



Lessons for Teachers in Grades 9-12
Examining the Impact of Technology in Schools, After School, at Home and in the Future Workforce.

Grade Levels: 9-12

(Teachers are encouraged to adapt lesson plans based on grade level of students and State Curriculum Standards.)

Subject: Language Arts/Social Studies/Technology

Suggested Time: Two Class Periods (50 minutes)

Objectives:

The students will be able to:

- 1. Identify influential modern technological advances.*
- 2. Compare essential and non-essential modern technological devices.*
- 3. Describe the impact of modern technological inventions on life in 2005.*
- 4. Evaluate the current US culture's dependency on technology.*
- 5. Explain how technology integration impacts US student preparation for a Global Economy.*
- 6. Write a formal persuasive business letter emphasizing the need for technology within the school setting.*
- 7. Understand the difference between Fact and Opinion*

Resources

- Paper, Pens or pencils*
- Access to Computers with Internet Access*
- Index Cards*
- White Board*
- Magazines and Newspaper*
- Television, DVD or VHS player*

Evaluation

Teachers may evaluate student participation, writing skills, ability to use content vocabulary, mechanics of letter writing, ability to identify facts versus opinions, ability to complete a persuasive argument.

Vocabulary

Content Vocabulary

Broadband, CD burner, chat, computer, distance learning, download, filter, firewall, IM, laptop computer, listserv, Mp3 player, online text books, PDA, scanner, weblog, wireless, VCR, camcorders, digital recorder, video games, DSL, broadband, instant messaging, DVD, cell phone, personal computers, internet, handhelds, laptops, scanners, GPS, e-mail, spell check

Language Arts Vocabulary

persuade, convince, sway, argue, emphasize, encourage, advocate, influence, advertise, influence, opinion, heading, greeting, body, closing, signature, fact, actuality, opinion, judgment, estimation

Classroom Activities

Teachers may choose to complete all or some of these exercises or use these exercises as a starting point for their own creative approach.

1. Introduction

- A. Divide the class into cooperative groups of 4-5 students. Provide each group with at least one magazine and the local newspaper. Ask the groups to locate at least two advertisements highlighting modern technologies. Each group should then discuss the value of the modern technology and the influence of the technology on daily life. Each group will be invited to share their advertisements with the class and review their reflections regarding the necessity of the modern technology. The teacher will track the discussion via a graphic organizer and display the advertisements.**
- B. Facilitate a whole group discussion regarding essential modern technologies and how they affect the students' daily lives.**

Possible Discussion Questions:

- Which modern technologies are used most often during the school day?**

- **What would class be like without modern technology?**
- **Explain why modern technologies are important to your success in school.**
- **Which modern technologies do you use outside of school?**
- **How would your life change without these technologies?**
- **How might school change without these technologies?**
- **Compare and contrast a school day with technology and without technology.**
- **List facts related to modern technology vs. opinions related to modern technology.**

2. Writing

Hints for the Teacher:

The following writing lesson is based on a persuasive letter to your local US Representative or US Senator. Please visit ([URL](#)) to locate the contact information for your state's Congressman.

Following the 5-Step Writing Process of modeling, drafting, revising, editing and publishing the teacher will model and the students will write a letter to their U.S. Representative or US Senator ([URL](#)) detailing the importance of technology in the modern day classroom. Once the student's work has been edited students are encouraged to submit their letters via Congressmerge ([Link](#)).

****Teachers and students may choose to contact their Representative or Senator via US Postal service, fax or e-mail. Technology Black Out Day encourages electronic communication via e-mail, fax or e-fax.**

****[In order to be eligible for Technology Black Out Day Prizes students must submit their final product on-line at \(\[URL\]\(#\)\).](#) ****

Writing Prompt:

****Teachers are strongly encouraged to create a writing prompt based on your state standards and standardized test format. ****

Imagine a day with no access to modern technology, i.e. computer, cell phone, PDA, MP3, Spell Check, Video Games etc. What would your day be like? How might you be inconvenienced? How would this impact your school day and your studies? How would you feel? What would be different?

Now write a letter to your US Representative or US Senator explaining the difficulties you may have without access to modern technology in your school. Be sure to include an example of how various technologies have helped you achieve.

Extension Activities:

- A. Create an Advertising Campaign emphasizing the need for technology in the classroom.**
- B. Invite the local PTA, school board president, school superintendent, governor, US Representative or US Senator to visit your classroom/school to see technology in action within the school setting.**
- D. Review movie or television clips and track the various uses of modern technology**

Research Sources

Invention Time Line 1970-2004

<http://inventors.about.com/library/weekly/aa122999a.html>

Schools tackle PDA problem - September 21, 2003

<http://www.cnn.com/2003/EDUCATION/09/21/sprj.sch.classroom.gadgets.ap/index.html>

Teens Want Cell Phones and Laptops for Back to School - September 3, 2003 http://www.mediapost.com/dtfs_dsp_news.cfm?newsID=217351

'Star Wars Kid' school video raises web privacy issues - September 23, 2003 <http://www.eschoolnews.com/news/showStorytw.cfm?ArticleID=4648>

RIAA settles with 12-year-old girl - September 10, 2003

http://zdnet.com.com/2100-1105_2-5073717.html

Literature Resources

Ardley, N and Macaulay, D. New Way Things Work.

Walter Lorraine Books, 1998 ISBN: 0395938473 (Young Adult)

Anderson, M. Feed.

Candlewick Press, 2003. ISBN: 0763622591 Young Adult

Haddix, M. Among the Hidden. Simon and Schuster Children's Books, 2000. (7-9th grade) ISBN: 0689824750

Lesinski, Jeanne. Biography of Bill Gates. New York. Lerner Publishing Group, 2000. ISBN 0822549492. (Young Adult)

Lowe, Janet C. Bill Gates Speaks: Wisdom from the World's Greatest Entrepreneur. Portland. Wiley, John & Sons, Incorporated, 1998 (Young Adult) ISBN: 0471293539

Porter A. & Davies E. How Things Work

Barnes & Noble Books, 2003. ISBN: 0760746427 (Ages 8-12)

Related Language Arts Lesson Plans:

The Art of Persuasion Worksheet

http://www.edhelper.com/ReadingComprehension_33_32.html

Letter Generator

http://www.readwritethink.org/materials/letter_generator/

PERSUASIVE ARGUMENT Grade Level - 7-12

<http://www.lessonplanspage.com/LAWritingPersuasiveArguments-Issues712.htm>

Persuasive Letter Writing

<http://www.lessonplanspage.com/LACIOTechnicalWritingUnit-Part9-PersuasiveLettersHS.htm>

Persuasive Writing Grade Level(s): 6-8

<http://www.atozteacherstuff.com/pages/495.shtml>

Social Studies Related Lesson Plans

Balancing Budgets from Reagan to Today (Grade 9-12)

<http://school.discovery.com/lessonplans/programs/thereaganlegacybalancingact/>

Citizen Advocacy Center

Civic Education & Teacher Resources

<http://www.citizenadvocacycenter.org/teacher%20lessons.htm>

Dividing the Federal Pie <http://www.kowaldesign.com/budget>

The Election Process and the Campaign Trail (Grades 5-8)

<http://artsedge.kennedy-center.org/content/3773/>

Inventive Thinking Lesson Plans (K-12)

http://inventors.about.com/library/lessons/bl_inventive_thinking.htm

LESSON 2: Budget, Budget, Who's Got the Budget?

<http://www.learningtogive.org/lessons/unit50/lesson2.html>

Making Civics Real Workshop 3

[A Citizen's Guide to the Federal Budget \(PDF\)](#)

<http://www.learner.org/channel/workshops/civics/workshop3/lessonplan/lessonmaterials.html>

Related Technology Lesson Plans:

Computer Technology (Grade 8)

<http://school.discovery.com/lessonplans/programs/inventioncomputertechology/>

Connecting the Dots

Exploring the Differences between Digital and Analog Technologies

<http://www.nytimes.com/learning/teachers/lessons/20040805thursday.html>

CyberSpace (9-12)

<http://school.discovery.com/lessonplans/programs/cyberspace/>

From Page to Screen (Grades 6-8, 9-12)

Exploring the Uses of Scanning Technology to Make Materials Available Online

<http://www.nytimes.com/learning/teachers/lessons/20041216thursday.html>

Generation Tech

Capturing Today's Technology in a Virtual Time Capsule

<http://www.nytimes.com/learning/teachers/lessons/20041223thursday.html>

KIDS ON-Line: Sample lesson plans on how to use various technologies

<http://www.kidzonline.org/LessonPlans/lesson.asp?mode=1&GradeQry=0010100&SubjectQry=Educational%20Technology>

Lost in Time (Grade 6-8)

<http://school.discovery.com/lessonplans/programs/lostintime/>

Putting on a Show

Creating a Class Consumer Electronics Trade Show

<http://www.nytimes.com/learning/teachers/lessons/20050106thursday.html>

War or the Worlds

<http://school.discovery.com/lessonplans/programs/warofworlds/>

Won't You Be My (E-)Neighbor? (Grades 6-8, 9-12)

Fostering Communities with Technology

<http://www.nytimes.com/learning/teachers/lessons/20040826thursday.html>

Curriculum Standards

McREL Standards

From Content Knowledge, 3rd Edition, a compilation of content standards for K-12 curriculum, created by Mid-continent Research for Education and Learning (McREL).

Civics – 6-12

Standard 19 - Understands what is meant by "the public agenda," how it is set, and how it is influenced by public opinion and the media.

(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=14&StandardID=19>)

Listening and Speaking 4-12

Standard 8: Uses listening and speaking strategies for different purposes

(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=7&StandardID=8>)

Media 4-12

Standard 10: Understands the characteristics and components of the media

(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=7&StandardID=10>)

Writing 4-12

Standard 1: Uses the general skills and strategies of the writing process

(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=7&StandardID=1>)

Technology Black Out Day Lesson Plans Adapted from:

Net Day Speak Up Day Lesson Plan for Individual Response

Technology in Schools: Students Speak Up © 2003 NetDay www.netday.org