

## Get with the Program

### ***Scenario:***

Speaking before the School Health Center Policy Briefing Event in Los Angeles on February 27, 2009, State Superintendent of Public Instruction Jack O'Connell said, "And so, it is critical that we work together with our elected officials and our school-community partners to develop and implement a model of school health services for California that appropriately addresses the health needs of students while they are at school and keeps them healthy, fit, and ready to learn." Your team is a group of students, school nurses, administrators and teachers. You have been asked by the Board of Education of your school district to make a multimedia presentation proposing a model for a school health program.

### ***Possible topics to cover (these are only suggestions and are not a requirement for a superior presentation):***

1. Why do you think there is so much public attention being paid to health in our schools?
2. Is there any scientific evidence showing that good health is important for learning?
3. What components should be in a school health program?
4. Do students at your school think there is a need for a health program?
5. How is your school currently addressing the issue of health?
6. In light of the H1N1 flu, has your school adopted any policies to reduce the chance of spreading diseases?
7. Has your school made any health policy changes in the last few years?
8. Who should be involved in developing a school health program?
9. What is the reaction of other students to your proposed health program?
10. How will you get students and teachers excited about your program?

### ***Possible Sources***

Newspapers, health experts, school nurses, public health organizations, teachers, encyclopedias and Internet websites.

Email or interview experts with questions about the topic.

Internet links for additional resources are on page 2 of this scenario.

### ***Bibliography***

Be sure to have a printed bibliography to hand to the judges before you begin your presentation. You are encouraged to cite all of your sources including graphics. A simple web tool to organize your bibliography can be found at <http://citationmachine.net/>.

## 2009 CyberQuest 4th Grade Resources

**Center for Disease Control:** <http://www.cdc.gov/HealthyYouth/CSHP/>

Presents working descriptions of the eight components of a coordinated school health program.

**California School Boards Association:**

<http://www.csba.org/NewsAndMedia/OtherNewsletters/LinkToLearning/2008/Fall/InThisIssue/SHAC.aspx>

CSBA established a School Health Advisory Committee in August 2008. The School Health Advisory Committee will help research, study and inform CSBA's school-related health policy position.

Also, <http://www.csba.org/EducationIssues/EducationIssues/Wellness.aspx> : Student Wellness

**California Department of Education**

<http://www.cde.ca.gov/nr/sp/yr09/yr09sp0227.asp>

State Superintendent of Public Instruction Jack O'Connell spoke before the School Health Center Policy Briefing Event in Los Angeles on February 27, 2009.

<http://www.cde.ca.gov/ls/he/cs/resources.asp> : State and national resources for implementation of coordinated school health.

**State of Texas School Health Program:** <http://www.dshs.state.tx.us/schoolhealth/>

Four major projects make up the **School Health Program**. To visit a project site, click on any of the categories listed above or at the top of the left hand vertical column. Additional school health-related topics of interest are listed in the **REFERENCE CENTER**.

**Medline Plus:** <http://www.nlm.nih.gov/medlineplus/schoolhealth.html>

School Health: A service of the U.S. National Library of Medicine

**California School Health Centers Association:** <http://www.schoolhealthcenters.org/>

The California School Health Centers Association (CSHC) is the statewide organization leading the movement to put health care where kids are -- in schools.

## Clinical Notes

### ***Scenario:***

Your team is a group of music therapists on the Professional Advocacy Committee of the American Music Therapy Association. Your committee has been asked to make a multimedia presentation to the Continuing Education Committee of the California Medical Association on the value of using music in the treatment of patients. If accepted, your presentation will become part of their series of webinars to educate physicians on a wide range of topics.

### ***Possible topics to cover (these are only suggestions and are not a requirement for a superior presentation):***

1. What is Music Therapy?
2. How long has music been used in healing?
3. How does music help in the treatment of patients?
4. What scientific evidence is there that music therapy works?
5. Are some kinds of music more effective than others?
6. How widespread is the use of music in medicine?
7. How are any hospitals, clinics or doctors' offices in our area using music?
8. Can music be used to maintain wellness as well as in treatment of illness?
9. Describe a firsthand report from someone that feels music helped him or her recover from an illness.
10. How can you get more people interested in using music therapy?

### ***Possible Sources***

Newspapers, musicians, medical experts, music teachers, videos, CD's and Internet websites. Email or interview experts with questions about the topic.

Internet links for additional resources are on page 2 of this scenario.

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## 2009 CyberQuest 5th Grade Resources

### American Music Therapy Association

<http://www.musictherapy.org/>

Music Therapy is an established healthcare profession that uses music to address physical, emotional, cognitive, and social needs of individuals of all ages. Music therapy improves the quality of life for persons who are well and meets the needs of children and adults with disabilities or illnesses. Research in music therapy supports its effectiveness in a wide variety of healthcare and educational settings.

- Frequently Asked Questions: <http://www.musictherapy.org/faqs.html>
- List of media stories about music therapy: <http://www.musictherapy.org/media.html>

### University Hospitals Case Medical Center

<http://www.musicasmedicine.com/about/history.cfm>

### History of Music Therapy

*Listen to our music therapy public service announcement*

### Prevention magazine

[http://www.prevention.com/cda/article/music-as-medicine/ff9350d1fa803110VgnVCM10000013281eac\\_\\_\\_\\_\\_/health/natural.remedies/0/0/0/1](http://www.prevention.com/cda/article/music-as-medicine/ff9350d1fa803110VgnVCM10000013281eac_____/health/natural.remedies/0/0/0/1)

Exciting research suggests that the brain responds to music almost as if it were medicine. It may regulate some body functions, synchronize motor skills, stimulate the mind--even make us smarter. This article gives examples of how music can be used in therapeutic situations and everyday life, including types of music.

### Music as Therapy: Docs use Tunes as Treatment

<http://www.msnbc.msn.com/id/30990170/>

Music as Medicine, Researchers explore how melodies can help regulate heart, boost hormones

Article contains links to videos about how music is used with patients; a short ad precedes each video, but the videos are well worth sitting through the ad.

### U.S. News and World Report

<http://health.usnews.com/articles/health/brain-and-behavior/2008/07/17/music-as-medicine-for-the-brain.html>

Article: Music as Medicine for the Brain

### Medscape Journal of Medicine

<http://www.medscape.com/viewarticle/569013>

Brief video and description of a study conducted at Harvard Medical School measuring the effect of music on amount of sedation needed.

## Ancient Ways in Ancient Days

### ***Scenario:***

The Ancient Medical Museum is a new museum still in the planning stages. The concept behind the museum is to highlight the medical practices of ancient civilizations and show their connections to modern medical practices. The museum will be arranged so that each room, 40 by 40 feet, is dedicated to an ancient civilization. They are contracting with private firms to take a room and make it both historically accurate and interesting for patrons of all ages. The Museum Director has asked your firm to make a multimedia presentation to the governing board showing what you would include in a room of the museum.

### ***Possible topics to cover (these are only suggestions and are not a requirement for a superior presentation):***

1. Describe some of the medical practices of the culture.
2. Are any of these practices still in use today?
3. Does modern science support any of these practices?
4. Why are some of the practices no longer used in modern medicine?
5. Why do you think this was type of procedure was used?
6. What do you think influenced the medicine of a given time period?
7. What was the general health of the civilization?
8. What archeological evidence is there to support our ideas about the medical practices of this civilization?
9. Was there a connection between their religious beliefs and their medical practices?
10. Who were the medical experts and how did they fit into their culture?
11. What kind of displays will you setup that make the exhibit more interesting?
12. What artifacts are available to place in your displays?

### ***Possible Sources***

Newspapers, historians, medical experts, teachers, videos, CD's, encyclopedias, history textbooks and Internet websites.

Email or interview experts with questions about the topic.

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## 2009 CyberQuest 6th Grade Resources

### **Wikipedia: History of Medicine**

[http://en.wikipedia.org/wiki/History\\_of\\_medicine](http://en.wikipedia.org/wiki/History_of_medicine)

All human societies have medical beliefs that provide explanations for birth, death, and disease. Throughout history, illness has been attributed to witchcraft, demons, adverse astral influence, or the will of the gods. These ideas still retain some power, with faith healing and shrines still used in some places, although the rise of scientific medicine over the past millennium has altered or replaced many of the old beliefs...

### **History of Alternative Medicine**

<http://ezinearticles.com/?History-of-Alternative-Medicine&id=275778>

History has it that alternative medicine goes back 5000 years to Chinese traditional medicine, Indian (Ayurvedic medicine) and similar healing traditions in many cultures...

### **Folk Remedies**

[http://www.health911.com/remedies/rem\\_indx.htm](http://www.health911.com/remedies/rem_indx.htm)

Has links to specific folk medicine remedies both modern and old

### **Antiqua Medicina**

<http://www.hsl.virginia.edu/historical/artifacts/antiqua/>

Has multiple links to significant historical times of medicine

### **ThinkQuest: Ancient Medicine**

<http://library.thinkquest.org/C004203/science/science04.htm>

Article on some of the medical practices from ancient cultures

## Shots Felt 'Round the World

### ***Scenario:***

Although vaccines have prevented or even eliminated many serious childhood illnesses, some parents question whether vaccines are still necessary. Although the California School Immunization Law requires that children receive a series of immunizations before entry to schools, child care centers, or family child care homes, the California State Board of Education would like to develop an educational program for parents who refuse to have their children vaccinated. The Board has asked your team of medical experts to develop a multimedia presentation that would help schools and day cares increase their knowledge of the importance of vaccinating our children along with understanding the fears parents may share about having their child vaccinated.

### ***Possible topics to cover (these are only suggestions and are not a requirement for a superior presentation):***

1. What is a vaccine and how does it work?
2. Why are vaccines important?
3. What was the first vaccine and who discovered it?
4. How has disease changed in our world since we started using vaccines?
5. How has the process changed in the creation of new vaccines?
6. How are vaccines tested before they are distributed for use?
7. What vaccines are required before children can enter school and what diseases do they prevent?
8. Are there cases in the past when vaccines were not safe?
9. Which vaccines are parents most likely to avoid giving to their child and why?
10. What can public health officials and school personnel do to encourage parents to get their children vaccinated?

### ***Possible Sources***

Newspapers, historians, medical experts, school nurses, public health agencies, teachers, videos, CD's, encyclopedias, history textbooks and Internet websites.

Email or interview experts with questions about the topic.

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## 2009 CyberQuest 7th Grade Resources

### **Children's Hospital of Philadelphia**

<http://www.chop.edu/service/vaccine-education-center/home.html>

Vaccine Education Center

### **Centers for Disease Control**

<http://www.cdc.gov/vaccines/> : To continue to protect America's children and adults, we must obtain maximum immunization coverage in all populations.

<http://www.cdc.gov/vaccines/pubs/parents-guide/default.htm>

Parents Guide to Immunization.

### **California Department of Health**

<http://www.cdph.ca.gov/programs/immunize/Pages/CaliforniaImmunizationSchoolLaw.aspx>

School Immunization Law

### **American Academy of Pediatrics**

[http://www.cispimmunize.org/pro/pdf/RefusaltoVaccinate\\_revised%204-11-06.pdf](http://www.cispimmunize.org/pro/pdf/RefusaltoVaccinate_revised%204-11-06.pdf)

Documenting Parental Refusal to Have Their Children Vaccinated

### **Timeline of Vaccines**

[http://en.wikipedia.org/wiki/Timeline\\_of\\_vaccines](http://en.wikipedia.org/wiki/Timeline_of_vaccines)

### **Foundation for Biomedical Research**

<http://www.fbresearch.org/Education/Vaccines/Whatisavaccine/tabid/575/Default.aspx>

### **What is a Vaccine?**

<http://stanmed.stanford.edu/2009spring/article2.html>

## Pandemic Pandemonium

### ***Scenario:***

Your team is a group of infectious disease specialists from the Centers for Disease Control. Kathleen Sibelius, Secretary of Health and Human Services, has called your team of infectious disease experts to Washington, D.C. to brief her and her staff on the spread of pandemics so that they may better formulate national policy in dealing with diseases like the H1N1 flu. She has asked that you make a multimedia presentation about previous pandemics in history, how they spread and their effects on population and culture. She is particularly interested in lessons that can be learned from these pandemics.

### ***Possible topics to cover (these are only suggestions and are not a requirement for a superior presentation):***

1. What is a pandemic?
2. How does a disease turn into a pandemic?
3. Describe some famous pandemics.
4. What lessons have been learned from previous pandemics?
5. Describe some diseases that have the potential to become catastrophic pandemics along with how these diseases are currently being kept local.
6. What problems do doctors, scientists and government policy makers encounter in preventing the spread of disease?
7. How has fear played a role in how the public has reacted to current and previous pandemic threats?
8. How has the timeline for the spread of diseases changed in recent times?
9. What was the reaction of the World Health Organization to the H1N1 flu?
10. What steps can the World Health Organization take when a potential disease is discovered that might become pandemic?

### ***Possible Sources***

Newspapers, historians, teachers, public health organizations, medical experts, videos, CD's, encyclopedias, history textbooks and Internet websites.

Email or interview experts with questions about the topic.

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## 2009 CyberQuest 8th Grade Resources

Swine Flu (H1N1)

**Medicine.Net:** [http://www.medicinenet.com/swine\\_flu/article.htm](http://www.medicinenet.com/swine_flu/article.htm)

H1N1 Questions & Answers; FAQ slide show

**Center for Disease Control:** <http://www.cdc.gov/H1n1flu/update.htm>

Maps and graphs showing influenza activity

**New York Times:** <http://www.nytimes.com/interactive/2009/04/27/us/20090427-flu-update-graphic.html>

Map tracking swine flu cases

**Google Maps Mania blog:** <http://googlemapsmania.blogspot.com/2009/04/swine-flu-outbreak-on-google-maps.html>

Uses several features of Google Maps and Google Earth to track various swine flu; based on a doctor's work, but not necessarily authoritative; could be used as a model for students to develop their own maps using Google Maps and Google Earth.

**Wikipedia:** [http://en.wikipedia.org/wiki/2009\\_flu\\_pandemic](http://en.wikipedia.org/wiki/2009_flu_pandemic)

Overview of the Swine Flu Pandemic

1918 Flu Pandemic

**Center for Disease Control:** <http://www.cdc.gov/ncidod/eid/vol12no01/05-0979.htm>

An overview of the 1918 Influenza Pandemic

The "Spanish" influenza pandemic of 1918–1919, which caused ≈50 million deaths worldwide, remains an ominous warning to public health. Many questions about its origins, its unusual epidemiologic features, and the basis of its pathogenicity remain unanswered. The public health implications of the pandemic therefore remain in doubt even as we now grapple with the feared emergence of a pandemic caused by H5N1 or other virus. However, new information about the 1918 virus is emerging, for example, sequencing of the entire genome from archival autopsy tissues. But, the viral genome alone is unlikely to provide answers to some critical questions. Understanding the 1918 pandemic and its implications for future pandemics requires careful experimentation and in-depth historical analysis.

**Stanford University:** <http://virus.stanford.edu/uda/>

History of the pandemic

**Public Broadcasting System:** <http://www.pbs.org/wgbh/amex/influenza/>

Impact of the 1918 Influenza Pandemic in the United States; based on the PBS film, Influenza 1918; lots of resources.

## A Healthy Discussion

### ***Scenario:***

In Congress, a number of comprehensive reform proposals have been announced as the debate proceeds over how to overhaul the health care system. Many interest groups have powerful lobbyists to advocate their positions on these issues. However, California's Senators Boxer and Feinstein recognize the young adults of our country are an interest group without a voice, even though they will be most affected in the future by decisions being made now. They have asked high school students around the state to make multimedia presentations presenting their positions on health care reform with particular interest in the needs of people in the 18-25 year old sector. Your team is representing young adults in the San Joaquin Valley area. It is important, as you present to the senators, that you demonstrate an understanding of both health care issues as well as the political issues involved in passing a bill of this magnitude.

### ***Possible topics to cover (these are only suggestions and are not a requirement for a superior presentation):***

1. What is the history behind the federal government trying to create a national universal health care program?
2. How are people in the 18-25 age range currently getting insurance?
3. How many in the 18-25 are uninsured, and is the number higher in our valley?
4. Describe current health care benefits for people that cannot afford insurance.
5. What are factors in our current political climate that make it difficult to pass health care legislation?
6. How does our nation's health compare to other developed nations?
7. How much does it cost 18-25 year olds to be insured?
8. How are students at your school responding to the health care issue?
9. How does the cost of our health care compare to other developed nations?
10. What effect do these economic times have on health insurance coverage?
11. Compare our health care coverage to a country that has universal health care.
12. What fears have surfaced regarding the health care bills that are being drafted?
13. How do special interest groups influence legislation?
14. What would be the impact of passing a health care reform bill that includes government run insurance?

### ***Possible Sources***

Newspapers, historians, teachers, legislative analysts, videos, CD's, encyclopedias, history textbooks and Internet websites.

Email or interview legislators with questions about the topic.

Internet links for additional resources are on page 2 of this scenario.

### ***Bibliography***

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## 2009 CyberQuest High School Resources

**The Kaiser Family Foundation:** <http://www.kff.org/healthreform/sidebyside.cfm>  
Side-by-Side Comparison of Major Health Care Reform Proposals

**The White House, The President's Plan:** [http://www.whitehouse.gov/issues/health\\_care/](http://www.whitehouse.gov/issues/health_care/)

**The Wall Street Journal:** <http://online.wsj.com/article/SB124277551107536875.html>  
Republican alternatives to the President's plan

**Rocky Mount Telegram:** <http://www.rockymounttelegram.com/news/health-care-executives-sound-off-on-reform-efforts-896730.html>

Four health care executives voice their positions

**American Medical Association:** <http://www.ama-assn.org/ama/pub/health-system-reform/index.shtml>

AMA's vision for health system reform

### A History of Health Care Reform

[http://www.nytimes.com/interactive/2009/07/19/us/politics/20090717\\_HEALTH\\_TIMELINE.html](http://www.nytimes.com/interactive/2009/07/19/us/politics/20090717_HEALTH_TIMELINE.html)

### Constitutional Topic: How a Bill Becomes a Law

[http://www.usconstitution.net/consttop\\_law.html](http://www.usconstitution.net/consttop_law.html)

### Lobbyist and Lobbying

<http://www.meyersandassociates.com/lobbyist.html>

### Health-Care Lobbyists

[http://voices.washingtonpost.com/health-care-reform/2009/10/health-care\\_lobbyists\\_continue.html](http://voices.washingtonpost.com/health-care-reform/2009/10/health-care_lobbyists_continue.html)

### Young Adults Likely to Pay Big Share of Reform's Cost

<http://www.washingtonpost.com/wp-dyn/content/article/2009/09/15/AR2009091503716.html>