

THINK LITERACY in PHILOSOPHY

Rationale:

The Ministry of Education's "Think Literacy" document provides a set of strategies to help students develop their reading, writing and oral communication skills. "Think Literacy" was created out of the belief that literacy learning should be fostered in all subject areas, in order to not only reinforce these skills, but teach students how to apply them in various contexts. The strategies and templates provided in the document are modifiable, in order to fit subject-specific contexts. The "Think Literacy" document, as well as a library of subject-specific adaptations, can be accessed at the following link:

<http://www.edu.gov.on.ca/eng/studentssuccess/thinkliteracy/library.html>

The following strategies are adapted directly from the Reading, Writing, and Oral Communication sections of "Think Literacy." These activities are designed to fit with the 2013 Grade 11 Philosophy curriculum, HZB3M (specific expectations A1.1, A1.2, A3.2, A3.3, B1.2, B2.2, C2.2, C3.1, D2.2, and D2.3). These activities can be modified and used separately for various philosophical topics, or they can be used in sequence as a complete lesson plan.

TIP: If using the activities together as a complete lesson, it is suggested that a "Minds On" or introductory activity be added before the reading activity. For example:

- Have students do a 4 Corners activity (see Oral Communication section), omitting the discussion element. When doing this activity for the second time later in the class, ask students if anyone's response has changed after having read the articles.
- Play the video clip "People for Good: Caterpillar." Ask students if they consider this a "good deed." Ask if they would consider it a good deed if it were a rabbit instead of a caterpillar, or a dog, or a child. Discuss students' beliefs about the hierarchy of the value of life. <http://www.youtube.com/watch?v=FH4pHS6FNio>
- Have students complete a Rapid Writing activity based on the statement "Animal research for medical purposes is justifiable."
- In small groups, have students complete a Placemat activity. The prompt in the centre of the Placemat should be "Animal research for medical purposes is justifiable."

Reacting to Reading: **Making Reasoned Judgments (Both Sides Now)**

Philosophy HZB3M: Ethics – Animals in Research

Readers increase their understanding of the arguments for and against using animals for medical research purposes by reviewing what they have read, reflecting on what they have learned, and by asking questions about the significance of the debate and arguments. In this activity students are asked to consider the statement: “Animal research for medical purposes is justifiable.”

Purpose

- Assess different viewpoints or perspectives.
- Make judgments about viewpoints or opinions.
- To give reasons for and against a proposed idea.

Payoff

Students will:

- Think critically about the issue of animal experimentation.
- Summarize the important ideas, concepts, and information surrounding the debate.
- Develop a model for reading and thinking critically about important concepts, issues, and idea.

Tips and Resources

- To *make judgments*, readers ask questions to help them process information, assess the importance and relevance of the information, and apply it in a new context. *Evaluating* is a skill that readers use when reading and critically thinking about a particular text. Readers make value judgments about the validity and accuracy of the ideas and information, the logic of a writer’s argument, the quality of a writer’s style, the effectiveness of the text organization, the reasonableness of events and actions, and more.
- Make copies of the articles, “Flight Risk”, and “Problems with medical research”.
- Make copies of *Making Judgments (Both Sides Now)* worksheet.
- This topic is only one of many possible topics and the strategies that can be used for any issue that a teacher may find more relevant to their class.
- See the following:
 - Teacher Resource, *Both Sides Now – Sample Response*.
 - Student Resource, *Both Sides Now – Template for Making Judgements*.
 - Student/Teacher Resource, *Clues for Finding Answers in the Text*.

Further Support

- Review reading skills and tracking of main ideas, comparing and contrasting, making inferences and drawing conclusions with students.
- Encourage the class to be critically minded when considering both the arguments for and against and consider what counter arguments could be used during the 4 corners debate that will follow the reading.

Reacting to Reading: **Making Reasoned Judgments (Both Sides Now)**

Philosophy HZB3M: Ethics – Animals in Research

What teachers do	What students do
Before • Make copies of the two opposing articles, , “Flight Risk”, and “Problems with medical research” and the Making Judgements “Both sides now” graphic organizer. • Write the following statement on the board: Animal research for medical purposes is justifiable. • Review the difference between information and opinion. • Using a T-Chart have a brief class discussion in order to develop some brief opening ideas as to the arguments for and against animal experimentation. • Ask students where their responses came from (e.g., prior knowledge and experiences of other reading tasks, videos, discussions.) • Have students consider any possible sources of bias that will direct one’s thinking in this debate.	• Recall information they may already know on the topic of animal experimentation. • Review what they already know about inferences based on information, prior knowledge and experience. • Contribute to the class discussion. • Observe the teacher recording the evidence that supports or opposes the statement. • Recall where they learned about the topic or issue.
During • Put the students into groups of three for the reading activity. • Ask students to review the readings and find the evidence which supports and opposes the statement provided. • Circulate in the room during this reading period and intervene to clarify the task or content if needed.	• Read the sources given to them and ask critical questions of the information. • Identify the opinion or viewpoint that is presented. • Individually complete the Making Judgments (Both Sides Now) graphic organizer.
After • Put the class back into groups of three and have them peer review each other’s work. • Ask partners to orally summarize reading material, and identify the writer’s viewpoint. • Ask students to provide an idea or information from the reading materials that supports the viewpoint. • Ask partners to review and discuss the evidence and make a decision based on the evidence and related inferences. • Partners share their decisions and state reasons for their decision. • Students write a brief responses to the statement based on their learning.	• Listen to each group member’s summary and compare it to their own. Add to their own understanding. • Contribute to the discussion. • Evaluate the evidence and make a judgment based on the information provided by the text, inferences they have made, and their own knowledge and experience.

Student Resource 1

NATURE | EDITORIAL

Flight risk

Nature **483**, 373–374 (22 March 2012) doi:10.1038/483373b Published online
21 March 2012

As the campaign against animal research intensifies, so must the response.

Picture a crowd of scientists waving placards plastered with photographs of stroke victims and sufferers of Parkinson's disease. They are demonstrating outside the corporate headquarters of British Airways, Lufthansa and Delta, demanding that the airlines stop impeding the biomedical research that could deliver big advances against these and other diseases.

Seem far-fetched? Maybe. But if scientists want continued access to animals as research models, they will have to appear on the front line with every bit as much visibility, determination, organization and persistence as animal-rights activists now muster.

In a renewed campaign targeting transportation companies, protestors have found a public pressure point so effective that only a few major airlines still agree to transport non-human primates bound for research labs. Nor is the focus confined to primate transportation: earlier this year, the last ferry company that was willing to carry research rodents into the United Kingdom stopped doing so. Such blocks, scientists warn, could shift much animal work to countries where regulations are more lax.

But there is a silent majority for whom the activists do not speak. This includes most scientists, many ordinary citizens and millions of patients and their families touched by disease and injury. This constituency must mobilize in the defence of human health if the gains enabled by future primate research — and, ultimately, all animal research — are not to be thrown away.

“Silence from the research community will mean lost access to research animals.”

Scientists and their allies must, of course, continue to be open about the price animals pay in research. They must openly acknowledge, immediately correct and do everything they can to prevent lapses in the care of the animals in their charge. At the same time, scientists must make every effort to use lower animal, and non-animal, models where possible, as regulations already require. And alongside all of that,

they must emphasize the tangible and compelling improvements to human life that animal research has made possible.

Consider stroke, which affects some 795,000 people in the United States alone each year — 1 person every 40 seconds — at a cost in excess of US\$40 billion. More than 1,000 experimental treatments aimed at protecting brain cells in acute stroke have been developed in cells and rodents; none has been effective in humans. So a possible advance in a paper published last month is significant ([D. J. Cook *et al.* *Nature* 483, 213–217; 2012](#)). Using macaques — animals whose neuroanatomy, genetics and behaviour are far closer to humans than are those of rodents — the study showed that a drug called a PSD-95 inhibitor reduced the volume of brain tissue killed by the stroke and significantly preserved neurological function. It has now moved into human trials, where early results are promising.

Many other advances have been made possible by primate research. Trials of brain–machine interfaces that allow quadriplegics to control robotic limbs with their minds, for example, and of gene therapy for haemophilia B. And deep-brain stimulation to alleviate the symptoms of advanced Parkinson's disease. Primates have also helped the development of antiviral therapies to prevent mother-to-child transmission of HIV; of Rituxan (rituximab), a key drug against non-Hodgkin's lymphoma; and of Benlysta (belimumab), the first new lupus treatment in 50 years. Primates are making possible strides towards a vaccine against Ebola, and they have affirmed that the diabetes drug pioglitazone can slow early Parkinson's disease — a therapy now being taken into human trials.

Future advances of this kind cannot be allowed to stall. The scientific community and its allies in patient and research advocacy groups should mount a vigorous, coordinated campaign to lobby major airlines. They should vocally support companies such as Air France that continue to fly research primates. They should confront others with the human cost of their alignment with animal activists. And to those airlines that are wavering, they should make a pointed, persuasive case.

An apt target in the last category is United Airlines, which merged with Continental in 2010. Continental was the last major US airline carrying non-human primates for research. The now-merged airline, still under the name of United, says it is “in the process of integrating” the former United and Continental policies on transporting research primates, for publication this autumn. Only a powerful and visible public campaign urging United to transport research primates will give the firm the political cover it needs to take such a position.

Urgent and dramatic action is necessary. It is increasingly clear that silence and passivity from the research community will lead to only one result: lost access to research animals in the countries best equipped for their responsible, humane and justified use.

Student Resource 2

American Anti-Vivisection Society: Problems With Medical Research

Scientists use animals in biological and medical research more as a matter of tradition, not because animal research has proved particularly successful or better than other modes of experimentation. In fact, animal ‘[models](#)’ have never been validated, and the claim that animals are necessary for biomedical research is unsupported by the scientific literature^[1]. Instead, there is growing awareness of the limitations of animal research and its inability to make reliable predictions about human health.

The biomedical research community and its affiliated trade associations routinely attempt to convince the general public, media, and government representatives that the current controversy over the use of animals is a life-and-death contest pitting defenders of human health and scientific advancement against hordes of anti-science, anti-human, emotional, irrational activists. Such a deliberate, simplistic dichotomy is not only false, but ignores the very real and well-documented ethical and scientific problems associated with the use of animal experiments that characterize modern biomedical research, testing, and its associated industries.

The biomedical community would instead be better served by promoting increased funding and research efforts for the development of [non-animal models](#) that overcome the pressing ethical and scientific limitations of an increasingly archaic system of animal experimentation.

Ethical Concerns of Using Animals in Research

Animals are living, sentient beings, and animal experimentation by its very nature takes a considerable toll on animal life. In most cases, researchers attempt to minimize the pain and distress experienced by animals in laboratories, but suffering is nonetheless inherent as animals are held in sterile, isolated cages, forced to suffer disease and injury, or euthanised at the end of the study.

While the majority of scientists are well-intentioned, focused on finding cures for what ails us, some biomedical researchers fail to recognize or appreciate that laboratory animals are not simply machines or little boxes that produce varieties of data. Once consideration of animals is reduced to this level, callousness and insensitivity to the animals’ pain, suffering, and basic needs can follow.

Indeed, animals in laboratories are frequently treated as objects that can be manipulated at will, with little value for their lives beyond the cost of purchase. AAVS, however, believes that animals have the right *not* to be exploited for science, and we should not have to choose between helping humans and harming animals.

[Click here](#) to read more about ethical concerns with animal research.

Scientific Limitations of Using Animals

In addition to the ethical arguments against using animals in research, animal advocates, as well as many scientists, are increasingly questioning the scientific validity and reliability of animal experimentation. Some of the main limitations of animal research are discussed in detail below:

- Animal studies do not reliably predict human outcomes.
- Nine out of ten drugs that appear promising in animal studies go on to fail in human clinical trials.
- Reliance on animal experimentation can impede and delay discovery.
- Animal studies are flawed by design.

Animal studies do not reliably predict human outcomes.

Obvious and subtle differences between humans and animals in terms of our physiology, anatomy, and metabolism make it difficult to apply data derived from animal studies to human conditions. Acetaminophen, for example, is poisonous to cats but is a therapeutic in humans; penicillin is toxic in guinea pigs but has been an invaluable tool in human medicine; morphine causes hyper-excitement in cats but has a calming effect in human patients; and oral contraceptives prolong blood-clotting times in dogs but increase a human's risk of developing blood clots. Many more such examples exist. Even within the same species, similar disparities can be found among different sexes, breeds, age and weight ranges, and ethnic backgrounds.

Furthermore, animal 'models' are seldom subject to the same causes, symptoms, or biological mechanisms as their purported human analogues. Indeed, many health problems currently afflicting humans, such as psychopathology, cancer, drug addiction, Alzheimer's, and AIDS, are species-specific.

As a result, accurately translating information from animal studies to human patients can be an exercise in speculation. According to Hackam and Redelmeier (2006), "patients and physicians should remain cautious about extrapolating the findings of prominent animal research to the care of human disease," and even high-quality animal studies will replicate poorly in human clinical research.^[2]

Nine out of ten drugs that appear promising in animal studies go on to fail in human clinical trials.

Indeed, because of the inherent differences between animals and humans, drugs and procedures that work in animals often end up failing in humans. According to Health and Human Services Secretary Mike Leavitt, "nine out of ten experimental drugs fail in clinical studies because we cannot accurately predict how they will behave in people based on laboratory and animal studies."^[3]

A significant amount of time and money, not to mention animal lives, is squandered in the process. Pfizer, for example, reported in 2004 that it had wasted more than \$2 billion over the past decade on drugs that "failed in advanced human testing or, in a few instances, were forced off the market, because of liver toxicity problems."^[4]

In fact, there have been numerous reports recently of approved drugs causing serious and unexpected health problems, leading the Food and Drug Administration (FDA) to remove the products from the market or require black box warnings on their labels. The FDA has reported that "adverse events associated with drugs are the single leading contributor to preventable patient injury, and may cost the lives of up to 100,000 Americans, account for more than 3 million hospital admissions, and increase the nation's hospitalization bill by up to \$17 billion each year."^[5] The agency estimates that drug-related injuries outside the hospital add \$76.6 billion to health care costs.

Reliance on animal experimentation can impede and delay discovery.

Alternatively, drugs and procedures that could be effective in humans may never be developed because they fail in animal studies. It is difficult to know how frequently this occurs, since drugs that fail in animals are rarely tested in humans. However, there have been some notable cases. Lipitor, for example, Pfizer's blockbuster drug for reducing cholesterol, did not seem promising in early animal experiments. A research scientist, however, requested that the drug be tested in a small group of healthy human volunteers, and it was only then that its effectiveness was demonstrated.^[6]

In many instances, medical discoveries are delayed as researchers vainly waste time, money, effort, and animal lives trying to create an animal model of a human disease. A classic example is the discovery that smoking significantly increases the risk of lung cancer. The finding was first reported in 1954 on the basis of an epidemiological study. The report was dismissed, however, because lung cancer due to inhalation of cigarette smoke could not be induced in animal models, and it wasn't until 30 years later that the U.S. Surgeon General finally issued the warning on cigarettes.

Another noteworthy example concerns the development of the polio vaccine. Researchers spent decades infecting non-human primates with the disease and conducting other animal experiments, but failed to produce a vaccine. The key event which led directly to the vaccine and a Nobel Prize occurred when researchers grew the virus in human cell cultures *in vitro*.

Animal studies are flawed by design.

In addition to the fact that animals make poor surrogates for humans, the design of animals experiments is often inherently flawed, making it that much more unlikely that results obtained from such studies will be useful. Researchers from the Vanderbilt University Medical Center described some of the problems with animal 'models' in their 2004 article: "...[T]he design of animal studies automatically controls many variables that can confound human studies"; "...[T]he phenotypes studied in animals are not truly identical to human disease but are limited representations of them"; and "In most cases, animal studies do not assess the role

of naturally occurring variation and its effects on phenotypes.”^[7]

Furthermore, in their effort to secure research funds, expand the territorial boundaries and influence of their laboratories, or simply maintain their employment, it is a common practice for biomedical researchers to generate an endless series of experiments by devising minor variations on a common theme, redefining previous work, subdividing one problem into multiple parts, or manipulating new technology and equipment to answer old or irrelevant questions. Such practices are endemic in such fields as experimental psychology, substance abuse/addiction, and most of the neuroscience and transplantation protocols, yet by their very design do little to improve human or animal lives.

Promise of Alternatives

In animal research, as with slot machines, if you pull the traditional levers enough times, a winner eventually appears. However, animal research, in addition to being ethically challenged, is also highly flawed and severely limited, and as such, the majority of such research has failed to translate into improvements in human health.

Despite the problems with animal research, there continues to be an over-reliance on questionable animal ‘models,’ and there has been “an unprecedented increase in funding for biomedical research”^[8] over the years, without much success.

If the goal of biomedical experimentation is the understanding and treatment of human clinical concerns, then the current emphasis on animal ‘models,’ constructed under multiple artificial conditions, should be replaced by more relevant [alternatives](#) and a return to an emphasis on clinical research and public health attention to preventative measures.

Even in areas that have come to rely on vivisection, ending animal experimentation would not halt research because experience shows that scientists quickly devise new techniques to achieve their objectives. Epidemiology, cell culture experiments, and human clinical studies, as well as recent advances in *in silico* biology (computational modeling), are all better suited to efficiently and safely uncovering the cause of a disease and its treatment than is animal experimentation.

Resources

FDA’s Innovation or Stagnation: Challenge and Opportunity on the Critical Path to New Medical Products

[1] Matthews, R.A.J. (2008). Medical Progress Depends on Animal Models – Doesn’t It? *Journal of the Royal Society of Medicine*, 101: 95-98.

[2] Hackam, D.G. and Redelmeier, D.A. (2006). Translation of Research Evidence From Animals to Humans. *Journal of the American Medical Association*, 296(14): 1731-1732.

[3] Food and Drug Administration (2006, Jan. 12). FDA Issues Advice to Make Earliest Stages of Clinical Drug Development More Efficient. Press Release. Retrieved March 2008, from <http://www.fda.gov/bbs/topics/news/2006/NEW01296.html>.

[4] Rotman, D. (2004). Can Pfizer Deliver? *Technology Review*. Retrieved March 2008, from <http://www.technologyreview.com/Biotech/13462/page1/>.

[5] Food and Drug Administration (2004). Innovation or Stagnation: Challenge and Opportunity on the Critical Path to New Medical Products. Retrieved March 2008, from www.fda.gov/oc/initiatives/criticalpath/whitepaper.pdf.

[6] Agres, T. (2006, Mar. 9). FDA Input Aids Early Trials. *Drug Discovery and Development*. Retrieved March 2008, from <http://www.dddmag.com/fda-input-aids-early-trials.aspx>

[7] Williams, S.M., Haines, J.L., and Moore, J.H. (2004). The use of animal models in the study of complex disease: all else is never equal or why do so many human studies fail to replicate animal findings? *Bioessays*, 26(2): 170-179.

[8] Food and Drug Administration (2006, Jan. 12). See note 3 above

Based on THINK LITERACY: Cross-Curricular Approaches, Grades 7-12

Student Resource 3

MAKING REASONED JUDGMENTS: ANIMALS IN RESEARCH

Both Sides Now		
Evidence That Supports		Evidence That Opposes
	Animal research for medical purposes is justifiable.	
Decision		

Reasons

Based on THINK LITERACY: Cross-Curricular Approaches, Grades 7-12

Oral Communication: 4 Corners Activity

Philosophy HZB3M: Ethics – Animals in Research

In this strategy, students individually consider an issue and move to a corner of the room where they join others who share their ideas. Discussants increase their understanding of the arguments for and against using animals for medical research purposes by reviewing their prior knowledge and intuitions about animal research, recalling and reflecting on what they have learned so far in the class that might be applicable to this question of applied ethics, and prepare to critically read and consider questions about the significance of the debate and arguments. In this activity students are asked to consider the statement: “Animal research for medical purposes is justifiable.”

Purpose

- Allow students to make personal decisions on sensitive issue of the ethics of animal research for medical purposes; encourage critical thinking.
- Encourage an exchange of ideas in small groups.
- Facilitate whole-class discussion of these ideas.

Payoff

Students will:

- Make up their own minds on an issue.
- Speak freely in a relaxed, small-group environment.
- Think creatively and critically.
- Prepare to think critically about the issue of animal experimentation.
- Recall important ideas, concepts, and information surrounding the debate from prior lessons, personal experience, and intuitions.

Tips and Resources

- Encourage students to make up their own mind concerning the issue.
- Encourage students to express themselves in speech (discussion), writing or images (on chart paper placed in corners).
- Possible variations:

- Students verbalize their reasons and intuitions about the question in their corners, the teacher may also supply chart paper so students can write reasons, or draw images that illustrate their reasons or intuitions.
- Teacher may group each corner's students into discussion groups of 2 or 3, depending on number of students in corner.
- Try using only two responses; draw a line dividing the room and ask students to stand on one side of it, depending on their decision. Students can be prompted periodically to cross the line if something has been said that changes their answer to the question. Likewise the teacher may ask students if their answer changes if the question is changed. Example: "Is animal research for cosmetic research justified?"
- Vary the approach by creating a value line. Ask students to rank themselves by lining up in a single line of a continuum, from strongly agree to strongly disagree. This will make student exchanges a necessity so that students can discover exactly where they fit on the line.
- Teacher may supply chart paper on wall or desk near each 4 corner where students can write reasons, or draw images that illustrate their reasons or intuitions.
- Enrich the experience of a group that finishes quickly by prompting them to consider how prior studies such as metaphysics (e.g. what is a person?), or ethical theories (e.g. utilitarianism, deontology) might influence or complicate their reasons or feelings about the question.
- See the following: Teacher Resource: *Think Literacy: Oral Communication*: pp. 182-4.

Further Support

The teacher may need to:

- Encourage some students and promote equal responses in groups.
- Assign roles to group members who are dominating discussion, or are lost and/or disconnected from class, such as: Art Director, Discussion Moderator, Group Representative (to report back to class).
- Jumpstart a stalled group with discussion questions, such as: "How does this question relate to me?"; "Under what circumstances would my own or a friend's family pet make a good candidate for animal experimentation?"

Oral Communication: Four Corners Activity

Philosophy HZB3M: Ethics – Animals in Research

What teachers do	What students do
Before - Write the following statement on the board: Animal research for medical purposes is justifiable. - Organize the room into four areas(corners) and label with “Strongly Agree”, “Somewhat Agree”, “Somewhat Disagree”, “Strongly Disagree” (Optional) place chart paper and markers on wall or on desk next to signs. - A minute or two should be enough time for students to choose and move to their corners;ensure that this time is spent quietly sothat students make their own choices.	- Fully understand the question posed. - Carefully ponder the question, making a personal decision as to the position they will take. - Recall information they may already know on the topic of animal experimentation.
During - Ask students to move to the corner that best represents their stance on the issue. - Direct students to get into groups of three(if possible) to discuss the reasons for their choices. In cases where the groups are not large enough, pairs may be formed. In cases where only one student is in a group, the teacher could act as the other member of the pair. - Circulate in the room during this sorting period and intervene to clarify the task or content if needed. - For groups that stall or finish quickly see previous page for prompts. - Monitor discussion in corners, and after 5-10 minutes draw attention of whole class.	- Move to the corner that best describes their personal views on the issue. - Engage in an exchange of ideas with other members of their group, remaining open and communicative. - Ensure that everyone is heard and that everyone in the group shares equally. Prepare to speak to the class about the group’s discussions, noting common reasons and differing opinions. (Optional) write or illustrate on chart paper reasons that contribute to their decision to go to that corner.
After - Reconvene class into one group at desks.. - Check in with each group. Prompts: What does your sign say? What did your group talk about? What reasons did you arrive at for holding the position on	- Highlight their group’s main points with the class, pointing out commonalities and discrepancies. - Ensure that each member of the group has something to share with the class.

your sign? What did you write/draw on your chart paper? • (Optional) Students write a brief responses to the statement based on their learning.	
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Based on THINK LITERACY: Cross-Curricular Approaches, Grades 7-12

Developing and Organizing Ideas: **Supporting the Main Idea**

Philosophy HZB3M: Ethics – Animals in Research

In this strategy, students learn how to select the better of two possible main ideas to use as a topic sentence in an argumentative paragraph, and then learn how to choose details or premises to support it. Student samples are based on an ethics unit in a philosophy course. Samples may also be used to teach summary or opinion writing.

Purpose

- Distinguish main ideas and supporting details for a paragraph

Payoff

Students will:

- Write well-organized argumentative paragraphs for philosophy, with supporting details or premises.
- Demonstrate a clear understanding of the topic.
- Improve reading comprehension by spotting main ideas and supporting details.

Tips and Resources

- Use this strategy in philosophy to argue a point.
- The “main idea” is a broad statement that includes a topic that can be expanded. In this case, it is a statement of opinion or one that takes a stance on the issue. It usually begins the paragraph.
- Identify the correct main idea by selecting the one that has the most supporting points.
- Write the sentences into an argumentative paragraph by starting with the general opinion statement and writing the remaining sentences in order of importance. Exclude any sentences that do not directly support your point.
- Reinforce your point with a concluding sentence (the conclusion based on your premises).
- See the following resources:
 - Student/Teacher Resources, *Finding and Supporting the Main Idea – Sample Exercises and Answer Key*
 - Student/Teacher Resource, *Supporting the Main Ideas* in *Think Literacy: Cross-Curricular Approaches, Grades 7-12* on p.112
- This activity can be expanded upon to turn opinion paragraphs into argumentative essays or class debates. See the **Adding Details** writing activity in Student Resource, *Adding Details* in *Think Literacy: Cross-Curricular Approaches, Grades 7-12* on p.118

Further Support

Alternative methods:

- Complete the activity on paper.
- Work either individually or in pairs.
- Read groups of sentences.
- Look for the best-supported general statement.
- Cross off statements that do not fit the general statement selected.

Based on THINK LITERACY: Cross-Curricular Approaches, Grades 7-12

Developing and Organizing Ideas: Supporting the Main Idea

Philosophy HZB3M: Ethics – Animals in Research

What teachers do	What students do
Before • Use the Student/Teacher <i>Sample Exercise</i> provided. • Enlarge each set of statements and cut up into their separate statements. • Place each set of statements into a separate envelope. • Divide the class into groups of three or four and give each group one set of statements. • Model the strategy on the board or overhead using the set that was given to the students. • Teach how to find main ideas in the statements (see Tips and Resources). • Hand out a second set of envelopes to each group for them to complete individually. • Alternatively, have the students complete this activity directly on paper, without cutting up the groups of statements.	• Read through the set of statements with the teacher. • Annotate statements while the teacher models.
During • Circulate through the class. • Ask students how they know which statement is the best-supported stance or opinion. • Point out that if students have more sentences crossed out than they have left to work with, they have probably selected the wrong stance on the issue.	• Work individually or in pairs or in small groups. • Read through the group of sentences. • Look for the best-supported opinion statement (if there is more than one main idea, choose the one that has the most supporting statements.) • Place statements to the side if they do not fit the selected main idea. • Place the selected main idea or opinion on top. • Place supporting statements directly under the opinion.
After	

• Review and discuss the second set of sentences and discuss answers. If needed, have students move on to another set of sentences. • Model how to use the sentences to write an argumentative paragraph (see Tips and Resources). • Demonstrate how to write a concluding sentence. The basic style is to reword the first sentence/stance on the issue. • Have students write a generalized opinion statement and supporting details in response to the statement: <i>Animal research for medical purposes is justified.</i> • Students should use ideas from their group discussions, chart paper, and articles to support their opinion. • Have students write their sentences into an argumentative paragraph.	• Review the statements with the teacher. • Write sentences into a paragraph. • Write own generalized opinion and supporting details in response to the statement: <i>Animal research for medical purposes is justified.</i> • Use ideas from your group discussion, chart paper, and the articles to support your opinion. • Write your sentences into an argumentative paragraph.
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Based on THINK LITERACY: Cross-Curricular Approaches, Grades 7-12

Student Resource

Finding and Supporting the Main Idea

1. Look at the scrambled statements in paragraph one.
2. Identify two main ideas in paragraph one.
3. Choose which main idea is best supported by the other statements given – this will be your main idea for the paragraph.
4. Cross off or remove the statements that do not belong in the paragraph (that do not support your main idea).
5. Order statements in the paragraph.

6. Share and compare your ideas with others.

7. Write your final paragraph.

Based on THINK LITERACY: Cross-Curricular Approaches, Grades 7-12

Student/Teacher Resource

Finding and Supporting the Main Idea

Sample Exercise

Paragraph one:

The innocent may be wrongly executed.

More than half of U.S. states use the death penalty, including Florida, Pennsylvania, Washington, and California.

Capital punishment does not deter crime; crime rates are not lower in places that enforce the death penalty.

In 2011, Troy Davis was put to death in Georgia for shooting a police officer.

There are many persuasive arguments against the use of capital punishment.

Canada eliminated the use of the death penalty for murder in 1976.

The death penalty leaves no possibility for criminal rehabilitation.

Capital punishment may provide closure and relief for families of the criminals' victims.

Paragraph two:

Euthanasia weakens society's respect for life.

People have the right to be free from incurable suffering.

Certain types of euthanasia, such as passive euthanasia, are legal in some countries.

Legalizing euthanasia could create a "slippery slope" effect that allows for death without patient consent.

Allowing people to choose death may free up health care resources for people with curable illnesses.

If there is no harm to others, people should have the right to choose their own fate.

People deserve to die with dignity.

Allowing euthanasia means accepting that some lives are more valuable than others.

Euthanasia is an ethical practice and should be legalized.

Paragraph three:

Acts of civil disobedience pose the threat of becoming violent.

Rosa Parks' refusal to sit at the back of the bus is an example of civil disobedience.

Accepting civil disobedience could cause social and legal chaos.

Civil disobedience is a peaceful form of protest that does not cause harm.

Disobedience of laws can be justified if such laws are unjust.

Civil disobedience is morally justified.

The acceptance of civil disobedience is necessary in order to create an equitable, just society.

Based on THINK LITERACY: Cross-Curricular Approaches, Grades 7-12

Student/Teacher Resource

Finding and Supporting the Main Idea

Answer Key

Legend:

- | | |
|-------------------------------------|--|
| ☐ | Main idea |
| ☒ | Supporting idea; statement belongs in the paragraph |
| ☐ | Statement should be crossed out or removed; does not belong in paragraph |

Paragraph one:

- ☐ There are many persuasive arguments against the use of capital punishment.
- ☒ The innocent may be wrongly executed.
- ☒ Capital punishment does not deter crime; crime rates are not lower in places that enforce the death penalty.
- ☒ The death penalty leaves no possibility for criminal rehabilitation.
- ☐ In 2011, Troy Davis was put to death in Georgia for shooting a police officer.
- ☐ Capital punishment may provide closure and relief for families of the criminals' victims.
- ☐ Canada eliminated the use of the death penalty for murder in 1976.
- ☐ More than half of U.S. states use the death penalty, including Florida, Pennsylvania, Washington, and California.

Paragraph two:

- ☐ Euthanasia is an ethical practice and should be legalized.
- ☒ People have the right to be free from incurable suffering.

- ✓ Allowing people to choose death may free up health care resources for people with curable illnesses.
- ✓ If there is no harm to others, people should have the right to choose their own fate.
- ✓ People deserve to die with dignity.
- ☐ Euthanasia weakens society's respect for life.
- ☐ Allowing Euthanasia means accepting that some lives are more valuable than others.
- ☐ Legalizing euthanasia could create a "slippery slope" effect that allows for death without patient consent.
- ☐ Certain types of euthanasia, such as passive euthanasia, are legal in some countries.

Paragraph three:

- ☐ Civil disobedience is morally justified.
- ✓ Civil disobedience is a peaceful form of protest that does not cause harm.
- ✓ Disobedience of laws can be justified if such laws are unjust.
- ✓ The acceptance of civil disobedience is necessary in order to create an equitable, just society.
- ☐ Accepting civil disobedience could cause social and legal chaos.
- ☐ Passionate acts of civil disobedience pose the threat of becoming violent.
- ☐ Rosa Parks' refusal to sit at the back of the bus is an example of civil disobedience.