

Technology and 21st Century Skills: Students Speak Up

For use with NetDay's Speak Up Survey Grades K-3

Grades: K-3 Group Survey

Subjects: Language Arts, Math

Suggested Time: One Class Period (35 minutes)

Lesson Overview

Students will learn technology terms and discuss how technology is used at school and outside of school. A recorder (the teacher or a student volunteer) will complete the online Speak Up Survey (www.netdayspeakup.org) on behalf of the group. There are 7 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.

Activity List

1. Warm-up Exercise – What Is *Technology*? (10 minutes)
2. Class Discussion – Technology and School (15 minutes)
3. Wrap Up – The Big Picture (15 minutes)
4. Group Activity – Complete the Speak Up Survey (15-20 minutes)
5. Extension – Compare results of your school with the national data (optional)

Objectives

Students will:

- Define computer, Internet, and technology
- Discuss their opinions and findings with peers
- Write and share their ideas
- Engage in civic responsibility by sharing their ideas with their school community and contributing to a national survey
- Suggest ways that technology and Internet use can be improved in their school

Resources

- Poster board or white board to record ideas
- Paper and pencils for students

Teacher Preparation

- Confirm that your school is registered for the 2005 Speak Up event. (www.netdayspeakup.org)
- Print out the Speak Up survey for the class. (Instructions and links follow.)
- Review the survey and determine the best way to engage students.

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

The Speak Up survey site, www.NetDaySpeakUp.org, will be open **October 21-November 18, 2005**. Teachers and students use their school name or zip code and school 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 flier is available for you to print out and send home with students at www.netday.org/speak_up_how_to_2.htm

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.

CD burner
Cell phone
Computer
Confidential
Digital camera
Download
Electronic books
Email
Instant messenger (IM)

Internet
Laptop computer
MP3 player or iPod
Privacy
Scanner
Software
Technology
Website
Wireless

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.

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Instructions for Completing the Survey with Your Class

1. Print out the K-3 Survey to collect and tally the group's responses.

You can print out the survey from the following link:

http://www.netday.org/speakup2005_survey_preview.htm

2. As a class, ask students to raise their hands to respond to each question and record the results. You can also work with a parent or older-student volunteer to help you tabulate the responses and enter the data into the online survey.

Note: For some questions, such as number 10, you may want to receive responses as written answers to protect students' privacy.

3. The last two questions are open-ended responses. We recommend that you facilitate a 5-minute class discussion to select your group's favorite answers to these questions.

When you (or your class representative) are ready to enter all of the survey data, go to <http://www.NetDaySpeakUp.org> to enter the results. You will need your school name or zip code and your school's secret word. Please be sure that you have enough time to complete the survey (about 15-20 minutes).

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 – What Is *Technology*? (10 minutes)

Tell students that they are going to be taking a survey about how they use computers and the Internet. *Students just like you all over the United States are filling out this survey so that adults can learn more about how students want to use technology.*

Introduce the survey by talking about technology and computers. *Computers are big and small. They are inside all kinds of things that you use every day.* Ask students to brainstorm some things that they know people do with computers, for example: make sounds, draw pictures, play movies, write letters, and so on. *What are examples of things that **you** do with computers?*

Have students come up with ideas and write them where they can be seen.

Tell students that different kinds of technology include computers, printers, cell phones, digital cameras, and so on. This survey is going to talk about computers and technology. *Now that we all know what technology is, let's think about how we use it in school.* Ask students to identify which technologies they use for school and write them on the board. Next, review question 13 of the survey with the class. (See next page.)

13 Which of these do you do with a computer for school? (Choose any that apply.)

- Play learning games
- Learn songs or listen to music
- Practice spelling or reading
- Practice numbers or math
- Make pictures
- Create a web page, movie, or slide show
- Email my teacher
- Use an online book
- Email an expert, like a scientist
- Go to favorite websites

Now engage students in a conversation about how they use computers outside of school. Ask students to brainstorm ideas about technologies they use at home. Students may come up with ideas that are not listed in the survey. Ask students to share some of their favorite things to do with computers during free time or fun time. Review questions 18 and 19 of the survey below:

18 Do you use computers in your free time away from school?

- Yes
- No

19 If yes, how do you use computers in your free time? (Choose all that apply.)

- Talk or email with friends or family
- Play games
- Listen to or download music
- Visit favorite websites
- Use a search engine to look for information (like Google)
- Use software to draw pictures, make cards, or movies
- Other

Compare the uses of technology at school and at home. *How are they the same? How are they different?*

2. Class Discussion – Technology and School (15 minutes)

As a class, discuss how students use technology in different subject areas. Review questions 14 and 15 from the survey below. Are students surprised at how much (or how little) technology is used for subjects like writing, math, and science? Are there other ways they can see technology helping them with these subject areas?

14 What do you like best about using computers for school? (Choose any that apply.)

- I can get the best information online.
- I can work more quickly.
- I can do group projects easier.
- It's more fun.
- I have more tools to use.
- I learn more.
- I make fewer mistakes.

15 Which subject would you like better if you could use more technology? (Choose your top choice.)

- Math
- Reading and writing
- Social Studies
- Science
- ESL (learning English)
- Art
- Music
- P.E. or Gym

Have students share their ideas for using technology for school. Students can create posters illustrating one new way that they would like to use technology in school.

3. Wrap Up – The Big Picture (15 minutes)

Unlike adults, students may not have thought much about the importance of technology. Ask them to imagine their school or their home life without computers, the Internet and other technologies. How would their lives be different without them? Review questions 22 and 23 below with the class.

22 Good computer skills are necessary for...? (Choose all that apply.)

- Doing well in school
- Getting a job
- Knowing about the world
- Making money
- Keeping in touch with family and friends
- Being happy
- Being a good citizen
- None of the above

23 If you were in charge of building a new school what would be most important? (Students should choose their top choice.)

- Fast Internet everywhere
- More software for learning
- A new computer for every teacher
- Digital cameras and video equipment for students
- Computer labs that stay open after school and on weekends
- Laptops for every student
- A film studio
- Other

Ask students to brainstorm any ideas they have about ways that technology could be used better to help students in the classroom or after school.

As with previous years, the Speak Up survey concludes with two open-ended questions that focus on big-picture thinking. Have students spend 5 minutes writing their ideas down to one of the following questions. Share ideas and pick several favorite ideas to share.

24 This year, students around the world have learned about hurricanes, hunger, disease, war, and terrorism. What is one way our leaders could use technology to deal with these things and make the world a better place?**25 Science, technology and new ideas are clearly important for your future. What should your school do to make sure you have the knowledge and skills to be successful?**

The Speak Up Day survey site, www.NetDaySpeakUp.org, will open at 8:00am (Eastern Time) on October 11, 2004 and be available until 4:00pm (Hawaii Time) on Friday, October 29. Teachers and students use their school name, zip code and school secret word to access surveys. Students and teachers cannot save their work and return later.

4. Group Activity – Complete Speak Up Survey (15 - 20 minutes)

Follow the instructions on page 3 of this lesson plan to complete the online Speak Up survey. You or a helper will go to the survey site: www.netdayspeakup.org and enter their school name or zip code, and your school's secret word to enter your class tally results for the survey. See the How-to Speak Up Guide (http://www.netday.org/speak_up_how_to.htm) for more tips on administering the survey.

5. Extension – Compare results of your school with the national data

School contacts will be notified when the NetDay data is available in January 2006. 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. NetDay 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).

Listening and Speaking K-5

Standard 8: Uses listening and speaking strategies for different purposes

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

Writing K-5

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

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

Technology K-5

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

(<http://www.mcrel.org/compendium/Benchmark.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.