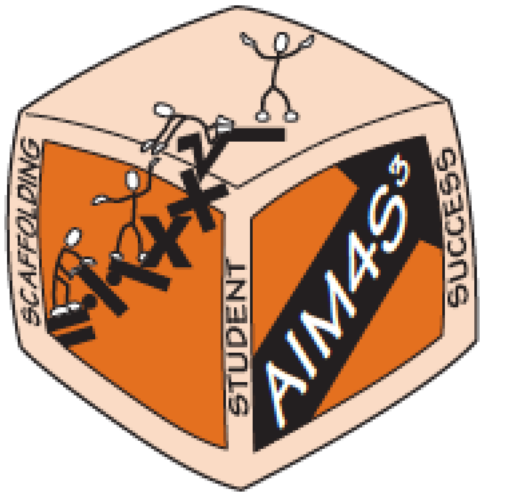
NMTEACH EDUCATOR EFFECTIVENESS SYSTEM AND AIM4S^3 TM: A BRIEF LOOK AT CLASSROOM PLANNING, INSTRUCTION AND THE FOUR DOMAINS

Dual Language Education of New Mexico
www.dlenm.org

NMTEACH AND AIM4S^3



During administrator trainings, we often hear that the Achievement Inspired Mathematics for Scaffolding Student Success Framework (AIM4S^3) supports teachers in meeting the high expectations of the four domains in the NMTEACH rubrics. Following are pictures and artifacts from classroom teachers showing AIM4S^3 planning and instruction in action to support language learners.

AIM4S^3 IN ACTION

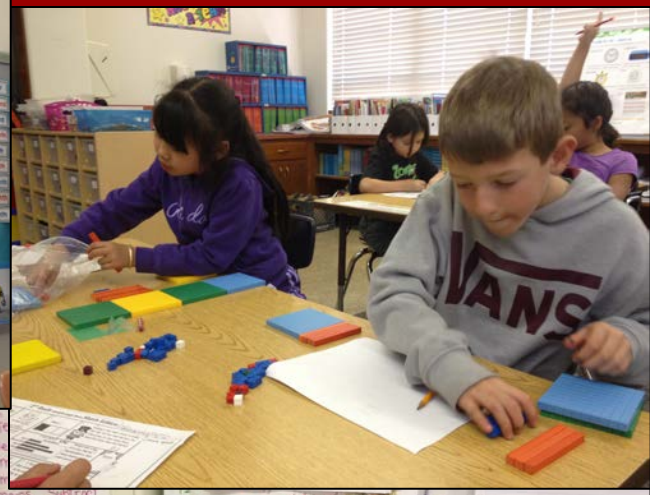
Teaching for Learning

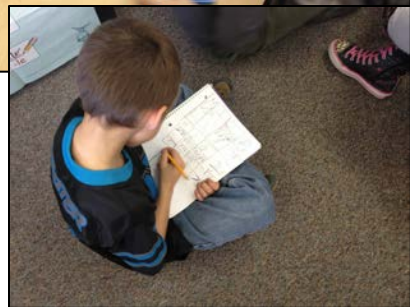
3B: • Scaffold for a deep understanding of concepts, using academic language

• Create opportunities for student-led discussion and debate of key concepts

Planning and Preparation

1B: Research-based practices, including sheltered and differentiated instructional strategies, with a variety of specially designed instructional materials





Planning and Preparation

1B: Learning activities that incorporate students' use of their first and second languages to make connections to real-world application and include learning activities that progress coherently, are research-based, and are relevant to students and the instructional/IEP goals

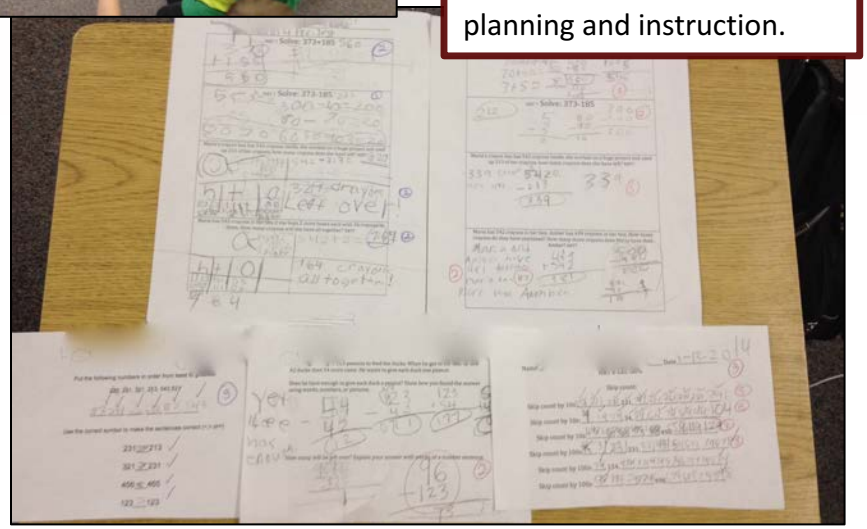
Creating an Environment for Learning

2B: Visuals, graphics, and/or technology is accessible to use and to adapt to advance learning and engage students at varying levels of academic content including English language proficiency

Planning and Preparation

1E: Provides strong evidence of using student achievement data to differentiate instruction, including the use of ACCESS scores to support and monitor the progress of ELs and to differentiate their instruction according to English language proficiency levels

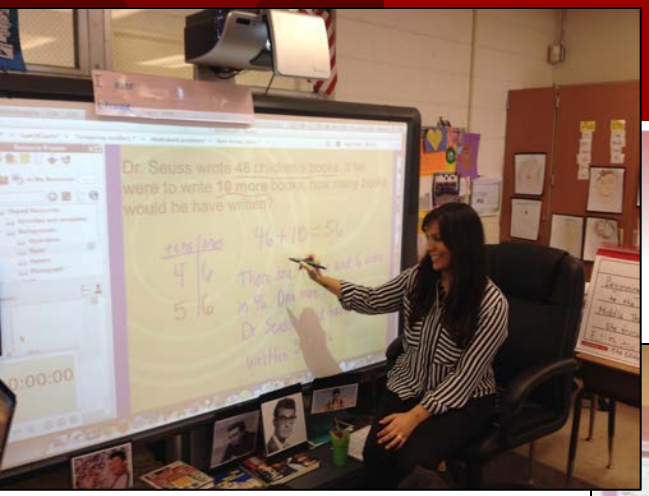
Second grade team tracks student progress using an Excel spreadsheet. This data is then used to inform planning and instruction.

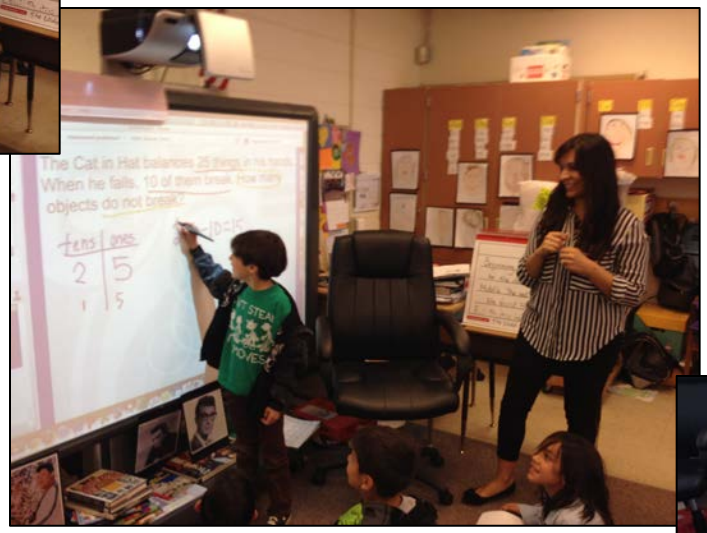


Teaching for Learning

3D: Support students in monitoring their progress with evidence-based strategies that include a combination of self and peer assessments

Teach, Model, Practice





First grade students learn to solve word problems during lessons carefully designed for gradual release of responsibility.

Teaching for Learning

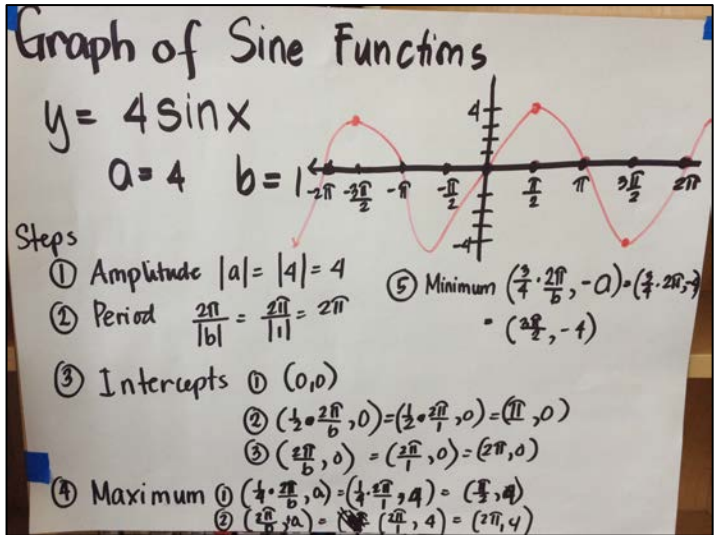
3B: • Scaffold for a deep understanding of concepts, using academic language

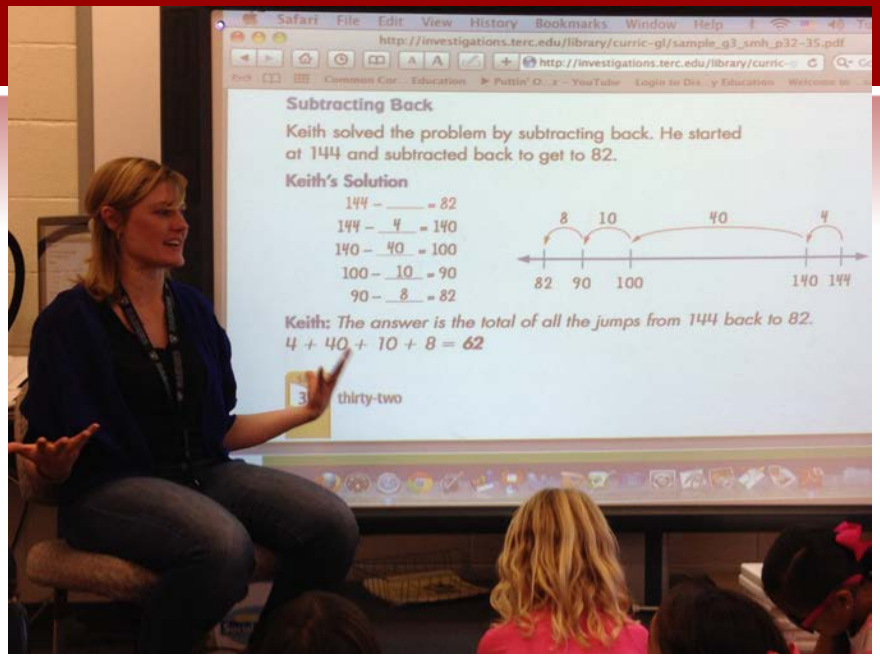
• Allow students to take ownership or to lead, ensuring that all voices are heard in classroom and group discussions

Making content clear and accessible

Teaching for Learning

3C: The teacher delivers lessons coherently with attention to scaffolding, pacing, sequencing, flexible grouping, student reflection, and closure





Planning and Preparation

1B: Learning activities that create explicit connections between previous learning and new concepts and develop skills for all learners

Flexible Grouping

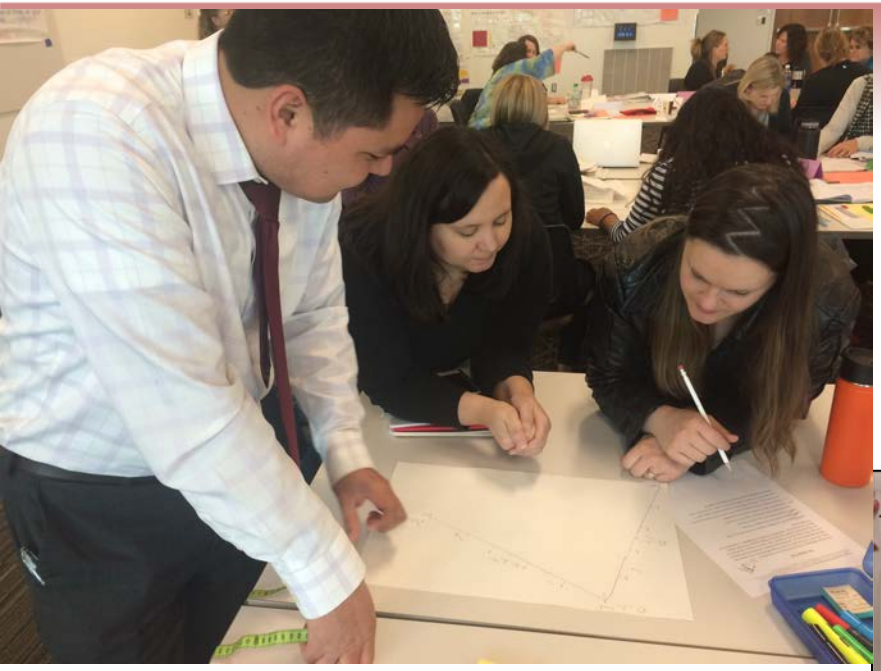
Planning and Preparation

1B: Challenging research-based learning tasks that are structured to progressively develop students' cognitive abilities and academic language

Teaching for Learning

3C: The teacher encourages students to negotiate meaning and clarify understanding with their peers, which may be supported using a language other than English

Intentional planning

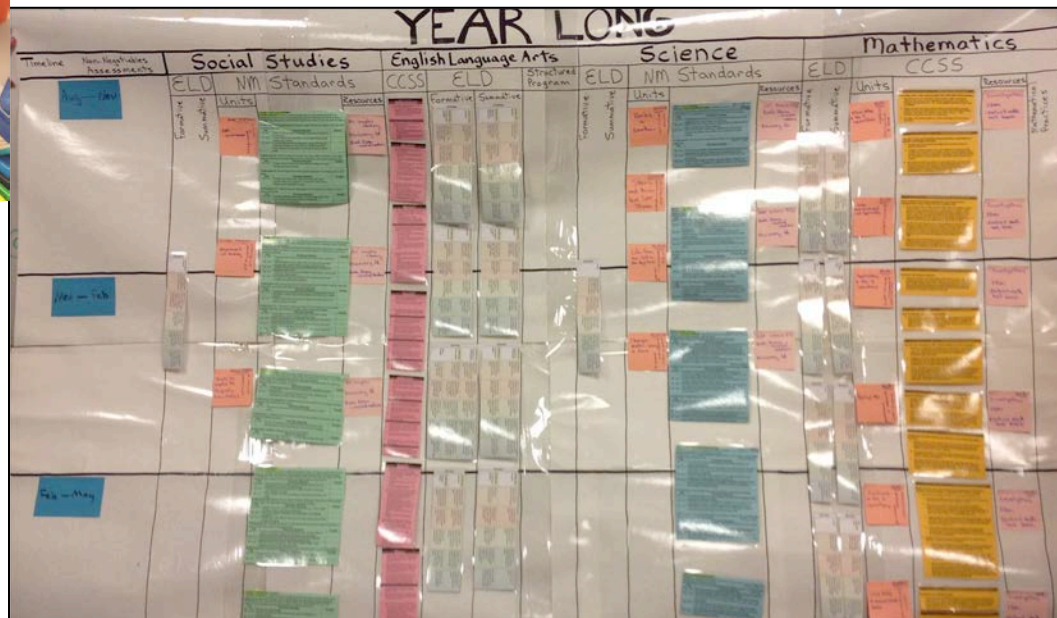


Planning and Preparation

1D: Creating lessons that reduce barriers, optimize levels of challenge and support, meet the needs of all learners, and increase access to grade-level curriculum

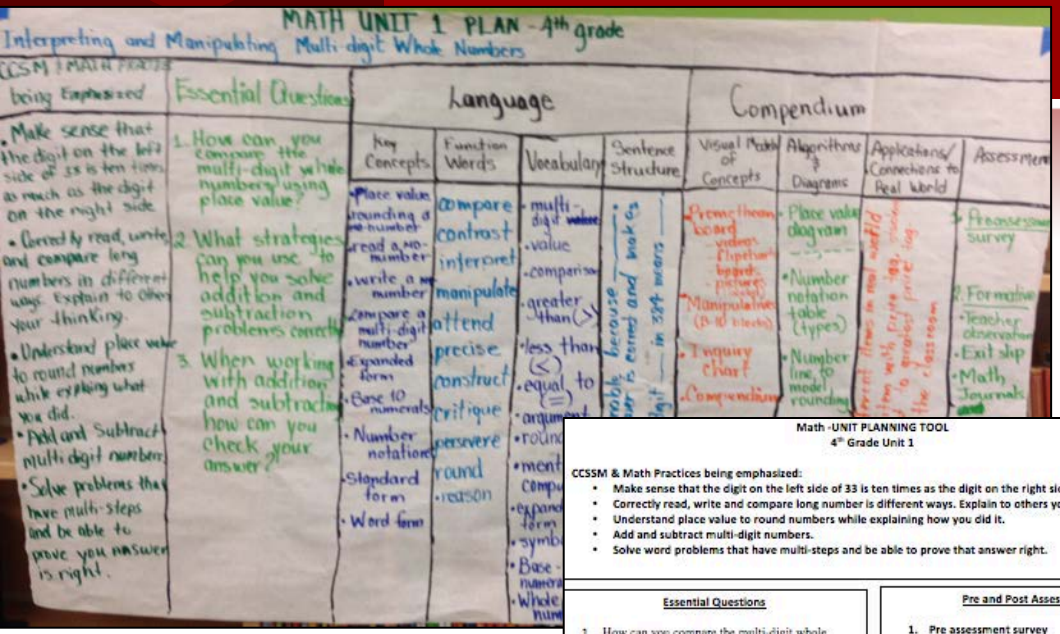
Professionalism

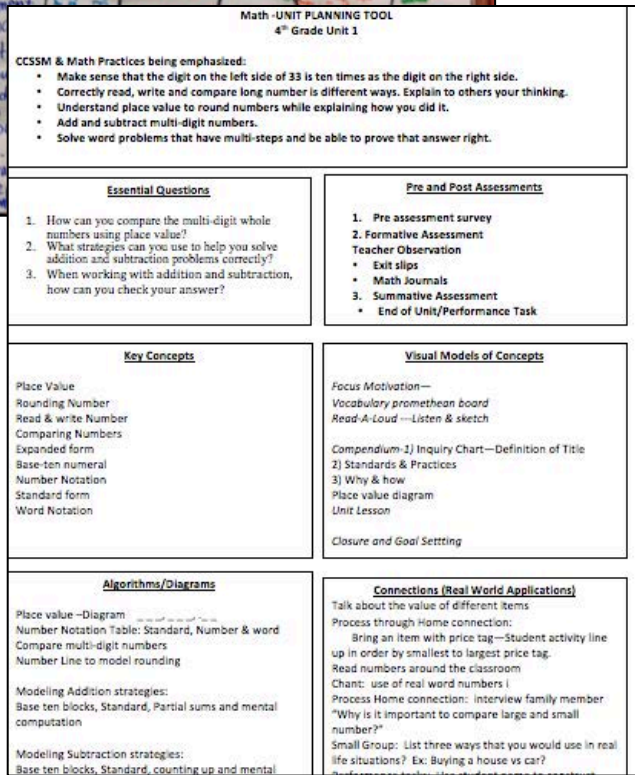
4C: Collaborates with colleagues to reflect on, and apply, the necessary modifications for instructional practices that address the academic and linguistic needs of all students



Unit planning targeting ELLs

During an AIM4S^3 Level I training, a fourth grade team plans their first unit of the year.





Math -UNIT PLANNING TOOL
4th Grade Unit 1

CCSSM & Math Practices being emphasized:

- Make sense that the digit on the left side of 33 is ten times as the digit on the right side.
- Correctly read, write and compare long number is different ways. Explain to others your thinking.
- Understand place value to round numbers while explaining how you did it.
- Add and subtract multi-digit numbers.
- Solve word problems that have multi-steps and be able to prove that answer right.

Essential Questions

1. How can you compare the multi-digit whole numbers using place value?
2. What strategies can you use to help you solve addition and subtraction problems correctly?
3. When working with addition and subtraction, how can you check your answer?

Pre and Post Assessments

1. **Pre assessment survey**
2. **Formative Assessment**

Teacher Observation

- **Exit slips**
- **Math Journals**

3. **Summative Assessment**
   - **End of Unit/Performance Task**

Key Concepts

Place Value
Rounding Number
Read & write Number
Comparing Numbers
Expanded form
Base-ten numeral
Number Notation
Standard form
Word Notation

Visual Models of Concepts

Focus Motivation—
Vocabulary promethean board
Read-A-Loud ---Listen & sketch

Compendium-1) Inquiry Chart—Definition of Title
2) Standards & Practices
3) Why & how
Place value diagram
Unit Lesson

Closure and Goal Settting

Algorithms/Diagrams

Place value --Diagram
Number Notation Table: Standard, Number & word
Compare multi-digit numbers
Number Line to model rounding

Modeling Addition strategies:
Base ten blocks, Standard, Partial sums and mental computation

Modeling Subtraction strategies:
Base ten blocks, Standard, counting up and mental

Connections (Real World Applications)

Talk about the value of different items
Process through Home connection:
Bring an item with price tag—Student activity line up in order by smallest to largest price tag.
Read numbers around the classroom
Chant: use of real word numbers i
Process Home connection: interview family member "Why is it important to compare large and small number?"
Small Group: List three ways that you would use in real life situations? Ex: Buying a house vs car?

Focus and Motivation

Present self and share personal story to make a connection to place value.
Listen & Respond in any way
Literacy /Read-A-Loud
- Build Background with labeled pictures for main concepts
- Geographic in context through pictures and maps

Informal student survey with thumbs up, sideways and down to inquiry "How much you like math?"
Chants
Songs
Video clips of numbers used in real world situations
PBS-games

Language Functions	Language Structures
Compare	
Contrast	_____ is greater/smaller than _____ because _____.
Interpret	My answer is reasonable because _____. I understand that the digit _____ in the number 384 means _____?
Manipulate	
Attend	
Precision	I know that my answer is correct and makes sense because_____?
Construct	
Critique	
Persevere	
Rounding	The number _____ rounded to the nearest _____ is _____

Vocabulary

--Multi-digit Number
--Digit ---Estimation ---Base 10 numerals ----expanded form
-Value ---Base 10 Number Standard form Symbols
--Comparison) ----number names Mental computation
-- > greater than ----Whole Number
< less than
--Argument = Equal
--Reasoning symbol
--Precision Rounding

Planning and Preparation

1C: Align rigorous instructional processes and learning activities to all NM adopted standards

Collaborating with Colleagues and Families

Professionalism

4B: Shares knowledge of, and proactively seeks, opportunities to learn more about techniques and strategies to work with all students, which may include cultural perspectives and strategies for sheltering academic language and research-based strategies that address student learning

Fourth grader shares with her mom what they are learning in math during parent teacher conferences.

Professionalism

4A: Communicates with families in a manner that is culturally sensitive and responsive and affirms the positive worth of the students and families