Algebra vs. Geometry

Algebra teachers tend to use *look for a pattern, make a table, examine a simpler case, and write an equation* as strategies that form the basis for most of their instruction. As a result, students grow comfortable learning math with these strategies. Unfortunately, too many students learn algebra by rote memorization. That results in any variation of a problem causing great difficulty and frustration for students. That can be clearly seen on the results of high stakes in mathematics.

Teachers of geometry tend to use: *go back to the definition, draw a picture, examine a related problem, identify a sub goal, and work backward* as their primary strategies. Students who learned algebra by memorizing often run into difficulty in geometry. Students and teachers who use those same strategies to teach or learn geometry that were successfully used in algebra often run into difficulty too – resulting in higher fail rates.