

State Board of Education

Maryland School Assessment (MSA) 2011 Science Results

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2011 MSA Science Results

- Fourth reported year
- Tests administered in grades 5 and 8
- High school science test is HSA Biology
- Science results are NOT used in AYP calculations.

2011 MSA Science

- Multiple choice and constructed response
- On-line assessment with paper/pencil option
- Just under 122,300 students tested
- Majority (61%) tested online

Science Comparison 2010 to 2011

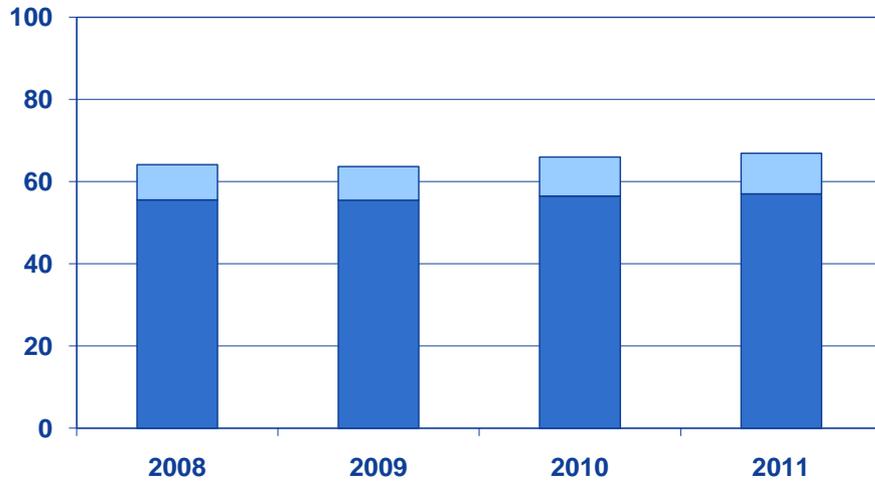
- Small gains in both grade levels:
 - Grade 5 - 0.9 points
 - Grade 8 - 1.8 points
- Growth for FARMS (+1.1 point in grade 5, 3.1 in grade 8), and ELL for grade 5 (4.8)
- Special Education student group declined 2.5 points in grade 5 and 1.3 in grade 8

Science

Percent Proficient and Advanced

Grade 5 2008-2011

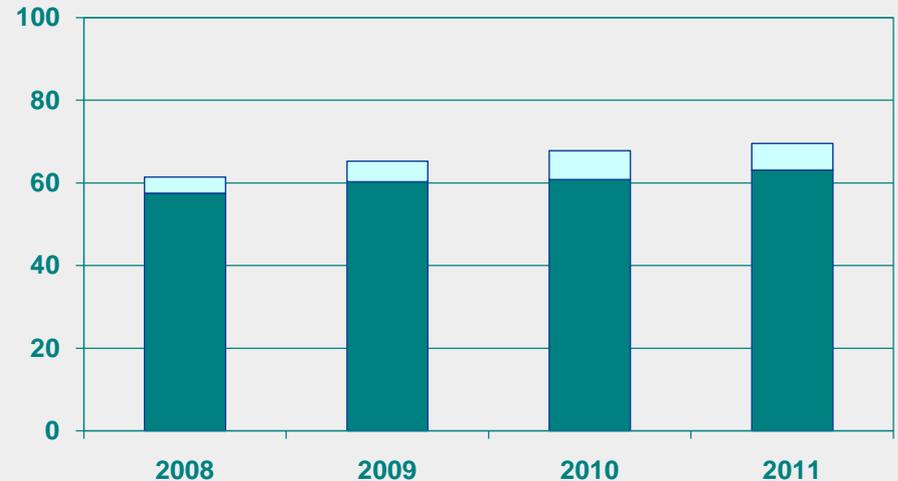
■ Proficient ■ Advanced



2.7-point gain

Grade 8 2008-2011

■ Proficient ■ Advanced



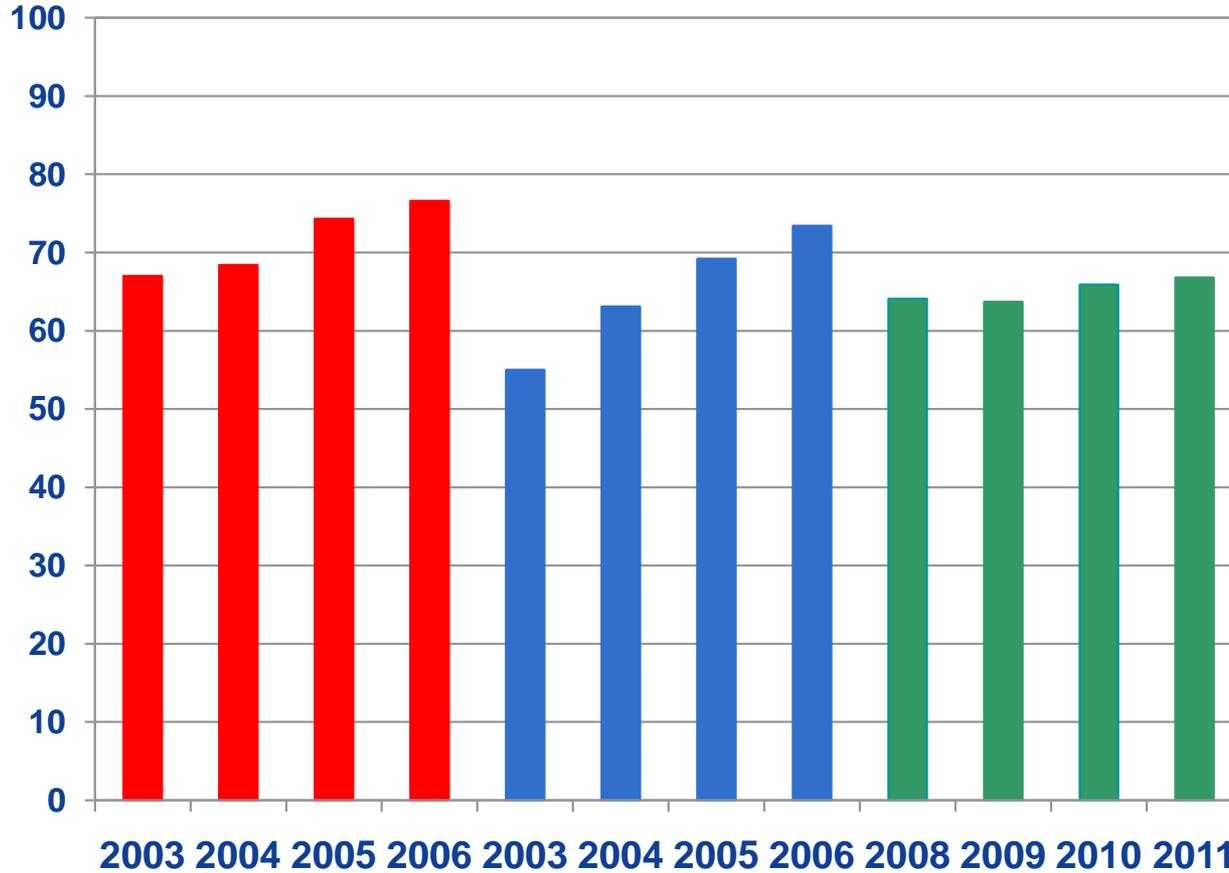
8.1 point gain

Observations

- More growth at middle school where students are enrolled in science courses
- Newer assessment – 5 years behind reading and mathematics in implementation – keeping pace with first 4 years of reading and mathematics performance
- Gaps generally growing for services subgroups

1st-4th Administration Comparison

% Proficient and Advanced - Grade 5



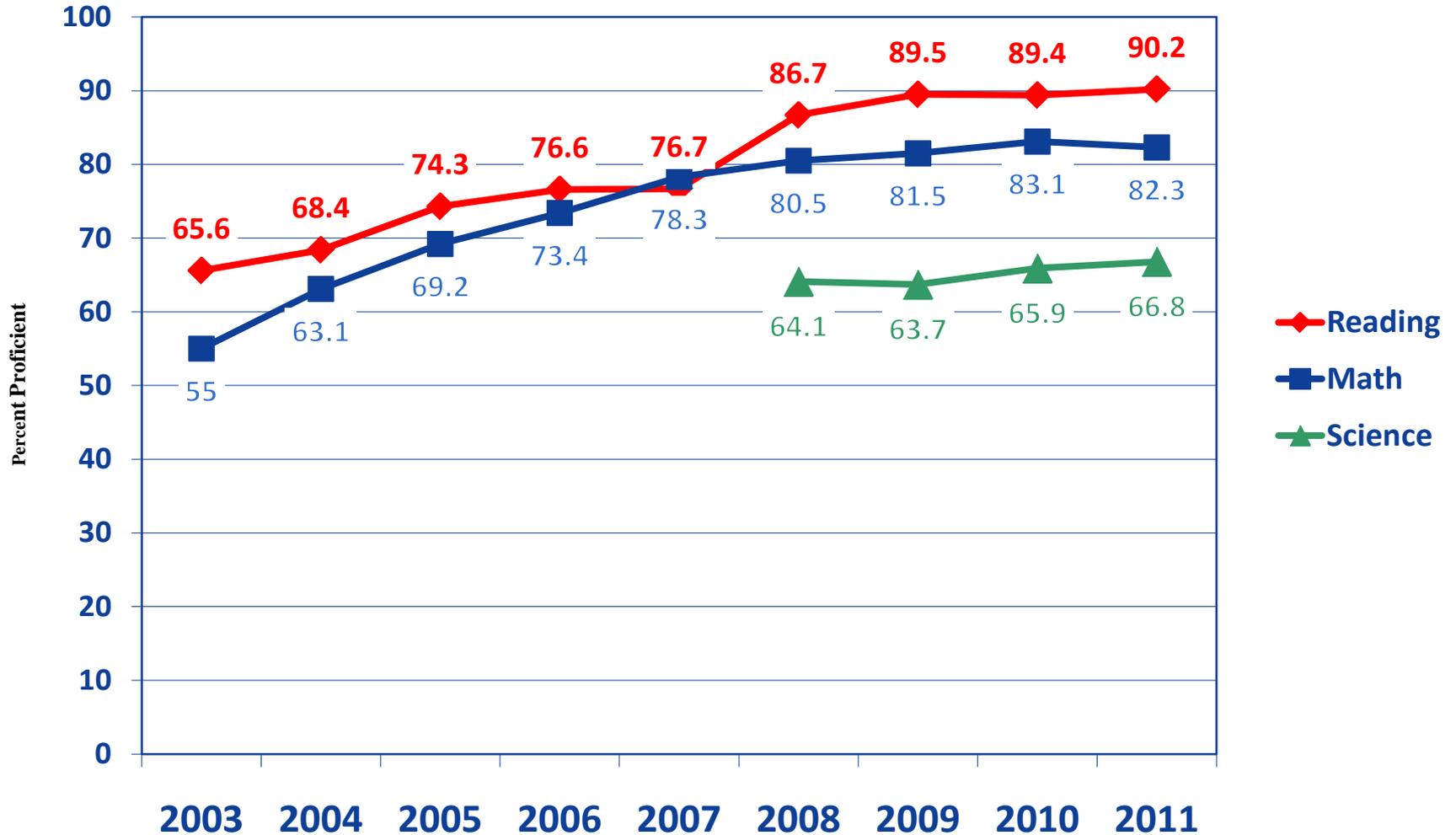
Reading

Mathematics

Science

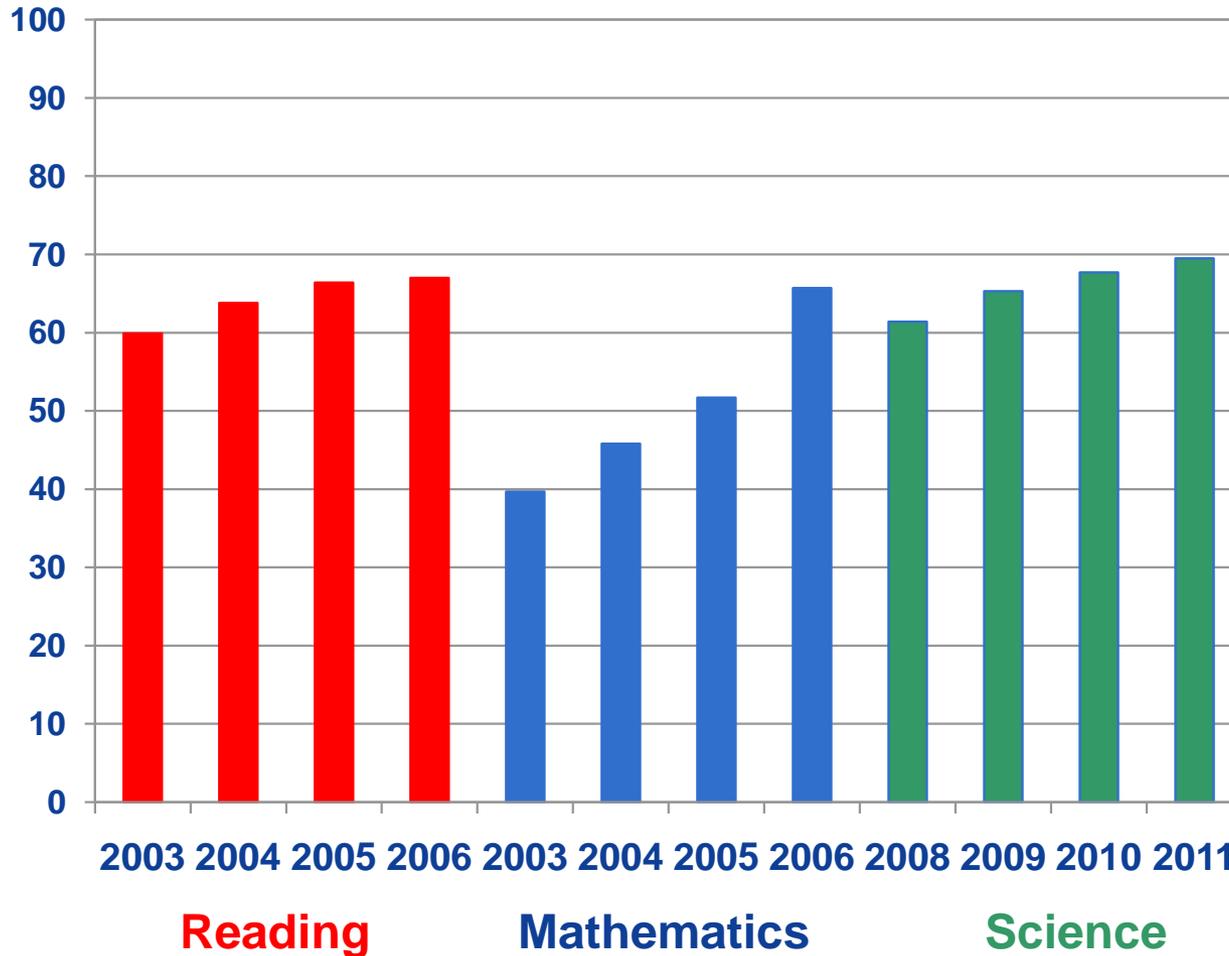
Content Area Trend Comparison

Grade 5



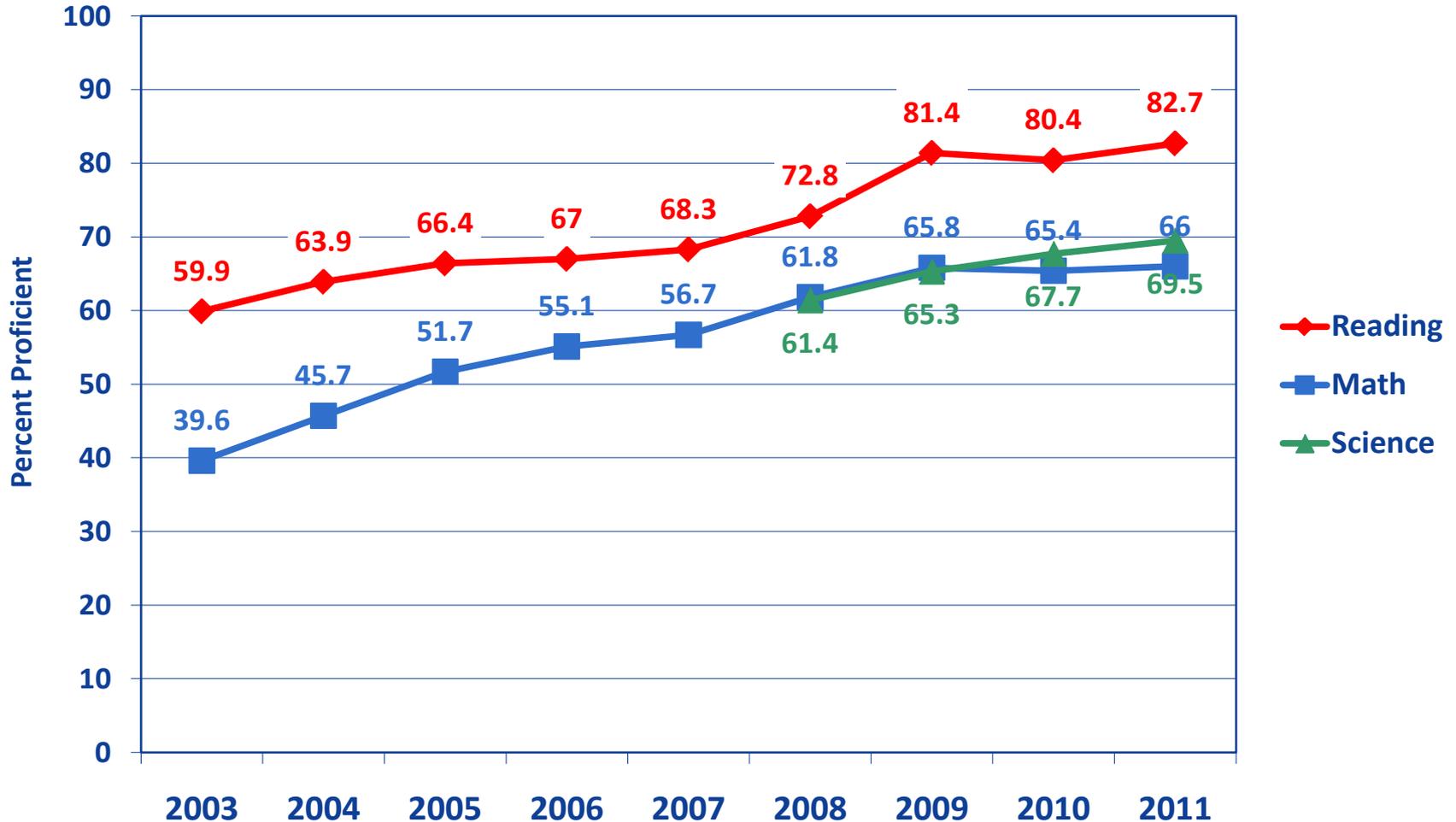
1st-4th Administration Comparison

% Proficient and Advanced - Grade 8



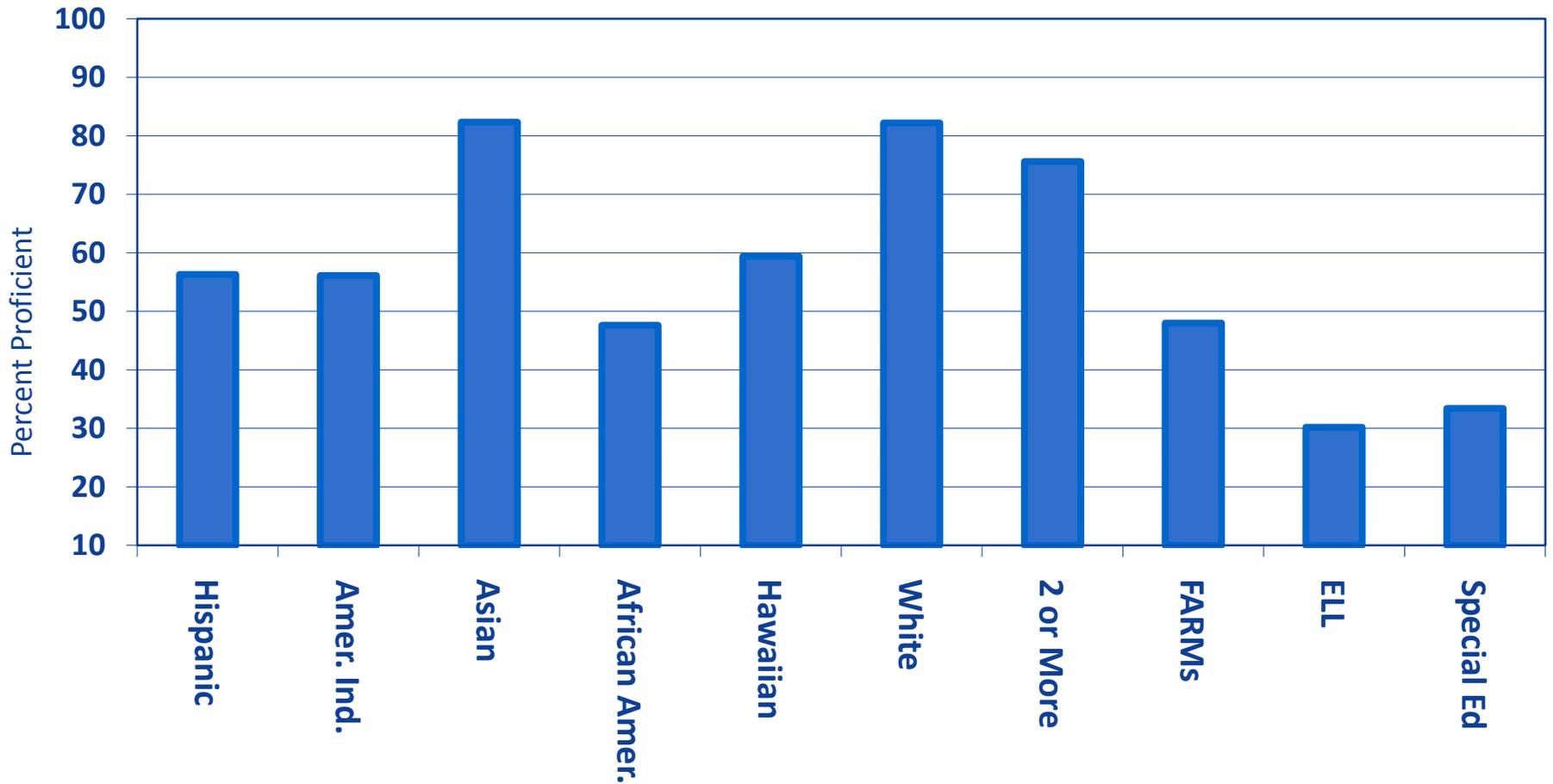
Content Area Trend Comparison

Grade 8



2011 Grade 5 Science Results

All Subgroups



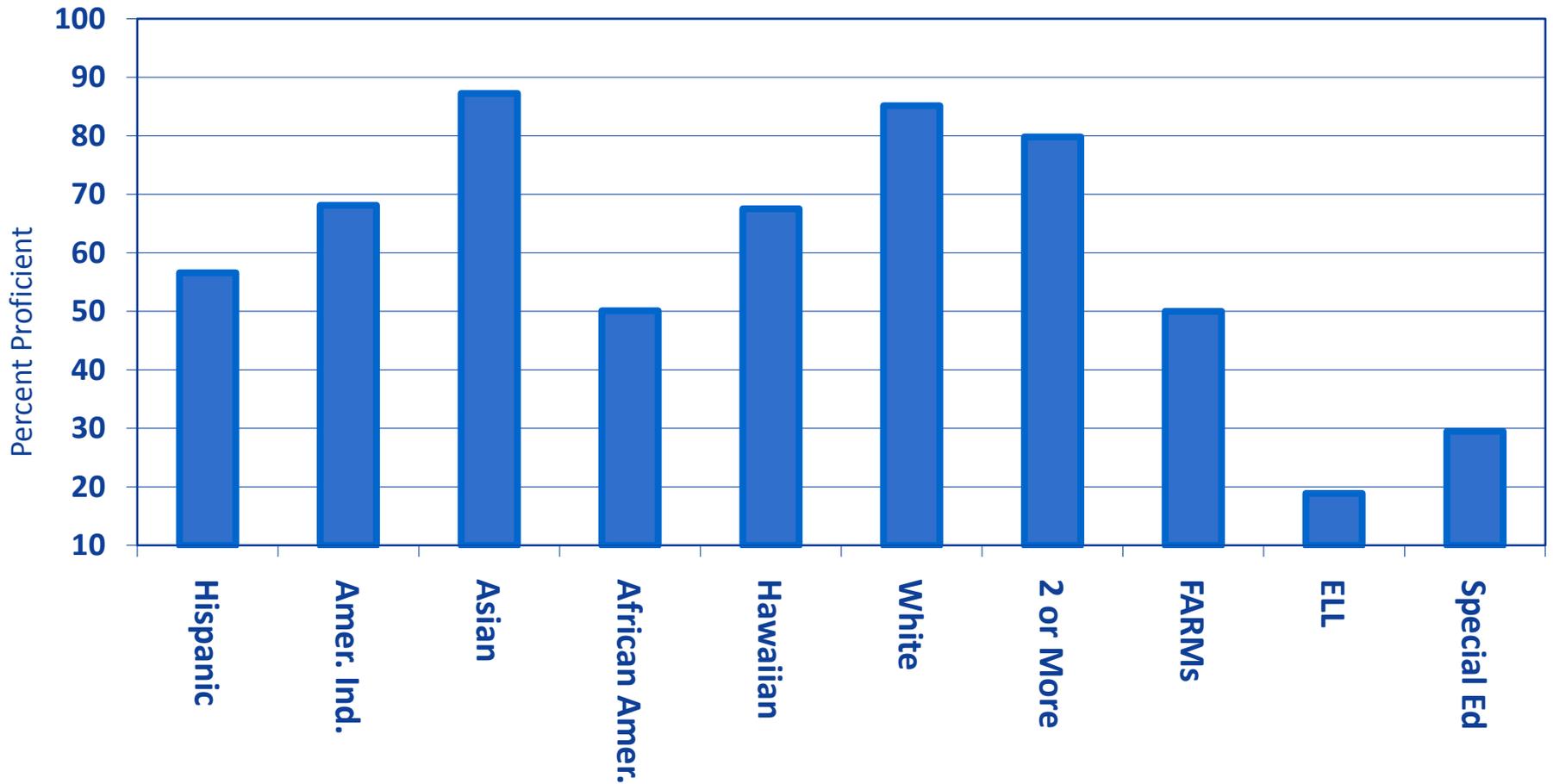
Achievement Gap Reduction

Grade 5

	Reduction	% Prof./Adv.
FARMS	-0.6	48.0
Special Ed	-5.5	33.4
ELL	0.3	30.2

2011 Grade 8 Science Results

All Subgroups



Achievement Gap Reduction

Grade 8

	Reduction	% Prof./Adv.
FARMs	4.7	50.0
Special Ed	-4.1	29.5
ELL	-3.8	18.9

School System Observations

- 14 systems improved at Grade 5
- 19 systems improved at Grade 8
- 12 systems improved at both grade levels
- Nine school systems tested more than 95 percent of students on-line, another 3 tested more than 90 percent

Summary

- Both elementary and middle school performance showed slight improvement.
- Elementary scores: scores are lower than current Grade 5 reading and math scores.
- Middle school scores: surpassed first 4 years of reading and math, surpassed current grade 8 math scores.
- African American and services subgroups lagging behind; FARMs made progress in Grade 8 gap reduction.

How is MSDE supporting local school system efforts to improve teaching and learning in science?

Questions & Discussion