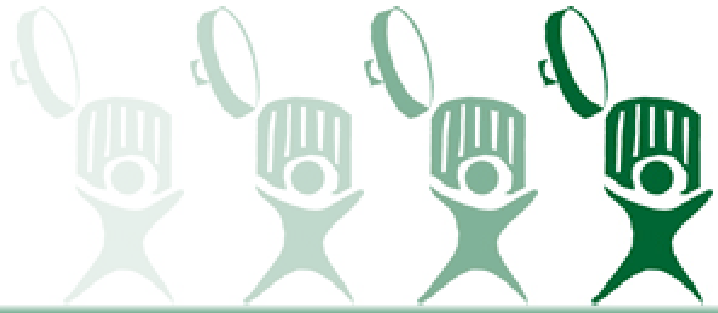


The LEAP Program

Investigate Recycling & Composting



Leadership in Environmental Action Projects is a student action program that reduces, reuses and recycles trash from schools and communities informing people about local solid waste and resource issues. LEAP uses student - community partnerships and cooperative learning to achieve these goals.

The St. Louis-Jefferson Solid Waste Management District, using landfill tipping fee surcharges, has funded LEAP.

Our goal is to help people begin to appreciate the integral role of energy -- its use and conversion from one form to another -- and start to look at products as resources rather than as trash. Students see the inefficiency and waste of a linear system vs. the benefits and practicality of cyclical systems.

A Year in LEAP

The LEAP Program is a year or semester long program featuring five or more hands-on classroom visits and the implementation of a student-led project designed to reduce waste in the school and community.

To learn more contact:
Katherine Golden, EarthWays Education Coordinator
katherine.golden@mobot.org /314.577.0207



What's In A School's Trash?

Students participating in LEAP are constantly involved in hands-on learning. They collect, measure and record the trash they generate in a day, and analyzing the composition of trash generated by the entire school. The following information was obtained from LEAP school Waste Assessment and depicts a typical school's trash.

Possible LEAP Projects

Aluminum can recycling

Compost bin
for organic material

Ink cartridge recycling

Used textile drive

Waste-Free lunch days

Newspaper or linen drive
for animal shelter

Recycled toy drive

Procurement policy
change: purchasing
recycled-content supplies

Reuse collections

And so many more!
Creativity is key!



Missouri Department
of Natural Resources



MISSOURI BOTANICAL GARDEN

LEAP Recycling Education Offerings

s science
ss socialstudies
ca communicationarts
m math

Classes are 45-60 minutes long and can accommodate 25-30 students. More lessons are constantly being developed; please inquire if you would like to focus on a particular topic not listed here!

To book an offering, or for more information on EarthWays Sustainability Education offerings, contact: Katherine Golden at 314-577-0207 or katherine.golden@mobot.org.

Decomposer Detectives

K 1 2 3 4 5 6

s ca

Discover the secrets and mysteries of organisms by digging through compost. Students will perform the skit "To Eat and Be Eaten," use hand lenses to examine and identify decomposers and learn about natural cycles. Skit can also be used as a peer-teaching tool!

Trash Bag Relay

K 1 2 3 4 5 6 7 8 9 10 11 12

s ss ca m

Combines waste awareness with decision-making skills. Student relay teams sort the contents of trash bags, deciding whether or not to Reuse, Recycle, Compost or Landfill. This activity is excellent for peer teaching in same grade or younger classes.

Making Recycled Paper

3 4 5 6 7 8 9 10 11 12

s ca

Experience the process of making paper from recycled stock. Although students use blenders and industry uses gigantic "hydropulpers," the process is the same. Use various colors and additives to alter the appearance and texture of paper. *Participants must bring one section of newspaper for use and have access to water and electricity for this activity.

Writing Recycled Poetry

3 4 5 6 7 8 9 10 11 12

s ss ca m

Incorporates writing exercises and poetry analysis. Students collaboratively compose a poem about sustainability after exploring the tactile medium of recyclable newspapers.

A Closer Look

4 5 6 7 8 9 10 11 12

s ss ca

Students participate in an in-depth investigation of the properties of recyclable materials. Using an acrostic developed by "Keep America Beautiful," students will learn to re-think our resources. Then, while creatively challenged to invent new ways to reuse a discarded object, students will begin the artistic process of "up-cycling."

Media Literacy

4 5 6 7 8 9 10 11 12

ss ca m

Can recycling be beneficial to the economy as well as the environment? Playing a game, students experience the relationships between raw materials, producers, consumers and the market economy. Learn how two local companies profit from using 100% recycled material!

Energy Chain

4 5 6 7 8 9 10 11 12

s ss ca

An interactive, energizing role-playing activity looking at the natural, capital, and human resources needed to make a plastic bottle or aluminum can. This activity demonstrates the difference between linear and cyclical systems and distinguishes between renewable and non-renewable resources.

Garbology 101

4 5 6 7 8 9 10 11 12

s ss ca

Wonder where trash goes when it leaves your home or school? This tabletop model allows students to observe the workings of a modern landfill. Explore the roles of society, economics and science in solid waste disposal.

Trash Math

4 5 6 7 8 9 10 11 12

s ss ca m

What comprises our waste stream? Working in small groups, participants sort the contents of a miniature trashcan, create graph and identify strategies to reduce waste. Modeled on the Missouri Solid Waste Composition Study.

50 Words or Less

4 5 6 7 8 9 10 11 12

s ca

Students are introduced to the concept of "budgeting" our natural resources through a writing exercise in which they will create a story using 50 words or less. A guided discussion further probes into the link between sustainability and sharing.

HHW or Safe?

6 7 8 9 10 11 12

s ss ca

An introduction to hazardous materials commonly used in the home, including legal definitions of substances and a label-reading exercise. Students test household cleaning products, comparing "hazardous products" with safer alternatives. Discussion includes purchasing, handling and product disposal.