

Saving Peter's Packets Networking & Positive Uses of Computers

For Middle School Students

Lesson 5: Try Out a Tech Career

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Teacher Summary

Students learn about the many careers that feature skills in technology and consider these careers for the future. They use online resources and creative thinking skills to complete the lesson.

This lesson can be completed in one to two 50-minute periods.

Objectives

- To introduce information technology-related careers
- To encourage girls to consider careers in technology
- To open students' minds to the many aspects of careers in technology
- To help students understand the importance of education in their future

ISTE NETS: Standards for Students

Basic operations and concepts:

- Students demonstrate a sound understanding of the nature and operation of technology systems.
- Students are proficient in the use of technology.

Social, ethical, and human issues:

- Students practice responsible use of technology systems, information, and software.
- Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

Technology research tools:

- Students use technology to locate, evaluate, and collect information from a variety of sources.

Technology problem-solving and decision-making tools:

- Students use technology resources to solve problems and make informed decisions.
- Students employ technology to develop strategies for solving problems in the real world.

Preparations for the Lesson

Students will need to be able to go online to check out career opportunities. If you don't have one computer for each student, divide the class into all-boy and all-girl groups.

Although there are numerous sites that focus on technology-related careers, many of them are too detailed for this age group. The sites listed in our Additional Resources should be on a level that is of interest to Middle School students. You may also know of or find other sites that would work for this lesson.

Decide if you'd like your students to record their work in word processing, spreadsheet, or database documents. Base your decision on the programs that are on the computers you are going to use and the skill level of your students. Regardless of the computer application you use, students will be able to gather and record information about technology-related careers.

Lesson Directions

1. Introduce the topic of technology-related careers. Ask your students to consider which tech careers were involved in the making of Peter Packet and which careers are related to the Peter Packet content (programmers/software engineers, designers, graphic artists, tech writers, tech editors, Web developers, network specialists, computer technicians, network designers, software engineers, systems engineers, information technology managers, marketing professionals, educators).
2. Have students set up the computer application they are going to use with categories such as Career Name, Job Definition, Other Information, and Level of Interest. The Level of Interest category refers to whether or not students are interested in each job as a career.

3. Ask students to begin by listing all the computer-related careers they can think of under the category Career Names. The careers can be in areas other than IT (writer, magazine layout designer, robotics engineer, physician, musician, tool designer, architect). Give students the Web addresses of the sites in Additional Resources so that they can add other career names to their list and fill in other categories with information they find.
4. When the students have gathered their information and made decisions about which tech-type careers they are interested in, let them discuss why they chose certain careers.
5. Bring up the fact that fewer girls than boys select traditional tech-related fields such as network troubleshooting, computer systems design, software engineering, and many of the higher paying careers in the field. Ask your students why that might be. Will the girls in your class opt for other careers, and if so, for what reason?
6. As a homework assignment, have the students design their ideal tech-related career. Will they go to an office, work from home, or travel the world? Will it allow them to use their creativity? Their artistic skills? Their organizational abilities? Their interest in helping others?
7. Present students with the **Networking Certificate** <Instructors>Lessons>Unit Packet>Career Lesson>completed.pdf

Additional Activities

Killing a Virus & Working with the Secret Service—in High School!

Have students read the success story about a high school student who stopped a virus from spreading in his school and also helped the US Secret Service locate a student in his school who sent a threat against the White House to the Secret Service.

<http://www.cisco.com/en/US/learning/netacad/success_stories/Joseph.html>

Technology Professionals

Invite members of the community with tech-related careers to your classroom to talk to your students or arrange for your students to have a video conference with a technology expert.

Role Playing & Drawing the Future

Let your students role play themselves doing their favorite tech-related job, dress up and act out their view of themselves in the future engaged in their favorite tech-related job, or draw themselves involved in their favorite tech-related job.

Additional Career Resources

Career Opportunities in Information Technology

<<http://www.computer.org/education/careers.htm#career>>

Information on a variety of tech-related careers

Streaming Careers (online video interviews with IT leaders)

<<http://www.kidzonline.org/StreamingFutures/careervideo.asp?careerid=7>>

Video clips of leaders in the field of technologies

Girl Power – Cool Tech Jobs

<<http://www.girlpower.gov/girlarea/sciencetech/jobs/index.htm>>

Interesting career opportunities for girls

Get Tech

<<http://www.gettech.org/default2.asp>>

Nice site that promotes tech careers

Girls Go Tech

<<http://www.girlsgotech.org/careers.html>>

Additional information on girls and technology