO.....

Provide a rich language environment

Krashen (1989) Input Hypothesis Input: reading and listening results in vocabulary growth.

Using read alouds, wide reading, free reading, oral language activities in science units, talk, writing...

Multiple exposures to words contribute to the acquisition of vocabulary.

Isabel L. Beck (2001b)

Levels of Word Knowledge

No knowledge

General sense

Narrow, context-bound knowledge

Knowledge but slow to recall

Rich decontextualized knowledge

Student example *friction* Braun(2009)

LEVEL

STUDENT WRITTEN RESPONSE

Never saw it

something that isn't true

Heard of it

stopping a bike or car creates friction

Recognize it

friction happens when two things are rubbed together

Know it

a created force that slows down a moving object

McKeown & Curtis (1987)

Where do I find read alouds?

American Library Association www.ala.org

Childrens Literature www.childlitassn.org

Conferences

Illinois Reading Council www.illinoisreadingcouncil.org/conference

Friends

Family

Libraries, book stores, and garage sales

Alphabet Books

G is for Googol by David M.
Schwartz

Q is for Quark by David M.
Schwartz

Prairie Numbers: An Illinois
Number Book

Literacy Lesson

Reading

Writing

Speaking

Listening

Viewing

Visualizing

Literacy Lesson

All living things strive to survive...

Quick Write:

What does this mean to you?

What do you know about

Red-Tailed Hawks?

Brainstorm, Share, Add to List



Red-Tailed Hawk by Gary92029

With a partner list facts from the video

Arrowhawk: read aloud

Predict

Write something

Draw something

Say something

Affective responses

Red-tailed hawk From Wikipedia, the free encyclopedia

The **red-tailed hawk** (*Buteo jamaicensis*) is a bird of prey, one of three species colloquially known in the United States as the "chickenhawk," though it rarely preys on standard sized chickens.[2] It breeds throughout most of North America, from western Alaska and northern Canada to as far south as Panama and the West Indies, and is one of the most common buteos in North America. Red-tailed hawks can acclimate to all the biomes within their range. There are fourteen recognized subspecies, which vary in appearance and range. It is one of the largest members of the genus *Buteo* in North America, typically weighing from 690 to 1,600 g (1.52 to 3.53 lb) and measuring 45–65 cm (18–26 in) in length, with a wingspan from 110–145 cm (43–57 in). The red-tailed hawk displays sexual dimorphism in size, with females averaging about 25% heavier than males.[3] The bird is sometimes referred to as the **red-tail** for short, when the meaning is clear in context.

Nonfiction Article

underline facts

10 word summary

personal response

“Born Free” a Red-Tailed Hawk Chick by Patrot36

Add a line retelling
Groups of 3
Sign in on one sheet
Pass paper around
Each person adds a line

Create a Book

8 page book: folded paper

p1 cover: red-tailed hawk picture and title, author

p2 title page

p3 prior knowledge

p4 facts, at least ten

p5 feelings about the red-tail

p6 labeled diagram of red-tail

p7 resources

p8 further questions

Assessment of Book Project

Product Descriptor

Folded book	5pts
Followed directions for each page	8pts
Neatly written and colored	5pts
Completed on time	2pts
Accurate information	20pts
Mechanics	10pts
Goes beyond	(5pts)

TOTAL /50

Possible writing activities for BBB...

- Write a poem about the feelings of the grandson as his grandpa retold the story.
- Continue the story beyond the Zook and the Yook on the wall with the bombs.
- Analyze and compare this Dr. Seuss satire to a historical or political event.
- Consider the factors which cause so many people, or groups, in our society to be antagonistic towards one another. Select two or three and write about each one of them in detail.
- Consider the factors which cause so many people, or groups, in our society to be antagonistic towards one another. Select two or three and write about each one of them in detail.
- Compare how walls have been used around the world.
- Argue for or against constantly matching weapons in this story. Connect to modern day examples, or historical events.
- Take a position for or against the Robert Frost quote: Walls make good neighbors. Include personal, historical, or current events to support your position.
- Write a narrative from the point of view of the grandson. Think of the escalating conflict. How did the conflict start? Who was right? How did group members react? How did the story end? Include details from the story as well as feelings or reactions of the grandson

References

Beck, I.L., & McKeown, M. G. (2001b). Text talk: Capturing the benefits of read-aloud experiences for young children. *Reading Teacher*, 55(1), 10-20.

Braun, P. A. (2009) *The Effects of Reading Nonfiction Aloud on the Vocabulary Acquisition of Middle School Students*

Braun, P. A. (2010). Taking the time to read aloud. *Science Scope* 34:2, 45-49.

Blachowicz, C. L. A., & Fisher, P. J. (2000) Vocabulary instructional In M. L. Kamil, B. P. Mosenthal, D. Person, & R Barr (Eds.), *Handbook of reading research volume III*, 503-523.

Fang, Z. (2006) The language demands of science reading in middle school. *International Journal of Science Education*, 28, 491-520.

Jenkins, J. R., Stein, M. I., & Wysocki, K. (1984). Learning vocabulary through reading. *American Educational Research Journal* 21, 767-787.

Krashen, S. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. *The Modern Language Journal*, 73, 440-464.

McKeown M. G., & Curtis, M. E. (1987). *The nature of vocabulary acquisition*. Hillside, NJ: Lawrence Erlbaum.

Nagy, W. E., Herman, P. A., & Anderson R. C. (1987). Learning word meanings from context during normal reading. *American Educational Research Journal*, 24. 237-270.

Seuss, Dr. (1984). The butter battle book. *Random House, Inc.* NY.

Wordle-Create, www.wordle.net/create.