

Math Programming at Stonegate Elementary School

In Pursuit of Equity and Excellence

PTA Meeting
Tuesday, February 2, 2010

Outcomes

By the end of the session, participants will have learned:

- How math programming has evolved to promote equity and excellence



- Strategies that have assisted in the overall math success within each subgroup

Where We Were

Math programming in 2006-2007:

- Students were placed in math classes based on pre-assessment data, placement tests, and end-of-year math reports
- 2 on-grade level classes and 1 accelerated class at each grade
- 2 Math 6 courses
- Kindergarten formed accelerated class at beginning of 2nd semester
- 60-minute math block



Where We Were

Math programming in 2007-2008:

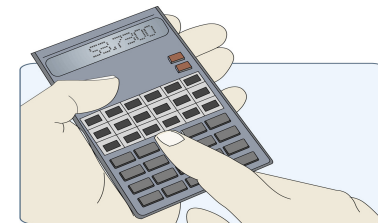
- **Began collecting additional data points**
- **Implemented formal data chats on math**
- 2 on-grade level classes and 1 accelerated class at each grade
- **1 Math 6 course; reviewed enrollment and completion data, and placement criteria**
- Kindergarten formed accelerated class at beginning of 2nd semester
- 60-minute math block



Where We Were

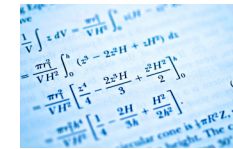
Math programming in 2008-2009:

- **Developed and implemented data grids, based on Sherwood project**
- **Considered multiple data points for placement**
- **Focused on organization of math instructional block**
- **1 on-grade level class, 1 compacted class, and 1 above-grade level class at each grade**
- **2 Math 6 courses**
- Kindergarten formed accelerated class at beginning of 2nd semester
- 60-minute math block



Where We Are

Math programming in 2009-2010:



- Continued use of data grids
- Considered multiple data points for placement
- Focused on organization of math instructional block
- **Developed look-fors for formal walk-through**
- 1 on-grade level class, 1 compacted class, and 1 above-grade level class at each grade
- **1 Math 6 course, 1 Math 6/7, 1 Math 7, and 1 Math 5**
- **Kindergarten compacts K/1 curriculum and remains heterogeneous throughout year**
- **70-minute math block**

School Improvement Goal

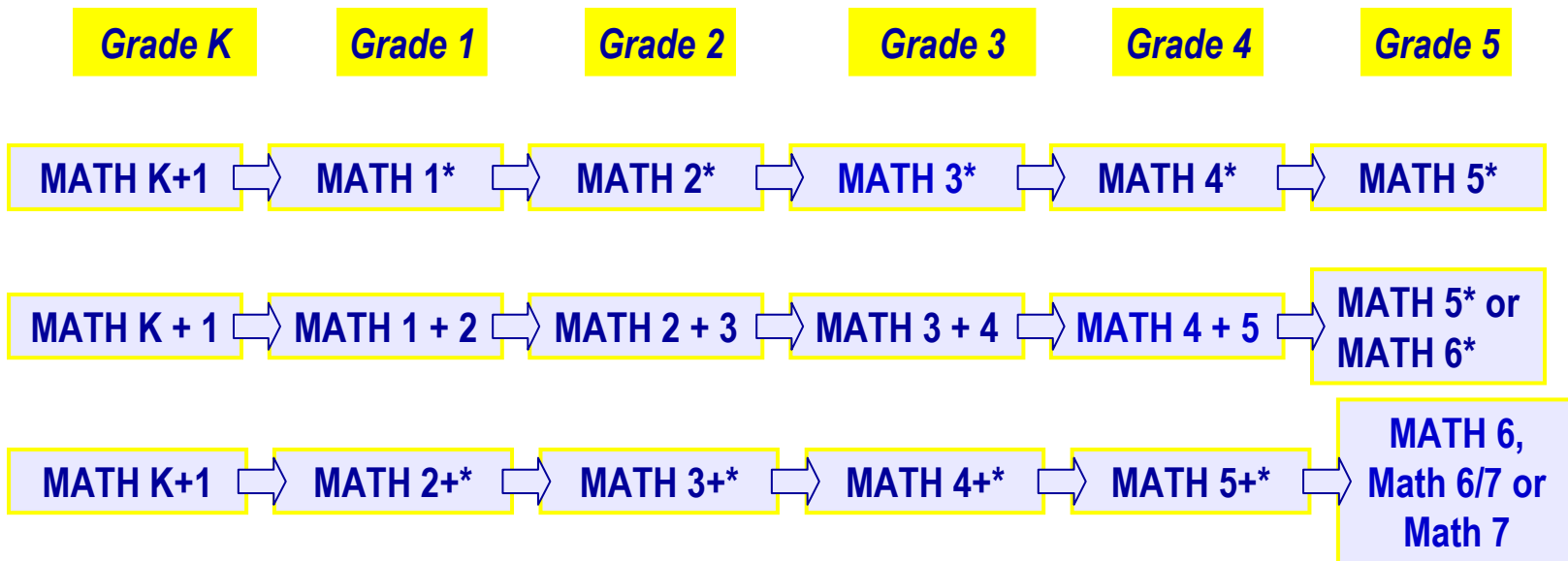
Exceed 2010 AMO target of 79.4% in math, for all subgroups



- Increase FARMS performance by at least 2%
- Increase Special Education performance by at least 10%
- Increase LEP performance by at least 12%

Exceed the 2010 performance target of Math 6 or higher participation, with at least 45% of students enrolled in Math 6 or higher

Math Pathways at Stonegate 2009-2010



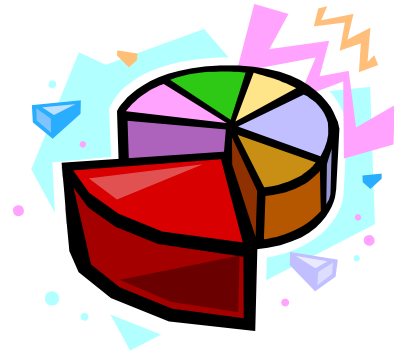
•Indicates student is working on above grade level indicators

Grouping: What It Looks Like

	On What we've been doing Continued	Above or Compacted What we've been doing Continued	Above (+) New for 08-09 Continued 2009-2010
Guide	Students are instructed using the on-grade level instructional guide.	Students are instructed using the on-grade level instructional guide.	Students are instructed using the above-grade level instructional guide.
Assessment	Students are assessed using the on-grade level unit assessment.	Students are assessed using the on-grade level unit assessment.	Students are assessed using the above-grade level unit assessment.
Instruction	Students are exposed to above grade level indicators and specifically taught above-grade level indicators when appropriate.	Instruction is compacted. Students are taught both the on and the above-grade level indicators.	Students are taught the above-grade level indicators and are exposed to the next grade level indicators as appropriate.
Expectations	Students are expected to demonstrate mastery of the on-grade level indicators. Students will have the opportunity and will be encouraged to attempt ALL above grade level assessment items on the unit assessment.	Students are expected to demonstrate mastery of the on-grade level indicators and 80% or more of the above-grade level indicators.	Students are expected to demonstrate mastery of the above grade level indicators. Students will have the opportunity to attempt the next grade level assessment items on the unit assessment.

Best Practices

- 70-minute math block, new for 2009-2010
- Vertical planning
- *Small group instruction with use of differentiated stations*
- *Data collection and monitoring*
- Feedback on unit assessment reports
- Data chats with focus on strands
- Intervention support
- Before and after-school programming
- *Proactive communication with families*



Criteria for Placement: Grouping and Monitoring

Prior to grouping, teachers in grades 1-5 analyze a math articulation worksheet that reviews:

- the students' end-of-year math performance of the unit assessments
- the students' report card data
- the students' performance on standardized testing, including the TN2 and the MSA
- the students' performance on 2 specific math strands: number relationships/computation and algebra
- teacher recommendations
- pre-assessment data for on grade level indicators

Data Grids: Grouping and Monitoring

- Based on Sherwood data grids
- Supports grade level articulation and grouping practices
- Articulation process begins with team leaders
- Teachers and staff members focus on individual student performance data
- Placement waiver



Small Group Instruction and Stations

- Math instructional block
 - Warm up
 - Whole group
 - Small group and re-teaching
 - Guided practice
 - Closure and assessment
- Promoting differentiated stations that encourage equity and address a variety of learning styles; for example,
 - Teaching
 - Practice Plaza
 - Project Place
 - Mr. Fuddle
 - Anchor activity

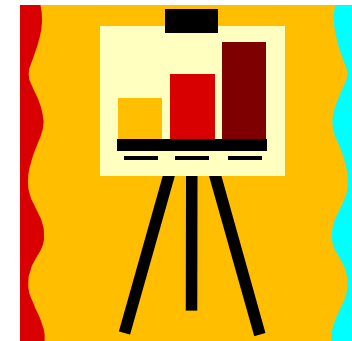


Small Group Instruction and Stations

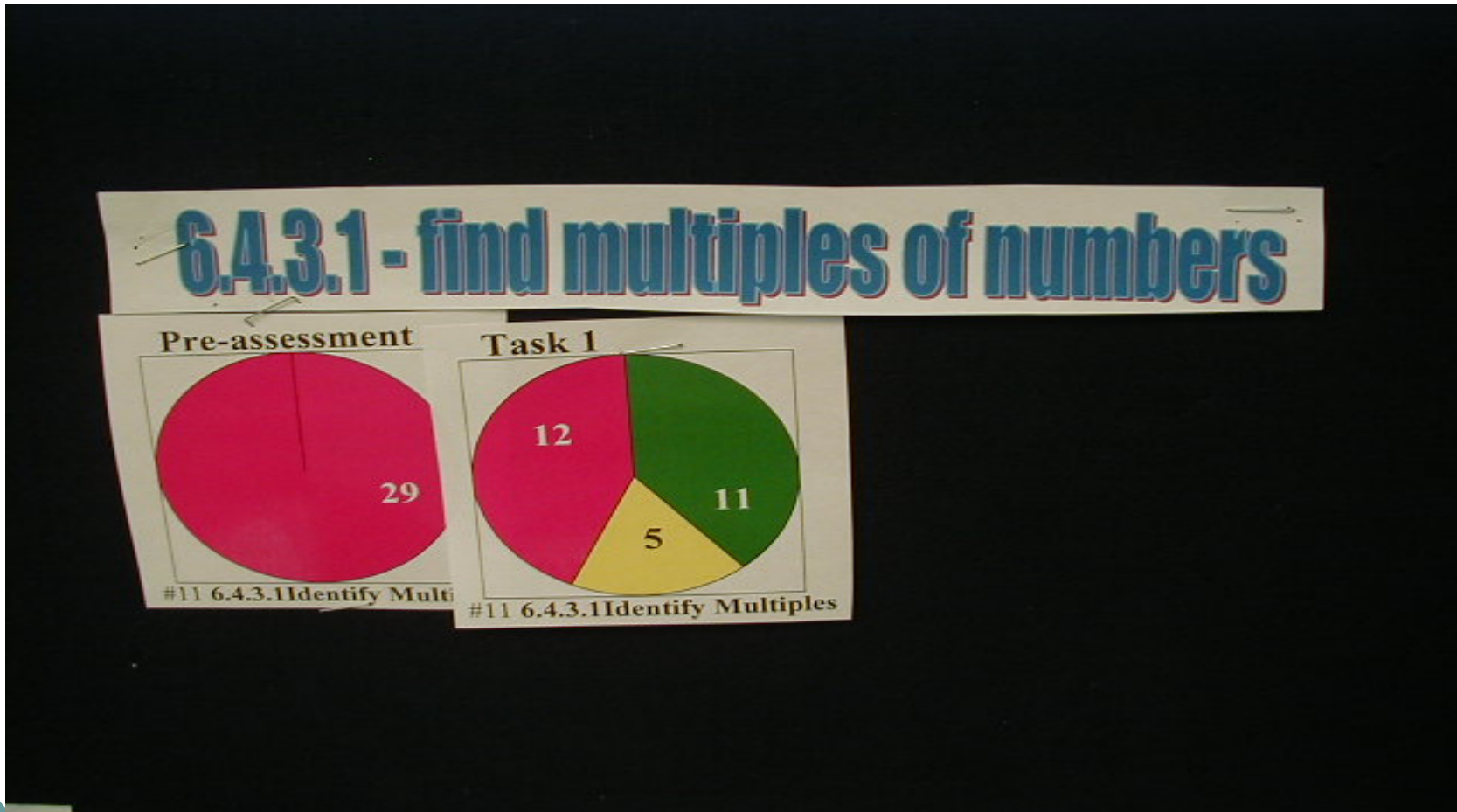
- Management of instructional block

- Use of daily data

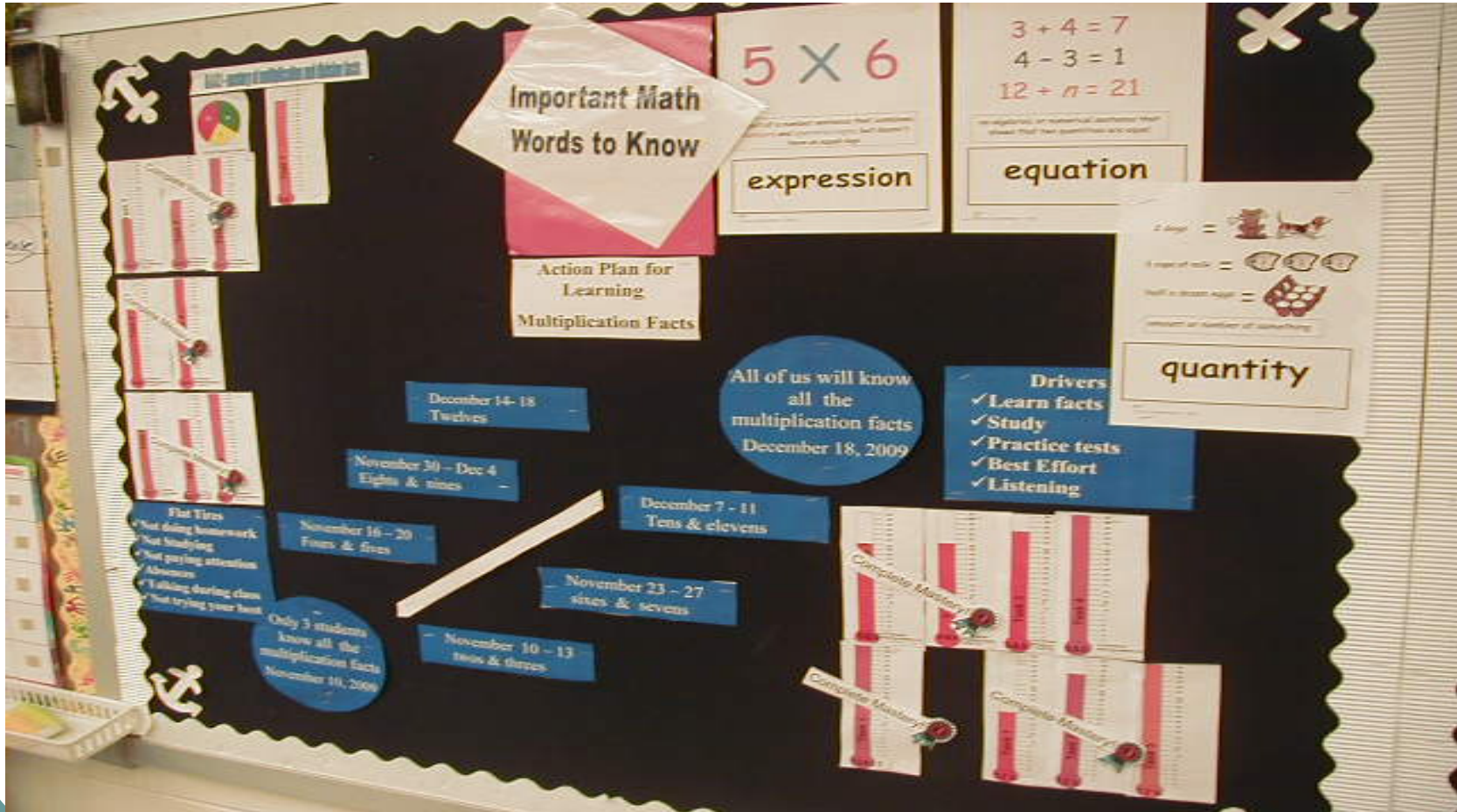
- Data wall
- Data notebooks
- Setting instructional purpose with relevant data



Example of Classroom Data



Example of Vocabulary and Classroom Data Wall



Communication and Support for Families

- School-wide practices

- Math links on website; many thanks to Oakland Terrace
- Parent newsletters per unit
- Grade level newsletters
- Math Night
- Bi-weekly Principal's Newsletter with curricular focus
- Principal's Coffee



Communication and Support for Families

- Teacher practices include:
 - Instructional PowerPoint presentations shared through mass emailing—connecting school instruction and home
 - Ongoing indicator updates via distribution list
 - Unit review packets
 - Re-teaching workshops during lunch and recess
 - Conferences to review unit assessments

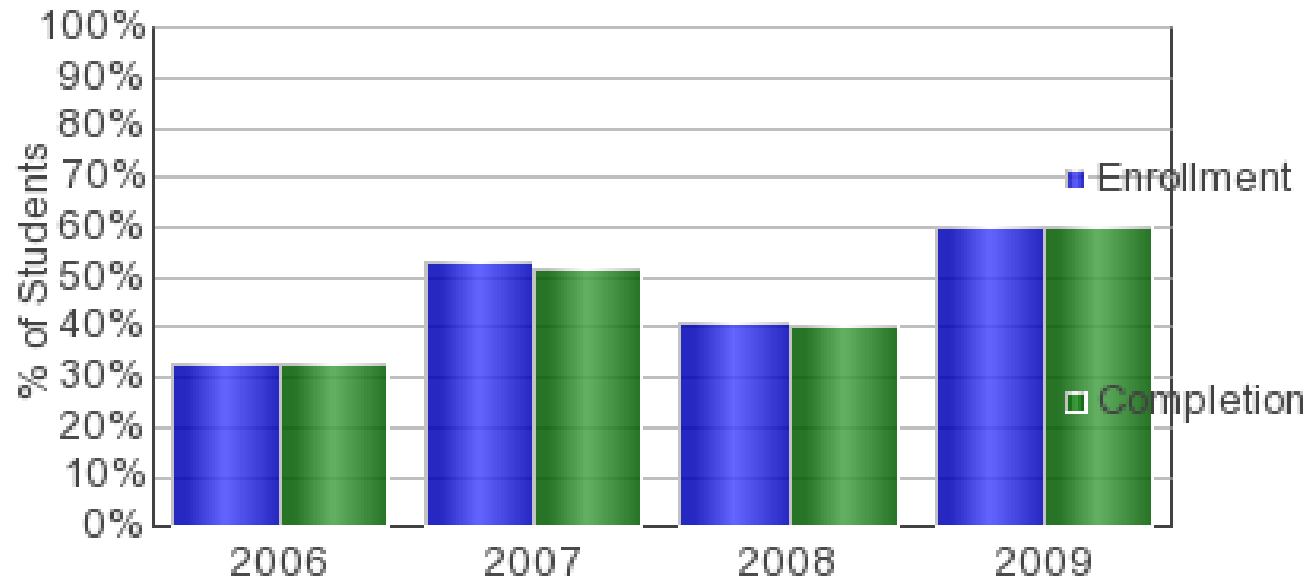


Data: Subgroup Performance

Subgroup Title	Percent Proficient (#) 2004	Percent Proficient (#) 2005	Percent Proficient (#) 2006	Percent Proficient (#) 2007	Percent Proficient (#) 2008	Percent Proficient (#) 2009
All Students	86.0 (166)	85.2 (196)	90.0 (199)	89.3 (176)	85.8 (187)	91.6 (196)
American Indian	NA	NA	NA	NA	100 (1)	NA
Asian	86.8 (33)	90.9 (40)	97.2 (35)	96.8 (30)	93.8 (30)	96.8 (30)
African American	81.2 (56)	69.3 (52)	85.3 (64)	83.3 (55)	79.7 (59)	91.3 (63)
White	90.0 (72)	95.8 (91)	92.4 (85)	93.9 (77)	91.0 (81)	93.3 (84)
Hispanic	83.3 (5)	81.3 (13)	82.4 (14)	76.5 (13)	72.7 (16)	79.2 (19)
FARMS	62.5 (10)	57.1 (12)	57.1 (8)	80.0 (16)	60.6 (20)	79.4 (27)
Special Education	46.4 (13)	48.5 (16)	65.6 (21)	54.2 (13)	50.0 (18)	77.1 (27)
Limited English Prof.	NA	50.0 (4)	66.7 (4)	40.0 (2)	55.6 (5)	66.7 (6)

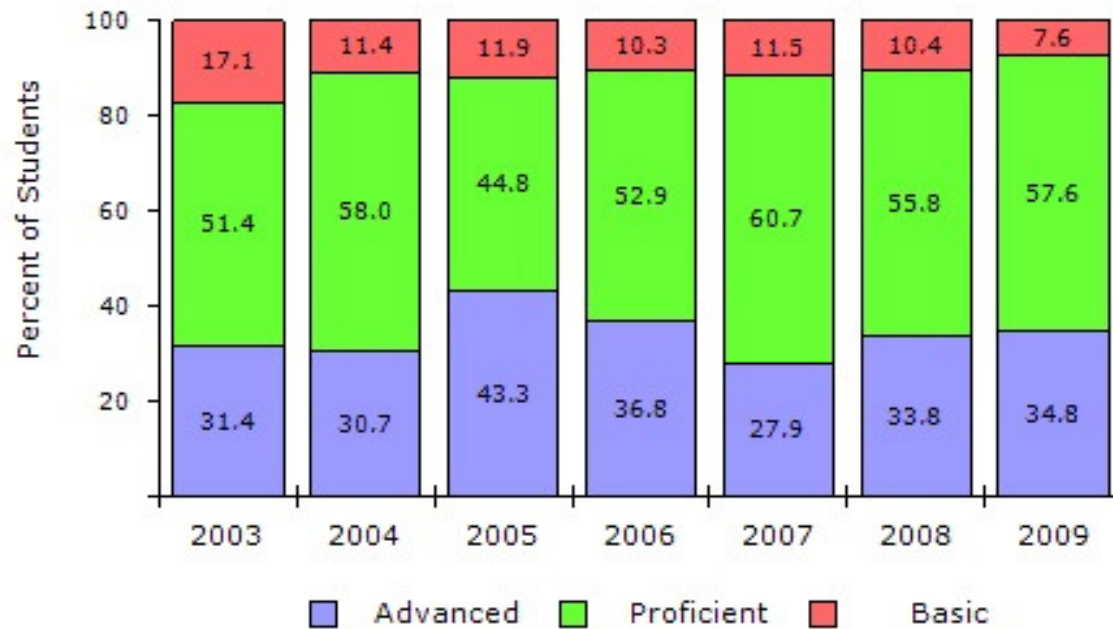
Data: 5th Grade in Math 6 or higher

Enrollment & Completion



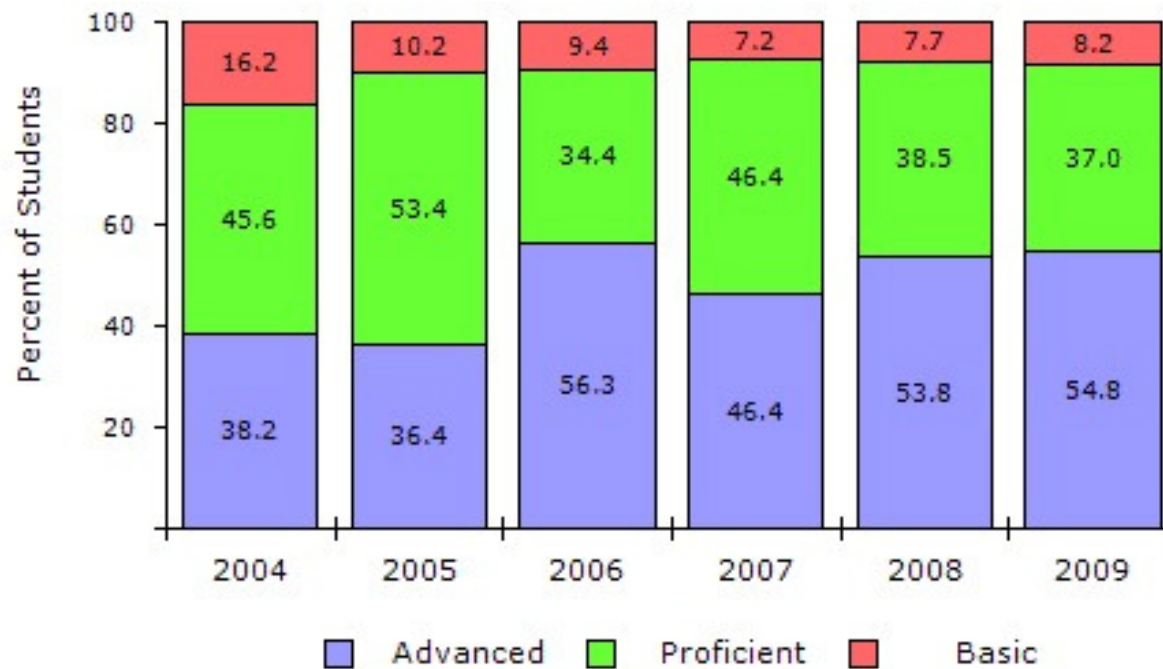
Data

MSA Proficiency Levels - Grade 3 - Mathematics



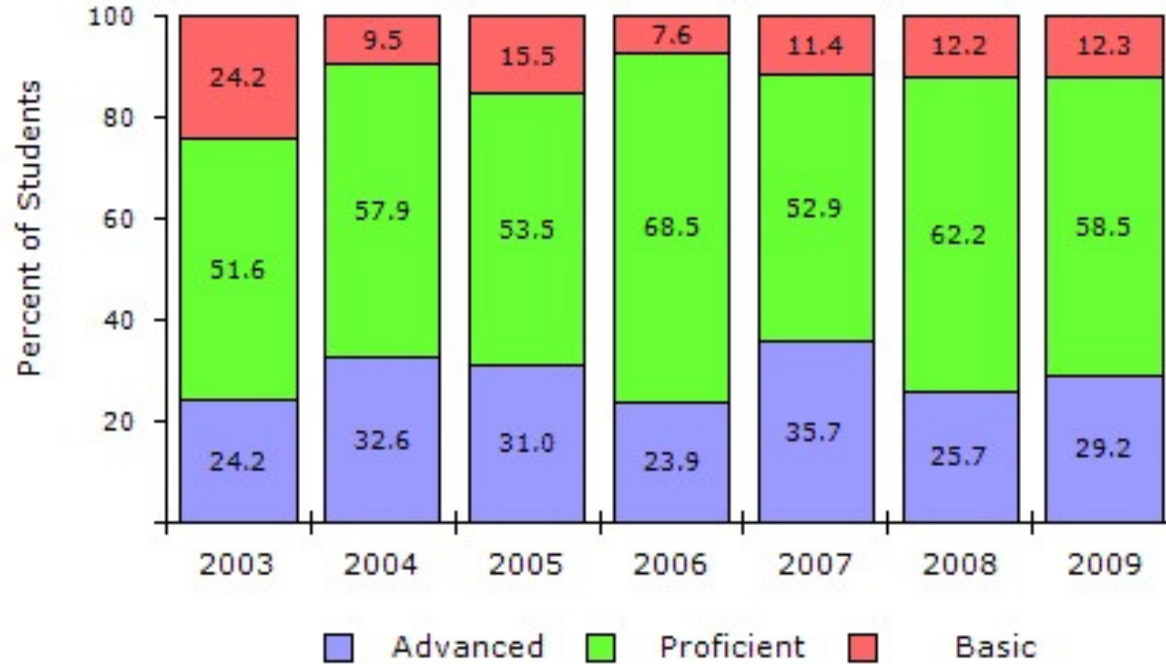
Data

MSA Proficiency Levels - Grade 4 - Mathematics



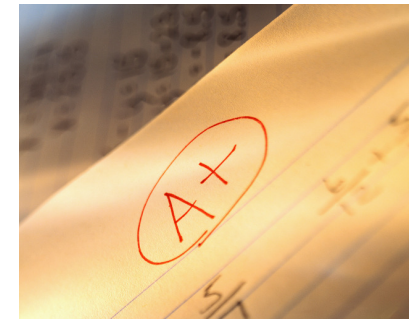
Data

MSA Proficiency Levels - Grade 5 - Mathematics



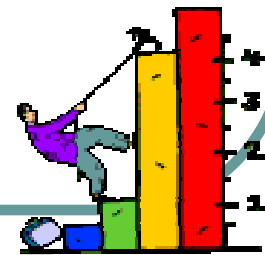
Informal Data Shows Retention of Content and Skills

- Increased success in number sense development
- Pre-assessment scores stronger and students are showing more consistent mastery
- Inclusion of Math 7 course
 - As evidenced by
 - Data chats
 - Pre-assessment test scores
 - Kid Talk notes
 - Data grids



Did We Meet Our 2009 Goals?

- Exceeded 2009 AMO target of 74.2 in math, for all subgroups
- Increased Special Education performance by 24%
- Increased ELL performance by 15%
- Increased FARMS performance by 10%
- Increased percentage of Hispanic students in Grade 5 enrolled in Math 6 by 50%



Questions

Please place questions in the Parking Lot.
They will be addressed
in the next issue of the Stonegate Splash.