Where Is the Erosion Happening? – Observation Activity

Dells of the Eau Claire Segment
Teacher Activity Sheet

Learning Goal

Students will observe the Eau Claire River from a safe overlook and identify places where erosion is occurring rapidly versus slowly. They will use water speed, turbulence, and rock shapes to make evidence-based observations about how the gorge forms over time.

Materials

- Clipboard or notebook
- Pencil
- Optional: Coloring pencils (blue, dark blue, gray)
- Optional: Binoculars (for better viewing)

Safety Note

Students must remain behind railings or designated safe viewing areas at all times. No one should approach the edge of the gorge or water.

Teacher Instructions

1. Introduce the concept (1 minute)

Explain that erosion happens faster where water is moving quickly, churning, or hitting the rock directly. Slow water erodes gently or not at all.

2. Students observe the river (2–3 minutes)

Have students silently observe the water. Ask them to notice: Where is it fast? Slow? Splashing? Smooth?

3. Students sketch and label (3–4 minutes)

Students draw the section of river they see and label areas as 'fast', 'slow', 'turbulent', or 'calm'.

4. Identify erosion hotspots (2 minutes)

Ask students to place an 'E' wherever they see signs of strong erosion—rapids, tight bends, deep pools, or undercut rock walls.

5. Share and compare (2–3 minutes)

Students share where they placed their 'E' marks. Discuss why erosion varies across different parts of the gorge.

Optional Extensions

- Before the activity, teachers may preview videos showing erosion processes:
  - Stream downcutting: https://www.youtube.com/watch?v=IS92_lxYt1s
  - Abrasion demonstration: https://www.youtube.com/watch?v=f8v6i7qyhz8
- Have students predict how the gorge might change over the next 100 years.

Student Observation Page

1. Observe the river carefully for one minute.
2. Sketch the section of the river you see.
3. Add labels:
   - ///// fast water (rapids)
   - ~~~~ slow or calm water
   - ● deep pool
4. Mark erosion hotspots with an 'E'.
5. Answer the quick questions:
   a. Where is the river moving the fastest?
   b. Where is it slowest?
   c. What clues tell you strong erosion is happening?
   d. Which areas look the most stable?