National Training Network

Methodology Research

Baltimore County
Maryland
2006–2009

Algebraic Thinking Results for Baltimore County Schools 2006 – 2009

Implementation: Baltimore County Public Schools began working with National Training Network to implement the Algebraic Thinking curriculum in grades 6 and 7 in the summer of 2006 and grade 8 in the summer of 2007.

Training: Teachers were trained prior to the start of the school year and follow up trainings were offered each subsequent summer through 2009 for new teachers to Algebraic Thinking.

Support: National Training Network provided onsite coaches in each of the middle schools in Baltimore County on an average of two days per month per school.

Placement/Course Eligibility: Students were placed in Algebraic Thinking based on the previous year's MSA scores. All students who scored at Basic level on the previous year's MSA were recommended for placement in Algebraic Thinking; however, each school determined the cut-off score for placement into Algebraic Thinking for students who scored at Proficient levels on the previous year's MSA.

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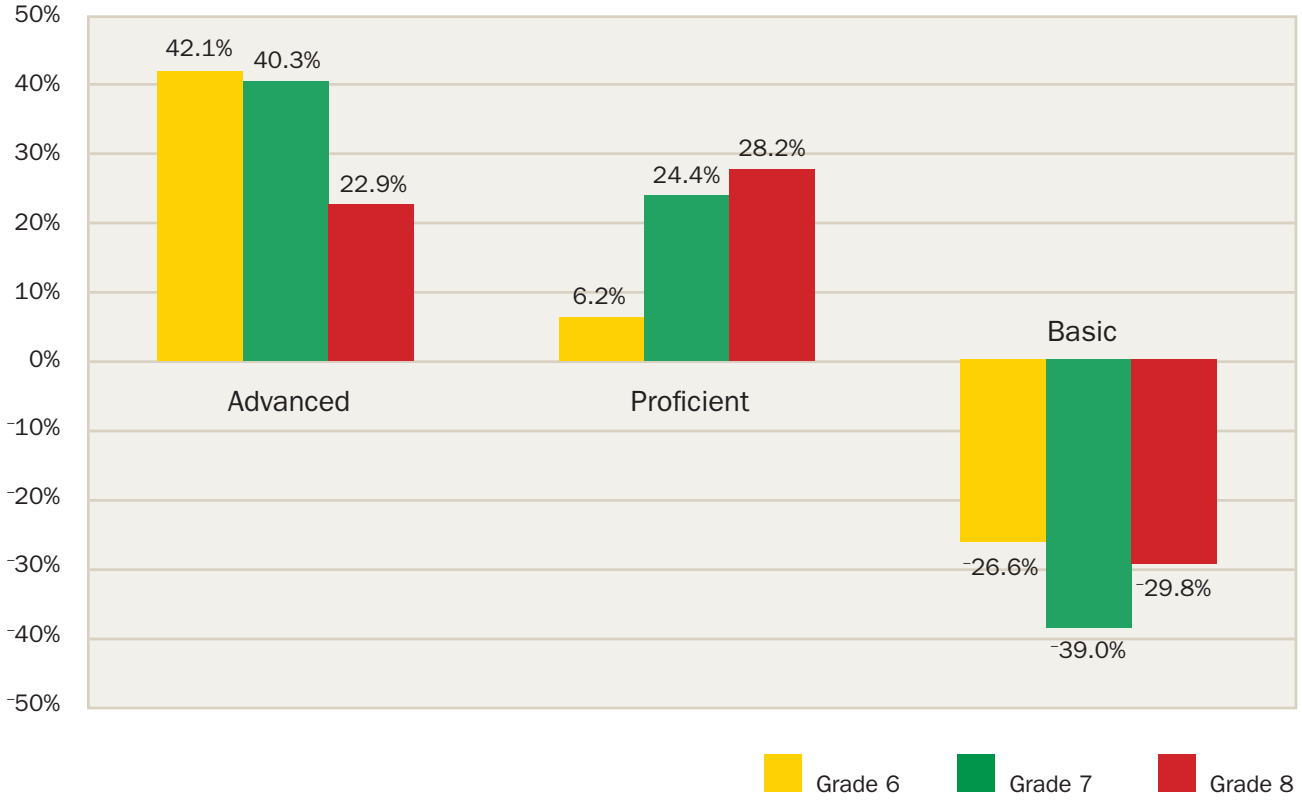
Percent of Change – Baltimore County
MSA Results – Grades 6, 7, and 8
2006 – 2009



The graph illustrates the percent of change for students in grade 6, 7, & 8 in Baltimore between 2006 and 2009. Note that the percent of change of students scoring at the Lowest Level (Basic) decreased at 6th grade by **-26.6%**; at 7th grade by **-39.0%**; at 8th grade by **-29.8%**. Whereas, correspondingly, at the Grade Level (Proficient) increased at 6th grade by **6.2%**; at 7th grade by **24.4%**; at 8th grade by **28.2%**. Of even more note, the Highest Level (Advanced) increased at 6th grade by **42.1%**; at 7th grade by **40.3%**; at 8th grade by **22.9%**.

*Data collected from Maryland state website: http://mdreportcard.org/

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Algebraic Thinking Results for Baltimore County Schools 2006 – 2009

MSA Levels - Grades 6 - Mathematics - Percent			
	Advanced	**Proficient**	**Basic**
2006 – NON AT	15.9	47.9	36.1
2007 – AT–Coaching	18.9	47.5	33.6
2008 – AT–Coaching	27.5	47.0	25.5
2009 – AT–Coaching	22.6	50.9	26.5
Percent of Change from 2006 – 2009	**42.1%**	**6.2%**	**-26.6%**

MSA Levels - Grades 7 - Mathematics - Percent			
	Advanced	**Proficient**	**Basic**
2006 – NON AT	14.4	43.5	42.1
2007 – AT–Coaching	14.6	43.6	41.8
2008 – AT–Coaching	16.9	49.0	34.0
2009 – AT–Coaching	20.2	54.1	25.7
Percent of Change from 2006 – 2009	**40.3%**	**24.4%**	**-39.0%**

MSA Levels - Grades 8 - Mathematics - Percent			
	Advanced	**Proficient**	**Basic**
2006 – NON AT	21.4	35.4	43.2
2007 – NON AT	21.4	31.9	46.7
2008 – AT–Coaching	24.4	36.0	39.6
2009 – AT–Coaching	26.3	40.9	32.8
Percent of Change from 2007 – 2009	**22.9%**	**28.2%**	**-29.8%**

The three tables above show the percent of students who scored Basic, Proficient, and Advanced in grades 6 – 8 for the years 2006 – 2009. The year 2006 is provided as a base year for 6th and 7th grade students who entered Algebraic Thinking in the 2006 – 2007 school year – 8th grade students entered in the 2007 – 2008 school year. The blue and orange boxes represent the percent of change. Again, note that the percent of change of students scoring at the Basic level decreased significantly across grade levels; whereas, the Proficient and Advanced levels increased significantly. Of particular interest is the increase in the Advanced levels, indicating the rigor of the Algebraic Thinking curriculum.

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