

*DESE*  
*Student Growth Model*

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# *What is a Student Growth Percentile (SGP)?*

- ★ A measure of student progress that compares changes in a student's MCAS scores to changes in MCAS scores of other students with similar achievement profiles.
  - The model establishes cohorts of students with “similar performance profiles” by identifying all students with the same (or very similar) MCAS scores in prior years
  - All MCAS data was used since 2006 when available to establish academic peers



# *Achievement vs. Growth*

- ★ MCAS shows how each student is achieving relative to state standards
- ★ Growth measures change in an individual student's performance over time
  - Cannot compare student's scaled scores from year to year
  - Percentile is calculated on the change in achievement, not the absolute level



# *Understanding Percentiles*

- ★ Compare to height and weight percentiles for children
- ★ Student growth percentiles measure change instead of absolute quantity
  - Student with a growth percentile of 90 in 5<sup>th</sup> grade mathematics grew as much or more than 90% of her academic peers from 4<sup>th</sup> to 5<sup>th</sup> grade math MCAS
  - Student with a growth percentile of 23 in 8<sup>th</sup> grade English language arts grew as much or more than 23% of her academic peers from 7<sup>th</sup> to 8<sup>th</sup> grade English MCAS



## *Rules of Thumb*

- ★ Typical student growth percentiles are between 40 and 60
- ★ Students or groups outside this range are higher or lower than typical growth









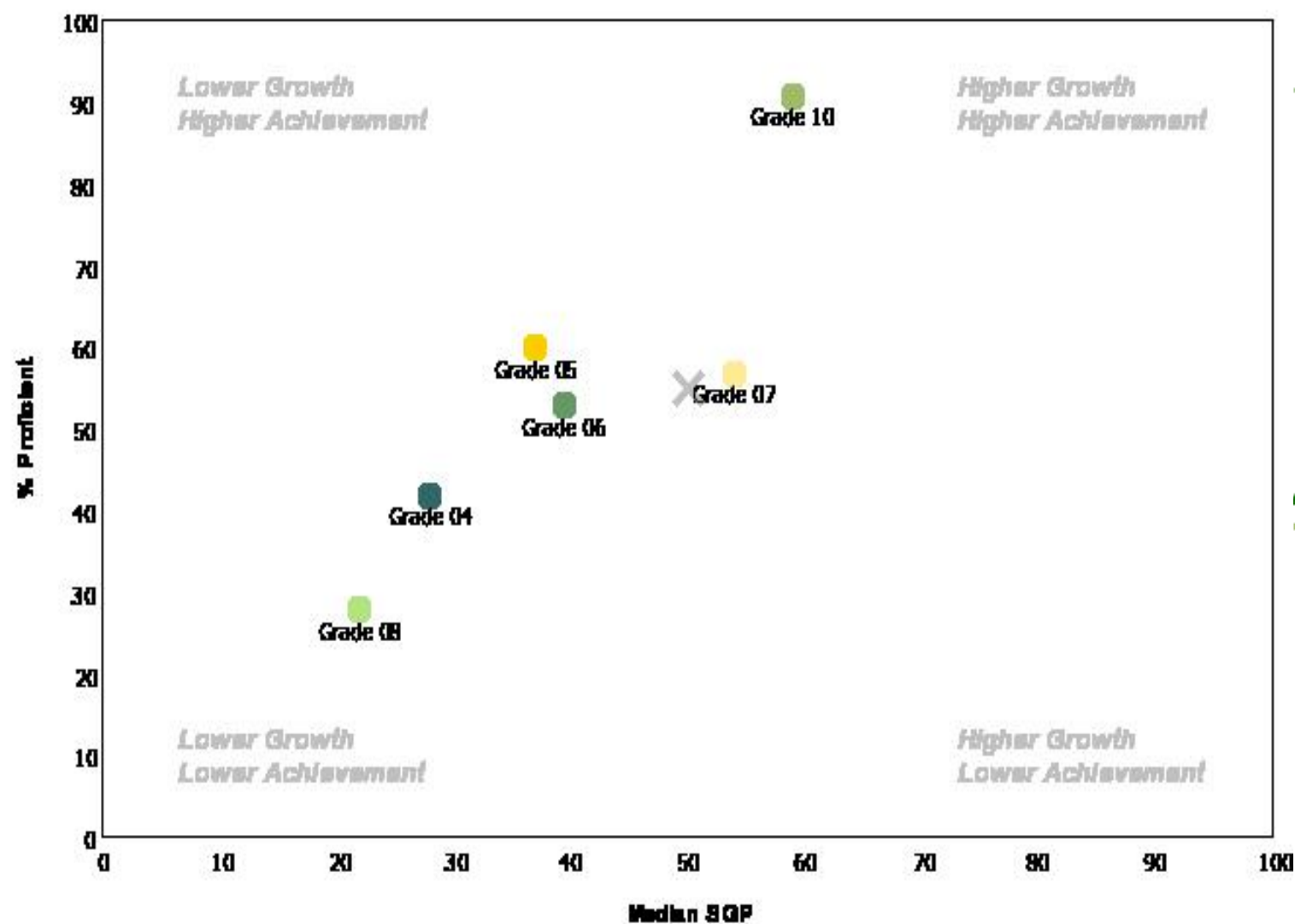


## *Measuring Growth for a Group*

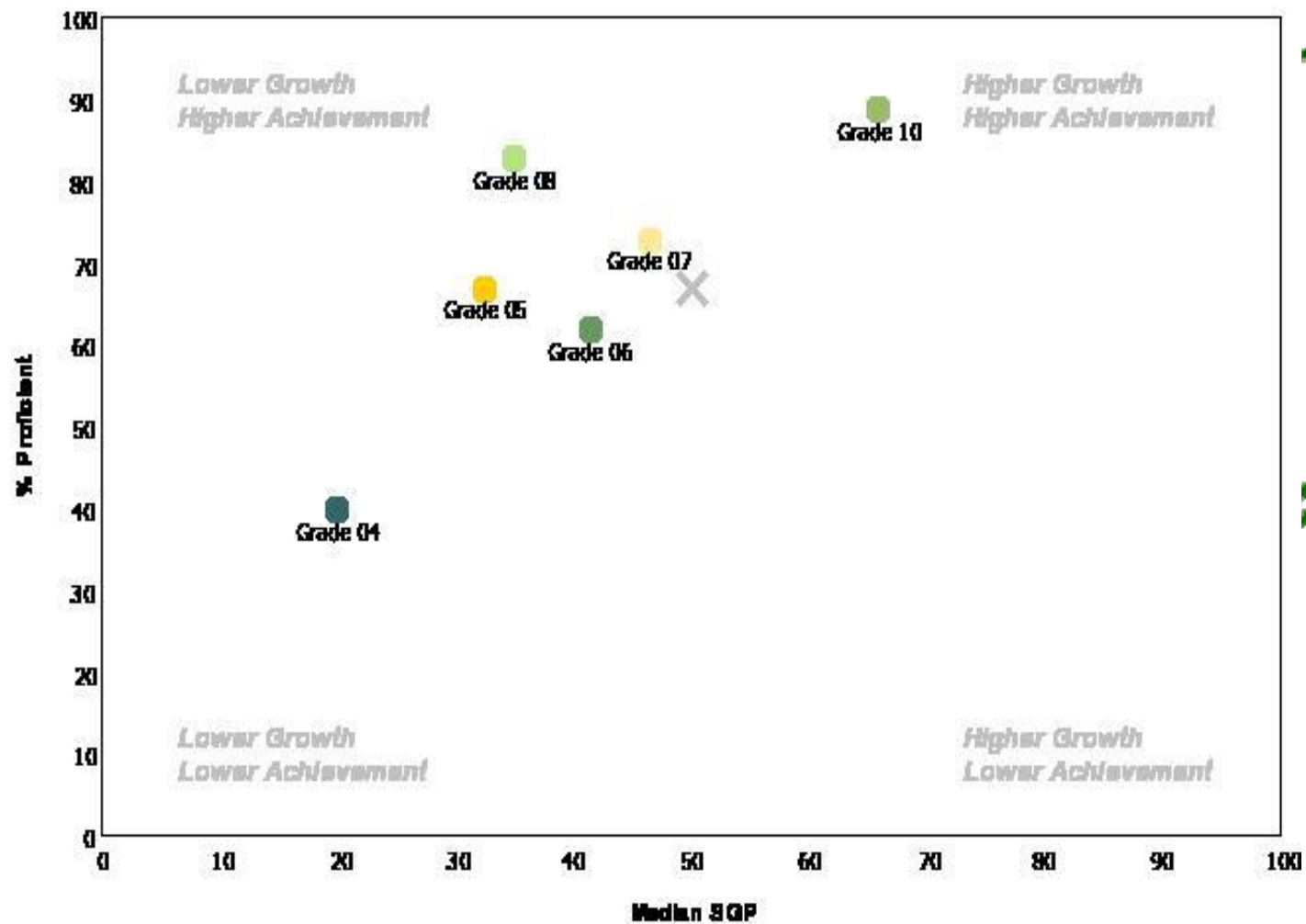
- ★ Most appropriate measure for reporting growth for a group is the median student growth percentile—the middle score if the individual student growth percentiles are ranked from highest to lowest
- ★ A typical school or district in the Commonwealth would have a median student growth percentile of 50



## Hull - 2009 MCAS All Grades Mathematics



### Hull - 2009 MCAS All Grades English Language Arts



# *Analyzing Student Growth Percentiles*

- ★ Principals and teachers working together
- ★ Working to determine how to increase the growth of our students
  - Curriculum
  - Instruction
  - Professional development
  - Home support

