Lesson Plan for a Mathematics Class
Seventh Grade Geometry
Anticipation/Reaction Guides and Discussion Groups

(Note: See Literacy and Learning, Anticipation/Reaction Guides, Discussion Groups video lesson for an illustration of this lesson in action.*)*

Topic: Triangles and Quadrilaterals

Objectives: The student will… (to be completed by the classroom teacher)

Set Induction: Ask the students if there are any geometric shapes in the classroom.

Activities:

Note: For this lesson, students are placed in small Discussion Groups of four (or three—according to the number of students present). Students have previously been introduced to small group activities, and group assignments are labeled for them at their desks. Activity sheets and materials are available for each group. The lesson can easily be modified for large group teaching and learning.

1. Hand out the Anticipation/Reaction Guide and have students fill out the Anticipation side individually. Then, have students discuss their answers in the small groups.

2. Have students read appropriate pages from the textbook, noting the pages that contain answers to the anticipation statements.

3. After reading, students work together to complete the Reaction side of the guide. Justification for each answer is to be written in complete sentences. (Note: Teacher monitors group discussions.)

4. Review all answers in large group to make sure students have the correct information. (Note: The Anticipation/Reaction Guide will be used as a study guide for a test later.)

5. Students are directed to draw a line down the center of a blank sheet of paper. On one side, they are to write "angles by degrees" and "triangles by segments" on the other side.

6. Students will work in their Discussion Groups to complete the chart.

7. Pass out guided questions to be answered in Discussion Groups using textbooks and math manipulatives to complete the assignment. Students are to answer with complete sentences.

8. The Recorder from each group shares answers to the guided questions.

Lesson Plan

Closure:

Ask students to share their thoughts about working together in small Discussion Groups. Questions may be,"How do you like working in small groups?" "Do you find working together with your classmates helps you understand geometry?" or"What do you like least about working in small groups?"

Evaluation Suggestions:

Group work; Anticipation/Reaction guides

Resources and Materials:

Group assignments/responsibilities, Anticipation/Reaction guides, textbooks, geo-boards, rulers, drawing paper, etc.

Other Applications

Middle school teachers know their students are more successful when they have an opportunity to actively participate in their learning. Anticipation and Reaction Guides are diagnostic tools that teachers can use to evaluate misconceptions based on students' prior knowledge in any content area. These literacy strategies may be used independently, and both serve as excellent tools to prompt discussions at any grade level.

In Discussion Groups, students can communicate their own opinions as well as listen to those of their classmates. The use of small groups can help students learn content material across the curriculum.

Reaction Guide

Reaction Guide	Agree	Disagree
1. Asking students to anticipate what will be discussed in the lesson will help prepare them for learning.		
2. It is unreasonable to ask middle school students to reflect upon information that has been presented to them.		
3. Discussion groups give students an opportunity to try out ideas in a non-threatening situation.		