EXPERIENCE: LABORSAVING DEVICES

Project Skill: Exploring different historical inventions and their impacts on physical activity.

Success Indicators: As a result of this activity, students will be able to:
- define and give examples of laborsaving devices
- explain the costs and benefits of laborsaving devices
- demonstrate an understanding for how laborsaving devices have removed a large portion of physical activity from the daily lives of modern Americans

Life Skills: Critical-thinking, Communication, Learning to learn

Preparation Time: Collect old magazines or pictures from history books on “old” inventions.

SUPPLIES:
- Old magazines
- Scissors
- Glue
- Large sheets of paper
- Optional: Media center, Internet access, encyclopedias

Optional Handouts
- Move It! or Kids Activity Plate handout (VCE publication 348-097)

Steps:
1. Introduce the concepts “laborsaving devices,” “inventions,” and “inventors.” Be sure to give examples of famous inventions and inventors.
2. Ask students to think about the era they are currently studying in their history class. What would life be like back then? What sorts of things did kids do? Parents?
3. Students may work singly or in groups: Using old magazines, cut out pictures of inventions that we use today, but did not exist during that period of history.
4. Hand out large sheets of paper, markers, and glue. Ask students to make charts showing current inventions (in one column), and what machines/activities were replaced by that invention (in the second column). As finding pictures of old-time machines/activities may be difficult, students will probably need to draw their own pictures for column 2. If students don’t know of a machine/activity that was the forerunner of the modern invention, ask them to take their best guess.
5. Have students/groups give short presentations (perhaps only an item or two from their charts) to the class. Particularly, have them explain what would have been necessary to accomplish the tasks currently done by modern inventions.
6. Once students have given their presentations, gather again as a class and talk about what those changes mean in terms of physical activity.
7. Explain that there is a reason why people today need to take time each day to exercise, where their grandparents/ancestors probably were active through their daily activities.
8. Ask students to act out some of the activities of the past.
9. If you want, give them handouts on physical activity.

**Tips:**
- Students may be asked to work either alone or in groups.
- This project is designed to coordinate with grade-appropriate history and social studies lessons. Students may be asked to compare time frames between present-day and the era being studied (early civilizations, colonial times, etc.).
- Although this lesson may be completed within a short time-frame, it may be expanded to incorporate other skills or levels of complexity. Such as a media center, the Internet, or encyclopedias may be used to gather information about one or more inventors or inventions. Also, students/groups may be asked to give short oral or written presentations of their findings.

**Examples of Inventors:**
- Henry Ford (the automobile assembly line process)
- Guglielmo Marconi (wireless telegraphy [radio])
- Wright Brothers, Orville and Wilbur (airplane)
- Eli Whitney (cotton gin)
- Bill Gates (computer operating system [DOS, Windows])
- Steve Jobs/ Apple (iphone)

**Examples of Inventions:**
- Cars and trucks
- Gas furnaces
- Dishwashers
- Clothes washers
- Clothes dryers
- Radio
- Planes
- Tractors
- Computers
- Remote controls
- Microwave ovens
- Cell phone
- iPad/Laptop computer
- Steam shovels
- Frozen foods
- Indoor plumbing
- Television
- iPhone

**Share:**
- What time frame or era would you rather live in?
- Were you surprised to learn how recent some inventions are?
- Have your parents or grandparents ever told you stories about their childhoods, and what things were like “before” certain laborsaving devices?
- What is your favorite laborsaving device?

**Process:**
- What did you notice about the kinds of activities required to accomplish the tasks now done by laborsaving devices?
- Do you think you would be able to have the same kind of life that you do now without all of the laborsaving devices?
- Would you be able to do as many things each day? Would you have to work harder?

**Generalize:**
- What do you think life would be like without modern inventions?
- Do you think our ancestors had to worry about fitting time to exercise into their days? Why?
- What cultures in the United States and abroad still use “traditional” methods of farming and transportation rather than some modern inventions?
- Why is it so important for us to be careful about how much physical activity we include in our lives each day?

**Apply:**
- What laborsaving devices (examples: dishwashers, cars) would you be willing to give up in order to put more physical activity in your day? What would you be unable to give up?
- What will you share with your parents and family about this exercise?

**Using laborsaving devices means that we need to find ways to be more active.**
**Game Ideas**

To help you integrate physical activities into other lessons or at the end of the different experiences shown here for Smart Activities, try one of these games or smart activities!

**Do the Warm Up Activities and/or Power Up Activities as a class.**

- **Hot Potato.** Have the children sit in a circle on the floor. Have them pass a real potato from one person to another until you say, “stop.” The person left holding the potato is eliminated and goes back to his or her seat.

- **Musical Chairs.** Set out a circle of chairs (with the backs to each other) in a large room with a lot of space (or outdoors). Use one less chair than the number of children playing the game. While music is playing, the children walk around the chairs while doing the activities described in the music. When the music stops, they must try to find a chair. The child who doesn’t find a chair is in charge of starting and stopping the music for the next round. Remove a chair each round. If there is enough room, have the children do different activities during each round, such as tip-toeing, doing somersaults, or crawling on the ground.

- **Guess What?** Write different foods on pieces of paper and tape one food on each child’s back. The object of the game is for each child to figure out the food he or she has. Everyone goes around and asks the other children “yes” or “no” questions. They can’t ask questions like “What food am I?” but rather questions like “Am I red?” or “Am I served hot?”

- **Fruit Concentration Game.** Assign students to groups of at least five. Have them sit in a circle on the floor with one person in the middle. Each child chooses a fruit to be. Pick a person to start the game (not the one in the middle). The person calls his or her own fruit name, then someone else’s. The object of the game is for the person in the middle to tag the second person before they call out their own fruit and another’s. For example if one girl was “banana” and another “orange,” she would say, “banana-orange.” The person in the middle must tag the “orange” before that person can say “orange” and another fruit name. Continue until the middle person tags someone sitting in the circle. Then they switch places. You can also use vegetables in place of fruit.

- **Food Plate Relays.** Place paper bags at the front of the room. Label each bag with a food group. Children are divided into teams and each team gets a certain number (30) of cardboard food models or cut-outs of foods from magazines. They must sort the foods and in a relay, place them in the proper bags.

- **Hopscotch.** If you have space and chalk, have the students draw and play their own hopscotch.

- **Dance.** Have children dance to audiotapes or to songs you sing as a class. Create silly dances if you want.

- **Grain Toss.** Incorporate this physical activity with the grazing with grains experience. Obtain a number of different types of grains and place them in Baggies. Use them like bean bags, providing different challenges to the students while doing this activity. For example, ask students to list a few foods made with those grains as they throw them to their neighbors. Another variation of this is to have buckets that they try to throw the bags into. Move the buckets around to make the distances shorter or longer.

- **Animal Games.** This is a good activity for younger children. Have children act out and sound out different animals. You can do this as a group activity or as a guessing game where children act out an animal and the rest of the class has to try to figure out which one it is.

- **Scavenger Hunt.** Using food models, hide foods around the classroom, a field, or playground and have the children try to find them.

- **Growing Grains.** How do grains grow? Have young children pretend they are seeds growing into full plants. Let them be as creative as possible.

- **Red Light, Green Light.** Choose one physical activity or a picture of a physical activity. Tell the children that when you say, “green light,” they can do the activity and proceed toward you. When you say, “red light,” they need to stop. Ask the children to stand at a line and begin the game. If a child doesn’t stop doing the activity when “red light” is said, then he or she needs to go back to the starting line.

- **Musical Movement.** Place jump ropes on the floor in a straight line. Start the music and allow children to walk forward, following the lines on the floor. When the music stops, the children should freeze like statues until the music starts again. Once they
learn the rules of the game, try different variations:
a) change the jump ropes from lines to curved lines; b) ask the children to follow the jump ropes by hopping on one foot, crawling on the floor, or doing somersaults; or c) have the children jump or hop back and forth across the jump rope until the music stops.

- Invent a Game. Challenge the students to create their own fun activity using things they have learned about food, nutrition, or physical activity.

- Melting Butter. This should be played in a large, open area like a gym. Someone is ‘it’ and tries to tag others. When someone is tagged, they pretend like they are melting very slowly, counting to ten before falling on the ground. Someone who is not it has to tap the person again to get back in the game. The first person to melt all the way to the ground is ‘it’ next time.

- Find other games at Zoom: For Kids by Kids: http://pbskids.org/zoom/activities/games/