Big River Journey Activity: Geography/ Science/ History



Lessons from a Landscape:

Our Place on the Mississippi River

Objective: Students will explore local river or neighborhood areas to find answers to questions about the river, the landscape, and local history.

Grade level/ time req't: 3-8; 1 hour for outdoor hike, preceded by 20-minute, whole-class preparatory session, and post-hike session(s) for writing or further investigations

Procedure: Select from the following questions, and add your own questions about the local landscape. Take a group hike (after or during a rain is best) and use other resources to find answers to these questions. After the hike, write what you found, and write additional questions that you'd like to answer. Make a simple map to show local landscape features such as creeks, and how rain flows from your school to the river.

Questions about the river and landscape:

- 1. Where does water come from and go to when it flows over this land?
- 2. Where does water go from streets, sidewalks, playgrounds and parking lots?
- 3. Does rain soak into the ground or run over it? What % of surface area is permeable?
- 4. How does rain get to the river from here?
- 5. Does rain flow quickly or slowly to the river? What does the rainwater carry with it?
- 6. How has this land been shaped by water? Is the river valley steep or shallow? Why? (What other landscapes have been shaped by water? Where are they?)
- 7. Do you think the land around us is changing today? How/why?
- 8. What cultures of people have lived here before us? What evidence have they left? How did they use and affect the river?
- 9. How has the river affected human settlement patterns?
- 10. How are people using the river and the land around it today? What animals use it?
- 11. What does the river (or a tributary) look like? Smell like? Is it clear or cloudy?
- 12. How has the river been changed or affected by people? Are there any dams, storm drain pipes, or dredging? How have these changed the river? Is the river drinkable?
- 13. Do you find evidence or sources of pollution? What effects does the pollution have?

Teacher Background:

Landscapes tell stories. The Mississippi River and watershed is the central feature of our physical and cultural geography in the Midwest. The river's landscape is a history book and a science book at the same time. You can explore this landscape and "read" stories about science and change, geology and hydrology, cultures and settlement, ecology and the

connectedness of all things. The river and its surrounding landscape offers a tangible way to investigate our history, science, and sense of place. Walking lessons can involve inquiry (as suggested by questions above), or could be an environmental inventory (simply observe and record what you see.) An inventory could become the basis for stewardship action.

Words/ science concepts: landscape, environment, geology, erosion, sediment, floodplain, watershed, pollution, runoff

Connecting lessons: geography, mapping, local cultures and history, geology, time, water pollution, service learning (stewardship), art (drawing, model building)