Cyber Seniors: A Study in Need and Communication

<table>
<thead>
<tr>
<th>AREA OF SERVICE</th>
<th>Human Need</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNITY NEED</td>
<td>Computer Literacy</td>
</tr>
<tr>
<td>TYPE OF SERVICE</td>
<td>Direct</td>
</tr>
<tr>
<td>SUBJECT AREA/LEVEL</td>
<td>Instructional Tech/6-8</td>
</tr>
<tr>
<td>CONCEPT</td>
<td>Communication</td>
</tr>
</tbody>
</table>

**SERVICE-LEARNING PROJECT SUMMARY**

This middle-school school project uses student learning from a study of technology and computer skills to solve a community problem or need for computer literacy. Participating students will teach senior citizens basic computer skills.

**LEARNING STANDARDS**

*Oklahoma Priority Academic Student Skills*

Instructional Technology Standard 1: The student will demonstrate knowledge of basic technology operations and concepts.

Standard 2: The student will demonstrate knowledge of social, ethical, and human issues, discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use.

Standard 3: The student will demonstrate knowledge technology productivity tools.

Standard 4: The student will demonstrate knowledge technology communication tools. Standard 5: The student will demonstrate knowledge technology research tools.
Cyber Seniors
Implementation Outline

1. Under teacher direction, students will decode a message communicated in Morse code.

2. Teacher will guide students to reflect upon Morse code as a form of communication.

3. Teacher will guide students to imagine and invent a new form of communication.

4. Teacher will review and/or teach basic technology operations, technology productivity tools, technology communication tools, and research tools. Teacher will also discuss social and ethical issues related to technology.

5. Under teacher direction, students will practice and demonstrate their new learning and understanding of topics outlined in #4.

6. Students will identify a need in their community and design service project(s) that utilize the knowledge and skills developed in #4 and #5.

7. Students will refine their service project(s), identify any local, state, or national laws, agencies, or policies that relate to the identified community need and their proposed service, and articulate the civic and public meaning of their proposed service.

8. Students will implement their service project and share their accomplishments with the community.

TEACHER’S GUIDE
Cyber Seniors

Teacher’s Note
Using the concept of “communication,” the teacher will engage students in an active unit of study around the instructional technology topics of “technology productivity tools, communication tools, research tools and relevant issues” to solve a student-identified community problem. Teachers may collaborate with others to broaden student understanding of the concept including freedom of speech, literature, and musical interpretation.

1. Under teacher direction, students will decode a message communicated in Morse code.

   Activity: Use Morse code to communicate a message to the class. Give each student a key for decoding Morse code. Ask students to decode the message. In pairs, allow students to communicate with each other by tapping their pencils using Morse code.
2. Teacher will guide students to reflect upon Morse code as a form of communication.

Activity: Each student will write a journal entry reflecting on their experience decoding the messages in Morse code. Students will answer the following questions:

- Could you understand the coded messages?
- What would have made it easier?
- Was it difficult to decode the message? Explain.
- What if this was the predominate way to communicate with others?

3. Teacher will guide students to imagine and invent a new form of communication.

Activity: Instruct pairs of students to imagine what the next generation of communication tools and systems might be and to draw a picture that represents that new form of new communication. Ask pairs to tell the class how their communication invention might impact schools, businesses, and home. Ask them to describe how the government might regulate the invention.

4. Teacher will review and/or teach basic technology operations, technology productivity tools, technology communication tools, and research tools. Teacher will also discuss social and ethical issues related to technology.

Activity 1: Teacher will define terminology related to computer technology. Students will take notes as the teacher lectures on basic operations and concepts related to computer technology. The teacher will also explain and demonstrate how to use technology productivity tools, communication tools, and research tools.

Activity 2: The class will discuss social and ethical issues related to technology.

5. Under teacher direction students will practice and demonstrate their new learning and understanding of the concept and topics outlined in #4.

Activity 1: Each student will be assigned a historical time period (e.g. 1500-1800s, 1800-1900, 1900-1950, 1950-1970, 1970-1990, 1990-present). Students will conduct Internet research to identify various forms of communication and technology developed and used during their assigned time period. Students will create a multimedia presentation that reflects their research and present it to the class.

Activity 2: Following the class presentations, the teacher will discuss the changes that have occurred in communication and technology in the last 50 years. Ask students how many of their grandparents use computers. Explain to students that due to the rapid changes in technology in the past 20 years, there are many people who do not have basic computer skills. Explain that this class will provide basic computer skill training for interested adults and senior citizens in their community. Instruct students to create an invitation, a letter, a display advertisement, and/or an information flyer that announces their services. Discuss with students the most appropriate way to publicize their services.

6. Students will identify a need in their community and design service project(s) that utilize the knowledge and skills developed in #4 and #5.
Activity 1: Students may identify a need in their community related to technology to design a service project that utilizes their knowledge and skills of computer skills, technology productivity tools, technology communication tools, and research tools. For assistance in designing a service or action project refer to the resources listed at the end of this unit.

Activity 2: Divide the class into six groups. Distribute the PASS Intermediate Level Instructional Technology standards to the groups. Tell each student group that they must develop and teach a lesson plan for one of the six standards to local senior citizens.

7. Students will refine their service project(s), identify any local, state, or national laws, agencies, or policies that relate to the identified community need and their proposed service, and articulate the civic and public meaning of their proposed service.

Activity 1: Students will analyze and refine their project design and develop a rubric for assessing the personal and community impact of their service.

Activity 2: Students will explore the deeper civic and public meanings of their service and analyze any formal or informal government structures related to the causes or effects of the community need addressed in their project. Students will write a paragraph, essay, or journal entry that reflects their understanding of the concept of communication related to government and personal responsibility.

Activity 3: Students will develop a cause and effect chart related to the community need then discuss any questions raised by the chart relative to their own lives and the general welfare of their community.

Activity 4: Students will explore the ways local government interacts with senior citizens. Students may discuss related issues with the Area Agency on Aging, the municipal or county health department, and gather and study statistics about the elderly as they explore the availability or lack of government and private services for senior citizens.

8. Students will implement their service project and share their accomplishments with the community.

Activity 1: Students will implement their project(s).

Activity 2: Students will analyze their service and communicate their analysis in written form.
INTERNET and OTHER RESOURCES

History of Communication Technology
http://myron.sjsu.edu/caesars/COMM.HTM
http://www.worldhistorysite.com/culttech.html

Seniors and Computers
http://www.csuchico.edu/~csu/seniors/computing2.html
http://seniorcitizensguide.com/articles/activities/sr_computers.htm
http://www.sunliving.com/seniortech.html

How Seniors Use Computers
http://seniors-site.com/computer/wendt.html

Students, Seniors, and Computers
http://www.nnh.org/ttis/ttisinfo.htm
http://www.education-world.com/a_tech/tech134.shtml
http://www.ncsu.edu/news/press_releases/03_12/357.htm