## engage ${ }^{\text {ny }}$

# State-Provided Growth Measures in APPR 

Update: April 2013 Board of Regents Meeting


## Ensuring Great Teachers and Leaders



Frameworks for managing human capital in schools: see for example: Rachel E. Curtis, Teaching Talent: A visionary Framework for Human Capital in Education, Harvard Education Press, Chapter 9; Herbert Heneman and Anthony Milanowski, Assessing Human Resource Alignment: The Foundation for Building Total Teacher Quality Improvement.

## National research shows how to do evaluation well

- Use research-based observation rubrics.
- Use multiple observations per teacher.
(ideally using multiple observers)

- Train and calibrate all observers.
- Value-added measures are more predictive of future student learning than other researched measures.
- Combining observation measures, student feedback surveys and value-added growth results on state tests is more reliable and a better predictor of student learning than:
> Any Measure alone
> Graduate degrees
> Years of teaching experience
- Combining "measures" is also a strong predictor of student performance on other kinds of student tests.
Measures of Effective Teaching Project; Bill and Melinda Gates Foundation


## New York State APPR design reflects latest research on effective evaluation systems.

## Annual evaluations with regular feedback

## Clear Rigorous Expectations <br> - NY State Teaching Standards <br> - ISLLC for principals

## Multiple Measures

- Required for all teachers and principals
- $40 \%$ Student Achievement (growth and locally-selected measures)
- $60 \%$ Other (observations, school visits, surveys, etc)
- Highly Effective; Effective; Developing; Ineffective
- Frequent, ongoing and linked to development opportunities
- Factors into employment decisions, supplemental compensation


## New York State Multiple Measures Evaluation System



## Status of 12-13 Measure Development

NYSED provided measures of student growth based on 2011-2012
State tests in August 2012 to all teachers with grades 4-8 ELA and Math and their principals, as required by Education Law 3012c.

Since then, NYSED has been working on enhancements to the measures with:

- American Institutes for Research, our vendor
- The "Metrics" work group of the Regents' task force on APPR
- Our growth measure Technical Advisory Group

Today we will provide an update on three proposed changes for 201213.

Key Points about New York State Growth Measures based on State tests:

- We measure student growth and not absolute levels of achievement
- Change in student performance between two points in time.
- We measure growth compared to similar students statewide using prior test history and demographic characteristics.

Every educator has a chance to demonstrate effectiveness on these measures regardless of the composition of his/her class or school.

This was true in 2011-12 and will be true in 2012-13.

## Changes for 2012-13

1. New York State will modify how students are attributed to teachers in grades 4-8 ELA/Math.

- Full-year enrollment required

From:

- No adjustment for student attendance
- Excluded $16 \%$ of eligible students in 11-12
- 60\% minimum enrollment required, including 150 K more students
- Weight student results by percent of time enrolled and in attendance
- Students present for less of the year count less


## Changes for 2012-13

2. We will have State-provided growth subcomponent measures for Principals with grades 9-12.
This year we propose to adopt two High School Principal student growth measures for 2012-13. They will be combined into one growth subcomponent rating for High school principals.

- MGP of ELA and Algebra Regents
- Similar to 4-8 growth measures, High School Principals will receive a mean growth percentile based on student scores on the Integrated Algebra and the ELA Regent exams compared to similar students using $7^{\text {th }}$ and $8^{\text {th }}$ grade tests, other Regents exams and all other factors used in 4-8 principal models.
- Comparative Growth in Regents Exams Passed
- Principals receive a growth score based on how many Regents exams students pass compared to similar students, up to eight exams. The definition of similar students will be the same as MGP of ELA/Algebra measure above.

The MGP for ELA and Algebra Regents exams uses the same approach as the 4-8 MGP measures, starting with individual student growth percentiles.


Comparing student A's Regent Algebra exam score to other students who had the same $8^{\text {th }}$ grade math score (640), she earned a "student growth percentile" (SGP) of 45, meaning she performed better in the current year than $45 \%$ of similar students.
SGPs are averaged to get a school Mean Growth Percentile

Comparative Growth in Regents Exams Passed: Calculate the difference between number of Regents passed for each student and similar students.
simplified illustrative example

| Student | Number of <br> Regents Passed In <br> Current Year For <br> This Student | Number of <br> Regents Passed <br> This Year by <br> Similar Students | Difference |  |
| :--- | :--- | :--- | :--- | :--- |
| Jessica | 1 | 1 | Principal's score <br> on this metric is <br> .2. Students at <br> this school on |  |
| Tyler | 2 | 2 | 0 | average are <br> passing .2 <br> Regents more <br> than similar <br> students. |
| Ashley | 1 | 2 | 0 |  |
| Emily | 2 | 1 | -1 |  |
| Jacob | 3 | 2 | 1 |  |
| Total Difference (Sum of Differences) | 1 |  |  |  |
| Average Difference (Total Difference/Number of <br> Students) | $1 / 5=.2$ |  |  |  |

## Changes for 2012-13

3. NYSED anticipates recommending at the June Board meeting adoption of "value-added" measures which will count for 25 points, instead of 20 points, for 4-8 ELA and Math and High School Principals.

- Enables us to consider more factors outside an educator's control and to more precisely measure results of instruction regardless of the composition of the class.
- Aligns with expectations for a 25 point growth measure, (and 15 point local measure) in $100 \%$ of District's approved 2012-13 APPR plans. (About 20\% of plans also included 20 point growth measures).

Criteria for including factors in value-added model:

- Data are collected Statewide and reported to SED.
- Empirical evidence demonstrates that adding the factor will improve the statistical characteristics of the model
- Inclusion promotes Regents policy objectives and minimizes unintended consequences


## Measurable factors in preliminary recommendation:

|  | Student Characteristics | Classroom or School Characteristics |
| :---: | :---: | :---: |
| Included in 4-8 ELA/Math Growth Model | -Up to three years of state test history, same subject <br> -Poverty <br> - Student with Disability (SWD) <br> -English Language Learner (ELL) |  |
| Possible Additions for value-added model (will include all current growth model factors) | -Prior year test score, other subject <br> -SWD spending less than $40 \%$ time in general education setting <br> - NYSESLAT score <br> - New to school in year other than typical entry year (i.e. non-articulation year) <br> -Over/under age <br> -Retained in grade | -Average prior achievement-same subject <br> -Range of scores around the average (i.e. Heterogeneity) of prior achievement <br> -Percent poverty <br> -Percent SWD <br> - Percent ELL <br> -Class Size |

## NYSED expects the 2012-13 growth score rating

 distribution to be similar to 2011-12:| Growth Score <br> Rating <br> $2011-12$ | Percent of <br> Teacher MGPs <br> (Grades 4-8, <br> Era/Math) | Percent of <br> Principal <br> MCPs <br> (Grades 4-8) |
| :--- | :--- | :--- |
| Highly Effective | $7 \%$ | $6 \%$ |
| Effective | $77 \%$ | $79 \%$ |
| Developing | $10 \%$ | $8 \%$ |
| Ineffective | $6 \%$ | $7 \%$ |

## Next steps on value-added model

- NYSED will consult full Regents Task Force about factors to be included in proposed value-added model.
- NYSED will return to Board of Regents with recommendation about value-added model at the June meeting.


## Advisory Groups

Technical Advisory Committee

- Dr. Daniel Goldhaber—University of Washington
- Dr. Hamilton Lankford-SUNY at Albany
- Dr. Daniel McCaffrey-RAND Corporation
- Dr. Jonah Rockoff-Columbia University
- Dr. Timothy Sass-Georgia State University
- Dr. Douglas Staiger-Dartmouth College
- Dr. Martin West—Harvard Graduate School of Education
- Dr. James Wyckoff—University of Virginia

Regents Task force on APPR
An advisory committee consisting of representatives of teachers, principals, superintendents of schools, school boards, school districts and board of cooperative educational services officials, and other interested parties.

