SCCTM President Leigh Martin announced the organization's winning proposals, extending congratulations to this year's recipients of the South Carolina Council of Teachers of Mathematics' Teacher Grants. The winning proposals were developed and submitted by: Dawn Bryant, from J.D. Lever Elementary in Aiken County; Wanda Noblin, Cowpens Elementary in Spartanburg Three; and Carrie Simpson, Robert Anderson Middle School in Anderson School District Five.

Dawn Bryant's proposal will support the development of a curriculum unit using fraction tiles to strengthen students' conceptual understanding while reinforcing procedural knowledge. Students, with teacher guidance, will use hands-on activities to discover basic concepts about fractions and gain in-depth knowledge that fractions are part of a whole. The students will gain the understanding of a unit fraction is the quantity formed by one part when a whole is partitioned into "x" equal parts using manipulatives. Once this process is complete, the student can go forth in understanding a fraction can be represented using set, area, and linear models.

During the second part of the unit, students will demonstrate their understanding that two fractions can be equivalent if they are the same size, based on the same whole, or at the same point on a number line using the fraction tiles. To demonstrate mastery, students will design a flip book representing real-world equations using fractions. As an extension to the unit, students will be given "Build the Bridge Challenge" to understand fractions in linear models. Students will be challenged to use clues to build bridges using the correct unit fraction models and placing sports spots on the floor to reach the opposite side of the room. The activities have been designed to increase the students' conceptual understanding of fractions and increase South Carolina Ready math end-of-year state assessment scores for our school.

Carrie Simpson will use the funds to develop a year-long theme where students will research the Titanic and discover many intriguing facts. By making many inferences and relating information to the world around them, the students will enhance their understanding and application of proportional reasoning. The students will have multiple opportunities to discover how proportional reasoning works and why it is important information to learn, promoting greater student engagement, along with sharing the excitement of learning the content within the math class.

When students engage in special projects (building gingerbread houses, creating models of Titanic, etc), they become more interested, stay on task, and better appreciate the complexity, value, and relevance of content standards. The College and Career Readiness Standards states that using “processes and proficiencies” is tremendously important in creating lifelong understanding of the content. Especially noteworthy is the incorporation of having the students investigate, research, write well, make inferences, draw conclusions, and discuss their reasoning with one another, allowing students to make connections, not only mathematically, but connections to all content areas as well.

K-5 math teachers at Cowpens Elementary have analyzed assessment data (iReady Math, MAP Math, SCReady, District Formative Assessment, District Benchmark Assessment) and noted a significant weakness trend in the areas of computational fluency, number sense and the use of visual models and problem solving strategies.

Wanda Noblin, who developed the proposal, shared that “there are no consistent models used with appropriate lessons, and we would like to incorporate more perceptual materials and manipulatives with targeted students.”

As a result, the K-5 math teachers will administer a universal screener to inform initial thinking about support and intervention. The results of the assessments will give the teachers information needed to make decisions about grouping students who need support. Frequent feedback and weekly progress monitoring will be used to inform and evaluate student success.

“Our math teachers indicated that struggling students lacked mathematical confidence. We will use one-to-one or small group instruction so that students have an opportunity to gain confidence in their mathematical abilities through immediate feedback,” added Noblin.

Students will use visual models and manipulatives to anchor mathematical thinking and conceptual development. The teacher may also choose to introduce an intervention game/activity as a math center (workplace) in the regular math class to provide a wider range of practice opportunities. These may be either opened to all students or by just some of the students. If a large number of students need additional support with a particular skill or set of skill, the teacher may consider using selection lessons and materials for short periods during regular math instruction. Selected games or activities may be sent home with students for additional support/

This year’s awards exceeded $3200, with the winners being selected by the SCCTM vice presidents and coordinated by the organizations’ president-elect, Marc Drews