

SOUTH CAROLINA GROWTH MODEL EXPLAINED

A Step-by-Step Explanation

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- Education Analytics (EA) calculates school-level academic growth model results for
 - Grades 4-8
 - Mathematics and ELA
- This presentation explains the way the calculations work as a step-by-step process
- For a more complete and detailed explanation of the statistical methodology, please see the full technical report



Growth Model – Step 1

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- After SC READY testing is complete, EA receives **student data from across the entire state** of South Carolina
- EA analyzes the data to find out:
 - ▣ How fast did students grow academically across the state?
 - ▣ Were there patterns in how fast different students grew?

Growth Model – Step 2

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- EA creates a target for each student
- The target is the state average growth of similar students, defined as students with the same test history in similarly achieving schools

Note:

These numbers are for illustrative purposes.

The actual adjustment amounts are calculated each year and for each grade/subject independently and reflect the actual data patterns across South Carolina.

+35 Average growth for students with the same test history

-5 Adjustment for school average achievement

+30 points
During the year



SC READY
2017-18

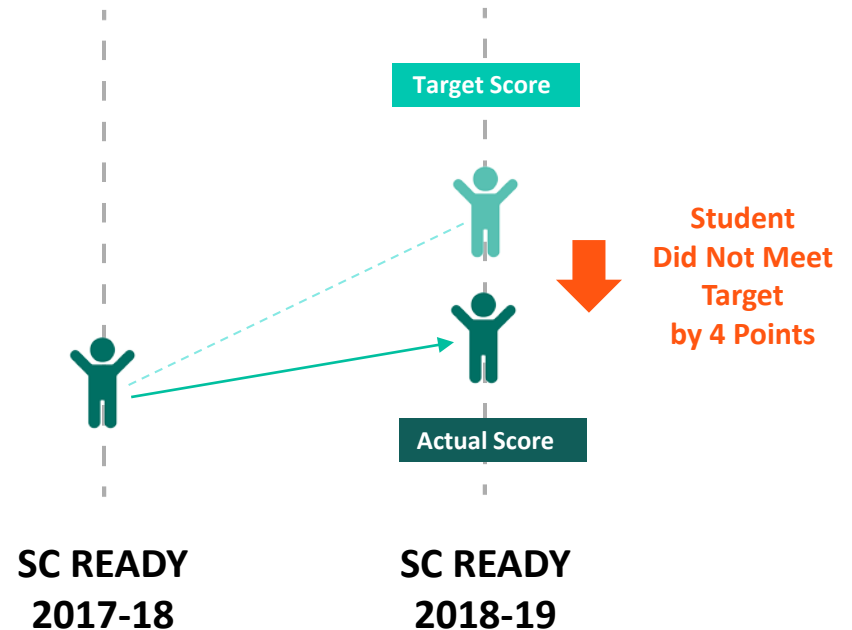
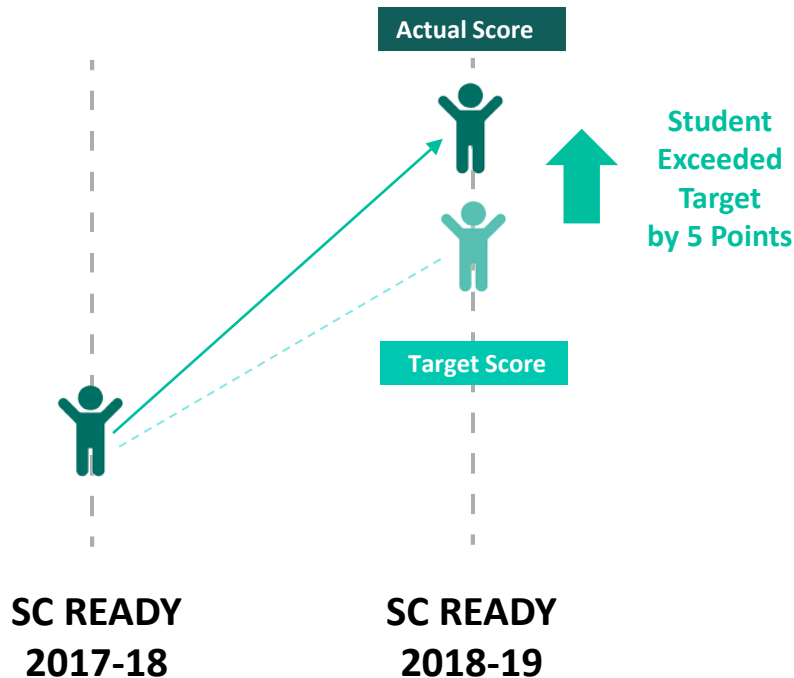
SC READY
2018-19



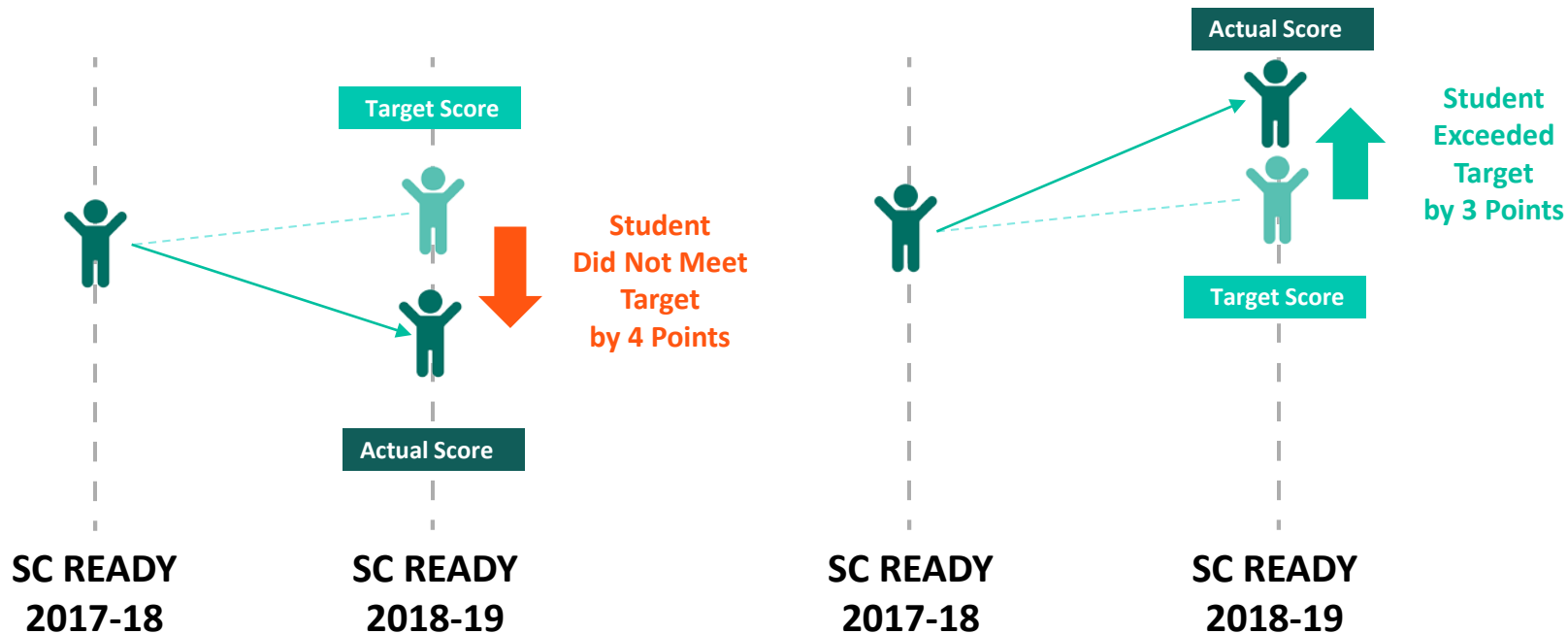
Growth Model – Step 3

5

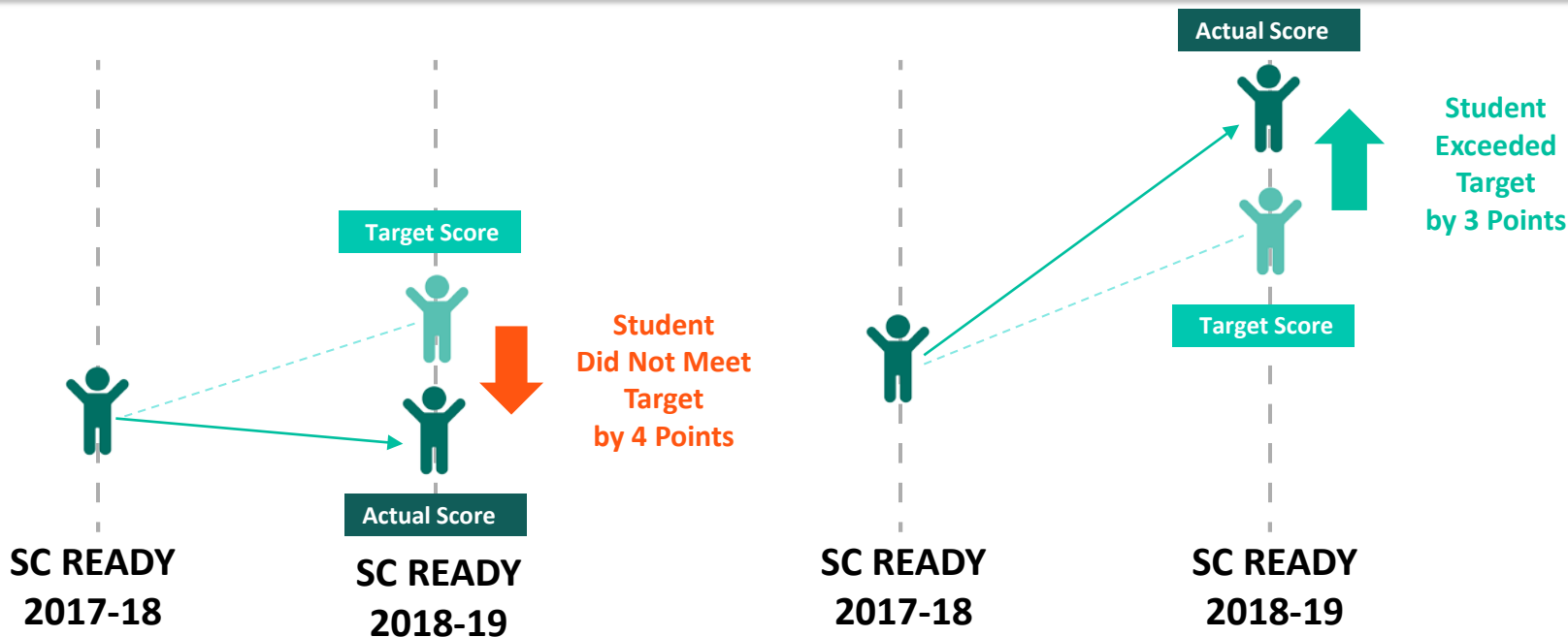
- Determine whether each **student** exceeded or did not meet the target, and by how much



Students
with
High
Pretest
Scores



Students
with
Low
Pretest
Scores



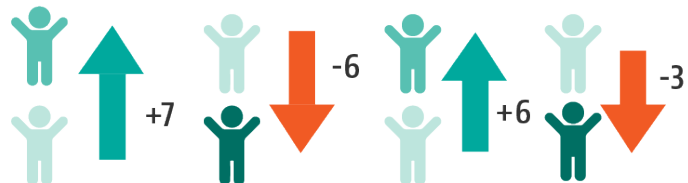
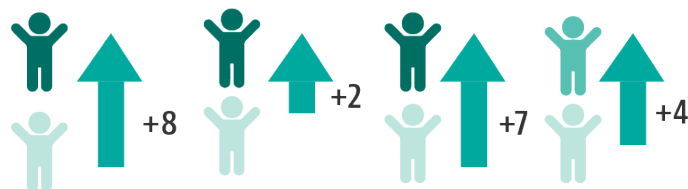
Growth Model – Step 4

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- **On average**, did a school's students tend to exceed or failed to meet their targets, and by how much?

School A

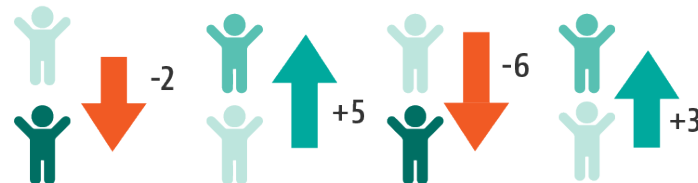
(Average **+3.13** Scale Score Points)



Above Average Value Added

School B

(Average **-1.25** Scale Score Points)

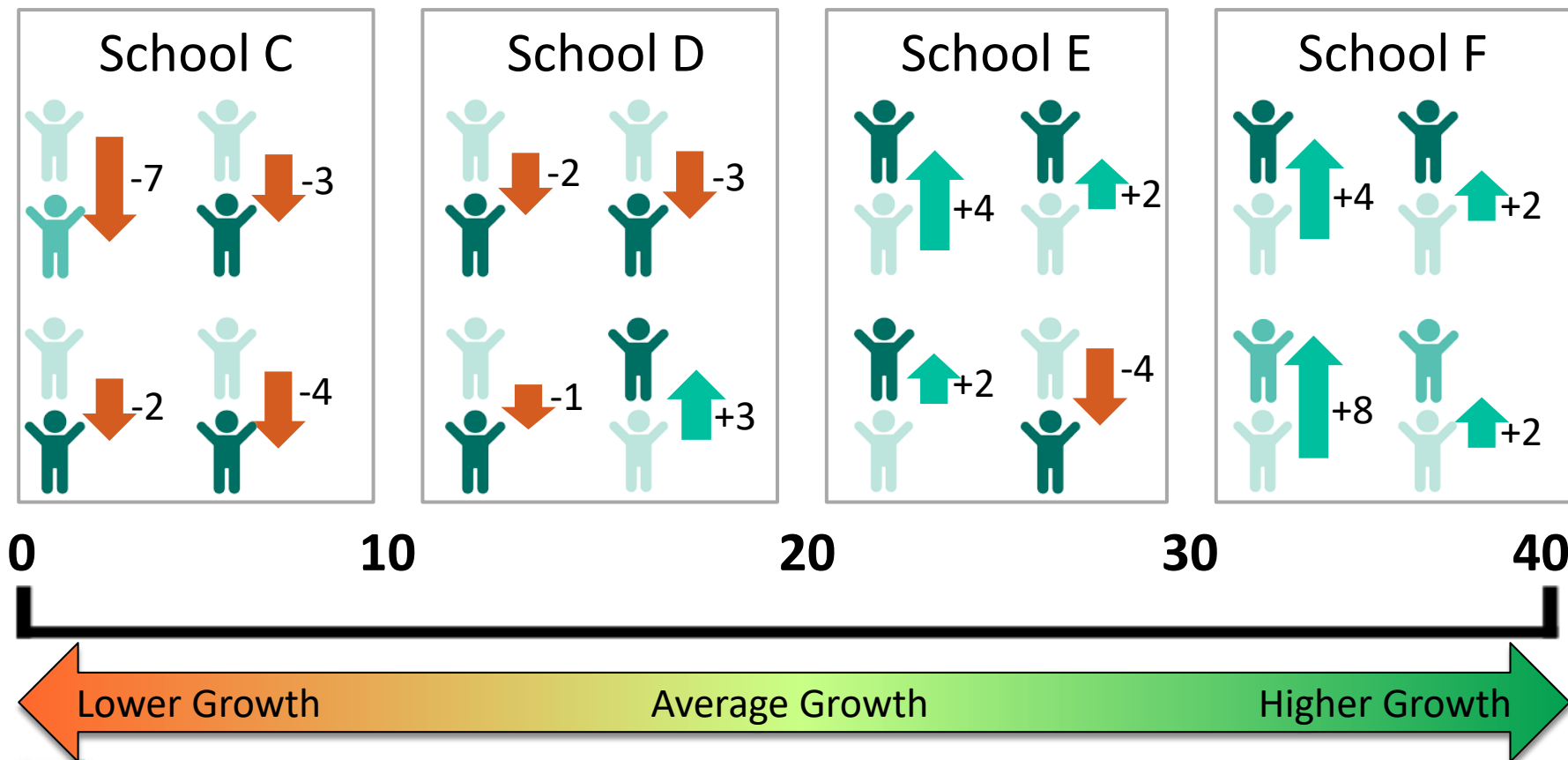


Below Average Value Added

Growth Model – Step 5

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- Growth results are **converted to a number on a 0-40 scale**.



Conversion to State Report Cards

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- Each school receives two growth values
 - One for all 4-8th grade students in the school
 - One for the lowest performing 20% of students in the school
- The two values are averaged to get a total number of points earned



Student Progress

Average
21.68/ 40

Points earned



Reporting

10

- For reporting purposes, the numbers on the 0-40 scale also are divided by 40 to get a percentage of points earned

Student Progress

Overall Percentage of Progress Points Earned

54.20%



Student Progress Components - Percent of Progress Points Earned

All Students

51.10%



Lowest Performing 20% of Students

57.30%

