# WASTE IN PLASE

# **Activity #6**

# Walk the Talk

# **Objectives**

Students will be able to:

- understand the attitudes that predominate people's thinking about litter, and
- identify the sources of litter.

### Method

Students will look for and document places on campus and in their community, if possible, where littering has occurred and attempt to determine its source.

#### **Materials**

- Large rolls of paper or maps of the community for each pair of students
- Seven different colored markers or crayons
- · Litter bags
- Sample litter items
- · Visual litter assessment

#### **Time**

1 hour plus additional time if done more than once or in community.

## Vocabulary

- biodegrade
- litter
- behavior
- · negligent

# **Background**

For over 30 years, KAB has successfully pursued a behavioral approach to reduce littering and increase beautification and waste reduction and recycling – the five-step KAB Attitude Change Process, developed through research and field-testing. The behavioral scientists identified the need to change behavior as the only effective way to achieve lasting, sustainable improvement in community quality of life.



The three reasons why people feel it is acceptable to litter are:

- · they feel no sense of ownership of the property;
- someone else will clean up after them;
- · trash has already accumulated.

## **Primary Source and Locations of Litter**

- Roadway Litter: There are over 51 billion pieces of litter on U.S. roadways, 4.6 billion of which are larger than four inches. Research shows that littering along roadways is generated by individual actions:
  - Motorists (52%)
  - Pedestrians (22.8%)
  - Improperly covered truck or cargo loads, including collection vehicles (16.4%)
  - Improperly secured containers, dumpsters, trash cans or residential waste or recycling bins (1.5%)
- Non-Roadway Litter: Off the roads and highways, litter originates from many sources, but primarily collects at the following locations starting from where most non-roadway litter occurs to least:
  - Transition points These are entrances to businesses, transportation centers, and other

places where items must be discarded before entering. Confection (candy, chocolate, gum, wrappers, etc.) ranks at the top (53.7%) of what is littered at transition points; this is followed by cigarette butts at 29.8%.

- Storm drains Located primarily in gutters and designed to drain excess rain from paved streets, parking lots, etc. Storm drains tend to attract cigarette butts, confection, and other litter.
- Loading docks Areas behind retail and wholesale business where products are loaded/unloaded from trucks and trailers can become littered with cigarette butts, confection wrappers/debris, and paper.
- Recreational areas Parks, beaches, game courts, and open areas where people congregate for leisure activities create opportunities for littering.
- Construction sites Active residential or commercial construction sites are a trap for litter.
- Retail High-traffic locations such as shopping centers, strip malls, and convenience stores can generate litter, such as packaging, cigarette butts and confection wrappers/debris on the ground.

#### Procedure

- Have students brainstorm and list reasons why they think people litter. Have a student list them on a board, some chart paper or a computer projected image. This can also be done in small cooperative groups.
- 2. Ask the students to look at their lists and see if they can group any of their reasons into major categories.
- 3. Divide the class into groups. Assign each group one of the sources of litter and ask them to research it. What is each source of litter? What types of items are littered on or near each source? Is the source usually associated with purposeful litter or negligent litter (i.e., litter that was intentionally dropped or litter that might have blown off a table or out of a receptacle)?
- 4. Ask the class to think about their community. Where would they find the sources of litter? Where have they seen the most litter? Why do they think that is the case? Tell them they are going to create a map of their community (or an imaginary community) and illustrate the places where you would find each type of litter. Provide a large roll of paper or maps. Each group will add illustrations depicting their source of litter.

Students can also glue pieces of litter associated with each source onto the paper.

Have the class assign each of the sources of litter (see above) a different color code (e.g., motorist = green). Before going outside ask the students to make color keys on the backs of their maps. The students will color code on their maps or graph papers where they found the litter (e.g., near houses, near construction sites). The colors will help them identify the possible sources.

Take a walk with the students. Use the Visual Litter Assessment to evaluate the area. Walk the entire site and if students may go off site walk the immediate area around the site.

**IMPORTANT**: You may want to take gloves and bags to clean up the litter along the way.

- 5. Once students have completed their litter map, tell them that they are now going to cleanup and greenup our community. Brainstorm strategies with the students to prevent each type of litter, such as placing trash cans at strategic points in the community, beautifying pedestrian walkways to discourage littering, etc.
- 6. Once students have listed a variety of strategies provide them with a second sheet of paper. Ask students to recreate their map, but this time, illustrate the strategies to prevent litter. If students participated in the "Keep It Beautiful and Green" lesson, make sure they add their garden to the map. For two additional days at varying times, have the students take their litter walk. Varying the time of the litter walk will also help them identify litter (e.g., take the students on the litter walk after a class has been outside for lunch or recess).
- 7. Lead a discussion with the students based on the maps and their experiences in the community.
  - Have they noticed any trends, patterns, or behaviors related to litter?
  - What places did the class identify as major locations for littering?
  - Why do you think this location is being littered?
  - Where are some of the places that are not littered? Why or why not?
  - Will cleaning up litter after it's been thrown on the ground really solve the littering problem? Why or why not?

- How could you use KAB's reasons why people litter to educate others about litter prevention?
- What are some things we could do as a class to prevent littering from occurring in our community?
- 8. Hang both maps in the hallway or library for other students to see.

#### **Assessment**

 Ask students to rewrite the three reasons why most people litter using their own words.

# **Technology Connections**

- Have students look up maps on Google Maps or MapQuest to help them get started.
- Create a digital version of map that can be shared with school or community officials.

### **Enrichment**

 Have students conduct a litter walk around the community and note what they see. Do their observations match the litter maps they created? Students can repeat the walk on a regular basis to see if anything changes.

# **Student Activity Sheet – Visual Litter Assessment**

| Team |   | Date   | Date     |                    |  |
|------|---|--|----------|--------------------|--|
| Loc  | cation  |  |          |                    |  |
| 1.   | Take a good look at the area and determine as a group how "littered" it is based on the scale below (circle your choice):   |  |          |                    |  |
|      | No litter   | Slightly littered                                    | Littered | Extremely littered |  |
|      | Minimal or No litter = virtually no litter can be observed.   |  |          |                    |  |
|      | Slightly littered = a small amount of litter is observed.   |  |          |                    |  |
|      | Littered = visible li   | = visible litter is easily seen throughout the area. |          |                    |  |
|      | <b>Extremely littered</b> = a continuous amount of litter is observed, some large enough to require equipment of extra manpower to remove (e.g. appliances, construction debris, abandoned vehicles, etc.). |  |          |                    |  |
| 2.   | Is there one or more trash cans or a recycling bin in the area?   |  |          |                    |  |
| 3.   | What is being littered? Is there one item that stands out as being most of the litter?  |  |          |                    |  |
| 4.   | Who do you think is doing the littering?  |  |          |                    |  |
| 5.   | Why might someone litter in this location?  |  |          |                    |  |
| 6.   | Where is most of the litter?  |  |          |                    |  |
| 7.   | Who is in charge of the area/location?  |  |          |                    |  |
| 8.   | Describe anything else you think is important about the litter conditions in this location.   |  |          |                    |  |