

## Print this Meridian Article

### [Applying the Refreshed NETS-S to Civic Ideals and Practices](#)

[Linda Bennett, Susan Biffignani, Erin Steinkamp, Jaime Rhoades](#)

Issue I, Volume 11, 2008

[View Online](#)

<http://www.ncsu.edu/meridian/win2008/nets/index.htm>

#### Introduction

| Related Articles   |
|--|
| <a href="#"><u>Learning Cyber Citizenship in Middle School</u></a><br>Summer 2005                                |
| <a href="#"><u>Usage of Instructional Technology in Teaching Middle School Social Studies</u></a><br>Winter 2003 |
| <a href="#"><u>Update on: Making Long Distance Relationships Work Article</u></a><br>Winter 2006                 |

The [Refreshed National Educational Technology Standards for Students](#) (NETS-S) were approved last summer (International Society for Technology in Education, 2007). These standards are (1) Creativity and Innovation, (2) Communication and Collaboration, (3) Research and Information Fluency, (4) Critical Thinking, Problem-solving, and Decision-making, (5) Digital Citizenship, and (6) Technology Operations and Concepts (see [Appendix A](#)). The NETS-S Digital Citizenship Standard and the [Civic Ideals and Practices Strand](#) of the National Council for the Social Studies (NCSS) can be used by middle school teachers to create lessons that develop effective citizens and explore the ideals, principles, and practices of citizens in a democratic society (see [Appendix B](#)).

Since civic ideals and practices apply to the digital world, teachers need ideas for using technology while teaching civics. This is an opportunity for K-12 teachers to select developmentally appropriate applications of technology that promote civic engagement. As middle school students take on more responsibilities, they develop skills as citizens in both the face-to-face and online worlds; therefore, teachers must design instruction related to digital citizenship.

With the NETS-S and the NCSS standards as guides, three teachers are putting the new Refreshed NETS-S into practice. Using the NETS-S,

Jaime Rhoades (Gifted Education Program Coordinator), Susan Biffignani (6th grade educator), and Erin Steinkamp (8th grade Social Studies teacher) designed learning experiences for 6th through 8th graders at Valley Park Middle School in Valley Park, Missouri. As [Enhancing Missouri's Instructional Networked Teaching Strategies](#) (eMINTS) teachers, Rhoades, Biffignani and Steinkamp are exemplars of how to infuse technology into the social studies curriculum and their classrooms. Students learn civic competencies while using technology and demonstrate respect, responsibility, and rights as digital citizens (Bennett, 2005).

The next section provides examples of how developmentally appropriate citizenship curricula incorporate the NETS-S for 6th through 8th grades. The application of the NETS-S skills section includes six technology skills with two to

three curriculum examples and resources that have been implemented in middle school classrooms. The Refreshed NETS-S skills for the use of technology in the classroom are linked to middle school performance indicators for the NCSS Strand of Civic Ideals and Practices and are listed at the beginning of each civics activity.

## **Application of NETS-S to Citizenship Education**

**NETS-S: 1. a & b, 4. b & c; NCSS: X. c, e, & g**

**Activity I: Taking Perspectives with Cartoons.** Sixth grade World History students study various political/editorial cartoons to understand point of view/perspective and the beginnings of propaganda in the media. [Mr. Donn, Daryl Cagle Cartoonist](#), and [St. Louis Today](#) are possible sites for locating cartoons. After using the Internet to analyze many different cartoons, the students create original cartoons to show their perspective, or point of view, on a topic of interest. The students also write a letter to the editor to accompany their cartoon.

**NETS-S: 1. a & b; NCSS: X. a, b & i**

**Activity II: Historical Advertising.** In this activity, 8th grade United States History students research one of the original thirteen American Colonies and create an advertising campaign to encourage future settlement in that particular colony. While creating the ads for their colony, the groups look at living and working conditions during this time period to develop reasons to explain why people would leave Europe and come to America. Students' campaigns focus on predictions and descriptions about the types of people or families who live in the colonies.

Using *Microsoft PowerPoint*, *Word* and/or *Publisher*, students develop a sales pitch to persuade the London Company to invest in their colony. While collecting online and print information, students gain brief background knowledge about the establishment of their colony which includes topics such as why certain people would come to that colony. A jingle or commercial to "sell" the colony is recorded with digital equipment. Students present their campaign to classmates, who give feedback on the quality of their persuasive advertisement.

**NETS-S: 1. a – d; NCSS: X. c, f, & h**

**Activity III: Investigating Theme Parks.** A gifted middle school class of 6th through 8th graders completes investigations about theme parks. Students pair up and delve into the research using [Grolier Online Encyclopedias](#), [The Theme Park Page](#), and magazines. Students examine many issues relating to theme park development throughout the unit, including the physics involved in different types of rides, the economic impact of theme parks on the surrounding geographic areas, theme park safety issues and guidelines, and the clientele/marketing strategies for theme parks. Some of the culminating projects completed by students from classroom labs and activities are outlined below. Students

brainstorm, analyze, and investigate factors that affect the success of theme/amusement parks, as well as compile and organize data using *Inspiration* software; design a 3-D model of a theme park ride that includes all of Newton's Laws and compose a business letter in *Microsoft Word* to a theme park owner about construction of the ride; and create a new theme/amusement park using *Microsoft Publisher* to create a brochure for the park, an advertisement for the park, and map of the park.

**NETS-S: 2. a, b, & d; NCSS: X. b & c**

**Activity IV: Moodling the Civil War.** Students learn about life during the Civil War using a Wiki in [Moodle](#). Moodle is an open source course management system used to create online courses. One of the features in Moodle is a Wiki option where students create a webpage focusing on collaboration to create documents for learning as a community. These tools are used so that the entire class can edit a document together, create a class project, or

each student can work individually on content or a specific topic to share with their classmates. It helps build a supportive classroom community where all students become responsible for what and how they gather and learn information. Valley Park School District provides this course management system to teachers. Students in an 8th Grade United States History class collaboratively research information on the United States of America and the Confederate States of America during the Civil War. Students take "sides" in the Civil War and begin to research different aspects of life as a soldier and the effect the war had on those at home. Students post their findings in the Moodle Wiki to share with other groups. Each group posts the information they find, as well as links and resources that they use. Other students evaluate the information that they read and ask questions or dispute the validity of the information based on research they gather. Students ask for verification and additional information from other teachers in the district who have knowledge in their subject area. They also seek verification from other outside resources, such as historians at Civil War museums and the National Parks Service who maintain the battlefields of the Civil War.

**NETS-S: 2. a & b; NCSS: X. a – h**

**Activity V: Writing your Legislator.** Each year, gifted elementary and middle school students compose letters to their legislators in Missouri and members of the Valley Park Board of Education. In these letters, students address and advocate for their unique academic and social-emotional needs. Students also learn to be proactive members of society. During this process, students review past legislation and mandated efforts related to gifted education, both in the state of Missouri and throughout the nation. They also discuss weekly legislative updates provided to the teacher by a lobbyist for gifted education. Students are encouraged to practice and successfully navigate the [Missouri House of Representatives](#) and [Missouri Senate](#) web sites, based on their grade level. By exploring these web sites, students use technology to gather information about contacting their legislators and to gain knowledge about current political issues in the state of Missouri.

In composing their letters, students use letter-writing guidelines on [The Gifted Association of Missouri's Successful Advocacy](#) web site. Students compose their letters during a lengthy process of draft writings, self and peer editing opportunities, as well as teacher editing and assessment, prior to using *Microsoft Word* to type their final letter. Students know how their letters will be assessed because they receive a Business or Friendly Letter Scoring Guide at the beginning of the letter writing process. The scoring guide outlines the following criteria for students' letters to be evaluated: layout/design, conventions, sentence structure/fluency, ideas/content, and organization. Once the letters are complete and assessed, they are compiled into a classroom book.

Ultimately, the goal is for students to use their letters to create a *PowerPoint* presentation, resulting in a slide show of numerous letters from students in the Gifted Education Program. Copies of the *PowerPoint* can be burned to disc and easily mailed to elected officials and presented to groups, such as the Board of Education.

**NETS-S: 2. a & b, 3. a – c; NCSS: X. c & d**

**Activity VI: Researching a Country.** The essential elements of the [National Geography Standards](#) are used by students in the 6th grade World History classroom to research a country of their choice. The [Central Intelligence Agency](#), [infoplease](#), [Vivismo](#), [About.com](#), and the [National Geographic](#) are a few tools that students use to research the country. The students are introduced to various search engines on the Internet since this is, for most, the first time they have been allowed to do an Internet search at school. Students are introduced to the topic of website validity and look for reliable sources as they research. Students discover similarities and differences in the economies, governments, culture, and geography of their chosen countries. After completing the research, the students create a project to share with the class. The students create a Webpage, a travel



brochure about the country using *Microsoft Publisher* or *PowerPoint*, or request an alternative project based on their creativity. When complete, the students share with their peers the knowledge they gained.

**NETS-S: 3. a – d; NCSS: X. a – i**

**Activity VII: Writing a Bill.** Students in an 8th Grade Social Studies Enrichment class choose a topic based on an issue that they view as important or something they want changed, in order to develop a bill. Once they have the background information on the topic, they begin to put together a bill for submission to [eCongress](#) (sponsored by the Youth Leadership Initiative at the University of Virginia Center for Politics). This online project allows student groups from all over the country to research and develop their own bills, while learning the process of how a bill becomes a law. Students also collaborate with others across the country to revise bills and vote on those they feel are of high quality.

**NETS-S: 3. a – d; NCSS: X. b – f**

**Activity VIII: Analyzing Global Warming.** Gifted middle school students in grades 6 through 8 analyze many current and global issues that impact our world politically, socially and environmentally. One of the issues that they research is global warming. The students watch the movie *An Inconvenient Truth* (David, Bender, Burns, & Guggenheim, 2005) because it addresses many environmental issues relating to global warming. The video also presents the opportunity to analyze environmental issues in the context of political party agendas, scientific evidence, and economics. Integrating the video or any portion of [AIT in the Classroom: Educator's Resource](#) curriculum materials requires students to explore scientific research and Earth's global environment set in a historical context. In addition, students analyze the role of politics in influencing information presented to the greater public and how that information plays a role in shaping the opinions of people.

**NETS-S: 4. a – d; NCSS: X. a – i**

**Activity IX: Writing an Amendment.** Students in an 8th Grade Social Studies Enrichment class research ways to improve the government of the United States. The students look for issues or problems in the current government and develop amendments to the [United States](#) or [Missouri](#) Constitutions. As the students plan their amendments, they also analyze solutions and predict possible effects of the amendments on the way government functions and the lives of United States citizens. Each amendment is introduced to the class (the students call it the Constitutional Convention). After the discussion, students vote on whether or not the amendments should become part of the United States or Missouri Constitutions.

**NETS-S: 4. a – d; NCSS: X. a, c, d, & g**

**Activity X: Investigating a Controversial Topic – Cloning.** Within a unit on medicine, gifted students in a multi-age (grades 6-8) middle school class study cloning as a subtopic. To introduce the activities, students brainstorm their current knowledge about cloning and issues surrounding it and complete a classroom KWL Chart. A KWL chart is a graphic organizer with three columns so that students can organize What I Know, What I Want to Know, and What I Learned. Students use the information from the Know section of the KWL Chart to write a short position paper about cloning. Their current knowledge about cloning is used to write a rationale explaining their position and beliefs about the topic.

An introduction to stem-cell and reproductive cloning is provided. The students use [Grolier Online Encyclopedias](#), as

well as information from appropriate books and magazines, to gather research about both types of cloning. After researching, students work in pairs to create a graphic organizer using Inspiration software that compares and contrasts both types of cloning. Inspiration software, is used so students can create their own visual map of facts, key ideas, and connections between larger concepts. This software allows the flexibility to format conclusions in ways that help them learn, as well as in ways that are presentable for others. The graphic organizers are graded for accuracy of information. After the initial position papers are returned, students elaborate on their positions based on the new knowledge in order to type a final position paper. Ultimately, the goal is to post positions in a discussion forum or a classroom blog. A discussion forum or classroom blog allows students to share ideas and opinions they may not always feel comfortable sharing during a face-to-face classroom discussion, especially concerning controversial topics such as cloning. Also, it allows students more “think time” about a discussion and gives them an opportunity to access the discussion or blog from home if they would like to add any new comments. This activity encourages students to share their ideas and knowledge while also engaging students in the practices of writing to inform, debate, or persuade, depending on the focus of the discussion or blog.

**NETS-S: 4. c; NCSS: X. a & b**

**Activity XI: Comparing Democracy: Yesterday & Today.** As 6th grade World History students learn about the basics of democracy in Ancient Greece and Rome, they compare life and citizenship in those civilizations with present day life in the United States. Students research various types of democracy and consider how each type developed and evolved over time. In addition, students look at the effects each government had on the citizens of each country.

The students use [Smart Ideas](#) to create a Venn diagram in order to compare the governments of the ancient civilizations with the present government of the United States. *Smart Ideas* is a concept mapping software that is compatible with use of a Smart Board. *Smart Ideas* offers free trial downloads, but there is a charge if you choose to use it past the trial period. *Smart Ideas* software is similar to *Inspiration* software. Students use [Mr. Donn](#) and the [Constitution Center](#) to research government. After analyzing each government, the students look at the [Constitution of the United States](#), particularly the [Bill of Rights](#). To help the students better comprehend what the Bill of Rights stands for, students create their own Bill of Rights using the original as their guide and type them to share it with the class.

**NETS-S: 5. b & c; NCSS: X. a, g, h, & i**

**Activity XII: Being a Responsible Cyber Citizen.** At the beginning of the school year, students complete a [WebQuest](#), or technology-based lesson on Cyber-safety, web-bullying, and ethical behavior while using computers. Students learn to explain and practice how computers should be used in a school setting. In addition, the students take responsibility for themselves in learning how to gather information and avoid sites and information that may be inaccurate or biased. Students also develop the skills necessary for collaboration with peers.

**NETS-S: 5. a – d; NCSS: X. c & g**

**Activity XIII: Know Your Sources.** Gifted middle schools students in a 6th through 8th grade class have on-going, integrated mini-lessons built into larger lessons whenever a technology teachable moment occurs. For example, when using Internet-based magazine articles, journal articles, or web sites as a foundation of content within a lesson, students use at least two different sources that offer slightly different viewpoints, when possible. Students then complete a Venn diagram, or similar graphic organizer, comparing and contrasting the content of the articles or websites. They also evaluate the credentials of the authors, the reliability of the source or organization, and the “voice” of the article or web site. Students use the term “voice” to answer the following question: Does the article state “I” often, indicating opinion biased content, or does the article avoid “I” statements and have reliable resources cited to support the document? These integrated mini-lessons are important because students take responsibility for gathering, analyzing, and utilizing appropriate information.

**NETS-S: 5. a & c; NCSS: X. a & c**

**Activity XIV: Acceptable Use Policy.** All students complete the district and classroom Acceptable Use Policies (AUP) to ensure student responsibility for their actions related to technology. Completing the district and classroom AUPs raises awareness regarding the responsibility of using technology and the consequences that result in abusing such privileges. Completion of the district AUP is a requirement for students prior to their use of any district technology. The AUP documents students' and parents' awareness of the district's belief and understanding that acceptable technology use is not guaranteed, should a student choose to violate the agreement/policy.

**NETS-S: 6. b & c; NCSS: X. a, h, & i**

**Activity XV: Making a Technology Tool Guide.** Before each project or online lesson, students are provided instruction on how to use a specific program or a new component of a program they have already used, in both the 6th and 8th grade classrooms. In the 8th grade classroom, the students develop troubleshooting guides for classroom computers. These student created guides are written such that anyone could diagnose and fix the problem they are experiencing with their computer. This book also includes helpful hints for different programs or media that are used by the 8th grade on a regular basis.

**NETS-S: 6. a – c; NCSS: X. d, e, & h**



Images obtained from Comstock Images, 244 Sheffield St. Mountainside, NJ 07092

**Activity XVI: Be a Technology Resident Expert.** Students in the gifted 6th through 8th grade classroom volunteer to be selected as a Technology Resident Expert. One of the students who volunteers is elected by their classmates to be a Technology Resident Expert in a certain area of technology. For example, students who have demonstrated strengths using specific technology in the past, or who feel they have enough experience using specific technology, can volunteer to teach other students to use or troubleshoot the technology.

At least one Technology Resident Expert is elected in each of the following categories listed to help troubleshoot or teach usage to other students as they request assistance: *Microsoft PowerPoint*,

*Microsoft Publisher*, *Microsoft Word*, *Microsoft Excel*, *Kidspiration/Inspiration software*, *Microsoft Paint* (software for creating and editing graphics), Internet Browsing/Free Searches, Online Filing System (such as <http://ikeepbookmarks.com>), Smart Board Software and Tools, Digital Camera Usage, Scanner Usage, and File Management. Having Technology Resident Experts not only empowers students to act as leaders in the classroom, but provides an opportunity for students to partake in building classroom community relationships. Students are aware that every person has strengths in different areas and that everyone can contribute in the classroom when working with technology.

**NETS-S: 6. a & b; NCSS: X. d, e, & h**

**Activity XVII: Using the Tools.** In 6th grade World History, students are beginning to have sole responsibility for their technological activities. Most students attempt minor troubleshooting, but the students are also becoming responsible for their personal computers. The students check out their laptops and report any abnormalities to the instructor. This behavior ensures student accountability and students are solely responsible for the computer assigned to them, thus creating a sense of ownership. Students are also beginning to use USB drives to collect data and transfer it from school to home and back, which helps students see the real life applications of

what they are learning. This makes them responsible for transporting the USB drive and information from school to home.

## Conclusions

It takes the contributions of dedicated 6th through 8th grade teachers like Rhoades, Biffignani, and Steinkamp to design new curricula that evolves as new standards and new technologies become part of the classroom. These middle school activities contain diverse technologies, learning strategies, and civic engagement for students to learn how to use technology responsibly. We hope other middle school teachers take the challenge to design curricula that promote civic engagement while using technology.

## About the Authors



**Linda Bennett** is an associate professor of social studies education at the University of Missouri. Dr. Bennett conducts research on the integration of technology into social studies education. She can be contacted at [lb@missouri.edu](mailto:lb@missouri.edu)

Linda Bennett, Ed.D.  
University of Missouri  
303 Townsend Hall  
Columbia, MO 65211  
573-882-1993 (office)  
573-884-2917 (fax)  
[lb@missouri.edu](mailto:lb@missouri.edu)



**Susan Biffignani** is a member of the Valley Park School District. Susan currently teaches social studies and reading in the sixth grade at Valley Park Middle School. Susan serves on the district CSIP committee, chairing the Achievement Gap committee. Susan is a former MAP Senior Leader for the state of Missouri and has made numerous presentations on the state testing procedures. Susan has also served as a mentor teacher and was Teacher of the Year for the Valley Park School District in 2002. Susan earned her undergraduate degree, B.S. in Elementary Education from Harris Stowe State College, now Harris Stowe University, where she has been honored as a distinguished alumni. She received her M.A. Ed in Middle Level Education from Maryville University. Susan is currently working to receive her eMINTS certification from the state of Missouri.

Susan Biffignani  
Valley Park Middle School  
One Main Street  
Valley Park, MO 63088  
636-923-3556  
[sbiffign@vp.k12.mo.us](mailto:sbiffign@vp.k12.mo.us)



**Erin Steinkamp** is a Social Studies Teacher for the 8th grade at Valley Park Middle School. She is a veteran eMINTS teacher as well as a Nationally Certified Peer Program Educator. She earned a B.S. in Secondary Education from Southeast Missouri State University, her M.A. in Education in Curriculum and Instruction from National Lewis University, has basic certification in Character Education from the University of Missouri - St. Louis, and is currently working on a M.A. in School Counseling from Lindenwood University.

Erin Steinkamp  
Valley Park Middle School  
One Main Street  
Valley Park, MO 63088  
636-923-3509  
[esteinka@vp.k12.mo.us](mailto:esteinka@vp.k12.mo.us)



**Jaime Rhoades** is the Gifted Education Coordinator for grades K-8 and the Gifted Cluster Grouping Facilitator for grades 2-5 in the Valley Park School District. She has been an instructor in the College for Kids program at St. Louis Community College at Meramec, and has presented at several conferences pertaining to Gifted Cluster Grouping and Differentiation. She earned a B. S. in Elementary Education from University of Missouri-St. Louis, her M.A.Ed. in Gifted Education from Maryville University, and her Ed.S. in Administrative Leadership from Webster University. Jaime served as a past member of the St. Louis Association for Gifted Education Board of Directors from 2003-2006, and served as President of the organization from 2005-06. She has recently been hired as an Adjunct Professor in the Education Department at Maryville University.

Valley Park Elementary and Middle School  
One Main Street  
Valley Park, MO 63088  
(636) 923-3593  
<http://www.vp.k12.mo.us/es/teacher/jrhoades/index.htm>  
[jrhoades@vp.k12.mo.us](mailto:jrhoades@vp.k12.mo.us)

## References

About Inc. (2007). *About*. Retrieved October 21, 2007, from <http://www.about.com/>

Bennett, L. (2005). Guidelines for using technology in the social studies classroom. *The Social Studies*, 96(1), 38-40.

Cagle, D. *Daryl Cagle cartoonist*. Retrieved October 23, 2007, from <http://www.cagle.com/>

Central Intelligence Agency. *Central Intelligence Agency*. Retrieved October 12, 2007, from <http://www.cia.gov>

Coaster Radio.com Networks. (2007). *The theme park page*. Retrieved October 24, 2007, from <http://www.themeparkpage.com/>

Dodge, B. (2007). *WebQuest.org*. Retrieved October 15, 2007, from <http://www.webquest.org/index.php>

Donn, D. & Donn, L. (2006). *Mr. Donn*. Retrieved October 13, 2007, from <http://www.mrdonn.org>

Enhancing Missouri's Instructional Networked Teaching Strategies. *Enhancing Missouri's instructional networked teaching strategies national center*. Retrieved October 15, 2007, from <http://www.emints.org/>

The Gifted Association of Missouri. (2006). *Successful advocacy*. Retrieved October 23, 2007, from <http://www.mogam.org/www/index.shtml>

David, L., Bender, L. & Burns, S. Z. (Producers), & Guggenheim, D. (Director), (2005). *An inconvenient truth* [Motion picture]. Unites States: Paramount Classics and Participant Productions.

International Society for Technology in Education. (2007). *Refreshed national educational technology standards for students*. Retrieved October 15, 2007, from [http://www.iste.org/inhouse/nets/cnets/students/pdf/NETS\\_for\\_Students\\_2007.pdf](http://www.iste.org/inhouse/nets/cnets/students/pdf/NETS_for_Students_2007.pdf)

*Missouri House of Representatives*. Retrieved October 21, 2007, from <http://www.house.mo.gov/>

Missouri Secretary of State. *Missouri Constitution*. Retrieved October 21, 2007, from <http://www.sos.mo.gov/pubs/constitution.asp>

ModdleDoc. (2007). *Moodle*. Retrieved October 26, 2007, from <http://www.moodle.org/>

The National Archives. (2007). *The national archives experiences*. Retrieved October 15, 2007, from [http://www.archives.gov/national-archives-experience/charters/bill\\_of\\_rights.html](http://www.archives.gov/national-archives-experience/charters/bill_of_rights.html)

National Council for Geography Education. (2005). *The eighteen national geography standards*. Retrieved October 23, 2007, from <http://www.ncge.org/publications/tutorial/standards/>

National Council for the Social Studies. (1994). *Curriculum standards for social studies: II thematic strands*. (1994). Retrieved October 14, 2007, from <http://www.socialstudies.org/standards/strands/>

National Geography Society. (2007). *National geographic*. Retrieved October 24, 2007, from <http://www.nationalgeographic.com>

Participate Productions. (2005). *An inconvenient truth in the classroom*. Retrieved October 21, 2007, from <http://www.takepart.com/educators/node/?q=node/>

Pearson Education. (2007). *Infoplease*. Retrieved October 23, 2007, from <http://www.infoplease.com>

Scholastic, Inc. (2007). *Grolier online encyclopedia*. Retrieved October 24, 2007, from [http://auth.grolier.com/login/go\\_login\\_page.html?bfs=N](http://auth.grolier.com/login/go_login_page.html?bfs=N)

Society for Technology in Education. (2007). *Profile for technology-literate students: Grades 6-8*. Retrieved October 20, 2007, from <http://www.iste.org/inhouse/nets/cnets/students/pdf/Student%20Profiles-Draft.pdf>

Smart Technologies. (2007). *Smart ideas*. Retrieved October 21, 2007, from <http://www2.smarttech.com/st/en-us/products>

Software Designs. (2006). *I keep book marks*. Retrieved October 14, 2007, from <http://ikeepbookmarks.com/>

The St. Louis Post Dispatch. (2007). *St. Louis today*. Retrieved October 14, 2007, from <http://www.stltoday.com>

Youth Leadership. (2006). *eCongress*. Retrieved October 24, 2007, from <http://www.youthleadership.net/students/econgress/>

*Vivisimo*. Retrieved October 21, 2007, from <http://www.vivisimo.com>

## **Appendix A**

### **National Educational Technology Standards for Students**

#### **1. Creativity and Innovation**

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes.
- b. create original works as a means of personal or group expression.
- c. use models and simulations to explore complex systems and issues.
- d. identify trends and forecast possibilities.

#### **2. Communication and Collaboration**

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- a. interact, collaborate, and publish with peers, experts or others employing a variety of digital environments and media.
- b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- c. develop cultural understanding and global awareness by engaging with learners of other cultures.

- d. contribute to project teams to produce original works or solve problems.

### **3. Research and Information Fluency**

Students apply digital tools to gather, evaluate, and use information. Students:

- a. plan strategies to guide inquiry.
- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- d. process data and report results.

### **4. Critical Thinking, Problem-Solving & Decision-Making**

Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate digital tools and resources. Students:

- a. identify and define authentic problems and significant questions for investigation.
- b. plan and manage activities to develop a solution or complete a project.
- c. collect and analyze data to identify solutions and/or make informed decisions.
- d. use multiple processes and diverse perspectives to explore alternative solutions.

### **5. Digital Citizenship**

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a. advocate and practice safe, legal, and responsible use of information and technology.
- b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- c. demonstrate personal responsibility for lifelong learning.
- d. exhibit leadership for digital citizenship.

### **6. Technology Operations and Concepts**

Students demonstrate a sound understanding of technology concepts, systems and operations. Students:

- a. understand and use technology systems.

- b. select and use applications effectively and productively.
- c. troubleshoot systems and applications.
- d. transfer current knowledge to learning of new technologies.

*Note.* From “*Educational technology standards for students*,” by International Society for Technology in Education, 2007, Washington, DC: NCSS. Copyright 2007 by ISTE. Reprinted with permission.

## **Appendix B: National Council for the Social Studies Middle Grades**

### **Civic Ideals and Practices Strand**

#### **X. Civic Ideals and Practices**

Social studies programs should include experiences that provide for the study of the ideals, principles, and practices of citizenship in a democratic republic, so that the learner can:

#### **MIDDLE GRADES**

- a. examine the origins and continuing influence of key ideals of the democratic republican form of government, such as individual human dignity, liberty, justice, equality, and the rule of law;
- b. examine the origins and continuing influence of key ideals of the democratic republican form of government, such as individual human dignity, liberty, justice, equality, and the rule of law;
- c. identify and interpret sources and examples of the rights and responsibilities of citizens;
- d. locate, access, analyze, organize, and apply information about selected public issues — recognizing and explaining multiple points of view;
- e. practice forms of civic discussion and participation consistent with the ideals of citizens in a democratic republic;
- f. explain and analyze various forms of citizen action that influence public policy decisions;
- g. identify and explain the roles of formal and informal political actors in influencing and shaping public policy and decision making;
- h. analyze the influence of diverse forms of public opinion on the development of public policy and decision making;
- i. analyze the effectiveness of selected public policies and citizen behaviors in realizing the stated ideals of a democratic republican form of government;
- j. explain the relationship between policy statements and action plans used to address issues of public concern;
- k. examine strategies designed to strengthen the "common good," which consider a range of

options for citizen action.

*Note.* From "*Expectations of excellence: Curriculum standards for social studies,*" by National Council for the Social Studies, 1994, Silver Spring, Maryland: NCSS. Copyright 1994 by NCSS. Reprinted with permission.