



National Training Network

Methodology Research

San Ysidro Schools
California
2005–2008

Algebraic Thinking Results for San Ysidro Schools 2005 – 2008

Implementation: San Ysidro Schools began working with National Training Network to implement the Algebraic Thinking curriculum in the summer of 2005. San Ysidro had the highest poverty rate in San Diego County, more than 95% of their students at free and reduced lunch, and was 80% non English Speaking.

Training: Training took place from September 26 – 28 in 2005 with implementation beginning in October of 2005; for the 2006 – 2007 school year, training sessions were held during a summer training held July 17 – 21, 2006. During the 2007 – 2008 school year, training sessions were held during the school year.

Support: National Training Network provided onsite coaches in each of the elementary school sites in San Ysidro, California on an average of one day per month during the 2005 – 2006 school year; in 2006 – 2007, onsite coaches were provided in each of the elementary and the middle school sites on an average of one day per month; in 2007 – 2008, onsite coaches were provided in each of the elementary and the middle school sites on an average of two days per month.

Placement/Course Eligibility: All students in the 5th grade at Beyer Elementary School were placed in Algebraic Thinking due to the high school failure rate on the CST. The large majority of these students continued Algebraic Thinking Part I and Part II at San Ysidro Middle School in grades 6 and 7, respectively.

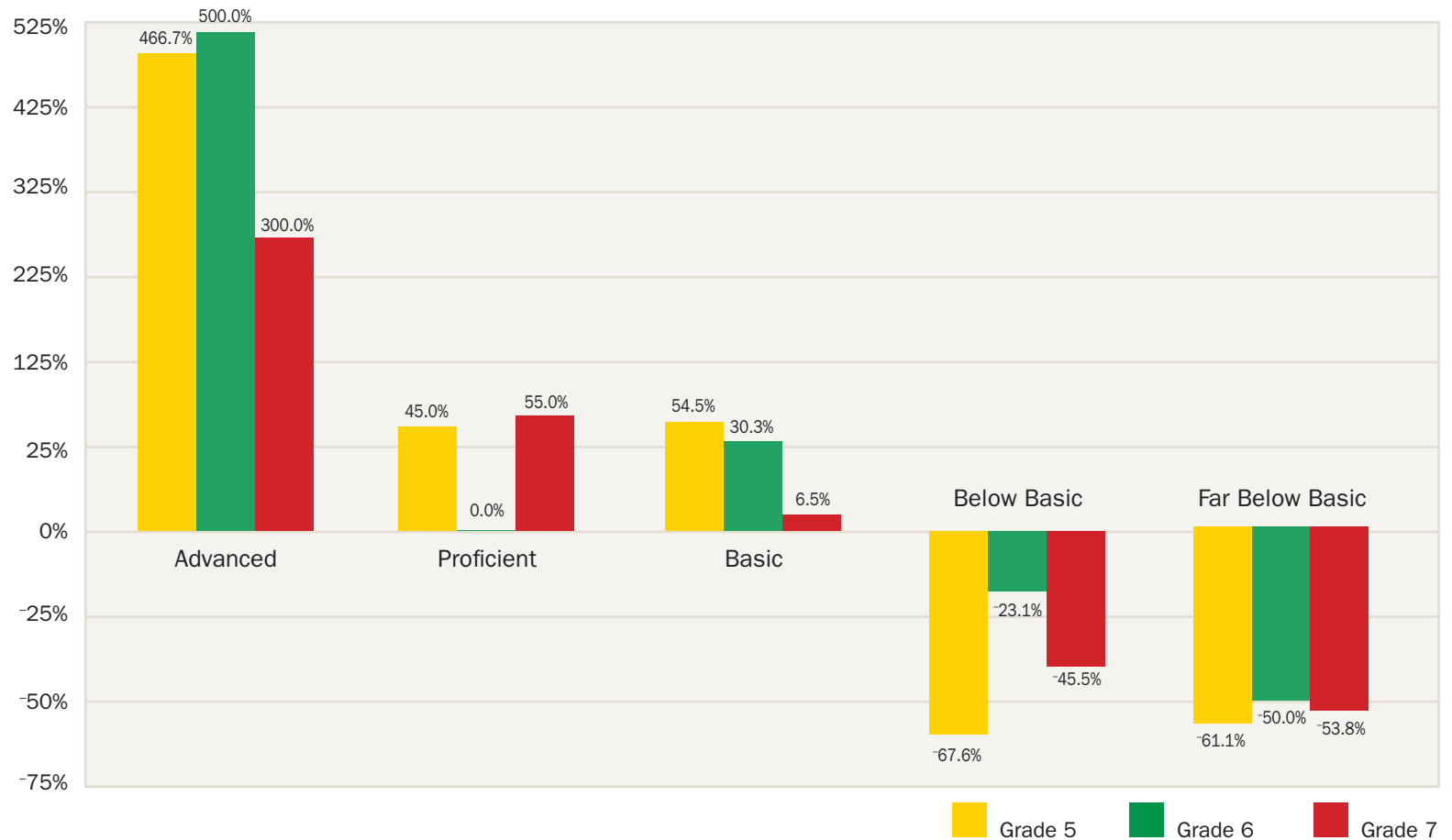


National Training Network

www.NTNMath.com

1.800.686.1001

Percent of Change – San Ysidro Schools CST Results – Grades 5, 6, and 7 2005 – 2008



The graph illustrates the percent of change for students in grade 5, 6 & 7 in San Ysidro between 2005 and 2008. Note that the percent of change of students scoring at Far Below Basic decreased at 5th grade by **-61.1%**; at 6th grade by **-50.0%**; at 7th grade by **-33.8%**. Likewise, the percent of change of students scoring at Below Basic decreased at 5th grade by **-67.6%**; at 6th grade by **-23.1%**; at 7th grade by **-45.5%**. Whereas, correspondingly, the percent of change of students scoring at Basic increased at 5th grade by **54.5%**; at 6th grade by **30.3%**; at 7th grade by **6.5%**.

The percent of change of students scoring at Proficient increased at 5th grade by **45.0%**; at 6th grade remained static; at 7th grade by **55.0%**. The percent of change of students scoring at Advanced increased at 5th grade by **466.7%**; at 6th grade by **500.0%**; at 7th grade by **300.0%**.



Percent of Change – San Ysidro Public Schools – 2005 – 2008

CST Levels – Grades 5 - Mathematics – Beyer Elementary – Percent – TABLE 1

	Advanced	Proficient	Basic	Below Basic	Far Below Basic
2005 – no coaching	2	18	28	34	18
2006 – no coaching	3	20	22	37	18
2007 – with coaching	2	14	29	47	8
2008 – with coaching	17	29	34	12	7
Percent of Change from 2006 – 2008	466.7%	45%	54.5%	67.6%	61.1%

CST Levels – Grades 6 - Mathematics – Beyer Elementary – Percent * (Base Data) TABLE 2**

	Advanced	Proficient	Basic	Below Basic	Far Below Basic
2005 – no coaching	0	18	33	39	10
2006 – with coaching	12	22	23	39	4
2007 – with coaching	3	15	34	36	12
2008 – with coaching	5	18	43	30	5
Percent of Change from 2005 – 2008	500%	0%	30.3%	23.1%	50%

CST Levels – Grades 7 - Mathematics – San Ysidro Middle – Percent – TABLE 3

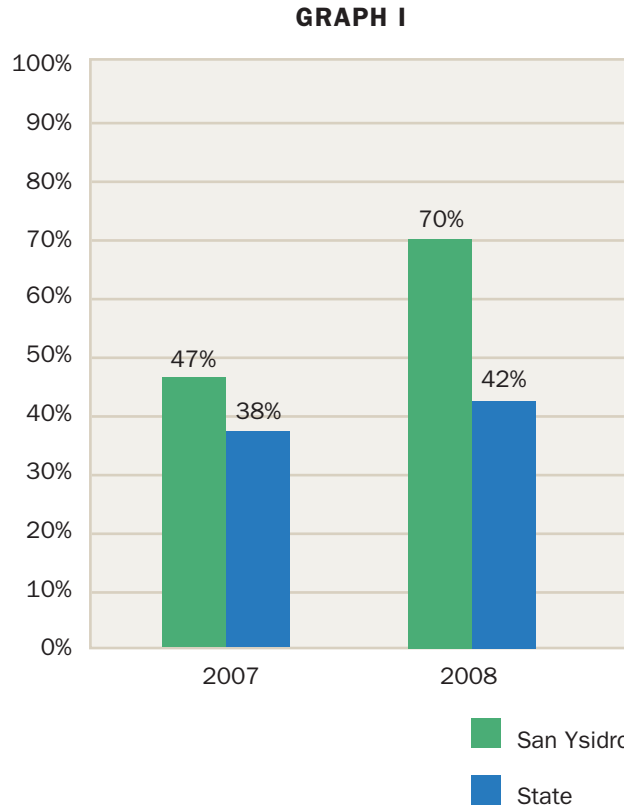
	Advanced	Proficient	Basic	Below Basic	Far Below Basic
2005 – no coaching	3	12	33	35	16
2006 – no coaching	3	20	31	33	13
2007 – with coaching	9	23	36	23	9
2008 – with coaching	12	32	33	18	6
Percent of Change from 2006 – 2008	300%	55%	6.5%	45.5%	53.8%

Algebraic Thinking was first implemented in 6th grade (Baseline Data Table 2 above) in the 2005 – 2006 school year; therefore, the 2005 data in Table 2 serves as the Baseline Data. The 2006 – 2007 data in Tables 1 & 3 serve as baseline data for these tables, as that was the year of implementation. The three tables show the percent of change of students who scored Far Below Basic, Below Basic, Basic, Proficient and Advanced for the years 2005 – 2008. The blue and orange boxes represent the percent of change. Again, note that the percent of change of students scoring at the Far Below Basic, and Below Basic levels decreased significantly across grade levels; whereas, the Basic, Proficient and Advanced percent increased significantly. Of particular interest is the increase in the Advanced levels, indicating the rigor of the Algebraic Thinking curriculum.

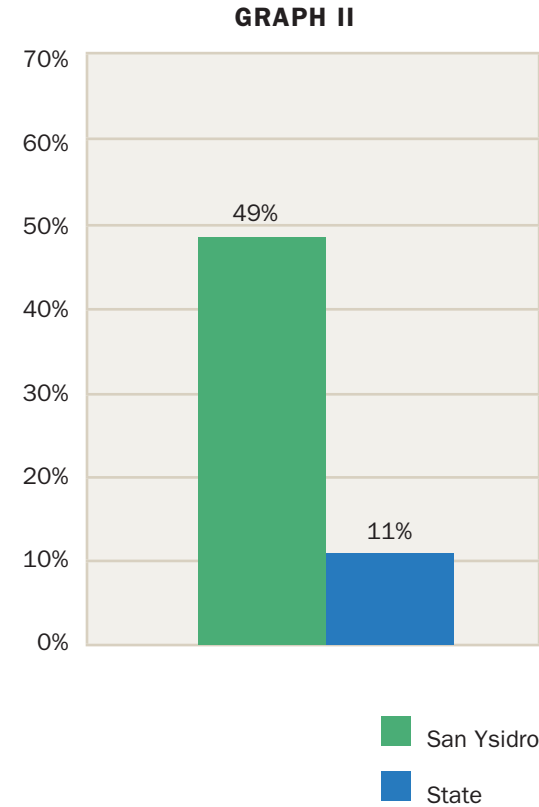


San Ysidro Public Schools – Algebra 1 Results – 2007 – 2008

Percent Proficient or Advanced
San Ysidro Public Schools vs State – CST
Algebra 1 Results 2007 – 2008



Percent of Change
San Ysidro Public Schools vs State – CST
Algebra 1 Results 2007 – 2008



Graph I above compares the percent of students in San Ysidro who scored Proficient or Advanced on the California State CST for Algebra 1. 2007 represents students who did not receive instruction based on Algebraic Thinking in grades 5 – 7. 2008 represents students who were enrolled in AT for at least two years prior to taking Algebra 1 in grade 8. San Ysidro's growth in percent passing (**from 47% to 70%**), or **23%** is compared to the state wide growth (**from 38% to 42%**), or **4%**.

Graph II above compares the same data from a percent of change model. The percent of change for San Ysidro students was **49%** while the percent of change state wide was **11%**.

<http://star.cde.ca.gov/star2009/ViewReport.asp>

