

Moving Along

***Exploring the role of biking
and walking in your life!***

A transportation safety activity booklet
for upper elementary aged youth



While this booklet is in the public domain, and may be copied freely, please credit the source whenever you copy or quote any portion of this document.

Funded through grants from the Governor's Traffic Safety Committee and the New York State 4-H Foundation. Layout by Myrah Bridwell.

For more information, contact:

Lois E. Chaplin
Extension Associate
Biological & Environmental Engineering Department
326 Riley-Robb Hall
Cornell University
Ithaca, NY 14853

Phone: (607) 255-2498
Fax: (607) 255-4080
e-mail: lec4@cornell.edu
<http://www.bike.cornell.edu>

Cornell Cooperative Extension provides equal employment and program opportunities.

Publication # MAB-1-S01
Copyright © 2001 by Lois Chaplin

1 **Awareness of personal transportation habits, options and environmental tradeoffs**

Activity Outcomes

By the end of this session, participants will be able to describe the various transportation choices available (car, bus, train, walk, bike etc.). They will develop an awareness of various environmental costs associated with some choices.

Classroom Activity #1

Generate a list of various transportation options available. Which ones are used in your community? Which ones are not available? How do most people get around their neighborhood? What resources are required for each kind of trip? Which ones involve the use of natural resources? non-renewable resources? personal energy? Which travel modes use the least amount of non-renewable resources? What are some of the hidden costs of travel by automobile?



Classroom Activity #2

Ask students to write about someone taking a trip, using as many different kinds of transportation available. Assess how many kinds of resources were used in the trip. OR Ask them to write about someone taking a trip that is very environmentally friendly. What would the tradeoffs be?

Related Subjects

Social Studies, Language Arts, Earth Science

Background Notes

See transportation choices and our environment

Journal Writing

Ask each student to keep a travel diary for a week. They should track the reasons for their travel, what mode they used (bike, car, bus, etc), and how far they traveled. Afterwards, they can develop a class profile by tallying up the reasons, time spent traveling, and what modes were used.

Extender

Study the evolution of transportation in your community. How did people travel 20 years ago? 25? 100? How might it be different in another 20 years?

2 Promoting and encouraging bicycling and walking for fun and fitness

Activity Outcomes

By the end of this session, participants will have an increased awareness of the extent of bicycling and walking in their community. They will be able to describe the reasons why people bike and walk and reasons why they don't.

Classroom Activity

Conduct a survey (your classroom, school, or some other defined group) to determine:

- ❖ How many people own bikes. Questions to ask include do they ride the bike and how often; reasons why they bike (to school, work, store, fitness, fun) or why they don't (no safe places, too busy, no parking).
- ❖ How many people walk, and for what reasons (fitness, fun, choose to, only way to get around).

Before the results are tabulated, students could predict some of the results. Survey results should set the stage for discussion.

School-wide Activity

Arrange for a series of announcements to be broadcast over the public address system in the school. Announcements could share the results of the survey, and encourage the listeners to walk or bike more often.

Related Subjects

Social Studies, Math, Health

Background Notes

Health benefits, Crash facts, Bikeable and walkable communities

Extenders

Have students research sources of educational materials that feature bicycling and walking. Request materials (via the mail or the internet) for the class. Research the body's essential nutrients and the role they play in bicycling and other activities.



3 Understanding traffic laws and hazards

Activity Outcomes

By the end of this session, participants will have an increased awareness of traffic rules and how they work to insure a safer traffic environment. They'll be able to explain what traffic hazards are present and ways to avoid them.

Classroom Activity #1

Make a list of all the traffic rules everyone experienced on their way to school (or on a weekend trip, or other outing). Why are there traffic rules? What happens when people don't follow them? Discuss words such as "predictable" and "traffic flow."

School-wide Announcement

Develop a list of bike safety traffic rules that are important for all riders to follow and turn them into a series of public address announcements. Example: 'It's spring time and that means it's time for bike riding once again. While bike riding is lots of fun, it's important to remember to follow some basic traffic rules. When you're riding on the roadway, remember to ride on the right hand side of the street in the same direction as the cars.'



Classroom Activity #2

Go to a busy intersection and watch traffic. Are there any particular problems for bicyclists or pedestrians? What are some things that motorists do that are bad? good? What are the different traffic signs? What do they mean? Do people follow them? What does yield mean? Is this a safe intersection for walkers to get across? What makes it safe or not safe?

Related subjects

Social Studies, Health Science

Background notes

Crash facts



Extender

Invite a police officer or a school crossing guard to visit your class and talk about safety issues in your community. Plan a visit to a classroom of some younger students and review some basic traffic law concepts with them.

4 How pedestrian- or bicycle-friendly is your neighborhood?

Activity Outcomes

By the end of this session, participants will be able to describe the elements of a bicycle- and pedestrian-friendly community with respect to basic roadway design and traffic safety. They'll learn about who is involved in making community improvements.

Classroom Activity

Conduct a survey (your classroom, school, or some other defined group) of how people traveled to school. Be sure to gather information about the weather, days of the week, combination trips that might include more than one travel mode, routes used.

Related subjects

Social Studies, Health Science, Math

Background notes

Bikeable and walkable communities

At home Activity

Take a closer look at your neighborhood. With a family member or other adult, take a walk in your neighborhood. Is there room to walk? Was it easy to cross the streets? Did drivers behave well? Was it easy to follow safety rules? Was your walk pleasant? Are there ever many people out and about walking or biking? Why or why not? What could be different to encourage more people to bike or walk? (better crosswalks, sidewalks, shoulders on the roadway, more bike paths).



School Announcement

Review the highly traveled areas in and around the school and design an announcement for the public address system similar to the following: "Did you know that 3/4 of the students coming to school cross Day Street at the intersection with First Street? If you do so, please remember to look both ways and be sure there is no traffic coming before you cross the street." OR "If you're a student who is dropped off by a parent or a carpool at the Front Street entrance, remember to watch for moving cars before you open the door."

Extender

Identify and interview the "experts" in your community. Who are the people in your community responsible for transportation planning? Is there a bicycle and pedestrian program manager? county, city or town planner? Are there any advocacy organizations? volunteers? Written policies promoting alternative transportation? dedicated funds? Are there public events promoting biking or walking? Develop a profile of your community and develop an action plan to address one or more concerns.

Background Notes

Health Benefits

There's no doubt about it; we're becoming a health conscious society. Physical inactivity is one of the major risks factors for several major diseases, including heart disease. Young people who incorporate physical activity into their lifestyle will increase their chances of being healthier adults and leading longer, more productive lives. By presenting bicycling and walking as a fun and healthful means of recreation and transportation, you can have a long-lasting, positive impact upon your students' futures.

“Because physical activity is so directly related to preventing disease and premature death and to maintaining a high quality of life, we must accord it the same level of attention that we give other public health practices that affect the entire nation.”

~ Audrey F. Manley, Surgeon General (Acting)

Bikeable and Walkable Communities

People are starting to pay more and more attention to quality of life issues in communities and neighborhoods. Lively downtown areas, streets designed for pedestrians as much as autos, a scale and pattern of development that allows us meet everyday needs by walking are all key factors in ensuring cities provide a high quality of life.

An assessment of your school's community or a nearby neighborhood will bring attention to basic issues of livability as it affects their day to day lives.

Does It Matter?

The physical environment does impact how much residents can and will walk. In research comparing communities with suburban sprawl (few sidewalks and inaccessible pedestrian destinations like large malls surrounded by parking lots) to traditional communities (with plentiful sidewalks and inviting downtown commercial areas), it was found there were three times as many pedestrian trips in the communities designed with pedestrians in mind.



Crash Facts

People are bicycling and walking more, and more attention is being paid to the dangers associated with these activities. Although there are risks, we need to keep them in perspective. Learning some basic traffic skills for cyclists and pedestrians will be a life-long asset.

The most common situation involving child pedestrian fatalities occurs when the child darts into the street. This happens at mid-block locations and at intersections. The most important skill for children to learn is to stop and look left, right, left and make sure there are no cars coming before crossing a street.

Five types of bicycle/car crashes are the most common, especially for children. They occur when the bicyclist:

- ❖ enters a roadway from a driveway or side street without stopping or looking for traffic.
- ❖ rides into an intersection and fails to stop for the stop sign or traffic light.
- ❖ travels on the left side of the roadway, facing traffic.
- ❖ travels at night with no lights.
- ❖ makes a left-hand turn or swerves into the traffic lane without looking.

There's no question about it. Bike helmets are a must. In New York State, all persons under the age of 14 are required to wear an approved helmet when bicycling or in-line skating. It is highly recommended that cyclists and skaters of all ages wear helmets. They prevent head injuries.



Transportation Choices and Our Environment

A healthy future for our environment will require a generation making wise transportation choices. All forms of transportation require energy. Some forms of energy are renewable (hydro, solar, wind) and others are not (minerals and fossil fuels such as coal and oil). Natural resources will continue to be available as long as they are not over exploited.

We need to be more aware of the limits of our natural resources and how our transportation choices relate to their availability and the health of our environment. Different transport modes use different resources and have a range of impacts in the form of pollution as well as depletion.

Choices for all of us to consider include using public transit more often, carpooling, walking or biking, use of electric or natural gas vehicles, and increasing gas efficiency.

Resources

- ❖ The Sierra Club is one source of additional information about sprawl, livable communities and solutions. Sierra Club, 85 Second Street, Second Floor, San Francisco, CA 94105-3441. Phone 415-977-5500, Fax 415-977-5799
Website: <http://www.sierraclub.org/>

- ❖ If you make your way to <http://www.sierraclub.org/sprawl/community/walkable.asp> on the Sierra Club site, you will find an article written by Dan Burden. He describes a newly developing technique he is using to engage children in creating walkable communities. One aspect to his approach is to ask the students to list the three most important things that they want for themselves to be built in their neighborhood or town. Discussions ensue regarding needs for younger people, and older people.

- ❖ Going Places, Making Choices curriculum for grades 9-12 helps learners make informed transportation choices and encourages them to take action that reflects personal commitment to environmental health balanced with mobility needs.
National 4-H Council, 7100 Connecticut Avenue, Chevy Chase, MD 20815.
Phone 301-961-2800, Website: <http://www.fourhcouncil.edu>

- ❖ Earthforce was formed in response to young people's overwhelming desire to act on behalf of the environment and their desire to help their communities through volunteer service. Get Out Spoken is their national campaign to make America more bike friendly. For more info: Earthforce, 1908 Mount Vernon Avenue, Second Floor, Alexandria, VA 22301. Email: getoutspoken@earthforce.org, Website: <http://www.earthforce.org>

- ❖ Way to Go School Program. Prepared to help school communities and others develop their own strategies for encouraging less reliance on vehicular transportation in their areas. For more information: phone 1-877-325-3636. Email: waytogo@bc.cympatico.ca, Website: <http://www.waytogo.icbc.bc.ca/>

- ❖ The Partnership for a Walkable America has a web site with numerous resources. "Walk Our Children to School Day" is featured, along with a checklist to assess a community's "walkability." Website: <http://www.nsc.org/walkable.htm>