



SUFFIELD PUBLIC SCHOOLS

SARA BARANAUSKAS
K-5 Math and Science Curriculum Leader
with
KRIS PRYCE
K-5 ELA and Social Studies Curriculum Leader

February 27, 2017

Our math consultant, Chris Moynihan ran a K-5 Parent Night in February. During this information session, parents learned about the need for change in teaching and learning of mathematics, and how number sense plays a critical role in children's mathematical understanding and ability to "do math". Dr. Moynihan reviewed how Suffield's curriculum is providing students with "fluidity and flexibility with numbers so that they can use numbers to navigate the world successfully and be a productive citizen".

K-5 teachers have begun calibrating the common Numbers and Operations units. During these sessions teachers have deepened their understanding of conceptual understanding and how important it is to facilitate this type of understanding with all students in order to build a strong mathematical foundation. This is critically important as it enables students to apply the principles, ideas and computation skills they've developed when they work through and solve new and complex problems. To learn more about how critical conceptual understanding is for mathematical thinking, watch this video: <https://www.youtube.com/watch?v=W1eLt0Dz8Fk>



Grade 1 teachers use ten frames and linking cubes to represent a story context. Then they connect this model to a pictorial representation and finally to the equations to represent their thinking.



Parents engage in an activity called Newspaper Math where they think critically about how given numbers fit into current newspaper headings. Parents discussed how using number sense helped them navigate this experience.



Plans are underway for our Annual Read Across America Celebration. This event, which is celebrating its 20th anniversary, is sponsored by the National Teacher Association. March 2 is the birthdate of Dr. Seuss, who strived to bring the celebration of reading and literacy to all children. This year we will be celebrating Read Across America as a PreK-5 community. All students will begin their day at Spaulding School where joint morning meetings and buddy reading will occur pairing a Spaulding classroom with a McAlister classroom. Each school will continue to celebrate the joys of reading in their own buildings throughout the day. Our Read Across America celebration will kick-off a month long Reading Challenge for all PreK-5 students.

As students are engaged in our March Reading Challenge they will be working in the following Reading Units of Study. Our units are designed to not only develop strategic readers but a love of reading in all students.

The following units will be the focus areas throughout the month of March:

Kindergarten: Nonfiction Reading Strategies

First Grade: Fairy Tales

Second Grade: Studying Characters in a Series or Biographies

Third Grade: Mysteries or Countries Around the World

Fourth Grade: Nonfiction Author Study

Fifth Grade: Fiction Author Study - Reading Like a Fan



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STEVEN M. AUTIERI
6-12 Science Curriculum Leader

February 27, 2017

What's Happening at Suffield Middle School?

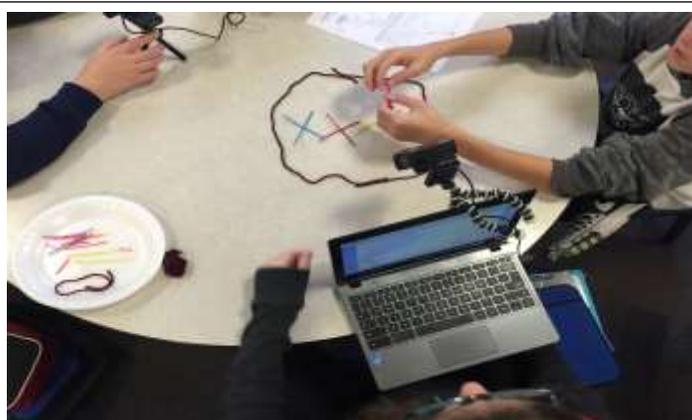
Throughout the first half of the school year, our students have been engaging in a series of newly revised and developed student assessments integrating many of the new science and engineering of the Next Generation Science Standards (NGSS). Mrs. Killam and Mrs. Peterson utilized modeling with our **Grade 6** students to design controlled experiments, creating a better water bottle during our unit on heat transfer.

Ms. Gardocki and Ms. DeGray have integrated the application of modeling simulations with our **Grade 7** students through a program called Gizmos to help provide a context for student learning during our human body unit, while studying the digestive and circulatory systems.

Mrs. Davis' and Mrs. Plourde's **Grade 8** students used models to form explanations during a unit on human genetics where our students constructed stop-motion animations and pedigrees to model the movement of genetic traits in a family.



Mr. Beigel's biology classes participating in a \$20,000 biotechnology grant through AMGEN Pharmaceuticals.



Grade 8 students working with stop motion animation to create models of the processes of mitosis and meiosis.

What's Happening at Suffield High School?

As part of a unit on chemistry, students in the **Grade 9** integrated science course engaged in several inquiry-based experiments to understand the properties of synthetic polymers such as plastics. Students conducted student-led debates, synthesized slime using the cross-linking properties of polymers and investigated the strength of different plastic bags in student research teams.

Our **Grade 10** biology teachers have been working with our students on the topics of human and molecular genetics. SHS was the only recipient in the State of Connecticut to receive a \$20,000 grant from AMGEN Pharmaceuticals, which permitted our students to use research-grade equipment to clone a red fluorescent gene from a sea anemone into bacteria. Our students have also participated in student-led debates on GMOs at both the academic and honors levels.

Mrs. Volpintesta, Mr. Courchesne, and Mr. Kauffmann are investigating the concepts of the mole and stoichiometry with the **Grade 11** chemistry course sections. Students experimentally determined the formula of a hydrate and the value of a penny while integrating concepts such as percent error.

Mr. Szabla has been studying the concepts of circular and rotational motion with **Grade 12** physics. AP and Honors have both conducted labs on impulse and momentum to determine momentum when objects collide.



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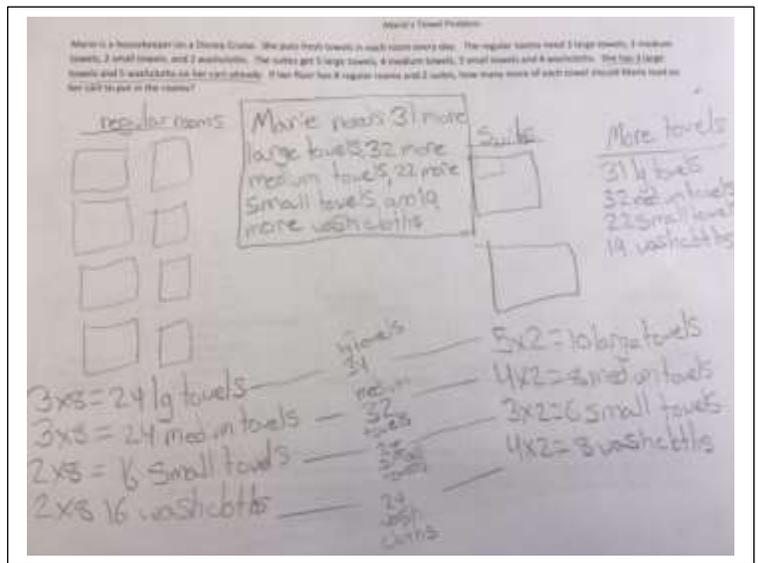
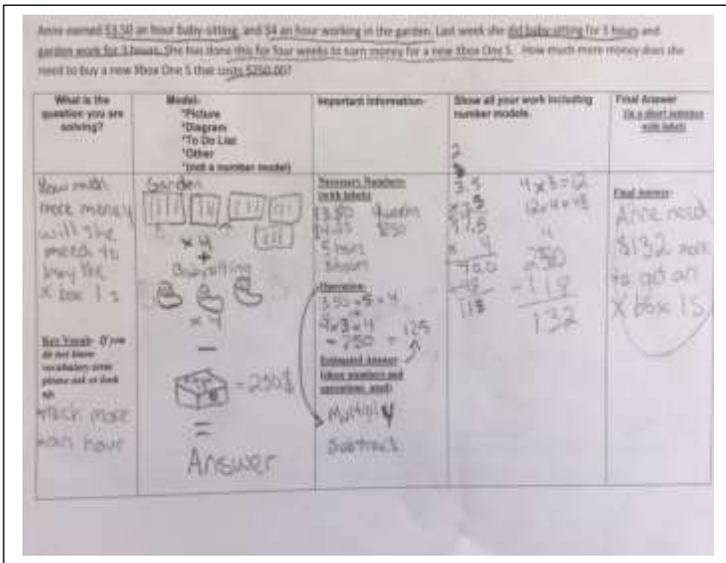
ESTHER DATTEY
6-12 Math Curriculum Leader

February 27, 2017

What's Happening at Suffield Middle School?

Our middle school mathematics teachers continue to work diligently on improving student experience with mathematics. Our 6th and 8th grade team's work with the Modeling Practice is ongoing, using PLC to strategically support this goal.

The grade-level teams created a modeling template to help students successfully tackle, break down, and solve challenging problems. The worksheet allows students to represent their conceptual understanding of a problem and make an estimate of what the solution will be, before they solve the problem either by traditional algorithm or based on their model. This process bridges the gap between conceptual understanding (why) and procedural fluency (how). Students create their own representation of real-world questions, which demands a deeper level of understanding and an opportunity to explore various representations from classmates. This builds confidence in math, and helps students take ownership of their learning. By using this approach math is not happening to them; rather they are active participants in learning math, which makes it more meaningful and enjoyable. Eighth-grade students follow a more formal modeling process: Defining the problem, making assumptions, creating a model/representation, and analyzing, justifying and communicating the response. Students engage in rich discourse during these sessions.



Using the modeling worksheet, students demonstrate their own thinking, understanding and interpretation of the problem and how to solve

What's Happening at Suffield High School?

The high school math intervention program is off to a good start. The program has been serving students who are struggling in their current math courses because of foundational gaps. Students are referred by their teachers, and then diagnostic assessment is conducted with parent and student consent. The diagnostic test informs the interventionist of students' areas of need or deficiencies in math. Students who qualify for intervention are scheduled to receive help during study hall. Students who have made adequate progress then test out of the program via assessment. Our mission is to provide our students with what they need to be successful and exit them when they master their goals. This process is a concerted effort by students, teachers, school counselors, parents, and academic support personnel.



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RICHARD LANE
K-12 Technology Integrationist

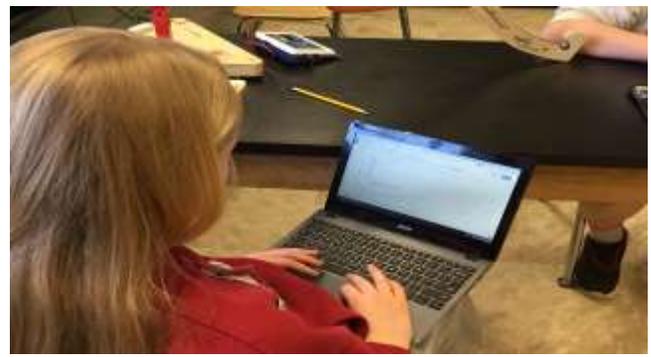
February 27, 2017

With half of the school year behind us, it is wonderful to look back at the work teachers and students are doing involving different technologies. In their first year of use in Kindergarten and First Grade classrooms, the Android tablets are becoming more and more familiar to students and teachers. Teachers have participated in multiple Android tablet training sessions to extend their understanding of device management. The concepts and skills covered will aid in setting up the devices for specific learning purposes and meeting learning needs. Based on feedback from Spaulding teachers, the upcoming February Spaulding Star School will include a session on the use of Android apps for Literacy to build upon the understanding mentioned above. Since the Spaulding Star School will have a technology focus, three other sessions have been offered to teachers, including: Curating Content with LiveBinders, Google Forms, and Google Classroom. Teacher voice and choice was paramount in providing these opportunities for their growth.

Sharing information with teachers and peers is an important aspect of student learning. Teachers at both Spaulding and McAlister are exploring the use of wireless screen sharing from student devices to encourage communication and discussion about work. McAlister students are continuing to combine hands-on creation in the Makerspace with digital design and presentation. Chromebooks are enabling them to collaborate as they plan their work and share it digitally throughout the process.



5th Graders referencing digital designs in the midst of collaborating on Makerspace creations.



8th Graders generating line graphs in Google Sheets after recording real-time velocity calculations.

Middle school students are regularly incorporating their Chromebooks into classroom learning. From synchronously collaborating on discussion questions and points of view to graphically representing scientific concepts in the form of line graphs and scatter plots, students are employing digital functions to facilitate and extend their learning. Additionally, teachers are collaborating to enrich the online research process and challenge students to thoughtfully and critically analyze information that they connect with concepts and ideas learned in class.

Not only are students becoming more savvy information seekers, they are learning how to create products and artifacts using different technologies. Stop motion animation, promotional videos, digital journals, and 3D printed objects help represent understanding and deeper student thinking. These are examples of how students have more choices of how to share their learning and are afforded opportunities and guidance on what to use and how to use it.

Another example of this is being developed at the high school and involves the use of quick response (QR) codes. In collaboration with the Library Media Specialist, a member of the art department is looking into sharing more information about student artwork through QR codes. Displayed art would have an accompanying QR code for viewers to scan with a device, such as a mobile phone or Chromebook. Scanning the QR code retrieves information and displays it for the viewer, whether it's text, video or something else. It is a great step in showcasing more about the ideas and people behind the artwork. It will serve as a stepping stone to other applications of QR codes and the continued use of technology to support communication among students and teachers.



SUFFIELD PUBLIC SCHOOLS

TIMOTHY KINEL
6-12 Social Studies Curriculum Leader

February 27, 2017

Middle School

Throughout the course of the 2016-17 academic year, the Social Studies Department has sought to bring a strong sense of coherence with regards to the academic skills and Social Studies content that students are exposed to during their tenure within Suffield Public Schools. At Suffield Middle School, teachers have been working to develop curriculum documents that more closely align with state and national standards, building and district improvement plans; as well as provide a greater common experience for all students. The sixth and seventh grade teachers have collaborated on various units within a shared World Regional Studies course. The eighth grade teachers have come together to devise new documents in order to shift their content focus in an effort to better align their instruction with the overall sequencing of the Suffield Public Schools Social Studies course offerings as well as the state and national standards that govern our discipline. While the new curriculum seeks to better align course content, it is through the application of the Degrees of Reading Power (DRP) assessment data that the teachers have sought to combat reading fluency issues and address the greatest areas of growth. By using the assessment data to determine the specific areas of greatest academic needs, Social Studies at Suffield Middle School has been able to devise numerous activities that aid in the direct instruction given to the students in these academic skill areas.



Sixth graders perform a live wax museum, where they display their research on a famous historical figure.



Mr. Efland's tenth grade International Relations class has an in-class discussion on the topic of Globalization.

High School

The Social Studies Department at Suffield High School has looked to the development of a more comprehensive curricular content that speaks directly to how the contemporary world came to be. Whether it be in their Modern World History, Civics, or American History course, the Suffield High School student will examine the historical conditions that have proven foundational in the creation of today's triumphs and tribulations. As the content shifts, the department has also sought to integrate college and career readiness skills more directly into the modalities of instruction and assessment. Through a thorough examination of the data provided by the National Clearinghouse, SAT, ACT, and SRI, we have uncovered several areas of academic skill development that require more focused attention.

The ninth grade is shifting its curricular content focus to offer the students a more thorough exploration of the world in the twentieth century. The tenth grade is moving towards a year-long Civics course in an effort to strengthen Suffield students' understanding of the functionality of the American governmental system as well as their role within our country's political edifice. The eleventh grade continues to analyze the effectiveness of the new chrono-thematic approach to explore American History from 1865 through the present day. All of these curricular efforts speak to developing a stronger understanding of how our contemporary nation and world came to be.



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JEANINE ROSE
6-12 ELA Curriculum Leader

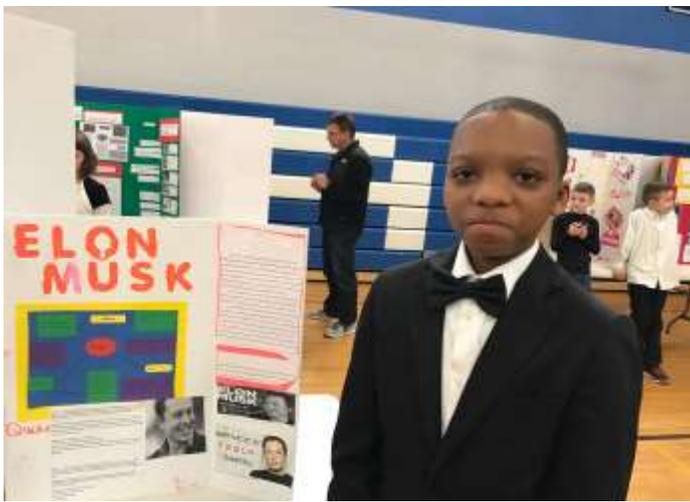
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English Language Arts at Suffield Middle School

Students at the middle school continue to build reading, writing, researching and speaking skills in their ELA classes. Neither rain nor snow nor late openings can stop our **6th graders**. Mr. Hershon, Mrs. Picard, Mrs. Tierney, and Mrs. Zavisza's **6th grade** students just presented their wax museum of historical figures and heroes to the delight of parents, students, and teachers alike.

Our **7th graders** are developing an array of reading strategies, particularly inferencing, in Mrs. DeFord's, Miss Smith's, Ms. Troiano's, and Ms. Zaczynski's classes. They will soon practice these strategies while reading an abridged version of *Flowers for Algernon*, a story about a learning disabled man whose intelligence is increased in a science experiment.

Mrs. Eggleston's, Mrs. Schragger's, Miss Marker's, and Mr. Wolfson's **8th grade** classes are studying dystopian and nonfiction literature in a "world gone wrong." They will soon embark upon a research project to hone their internet search and inquiry skills in developing an argumentative essay about what drives an author to write about certain social problems.



6th-graders research and present a hero at the Wax Museum



English IV students research and defend a resolution

Goings on in English at Suffield High School

Students in Ms. DeAngelis', Mr. Fortunato's and Mrs. Reiser's **English I** classes are reading Shakespeare's *Romeo and Juliet*. They study the impact of conflict and character on the story and how these are brought to life with dramatic elements. Classes continue to practice nonfiction rhetorical analysis and will soon begin reading *To Kill a Mockingbird*.

English II classes are reading Arthur Miller's *The Crucible*, an allegory of the McCarthy Era based in Salem, Massachusetts. Students continue to analyze famous historical speeches rhetorically to be more educated consumers of information and prepare for possible entry into the AP Language class in 11th grade.

Students in Ms. Hill's, Mrs. Kaplita's, and Ms. Petrone's **English III** classes engage in close reading and language study with *The Things They Carried*, a novel that examines the concept of truth in the Vietnam War.

English IV students are refining their inquiry, research and speaking skills in a mock congress activity in which they will research, present, and defend three congressional resolutions.



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ERIN GRASSO

K-5 Instructional Coach - English Language Arts

February 27, 2017

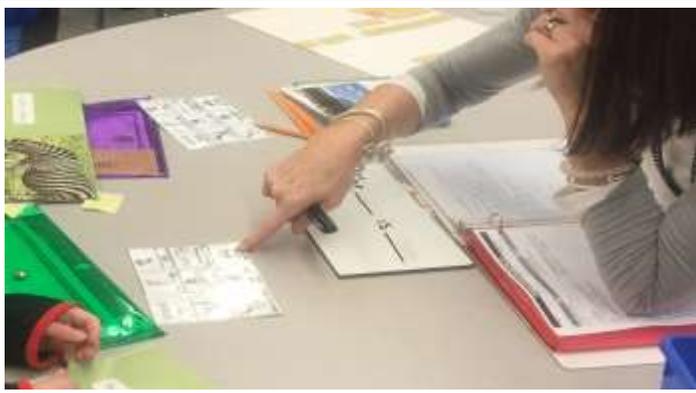
ELA Instructional Coaching

"When coaches and teachers interact equally as partners, good things happen." - Jim Knight

As an Instructional Coach, student learning is always a top priority. Through coaching cycles, I am working with classroom teachers to increase the quality and effectiveness of classroom instruction. As an instructional supporter, I am collaborating with teachers on identifying strategies to assess learning, differentiate instruction, and plan for targeted small group instruction. Over the past few months, I have been working with K-5 teachers to "learn" about their learners and "learn" about the contexts in which ELA instruction occurs. Student performance is positively influenced when the instruction and learning environment are created with the learner in mind.

Guided Reading is one of the contexts that contributes to a student's reading growth and has been the driver of many ELA coaching cycles. The ultimate goal of this small group instruction is to enable readers to work their way through text independently. Within this setting, all teaching is directed toward helping individual students within the group build systems of strategic actions that they initiate and control for themselves.

Using classroom reading assessment data, we are working to form small groups and identify the behaviors and understandings to notice, teach for, and support. Texts are selected and analyzed for demands and opportunities for learning. Coaching cycles are also focused on the essential components of a guided reading lesson: introducing the text, supporting students' reading of the text, guiding discussion of the text, engaging in specific teaching, supporting students' work with letters and words, and extending understanding through writing about reading.



Take a closer look - the teacher uses tools to help the student



A Kindergarten teacher works with a guided reading group focusing on Early Literacy behaviors.

Professional Learning Communities

STUDY-SELECT-PLAN-IMPLEMENT-ANALYZE-ADJUST (PLC Cycle Components)

The goal of PLC in the K-5 setting is to share best practice and engage in collaborative conversations and deliberate action to achieve student growth. Grade level teams have selected a problem of practice after analyzing student data and reflecting on School Improvement Plans. As a group, we researched instructional strategies that would influence student growth. At this time, classroom teachers are implementing strategies and monitoring both successes and challenges. Teachers in Kindergarten through Grade Four have selected a Problem of Practice in the area of English Language Arts.

Grade Level Problems of Practice

Kindergarten: Researching and implementing best practices in Reader's workshop including student engagement and differentiation to improve instruction.

Grade One: Researching and implementing instructional strategies for consistency in writing workshop.

Grade Two: Incorporating Responsive Classroom instructional strategies and resources to improve student engagement.

Grade Three: Identifying and using instructional strategies to meet all children's needs through the Reading Workshop model.

Grade Four: Implementing strategy groups in order to build student reading comprehension.



SUFFIELD PUBLIC SCHOOLS

JESSICA MARZI
K-5 Instructional Coach - Math

February 27, 2017

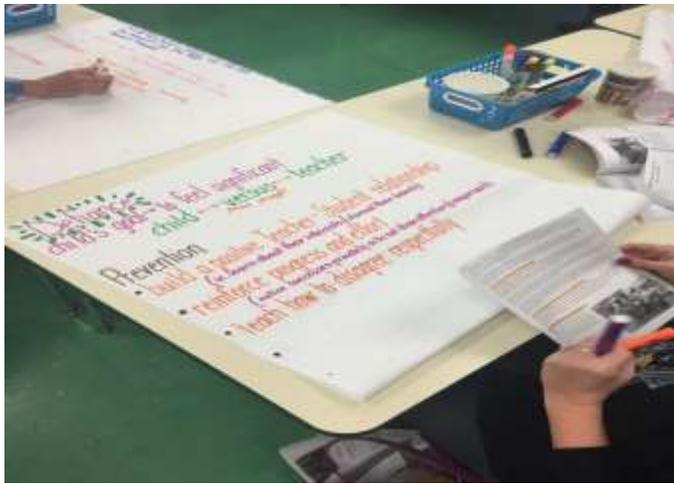
Mathematics Instructional Coaching

Collaboration, at its best, is a give and take dialogue, people working together as partners, reflecting and co-creating together" - Jim Knight (2007)

Instructional coaching is all about student outcomes; student learning is the goal and that comes through teacher growth. Through classroom visits and coaching cycles, I am working with K-5 teachers to increase capacity within mathematics, effectively plan through the use of Investigations, and create a mathematically rich environment for learning.

Over these past few months coaching has been focused on effective planning through the use of Investigations resources, getting to know our learners, and effectively setting up and managing math workshops. Small group instruction to differentiate instruction is a driving force in math workshops. Getting to know our learners through effective assessment within Investigations - with classroom observations and questions asked to facilitate rich conversations about math, we increase our understanding about what our kids know.

Coaching cycles are also focused on math workshop materials set up, anchor chart creation, effective use of tools, number talks routine for student discourse and effectively planning for discussions.



Second grade teachers use the text: *Teasing, Tatling, Defiance and More Positive Approaches to 10 Common Classroom Behaviors* to create posters for a gallery walk.



Grade 4 students discuss their mathematical thinking

Professional Learning Communities

STUDY-SELECT-PLAN-IMPLEMENT-ANALYZE-ADJUST (PLC Cycle Components)

The goal of PLC in the K-5 setting is to share best practice and engage in collaborative conversations and deliberate action to achieve student growth. Grade level teams have selected a problem of practice after analyzing student data and reflecting on School Improvement Plans. As a group, we researched instructional strategies that would influence student growth. At this time, classroom teachers are continuing research in the areas of their problem of practice. Their next step is to begin action steps to incorporate strategies into their classrooms. Teachers in Grade Two have selected a Problem of Practice in the area of Classroom Community with Responsive Classroom. Grade Five has selected a Problem of Practice in the area of Mathematics.

Grade Level Problems of Practice

Second Grade: Responsive classroom instructional strategies and resources to improve student engagement.

Fifth Grade: Differentiate instruction in the area of mathematics in order to reach all learners through the Investigations 3 Program.