

The Use of Student Growth in Teacher Evaluation

How Ratings Are Determined

Professional Practice

Student Performance

Performance Rating:
Observations;
Artifacts/Evidence;
Professional Growth Plan

Student Growth

Overall Rating

Growth is not a % of the overall rating but acts as a trigger to alter the rating if there is a discrepancy between the performance of the teacher and performance of students.

Student Growth Calculation

- SOAR

- *Student Ordinal Assessment Ranking –or- Simple Ordered Achievement Rank*

- Description:

- SOAR is a percentile value assigned as a growth measure between two points in time, for example, growth between last year and this year. SOAR is the percentile achieved most recently by each student, when compared only to other students of the same prior achievement level.

Q: What can SOAR scores tell us?

- SOAR shows how a student's achievement at the end of the year compares with that of other students who started the year at the same level.
- SOAR measures a teacher's impact on a group of students by measuring students' growth relative to academic peers.

Looking at student growth is important because it measures educational progress that is independent of the student's proficiency. Since SOAR only looks at academic peers, those students that scored the same in the previous year, the SOAR value is a measure of educational progress regardless of the student's starting proficiency.

WHY SOAR?

Student Ordered Assessment Ranking

- A measure of growth between two (2) academic years
- Group all students who scored the same scale score on the previous year
- Current scores are ranked from lowest to highest and given a percentile SOAR score
 $SOAR = P / (n + 1)$



Teacher SOAR

- Students identified for a teacher's roster(s)
- Students' median SOAR value is the teacher's SOAR score
- This is a median, not an average



SOAR tells. . .

- How a student's achievement compares to statewide academic peers
- A teacher's impact on a group of students
- A measure of educational progress independent of a student's proficiency level



SOAR doesn't. . .

- Doesn't adjust for student characteristics
- Tell the cause(s) for student growth
- Make predictions for student or teacher performance

Determining Overall Rating

Step 1: Professional Practice

Rating determined based on Teacher Performance (observation, PGP, artifacts/ evidence)

Step 2: Student Performance

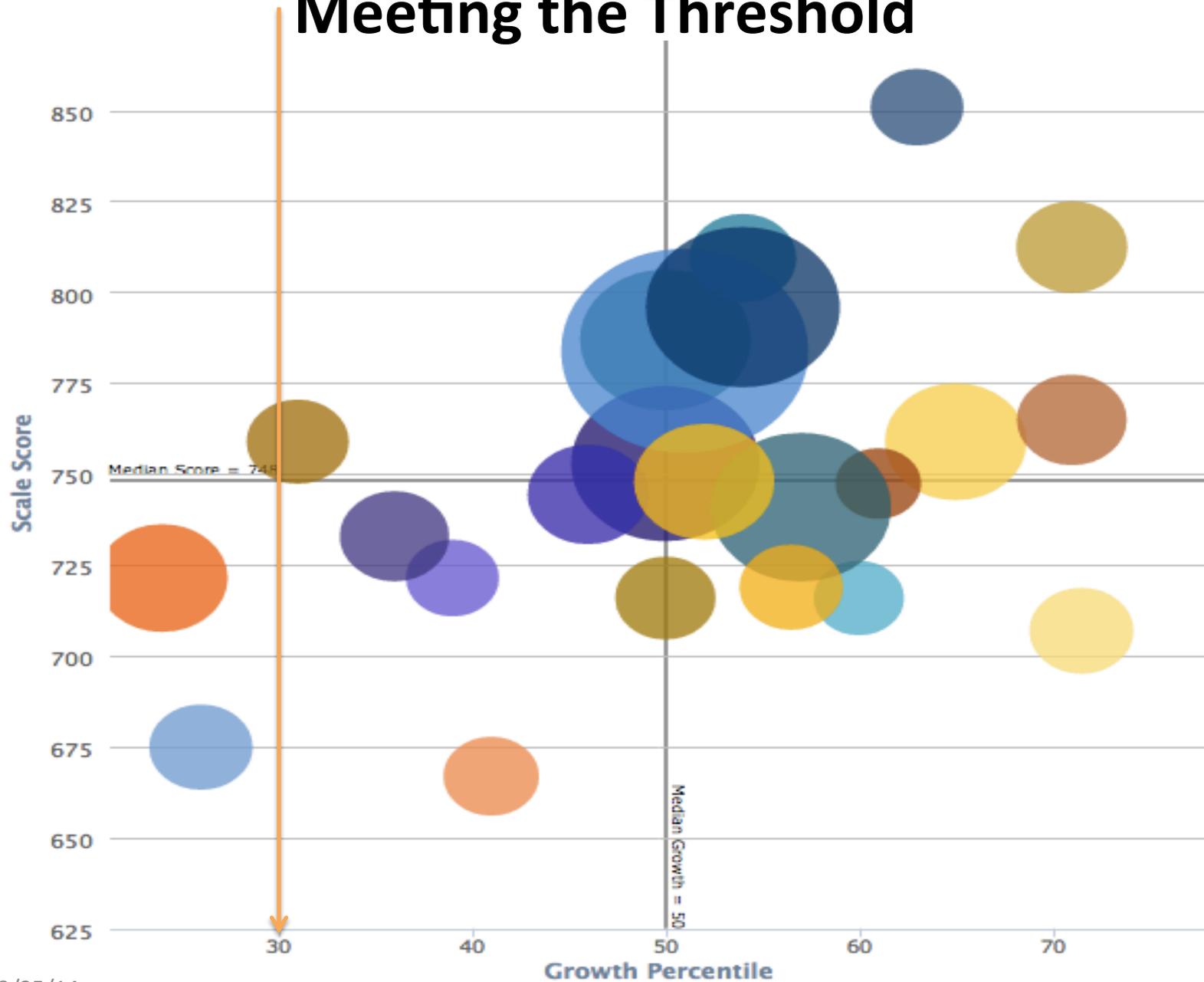
Review Student Growth Score to determine if meeting threshold

IF YES, rating stays as determined by Step 1

If NO, rating cannot be distinguished; if below SOAR for 2 years, rating lowered a level

Final Overall Rating Established

Meeting the Threshold



Considerations for Growth Measures

- **Rigorous measures:**
 - Exhibit high expectations for student progress toward college- and career-readiness
- **Between two points in time:**
 - Show learning growth between two points in time
- **Comparable across classrooms and grade levels:**
 - The measures used to show students' growth for a particular subject are the same or very similar across classrooms within a district or state.
 - The measures used in non-tested subjects and grades are as rigorous as those in tested subjects and grades. In other words, measures used to document student learning growth in art, music, and social studies must be as rigorous as those for student learning growth in reading/ language arts and mathematics.

Student Growth ILLUSTRATED



SOAR

(Student Ordered Assessment Rank)

Start with one grade, one test, last year

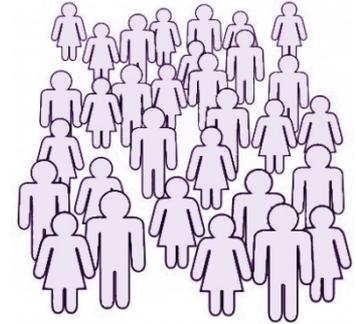


About 35,000 students in Arkansas take each assessment in each grade

Find all the students who have the same score on last year's assessment



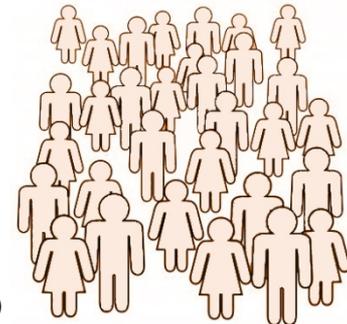
Everyone who made 320



Everyone who made 915

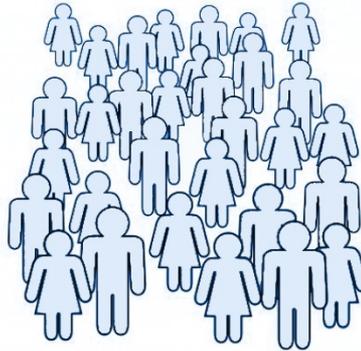


Everyone who made 647



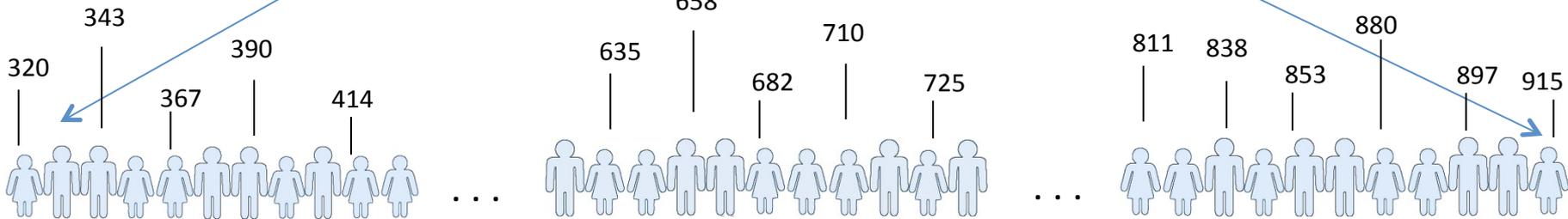
Everyone who made 844

Determine this year's score for each student in the group
(the group is ONLY those who made the same score last year)



Everyone who made
647 last year

Different scores this year



SOAR cont.

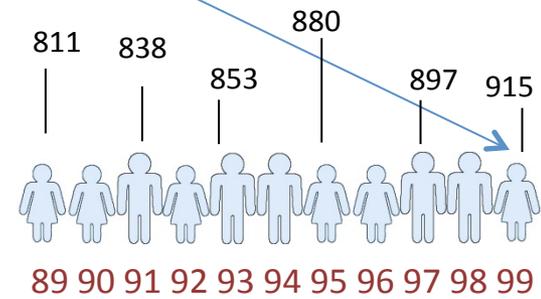
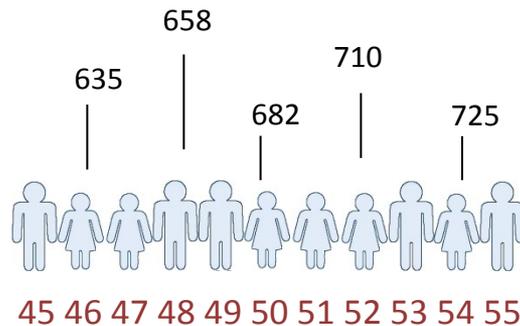
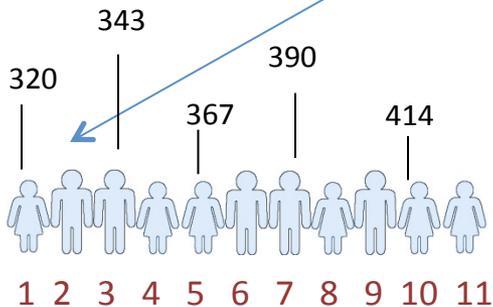
- Method:
 - Two scores are used for each student in a tested subject, the prior score and the current score.
 - All students with the same prior score are grouped together. Each grouping contains ONLY students with the same prior score.
 - The current score for each student is assigned a percentile ranking (1 to 99) within their specific grouping. Average SOAR for each grouping is 50.

Apply A Growth Percentile For Each Student



Everyone who made
647 last year

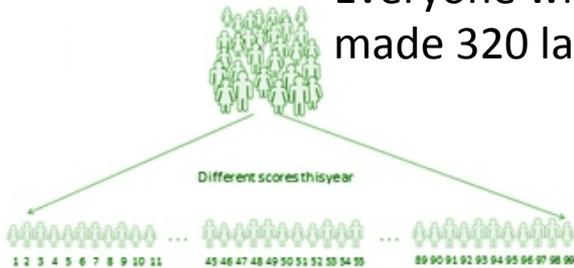
Different scores this year



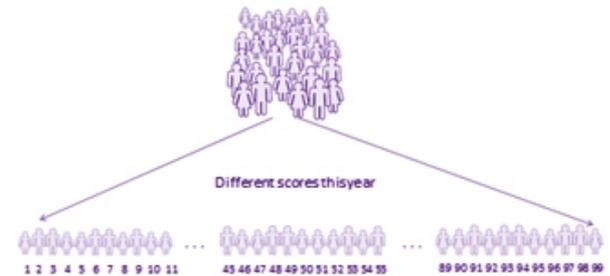
This percentile is the SOAR value

That's It! Repeat For Each Group.

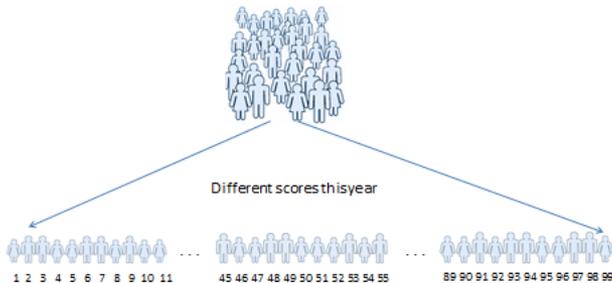
Everyone who made 320 last year



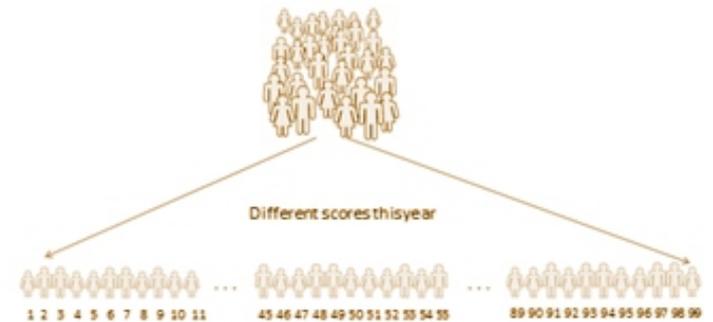
Everyone who made 915 last year



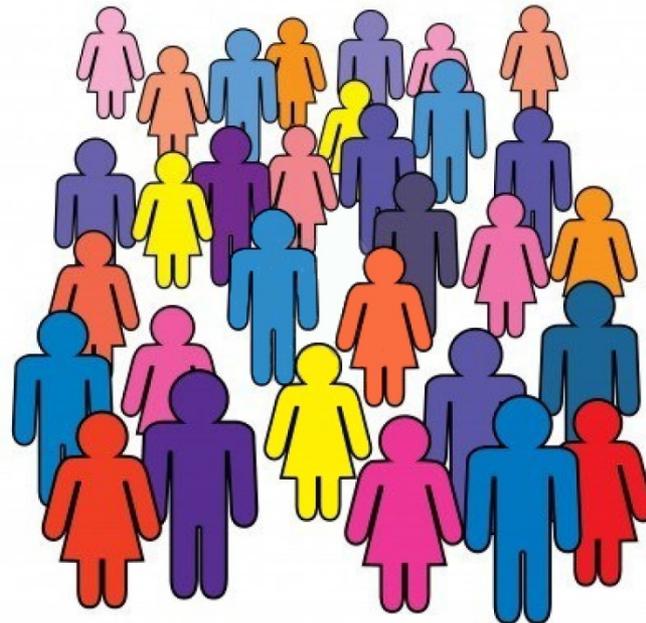
Everyone who made 647 last year



Everyone who made 844 last year

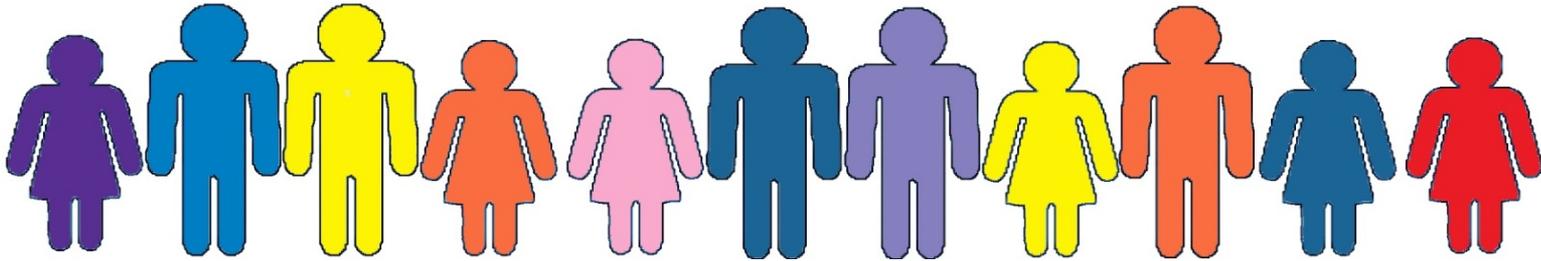


Each student for a teacher has a SOAR growth value from their assessments



A teacher's students are lined up by SOAR to find the median (middle)

13 17 21 34 42 55 62 71 77 77 93



This teacher's SOAR is 55



SOAR cont.

- Notes:
 - SOAR is based on a simple ordered ranking of student scale scores on two assessments.
 - Any two assessments in the same subject can be used as the prior and current scores.
 - The scales used in the assessments do not matter. Students with the same prior score will be grouped. It does not matter if the prior score is 340 or 0.135 or 9999.
 - Each separate prior score will be a separate group. All students with prior score X are compared only to each other this year. The SOAR value is the percentile this year for a student within the group who scored X last year.

SOAR Quick Facts

1. SOAR is not a growth to standard model.
2. SOAR is based on the SGP model and compares a student to his or her academic peers statewide.
3. A teacher is credited with a SOAR score based on the MEDIAN score of his/her students relative to performance of peer groups statewide.
4. The grouping of students will impact the teacher's SOAR scores.
5. Teachers whose SOAR score is below the 30th percentile have over 50% of their students declining in proficiency.

Growth in Evaluation Models

- Teachers' median student SOAR scores may be useful in explaining differences in student achievement among different teachers.
- In the case of school leaders, an indicator that aggregates teachers' median student SOAR scores or uses a school-level median student SOAR scores may also be useful in explaining differences in student achievement among different schools.

Analysis of factors in education that might impact differences in students' achievement scores?

- When Arkansas' teachers' median student SGPs are analyzed using a multi-level model, they are a significant factor in explaining the variance in student achievement at the teacher and school level.
 - In math, teachers' median student SGPs explain an additional 42% of the variation in student achievement scores among teachers that is above and beyond what is explained by students' demographics. In addition, 40% of the variation in student achievement among schools can be explained by the median student SGPs of teachers. This amount is in addition to the variation among schools explained by students' demographic characteristics.
 - In literacy, teachers' median student SGPs explain an additional 36% of the variation in student achievement scores among teachers that is above and beyond what is explained by students' demographics. In addition, 37% of the variation in student achievement among schools can be explained by the median student SGPs of teachers. This amount is in addition to the variation among schools explained by students' demographic characteristics.
- *Data based on 2013 Student State Assessment Results*

The Leadership/Learning Matrix

E F F E C T S D A T A	<i>Lucky</i>	<i>Leading</i>
	<ul style="list-style-type: none"> ➤ High results, ➤ Low understanding of antecedents ➤ Replication of success unlikely 	<ul style="list-style-type: none"> ➤ High results, ➤ High understanding of antecedents ➤ Replication of success likely
	<i>Losing Ground</i>	<i>Learning</i>
	ANTECEDENTS - ADULT ACTIONS/INTERVENTIONS CAUSE DATA	

Determining the Growth Threshold

