

National Council of Teachers of Mathematics

Annual Conference New Orleans, LA.

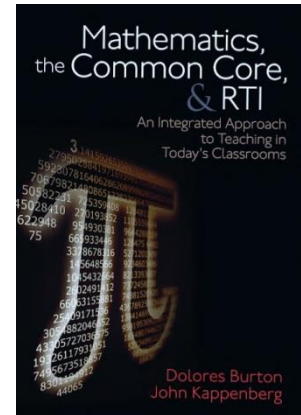
542- Implementing Common Core Mathematics and RtI in Your Classroom

Friday, April 11, 2014: 3:30 PM-4:30 PM

Grand Ballroom A (Hilton)

Dolores T. Burton

Dr.Dolores.Burton@gmail.com



Sheltered Instruction Observational Protocol Checklist

Lesson Objectives

- Math
- Language

Building Background

- Prior in-school learning
- Out-of-school knowledge of mathematics

Instructional Scaffolding

- Modeling mathematical procedures
- Modeling academic language
- Guided practice of new math learning
- Independent practice

Grouping Scaffolding

- Whole class
- Small group
- Pair work
- Independent work

Language and Mathematics Content Integration

- Listening
- Speaking
- Reading
- Writing

Practice and Application

- Hands-on practice
- Personally and culturally relevant application
- High level of engagement

Assessment

- Formative: individual, group
- Summative
- Written
- Oral
- Electronic

Source: In Burton and Kappenberg (2013) Adapted from Echevarria, Vogt, & Short (2012).

Implementing Common Core Mathematics and RtI in Your Classroom

Some guiding principles for Tier 1 interventions are:

1. Identify a clear goal for each curriculum area: mathematics language and concepts.
2. Identify any key vocabulary that may have multiple meanings (social vs. academic) and provide explicit instruction.
3. Model appropriate mathematics vocabulary during discussions with the class and the individual student.
4. Identify prior experiences as they relate to the students' culture and pose problems in familiar contexts.
5. Provide visuals both for instruction and student responses (use manipulative materials whenever possible).
6. Avoid using symbols and abbreviations unless the student has a vocabulary chart with the abbreviation or symbol connected to the word it represents.
7. New vocabulary should have a minimum of six varied exposures during a lesson and ideally a total of 30 or more exposures during the following month (Capps & Pickreign, 1993)
8. Research-based, carefully structured, and highly engaging.

(Burton & Kappenberg, 2013)

Common Core Content 4.MD.2

Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. (CCSSO, 2010 para. 2)

Math Think Alouds reference: <http://education.umn.edu/NCEO/OnlinePubs/ELLsDis16/>

Source:

Burton, D. T., & Kappenberg, J. (2013). *Mathematics, the Common Core and RtI: An integrated approach to teaching in today's classrooms*. Thousand Oaks, CA: Corwin Press.

Burton, D. T., & Kappenberg, J. (2011). *The complete guide to RtI: An implementation toolkit*. Thousand Oaks, CA: Corwin Press.

For more information access the trailer at <http://www.youtube.com/watch?v=Qa03Uj2JGdo> or email dr.dolores.burton@gmail.com or kappenberg@aol.com.