# RESEARCHING TO DEEPEN UNDERSTANDING

# DEVELOPING CORE PROFICIENCIES ENGLISH LANGUAGE ARTS / LITERACY UNIT GRADE 8

## RESEARCH TOPIC REPOSITORY

# HUMAN – ANIMAL INTERACTION





# **E PURPOSES AND USES OF A RESEARCH E TOPIC REPOSITORY**

A Research Topic Repository provides a starting point and a set of common source texts in a given topical arena for student inquiry while developing the research proficiencies that are the instructional focus of the Research for Deepening Understanding Units. The Repository suggests issues to consider in narrowing and focusing a class or student research, provides examples of possible areas of investigation that might be pursued, lists broad inquiry questions that can lead to investigative paths, and includes a set of source texts for one possible area.

The common text set models a range of text types, perspectives, and provides both background and extension texts. Background texts should be accessible to the student (relatively straightforward in approach, syntax, and language), require little background knowledge to interpret, and be comprehendible, given the student's reading skill and level. Extension texts should be rich, complex, and challenging (at the upper end of the text complexity band). They should be characteristic of texts in the field being investigated, present sophisticated arguments and/or research studies, and demand that students read closely to unpack vocabulary, syntax, and meaning.

The Repository supports and informs teacher and student decisions that are made during the research process, as described in the Researching for Deeper Understanding unit plan. The first decision is which Repository to use as a context for the unit and student research, or whether to develop a new, parallel Repository. Teachers and students should base this decision on the instructional level, curriculum context, student interests, and common text levels.

The Lexiles of the model common sources contained in this repository range from 810L to 1500L





# I. INTRODUCTORY TOPIC DESCRIPTION

## **HUMAN – ANIMAL INTERACTION**

Human – animal interactions have affected society in major ways, and provide innumerable topics for student research in every curriculum. For as long as humans and animals have co-existed on planet earth, they have interacted with each other. The earliest humans lived by pretty much the same guiding principle as the animals: "Eat or be eaten." Humans learned they could eat animals and also use their parts for things such as tools or clothing. As animal populations dwindled in certain areas, humans needed to travel or move to find more. They soon discovered that certain animals, particularly the herbivores, could be captured and kept in captivity until, after several generations, they lost their natural fear of their captors. These "domestic animals" provided humans a more dependable supply of food, clothing and even transportation.

Some domestic animals were soon recognized as valuable companions (e.g. dogs), while others were strong enough to become "beasts of burden," capable of hauling wagons, pulling plows or being ridden. Meanwhile, large wild carnivores such as wolves and mountain lions were seen as competitors for food, and thus were hunted and killed by humans.

As civilization progressed, humans needed more and more resources, such as trees, as building material for their homes, barns, wagons and ships. Trees were also converted to coke, which fueled the factories and allowed ore to be converted into metal. Soon, many of the forests were nearly gone, and the animals which depended on them began to disappear. Laws to protect animals and their habitats were eventually passed, but not before many species were lost forever.

Today, animals are still highly valued by humans. People in some countries use them much as their ancestors did. Animals such as serpents, sheep, goats, wolves, lions, eagles, doves and even cows have all been utilized as symbols or subjects in art, literature and religion. The images and stories of these animals evoke reactions deep within our psyches, and play significant roles in shaping our feelings toward and interaction with certain species. Animal pets number in the hundreds of millions. Sport hunting adds billions to the economy of the USA. Medical research laboratories use dozens of different species to test new products. Parts of animals are used to replace diseased or damaged human organs. Zoos are present in nearly every large city. Seeing-eye dogs guide our blind. Fast food restaurants serve up hamburgers by the billions. Humans could hardly exist without animals!





# II. POSSIBLE AREAS OF INVESTIGATION

- 1. Early human's dependence upon animals (e.g., early signs of hunting and eating of animals)
- 2. The domestication of animals (e.g., successful and failed domestication efforts specific species)
- 3. Agriculture and animal husbandry (e.g., breeding horses to better suite farming needs)
- 4. Use of animals in medical research and testing (e.g., use of laboratory mice to develop medications to treat illnesses)
- 5. Destruction of habitat and its effect on animal populations (e.g., clearing of rainforests to produce soy and sugarcane)
- 6. Hunting in modern times (e.g., subsistence hunting, market hunting and sport hunting)
- 7. Animals as pets and companions (e.g., domestic vs. wild pets)
- 8. Human-made vs. natural causes of animal species extinction (e.g., dinosaurs, passenger pigeon, ivory-billed woodpecker)
- 9. Commercial fishing's impact on fish populations (e.g. tuna fishing in the Mediterranean)
- 10. Animals in literature, art, and the entertainment industry (e.g., *Never Cry Wolf, Rhyme of the Ancient Mariner, The Artist*)
- 11. Animals as objects of worship (e.g., the sacred cow of India)
- 12. Working animals (e.g., police and military dogs, seeing-eye dogs)





# **III. POSSIBLE GUIDING QUESTIONS FOR INQUIRY AND RESEARCH**

The following questions can be used to initiate inquiry and to guide students in identifying paths for investigation. Some questions are generic, with the idea that a particular animal species may be identified by the teacher and/or student as the focus of inquiry. Others delve into subject areas that deal with multiple species, or identify an over-arching topic such as ethical treatment of animals.

- 1. What is the history of (a selected animal's) interaction with humans?
- 2. What are the general characteristics of the animal species that have been domesticated by humans? Are they always the same? Are there exceptions?
- 3. How are ethical standards applied in the use of animals for agriculture and medical research?
- 4. What species of animals are currently being affected by destruction of the rain forests of South America? How is that destruction affecting animals (birds) that spend a portion of their lives in North America?
- 5. What animals were worshipped by the ancient Egyptians? Are there religions today that worship or hold certain animals sacred? What are the reasons animals were/are worshipped?
- 6. What are subsistence, market and sport hunting? What are the ethical ramifications of each type?
- 7. Why do wild animals and domestic animals in the same family behave so differently toward humans?
- 8. How can we protect dwindling species that migrate to different parts of the world where they are subject to unregulated commercial hunting or fishing?
- 9. Who pays for wildlife conservation and what are the financial responsibilities of local authorities vs. federal authorities? (e.g. Federal Aid in Wildlife Restoration Act).
- 10. What legal protections do animals have and in what areas of animal use? (e.g., hunting seasons, medical experiments, etc.)
- 11. What international treaties have been signed, and by what countries, that protect endangered or other wildlife? (e.g. CITES, Migratory Bird Treaty Act)
- 12. How have various artist or authors depicted animals in their work? Why are animals such popular subjects of art and literature?
- 13. Who are the leading researchers of (selected animal or group of animals)?
- 14. What careers involve the use or treatment of animals? How does the use or treatment differ from career to career?





# IV. SOURCE LOCATIONS

In conducting research, students should be encouraged to conduct searches for sources in a variety of areas such as the school library, visits to and observations of sites and places related to the topic, search engines like Google and Bing, and on-line databases like EBSCO Host and Gale. In expanding the circle of potential resources for research, and in realigning their strategic searches, students should utilize the expertise of library-media specialists in their school or community, and learn from them how to access additional search vehicles that may be available to them.

Many state and school district library systems provide free public access to research portals that allow teachers and students to access various informational databases. Many of these have been organized so that articles can be searched for by text difficulty level (Lexile measure) as well as topic, allowing both teachers and students to find information at a variety of text complexity levels. Some national content aggregators that provide searches by Lexile level are: EBSCO, Gale, Grolier Online, Net Trekker, News Bank, Pro Quest, and Questia. Contact a library-media specialist for information on how to connect students to and navigate the state's database access.

# V. COMMON SOURCE TEXT SET

The common text set for this Repository presents a model text sequence focused on a particular area of investigation; the common text set can be used in various ways by a teacher and students, depending on the degree to which they want to focus inquiry and research on the areas of investigation suggested by the texts in the set. Each common text is linked to a specific reading activity in the unit plan, and each includes a short set of text notes and a set of text-based questions to initiate students' close reading. The model sources in this repository can be used in a variety of ways including:

- 1. **Provide background and direction for inquiry focused on the area of investigation:** In this case, students will read and analyze the common texts either as main sources or as a research base as they embark on inquiry and investigation directly related to the area(s) of investigation presented in the texts. They will develop the close reading skills required for effective research through text-based discussions and analysis of the common texts, as explained in the unit plan. Students may then extend their individual research into closely related areas and new texts.
- 2. **Provide skills practice and a starting point for students' research:** In this case, students will work with the text set to learn about and practice the close reading skills required for effective research, but will then conduct research into a related, but new area of investigation identified by the teacher or students, applying those same skills with new texts.
- 3. **Serve as models for the teacher:** In this case, the teacher may identify other, similar texts in a chosen area of investigation and build a new or expanded common text set, which parallels the model set in terms of breadth, richness, and complexity. Students will develop the close reading skills required for effective research using the teacher's new common text set and will launch either teacher- or student-directed inquiry in a new area of investigation area suggested by the texts in the set.





# V. COMMON SOURCE TEXT SET (CONT'D)

The general text characteristics and their sequential use in the unit's activities are outlined below:

#### Text #1 - Stimulus:

Rich, high interest text that can stimulate student thinking and discussion in the general topic area and lead the class or a student to consider various areas of investigation. Might be a literary text.

Students will use this text as a jumping off point for inquiry in **Part 1, Activity 2.** 

### Text #2 - Background information:

Accessible informational text providing accurate background information on an identified area. Characteristics – rich, quality, credibility, connection to the inquiry. Should be a quality source of rich information on central aspects of topic. Should frame an area in a way that can lead to many paths of exploration, rather than a single perspective or focus.

Students will use this text to build background and practice skills of close reading and initial text analysis (for credibility, accessibility, and relevance) in <a href="Part 1">Part 1</a>, <a href="Activity 3">Activities 2-3</a>.

### **Text #3 - Background information:**

Accessible informational text providing additional and complementary accurate background information related to an identified area of investigation.

Students will use this text to build background and practice skills of close reading and initial text analysis (for credibility, accessibility, and relevance) in **Part 1, Activity 3, and Part 2 Activities 2-3.** 

#### Text #4 - Perspective on the Topic:

Short, but potentially more challenging informational text that presents or suggests a particular perspective on an identified area of investigation. Should come from a credible source.

Students will use this text to identify one of multiple ways of viewing the identified area of investigation, to practice close reading skills of analyzing perspective and bias, and to compare with other perspectives in **Part 2, Activities 2-3.** 





# V. COMMON SOURCE TEXT SET (CONT'D)

### <u>Text #5 - Perspective on the Topic:</u>

Short, but more challenging informational text that presents or suggests a second or contrasting perspective on an identified area of investigation. Might come from a less known source with uncertain credibility.

Students will use this text to identify one of multiple ways of viewing the identified area of investigation, to practice close reading skills of analyzing perspective and bias, and to compare with other perspectives in Part 2, Activities 2-3.

### Text #6 - Perspective on the Topic:

Short informational text related to an identified area of investigation that presents or suggests an additional or contrasting perspective. Might come from an unusual source with uncertain credibility.

Students will use this text to identify one of multiple ways of viewing the identified area of investigation, to practice close reading skills of analyzing perspective and bias, and to compare with other perspectives in **Part 2, Activity 2-3.** 

#### Texts #7 - #10 - Arguments and Perspectives related to the Topic:

Longer and more complex informational texts related to an identified area of investigation with rich content, a clear perspective, and effective, well-developed argumentation.

Students will use this text to deepen their understanding of the identified area of investigation and the issues, debates, and controversies that surround it, and to practice the close reading skills of analyzing arguments, their reasoning, and their supporting evidence in Part 3, Activity2.

NOTE: the teacher or students may supplement this text set with additional examples of academic writing from fields related to the area of investigation.







# HUMAN – ANIMAL INTERACTION: THE LIMITS AND NECESSITIES OF MODERN DAY ANIMAL USE

Text Complexity Range: 810L to 1500L

| AUTHOR   | DATE           | LEXILE |
|--|----------------|--------|
| Text #1: "EARTH: A New Wild"   |                |        |
| PBS  | 2015           | NA     |
| Text #2: Animals: Moral Issues That Divide Us  |                |        |
| Dr. James Fieser   | 2001           | 1320 L |
| Text #3: American Dog: Search and Rescue Dogs  |                |        |
| Victoria Stilwell  | 2012           | NA     |
| Text #4: New York City Carriage Horse Falls Near Central Park, Reigniting Old Debate |                |        |
| Edward Lovett  | 2010           | 1080L  |
| Text #5: Monkey Business: Animal Testing Sparks International Debate                 |                |        |
| NA   | 2003           | 810L   |
| Text #6: Animal-Rights Activists Wreak Havoc in Milan Laboratory                     |                |        |
| Allison Abbott   | April 22, 2013 | 1300L  |
| Text #7: Italian Researchers Reply to Animal Facility Occupation                     |                |        |
| CNR Institute of Neuroscience  | April 23, 2013 | 1500L  |
| Text #8: Animal Experimentation is Justified   |                |        |
| Stuart Derbyshire  | 2004           | 1000L  |
| Text #9: History of the Cosmetic Directive   |                |        |
| Current Events Weekly Reader   | 2013           | NA     |
| Text #10: Are Apes Rights The Next Frontier  |                |        |
| Pamela Turner  | April 2008     | 1300L  |







### "EARTH: A New Wild"

#### **PBS**

Date: 2015 / Complexity Level: NA

#### **TEXT NOTES**

This five-minute video presents an extended preview of a new PBS series that debuted in February 2015. The series was produced by National Geographic and is narrated by conservation scientist Dr. M. Sanjayan, who explores the interrelationships among humans and animals in the "new wild" of various ecosystems (Plains, Forests, Oceans). This five-minute overview opens up the topic of human/animal interactions by beginning "a stunning visual journey to explore how humans are inextricably woven into every aspect of the planet's natural systems." (PBS website) For extended research in this area, viewers can also watch one of the five hour-long episodes of the show, available through the PBS site.

Sample Text-Dependent Questions:

- 1. What does the video suggest about the topic of human/animal interactions?
- 2. What other human/animal interactions does it make you think about?

# **TEXT #2**

# Animals: Moral Issues That Divide Us By Dr. James Fieser

**Date:** 2011 / **Complexity Level:** Measures at 1320L

#### **TEXT NOTES**

While this article has a high complexity level, students do not need to read the entire article. Students should focus their reading on the first three subsections: Animal Consciousness and Pain, Factory Farming, and Animal Research. These sections use vivid language that some students might find somewhat disturbing but most will find engaging and lead to them to unique inquiry paths. Frieser's research provides good background information concerning the controversy of animal use. His academic language paints a vivid description of current animal-use practices and raise interesting questions around the concept of pain. After these three sections student could continue to read to find survey results conducted by Friesen on people's beliefs about this ethical topic but it is not necessary.

Students might also access the following sites for historical background information:

- 1. What evidence suggests that dolphins and chimpanzees experience human-like pain?
- 2. What phrases are used by Friesen to describe the conditions of "factory farms?"
- 3. What evidence supports the claim, "Inhumane treatment of laboratory animals occurs at every stage of their lives?"







# **Search and Rescue Dogs**American Dog with Victoria Stilwell

**Date:** 2012 / **Complexity Level:** NA

### **TEXT NOTES**

This video is over twenty minutes long and teachers may choose for students to view it in its entirety. Teachers may also choose to only show the first 5:35 which show how dogs are being used positively to help save lives. This part also describes the bonds that are formed between handler and dog.

Sample Text-Dependent Questions:

- 1. What evidence from the video proves that firefighter Eric Darling and Ben the dog are a team? What words does Darling use to describe this partnership?
- 2. What benefits do dogs provide during search and rescue operations? What characteristics do dogs have that allow them to provide those benefits?

# **TEXT #4**

# New York City Carriage Horse Falls Near Central Park, Reigniting Old Debate By Edward Lovett

**Date:** 2010 / **Complexity Level:** Measures at 1080L

### **TEXT NOTES**

This article can be used to contrast with Text #3. While both search and rescue dogs and carriage horses are used to provide services to humans, their treatment appears quite different. The comparisons made in their treatment can provide an opportunity for students to think about service animals, their role in society, and how they are treated while carrying out their activity.

Sample Text-Dependent Questions (to drive initial close reading and discussion):

- 1. In what ways are the working conditions and jobs similar and different for carriage horses in Central Park and the search and rescue dogs described in the video used for Text #3?
- 2. In what way does the purpose of the animal's activity change the way we view or consider the risks it takes while carrying out the activity? Which textual details support your answer?







# Monkey Business: Animal Testing Sparks International Debate

**Date:** 2003 / **Complexity Level:** Measures at 810L (This source can be found by using EBSCO)

#### **TEXT NOTES**

This article focuses on the debate surrounding vivisection: experimentation on animals for medical purposes. This short article provides more background on the opinions of whether animals should be hurt and even killed in the name of research that benefits humans.

Sample Text-Dependent Questions:

- 1. According to researchers that conduct medical research on animals, what benefits are there to treating the animals well?
- 2. What evidence is used to support the claim that "researchers mistreat monkeys before subjecting them to painful experiments that are often painful?"



## **TEXT #6**

# Animal-Rights Activists Wreak Havoc in Milan Laboratory By Allison Abbott

**Date:** April 22, 2013 / **Complexity Level:** Measures at 1300L

#### **TEXT NOTES**

While the lexile level of this text is high, the vocabulary and language used in this journal is very accessible for middle school students. The article describes a how five animal rights activists broke into a medical research lab and ruined years of research in just a few hours of time.

Sample Text-Dependent Questions:

- 1. The author describes a demonstration by scientists in response to the "ignorance" of the activists. What does this imply would be the impact of the activists' break-in?
- 2. In what ways did the activists ruin the research being conducted?





# Italian Researchers Reply to Animal Facility Occupation By CNR Institute of Neuroscience

**Date:** April 23, 2013 / **Complexity Level:** Measures at 1500L

#### **TEXT NOTES**

In this letter by Italian researchers in response to the Milan break-in described in Text #6, the scientists explain the research they were conducting and their horror in it being destroyed. The high complexity level is due to long sentences so this text provides an opportunity to practice reading closely skills of rereading, annotating, and even using a guiding question, like "What information/ideas are presented in detail?"

Sample Text-Dependent Questions (to drive initial close reading and discussion):

- 1. Besides the "hundreds of thousands of Euros" lost in research, what do the authors describe as the greater loss?
- 2. What did the authors of this reply hope to clarify for readers?

# **TEXT #8**

# Animal Experimentation is Justified By Stuart Derbyshire

**Date:** 2004 / **Complexity Level:** Measures at 1000L (This source can be found by using the Gale Virtual Reference Library)

### **TEXT NOTES**

Derbyshire presents a powerful argument urging scientists to defend the work that they do which helps save human lives. This text is extremely long and goes into different subsections covering history, primate testing, philosophy behind testing, and uncertainty of the future. You may choose for students to read closely only the first two subsection "Scientists on the Defensive" and "Losing Nerve" which adequately capture Derbyshire's argument.

Sample Text-Dependent Questions:

1. What "disastrous tactical errors" have scientists made in "dealing with the animal rights movement?"

Delivery does Derbyshire call the three Rs patronizing?



# History of the Cosmetic Directive By Fightinganimaltesting.com

Date: 2013 / Complexity Level: NA

#### **TEXT NOTES**

This website is a timeline of events highlighting the history of the cosmetics directive in the European Union which aims to eliminate testing of cosmetics on animals. The timeline can help students understand how complicated a topic as it involves animals rights, business and human health interests. While this site is in favor of passing legislation banning testing on animals, students may be encouraged to find sources that support the use of testing on animals and explain the benefits of it.

Sample Text-Dependent Questions:

- 1. How do the authors show their displeasure for the governments of the European Union throughout this timeline?
- 2. How do cosmetic companies continue to get extensions on complying with the original ban?



# **TEXT #10**

# Are Apes Rights The Next Frontier By Pamela Turner

**Date:** April 2008 / **Complexity Level:** Measures at 1300L (This source can be found by using the Gale Virtual Reference Library)

### **TEXT NOTES**

In this point/counterpoint article, Pamela Turner describes the necessity for apes being used for medical research versus the argument by Jane Goodall and others that these amazing creatures experience pain and emotion and should be given person status. This text is a strong text to summarize the differing opinions explored in this repository.

Sample Text-Dependent Questions:

What arguments are given in support of certain animals being given "person status?"

How do scientists justify using animals for medical research?

# **VII. ADDITIONAL RESOURCES RELATED TO E HUMAN-ANIMAL INTERACTION**

### Battle over animal rights: scientists and animal-rights activists clash over the use of animals for medical research

Article that gives rich background information on the debate of using animals for research Available through Gale: Gale, Opposing Views in Context, Current Events, a Weekly Reader publication, December 9, 1996

Lexile Measure: 1160L

### **Monitoring the Health of Canine Heroes**

Article by the American Kennel Club Canine Health Foundation that reports on a study published in the 8/2010 issue of the Journal of Environmental Health, which deals with the current health of SAR dogs involved in the search at Ground Zero after the 9/11 attack

Lexile Measure: 1140L

#### **Wild Pets**

Natalie Smith examines the issues, both legal and ethical, of owning wild animals as pets. Scholastic News, Edition 5/6. 10/1/2012, Vol. 81 Issue 4, p4-5. 2p. Lexile Measure: 950L

### **Your Favorite Animal**

Article by Peg Lopata on the history of the bond between humans and dogs. Faces (07491387) Jul/Aug2012, Vol 28, Issue 9, p. 6-48.

Lexile Measure: 1200L

### The Ethics of Using Animals in Research

More challenging piece on the issue of ethics in animal testing Online Ethics Center for Engineering 8/17/2006. National Academy of Engineering, Lexile Measure: 1510L

### Dog Tale: Gray Wolf

Weir describes the domestication of dogs. (EBSCOhost) Current Science Vol. 96 Issue 5, p.10-11 Lexile Measure: 1010L

#### More Than Just A Family Pet

Article from the Toronto Star describes our emotional ties to pets. Available at EBSCOhost Lexile Measure: 860L





# **VII. ADDITIONAL RESOURCES RELATED TO HUMAN-ANIMAL INTERACTION (CONT'D)**

#### **Animal Allies**

Article by Michael Hauser in *Boys' Quest* on the uses of animals during military conflicts. Available at Gale

Lexile Measure: 1020L

### **Report Spots Risks in Animal Farm Practices**

Article by Elizabeth Weise in *USA Today* explaining farming practices and their risks to humans.

Available at Gale Lexile Measure: 1480L

# Working like a dog: sheepherders, detectives, household helpers, and more-dogs do all sorts of jobs. And they're doggone good workers!

Terrell Smith in National Geographic Explorer explains the many uses of dogs.

National Geographic Explorer, Jan-Feb 2003 v2 i4 p18(6).

Lexile Measure: 1140L

### **Factory Farm Animals are Treated Humanely**

Argument defending farming practices in the U.S.

Available at Gale Lexile Measure: 1130L







