

Learning, Communication, and 21st Century Skills: Students Speak Up

For use with Speak Up Survey Grades 6-12

Grades: 6-12

Subjects: Language Arts, Social Studies/History, Math, Government, Civics, Career or Job Training

Suggested Time: One Class Period (50 minutes)

Lesson Overview

Students will reflect on learning, communication, and their preparation for future jobs including the role technology and the Internet play in these areas. There are 8 suggested activities listed in this lesson plan. Start with the warm up activity and then select any of the activities that are appropriate for your students. The wrap up activity is a great way to get your students ready for participating in the Speak Up survey.

Activity List

1. Warm-up Exercise – How Do You Use Technology for Learning? (10 minutes)
2. Class Discussion – Effective Use of Technology (15 minutes)
3. Class Activity – Technology and Education in the News (20 minutes)
4. Group Activity – Challenges and Obstacles (15 minutes)
5. Group Activity – Create an Action Plan (30 minutes)
6. Wrap Up – The Big Picture (15 minutes + homework)
7. Individual Activity – Speak Up Surveys (15 minutes)
8. Extension – Compare results of your school with the national data (optional)

Objectives

Students will

- Reflect on their use of technology for learning and communication both inside and outside of school
- Consider how their math, science, and technology education is preparing them for future success
- Discuss their opinions and findings with peers
- Suggest ways that technology and Internet use can be improved in their school
- Engage in civic responsibility by participating in school site decision-making

Teacher Preparation

- Confirm that your school is registered for Speak Up (www.netdayspeakup.org)
- Preview the survey. (http://www.tomorrow.org/speakup/speakup_surveys.html)

Speak Up Lesson Plan

Grades 6-12 Survey



- Reserve computer lab or mobile laptop for class use, set up a station in the classroom where students can complete the survey, or assign the completion of the survey as homework.

How To Speak Up – Tips For Having Your Students Take the Survey

The Speak Up survey site, www.netdayspeakup.org, will be open **October 20 - December 19, 2008**. Teachers and students use their school name or zip code and secret word to access the surveys online.

Students can take the survey from any Internet-connected computer, at home or at a library using your school name and secret word. If you want to have students take the survey in class, consider setting up the survey on several classroom computers as a survey center for the entire survey period. Students can rotate through the centers during class period activities.

A flyer is available for you to print out and send home with students at http://www.tomorrow.org/speakup/pdfs/Speak_Up_Flyer.pdf

Vocabulary

The Speak Up surveys ask questions about the tools that students use for learning inside and outside of the classroom. In preparation for the survey, discuss any new terminology with students.

- *Chat rooms*
- *Critical thinking*
- *Desktop computer*
- *Digital camera*
- *Discussion board*
- *DVD or CD burner*
- *Hand-held device (PDA)*
- *Instant Messenger (IM or AIM)*
- *Internet filters*
- *Laptop computer or Notebook computer*
- *MP3 player or iPod*
- *Online*
- *Online class*
- *Personal networking, like MySpace*
- *Podcast*
- *Scanner*
- *School portal, like Blackboard*
- *Search engine*
- *SmartBoard*
- *SmartPhone, like Blackberry or Sidekick*
- *Simulations*
- *Skype or VoIP (talking over the Internet)*
- *Software*
- *Tablet PC*
- *Text messaging*
- *Web logs (Blogs)*
- *Website*

Assessment

Teachers can evaluate students on their preparation and participation in group and class discussions. Students can print a copy of their survey completion confirmation to submit as proof of completion of the survey.

Classroom Activities

The following activities are designed to engage students in the survey experience and understand the importance of their participation. You may choose to do all or some of these exercises.

1. Warm-up Exercise – How Do You Use Technology? (10 minutes)

Technology means different things to different people. For the purposes of this activity and the survey, we are using the term “technology” to mean all kinds of electronic devices, not just computers and the Internet. Start by reviewing questions 6, 10, and 14 of the survey with the class.

6. Which of these activities do you regularly do using technology?

(Check all that apply)

- a Create and post videos online
- b Download music
- c Go to TV show websites to give feedback or vote
- d Maintain a personal website like MySpace or Facebook
- e Participate in virtual reality environments like Second Life
- f Play video or online games
- g Read or post blog or wiki entries
- h Remix content (such as music, video, text) to create something new
- i E-mail
- j Instant Message
- k Text Message
- l None of the above

10. How do you use technology for schoolwork?

(Check all that apply.)

- a Check on assignments or grades online
- b Complete writing assignments
- c Conduct online research
- d Conduct virtual experiments or simulations
- e Create slide shows, videos or web pages for an assignment
- f Email, IM or Text classmates about assignments
- g Email, IM or Text teachers about assignments
- h Get help from an online tutor
- i Listen to a podcast for a class
- j Play educational games
- k Take a class online
- l Take tests online
- m Use my personal webpage to collaborate with classmates on a project
- n Use online textbooks or other online curriculum
- o Work on projects with students in other countries
- p Other

14. In some schools, students use mobile devices (cell phones, MP3 players, PDAs etc) to help with schoolwork. How would you like to use a mobile device to help you with your schoolwork?

(Check all that apply)

- a Email or IM or Text a classmate
- b Email or IM or Text my teacher
- c Conduct Internet research
- d Access social networking sites (e.g. Facebook or MySpace)
- e To share and edit calendars, or organize bookmarks
- f To upload or download information from my school's portal
- g To create or share documents, videos or podcasts
- h To work on projects with my classmates
- i To play educational games
- j None of the above
- k Other - your ideas:

Ask students to write in their journal a quick response to one or both of these questions:

- *How important is technology to the way you learn at school and outside of school?*
- *What is different about the way you use technology at school from the way you use it outside of school?*

2. Class Discussion – Why is science important? (15 minutes)

Review questions 22 and 23 from the survey below. As a class, discuss how students like to learn science. *Do you like hands-on activities? Practicing skills on the computer? Learning about careers? How much (or how little) is technology involved in the way you like to learn? Are there other ways you can see technology helping you with these subject areas?* Interweave these questions with a discussion about why science is important for everyone to learn.

22. How is learning science important to your future?

(Check all that apply)

- a I might want a job that uses science.
- b To help me get into college.
- c To graduate from high school.
- d It helps me develop my problem solving and critical thinking skills
- e It will help me make informed decisions in the future.
- f Learning science is not important to my future.
- g I don't know.

23. Imagine your ultimate science classroom. Which of the following would be an essential part of that classroom?

(Check all that apply)

- a Learning from a teacher who is excited about science.
- b Using animations to help me visualize difficult concepts.
- c Practicing what I have learned using interactive simulations.

Speak Up Lesson Plan

Grades 6-12 Survey



- d Conducting real research on topics that I am most interested in.
- e Having experts come and speak to our class about science careers.
- f Working with other students on projects.
- g Reading the science textbook.
- h Using standard lab tools to conduct scientific investigations.
- i Using technology-based tools to conduct scientific investigations.
- j Understanding why science is relevant to my life.
- k Using visualizing software to help me organize ideas.
- l Using online databases to do research.
- m Creating multi-media presentations of my scientific findings.
- n Other, please specify:

3. Class Activity: Technology and Education in the News (20 minutes)

As a class, read and discuss a current article about technology in schools. We suggest any one of these as a starting point with suggested discussion questions. Choose one or multiple topics and discuss students' reactions in class.

TOPIC: TECHNOLOGY TOOLS AND RULES AT SCHOOL

Textbooks dumped in favor of laptops - September 20, 2004

<http://www.eschoolnews.com/news/showStory.cfm?ArticleID=5270>

Sending Kids Back to School with Cell Phones

<http://www.schoolcio.com/showArticle.jhtml?articleID=192500041>

Social-Networking Web Sites Pose Growing Challenge for Educators

<http://www.edweek.org/ew/articles/2006/02/15/23facebook.h25.html>

Classroom Instruction: Rural Georgia school displays iPod ingenuity

<http://www.eschoolnews.com/news/showStorysr.cfm?ArticleID=6283>

- What kinds of technology should students be able to use at school?
- Should there be any restrictions about how to use technology at school?
- How does technology help students with their school work?
- How does technology distract students from their school work?
- How are decisions about technology use in schools made?

OTHER TOPICS

Review question 7 from the survey below. What do students know about these issues? As an Internet search exercise, see if students can find out more about one of these issues. What do students think? What is the responsibility of schools to protect students?

7. Which of these things really bugs you about using the Internet?**(Check all that apply)**

- a Adults being too concerned about internet safety
- b Cookies and popup ads
- c Harassed by someone online (Cyberbullying)
- d False information on social networking sites/personal webpages
- e Online predators
- f Paying for music downloads
- g Internet speed is too slow for what I need to do
- h Spam
- i Trying to figure out if information from the web is accurate
- j Websites that require you to register on their site to get information
- k Paying for access to the Internet in public places
- l Some people not having access to the Internet
- m Too much information
- n None of the above
- o Other, Please specify

4. Group Activity: Challenges and Obstacles (15 minutes)

Divide students into small groups to brainstorm generally about 5 challenges or obstacles to using technology and the Internet for schoolwork. Is there any problem that is common to most challenges? What are some of their proposed solutions?

Use questions 21 and 28 and compare the responses to students' original thinking.

Encourage students to put themselves in the place of key decision makers in the school or district. How would they prioritize the problems? Which obstacle would they choose to tackle first? Encourage students to think about the trade-offs and new challenges that might be introduced by their proposal.

21. Besides not having enough time in your school day to use technology, what are the other major obstacles you face using technology at your school? (Check all that apply)

- a Assignments don't take advantage of technology
- b Computers are old, slow, broken or freeze up
- c I cannot access my personal email account or send email or IM to classmates
- d There are rules against using technology at my school
- e I do not have my own computer to use at school
- f I don't have the skills I need
- g Internet access is slow or does not always work
- h Not enough computers, printers, scanners, other digital equipment
- i School filters or firewalls block websites I need
- j Software is old or not good enough for what I need

- k Teachers don't know how to use the technology
- l Teachers limit our technology use
- m Other:

28. Imagine you are designing the ultimate school. Which of these tools would have the greatest positive impact on your learning? (Check all that apply)

- a Personal laptops for each student to use
- b Access to online databases for research
- c Career technical education classes
- d Digital equipment for creating multi-media projects
- e Games/Virtual Simulations
- f Interactive white boards in every classroom
- g Using online tools to help organize class work or assignments.
- h Mobile learning devices (cell phones, PDAs, MP3 players, graphing calculators)
- i Online Classes
- j Using online tools to help you communicate with your teachers
- k School portal
- l Student access to email and IM accounts from school
- m Handheld student response systems
- n Unlimited student access to the Internet
- o Web 2.0 tools such as blogs, social networking sites, wikis
- p Other, please specify

5. Your Voices, Your Futures

Students in your grades might just be beginning to think about their future or else they may be very used to discussing their career aspirations. The skills listed below define "21st century skills" or important skills that your students might need in college, jobs, and careers. Have students work on this ranking activity on their own and then share their responses with in a class discussion.

8. Which of these skills is most important for you to be successful in the 21st century?

(Check all that apply)

- Ability to work with people from all over the world
- Collaboration and teamwork skills
- Ability to communicate in more than one language
- Communication skills
- Ability to learn new things
- Creativity
- Know how to use technology effectively
- Problem solving and critical thinking skills
- Information and media literacy skills
- None of the above
- Other, please specify: _____

As with previous years, the Speak Up survey concludes with two open-ended questions that focus on big-picture thinking. You might choose to assign one or both of these questions to students as a homework assignment.

29. **What if you had all the resources you needed to create a new video, cell phone, software or online game that would teach other kids about an issue or topic that is important to you. Tell us about your game - what is it about, how do you play it, what would kids learn from your game, what makes your game special?**
30. **Imagine that you are the principal of your school and your #1 goal is to make sure that every student feels that they are an important member of your school community. As principal, what would you do to help every kid feel connected and valued?**

6. Individual Activity: Speak Up Surveys (15 minutes)

Have students to complete the online Speak Up survey about how they use technology and the Internet. Students go to the survey site: www.netdayspeakup.org and enter their school name or zip code, and your school's secret word to access the survey. See the How-to Speak Up Guide http://www.tomorrow.org/speakup/pdfs/Educators_How_to_guide.pdf for more tips on administering the survey.

7. Extension: Compare results of your school with the national data

School contacts will be notified when the Speak Up data is available in January 2009. Your school's data will be accessible with the same secret word that you use to take the surveys. Students and teachers can access aggregated results for their own school as well as their district and to see how their experience with technology and the Internet relates to other youth. Speak Up will compile the results and share with local, state, and national decision-makers.

The comparative national data provides rich opportunities for data and statistics activities that support your math objectives.

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 (Level III & IV)

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/standardDetails.asp?subjectID=14&standardID=19>

Listening and Speaking 6-12 (Level III & IV)

Standard 8: Uses listening and speaking strategies for different purposes

<http://www.mcrel.org/compendium/standardDetails.asp?subjectID=7&standardID=8>

Media 6-12 (Level III-IV)

Standard 10: Understands the characteristics and components of the media

<http://www.mcrel.org/compendium/standardDetails.asp?subjectID=7&standardID=10>

Writing 6-12 (Level III-IV)

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

<http://www.mcrel.org/compendium/standardDetails.asp?subjectID=7&standardID=1>

Technology 6-12 (Level III-IV)

Standard 3: Understands the relationships among science, technology, society, and the individual

<http://www.mcrel.org/compendium/standardDetails.asp?subjectID=19&standardID=3>



ISTE National Education Technology Standards

http://cnets.iste.org/students/s_stands.html

3. Technology productivity tools

- Students use technology tools to enhance learning, increase productivity, and promote creativity.
- Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.

4. Technology communications tools

- Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

5. Technology research tools

- Students use technology to locate, evaluate, and collect information from a variety of sources.
- Students use technology tools to process data and report results. Evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.

6. Technology problem-solving and decision-making tools

- Students use technology resources for solving problems and making informed decisions.
- Students employ technology in the development of strategies for solving problems in the real world.