

Teach **math** so  
they **want more.**

Learn  
how with  
Tom Schersten



*Foundation Training  
& Implementation Support*

## **Place Value**

*and the*

## **Common Core**

*Grades 2, 3, 4*

### **What Will Teachers Learn in Training?**

- How to teach Place Value so that students really UNDERSTAND;
- How to stop causing Place Value confusion *unwittingly*;
- How to engage students in active discourse in the Common Core classroom;
- How to increase number fluency in all learners;
- How to use a student's developmental stage to *increase* learning;
- How to teach understanding and accuracy in mental and written math;
- How to be free of behavior issues when using manipulatives;
- How to embed easy-to-use Place Value lessons immediately.

**What Happens When Students Don't Understand Place Value?** Place Value is the keystone of arithmetic/algebraic patterns. When students don't understand Place Value they struggle in math and science, score lower on standardized tests, and become candidates for math phobia.

**Why Are So Many Students Confused About Place Value?** Despite the Common Core, many teachers are still using certain traditional instructional methods which mislead students about the real properties of Place Value.

**How Will This Training Help Teachers Make an Immediate Difference?** Training focuses on exciting hands-on, minds-on, Place Value lessons and activities that are ready for the Common Core math and science classroom.

**Target Audience for Training:** Grades 2, 3, 4 classroom teachers, all educators who support math and science learning, and their administrators.

**Training for Sustainability:** We offer sustainability by providing research-based foundation training followed by implementation support.

CRISTIA



LESHER ASSOCIATES

Staff Development and Consulting

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### **Foundation Training Options** (select one or both):

- **Place Value Math Residency, School-Embedded, Grades 2, 3, 4**
  - 3-5 days
  - Includes:
    - Demonstration Teaching
    - Teacher Training
    - Extensive training materials
    - Family Math Night option
  
- **Place Value Summer Institute, In-District, Grades 2, 3, 4**
  - 3-5 days
  - Includes:
    - Teacher Training
    - Extensive training materials
    - Demonstration Teaching option, if students are available

### **Implementation Support:**

- **First Year Implementation Support**
  - Email and phone support
  - Monthly or bi-monthly onsite support:
    - Coaching
    - Teaching-With (teachers plan and teach lessons with Tom Schersten)
    - Demonstration Lessons as needed
    - Observations as desired
    - Small-group trainings on targeted topics
    - Supplemental training materials
    - Trouble-shooting around specific learners and or classes, including Coaching, Demonstration Teaching, and Teaching-With
    - Special Education training and Demonstration Teaching
    - Tips on implementation for Administration
  
- **Second and Third Year Implementation Support:**
  - Email and phone support
  - Onsite support planned with client, based on teacher needs and student performance
  - Training for new staff

**Tom's Videos on Place Value:** Watch an example of Tom Schersten's Place Value videos [here](#).

### **Tom's Twelve Principles of Place Value Training:**

1. We use mathematically accurate language and instruction, Common Core philosophy, and interesting, fun lessons.
  
2. We eliminate from our teaching those traditional practices by which teachers unwittingly cause Place Value confusion.
  
3. With sound Place Value instruction, our students develop number sense fluency. Thus, they more easily understand estimation, rounding, mental computation, and how to assess the reasonableness of results.

4. We engage students in active mathematical discourse, using Common Core math practices. We resist being the “sage on the stage.” Rather, we are the “guide on the side.”
5. We teach our students what algorithms mean, and how and why they work. Because they understand them, our students are able to memorize and use them successfully.
6. Instead of traditional worksheets, we use highly interesting, concrete math games and activities that are a more powerful avenue of mathematical learning. This accelerates understanding of Place Value and the memorization of number facts in our students.
7. We continually gather formative assessment data during hands-on activities and discussions launched by concrete experiences.
8. We differentiate our Place Value instruction. We know and teach to the math ability, learning style, and developmental stage of each student. Since students in Grades 2 - 4 are at Piaget’s concrete operational stage of development, we always start by teaching concretely.
9. We move our students into written math using the Concrete-to-Written-Math Sequence®, a classroom-proven, step-by-step method.
10. We successfully teach students to make good behavior choices when learning with concrete materials.
11. Our students look forward to math because they succeed and are satisfyingly challenged. We accomplish this with great teaching, careful listening and responding, and a little humor.
12. All current math and science texts and curricula are complemented and enhanced by this approach to Place Value instruction.

### **Training on Additional Math Topics, Grades PreK-12**

