

Making Math Real®

INSTITUTE

www.makingmathreal.org

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The following data is a representative sample of both public and non-public schools receiving multisensory structured training in **Making Math Real®**, as well as data from Making Math Real's 2004 Summer Institute & Clinic.

The first school, a public elementary school in Berkeley, received significant, on-going training from 2001 to 2002 thus contributing to the substantial gains. The other two public schools received minimal training during those two years and still posted notable gains. These schools are comprised of inner-city student populations. Scores were not disaggregated for special education students. Data gives evidence of significant gains in closing the gap in achievement between under-performing students and those students performing at or above grade level.

There are no test scores for kindergarten and 1st grade because state testing starts at 2nd grade.

California Department of Education Standardized Testing and Reporting (STAR) Results

<http://star.cde.ca.gov>

PUBLIC ELEMENTARY SCHOOL #1 / BERKELEY, CA: 400 students (approx.)

- Percentage of economically disadvantaged students scoring at or above the 50th percentile:

Grade Level	Pre: 2000	Post: 2002	Percent Increase
2 nd Grade	27	39	44%
3 rd Grade	46	42	-8%
4 th Grade	26	52	100%
5 th Grade	15	52	247%

- Percentage of all students scoring at or above the 50th percentile:

Grade Level	Pre: 2000	Post: 2002	Percent Increase
2 nd Grade	57	66	16%
3 rd Grade	72	59	-18%
4 th Grade	56	67	20%
5 th Grade	51	71	39%

PUBLIC ELEMENTARY ACADEMY / SAN JOSE, CA: 400 students (approx.)

- Percentage of economically disadvantaged students scoring at or above the 50th percentile:

Grade Level	Pre: 2000	Post: 2002	Percent Increase
2 nd Grade	75	61	-19%
3 rd Grade	50	60	20%
4 th Grade	52	58	12%
5 th Grade	36	45	25%

- Percentage of all students scoring at or above the 50th percentile:

Grade Level	Pre: 2000	Post: 2002	Percent Increase
2 nd Grade	73	62	-15%
3 rd Grade	49	69	41%
4 th Grade	53	60	13%
5 th Grade	42	47	12%

PUBLIC ELEMENTARY SCHOOL #2 / BERKELEY, CA: 400 students (approx.)

- Percentage of economically disadvantaged students scoring at or above the 25th percentile:

Grade Level	Pre: 2000	Post: 2002	Percent Increase
2 nd Grade	54	72	33%
3 rd Grade	62	76	18%

- Percentage of all students scoring at or above the 50th percentile:

Grade Level	Pre: 2000	Post: 2002	Percent Increase
2 nd Grade	78	82	5%
3 rd Grade	76	87	14%

* *Making Math Real training for grades k-3 only.*

WOODCOCK-JOHNSON III
TESTS OF COGNITIVE DEVELOPMENT & ACADEMIC ACHIEVEMENT
Grades 2ND-12TH

Non-Public LD School in Marin County

The students at this Marin County school are children and young adults with significant learning disabilities including but not limited to: NLD, Asperger's Syndrome, dyslexia, dyscalculia, and bi-polar disorder. Most students are two to three grade levels behind their age equivalent peers. The data below is a sample from the 30 students working with the Making Math Real program at the school. Not all students were included because pre-test scores were not available at the time.

The following scores from the WJIII are only for math. *Broad math* is a combination of calculation skills and reasoning skills. *Calculation skills* looks at the students' abilities to work accurately and fluently with the mechanics of math (math facts, four operations, fractions, decimals, etc.). *Math reasoning* skills include a student's concept understanding and ability to apply skills in generalized ways.

Note the students improved scores from 2004 to 2005. Any score that is one grade level jump or higher is significant proof of closing the achievement gap.

GRADE EQUIVALENT SCORES

Student#1:	2004	2005
Broad Math	7.0	7.3
Math Calc. skills	6.1	5.9
Math Reasoning	7.8	9.9

GRADE EQUIVALENT SCORES

Student#2:	2004	2005
Broad Math	5.3	7.4
Math Calc. skills	5.1	9.2
Math Reasoning	5.2	5.7

GRADE EQUIVALENT SCORES

Student#3:	2004	2005
Broad Math	5.9	9.4
Math Calc. skills	6.2	10.9
Math Reasoning	5.5	7.2

GRADE EQUIVALENT SCORES

Student#4:	2004	2005
Broad Math	4.5	6.1
Math Calc. skills	4.2	5.6
Math Reasoning	4.0	5.7

GRADE EQUIVALENT SCORES

Student#5:	2004	2005
Broad Math	7.0	7.3
Math Calc. skills	6.1	5.9
Math Reasoning	7.8	9.9

GRADE EQUIVALENT SCORES

Student#6:	2004	2005
Broad Math	5.2	6.9
Math Calc. skills	4.2	6.2
Math Reasoning	6.1	7.2

GRADE EQUIVALENT SCORES

Student#7:	2004	2005
Broad Math	6.4	7.3
Math Calc. skills	6.0	6.1
Math Reasoning	7.3	7.7

GRADE EQUIVALENT SCORES

Student#8:	2004	2005
Broad Math	5.2	7.7
Math Calc. skills	5.4	7.2
Math Reasoning	5.7	8.1

GRADE EQUIVALENT SCORES

Student#9:	2004	2005
Broad Math	4.2	5.0
Math Calc. skills	3.2	4.8
Math Reasoning	5.4	5.1

BASELINE MEASURE CRITERION REFERENCE FOR LD STUDENTS
Grades 3rd -8th

Making Math Real Institute & Clinic - 2004 Summer Clinical Practicum

The following pre and post criterion measures represent our most recent three-week intervention for 60, 3RD-8th graders with a range of learning disabilities including dyscalculia, ADHD, NLD, and Asperger's Syndrome.

Significant gains were achieved in the following areas:

- Acquisition of the math facts
- Number concepts
- Place Value
- Synthesis of concept procedure integration
- Number theory
- Whole number factoring
- Fraction applications
- Fraction, decimal, percent conversions
- Increasing decreasing by powers of ten
- Increased cognitive focus and endurance
- Increased fluency and accuracy with calculation

Grade	Pre: 8-2-04 Percent Proficient	Post: 8-20-04 Percent Proficient
3RD	Place Value: 50% # Concepts: 50% + Facts: 38% + with renaming: 0%	Place Value: 100% # Concepts: 100% + Facts: 88% + with renaming: 75%
4TH	Place Value: 100% # Concepts: 100% + Facts: 5% + with renaming: 0%	Place Value: 100% # Concepts: 100% + Facts: 90% + with renaming: 100%
5th	Place Value: 14% # Theory: 7% x facts: 21% Single Digit Multipliers: 50% Powers & Multiples of 10: 28% Double Digit Multipliers: 7%	Place Value: 79% # Theory: 71% x facts: 56% Single Digit Multipliers: 100% Powers & Multiples of 10: 70% Double Digit Multipliers: 35%
6-8th	Place Value: 74% # Theory: 59% x facts: 23% Single Digit Multipliers: 82% Powers & Multiples of 10: 82% Double Digit Multipliers: 82% Fraction Concepts/ Applications: 14% Fraction/Decimal/ %: 25%	Place Value: 82% # Theory: 82% x facts: 42% Single Digit Multipliers: 100% Powers & Multiples of 10: 100% Double Digit Multipliers: 100% Fraction Concepts/ Applications: 72% Fraction/Decimal/ %: 100%