

Name: Ellen Tate (part of group with Greg, Natalie, Diane)

**LESSON PLAN**

Lesson Topic: Movement as a Sense of Place

Grade Level: 9

**Broad-Based Theme: Place as Text in the Most Southern Place on Earth**

**Generalizations (3 or 4):**

1. Identify shapes: triangles, rectangles, trapezoids, parallelograms within a composite figure.
2. Understand the concept of a composite figure and its area.
3. Compute the area of each shape using the correct formula.
4. Utilize historical data and diagrams to solve real world area problems.

**Guiding Questions (GQ):**

1. What engineered structure was used to control the movement of the Mississippi River during a flood?
2. What was the result of the failure of this structure at Mounds Landing, MS during the 1927 flood in terms of velocity of water?
3. What was the design of the new levee after the flood?
4. Use the area of a cross-section of the levee to help you understand the magnitude of the soil movement required to build a new levee.

Lesson Plan Objective(s):	Gen/GQ #	Procedure:	Materials/Resources	Evaluation related to objectives
Utilize a historic diagram of a Sept. 1927 levee plan to discuss composite figures.	2,4/1	A. Introduction/Motivation  Background info on Mississippi River and Flood of 1927  Discuss conflict between river and man	Book – <u>Rising Tide</u> by John M Barry  Internet research and pictures	Evaluation related to objectives  Worksheet complete and correct  Teacher observed evaluation of groups
Identify the individual geometric shapes in the composite levee shape.	1/3		Historical diagram worksheet.	Group report
Compute the area of each shape using its correct formula.	3,4/3		FCAT formula sheet	Test on area of polygons and composite figures
Calculate the area of the whole cross-section.	3,4/3	B. Study/Learning Activities  Review polygon area formulas		
Summarize by discussing how this total area can be used to find the volume of	4/4	Worksheet copy of levee plan  Draw lines to divide composite shape into		

<p>varying lengths of levee construction.</p>		<p>individual polygons Group work to figure area and total area</p> <p>Group report on its methods of solving</p> <p>C. Culmination</p> <p>Discuss how area can be used to find volume of a section (length) of levee.</p> <p>Assign each group a different volume problem.</p> <p>D. Follow-up</p> <p>Discuss magnitude of building levees along Mississippi River. (Massive Movement of Soil)</p>		
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