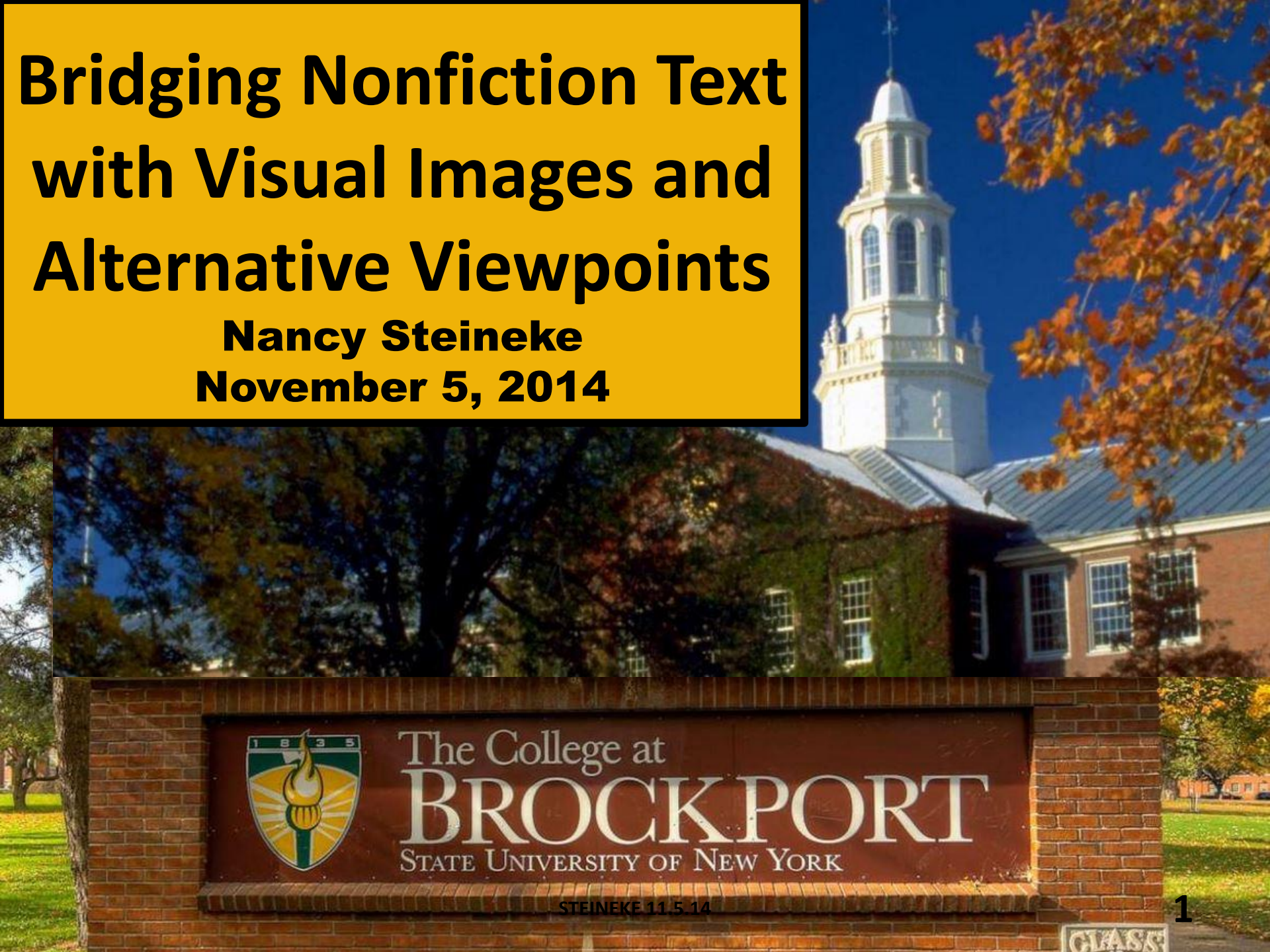


Bridging Nonfiction Text with Visual Images and Alternative Viewpoints

Nancy Steineke
November 5, 2014



Harvey "Smokey" Daniels / Nancy Steineke

Texts AND Lessons

for CONTENT-AREA READING

WITH
MORE
THAN
75
ARTICLES

The New York Times • Rolling Stone

HARVEY "SMOKEY" DANIELS • NANCY STEINEKE

TEACHING THE SOCIAL SKILLS OF ACADEMIC INTERACTION

Step-by-Step Lessons for
Respect, Responsibility, and Results

35
Projectable
Lessons!

Grades 4-12

With Illustrations by
SATYA MOSES



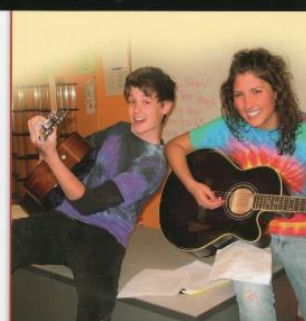
CI CORA LITERA

Foreword by Ellin Oliver Keene

NANCY STEINEKE

ASSESSMENT LIVE!

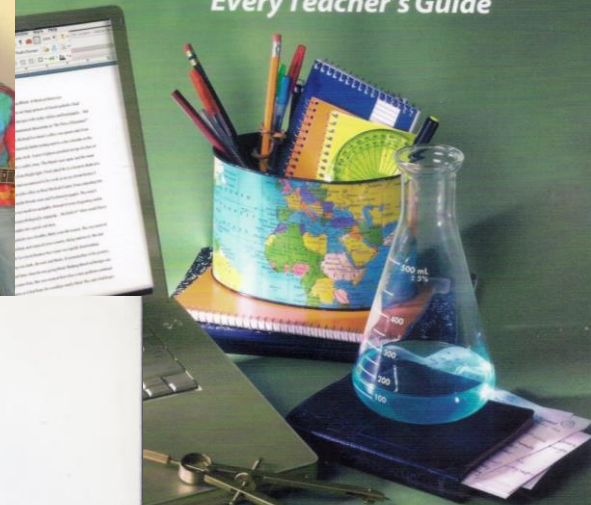
10 Real-Time Ways
for Kids to Show What
They Know—and
Meet the Standards



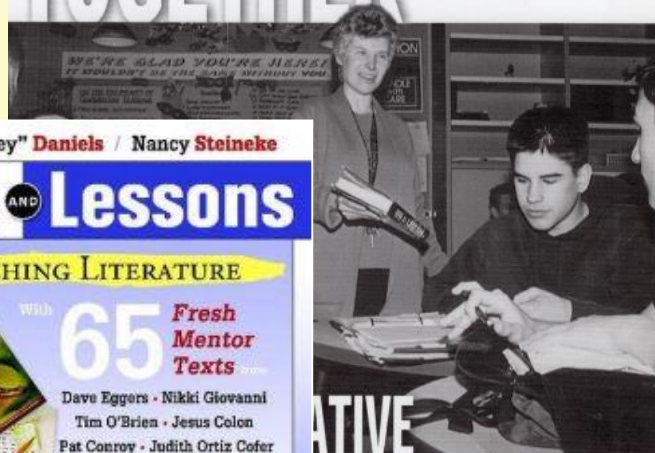
Harvey Daniels / Steven Zemelman / Nancy Steineke

Content-Area Writing

Every Teacher's Guide



READING & WRITING TOGETHER



Harvey "Smokey" Daniels / Nancy Steineke

Texts AND Lessons

for TEACHING LITERATURE

With
65 Fresh
Mentor
Texts

Dave Eggers • Nikki Giovanni
Tim O'Brien • Jesus Colon
Pat Conroy • Judith Ortiz Cofer
and many more

- ✓ Selections That Spark Interest and Promote Joy in Reading
- ✓ Lessons That Support Best Practice Teaching and the Common Core State Standards
- ✓ Comprehension Strategies That Engage and Empower Students



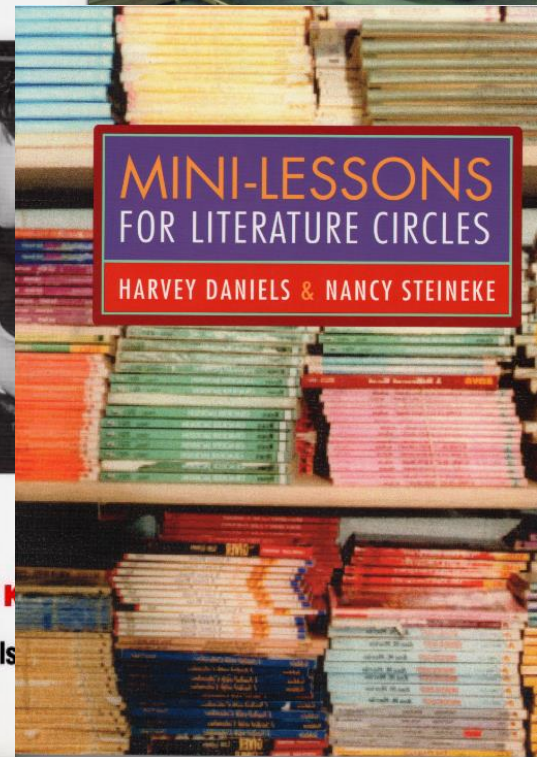
NANCY STEINEKE

Foreword by Harvey Daniels

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MINI-LESSONS FOR LITERATURE CIRCLES

HARVEY DANIELS & NANCY STEINEKE







Today you will research how penguins are rescued after a large oil spill. You will read two articles, and then you will view a video. As you review these sources, you will gather information and answer questions about the rescue of penguins so you can write an essay.

Lauren Tarshis "The Amazing Penguin Rescue"

Dyan deNapoli "The Amazing Penguin Rescue"

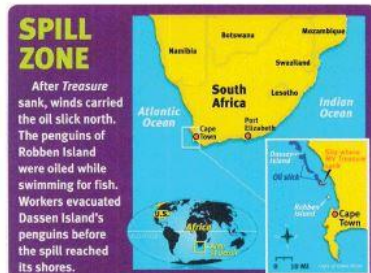
Endangered Penguins Caught in Oil Spill

Read the passage from the article by Lauren Tarshis titled "The Amazing Penguin Rescue." Then answer the questions.

from "The Amazing Penguin Rescue."

by Lauren Tarshis

- 1 Imagine you are an African penguin living on an island in the middle of the South Atlantic Ocean. You live with tens of thousands of other penguins on a rocky beach. It's a typical day there in June—cold and windy. The beach echoes with penguin noises, barks and honks and brays. Some of your fellow penguins fight for territory. Others cuddle with their mates and dote on their chicks.



"The Amazing Penguin Rescue" by Lauren Tarshis and map graphic from Storyworks April/May 2011 issue. Copyright © 2011 by Scholastic, Inc. Used by permission of Scholastic, Inc.

Compare how the articles by Lauren Tarshis and Dyan deNapoli and the video describe penguin rescue efforts after oil spills. Support your essay with information from all three sources.

Enter your essay text here

Comparing three texts

Expectations

- writing equal with reading
- more nonfiction reading
- excerpts and selections
- more “close reading”
- more “cold reading”
- text set compare/contrast
- all writing is “persuasive”
- reading/writing takes place in
ALL content areas

Charlotte Danielson's Framework for Learning



DOMAIN 1: Planning and Preparation

- 1a Demonstrating Knowledge of Content and Pedagogy**
 - Content knowledge • Prerequisite relationships • Content pedagogy
- 1b Demonstrating Knowledge of Students**
 - Child development • Learning process • Special needs
 - Student skills, knowledge, and proficiency
 - Interests and cultural heritage
- 1c Setting Instructional Outcomes**
 - Value, sequence, and alignment • Clarity • Balance
 - Suitability for diverse learners
- 1d Demonstrating Knowledge of Resources**
 - For classroom • To extend content knowledge • For students
- 1e Designing Coherent Instruction**
 - Learning activities • Instructional materials and resources
 - Instructional groups • Lesson and unit structure
- 1f Designing Student Assessments**
 - Congruence with outcomes • Criteria and standards
 - Formative assessments • Use for planning

DOMAIN 2: The Classroom Environment

- 2a Creating an Environment of Respect and Recognition**
 - Teacher interaction with students • Student interaction
- 2b Establishing a Culture for Learning**
 - Importance of content • Expectations for learning
 - Student pride in work
- 2c Managing Classroom Procedures**
 - Instructional groups • Transitions
 - Materials and supplies • Non-instructional duties
 - Supervision of volunteers and paraprofessionals
- 2d Managing Student Behavior**
 - Expectations • Monitoring behavior • Response to misbehavior
- 2e Organizing Physical Space**
 - Safety and accessibility • Arrangement of furniture and resources

DOMAIN 4: Professional Responsibilities

- 4a Reflecting on Teaching**
 - Accuracy • Use in future teaching
- 4b Maintaining Accurate Records**
 - Student completion of assignments
 - Student progress in learning • Non-instructional records
- 4c Communicating with Families**
 - About instructional program • About individual students
 - Engagement of families in instructional program
- 4d Participating in a Professional Community**
 - Relationships with colleagues • Participation in school projects
 - Involvement in culture of professional inquiry • Service to school
- 4e Growing and Developing Professionally**
 - Enhancement of content knowledge and pedagogical skill
 - Service to the profession
- 4f Showing Professionalism**
 - Integrity/ethical conduct • Service to students • Advocacy
 - Decision-making • Compliance with school/district regulations

DOMAIN 3: Instruction

- 3a Communicating With Students**
 - Expectations for learning • Directions and procedures
 - Explanations of content • Use of oral and written language
- 3b Using Questioning and Discussion Techniques**
 - Quality of questions • Discussion techniques • Student participation
- 3c Engaging Students in Learning**
 - Activities and assignments • Student groups
 - Instructional materials and resources • Structure and pacing
- 3d Using Assessment in Instruction**
 - Assessment criteria • Monitoring of student learning
 - Feedback to students • Student self-assessment and monitoring
- 3e Demonstrating Flexibility and Responsiveness**
 - Lesson adjustment • Response to students • Persistence

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Proficient	Distinguished
Most of teacher's questions are of high quality. Adequate time is provided for students to respond.	Teacher's questions are of uniformly high quality, with adequate time for students to respond. Students formulate many questions.
Teacher creates a genuine discussion among students, stepping aside when appropriate.	Students assume considerable responsibility for the success of the discussion, initiating topics and making unsolicited contributions.
Teacher successfully engages all students in the discussion.	Students themselves ensure that all voices are heard in the discussion.

As one of my colleagues put it, "To be a distinguished teacher, the kids pretty much have to run the class!"

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GOALS

- **Closely reading an image**
- **Creating engagement with text**
- **Strategies for reading/writing**
- **Examining multiple viewpoints**
- **Collaboration management**

STRATEGIES

- **Interviewing**
- **Turn and Talk**
- **Collaboration Mini-lessons**
- **Text Sets**
- **Visual Comprehension**
- **Point of View Annotation**
- **Alternative Perspective Writing**
- **Using textual evidence**



(time permitting)

**You need
to
FORM A
GROUP OF
TWO**



Find your **SHOULDER PARTNER**



MINI-LESSON # 1

How you sit matters

- Move so that you can easily talk with the person next to you.



**Now
get
acquainted**



MINI-LESSON # 2: Making a good first impression

Are you....



Making a good faith effort
--trying your best--



Helping your partner
do his/her best



- Being a good listener
- Using good manners
- Following instructions

**Let's warm-up our
conversation a little bit more.**



Interview your shoulder partner



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MINI-LESSON # 3

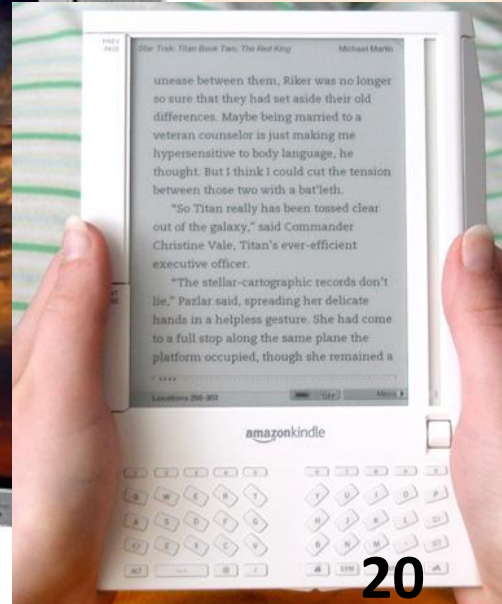
How you sit matters

- **Eye to eye**
- **Knee to knee**
- **Ear to ear**

Re-adjust your seating for optional conversation!



What are your favorite electronic gadgets and why?



Did we just “waste time?”



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Study Finds Payoffs in Teaching Social Skills

Joseph Durlak et al, Loyola University Chicago
Child Development, February 2011.



- meta-analysis of 213 studies
- 270,000 students, K-12
- focused on general social skill training,
vs targeted (e.g anti-bullying programs)

Students who participated in social skills learning experiences showed statistically significant gains in academics:

11% higher
than nonparticipating
students in
course grades
AND
standardized test scores



Greater cooperation

**Better attitudes
toward school**

**Less emotional
distress**



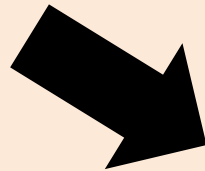
Fewer discipline problems

**More helping and
collaboration with others**

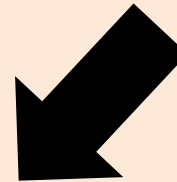
(Effects lasted six months after treatment)



Acquaintance
(via self-disclosure)



Friendship



**Supportive
Classroom
Behavior**

QUICK meetings

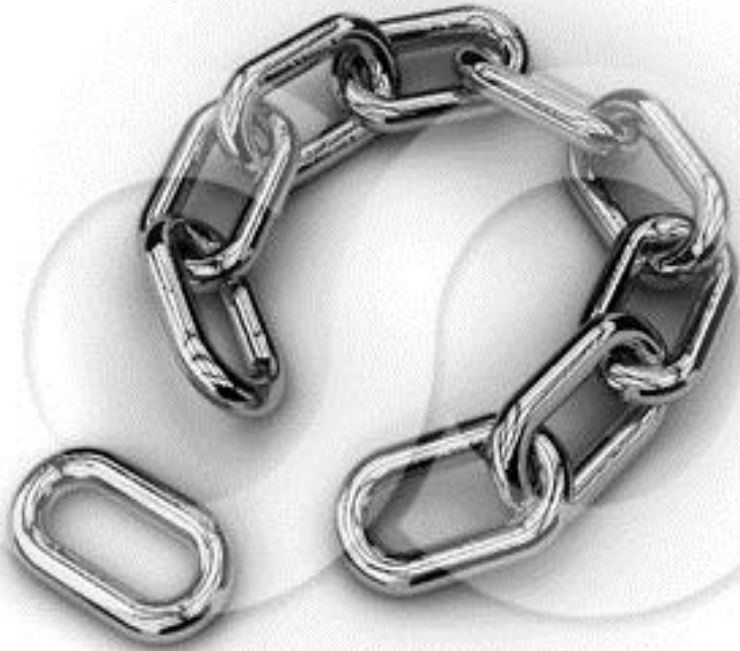


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Pairs



The missing link



HARVEY "SMOKEY" DANIELS • NANCY STEINEKE

TEACHING THE **SOCIAL SKILLS** OF **ACADEMIC INTERACTION**

Step-by-Step Lessons for
Respect, Responsibility, and Results

35
Projectable
Lessons!



Grades 4-12

EXPLICITLY TEACHING the social skills of small group interaction

Research has demonstrated that conversation with peers improves comprehension and engagement with texts in a variety of settings (Cazden, 1988). Such literary conversation does not focus on recalling or retelling what students read. Rather, it asks students to analyze, comment, and compare—in short, to think about what they've

Research has demonstrated that conversation with peers improves comprehension, engagement, and standardized test scores in a variety of settings.

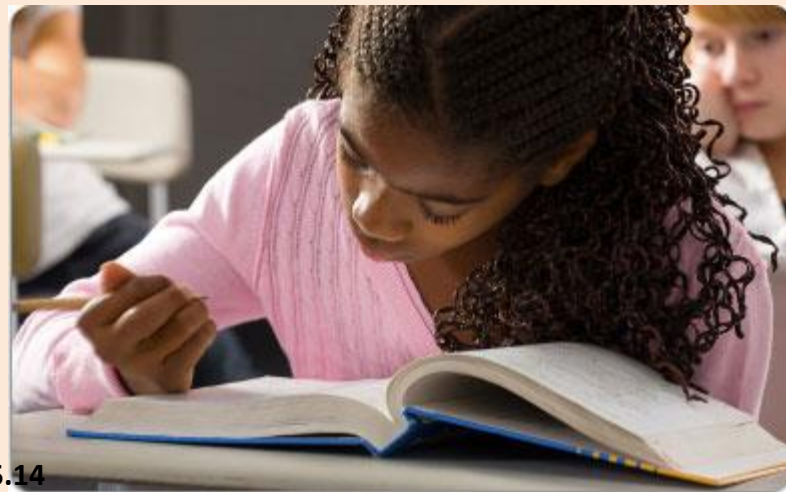
**Richard Allington,
Educational Leadership, March
2012**

The task of switching between writing, speaking, reading, and listening helps students make connections between, and thus solidify, the skills they use in each. This makes peer conversation especially important for English language learners, another population that we rarely ask to talk about what they read.

What kids can do with a partner, out-loud today...



...they can do silently and alone later on.



Today you will read and answer questions on a story about a man seeking to complete an important mission. When you have finished reading and answering questions, you will write a narrative story using details from your reading.

Elephants Can Lend a Helping Trunk

Elephants Show Cooperation

from "Elephants Know When They Need a Helping Trunk in a Cooperative Task"

Read the article "Elephants Can Lend a Helping Trunk." Then answer the questions..

Elephants Can Lend a Helping Trunk

by Virginia Morell

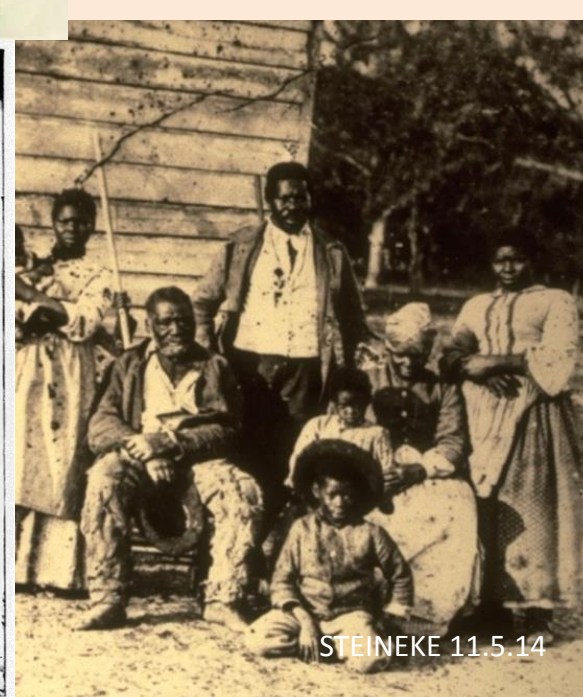
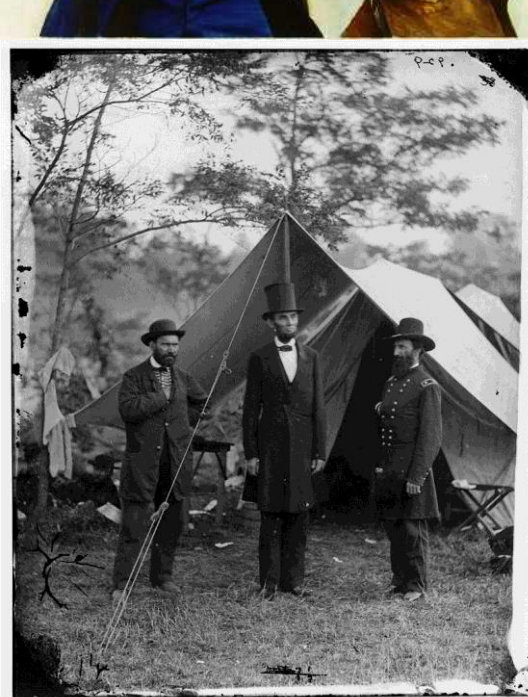
- 1 Elephants know when they need a helping hand—or rather, trunk. That's the conclusion of a new study that tested the cooperative skills of Asian elephants (*Elephas maximus*) in Thailand and showed that the pachyderms understand that they will fail at a task without a partner's assistance. The ability to recognize that you sometimes need a little help from your friends is a sign of higher social cognition, psychologists say, and is rarely found in other species. Elephants now join an elite club of social cooperators: chimpanzees, hyenas, rooks, and humans.
- 2 To test the elephants' cooperation skills, a team of scientists modified a classic experiment first administered to chimpanzees in the 1930s, which requires two animals work together to earn a treat. If they don't cooperate, neither gets the reward. For the elephants, the researchers used a sliding table with a single rope threaded around it. Two bowls of corn were attached to the table, but the elephants could reach

Write an essay comparing the information presented in the video with that presented in the article "Elephants Can Lend a Helping Trunk" and the passage from "Elephants Know When They Need a Helping Trunk in a Cooperative Task." Remember to use evidence from the video, the article, and the passage to support your answer.

Enter your essay text here

Comparing three texts

Slavery and the Civil War

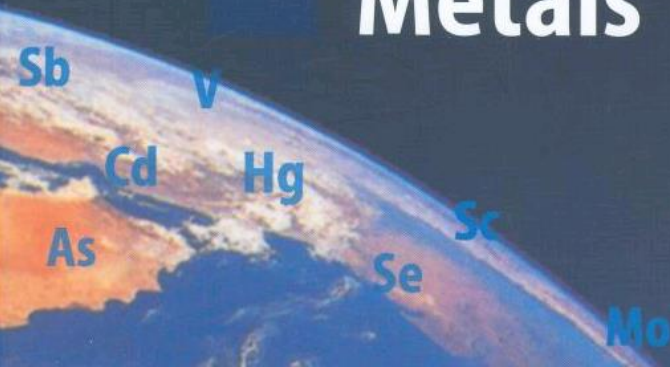


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Chemistry and Earth Science

Environmental
Geochemistry
of Potentially
Toxic
Metals

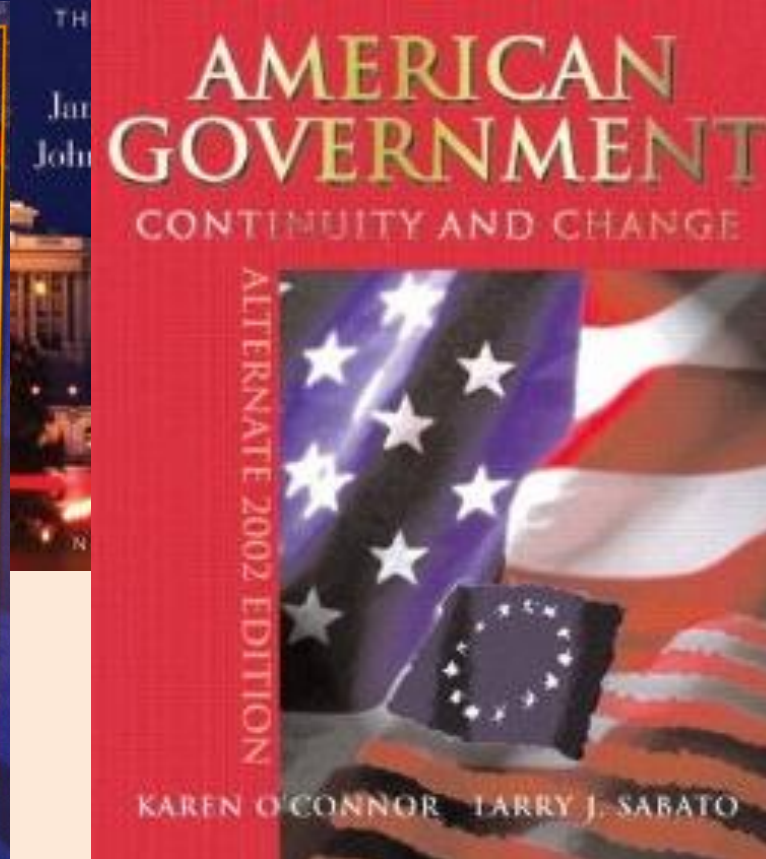
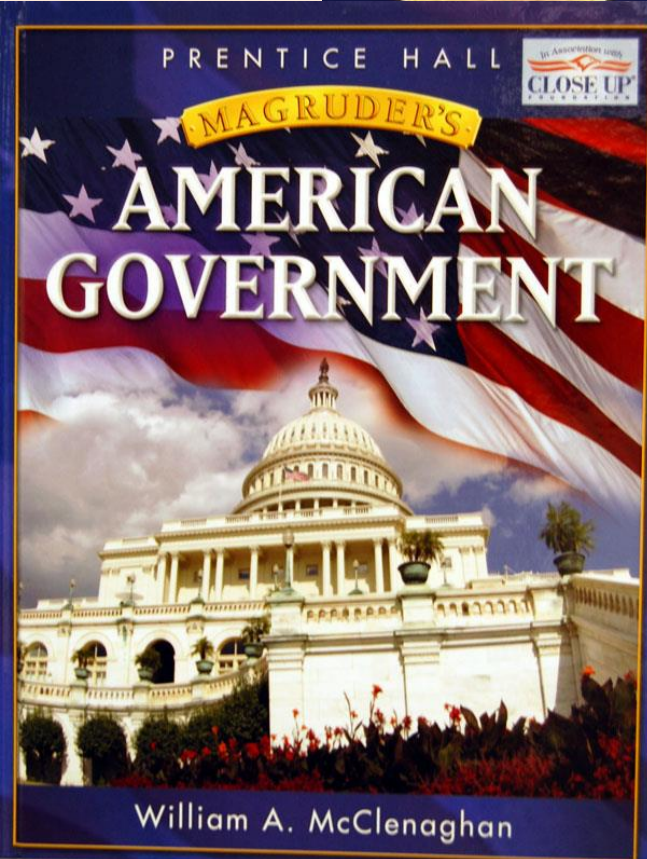
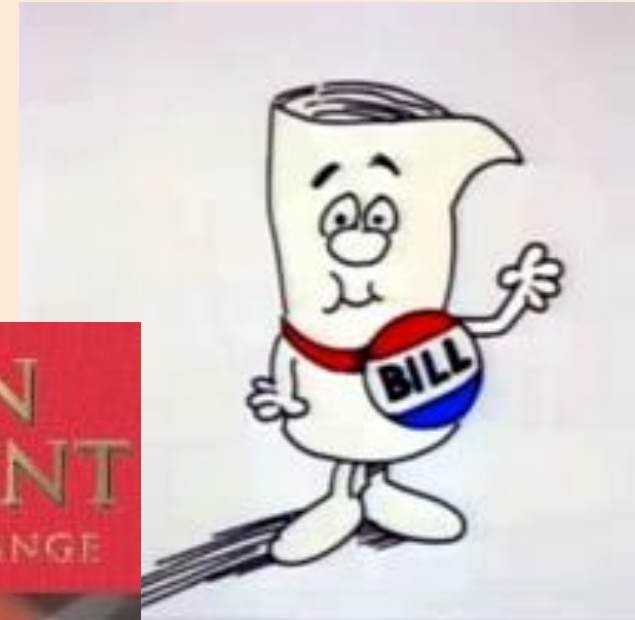


Environmental
Chemistry

Microscale Laboratory Experiments



How a Bill Becomes a Law



Expectations

--writing equal with reading

--more nonfiction reading

--excel

--more

--more

HOW?

--text set compare/contrast

--all writing is “persuasive”

--reading/writing takes place in
ALL content areas

What gets students engaged in content area reading?



**Ivey and Broaddus
RRQ, October 2007**

Electronic Device	Currently use	Replaced when broken/ new model available	Discarded old model	Recycled/ reused old model	Store old model
Cell Phone					
Smart Phone					
Laptop Computer					
Desktop Computer					
Television					
DVD Player					
Gaming System					
Digital Camera					
Video Camera					
iPad					
e-Reader (e.g., Kindle)					

**Compare with your partner.
What have you replaced,
discarded, recycled, stored?**



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Electronic Device	Currently use	Replaced when broken/ new model available	Discarded old model	Recycled/ reused old model	Store old model
Cell Phone					
Smart Phone					
Laptop Computer					
Desktop Computer					
Television					
DVD Player					
Gaming System					
Digital Camera					
Video Camera					
iPad					
e-Reader (e.g., Kindle)					

Let's come back together and hear some highlights from your discussions.

- What do you do with your older electronics?
- What did you have in common?
- What questions arose?



LAUNCH WITH IMAGES

- 
- **To build interest and engagement**
 - **To activate prior knowledge**
 - **To include ALL students**
 - **Build scaffolding**









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**1 of 6 children in the world
is in forced labor or slavery**

**90% of those children
are girls**





VISUAL NOTETAKING

Divide a blank piece of paper into four quadrants

<ul style="list-style-type: none">• sad• skinny• glasses• poorsowing• old man• has no food• no close• dusty• teacher	<ul style="list-style-type: none">• don't brush• Poor kids• sowing• why work so little age• girls making most of the work• dusty
<ul style="list-style-type: none">• Sowing in a very hard way• hands are tired	<ul style="list-style-type: none">• Old guy• working hands• hungry• working hard.





Upper Left

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Lower Left

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Upper Right
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Lower Right

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Turn to your partner and compare what you saw



Let's come back together and hear some highlights from your discussions.

- What were the big ideas that came up?
- What did you agree on or debate?
- What questions arose?





What happens to our e-waste?



Free Recycling Event



Sunday, April 27
12:00 p.m. - 6:00 p.m.
North Parking Lot



Free electronic and bicycle recycling!

Celebrate Earth Day at Brookfield Zoo by recycling your old unwanted electronics and bicycles for **FREE** and then enjoy our **Party for the Planet**.* **Plus, receive free parking in the North Parking lot if you bring an approved item to recycle that day.**

Electronic Recycling

Did you know that nearly 60% of all electronics can be reused and the other 40% get recycled back to their original raw state? Many people don't realize that electronics are made of valuable resources such as precious metals, plastics and glass. Many of these materials require energy to manufacture. Electronic equipment that gets thrown away also throws out these valuable resources and generates more pollution in order to manufacture new products.

Certain electronics such as monitors and circuit boards contain toxic substances like lead, mercury, and chromium. When these heavy metals get dumped into the solid waste stream it becomes a concern with state and local officials since they pose an environmental risk. Electronic recycling is a great solution.

Electronic waste is now banned from Illinois landfills and may not be discarded in your regular trash.



Items being accepted are:

- Monitors
- Laptops
- Televisions
- Printers
- Computers (and parts)
- Computer peripherals (mouse, keyboards)
- Fax machines
- Scanners
- DVD players/recorders
- Stereo equipment
- VCR's
- Video game consoles
- PDA
- Cellphones and accessories
- Mp3 and iPods
- Telephones and accessories
- Microwaves

Items NOT accepted include:

- Typewriters
- Toaster Ovens
- Hair Dryers
- Curling Irons
- Cash Registers
- UPS Batteries
- Copiers
- Electronic Tools

Texts AND Lessons

TOWARD DEEPER THINKING

Strategy 16

Point of View Annotation

Once again, this strategy requires students to read, underline, and take notes. We are kind of big on that process.

But this time, rather than reading and reacting from their own perspectives, kids are required to *impersonate someone else* doing the reading. Yes, they take on a role outside themselves, and then annotate and respond in that role.

You can assign these roles, or the students can suggest ones of their own devising. In language arts, valuable roles might involve looking at a story from the viewpoint of particular characters. In science, perspectives might be based on the different components of a cell or an atom (e.g., How would the mitochondria react to this passage?). In history, different world leaders might interpret the same historical event in different ways.

This is an excellent way to keep students engaged as they read and create notes for a later conversation. Taking an alternative viewpoint dramatically reminds kids that everyone does not interpret information the same way—or even recognize the same details as important. Understanding multiple viewpoints becomes particularly important when students encounter content that has some controversy attached. And, when you think about it, how much content is really free of any controversy?

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for CONTENT-AREA READING

WITH
MORE
THAN
75
ARTICLES from

The New York Times • Rolling Stone
The Washington Post • Car and Driver
The Chicago Tribune • and more

✓ 23 Comprehension Strategy
Lessons to Get Every Kid Thinking

✓ Collaboration Strategies that
Spark Discussion and Debate

✓ 10 Text Set Lessons Aligned to
Common Curricular Topics

Heinemann
DEDICATED TO TEACHERS

Watch your driving, kids. The parents are watching.

By Matt Zapotosky, *The Washington Post*, October 26, 2008

ASHINGTON — Ken Richardson does not have to ride in his 17-year-old daughter's Ford Escort to know when she takes a turn too fast. The camera system installed in her car will e-mail him about it.

The cameras are among the latest tools in the struggle to reduce teen car crashes, a problem that has been particularly vexing in Maryland. Last year, crashes involving drivers ages 16 to 20 killed 112 people in the state. Such accidents are often caused not by alcohol or overt recklessness but by simple driver inexperience. The problem has persisted despite efforts by lawmakers to restrict teen driving privileges.

The camera, mounted on the front windshield, captures footage of what is happening outside as well as in the vehicle. It saves about 20 seconds of that footage only when its sensors are triggered by excessive G-forces. Those forces tend to accompany unusual driving maneuvers such as sudden braking or swerving. Saved footage is transmitted back to DriveCam via a cellular network. DriveCam experts review the videos, add tips for the young drivers and post them to a Web site where parents can see them a day or so later. Parents receive an e-mail alert when the videos are posted.

The camera can capture anything going on in the car, but the company uploads only footage that involves unsafe driving. "If an event is captured that is embarrassing to the teen ... then we're not going to return it to the family," Carpenter said.

In the month or so since the camera was installed, Stacie has not been caught on camera doing anything too bad. But the camera has been a sore point since Ken Richardson told his daughter it would be installed, whether she liked it or not. "I feel like I'm being baby-sat, like I'm being watched constantly," said Stacie Richardson, Ken's daughter. "It drives me nuts."

Richardson has tried every possible angle to convince his daughter that the camera is a good idea. He has tried telling her she could earn new driving privileges by avoiding major incidents. He has appealed to her sense of benevolence, telling her that being a part of the study could save others' lives. And he has tried telling her that when she gets older, she'll want the same kind of device for her kids.

The limited research conducted on DriveCam elsewhere in the country seems to support her dad. McGehee, the researcher, tracked 25 new drivers using the camera and a feedback system for more than a year starting in 2006. The six people that McGehee classified as "high-frequency drivers," meaning they triggered the camera frequently early on, did so 86 percent less after using the DriveCam and McGehee's version of the feedback system. The study was funded by American Family Insurance, which uses the cameras as a marketing tool, offering them free for the young drivers it insures.

Parent's Perspective

I think this would be a great idea!

As a parent, I should know how fast or slow my child is driving.

When I place this in my son's car, I will know everywhere they're going and everything they are doing inside the car.

My daughter would say the exact same thing. In fact, my son would too. They would think that I don't trust them, but the truth is I just want them to be safe.

Since my kids would complain about it I wouldn't tell them about installing the camera in their car. Then I could keep an eye on their driving while I am doing work on my laptop.

Text Choices

With your partner, decide which article you will both read.

India's Poor Risk 'Slow Death' Recycling E-Waste

The Economics of E-Waste: Examining the E-Waste Stream from the United States to China

Role Choices

Now choose which role each of you will take.

- **Child laborer**
- **Parent of child laborer**
- **E-Waste Recycling CEO**
- **Investigative Reporter**
- **Humanitarian Aid Activist**
- **Environmentalist**
- **Electronic Gadgets Fan**

E-Waste

Point of View Annotation

Read, underline, and annotate as if you were:

- **Child laborer**
- **Parent of child laborer**
- **E-Waste Recycling CEO**
- **Investigative Reporter**
- **Humanitarian Aid Activist**
- **Environmentalist**
- **Electronic Gadgets Fan**

POV Annotation: Tim Cook (Jobs' successor at Apple)

The Economics of E-Waste

When it comes to computers or phones, the electronics industry continuously profits from our desire to have the newest electronic products on the market. In the United States, Americans throw out 130,000 computers each day and over 100 million cell phones annually. In fact, the United States generates more e-waste than any other country, roughly 2,124,400 tons per year.

This is what's making Apple rich!

Good news: We can hardly keep up with the demand for iPhone 6 and iPad Air 2!
Bad news: If this e-waste info goes viral, the public might expect Apple to do something about it! How can I spin e-waste to Apple's advantage?

E-Waste

Point of View Annotation

Read, underline, and annotate as if you were:

- **Child laborer**
- **Parent of child laborer**
- **E-Waste Recycling CEO**
- **Investigative Reporter**
- **Humanitarian Aid Activist**
- **Environmentalist**
- **Electronic Gadgets Fan**

Point of View Discussion

1. State your roles.
2. Take turns pointing out something you underlined.
Read it aloud and let your partner guess how your role responded. Add any ideas that were not already mentioned.

Expectations:

- Knee to Knee, Eye to Eye
- Equal Participation
- Using First Names
- Making a Good Impression
- Following Discussion Directions
- Using Text Support

How did your role affect what you noticed in the text?

Find a specific passage that both of you underlined and compare how the different roles reacted.



Let's come back together and hear some highlights from your discussions.

- **How did your role affect your interpretation of the text?**



Texts AND Lessons

TOWARD DEEPER THINKING

Strategy 15

Alternative Perspective Writing

- Time:
40 minutes
- Grouping
Sequence:
Pairs

Early in the novel *To Kill a Mockingbird*, Atticus advises Scout that she'll get along better with others if she can take on alternative perspectives: "You never really understand a person until you consider things from his point of view."

Encouraging our students to examine a piece of content-area text from a variety of viewpoints strengthens them as readers—and as citizens. Writing from the perspective of a different role or character forces students to creatively reframe information from the text, using their background knowledge to make connections and draw inferences.

In a second phase of this strategy, we add the element of correspondence. After writing their initial piece, students trade with a partner and respond in the role of a new character. This offers kids an immediate audience for their work as well as a tangible response to their writing. In addition, assuming a different role forces writers to review the original text to incorporate factual information. This strategy is highly engaging and fun, plus students also get substantial writing practice along the way.

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CONTENT-AREA READING

WITH
MORE
AND
75
ARTICLES from

New York Times • *Rolling Stone*
Washington Post • *Car and Driver*
Chicago Tribune • and more

✓ **23 Comprehension Strategy Lessons** to Get Every Kid Thinking

✓ **Collaboration Strategies** that Spark Discussion and Debate

10 Text Set Lessons Aligned to Common Curricular Topics

Heinemann
DEDICATED TO TEACHERS



DEADLY SPIDER REQUIRES LONG COURTSHIP—OR ELSE

Female Australian redback gets almost 100 minutes, or it will eat suitor

DISCOVERY CHANNEL

Jennifer Viegas, Oct. 21, 2009



Females of the Australian redback spider, one of the world's most poisonous spiders and a close relative to the black widow, demand 100 minutes of courting or else they usually cannibalize their male suitors.

Recent research shows that bigger isn't always better in the mating game. The tiniest of males sometimes approach female redbacks after offering the critical 100 minutes of wooing and successfully mate without being eaten.

The study shows that puny males of this species can win at love without exerting much effort and begins to explain the extreme size differences between males and females among some spider species. It appears as though females are not tuned to select male size, but rather the duration of courtship.

A male first performs a lengthy "courtship dance," where it vibrates the female's web and wraps it in his own silk to reduce the emission of pheromones that could attract other males. He then drums on her abdomen and may alternate between drumming and web dancing. If he does this for less than 100 minutes, the female will eat him.

But if he meets her desired courtship, he may be able to mate and not, he's usually eaten and then enter her web, sometimes fighting other to get to her. Females appear as a referee and strike at males with legs as males escalate aggressive one another.

The bizarre process may help to ensure male spiders are often so much smaller than females. For this species, males comprise 1 percent of the body weight of female.

Smaller males likely mature faster and therefore mate earlier in life. And may be better equipped to scar towards females and their well females, on the other hand, greater reproductive success, so it winds up with enormous females; small males.

Researcher Mariella Herberstein says, "The question that remains is why we have not evolved a way of distinguishing between two courting males in may be that distinguishing the vibrations in a complex three-dimensional web is very difficult, an aspect clearly take advantage of."

Attractive Single Australian Redback Looking for STMR (Single Tiny Male Redback)

My name is Rachel Redback. I enjoy mating, the more love the better. The size of a male means absolutely nothing to me. I am looking for a spider with stamina, fighting skills, and no fear of death.

Just so you know, I am very selfish and picky. The loving must be at least 100 minutes—or else. My male must satisfy my needs. He must successfully complete the traditional courtship dance, and he better massage my abdomen; we Redbacks get very stressed out.

My spider must be a warrior, a great combatant to earn my love. I'm so tired of losers coming on to me when I'm just minding my own business. Losers are a dime a dozen. I eat losers for breakfast—literally! A spider that earns my love will have to battle his way through a gauntlet of fierce would-be mating partners.

The lucky hunk of a spider that wins my love must have no regard for his life. If you don't please me, I'll devour you like humans eat fast food. I can't stand it when males beg for mercy when I tell them they're not good enough for me. If you fear death, you had better stay away from this spider! Let me remind you, we female Redbacks are much larger than you males. And if it turns out you don't satisfy me, I hope you at least taste good.

Again, my name is Rachel Redback. I love a spider that can fight, has great stamina, and is fearless. If you think you are male enough for me, meet me in my web.

—Rachel Redback

Reply

I've read through your profile a million times and after careful consideration, I feel that I am the spider for you. I've got everything you're looking for and more. Stamina is my middle name. My small body allows me to court for hours. 100 minutes? That's nothing. I've got enough endurance to go longer than the rest of those losers that wind up in your web.

I'll do anything to prove my love for you. If it takes fighting off other spiders who want you, then so be it. I may be small, but I sure can fight for what I want. I have no fear and am willing to risk my life for a chance with you.

Death doesn't scare me. If you happen to eat me alive after we mate, that is fine by me. I'll die happily knowing that I fulfilled your needs; the more eggs I fertilize the better. I understand that you have neurotoxic venom that causes severe pain to larger animals and humans. Just knowing that you can kill me with one bite drives me crazy!

On top of all that power and control, you have the most beautiful long, black legs I have ever seen. The vibrant red stripe on your back makes you stand out from the rest of the females out there. I'm very excited to meet you. I've got everything you need, and I am sure you will pick me because your profile shows you have some pretty good taste! Give me a call.

—Rick Redback

Reply

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—Rick Redback

Now let's write a letter!



STEINEKE 11.5.14

A Letter to Apple

From an alternative perspective, write a passionate letter to Apple outlining your position in regards to e-waste.

- Child laborer
- Parent of child laborer
- E-Waste Recycling CEO
- Investigative Reporter
- Humanitarian Aid Activist
- Environmentalist
- Electronic Gadgets Fan

A Letter to Apple

Consider these questions as you write:

- What do you know personally about e-waste?
- How is e-waste affecting your life directly or indirectly? Positively, negatively, neutrally?
- What do you want Apple to do?
- What are you willing to do personally in order to make this happen?

**Your role has changed
again—**

**Now you are Apple CEO
Tim Cook and for some
mysterious reason this
letter has been delivered to
you.**

WRITE YOUR RESPONSE

From what point of view did the article authors write?

- Child laborer**
- Parent of child laborer**
- E-Waste Recycling CEO**
- Investigative Reporter**
- Humanitarian Aid Activist**
- Environmentalism**
- Other (define)**

Who has a letter and response they'd like to share?



Chemistry and Earth Science

Environmental
Geochemistry
of Potentially
Toxic
Metals



Environmental
Chemistry

Microscale Laboratory Experiments



STEIN 14.5

Harmful Effects Caused By Improper Computer & Electronic Waste Recycling

Electronic waste affects nearly every system in the human body because they contain a plethora of toxic components including **Mercury, Lead, Cadmium, Polybrominated Flame Retardants, Barium** and **Lithium**. Even the plastic casings of electronics products contain **Polyvinyl Chloride**. The health effects of these toxins on humans include birth defects, brain, heart, liver, kidney and skeletal system damage. They will also significantly affect the nervous and reproductive systems of the human body.

E-Waste Toxic Components and their Damage to Human Health

Toxic Materials	Birth Defects	Brain Damage	Heart, Liver, Lung & Spleen Damage	Kidney Damage	Nervous/ Reproductive System Damage	Skeletal System Damage
Barium		X	X			
Cadmium	X		X	X	X	X
Lead	X	X		X	X	
Lithium	X	X	X	X	X	
Mercury	X	X	X	X		
Nickel	X		X	X	X	
Palladium	X	X	X	X		
Rhodium			X			
Silver	X	X	X	X	X	

Without safe recycling, most of these toxic components will end up in land fill – poisoning the soil and water



Barium

Nickel

Cadmium

Palladium

Lead

Rhodium

Lithium

Silver

Mercury

http://www.greencitizen.com/harmful_effects.php

Periodic Table of the Elements																		2 He Helium 4.003	
1 IA 1A H Hydrogen 1.008	2 IIA 2A Be Beryllium 9.012												13 IIIA 3A B Boron 10.811	14 IVA 4A C Carbon 12.011	15 VA 5A N Nitrogen 14.007	16 VIA 6A O Oxygen 15.999	17 VIIA 7A F Fluorine 18.998	18 VIIIA 8A Ne Neon 20.180	
3 Li Lithium 6.941	4 Be Beryllium 9.012											5 B Boron 10.811	6 C Carbon 12.011	7 N Nitrogen 14.007	8 O Oxygen 15.999	9 F Fluorine 18.998	10 Ne Neon 20.180		
11 Na Sodium 22.990	12 Mg Magnesium 24.305	3 IIIB 3B	4 IVB 4B	5 VB 5B	6 VIB 6B	7 VIIB 7B	8 VIII 8	9 VIII 8	10 VIII 8	11 IB 1B	12 IIB 2B	13 Al Aluminum 26.982	14 Si Silicon 28.086	15 P Phosphorus 30.974	16 S Sulfur 32.066	17 Cl Chlorine 35.453	18 Ar Argon 39.948		
19 K Potassium 39.098	20 Ca Calcium 40.078	21 Sc Scandium 44.956	22 Ti Titanium 47.88	23 V Vanadium 50.942	24 Cr Chromium 51.996	25 Mn Manganese 54.938	26 Fe Iron 55.933	27 Co Cobalt 58.933	28 Ni Nickel 58.693	29 Cu Copper 63.546	30 Zn Zinc 65.39	31 Ga Gallium 69.732	32 Ge Germanium 72.61	33 As Arsenic 74.922	34 Se Selenium 78.09	35 Br Bromine 79.904	36 Kr Krypton 84.80		
37 Rb Rubidium 84.468	38 Sr Strontium 87.62	39 Y Yttrium 88.906	40 Zr Zirconium 91.224	41 Nb Niobium 92.906	42 Mo Molybdenum 95.94	43 Tc Technetium 98.907	44 Ru Ruthenium 101.07	45 Rh Rhodium 102.906	46 Pd Palladium 106.42	47 Ag Silver 107.868	48 Cd Cadmium 112.411	49 In Indium 114.818	50 Sn Tin 118.71	51 Sb Antimony 121.760	52 Te Tellurium 127.6	53 I Iodine 126.904	54 Xe Xenon 131.29		
55 Cs Cesium 132.905	56 Ba Barium 137.327	57-71	72 Hf Hafnium 178.49	73 Ta Tantalum 180.948	74 W Tungsten 183.85	75 Re Rhenium 186.207	76 Os Osmium 190.23	77 Ir Iridium 192.22	78 Pt Platinum 195.08	79 Au Gold 196.967	80 Hg Mercury 200.59	81 Tl Thallium 204.383	82 Pb Lead 207.2	83 Bi Bismuth 208.980	84 Po Polonium [208.982]	85 At Astatine 209.987	86 Rn Radon 222.018		
87 Fr Francium 223.020	88 Ra Radium 226.025	89-103	104 Rf Rutherfordium [261]	105 Db Dubnium [262]	106 Sg Seaborgium [266]	107 Bh Bohrium [264]	108 Hs Hassium [269]	109 Mt Meitnerium [268]	110 Ds Darmstadtium [269]	111 Rg Roentgenium [272]	112 Cn Copernicium [277]	113 Uut Ununtrium unknown	114 Fl Flerovium [289]	115 Uup Ununpentium unknown	116 Lv Livermorium [298]	117 Uus Ununseptium unknown	118 Uuo Ununoctium unknown		
Lanthanide Series			57 La Lanthanum 138.906	58 Ce Cerium 140.115	59 Pr Praseodymium 140.908	60 Nd Neodymium 144.24	61 Pm Promethium 144.913	62 Sm Samarium 150.36	63 Eu Europium 151.966	64 Gd Gadolinium 157.25	65 Tb Terbium 158.925	66 Dy Dysprosium 162.50	67 Ho Holmium 164.930	68 Er Erbium 167.26	69 Tm Thulium 168.934	70 Yb Ytterbium 173.04	71 Lu Lutetium 174.967		
Actinide Series			89 Ac Actinium 227.028	90 Th Thorium 232.038	91 Pa Protactinium 231.036	92 U Uranium 238.029	93 Np Neptunium 237.048	94 Pu Plutonium 244.064	95 Am Americium 243.061	96 Cm Curium 247.070	97 Bk Berkelium 247.070	98 Cf Californium 251.080	99 Es Einsteinium [254]	100 Fm Fermium 257.095	101 Md Mendelevium 258.1	102 No Nobelium 259.101	103 Lr Lawrencium [262]		
			Alkali Metal	Alkaline Earth	Transition Metal	Semimetal	Nonmetal	Basic Metal	Halogen	Noble Gas	Lanthanide	Actinide							

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chemistry.about.com
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Barium-Ba-56

Nickel-Ni-28

Cadmium-Cd-48

Palladium-Pd-46

Lead-Pb-82

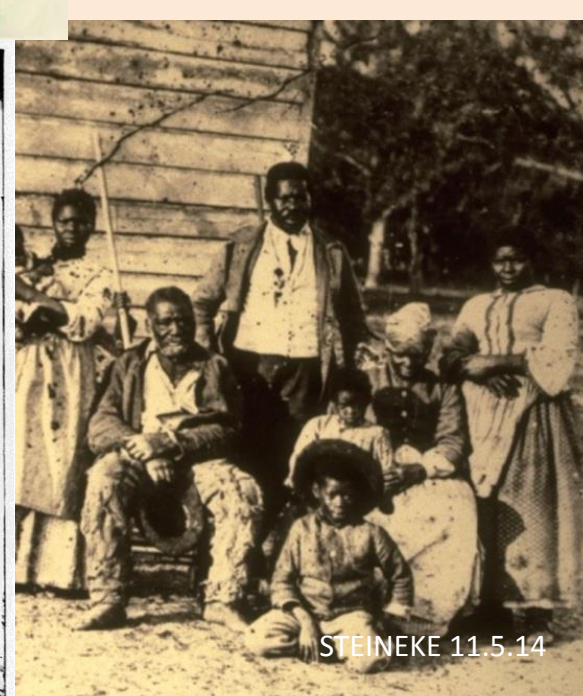
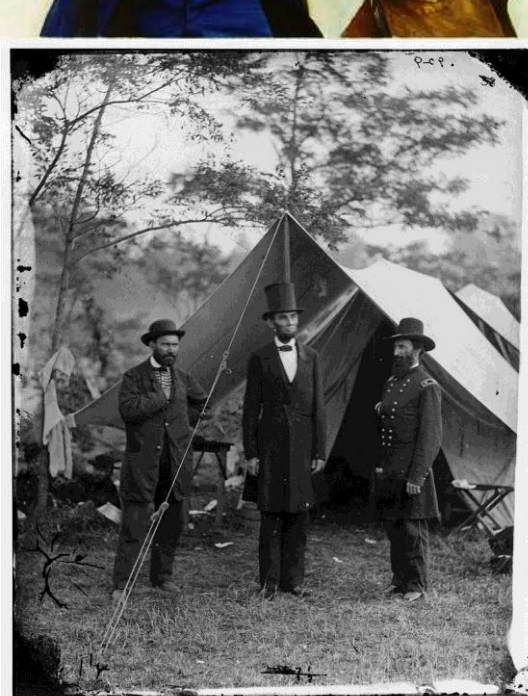
Rhodium-Rh-45

Lithium-Li-3

Silver-Ag-47

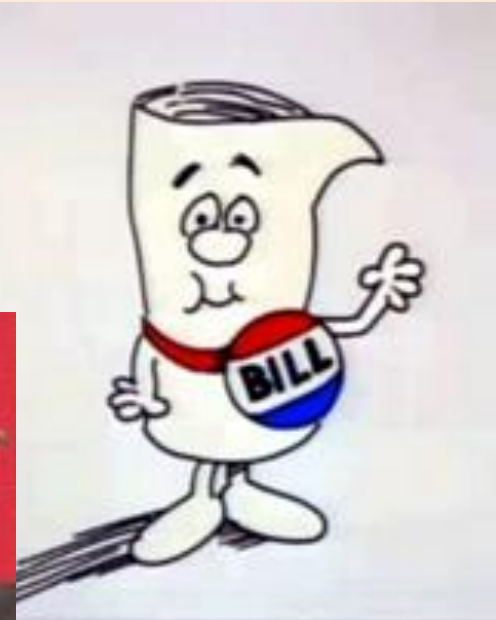
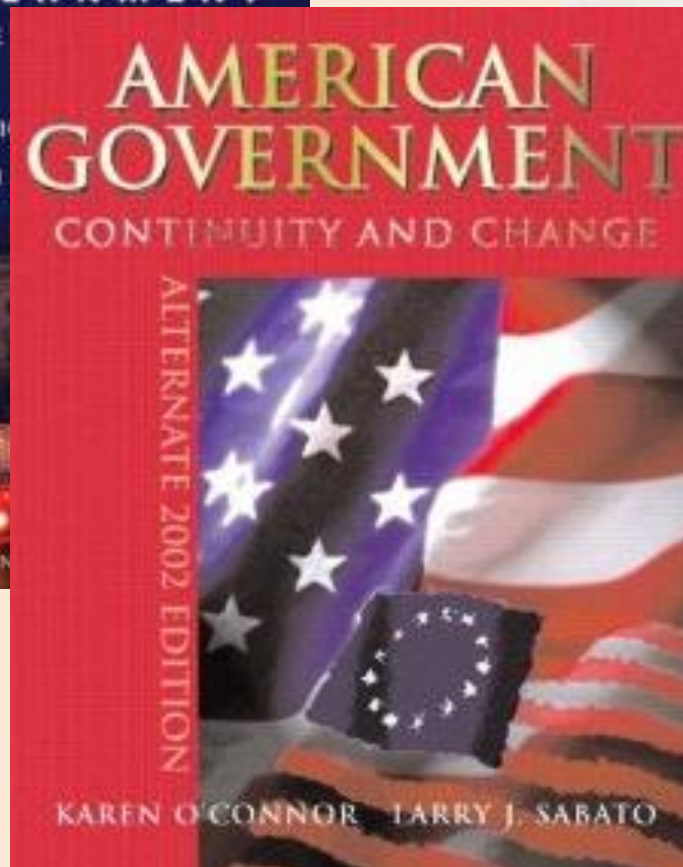
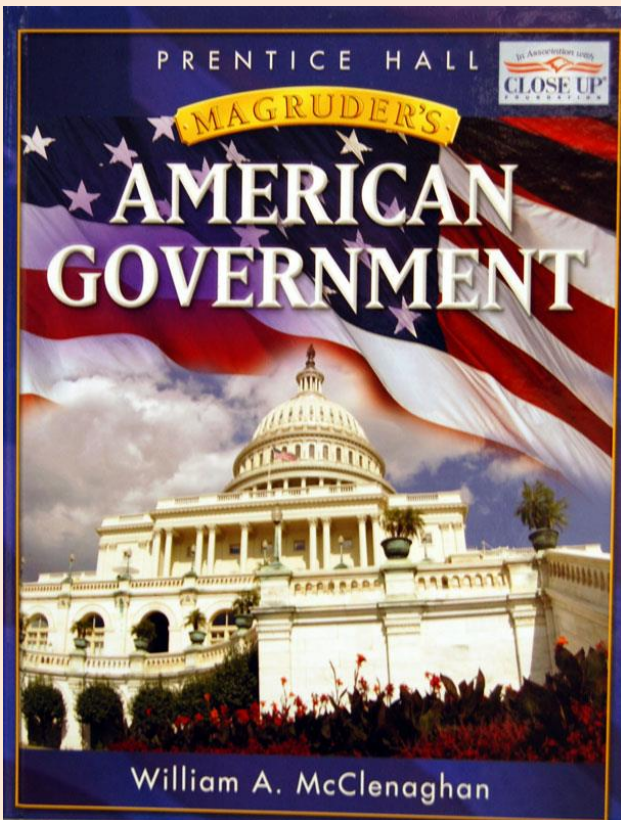
Mercury-Hg-80

Slavery and the Civil War



On the eve of the American Civil War approximately 4 million enslaved African Americans lived in the southern region of the United States of America. The vast majority worked as plantation slaves in the production of cotton, sugar, tobacco, and rice. Very few of these enslaved people were African born principally because the importation of enslaved Africans to the United States officially ended in 1808, although thousands were smuggled into the nation illegally in the 50 years following the ban on the international trade. These enslaved people were the descendants of 12 to 13 million African forbearers taken from their homes and forcibly transported to the Americas in a massive slave trade dating from the 1400s. Most of these people, if they survived the brutal passages from Africa, ended up in the Caribbean (West Indies) or in South and Central America. Brazil alone imported around five million enslaved Africans. This forced migration is known today as the African Diaspora.

How a Bill Becomes a Law



Free Recycling Event



Sunday, April 27
12:00 p.m. - 6:00 p.m.
North Parking Lot



Free electronic and bicycle recycling!

Celebrate Earth Day at Brookfield Zoo by recycling your old unwanted electronics and bicycles for **FREE** and then enjoy our **Party for the Planet**.* **Plus, receive free parking in the North Parking lot if you bring an approved item to recycle that day.**

Electronic Recycling

Did you know that nearly 60% of all electronics can be reused and the other 40% get recycled back to their original raw state? Many people don't realize that electronics are made of valuable resources such as precious metals, plastics and glass. Many of these materials require energy to manufacture. Electronic equipment that gets thrown away also throws out these valuable resources and generates more pollution in order to manufacture new products.

Certain electronics such as monitors and circuit boards contain toxic substances like lead, mercury, and chromium. When these heavy metals get dumped into the solid waste stream it becomes a concern with state and local officials since they pose an environmental risk. Electronic recycling is a great solution.

Electronic waste is now banned from Illinois landfills and may not be discarded in your regular trash.



Items being accepted are:

- Monitors
- Laptops
- Televisions
- Printers
- Computers (and parts)
- Computer peripherals (mouse, keyboards)
- Fax machines
- Scanners
- DVD players/recorders
- Stereo equipment
- VCR's
- Video game consoles
- PDA
- Cellphones and accessories
- Mp3 and iPods
- Telephones and accessories
- Microwaves

Items NOT accepted include:

- Typewriters
- Toaster Ovens
- Hair Dryers
- Curling Irons
- Cash Registers
- UPS Batteries
- Copiers
- Electronic Tools

H.R.2791 - Responsible Electronics Recycling Act

113th Congress (2013-2014)

BILL

Sponsor: [Rep. Green, Gene \[D-TX-29\]](#) (Introduced 07/23/2013)

Cosponsors: [18](#)

Latest Action: 09/24/2013 Referred to the Subcommittee on Environment.

Tracker:

Introduced > Passed House > Passed Senate > To President > Became Law

Hide Overview x

Summary (1)

Text (1)

Actions (6)

Titles (2)

Amendments (0)

Cosponsors (18)

Committees (2)

Related Bills (0)

Summary: H.R.2791 — 113th Congress (2013-2014)

There is one summary for this bill. [Bill summaries](#) are authored by [CRS](#).

Shown Here:

Introduced in House (07/23/2013)

Responsible Electronics Recycling Act - Amends the Solid Waste Disposal Act to: (1) prohibit the export of restricted electronic waste to countries that are not members of the Organization for Economic Cooperation and Development (OECD) or the European Union (EU), or Liechtenstein; (2) require the Administrator of the Environmental Protection Agency (EPA) to develop and promulgate procedures for identifying certain electronic equipment as well as additional restricted toxic materials contained in such equipment which poses a potential hazard to human health or the environment; and (3) establish criminal penalties for knowingly exporting restricted electronic waste in violation of this Act. Allows certain exceptions to such export ban.

Defines "restricted electronic waste" to include electronic equipment (excluding parts of a motor vehicle), such as computers, televisions, printers, copiers, video game systems, telephones, and similar used electronic products, that contain cathode ray tubes, batteries, switches, and other parts containing lead, cadmium, mercury, organic solvents, hexavalent chromium, beryllium, or other toxic ingredients.

Requires persons who handle restricted electronic wastes to permit appropriate EPA and state officials access to such wastes upon request.

Directs the Secretary of Energy to establish a competitive research application program to provide grants for research in the recovering and recycling of critical minerals and rare earth elements found in electronic devices.

STEINEKE 11.5.14

More on This Bill

[Constitutional Authority Statement](#)

Primary Subject:

Foreign Trade and
International Finance

[View all subjects »](#)

S. 2090: Responsible Electronics Recycling Act

Introduced: Mar 6, 2014

Status: Referred to Committee on Mar 6, 2014

Prognosis 1% chance of being enacted

TRACK THIS BILL

Call Congress

About the bill



SPONSOR

Sheldon Whitehouse

Junior Senator from Rhode Island

PARTY

Democrat



TEXT

Read Text »

LAST UPDATED

Mar 6, 2014

LENGTH

26 pages

RELATED BILLS



S. 1270 (112th) was a previous version of this bill.

Referred to Committee
Last Action: Jun 23, 2011

H.R. 2791 (identical)

Referred to Committee
Last Action: Jul 23, 2013

Prognosis

4% chance of getting past committee.

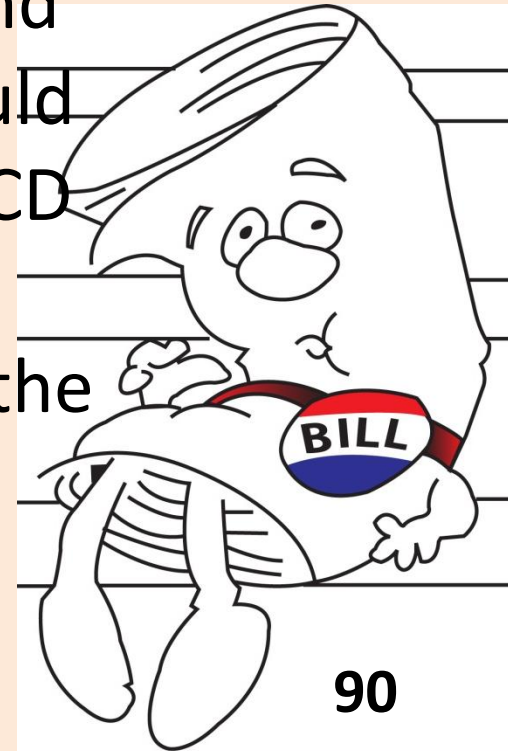
1% chance of being enacted.

Only 11% of bills made it past committee and only about 3% were enacted in 2011-2013. [[show factors](#) | [methodology](#)]

H.R. 2791/S. 2090

The Responsible Electronics Recycling Act (RERA)

Under the legislation, tested and working equipment can still be exported to promote reuse. Products could also still be exported for warranty repair or recall. However, consumer electronic equipment, parts, and materials that contain toxic chemicals could not be exported to nations outside of OECD (Organization for Economic Co-operation and Development) member countries or the European Union.



H.R. 2791: Referred to subcommittee 9/24/13

S. 2090: Referred to committee 3/6/14



Prognosis

4% chance of getting past committee.

1% chance of being enacted.

Only 11% of bills made it past committee and only about 3% were enacted in 2011–2013. [[show factors](#) | [methodology](#)]



Rep. Daniel Lipinski 

@RepLipinski

Proudly representing the people of Illinois' 3rd Congressional District. Follow me on Facebook at facebook.com/repdanlipinski

 lipinski.house.gov

 143 Photos and videos

TWEETS
540

FOLLOWING
530

FOLLOWERS
2,045

FAVORITES
80

Tweets

Tweets & replies

Photos & videos



Rep. Daniel Lipinski @RepLipinski · 19h

A full investigation needs to take place this entire shameful situation, but right now it is a time to welcome Sgt. #Tahmoore home

STEINEKE 11.5.14

Nonfiction Writing

- Students actively read and use their annotation in engaging ways
- Encourages deeper thinking/revisiting/ comparing text
- Enables students to examine information from different perspectives
- Integrated with reading

Turn to your partner and thank them for working with you!

