



Education Analytics INC.

# DELAWARE STUDENT GROWTH MODEL

Understanding the 2019-20 Measure A Projections

# Topics for Today

- Measure A – student growth model details
- How student growth model is developed
- 2019-20 projection model
- Student targets
- Teacher ratings

# 2019-20 Measure A – Student Growth Model

- Measures **student academic growth** based on state assessments in mathematics and ELA
- Uses statistical techniques to identify the **impact of educators' performance** on student achievement
- **Adjusts for context** such as prior student knowledge and other student characteristics

# The Growth Model Applies To:

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- Grades 4-8 (Mathematics and ELA)
- Students who have valid scores for the prior year (spring 2019) Smarter Balanced assessment

# The Growth Model Adjusts For:

- Smarter Balanced assessment scale score from:
  - The prior year (Spring 2019)
  - Two years prior (Spring 2018)
  - Three years prior (Spring 2017)
- ELL Status
- Special Education Status

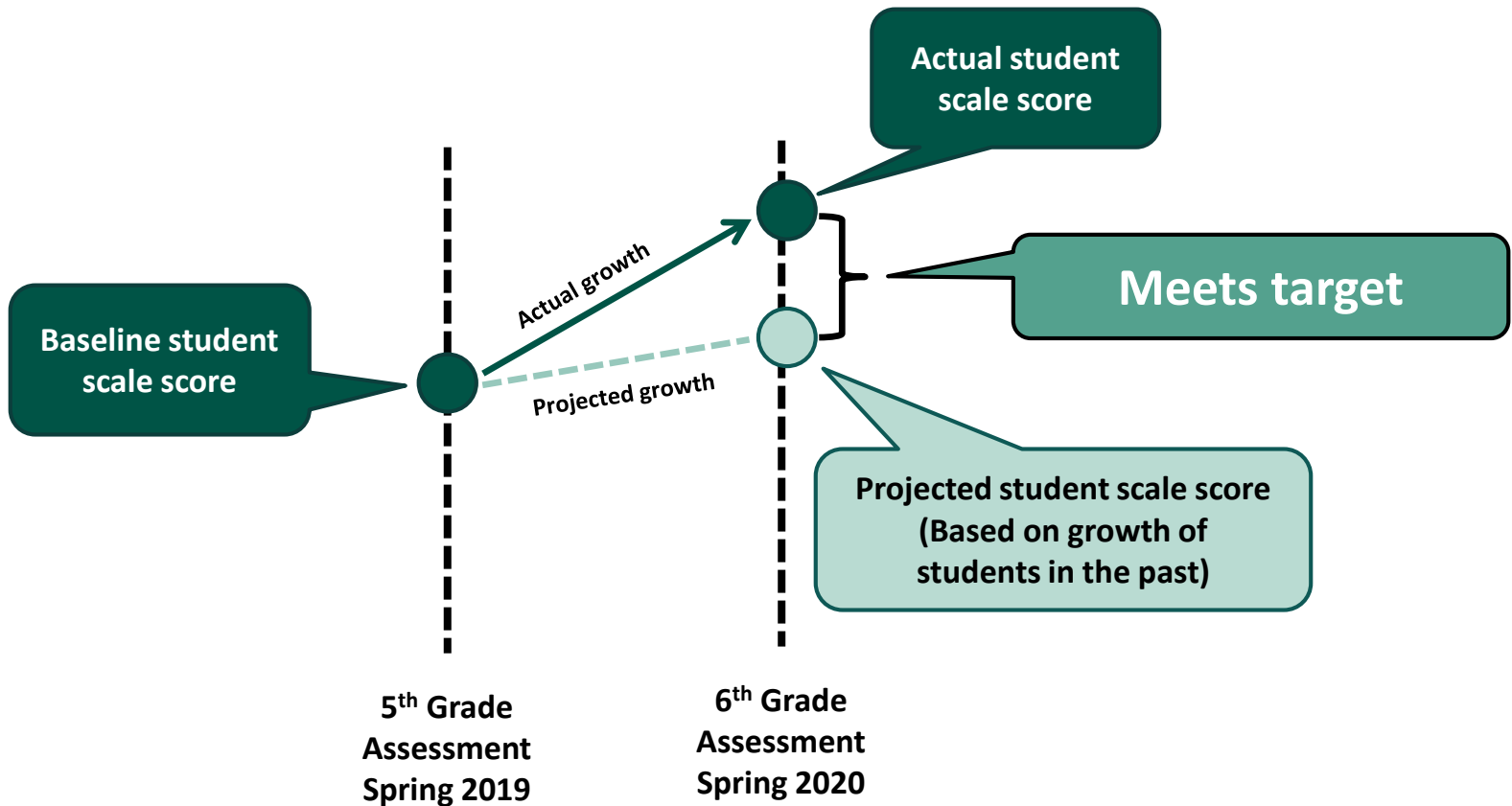
# 2019-20 Growth Model Summary

- Similarities to the 2018-19 growth model
  - The student growth model is similar in intent and coverage to last year's model.
  - The model is also longitudinal like last year's.
  - When the Smarter Balanced data is available for each student, we use multiple years of prior student achievement data
    - Increases the predictive power of the growth model
    - Multiple years of prior student achievement data are widely employed in growth models around the country

# 2019-20 Growth Model Summary

- Differences this year
  - Projections are provided earlier this year than in past years & will be updated in the winter
    - This means some students whose demographic data were missing during the summer run will not be included in the first round of Fall projections
    - We will update projections with missing students in the winter & share with the field then.

# Visual Representation of Student Growth Model

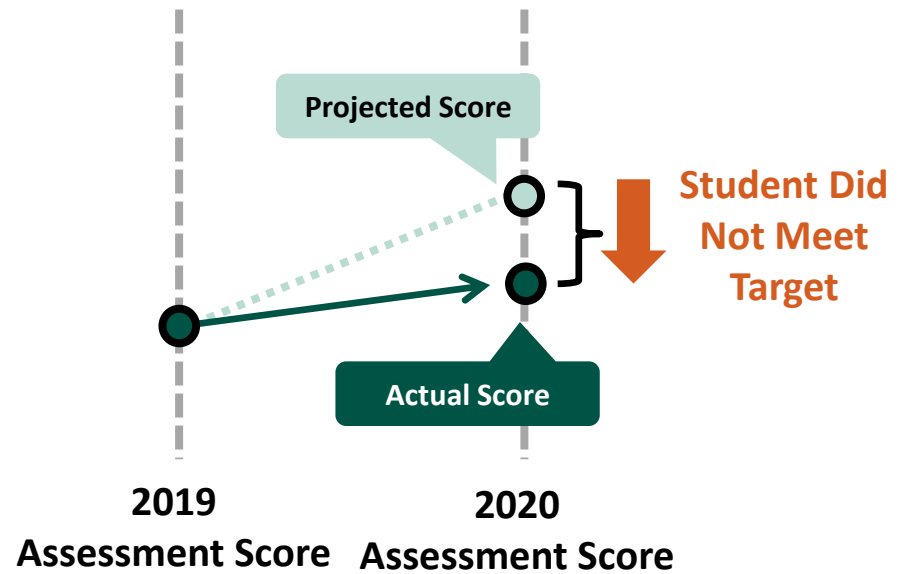
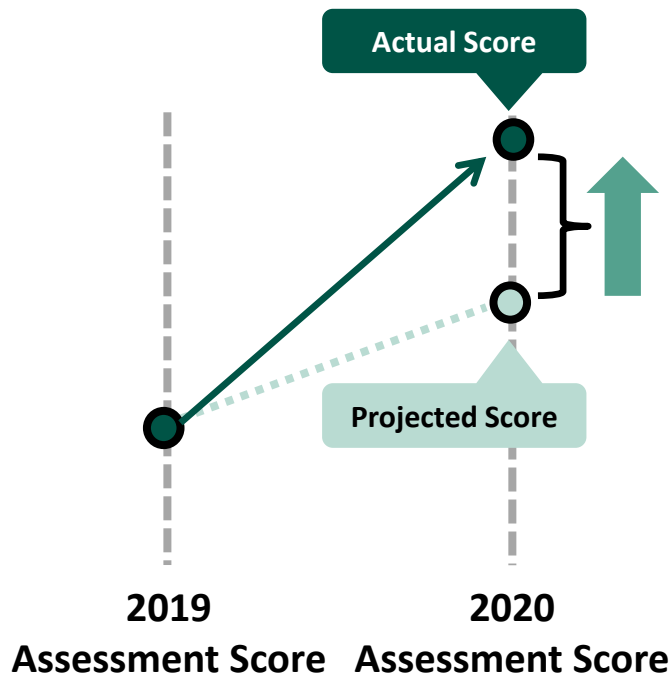




# How Are Ratings Calculated?

## Delaware Student Growth Model

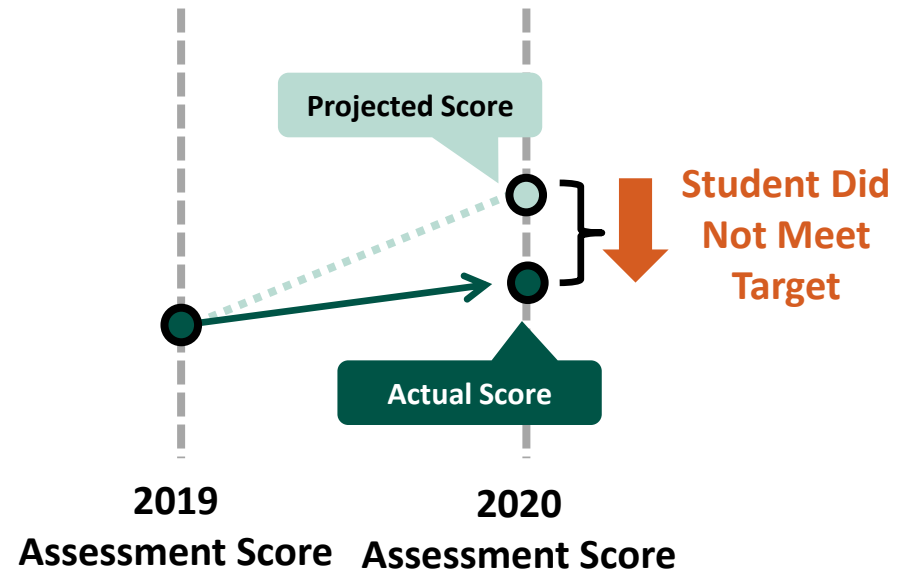
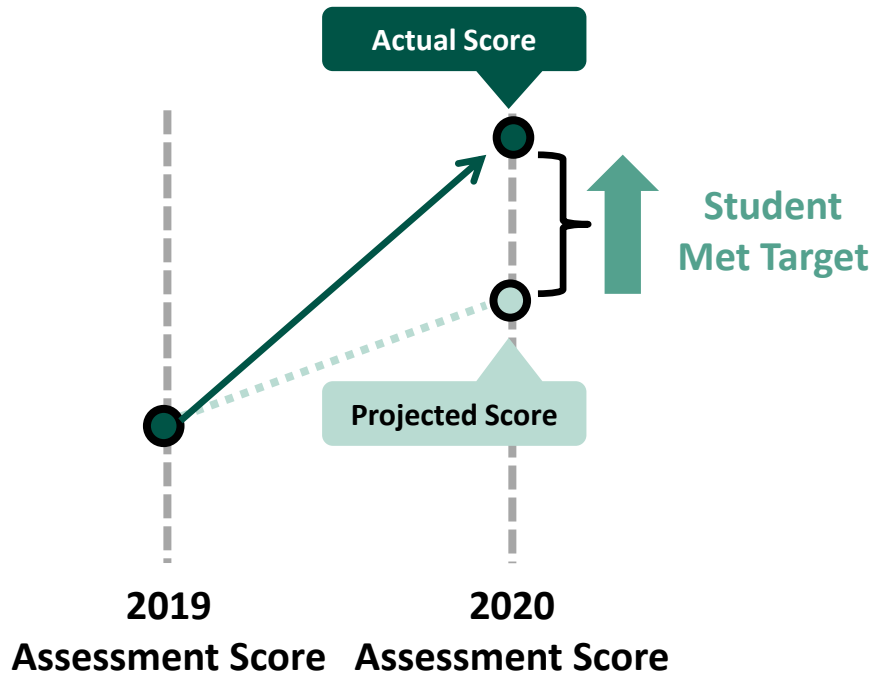
- Step 1: Determine if each **student** met/exceeded or did not meet target



# How Are Ratings Calculated?

| Name    | Baseline | Projected | Actual | Outcome         |
|---------|----------|-----------|--------|-----------------|
| Lee, I. | 2796     | 2802      | 2807   | Met or Exceeded |

| Name    | Baseline | Projected | Actual | Outcome      |
|---------|----------|-----------|--------|--------------|
| Day, J. | 2796     | 2802      | 2798   | Did Not Meet |



# Percent of Students Meeting Targets

## Delaware Student Growth Model

- Step 2: What percentage of an **educator's students** met or exceeded their targets?

### Teacher A

|                                |            |
|--------------------------------|------------|
| Number met or exceeded         | 6          |
| Total students                 | 15         |
| <b>Percent met or exceeded</b> | <b>40%</b> |

### Teacher B

|                                |            |
|--------------------------------|------------|
| Number met or exceeded         | 14         |
| Total students                 | 20         |
| <b>Percent met or exceeded</b> | <b>70%</b> |

# Measure A - Teacher Ratings

| Exceeds                                                          | Satisfactory                                                | Unsatisfactory<br>(w/ administrator<br>discretion)          | Unsatisfactory                                                     |
|------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------|
| <b>65% or more</b> of students in class met their growth targets | <b>50-64%</b> of students in class met their growth targets | <b>35-49%</b> of students in class met their growth targets | <b>Less than 35%</b> of students in class met their growth targets |

# Teacher Rating

## Delaware Student Growth Model

- Step 3: Teacher rating based on percentage of students meeting or exceeding targets

### Teacher A

|                                |            |
|--------------------------------|------------|
| Number met or exceeded         | 6          |
| Total students                 | 15         |
| <b>Percent met or exceeded</b> | <b>40%</b> |

**Unsatisfactory w/discretion  
(35%-49%)**

### Teacher B

|                                |            |
|--------------------------------|------------|
| Number met or exceeded         | 14         |
| Total students                 | 20         |
| <b>Percent met or exceeded</b> | <b>70%</b> |

**Exceeds  
(65%+)**

# Conclusion

- Measure A – Student Growth Model
  - Statistical Growth Model Techniques
  - Student Growth Targets
    - 2019-20: Targets are determined using three years of prior assessment data, when available, which increases the predictive power of the growth model.
    - Projections will be updated with missing students in the winter.
  - Teacher Ratings

# Questions and Comments

- Please send any questions or comments to Dr. Seher Ahmad ([Seher.Ahmad@doe.k12.de.us](mailto:Seher.Ahmad@doe.k12.de.us))

