

Instructional Recipe

How Do We Use Technology at School and at Home?

Kindergarten, Social Studies & Language Arts



Online research and information resources available through a partnership between the Texas State Library and Archives Commission, the Texas Education Agency and Education Service Center, Region 20
<http://web.esc20.net/k12databases>

Step 1 – Ask

Objectives: Students will identify examples of technology used in the home and at school and will analyze and explain how people use technology to complete tasks and to meet their needs.

Introduction: Ask students to brainstorm various ways they could send a message to a classroom located on the other side of the school. Some examples might include: (1) send a student to the other class to deliver the message; (2) call the other classroom on the telephone; or (3) use a computer to send the message in an email. Which way would be the fastest? Note that both of the quicker methods, phone call and email, require the use of technology. Various types of technology help us do tasks and meet our needs.



"computer: laptop computer." Online Photograph. Encyclopædia Britannica Online School Edition. 4 July 2008 <<http://school.eb.com/elementary/art-88098>>.

Ask:

- ★ What is technology?
- ★ What are examples of technology we use at home?
- ★ What are examples of technology we use at school?
- ★ How does technology help us complete tasks and meet our needs?

Vocabulary:

- ★ technology- tools that helps us do tasks and meet our needs
- ★ task- a job
- ★ needs- something we must have in order to live

Social Studies TEKS:

(K.13) **Science, technology, and society.** (A) identify examples of technology in the home and school; and (B) describe how technology helps accomplish specific tasks.
(K.14) **Science, technology, and society.** (B) list ways technology meets people's needs.

English/Language Arts TEKS:

(K.3) **Listening/speaking/audiences/oral grammar** (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including appropriate volume and rate
(K.12) **Reading/inquiry/research** (A) identify relevant questions for inquiry such as "Why did knights wear armor?"; and (B) use pictures, print, and people to gather information and answer questions
(K.15) **Writing/composition** (B) write labels/notes, and captions for illustrations, possessions, charts, centers
(K.16) **Writing/inquiry/research** (B) record or dictate his/her own knowledge of a topic in various ways such as by drawing pictures, making lists, and showing connections among ideas

Technology Application TEKS:

(2) **Foundations** (A) use a variety of input devices such as a mouse, keyboard, disk drive, modem, voice/sound recorder, scanner, digital video, CD-ROM, or touch screen.
(7) **Solving problems** (A) use software programs with audio, video, and graphics to enhance learning experiences; and (B) use appropriate software, including the use of word processing and multimedia, to express ideas and solve problems
(11) **Communication** (A) publish information in a variety of media, including, but not limited to, printed copy or monitor display

Step 2 – Investigate

K-12 Databases Resources:

Display and read the following stories aloud and ask students to identify the type of technology the family used in each story. Discuss how technology helped the family complete tasks/meet their needs.

- ★ [Mop and Family](#). By: de Wolf, Alex. Ladybug, Jan2006, Vol. 16 Issue 5, p32-34, 3p; (AN 19418508)
- ★ [Mop and Family](#). By: de Wolf, Alex; Schaap, Martine. Ladybug, Sep2004, Vol. 15 Issue 1, p32-34, 3p, 3c; (AN 14299661)

To help students understand how computers can be used to play and to learn new things, allow students to explore the following resource:

- ★ [Britannica Learning Zone](#) (Discuss how the computer and this database help students learn, can be used for fun, etc.)

Books:

Collect a number of picture books with settings in a school or a home, and have students identify and discuss examples of technology depicted in the illustrations.

Additional Resources:

- Tour the *classroom and other areas of the school* (record examples of technology and discuss how technologies help students and staff to complete tasks).
- *Students' homes* (Do a “memory walk” through the students’ day and have them recall technology that is used in their homes (e.g., The alarm clock went off early. Alarm clocks are a type of technology that helps us know when it is time to wake up.)

Step 3 – Create

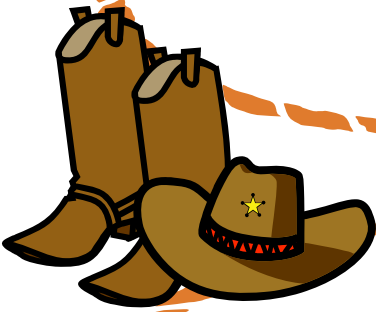
During the Investigation Stage (Step 2), students will take notes by doing “quick sketches” of examples of technology used at school (e.g., computer and printer) and at home (e.g., telephone and microwave oven). To make the task more manageable for young students, a piece of white construction paper folded into four quadrants can be used for note taking. The students should label/name the examples of technology (with teacher assistance).



Step 4 – Discuss

- ★ As a class, discuss examples of technology students depicted in their notes. Allow each student to choose one example from his/her notes to share with the group. Ask students to explain how the type of technology helps us complete tasks/meet our needs.
- ★ As a final product, small groups of students will create a book illustrating examples of technology used at school and at home. Each student will contribute one example of technology used in the school and one example of technology used in the home. As a cooperative learning challenge, and to encourage the use of higher order thinking skills, ask groups not to duplicate each other's examples within their book.
- ★ Provide groups with an opportunity to share their books orally with the class. Students will tell (1) what type of technology is illustrated; and (2) how the technology helps us to complete a task/meet our needs.

🔗 Technology Link – Students can use a drawing program, such as Microsoft Paint or Kit Pix, to create their book.






Step 5 – Reflect




Allow students to present their projects to the rest of the class. Use the following suggested rubric to assess the students' work. Make sure that the students are familiar with the rubric *before* they begin creating their project. They should refer to the rubric repeatedly to monitor their progress in creating their project.

🔗 Technology Link: You can also create your own rubric with your students at <http://rubistar.4teachers.org/index.php>.

How We Use Technology at School and at Home (Note Taking and Sharing Notes)

			
Notes	Drew and labeled two examples of technology used in the home and two examples of technology used at school	Drew one example of technology used in the home and one example of technology used at school or did not label examples	Did not draw at least one example of technology used at school and one example of technology used at home
Explaining Notes- Content	Named a type of technology used at school/home and accurately explained how the technology helps us	Named a type of technology used at school/home, but did not accurately explain how the technology helps us	Could not name a type of technology used at school/home or explain how it helps us
Explaining Notes- Voice	Student spoke clearly and was easy to hear and understand	Student spoke clearly some of the time but was sometimes difficult to hear or understand	Student did not speak in a way that was clear or easy to understand

How We Use Technology at School and at Home (Final Product—Group Book)

			
Individual Book Pages— Content	Drew and labeled two examples of technology, one used at school and the other used at home	Did not draw an example of both school and home technologies or did not label examples	Did not draw any examples of technology
Individual Book Pages— Sharing with the Class	Shared two examples of technology used at school/home and accurately explained how the technology helps us	Named a type of technology used at school/home, but did not accurately explain how the technology helps us	Could not name a type of technology used at school/home or explain how technology helps us
Sharing— Voice	Student spoke clearly and was easy to hear and understand	Student spoke clearly some of the time but was sometimes difficult to hear or understand	Student did not speak in a way that was clear or easy to understand
Group Book Content (Variety of Examples)	Every example of technology in the book is different from all the others	Most of the examples are different, but there are two or three that are the same	Many of the examples are duplicates