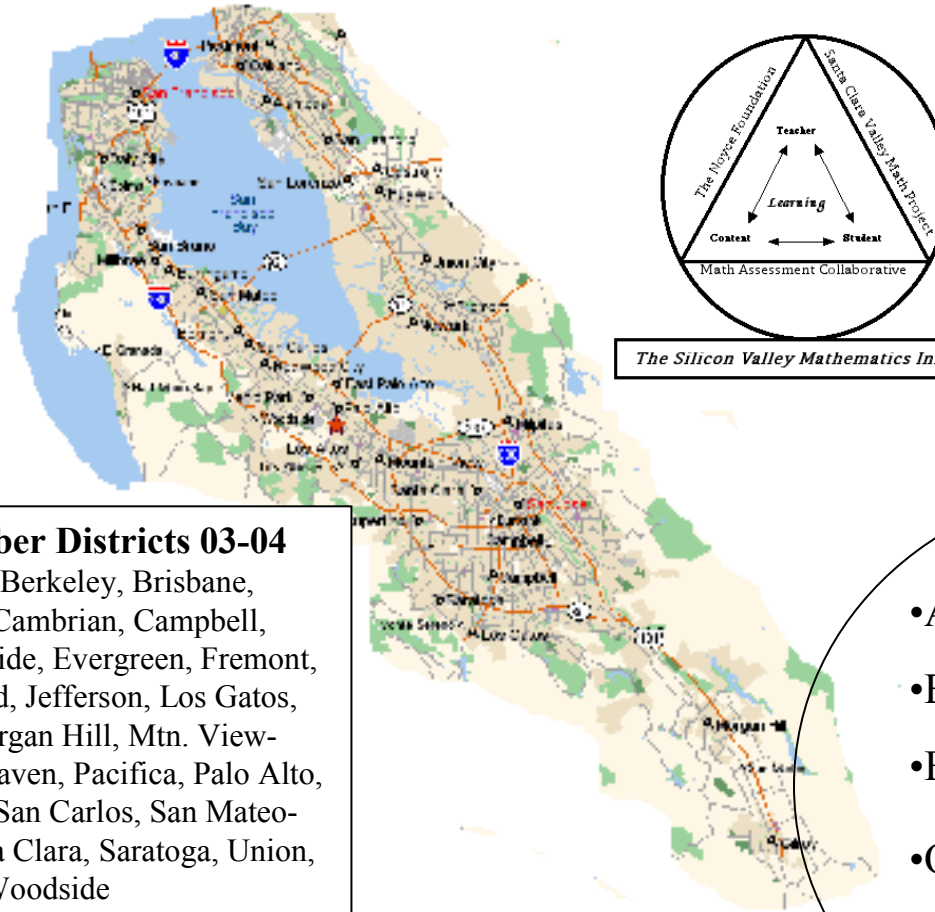


Mathematics Assessment Collaborative's
General Meeting

MARS Exam 2004
Final Report, District Reports
Tools for Teachers

The Silicon Valley Mathematics Initiative has grown from 27 to 33 member districts representing three counties of the Bay Area.



SVMI Member Districts 03-04
 Alum Rock, Berkeley, Brisbane,
 Burlingame, Cambrian, Campbell,
 Cupertino, East Side, Evergreen, Fremont,
 Gilroy, Hayward, Jefferson, Los Gatos,
 Moreland, Morgan Hill, Mtn. View-
 Whisman, New Haven, Pacifica, Palo Alto,
 Portola Valley, San Carlos, San Mateo-
 Foster City, Santa Clara, Saratoga, Union,
 Woodside

New Districts

- Aspire Charter Schools
- Bayshore
- Emery SD
- Oakland USD
- San Mateo Court Schools,
- Ravenswood SD

SCVMP Leadership Institute

The annual leadership institute was held for 12 days throughout May, June and August.

A total of 52 teacher-leaders representing 23 member districts attended the institute. The mathematical content was data analysis.

Silicon Valley Mathematics Initiative's **5th Annual Coaching Institute**

The institute ran for five days in August. There were 107 teachers, 23 coaches representing 19 school districts. The themes for the institute included problem solving, class culture, pedagogy, math content, and coaching.

MAC Professional Development Follow-up Workshops

The first set of workshops were held in Sept., there will be four more sets held once each month (in San Mateo, Fremont and Los Gatos).

The next set will be Tools for Teachers workshops (Oct.19-21).

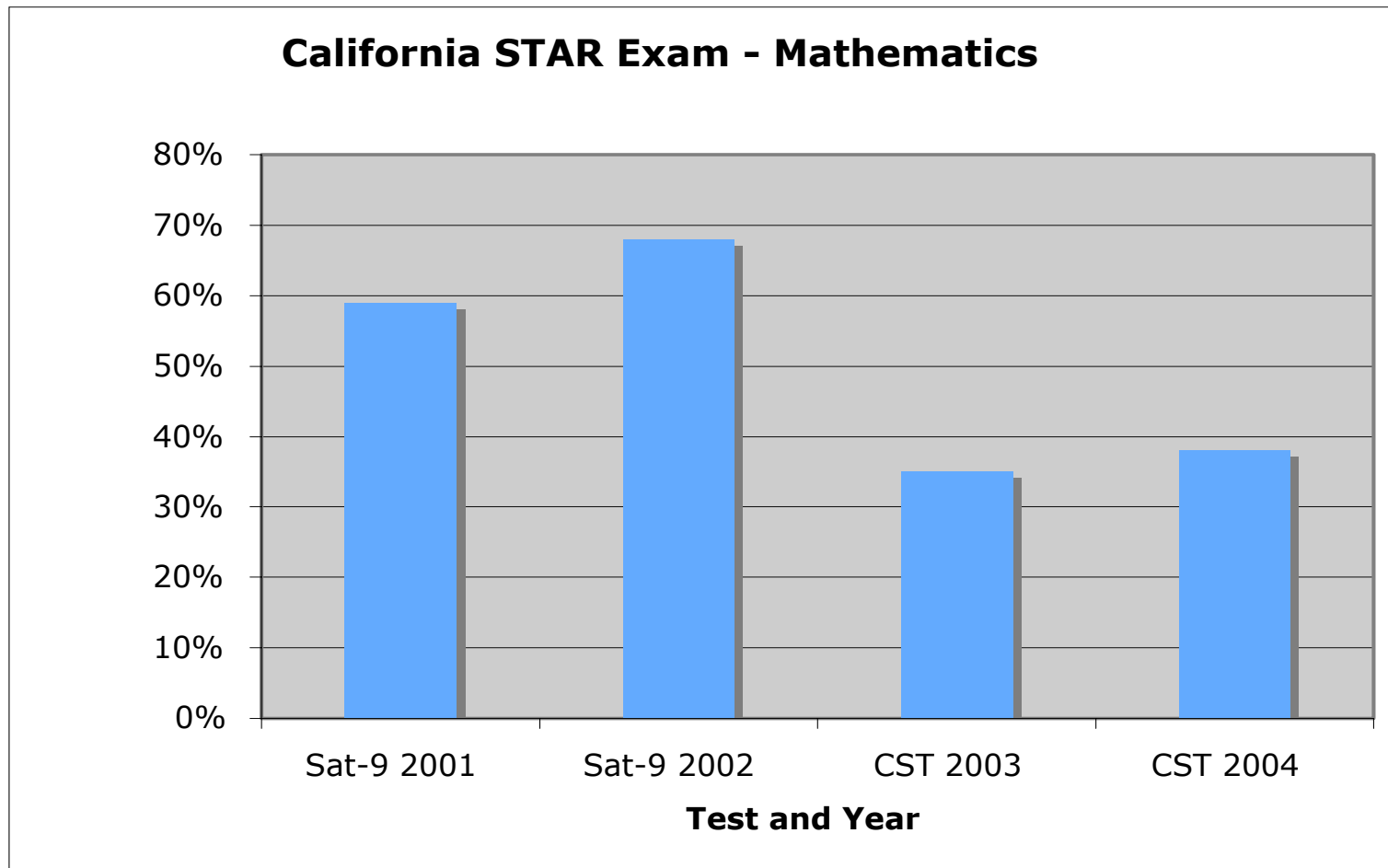
Urban Mathematics Collaborative's Mathematics Coaching Seminar

District math leaders from New York, Chicago, Boston, Denver, Washington State, and South Carolina visited the SVMl to learn about math coaching and other components that contribute to the member district's success.

Math Network Meetings

Monthly Math Network meetings support coaches. Doug Clarke from Australia worked with our coaching over three days including teaching two public lessons.

Comparison of state assessments between the transition years of 2002 and 2003



Comparison of California's Fifth Grade 2001 SAT-9 Math, 2002 SAT-9 Math, 2003 CST Math, 2004 CST Math

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Silicon Valley Mathematics Initiative's
**Mathematics Assessment
Collaborative**

*The Results of Students from Member
Districts*

MAC and BA/MARS Exams 2004

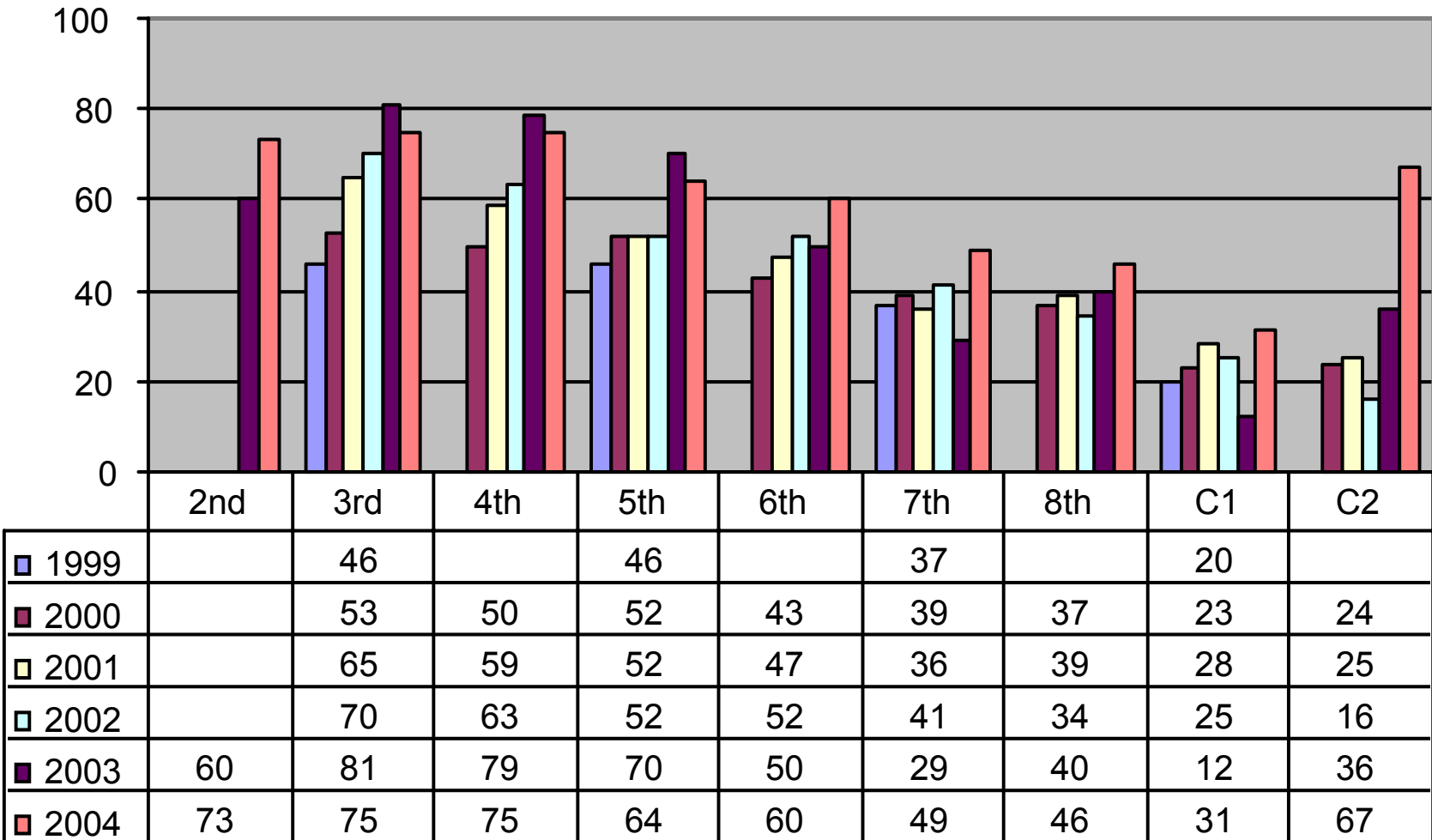
Mathematics Assessment Collaborative

Significant growth has been in the number of students assessed even though the number of districts has remain relatively constant.

Years of Exam	Districts	Teachers	Students
1999	21	462	23,128
2000	27	701	35,061
2001	26	1,036	51,806
2002	26	1,088	54,409
2003	28	1,440	72,016
2004	28	1,622	81,075

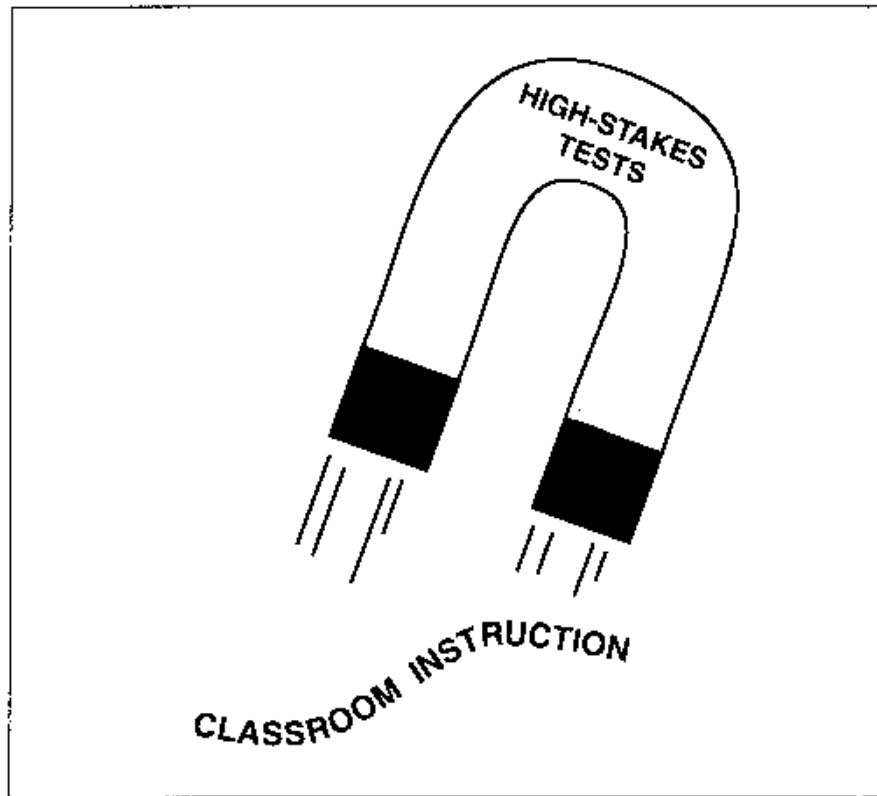
SVMI MAC/MARS Exams 1999 - 2004 Meeting Standards (Performance Levels 3 and 4)

Percent of Students Meeting Standard



Grade Levels

The Need for Multiple Measures



The Need for Multiple Measures

There is a higher correlation between the CST Math to CST English Than CST Math to MARS Exam

Grade level	Test vs. Test	CAT/6 Math Raw Score	CST English Raw Score	MARS Raw Score
2nd Grade	CST Math R. S.	0.82	0.76	0.72
3rd Grade	CST Math R. S.	0.83	0.82	0.76
4th Grade	CST Math R. S.	0.84	0.82	0.76
5th Grade	CST Math R. S.	0.85	0.80	0.78
6th Grade	CST Math R.S.	0.87	0.82	0.79

The differences between CST and MARS results point to the importance of using multiple measures

Comparison of CST math and MARS 2004 results for 7TH grade students

	CST: Below Standards (Far Below, Below and Basic)	CST: At or Above Standards (Proficient or Advanced)
MARS: Below standards	46%	11%
MARS: At or above standards	6%	37%

A comparison between STAR and MARS results point to the importance of using multiple measures

- As one proceeds up the grades, success on the performance exam implies success on the norm-reference exam.
- About 1/3 of students that appear to be successful in math based on the norm-reference percentile rank, do not meet 7th grade national standards.

2004 Exams

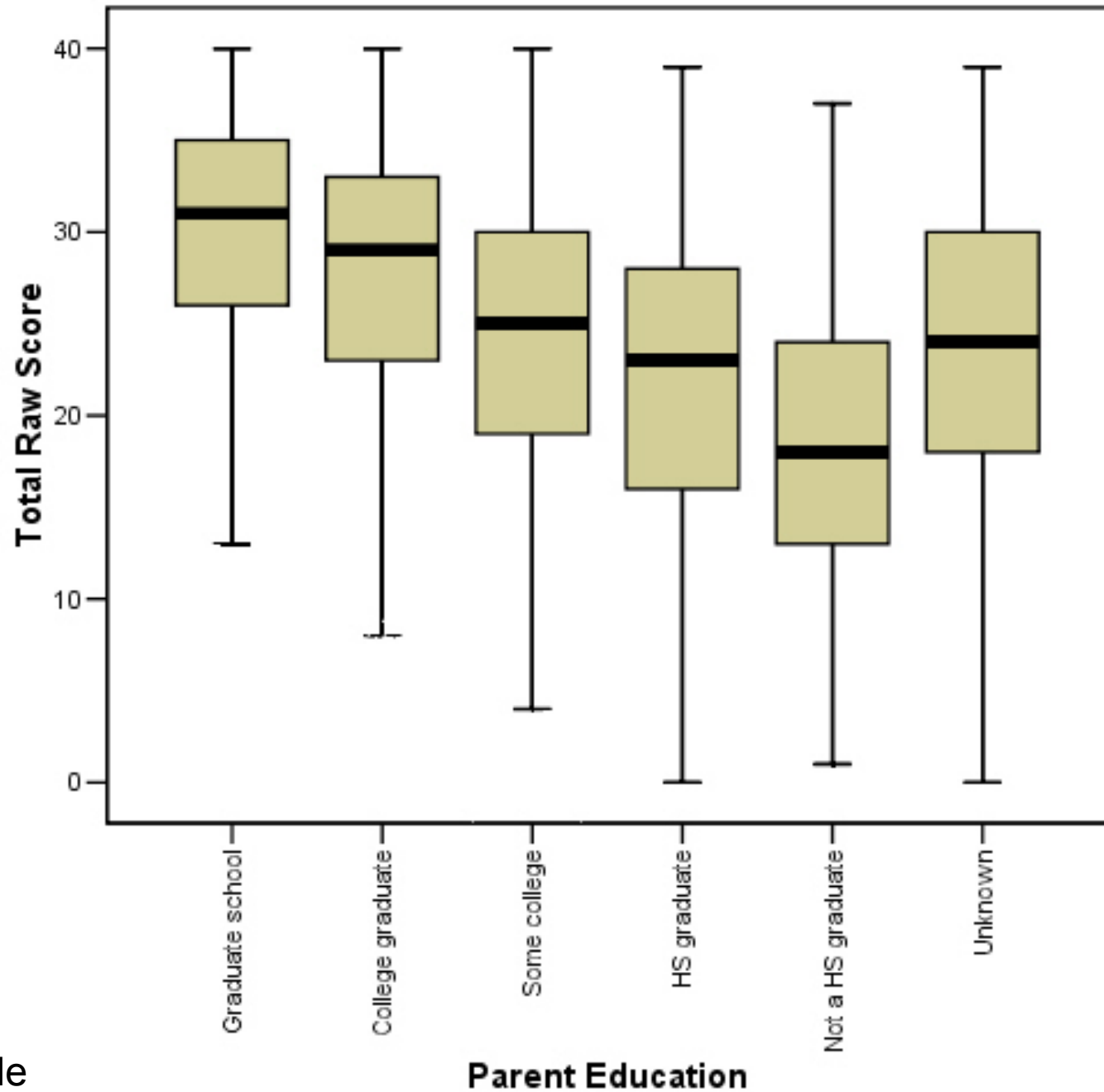
3rd grade		CAT-6: Below 50 th percentile	CAT-6: At or above 50 th percentile
	MARS: Below standards	19%	9%
MARS: At or above standards	12%	60%	

5th grade		CAT-6: Below 50 th percentile	CAT-6: At or above 50 th percentile
	MARS: Below standards	24%	10%
MARS: At or above standards	9%	57%	

7th grade		CAT-6: Below 50 th percentile	CAT-6: At or above 50 th percentile
	MARS: Below standards	37%	20%
MARS: At or above standards	3%	40%	

What Happens When We Consider Demographics?

High
Correlation
between
Parent
Education
and
Student
Achievement



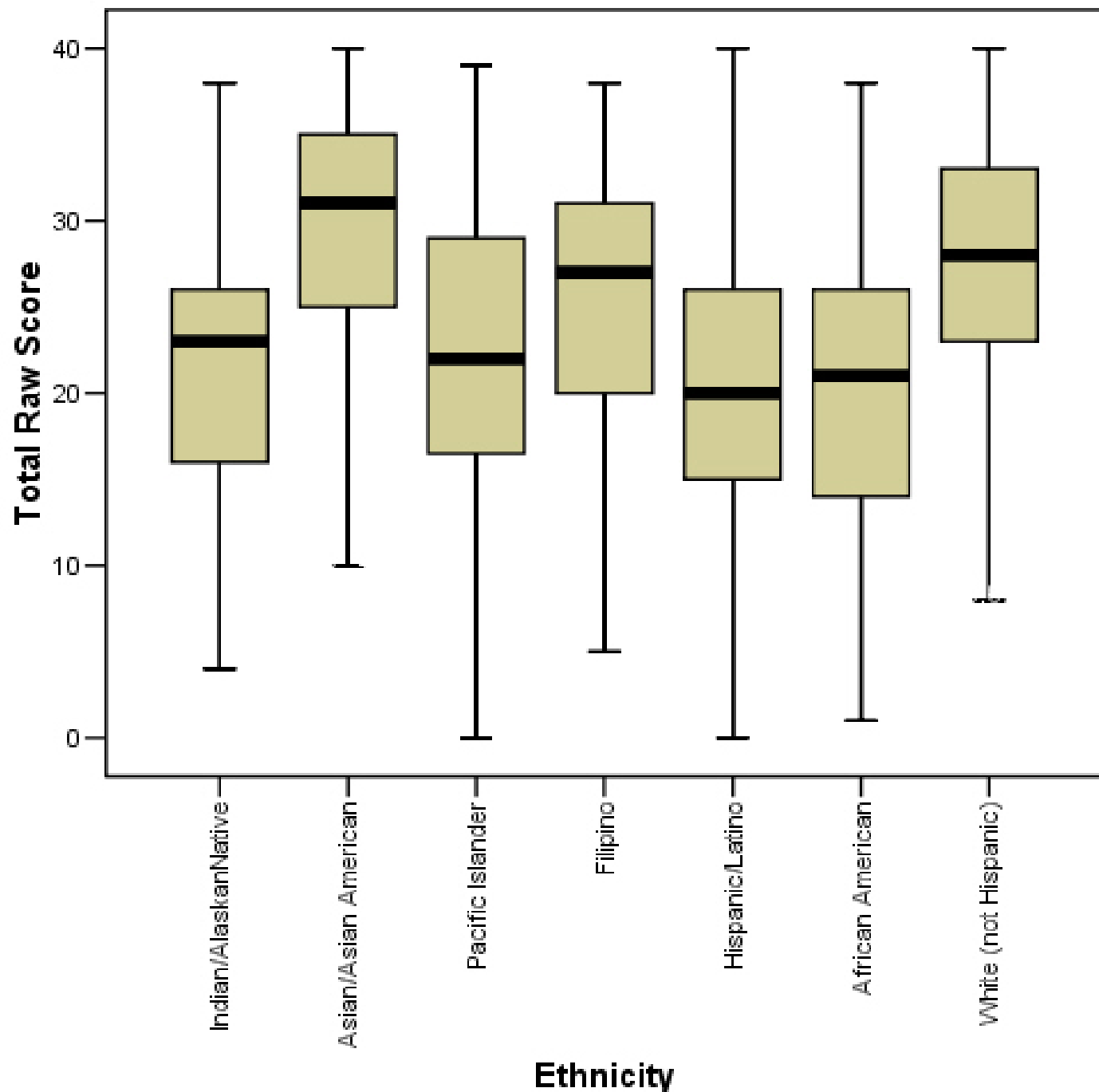
MARS 2004 4th Grade

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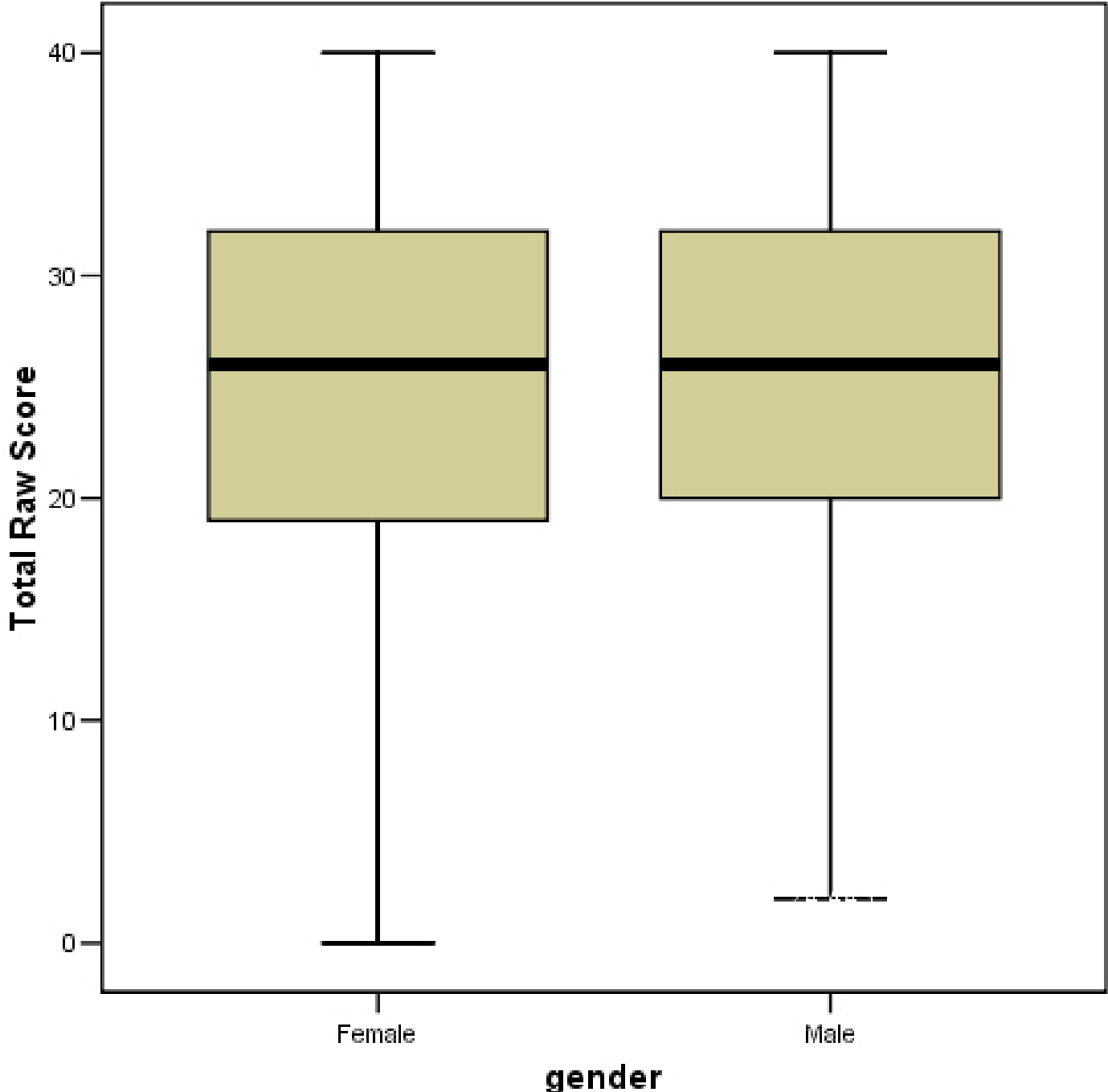
Students from ALL Ethnic groups performed at the highest levels,

Only students of color performed at the lowest level.

MARS 2004 4th Grade



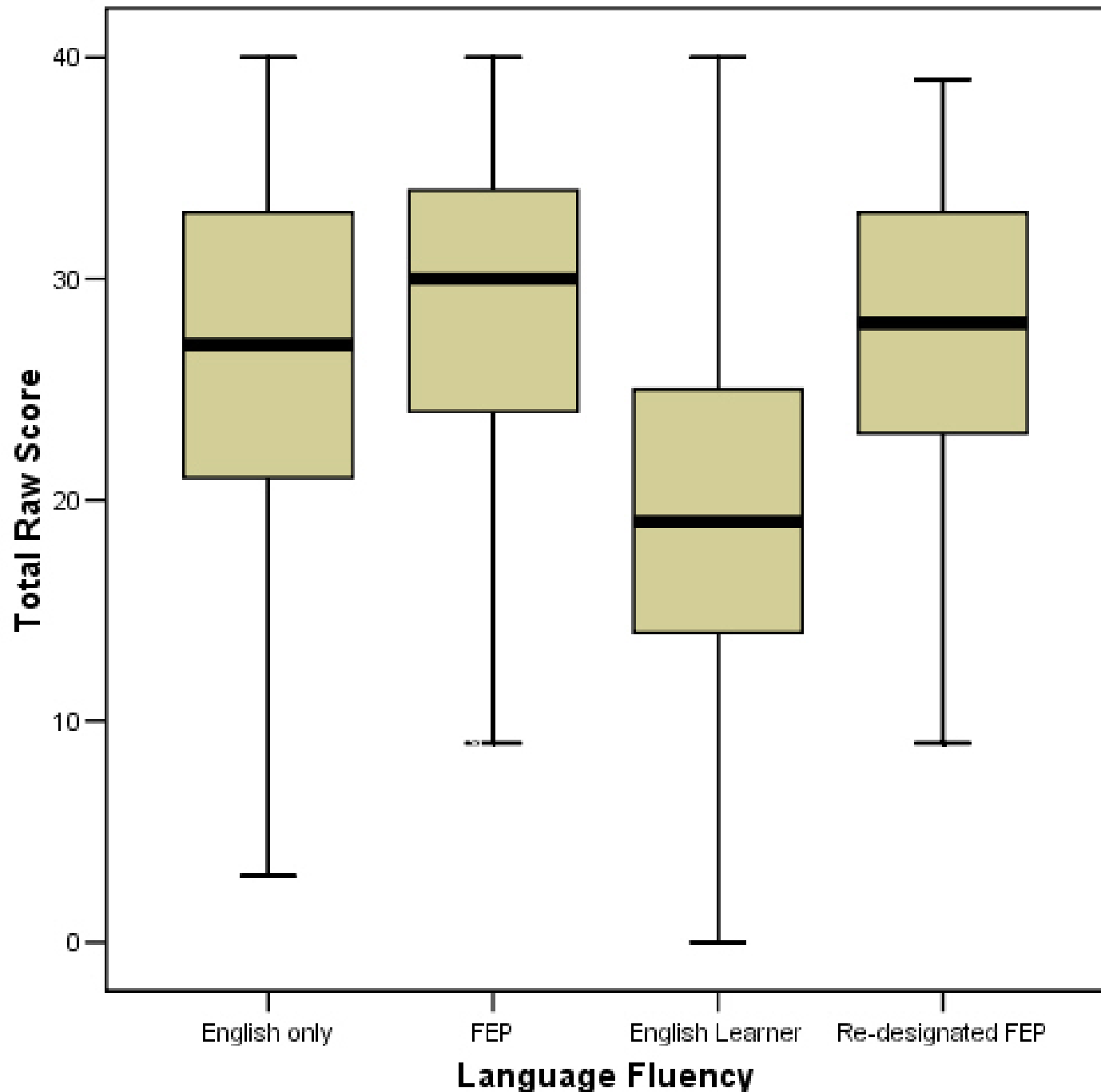
Basically there are no differences between gender achievement



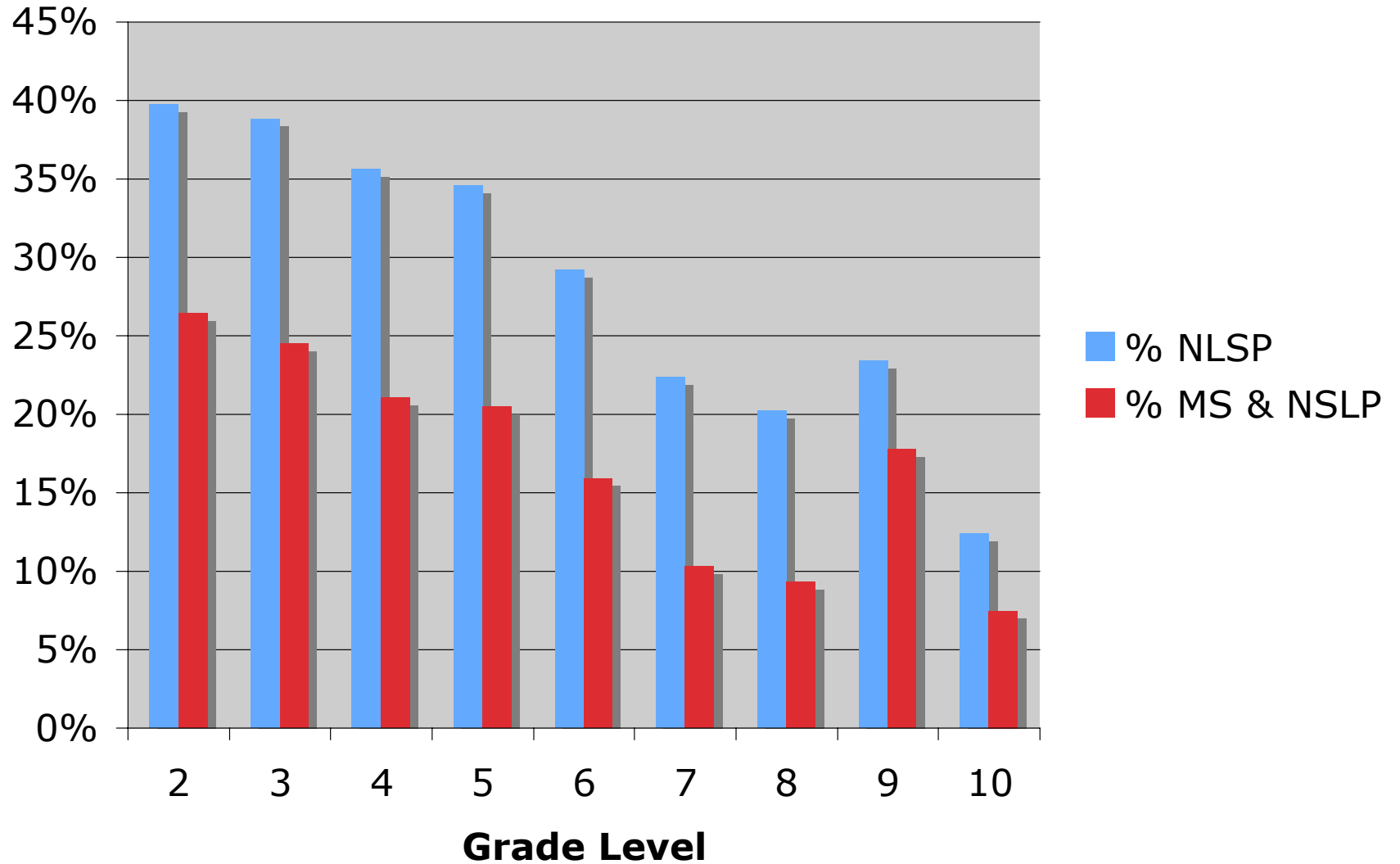
MARS 2004 4th Grade

The scores of students in the English Learner category are significantly lower than those of the students in all other Language Fluency categories.

MARS 2004 4th Grade



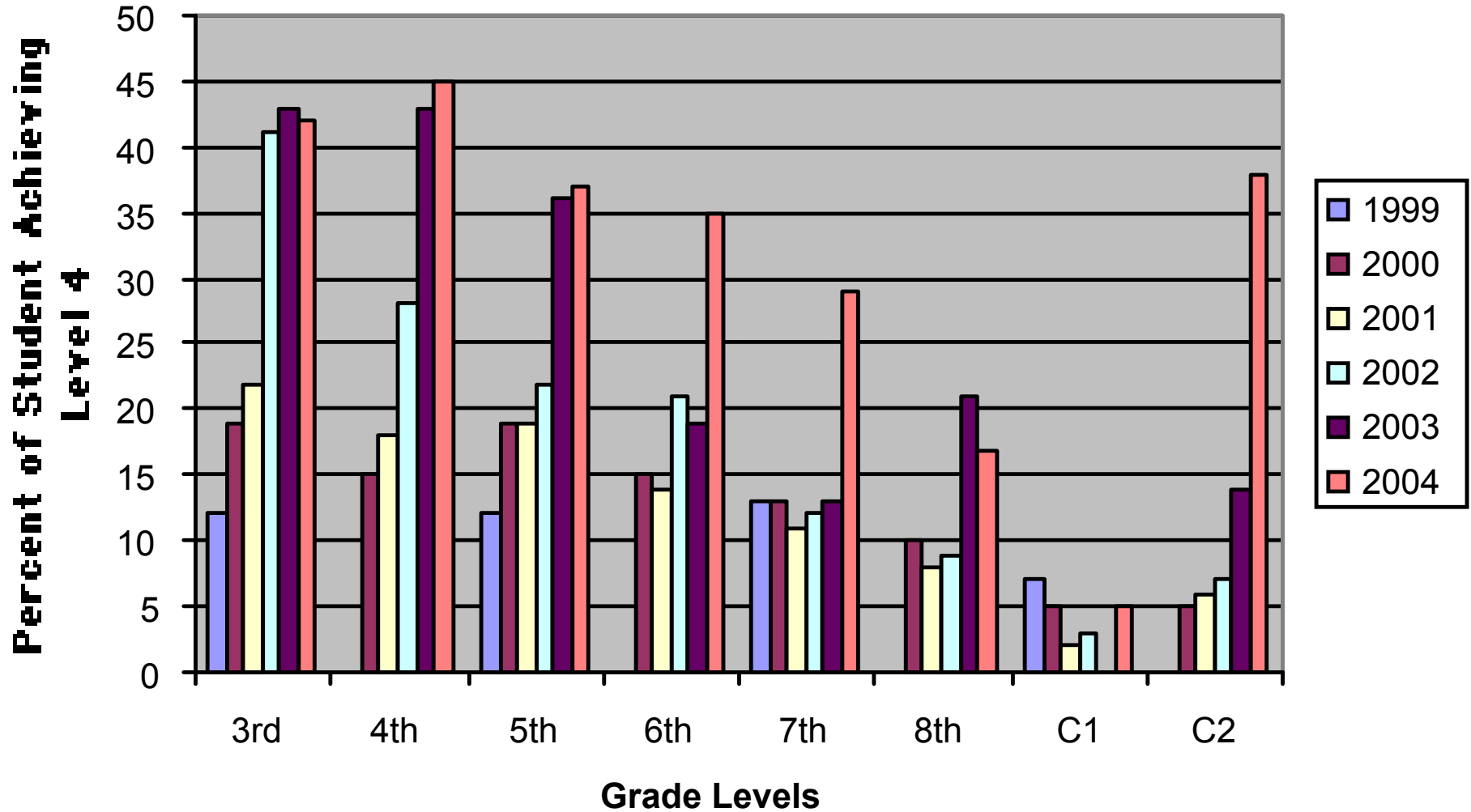
Effects of Poverty Through the Grade Levels



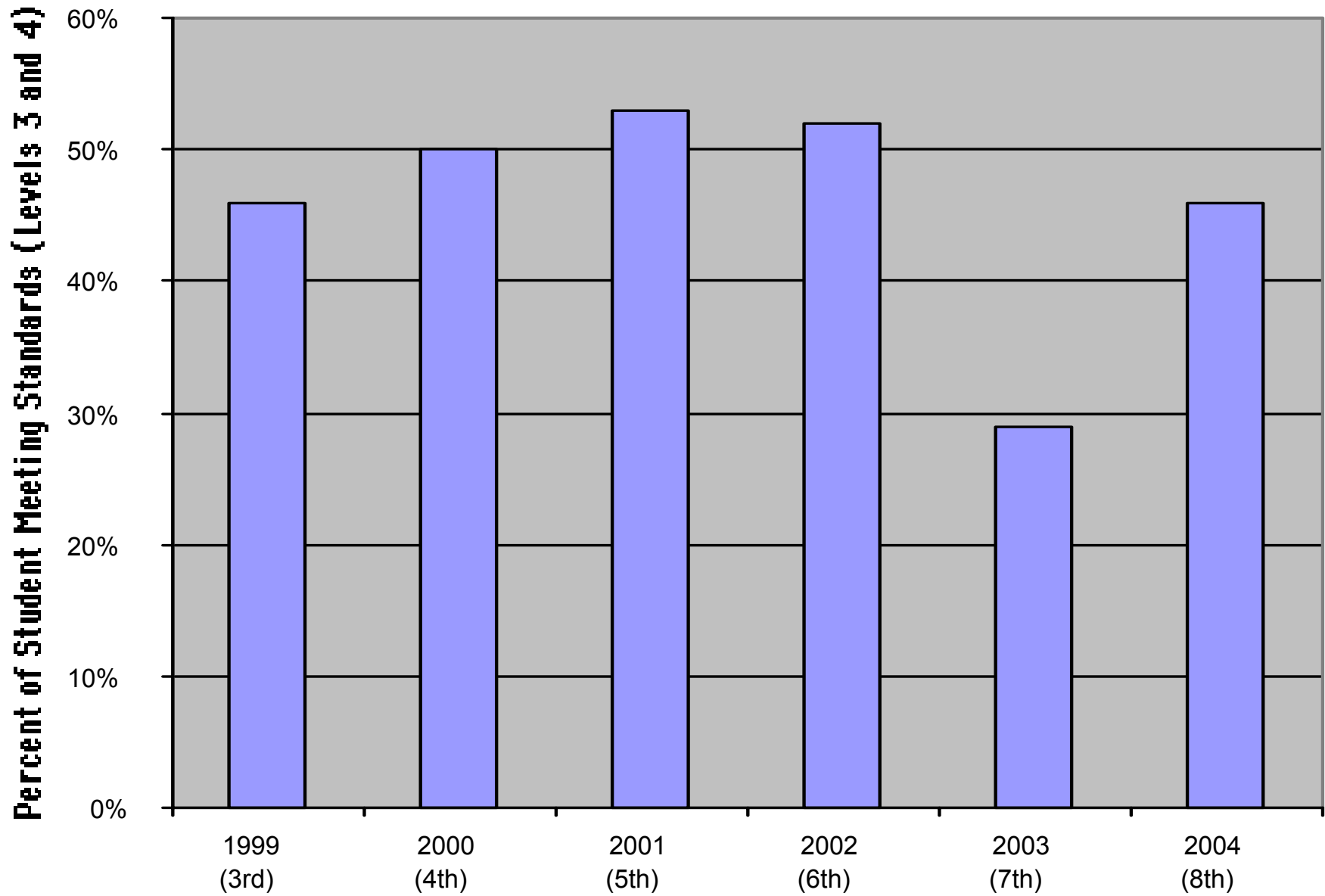
Trends in Student Achievement Over Time

SVMi MARS Exam 1999-2004

Students Achieving Highest Level (4)

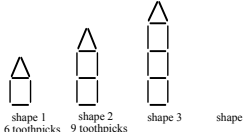


History of a Class of Students 1999 - 2004



Administer quality assessment tasks

TOOTHPICK SHAPES
Tom uses toothpicks to make the shapes in the diagram below.



shape 1 shape 2 shape 3 shape

6 toothpicks 9 toothpicks

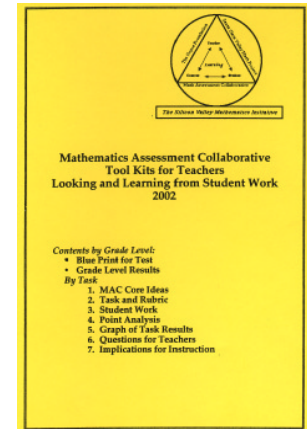
1. How many toothpicks make shape 3?

2. Draw shape 4 next to shape 3 in the diagram above

5. Tom says, "I need 36 toothpicks to make shape 12. Tom is not correct. Explain why he is not correct. How many toothpicks are needed to make shape 12?"

Collectively score and analyze student work

Cycle of Formative Assessment to Inform and Improve Learning



Document student thinking to inform instruction.

Drives the professional development experiences of the teachers.

Leads to improved teaching and learning in the classroom