Statement of Purpose: 5th Grade Mathematics

5th Grade math can be a turning point for a student’s interest or disinterest in math, as well as their future success in Math courses and everyday math concepts. This course is designed to insure a solid base of basic facts on which to continue to build a mathematical foundation. Although the complete Math curriculum includes number sense, measurement, geometry, patterns, functions, algebra, data analysis and probability, this mapping will concentrate on the number sense and operations part of the whole curriculum. This mapping is designed to insure mastery of the basic concepts and produce students who can become productive adults in society. The basic concepts concentrated on are addition, subtraction, multiplication, and division of whole numbers, decimals and fractions. Everyone in society needs these basic concepts to estimate costs of groceries, cooking, balance checkbooks or savings accounts, splitting costs or calculating payment plans just to name a few.

In the current curriculum design, these basics concepts are taught in the fourth, fifth, sixth and seventh grades. The goal of this new design is to eliminate the need to re-teach these concepts in each year by insuring mastery when they are originally taught. The state curriculum standards are all over the place for each level of math and encompass too many concepts. Currently, about half of the year is spent re-teaching or touching on concepts for future years. Students will be limited to the number of concepts introduced until mastery is evident. Assessment of this mastery will include practice assignments, using Nettrecker (web-based tool), observations, problem solving, cooperative group work, quizzes and Scantron testing.

Another goal of this design is to eliminate the disinterest or frustration many students feel by all of the new concepts introduces with what seems like no connection to actual life. Fifth grader’s impression of what math is needed in “the real world” is limited. Therefore gaining mastery will allow for real life situations to be a natural progression. Problem solving will focus on showing everyday uses of math that the students are learning. Another way to help with the frustration is to allow students who are having difficulty with a concept to have additional instruction and alternative assignments if necessary. Students who are mastering concepts quicker than the average student will be given more challenging activities and may be introduced to more abstract concepts, including but not limited to logical reasoning problem solving.