RATIONALE

The primary aim of the sixth grade mathematics program is to equip students with the skills necessary to function effectively in today's rapidly changing world by focusing on four critical areas.. The program combines problem-solving skills and critical reasoning skills with basic calculation skills to provide the students with a broad base of knowledge from which to draw as they become productive members of society. The program also provides numerous opportunities for the students to practice, apply, and integrate specific skills so that they become independent thinkers and problem solvers. Upon completion, the program allows for an easy transition into the next level of mathematics.

COURSE DESCRIPTION

Sixth grade offers a general mathematics course that continues the development of the elementary mathematics program. Students will be focusing on four critical areas of mathematics. Students will be connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems. They will also be focusing on completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers. Writing, interpreting, and using expressions and equations will also be a focus of instructional time. Students will be developing an understanding of statistical thinking throughout this course.

MOST IMPORTANT LEARNER OUTCOMES

I can statements:
1. I can understand ratio concepts and use ratio reasoning to solve problems.
2. I can apply and extend pervious understandings of multiplication and division to divide fractions by fractions.
3. I can compute fluently with multi-digit numbers and find common factors and multiples.
4. I can apply and extend previous understandings of numbers to the system of rational numbers.
5. I can apply and extend pervious understandings of arithmetic to algebraic expressions.
6. I can reason and solve one-variable equations and inequalities.
7. I can represent and analyze quantitative relationships between dependent and independent variables.
8. I can solve real-world and mathematical problems involving area, surface area, and volume,
9. I can develop understanding of statistical variability.
10. I can summarize and describe distributions.

Evaluation
Evaluations will be based on formative and summative assessments, daily work, journal entries, observation of students during activities, performance events, and MAP.