

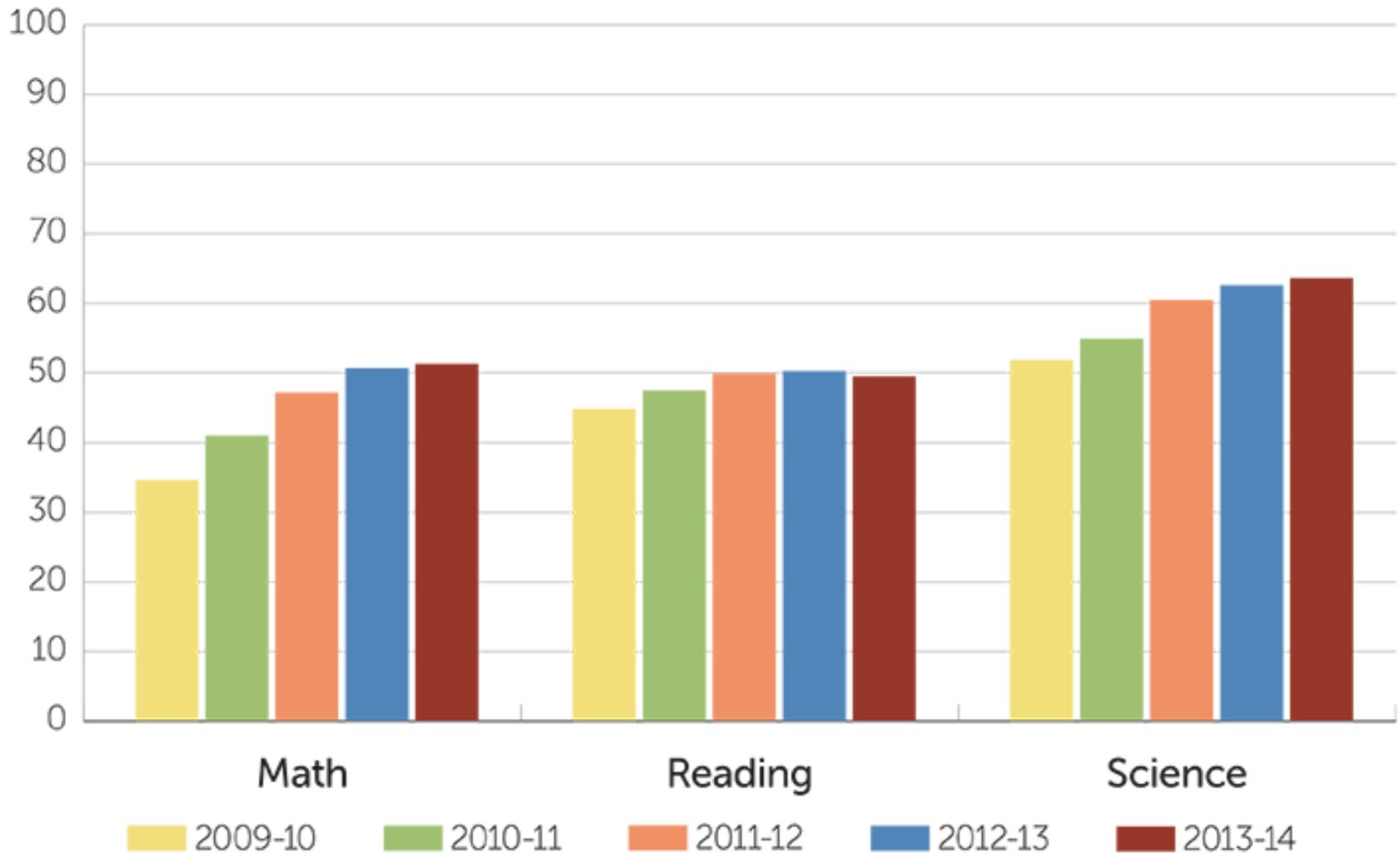
# State Level Results 2014

State Board of Education

July 25, 2014

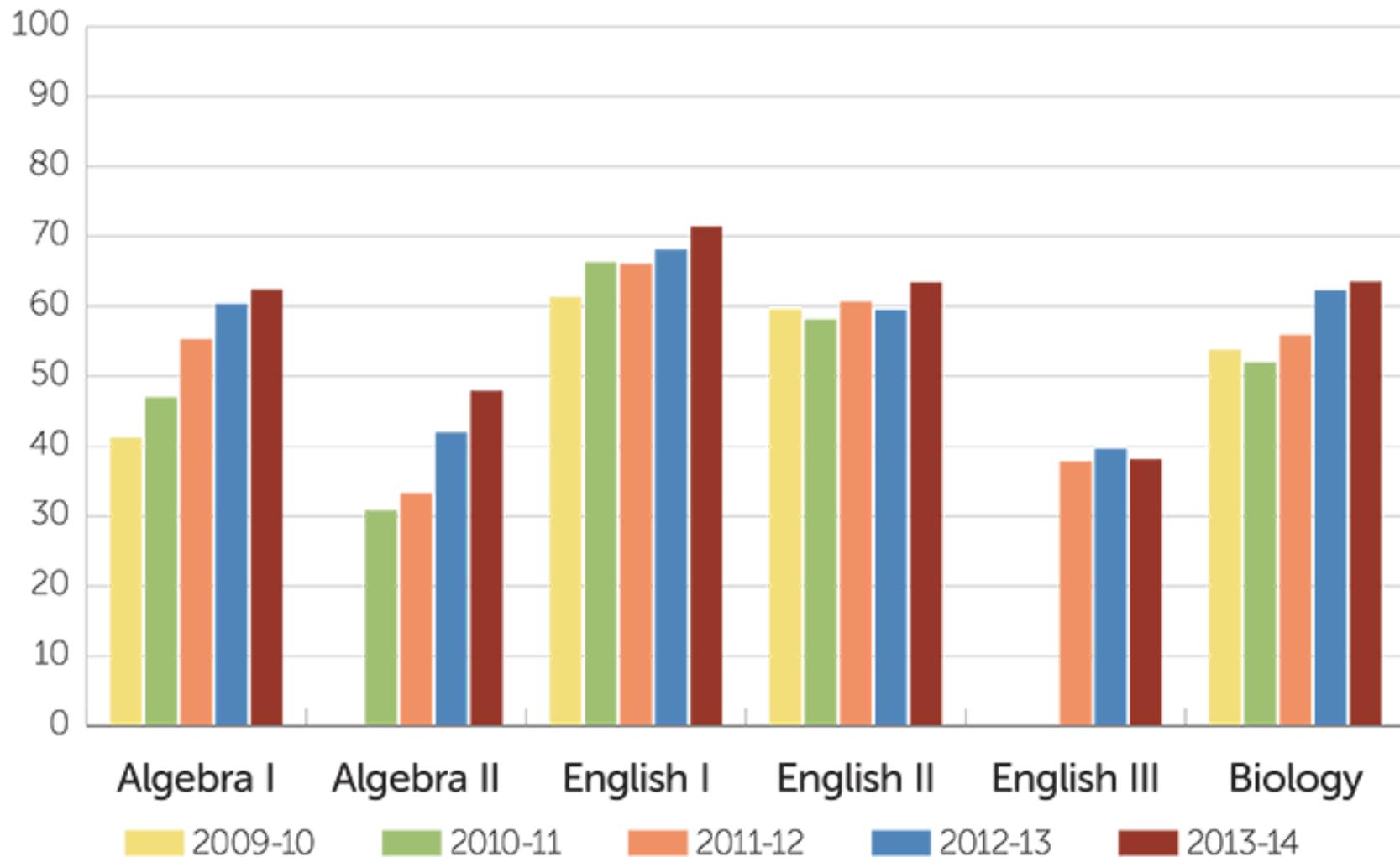
# GRADES 3-8 PERFORMANCE

*Percentage of Students Proficient and Advanced by Subject*



# HIGH SCHOOL PERFORMANCE

*Percentage of Students Proficient and Advanced by Subject*





# Chemistry Standards Setting Recommendations

State Board of Education  
July 25, 2014

# Objective

- Process for Chemistry assessment
- Review of standards setting process
- Recommendation for final reading

# Chemistry End of Course

- Field tested in 2012-13
- Operational in 2013-14
  - 60,500 students tested
- Standards setting panels with educators June 2014

# Why standards setting?

- Opportunity for educator input on cut scores used to define proficiency levels
- Opportunity for educators to discuss and recommend relationship between proficiency levels and college and career ready indicators

# Standards setting process

- Identify the relevant standards to be taught and assessed in each content area
- Define the expectations associated with each Performance Level
- Convene a panel of educators to provide content-based recommendations for cut scores
- Review educator process and recommendations with Technical Advisory Committee
- Recommend cut scores to the State Board
- State Board of Education reviews, discusses and approves cut scores

# Standards setting process

- Bookmarking process
  - Ordered item booklets show items in order of difficulty
  - Educators review the placement of bookmarks to recommend cut scores for basic, proficient and advanced
  - Review of related data (ACT, Explore, Biology)
- Three rounds of discussions over two days
  - 21 Tennessee educators
  - Familiar with the standards and with TCAP Chemistry EOC
  - Experience with
    - teaching diverse populations
    - students who have taken the TCAP EOC Chemistry Assessment
    - the teachers of these students, or
    - students in chemistry courses

# Proficiency level use

- Where are proficiency levels used?
  - District and school AMOs
    - Note: Science is not included in AMOs
  - School accountability (Priority, Focus and Reward)
- Where are proficiency levels NOT used?
  - TVAAS
  - Student grades

# Educator Recommendations

## Projected Percentage of 2013-14 Students At and Above Each Level

Cut Score	Basic		Proficient		Advanced	
	Scale Score	% at and Above	Scale Score	% at and Above	Scale Score	% at and Above
-2 CSEM	662	72.9	702	55.3	734	29.2
-1 CSEM	673	72.9	710	49.6	742	24.0
Recommended	684	67.3	718	44.0	750	19.0
+1 CSEM	695	61.0	726	35.6	758	14.4
+2 CSEM	706	52.4	734	29.2	766	12.3

# Related ACT Scores

- ACT Science College Readiness Benchmark (23) equates to scale score of 745
- Plan Science College Readiness Benchmark (22) equates to scale score of 741
- Scale score of 726 (1 CSEM +) equates to ACT Science score of 21

# Technical Advisory Committee (TAC)

- A group of national experts in large-scale student testing and accountability
- Provide objective analysis and advice on issues related to the state's student assessment program
- Includes two of the nation's foremost experts in standards setting
- TAC Members
  - Gregory Cizek, PhD, University of North Carolina, Chapel Hill
  - Laura Hamilton, PhD, RAND Corporation
  - Suzanne Lane, PhD, University of Pittsburgh
  - Sheryl Lazarus, PhD, University of Minnesota, National Center on Educational Outcomes
  - Marianne Perie, PhD, (chair), University of Kansas
  - Laurie Wise, PhD, Human Resources Research Organization

# TAC Review and Recommendations

- Be cautious with comparisons to ACT Science as ACT and TCAP Chemistry EOC do not assess the same material
- Consider the implications of ACT as compared to TCAP for both students and teachers
- Standard setting was conducted with fidelity to plan
- Educator recommendations should be taken within the CSEM range offered

# Standard Setting Recommendation

## Projected Percentage of 2013-14 Students At and Above Each Level

	<b>Basic</b>		<b>Proficient</b>		<b>Advanced</b>	
Cut Score	Scale Score	% at and Above	Scale Score	% at and Above	Scale Score	% at and Above
Recommended	684	67.3	726	35.5	758	14.4



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