



Engaging Issues

Teachers' Guide

Increase Student Achievement in 21st Century Skills

**Integrate Critical Thinking Strategies
ProQuest Mini-Research Models Make Research Easier
Model BookCarts Invest More Time in Learning, Not Searching**

INCLUDES:

- Over 90 engaging mini-research topics/issues to motivate student writing and expression
- Engaging Issues model BookCarts support teachers and students across the curriculum
- Each BookCart integrates lesson plan elements with the necessary learning resources
- Easy to copy model BookCarts for your local collection to jump-start research activities
- Engaging Issues correlate to national standards and critical thinking strategies
- Scientific research supports the effectiveness of inquiry-based activities for learning
- National Information Literacy Standards (AASL) correlation
- National Technology Standards for Teachers (ISTE) correlation
- Models and formats for mini-research reports and teacher assessment rubrics

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Engaging Issues BookCarts—A Lesson Plan Design for Inquiry-Based Learning

Each of the Engaging Issues BookCarts listed in this guide is organized to integrate many **lesson plan elements** used by teachers for assigning **inquiry-based activities**. This provides the following benefits for teachers, students, and librarians whenever an assigned BookCart engaging issue is opened by a student:

1. **Essential Question** models guide students to explore each topic/issue using critical thinking: <http://fno.org/feb07/topic.html> (teachers may add and assign others)
2. Teachers may **add student directions** to ensure each student knows what to do
3. Teachers and librarians may **add** valuable library **print resources** pathfinders
4. Teachers may **add a QuizCart** or information about the assessment method http://www.proquestk12.com/productinfo/library_bookcarts.shtml#2A

PQ; SocStudies--Government; High School; 2007-05-30 00:00:00

EB09--Universal Health Care Insurance

ESSENTIAL QUESTIONS FOR CRITICAL THINKING: 1. What should be the role of the federal government to provide support for comprehensive medical care program for all citizens? 2. Should the federal government subsidize health care insurance for employees of businesses that do not provide this benefit? 3. How would the federal government fund universal health insurance? STUDENT DIRECTIONS: PRINT RESOURCES: ASSESSMENTS:





5. Students can search for additional and more current eLibrary resources from **within** the BookCart but only from **teacher-selected** publications--saves time and ensures relevancy

Selected Publications Search

- 1 Health Affairs
- 2 Issues in Law & Medicine
- 3 Congressional Testimony
- 4 Health Affairs
- 5 The Journal of Law, Medicine & Ethics
- 6 JAMA

6. BookCarts contain a variety of media with balanced viewpoints—sample: 4 of 15:

Readings:
click on a title to view the full document text

1		Date: 11-28-2002 Reading Level: 9 Size: 9K	<u>Is rich-man, poor-man health care in our future?; Toronto Star</u>
2		Date: 10-12-2002 Reading Level: 12 Size: 3K	<u>CARTER LAYS OUT A HEALTH CARE PLAN; Blethen Maine Newspapers Inc.</u>
3		Date: 11-05-2000 Reading Level: 11 Size: 5K	<u>Of Innovation and the Uninsured; The New York Times</u>
4		Date: 01-01-2001 Reading Level: 13 Size: 5K	<u>Real numbers; The University of Texas at Dallas</u>

7. Include up to 30 eLibrary websites or your **favorites**—sample: 7 of 12





Web Links:

- 1 [Un Health Care Action Network](#) Ideas for implementing and funding
- 2 [Physicians for a National Health Program](#) Our Mission: Single-Payer National Health Insurance
- 3 [American Medical Students Association](#) Myths and facts about single payer health insurance.
- 4 [Almanac of Policy Issues](#) Universal Health Care Coverage
- 5 [American Medical Student Association](#) AMSA's Universal Health Care Initiative
- 6 [Universal Health Care](#) The case for single-payer universal health care
- 7 [Universal Health Care--2](#) Wikipedia article

8. Each topic/issue is correlated to **national standards**--teachers can add state standards

STANDARD:
National Std: Analyze and explain ideas and mechanisms to

9. Each BookCart can be adapted for student **reading levels** and **Lexiles**

10		Date: 02-21-2001 Reading Level: 9 Size: 26K	Health & Medicine (A Special Report) --- The Have-Nots: Can the problem of the uninsured be solved? Here are some of the...; Dow Jones
11		Date: 04-01-2002 Reading Level: 8 Size: 4K	Analysis: Debate erupts over Bush administration proposal for universal health care for pets; National Public Radio, Inc.
12		Date: 07-21-1998 Reading Level: 10 Size: 5K	The Price Britain Pays for Free Medicine; Dow Jones
13		Date: 02-22-2002 Reading Level: 12 Size: 13K	Health care for all; Commonweal

Additional Advantages

10. BookCarts can be used as alternative assignments for **homebound** students
11. Each BookCart is a lesson plan that can be viewed by **school leaders** when required
12. Each BookCart can be copied and adapted for the **school collection**:
http://www.proquestk12.com/productinfo/elibrary_bookcarts.shtml#4
13. Click the folder Engaging Issues BookCarts

Why Assign Inquiry-Based Learning with Engaging Issues and BookCarts?

Scientific Research of the Learning Process—Scientific research of the learning process, including recent brain research, **validates** that the most effective and long-term learning occurs when students are given opportunities to solve problems that are **relevant to their world** and have an opportunity to **express their reasoned opinions and conclusions** after in-depth study. <http://www.proquestk12.com/lsm/pqelib/pdfs/SBReLibTeacherTraining.pdf>. **Student curiosity** and the **innate desire for self-expression** provide powerful **motivation** for learning. Research activities that integrate **critical thinking and original thought** are the essential skills that students will need to **succeed in school, college, and in careers** in the Information Age.

State and National Standards Requirements—Each state and all national standards for the core curriculum require information literacy, technology integration, inferential reading, expository and persuasive writing, and critical thinking skills. Add to this the limitation of teaching and learning academic content with increasingly obsolete textbooks, and inquiry-based learning becomes essential in education today and in the future.

Support for Essential Skills and State Testing—Mini-Research with eLibrary BookCarts helps support academic skills standards that target inferential **reading**, expository and persuasive **writing**, **critical thinking**, and **technology** and **information literacy** skills. The **new breed of state assessments**, use these types of skills performance demonstrations in their design, so, student research activities are a **great way to hone these essential 21st Century skills** AND prepare for these **high-stakes tests**

Time on Task for More Effective Inquiry-Based Learning—eLibrary provides more than 45 million documents and 150,000 websites that are 100% K-12 relevant for students to use in inquiry-based learning activities. This is **safer, faster, and more focused** than **searching the Internet** where **less than 7% of content is K-12 relevant** and limited to websites. <http://www.proquestk12.com/productinfo/pdfs/eLibraryvsPrintLibraryvsGoogle.pdf>

Building Custom BookCart Collections for Professional Development—Teachers can customize the learning resources in BookCarts to meet student reading and interest levels. Teachers can also share BookCarts with other teachers in the school or department. Teachers can collaborate with each other and librarians to build custom collections to support local curriculum and standards using in-service and professional development days and even earn CEU credits.

Mini-Research—A Tool for 21st Century Learning—Today's students have the advantage of the Internet with its easy access to current and relevant K-12 curriculum information. eLibrary and BookCarts provide an excellent way to deliver standards-based learning resources that are current, relevant, authoritative, and **meet the individual reading and interest needs** of students. The ProQuest mini-research process **ensures** that these resources will be used in ways that **increase student achievement** in academic content and essential literacy skills.

Engaging Issues BookCart Collection

There are more than 90 model BookCarts created to support the engaging issues listed below. Each is also cross-indexed to other related curriculum areas. To view and copy these BookCarts: http://www.proquestk12.com/productinfo/elibrary_bookcarts.shtml#4. After you click the ProQuest Carts tab, click the folder **Engaging Issues BookCarts**.

CR Series – Civil Rights BookCarts (Government and Social Studies)

- CR01. Drug Testing of Students
- CR02. Pledge of Allegiance
- CR03. Emotional Violence, Harassment and Bullying
- CR04. Day Care and Welfare Reform
- CR05. Prayer in Schools
- CR06. Reparations for Past Injustices and Slavery
- CR07. TV in the Courtroom
- CR08. Banned Books
- CR09. Copyright and Personal Use of Internet Media/Music
- CR10. Roe v. Wade
- CR11. Capital Punishment
- CR12. Assisted Suicide or Euthanasia
- CR13. Prison Reform and Rehabilitation
- CR14. Animal Rights and Cruelty to Animals
- CR15. Rights of Illegal Aliens
- CR16. Medical Malpractice Reform
- CR17. Gender Discrimination Laws
- CR18. Impact of Media on Extreme Behavior
- CR19. Sportsmanship in Professional Sports

Related BookCart Titles in Other Sections

Universal Health Care Insurance
No Child Left Behind Act
Vouchers for Private School Attendance
Internet Filtering in Schools
The Power of Propaganda
Affirmative Action in College Admission
Digital Divide in Education
Fairness of SAT Scores for College Admission
Immigration Quotas
Legalization of Drugs
Managed Health Care and Rationing
Alternative Schools for Disruptive Students
Gun Laws and Domestic Violence

EB Series – Economics & Business BookCarts (Social Studies & Business Ed)

- EB01. Federal Budget Deficits and Tax Cuts
- EB02. European Economic Union
- EB03. Salaries in Professional Sports

- EB04. Tobacco Settlement Funds
- EB05. Legalized Gambling
- EB06. Stock Market Bulls and Bears
- EB07. The Chunnel or Eurotunnel
- EB08. Social Security Reform
- EB09. Universal Health Care Insurance
- EB10. Taxes on Internet Use

Related BookCart Titles in Other Sections

Medical Malpractice Reform
Gender Discrimination Laws
Performance-Enhancing Drugs
Managed Health Care and Rationing
Aging of America
Encryption Codes
Consumer and Industrial Robots

ED Series – Education BookCarts (Social Studies & Government)

- ED01. No Child Left Behind Act
- ED02. Vouchers for Private School Attendance
- ED03. Performance Pay for Teachers
- ED04. Sex Education in the Schools
- ED05. Internet Filtering in Schools
- ED06. School Uniforms
- ED07. Single-Gender Schooling
- ED08. Uses of Propaganda
- ED09. Preschool Education
- ED10. Internet, Learning and Virtual Schools
- ED11. eBooks
- ED12. Future of Traditional Libraries
- ED13. Bilingual Education
- ED14. Student Plagiarism
- ED15. Affirmative Action in College Admission
- ED16. Technology in Education
- ED17. Digital Divide
- ED18. Fairness of SAT Scores
- ED19. Education Reform in Public Schools
- ED20. Student Use of Cell Phones in Schools

Related BookCart Titles in Other Sections

Drug Testing of Students
Emotional Violence, Harassment and Bullying
Alternative Schools for Disruptive Students
Evolution vs. Creationism
Virtual Reality Simulations

EN Series – Environmental Issues BookCarts (Life Science and Earth Science)

- EN01. Extinction of the Dinosaurs
- EN02. Endangered Species
- EN03. Global Warming
- EN04. Clean Water Supply

Related BookCart Titles in Other Sections

World Population Growth
Alternative Energy Sources
Agricultural Revolution
Marine Exploration

GM Series – Global & Multicultural Awareness BookCarts

- GM01. World Population Growth
- GM02. Peace Corps
- GM03. Middle East Peace
- GM04. Immigration Quotas

Related BookCart Titles in Other Sections

European Economic Union
The Chunnel or Eurotunnel
Agricultural Revolution

HM Series – Health, Medicine & Fitness BookCarts (Health and Science)

- HM01. Alternative Medicine
- HM02. Food Safety and Preservation
- HM03. Cosmetic Surgery
- HM04. Performance-Enhancing Drugs
- HM05. Healthy Food Choices and Junk Food
- HM06. Obesity in Children
- HM07. Dietary Supplements
- HM08. Genetic Testing
- HM09. Legalization of Drugs
- HM10. Managed Health Care and Rationing
- HM11. Exercise and Health
- HM12. Life Extension and Reversing Aging

Related BookCart Titles in Other Sections

Drug Testing of Students
Assisted Suicide or Euthanasia
Medical Malpractice Reform

Tobacco Settlement Funds
Universal Health Care Insurance
Clean Water Supply
World Population Growth
Stem Cell Research

SS Series – Safety & Security BookCarts (Science, Technology, and Government)

- SS01. Identity Theft
- SS02. Cyber-Crime
- SS03. Alternative Schools for Disruptive Students
- SS04. War on Terrorism
- SS05. Airline Security
- SS06. National Identity Card
- SS07. Gun Laws and Domestic Violence
- SS08. Encryption Codes
- SS09. Biological and Chemical Weapons

Related BookCart Titles in Other Sections

Capital Punishment and Death Penalty
Rights of Illegal Aliens
Food Safety and Preservation
Legalization of Drugs

ST Series – Science & Technology BookCarts (General Science and Technology)

- ST01. Human Cloning
- ST02. Human Genome Project
- ST03. International Space Station
- ST04. Quantum and Particle Physics Research
- ST05. Evolution vs. Creationism
- ST06. Extra-terrestrial Life
- ST07. Big Bang Theory
- ST08. Alternative Energy Sources
- ST09. Agricultural Revolution
- ST10. Consumer and Industrial Robots
- ST11. Stem Cell Research
- ST12. Virtual Reality Simulations
- ST13. Marine Exploration

Related BookCart Titles in Other Sections

The Chunnel or Eurotunnel
Technology in Education
Digital Divide in Education
Extinction of the Dinosaurs
Food Safety and Preservation
Genetic Testing
Cyber-Crime
Encryption Codes
Agricultural Revolution

APPENDIX -- TEACHER RESOURCES

Use ProQuest Mini-Research Strategies to Turn Information into Knowledge Using Critical Thinking

Researched information *only becomes knowledge* when it is used to make comparisons, to predict consequences, to evaluate effectiveness, to form connections, and is then communicated to an audience with a purpose.

Elementary School or Beginners (Who, What, When, Where?)

Expand Knowledge--Reports should be mostly factual, require one good source (usually an encyclopedia article), and be delivered in a **summarized** (extracting the most important information) or a **paraphrased** (synthesizing and restating the most important information) report of less than 100 words. Students should be encouraged to attach an appropriate picture or map to the report.

Middle School or Some Experience Researching (Who, What, When, Where, Which, How and Why?)

Students should be required to use 2 or 3 sources. Reports can be written, oral, or created by teams. Reports should be between 100 and 200 words. Encyclopedic information is appropriate as one source only if it supports the 2 strategies listed below:

- **Compare/Contrast, or Which Is Better?**—Students research two similar leaders, authors, artists, countries, works, ideas, etc. and show how they are both alike and/or how they are different.

Examples: Low fat or low carbohydrate diets; more government regulation or greater competition; The Bible and the Koran; classical or contemporary music; Abraham Lincoln and Franklin Delano Roosevelt; the Greeks and the Romans.

- **Critique**—Students research a popular idea, custom, tradition, modus operandi, belief, or trend, and provide a logical argument for revising, eliminating, or expanding it.

Examples: Eating eggs and red meat are bad for your heart; “no pain, no gain” as a slogan for fitness training; the growing federal budget deficit will lead the U.S. into bankruptcy; to succeed, all students should go to college; affirmative action laws lead to lowering of standards in the future.

High School or Experienced (Who, What, When, Where, Which, How, and Why/Why Not, What If?)

Students should be required to use 3 or 4 sources. Reports can be written (200 to 300 words), oral (3 to 4 minutes) or in teams. With appropriate technology and training, a PowerPoint presentation should also be encouraged. Reports should require a summary document attached as a bibliographic reference to provide authentication. Strategies for mini-research should include predicting, evaluating, and persuading.

- **Persuade**—Students research a controversial issue, select a position (or teachers could assign the position), and then create an argument to support their opinion.

Examples: Students should have a right to free education through college; professional athletes are paid too much money; same gender schooling results in higher achievement for both sexes; euthanasia should be permitted under appropriate controls; some illegal drugs should be legalized; the federal government should pass and enforce new gun control legislation.

- **Predict**—Given a recent event, discovery, law, or invention, predict what will happen in the near future. Given a past event or series of events, create a scenario that may occur in the near future.

Examples: Predict what will happen if nothing is done about global warming by the year 2009 and why; predict what impact genetic cloning will have on human health in 10 years and why; careers and jobs are changing rapidly: what jobs will be most in demand 10 years from now, and why? How will the Internet affect business, social life, or education? How will the International Space Station affect science, politics, and economics; how will the new Euro affect the economies of Europe?

- **Evaluate**—Given a recent (in the last 5 years) change in a law, political leader, rules and regulations, organizational structure, invention, or discovery, summarize and evaluate the progress that may have been made in society because of that change.

Examples: The passing of the NAFTA treaty; the creation of the Dept. of Homeland Security; the introduction of distance learning courses by major colleges; welfare reform; doing business on the Internet; the launch and repair of the Hubble telescope.

ProQuest Mini-Research Strategies and Higher-Order Thinking Skills

Tailoring Mini-Research Strategies To Meet the Needs of Your Students

A single research topic can provide a **range of mini-research activities** that can be tailored to the **learning levels of students**. The same basket of resources retrieved from a single search can be used to answer a variety of research problems and issues. These strategies are **derived from the scientific-based research** of Benjamin Bloom and ***Bloom's Taxonomy*** that demonstrates that permanent learning only takes place when students **engage higher-order thinking skills in their school assignments**.

TOPIC: *GLOBAL WARMING*

KEYWORD SEARCH: causes of global warming

ENGAGING ISSUE: See the list below

Mini-Research Strategy

Essential Questions on This Topic

- | | |
|--------------------------|--|
| Expand: | What is global warming? (<i>look up and paraphrase – lowest level</i>) |
| Compare/Contrast: | How do today's climate patterns compare with past patterns to decide whether or not there really is global warming? (<i>Intermediate level higher-order thinking skills</i>) |
| Critique: | What actions by society and/or nature have contributed to global warming? (<i>intermediate level</i>) |
| Predict: | What will happen in the future if nothing is done to reverse global warming? (<i>higher-level</i>) |
| Persuade: | What must the U. S. and world governments regulate or create incentives for to help to reverse global warming?. (<i>higher-level</i>) |
| Evaluate: | How effective have the past actions taken by governments and/or business been to reduce global warming? (<i>highest level</i>) |

MINI-RESEARCH *FORMAL* MODEL REPORT FORMAT
(This is a Model for an Optional Cover Page)

UPPER DUBLIN HIGH SCHOOL

You may want to include a graphic image here

The Ethical Implications of Genetic Cloning

Student: Tammy Weisman

Science—Biology II

Teacher: Mr. Carl Janetka

February 24, 2007

THE ETHICAL IMPLICATIONS OF GENETIC CLONING

This is a *model of the formal report format* used for a mini-research report . It summarizes how the cloning of a sheep named Dolly, in Scotland, opens up a new world of ethical controversy as well as wonderful opportunities for mankind. **(Schmickel)** It requires the student to (1) Search *eLibrary* or eLibrary BookCarts to get relevant information, (2) browse each article to determine its significance to the mini-research report strategy, (3) save the significant articles, (4) copy and paste citations and *significant information* to a separate *Draft Summary* document, and then (5) create a final report, using *in-text references*, that connect the student's report to the *works cited* in the *Draft Summary*.

The teacher's research strategy motivates and focuses the student's search in *eLibrary*. The teacher will also have to provide some guidance in Searching *eLibrary* with key words, to get the most relevant information without wasting time. Saving information to disk in a school environment is preferred over printing each article because it saves paper, ink, and time on the front end of research, and then, saves some keying and keying mistakes on the back end, or final report. For schools who have computer lab(s) and/or library computer access for students, saved articles can be browsed in detail, off-line, saving on-line costs, and freeing computers that are on-line for more student research. **(Hotz)**

From the browsed articles, students will copy and paste citations and *significant information* to a summary document. The teacher then conferences with the student to create an optional outline, utilizing the strategy (problem) statement and the summary document. The teacher would then have copies of the outline and the summary document to help in evaluating the authenticity and the quality of ideas and writing in the final report/presentation. **(Norris)**

The finished report could be assigned individually, or to teams of students. The report could also be presented orally (supported by the summary document), or as PowerPoint presentation. Teachers would be responsible for a strategy related to their subject content, the final form of the report, and its evaluation. It is important that reports are brief (150 to 250 words is recommended), and assigned frequently enough so that students learn to master the research process prior to high school. **(Will)**

Reports are shown in double spacing so that teachers can utilize this space for comments if they choose to make them. A separate evaluation model with rubrics is included in this guide.

This is a model of a high school level formal mini-research report of approximately 200 words, using 4 sources, with in-text references, and a Draft Summary document attached in place of a Works Cited listing.

Shorter reports with 2 or 3 sources are more appropriate for middle school.

Model of Summary Document -- Significant Information and Works Cited

Previewed by teacher and then attached to final report (instead of a formal Works Cited)—
Helps to prevent *plagiarism*

Source: By ROBERT LEE **HOTZ** and THOMAS H. MAUGH II, TIMES STAFF WRITERS
Biotech: the Revolution Is Already Underway Dolly the cloned sheep made headlines. Los Angeles
Times Sunday April 27, 1997 Home Edition Part A, Page 1 Type of Material: Non Dup; Main Story;
Series; Chronology Series: IN OUR OWN IMAGE: Life in a genetically engineered world. * First; in a
series

(Work Cited is unformatted to save classroom time on mini-research projects, unlike term papers. Works Cited are copy/pasted and underlined to distinguish them from the significant information summary)

In creating Dolly from a single adult ewe cell, researchers at Scotland's Roslin Institute crafted the latest living invention to mark the crossroads of science and human values. These experimental creations are more than laboratory curiosities. Indeed, the seeds of the new biology are being sown across millions of farm acres this year, and its fruits are appearing on supermarket shelves and in medicine cabinets in hundreds of thousands of homes. The biological revolution is altering--in ways that we have yet to recognize--our image of ourselves.

For many scientists, cloning offers an unprecedented opportunity to engineer new life forms more efficiently, to revive endangered species and to explore treatments for a host of human diseases. However, critics in the United States and around the world have argued that cloning oversteps the bounds of morality, offering humanity too much power to manipulate living things. And the prospect of cloning human beings, they say, is repugnant.

"I am wondering if it is not time to set some limits on science," said Lori Andrews of Chicago-Kent College of Law at the Illinois Institute of Technology, an authority on genetic engineering and reproductive technologies.

Source: Copyright © 1997, St. Louis Post-Dispatch George **Will**; Washington Post Writers Group,
CLONING CREATES MORAL AMBIGUITIES, St. Louis Post-Dispatch, 27 Feb 1997, pp. 07B.

Now, what if the great given - a human being is the product of the union of a man and a woman - is no longer a given? The news from Scotland could have immense consequences for mankind's moral life - for thinking about "ought" propositions.

In his essay "Making Babies: The New Biology and the 'Old' Morality" Kass noted that technological corollaries to the pill - babies without sex - involve not just new ways of beginning life but new ways of understanding and valuing life. Connections with parents, siblings and ancestors are integral to being human, although not to being a sheep. Can individuality, identity and dignity be severed from genetic distinctiveness, and from belief in a person's open future? When Hiroshima occasioned anxious talk about the dangers of physics, Einstein replied that the world was more apt to be destroyed by bad politics than bad physics. Dolly raises the stakes of biology, but also of philosophy.

Source: Copyright © 1997, St. Louis Post-Dispatch, Patrick **Norris**, A NEW EWE OR A NEW YOU?,
St. Louis Post-Dispatch, 2 Mar 1997, pp. 03B.

If the technology to clone developed human beings were to become feasible, would we justify its use? Although cloning involves a replication of genetic material, it does not "duplicate" the person.

Environment plays a substantial role in the development of our abilities and personalities. Nevertheless, our genes contribute significantly to our talents, appearance and temperament. Would it be worthwhile for us to clone people with exceptional intelligence or artistic genius? Moreover, as a result of reproductive techniques like in vitro fertilization, many single individuals have already used donor sperm or eggs to pass on their genes.

An ethical response to this latest scientific discovery and its future uses must mediate between two extremes. Some people believe that any dabbling in genetics usurps a role reserved exclusively to God; that is, only God should play God. However, God has endowed human beings with intelligence, ingenuity and creativity for a purpose.

At first glance, sheep cloning offers significant potential benefits. The technology may offer a way to mass-produce drugs to treat diseases at a lower cost. Though other ethical issues are associated with cross-species transplants, cloning experiments may yield genetically engineered animal organs that can be transplanted into humans with less risk of rejection. Better livestock and more efficient food production may also result from Wilmut's discovery. The technology may even offer a way to save endangered species.

Source: Sharon Schmickle; Staff Writer, Cloning controversy // Cloned people? Senate panel tackles debate // The scientist who cloned a sheep and created a debate in the process says there's no reason, Star Tribune

It is recognized as the first clone from a mature mammal cell, something many scientists doubted was possible. The stunning announcement propelled Wilmut into a whirlwind of debate over the practical, legal and ethical implications of cloning. Within 10 days, bills were introduced in Congress to prohibit cloning humans and to outlaw federal funding on research in human cloning.

'Playing God' "Human beings are not God and we should therefore not try to play God," insisted Sen. Christopher Bond, R-Mo., author of one of the bills.

"They accused Galileo of playing God, too," retorted Sen. Tom Harkin, D-Iowa, referring to the 17th-century astronomer who was condemned for heresy for arguing that Earth and the other planets revolve around the sun. "This is a constant, common refrain down through the centuries that somehow we are playing God."

SHOULD STEM CELL RESEARCH WITH HUMAN EMBRYOS BE STOPPED?

Executive Summary—by Tammy Weisman

Stem cell research with human embryos has the potential to develop breakthrough cures for a host of genetic diseases that kill millions of Americans and other people in foreign countries. Stem cells are basic cells that develop first in human embryos after fertilization. All other specialized cells in the human body evolve from stem cells by a process that is not fully understood today. By understanding this process, scientists could grow new organs and other specialized cells to replace damaged or diseased cells in human beings, and thereby prolong and extend the quality of their life.

Why would this research not be acceptable and even be supported by everyone? Those who oppose this research argue that it is immoral to use human embryos because in the research process you are destroying a potential human being. Others who support the research argue that by not engaging in research, we are allowing the destruction of existing human beings.

I support the right to do research on existing embryos and if necessary, to have new sources of voluntary donations to increase the supply. If research in our country is stopped, then it will continue in some other country that may not have the best interests of our citizens in mind.

History has shown that when major scientific discoveries have occurred, they are always challenged by religious groups who predict all sorts of dire consequences for humanity. History has also shown, that when these discoveries are adopted and managed well, human beings have always benefited. Many examples of this are second nature to us now: blood transfusions, organ transplantation, vaccination, etc.

Information that Addresses Essential Question 1: What is stem cell research?

Source: Stem-cell research: Drawing the line; Anonymous; The Lancet 07-21-2001; Page: 163

Embryonic stem cells are pluripotent, meaning they are capable of developing into any cell type in the human body. Animal research suggests stem cells may some day provide a way to repair or replace diseased tissues and organs and make it possible to treat people with a wide variety of conditions, such as diabetes, Parkinson's disease, and Alzheimer's disease, for which we currently have no cure. Embryonic stem cells are harvested from three sources: aborted fetuses, so-called cadaveric stem cells; embryos left over from in-vitro fertilisation efforts, so-called discarded embryos; and embryos created in the laboratory solely for the purpose of producing stem cells, so-called research embryos.

Information that Addresses Essential Question 2: Who Opposes this research and why?

Source: Stem-cell research: Drawing the line; Anonymous; The Lancet 07-21-2001; Page: 163

Opposition to the use of embryonic stem cells from any of these sources comes mainly from those who hold that human life begins at conception and that destroying an embryo at any stage of development is tantamount to infanticide.

Some stem cells, however, have also been isolated from adult tissues, and opponents of human embryonic stem-cell research argue that research should be limited to such cells. But the general view of scientists working in this area is that adult stem cells, while they may one day prove useful for treatment, are simply not as versatile as their embryonic counterparts, because they are already partly differentiated.

Source: Defending cloning and stem cell research against faith-based curbs; Hull, Richard T; Flynn, Tom; Free Inquiry 01-01-2002; Page: 27

The report expressed the concern of conservatives that "society (and not only the embryos) will suffer irreversible moral harm by crossing the boundary that allows nascent human life routinely to be treated as a natural resource." This view turns on seeing embryos at their earliest stages as identical with humans that will, if those embryos are allowed to develop, clearly exist. This key belief, as well as the tactics of some of its proponents, deserves careful investigation. For, if it cannot stand up to nontheistic philosophical analysis, basing governmental policy on it crosses the boundary separating church and state.

Information that Addresses Essential Question 3: Who supports this research and why?

Source: Stem-cell research: Drawing the line; Anonymous; The Lancet 07-21-2001; Page: 163

Advocates of embryonic stem-cell research hold that while embryos certainly deserve respect they are not yet fully human and that the good that may result from medical research studies with their cells justifies their use.

Source: Defending cloning and stem cell research against faith-based curbs; Hull, Richard T; Flynn, Tom; Free Inquiry 01-01-2002; Page: 27

For, if it cannot stand up to nontheistic philosophical analysis, basing governmental policy on it crosses the boundary separating church and state.

In 1997, the Council issued "A Declaration in Defense of Cloning and the Integrity of Scientific Research." Thirty-one leaders in biology, philosophy, ethics, and other fields signed this document, which defended the inherent moral licitness of biotechnologies including human cloning.

Source: Several G.O.P. Senators Back Money for Stem Cell Research; Pear, Robert; The New York Times; 06-19-2001; Page: A.18

Two of the senators, Orrin G. Hatch of Utah and Susan Collins of Maine, said such experiments could be conducted safely and ethically under guidelines adopted by the National Institutes of Health.

Senator Hatch, a foe of abortion, told Mr. Bush that research with embryonic stem cells The president's advisers on science and health policy, including Tommy G. Thompson, the secretary of health and human services, see immense potential value in research with embryonic stem cells. But Karl Rove and other political advisers worry that support for such research would alienate conservative voters, anti-abortion groups and the hierarchy of the Roman Catholic Church.

Source: Ethicist weighs in on stem cell research; Jim Buckell; The Australian; 04-09-2003; EDITION: 1

Dr Young said stem cell research was progressing rapidly and if opportunities to extend stem cell lines available for research did not expand in the US, companies such as Genron would consider shifting overseas.

Already it was developing proposals to shift work to Canada, Korea, China or Singapore, where restrictions were not so great.

Source: Cancer, Up Close and Personal; Golden, Carl; The New York Times; 03-30-2003; Page: 14

I, and others like me, understand the position of those who oppose stem cell research on the ground that it represents destruction of human life. To us, it represents saving lives. We are not eager to engage in an abstract argument, probably never to be settled, over when life actually begins; many of us are painfully aware of when life actually ends.

Procedures for the *INFORMAL* Mini-Research Model

1. Each citation is **copied and pasted** from the original document in eLibrary--CE format, avoiding complex style transformations and saving time. These documents can come from independent student searches or from teacher/librarian BookCarts.
2. Paragraphs of *essential information* from 3-4 documents are **copied and pasted** from the original documents and combined with the citation for each. Essential information should address any or all the **three essential questions which are designed with help from the teacher or may be included with the BookCart description**.
3. This **Summary Document** of three or four citations and essential information demonstrates the student's critical reading skills (about two pages of information).
4. The teacher evaluates the this *Summary Document* **before the written report** to determine the relevancy and adequacy of the information gathered by the student in response to the essential questions.
5. This *Summary Document* is attached to the final report to serve as an **informal bibliography** and to help validate that the report represent original thinking and is **not plagiarized**.
6. Each **final report** includes an original **Executive Summary** that states **the reasoned opinion** of the student, the three essential questions, the citation(s) and the supporting evidence from the *Summary Document*.

Evaluating Mini-Research Reports

Mini-research reports **are not term papers**. They need to be relatively easy to evaluate. For this reason, this model will focus mostly on the research process (and the inherent *higher-order thinking skills--HOTS*), not solely on the traditional criteria of correctness of the ideas, or the mechanics and format of the content. Critical thinking elements are shown in (***red bolded italicized text***). Teachers can create their own system by varying the **Worth** factor or by including additional criteria or excluding existing criteria. Use the model below as a guide, but keep it simple!

Recommended Evaluative Criteria	Worth	Score
1. The student selected appropriate information sources from the BookCart based on the essential questions assigned. (<i>critical reading and selecting skills</i>)	15	15
2. The <i>Draft Summary</i> of the research results provided a variety of viewpoints and was relevant and sufficient to answer the essential questions in step 1. (<i>analyzing and organizing</i>)	15	12
3. The report/project included recommended citation formats for 3-4 sources summarized and approved in the <i>Draft Summary</i> (<i>organizing</i>)	5	5
5. The report/project used recommended format models correctly (<i>organizing</i>)	5	5
6. The report/project demonstrated a high level of use of correct language arts mechanics (<i>drafting and editing</i>)	20	16
7. The report/project answered the essential questions effectively (<i>synthesizing</i>)	15	12
8. The report/project flowed from an attention-grabbing introduction to development of important details, to a conclusion based on facts/expert opinions presented in the details (<i>writing/presentation</i>)	20	16
9. The report/project is both meaningful and interesting	5	5
9. Your additional criterion	?	?
Totals	100	86

**Advantages of ProQuest Mini-Research Strategies and Models
vs. Traditional Term Papers**

<i>Term Papers</i>	<i>Mini-Research Reports</i>
Formal—Written	Informal—Written, Oral, PowerPoint, Web Pages
Lengthy, Time Consuming and Infrequent	Brief, Three Class Periods, and Frequent
Traditional, Scholarly, Often Stale Topics	Current, Relevant and Engaging Topic/Issues
Focus on College and College Bound	Focus on All Students and State Standards, Reading and Writing Skills
Traditional Methods and Formats	Technology Enabled Methods and Formats
English and Social Studies	All Subjects and All Levels
Focus on Formats and Citations	Focus on Critical Thinking and Expression of Reasoned Opinion and Problem Solving.
Traditional BookCart Titles Prone to Plagiarism	Mini-Research Method and Original Thought BookCart Titles Help Prevent Plagiarism
Focus on Individual Effort, Print Output , and Teacher as Audience	Open to Collaboration with Team Reports, Multimedia and PowerPoint Presentations, Variety of Print Formats and Peer Audience
Students Generally Limited to Local Print Resources	Students Encouraged to Use a Variety of Media from Respected Sources
Emphasis on Note Cards and Manual Methods that Waste Time and Limit the Time for Writing and Presentation	Emphasis on Digital Methods to Save More Time for Critical Thinking, Writing, and Presentation

eLibrary BookCarts Support **ISTE** Technology Standards for Teachers

eLibrary with BookCarts and Mini-Research strategies provide direct support for the **bolded standards and benchmarks for teachers and students** .

A. Basic Computer/Technology Operations and Concepts.

- operate a **multimedia computer system** with related peripheral devices to successfully install and use a variety of software packages.

B. Personal and Professional Use of Technology.

- apply productivity tools for creating **multimedia presentations**.
- use computer-based technologies including **telecommunications to access information** and enhance personal and professional productivity.
- use computers to support **problem solving, data collection, information management, communications, presentations**, and decision making.
- demonstrate knowledge of **equity**, ethics, legal, and human issues concerning use of computers and technology.
- identify computer and related technology resources for **facilitating lifelong learning and emerging roles of the learner and the educator**.
- observe demonstrations or uses of broadcast instruction, audio/video conferencing, and other **distance learning** applications.

C. Application of Technology in Instruction.

- explore, evaluate, and use computer/technology resources including **applications, tools, educational software**, and associated documentation.
- describe current **instructional principles, research, and appropriate assessment practices** as related to the use of computers and technology resources in the curriculum.
- **design, deliver, and assess student learning activities that integrate computers/technology for a variety of student group strategies and for diverse student populations**.
- **design student learning activities** that foster equitable, ethical, and legal use of technology by students.
- practice responsible, ethical and legal use of **technology, information, and software resources**.

DRAFT ~ 21st Century Library Learning Standards (*working title*) DRAFT

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I. Learners use 21st century information skills, resources and tools to inquire, think critically, and gain knowledge.

Red text indicates ProQuest support when used with the Mini-Research Process.

Skills

- Use a variety of information literacies (e.g., textual, visual, media, digital) to gather meaning from information presented in any format.
- Use information literacies to contextualize and deepen academic content learning.
- Demonstrate mastery of technology tools to be both productive and critical thinkers.
- Employ critical thinking and problem solving skills to make sense of information gathered from diverse sources.
- Collaborate with others to broaden and deepen understanding.
- Follow an inquiry-based process in seeking knowledge in core subjects and 21st century content.

Students ask questions based on context.

1. Students recognize their own purpose in seeking information.
2. Students observe and experience to gather information.
3. Students gain background knowledge and context.
4. Students identify misconceptions in their own knowledge and gaps in their information.
5. Students develop and refine questions.

Students investigate.

1. Students find, evaluate, and select appropriate resources to locate the information they seek.
2. Students seek diverse sources and multiple points of view, pursuing a global perspective when appropriate.
3. Students navigate through text to locate relevant information.
4. Students locate and access the information they need (both independently and in collaboration with others) using print and technology tools.
5. Students clarify main and supporting ideas.
6. Students evaluate information before using (validity, appropriateness to their needs, social and cultural context).
7. Students evaluate information for accuracy, fact, opinion, point of view and bias and seek a balance in points of view.
8. Students record and organize information to answer their questions.

II. Learners use 21st century information skills, resources and tools to draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.

Skills
<ul style="list-style-type: none">• Use technology and information tools to think critically and work productively and creatively.• Collaborate with others to interchange ideas, develop new understandings, make decisions, and solve problems.• Continue an inquiry-based process in developing new understandings, drawing conclusions, and creating new knowledge. <p><u>Students draw conclusions and make decisions to form new knowledge.</u></p> <ol style="list-style-type: none">1. Students use strategies, thinking processes, and graphic organizers to gain understanding and organize their knowledge.2. Students process information by making connections to previous knowledge, ideas in other texts, and authentic situations in the world.3. Students synthesize and draw conclusions based on evidence.4. Students form new knowledge to support their curricular learning.5. Students apply their knowledge to new and authentic situations. <p><u>Students create own expressions of learning.</u></p> <ol style="list-style-type: none">1. Students use a variety of technological production tools to create projects that reflect their learning.2. Students use writing, media literacy, and technology skills to develop expressions of new understandings.3. Students use creativity and innovation skills to develop products to express ideas and information.

III. Learners use 21st century information skills, resources and tools to share their knowledge and understandings with others and participate ethically and productively as members of our democratic society.

Skills
<ul style="list-style-type: none">• Participate and collaborate as members of a social network of learners.• Use writing and speaking skills to communicate new understandings effectively.• Use technology and other tools to organize and display knowledge and understanding in ways that others can view, use, and assess.• Conclude an inquiry-based process by sharing their new understandings with others and reflecting on their learning. <p><u>Students share their new understandings with others.</u></p> <ol style="list-style-type: none">1. Students discuss the real-world applications of their knowledge.2. Students use a variety of strategies to organize their knowledge in such a way that it can be shared.3. Students identify appropriate audiences.4. Students determine effective formats and timeframe for sharing.

5. Students creatively use a variety of technology resources to display and share their understandings.
6. Students give credit when using others' ideas and products.

Students reflect on their own work.

1. Students articulate their new knowledge and the process by which they gained that knowledge.
 2. Students participate in peer-to-peer reflection and analysis.
 3. Students develop new questions to drive future inquiry.
- Students connect their learning to community issues.

IV. Learners use 21st century information skills, resources and tools to pursue personal and aesthetic growth.

Skills

- Read for pleasure and personal growth.
- Read widely to make connections with themselves, the world around them, and their previous reading.
- Respond to literature and creative expressions of ideas in various formats.
- Pursue passions in personal learning.
- Seek resources in a variety of formats and genres.
- Connect ideas to own interests and previous knowledge and experience.
- Organize their knowledge in a way that can be called upon easily.
- Use social networks and tools to gather and share information.
- Apply what they learn to their own lives.
- Use creative and artistic formats to express personal learning.

TYPICAL English Language Arts Standards for Reading, Writing, and Research Skills

The following standards are typical of all state standards in the English Language Arts that integrate the **need for** and the **value of** ongoing student research activities.

These research activities are **not the exclusive responsibility of English teachers** using literature-based themes, but have value in all content areas. **In-depth learning** is superior to superficial learning of content and concepts in all subjects and research activities are a **proven way** to create this opportunity for student learning.

State standards in all subjects require inquiry-based and current learning. However, the **essential skills of reading, writing, and presentation** listed below are reinforced by all teachers when they assign research activities that integrate **HOTS** (higher-order thinking skills). These are the essential literacy skills that are assessed by most states in the reading tests.

Reading – Students examine, construct and extend the meaning of a variety of self-selected and assigned text (traditional and **electronic**) by applying a range of reading strategies and **analytic techniques**.

- Analyze features and rhetorical devices of different types of **public documents (e.g., policy statements, speeches, debates)** and how authors use the features to achieve their purposes.
- **Synthesize the content and ideas from several sources dealing with a single issue** or written by a single author, producing evidence of comprehension by clarifying the ideas and **connecting them to other sources, related BookCart Titles**, or prior experience
- Extend ideas presented in **primary or secondary sources** through **original analysis, evaluation and elaboration**
- **Critique the power, validity and logic of arguments** advanced in public documents, their appeal to various audiences and the extent to which they anticipate and address reader concerns and counterclaims (e.g., appeal to authority, reason, or emotion)

Writing – Students produce **informational, practical, persuasive**, and narrative writing that demonstrates an awareness of audience, purpose and form using stages of the writing process as needed (i.e., **pre-writing, drafting, revising, editing and publishing**).

- Establish a controlling impression or **coherent thesis** that conveys a clear and distinctive perspective on the subject and maintains a consistent tone and focus throughout the piece of writing
- **Support thesis or judgments** with techniques such as **analogies, paraphrases, quotations and opinions from authorities**
- Develop key ideas by integrating complex connections among **ample supporting evidence** such as descriptions, personal experiences, observations, and/or **research-based information**

Language – Students understand and use the structures and conventions of the English language (i.e., vocabulary, spelling, grammar, mechanics and usage) in their oral and written communications.

- Identify and use knowledge of the **origins of commonly used words and phrases** derived from Greek, Roman and Norse mythology and other works often alluded to in American and World literature to **understand the meaning of new words**

Research-Based Writing – Students use the **research process** to search, organize, analyze, and **synthesize relevant information to solve problems** and to develop **informed opinions on real-world issues**.

- Use clear **research questions** and coherent **research methodology** to elicit and present evidence from **primary and secondary sources** using available library, **electronic** and human resources.
- **Synthesize information** from **multiple sources** and identify complexities and discrepancies in the information and how each medium offers a different perspective
- Use appropriate conventions for **in-text documentation, notes** and **bibliographies**, adhering to style manuals
- Self-edit and refine writing using knowledge of standard English conventions of language and appropriate traditional and **electronic resources** (e.g., **dictionary, thesaurus**, spell-check software)
- Prepare writing for publication by **integrating illuminating graphics** and format and appropriate traditional and **electronic resources** to enhance the final product and create an easily read product
- Write **expository texts** for an intended audience and purpose that define, inform, explain or some combination, including essays of analysis and **research papers** that marshal **evidence in support of a thesis** and related claims
- Write to **persuade** an intended audience by **clarifying and defending positions** with **precise and relevant evidence**, including **expert opinions** and commonly accepted beliefs

Speaking – Students communicate effectively in a variety of situations, with different audiences, purposes and formats.

- **Support, modify, or refute a position** using effective rhetorical and oral delivery strategies

Higher-Order Thinking Level	<u>BLOOM'S TAXONOMY—Bloom, B. S. (1956)</u> <i>Critical Thinking Skills Demonstrated</i>
KNOWLEDGE <div style="border: 1px solid black; padding: 2px; display: inline-block;">90% of Testing</div> <i>(Lowest Level)</i>	<ul style="list-style-type: none"> • observation and recall of information • knowledge of dates, events, places • knowledge of major ideas • mastery of subject matter <p><u>Question Cues:</u> list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where, etc.</p>
COMPREHENSION	<ul style="list-style-type: none"> • understanding information • grasp meaning • translate knowledge into new context • interpret facts, compare, contrast • order, group, infer causes • predict consequences <p><u>Question Cues:</u> summarize, describe, interpret, contrast, predict, associate, discuss, distinguish, estimate, differentiate, extend</p>
APPLICATION	<ul style="list-style-type: none"> • use information • use methods, concepts, theories in new situations • solve problems using required skills or knowledge <p><u>Questions Cues:</u> apply, demonstrate, calculate, complete, illustrate, solve, examine, modify, relate, classify, experiment, discover</p>
ANALYSIS <div style="border: 1px solid black; padding: 2px; display: inline-block;">Research Activities</div>	<ul style="list-style-type: none"> • seeing patterns • organization of parts • recognition of hidden meanings • identification of components <p><u>Question Cues:</u> analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer</p>
SYNTHESIS <div style="border: 1px solid black; padding: 2px; display: inline-block;">Research Activities</div>	<ul style="list-style-type: none"> • use old ideas to create new ones • generalize from given facts • relate knowledge from several areas • predict, draw conclusions <p><u>Question Cues:</u> combine, integrate, modify, rearrange, substitute, create, design, invent, what if?, compose, formulate, generalize</p>
EVALUATION <div style="border: 1px solid black; padding: 2px; display: inline-block;">Research Activities</div> (Highest Level)	<ul style="list-style-type: none"> • compare and discriminate between ideas • assess value of theories, presentations • make choices based on reasoned argument • verify value of evidence • recognize subjectivity <p><u>Question Cues:</u> assess, decide, rank, grade, test, measure, judge, recommend, explain, discriminate, support, conclude, summarize</p>

RENEWED EMPHASIS ON IMPORTANCE OF WRITING ACROSS THE CURRICULUM

Several new initiatives have occurred recently that recognize the renewed importance of **writing as an essential activity for student learning**. Writing is always a part of every mini-research activity.

- Research shows that the number of writing activities assigned in K-12 classroom has diminished and been replaced by increasing use of multiple choice assessments which require less teacher time and effort to grade.
- Research shows that narrative, expository, and persuasive writing require the use of higher-order thinking skills (HOTS). HOTS are essential for permanent learning vs. rote learning that is primarily temporary.
- Research shows that the most important factor for college success is the ability to write.

To motivate more writing activities across the curriculum because of their value

- The new SAT requires writing samples that express student ideas on a variety of issues based on writing deficiencies discovered by an increasingly greater number of high school graduates.
- Colleges have recently put more emphasis on evaluating writing samples in the admissions process.
- The College Board revises the new SAT to include a major essay writing component to encourage more writing in the K-12 curriculum in all subjects
- The College Board indicates that strong writing skills are a reliable and essential predictor of college success

National Commission on Writing in America's School and Colleges activities in K-12

1. NCW – “Writing is essential to educational and career success”
2. NCW – “Writing allows students to “connect the dots” in their knowledge and is central to self-expression”
3. NCW – “Writing is how we teach students the complex skills of analysis, synthesis, and problem solving”
4. NCW – “Writing must become an important focus beginning with elementary school
5. NCW – “Assessment with only multiple-choice tests is not adequate”

ProQuest Comment: Every mini-research assignment **integrates writing** using critical thinking that results in the construction of original thought and reasoned opinion by the student. It stands to reason that the use of technology, the Internet, and library digital learning resources enable mini-research assignments to be **more frequent** than in the past when quality resources were limited and not as easily accessible.

Librarians can secure their future by embracing the challenge of the Internet and using their expertise to train teachers and students to use this flood of new information effectively. The new emphasis must be more on ways to **use information for learning**, rather than on searching for information.