**Reflection in the Mathematics Classroom**

I try to use reflection in mathematics at the end of each unit. Two to three days before the unit is finished or before the unit assessment, I will ask my students to write an outline of the major topics covered in the unit. Then I would have the students write the subtopics into the outline included in the subtopics would be important ideas regarding a topic and types of problems that are applicable to the content. At this point students should be able to discuss or write what problems would represent this content, how those problems are solved, and identify common errors made for each type of problem. Once the student has a completed outline I would then have the students reflects on their personal strengths and weaknesses regarding the mathematics content. In studying for the assessment I would have the students focused on the content that they have difficulties with rather than spending time studying the content that they have mastered.

For the first unit in a course I will create the outline for the students in a large group setting. The second unit, also in a large group, I will have the students give suggestions for creating the outline. Then the students would have their individual reflection after the large group has created the outline. After the first two units I would let the class work in small groups to create the content outline, with an ultimate goal that by the end of the course each individual student can create their own study outline and reflect personal areas of strength and weaknesses.

Some students need to complete this reflection in a written format. Other students need to complete this reflection orally with a study partner, a parent, or a teacher. The idea is for the student to be able to communicate the mathematics showing understanding which would demonstrates the student’s personal ownership of the knowledge.