

Sister Kathleen Ryan

LESSON PLAN    ADOPT A STREAM            for READING THE RIVER  
June 13-18, 2004

ADOPT A STREAM: Students will adopt a stream (Banklick Creek) at Pioneer Park, Independence, KY. By testing the waters of this creek, they will learn the importance of good ecological practice, pollution control, interdependence and quality control of a stream that flows into the Licking River and eventually into the Ohio River....

A schedule for testing will be set. Parent/teacher aides, who will work with small groups of students, will be trained prior to fieldwork. Students will be instructed in safe and proper use of chemicals and instruments.

GRADES: 3-6

SUBJECTS: Science, geography, history, math, art, language arts

SKILLS: Data collecting, classifying, analyzing, comparing, collecting, recording, communicating, measuring, observing, applying, evaluating, reporting, describing, writing, working in cooperative groups.

DURATION: 2-4 hours for either four consecutive weeks or four meetings in each of the four seasons.

SETTING: Classroom; Banklick Creek, Pioneer Park.

KERA: meets academic expectations

OBJECTIVES:

- \* To learn stream's importance in the Licking River Watershed area.
- \* To determine quality of stream studied.
- \* To develop practices that insure stream's good quality.
- \* To work in small, cooperative groups with adult guide.
- \* To use scientific instruments properly.

METHOD:

- \* Students work together in cooperative groups with adult aide.
- \* Use scientific instruments, measures and methods.
- \* Assess stream quality.
- \* Identify possible sources of pollution.

- \* Determine actions for improvement.

#### PROCEDURE:

- \* Set stage by use of speakers, charts, maps, videos about streams....
- \* Play selected songs from PUT ON YOUR GREEN SHOES, an all-star album dedicated to healing the planet, produced by Songwriters & Artists for the Earth (SAFE).
- \* Adopt a stream (Banklick Creek).
- \* Schedule field trips to site.
- \* Adjust schedule if weather warrants.
- \* Enlist help of adults, parents as aides.
- \* Instruct about proper attire, e.g., boots.
- \* Assign rotation of tests to student groups.
- \* Carry out appropriate follow-up activities in classroom between field trips; i.e., art, writing, data sheets, charts, maps, posters, related reading, speakers.

EVALUATION: The activity of testing the stream (Banklick Creek) four different times not only shows quality but also possible improvement. Informing Kentucky Water Watch Personnel adds credence to (student) test results. Writing a personal practice plan (or pledge) allows students to take responsibility for their watershed area. Notifying local newspapers, civic officials increases public awareness and respect for local waterways.

#### EXTENTION:

- \* Prepare to pick up trash found at site. Place in proper container. Note effect on stream.
- \* Have Kentucky Water Watch representative come to speak to students about their test results, etc.
- \* Create posters showing "before/after" of stream.
- \* Write story of stream (history); Dream Stream--Banklick Creek--as it could be.
  
- \* Write to local officials seeking their cooperation on stream quality control.
- \* Read: A RIVER RAN WILD, by Lynne Cherry; WATER DANCE, by Thomas Locker; RUSSELL the MUSSEL, by Adele Conover, Richard Biggins, Richard Neves.

P. S.: Mrs. Kathy Harmeier and I took a group of eight sixth graders to Banklick Creek on July 7. We performed the tests with the cumulative results listed on the data sheet attached. There were four working groups. We had fun. The students enjoyed it and learned something as well. Thank you for a wonderful experience.