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EDTL 7100

September 26, 2010

**Curriculum Map –Evaluation Strategy**

 Due to the importance of this unit accompanied with the past struggles of sixth grade classes I am going to implement a multitude of assessment strategies. The topic itself will dictate which strategy as well as the amount of time permitted for the unit so that we do not fall behind in our overall pacing of the curriculum as the year moves on. In our unit I want to allow for such assessment strategies as modeling, graphic organizers, practice problems, computer based practice, short-answer written responses, a trio of formative assessments, four quizzes, and a summative assessment. Each of these strategies should allow for students to demonstrate their level of understanding at different levels as well as permit me opportunities to make changes in my teaching throughout the unit to improve areas of confusion before the unit moves too far ahead.

**Modeling**

During the two weeks we are discussing adding and subtracting fractions we will use a tremendous amount of modeling using Cuisenaire Rods. This will be done as the main feature to several small group activities where students will be expected to visually demonstrate the concept of adding and subtracting fractions through a series of problems rather than just working out problems on pencil and paper. To help in the assessment of this strategy my team will be doing this activity in our media center so that there will be three math teachers circulating around the groups each class period providing feedback rather than doing these activities in a singular classroom. Additionally this allows for students to be shuffled into different groups throughout these days as the different learning levels of some of the students are identified the math teachers can re-shuffle groups to improve the learning dynamic. By asking the students to work in groups and visually show the concepts while simultaneously explaining their decision making process this activity should significantly challenge the level of student understanding at the mid-way point of the unit.

**Graphic Organizers**

Typically fractions are an area where students experience significant difficulty therefore my team and I modified our teaching calendar this year to allow for more preparatory work before our unit begins. A week of primes, composites, prime factorization, least common multiple (LCM), and greatest common factor (GCF) was added in order to review some of the concepts taught in fifth grade that are instrumental in understanding fractions. As we reviewed these topics several graphic organizing techniques were provided for students to organize their thoughts. Using a list method, a tree diagram, a Venn diagram, or a ladder diagram were all demonstrated for students to select from as their understanding of these concepts expanded. Through challenging students to use a visual method of organizing their thoughts we are expanding the way our students look at past ideas as we draw new connections into our current curriculum. One more added benefit to the graphic organizers should be for each teacher to gather a better understanding of the learning styles of the different classes as we progress deeper into the school year. As teachers the more we know about our students the better we can incorporate popular learning styles into our everyday teaching practice so that we can better reach out to our audience.

**Quiz**

Our second strategy is to use frequent short quizzes at the end of each week of work. These quizzes will be twenty questions or fewer but will allow us to identify strengths and weaknesses as the unit transpires. Each teacher on my grade level will give the same assessment so that we can compare results among the grade level. We can later use this data to make any necessary changes in our schedule to re-teach specific areas of difficulty rather than review areas that are already understood. Following each assessment we can discuss with students the group results with our different classes. Through our class discussions we can identify the reasons behind limited success on a question or a specific concept.

**Practice Problems**

At the end of each new lesson there will be a series of about twenty practice problems for each student to work on outside of class. These problems will be taken as homework grades. The homework problems will be reviewed in class following the day they are assigned. Students will be allowed to ask questions on any of the areas they are struggling before the new days lesson begins. As a teacher I continue to be amazed at how much students understand for better or worse after the reinforcements of class are removed. By assigning homework to my students I am able to provide practice for students at the end of a lesson so that students can confirm or disconfirm their understanding and get additional assistance sooner in the unit instead of later.

**Computer Based Practice**

For any students requiring or seeking extra practice my school has the use of a few online review programs. Each of the programs provides instantaneous feedback for the user and operates at the users pace. A program called Study Island, an End of Grade Test preparatory program, can provide teachers with data on each student following every log-in session. This information can be but is not limited to a graphical comparison of each student to others in the school and the state, a list of suggested topics for remediation, a percent correct for each topic, and an End of Grade predicted score for each specific area. Our textbook is available online for every student in our school. Each student has a personal account to log-into to the textbook. As a teacher I can check to see which students are using the textbook online and which are not. The main feature of value with the online textbook is that for any student struggling there are tutorials with each concept that a student can use any where they can get online. This feature is especially helpful with students whenever they are absent for extended periods.

**Short-Answer Reponses**

Every unit in sixth grade contains several key concepts that students will write short-answer responses for. Instead of waiting until the final assessment these responses are going to be given with the modeling activities in the media center so that students can discuss their responses in groups while the material is freshest. Many of these short answer questions accompanying our addition and subtraction activities will be questions written at the analysis, evaluation, and synthesis tiers of Bloom’s Taxonomy. While students will be permitted to discuss these questions with their groups their responses must be written individually. Also, at the end of each period where a new lesson is taught my students are required to write a paragraph titled “Today in class I learned about . . .” where I provide a series of questions for students to write about. The response only needs to be a four sentence paragraph that is graded as a part of their daily class work grade.

**Formative Assessments**

Three formative assessments will be given at different points over the course of the unit. These assessments will contain approximately eight questions each written at comprehension and application tiers of Bloom' Taxonomy. These responses will be scored only as a means of gathering data on student understanding rather than a grade in the grade book. Once these responses are scored my math department and I can meet to discuss modifications in our teaching to clear up topical areas of confusion before our culminating assessment.

**Summative Assessment**

At the end of our unit there will be a common assessment. The test will be comprised with some of questions frequently missed over the four quizzes and mostly new questions designed to identify student understanding over all of the topics in the unit. This assessment will be between 30 and 40 questions.