

STUDENT GROWTH – VALUE-ADDED AND BEYOND

OSBA CAPITAL CONFERENCE
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RESEARCH CENTER

THE OHIO EDUCATION RESEARCH CENTER

- A collaborative of Ohio-based research universities & institutions
- Focused on a statewide research agenda
- Addressing critical issues of education practice and policy
- Custodians of an Ohio Longitudinal Data Archive



FUNDED PROJECTS RELATED TO SGM

- Educator Evaluation Studies
- Extended Testing for Value-Added Reporting
- Student Growth Measures (SGM) Policy & Practice

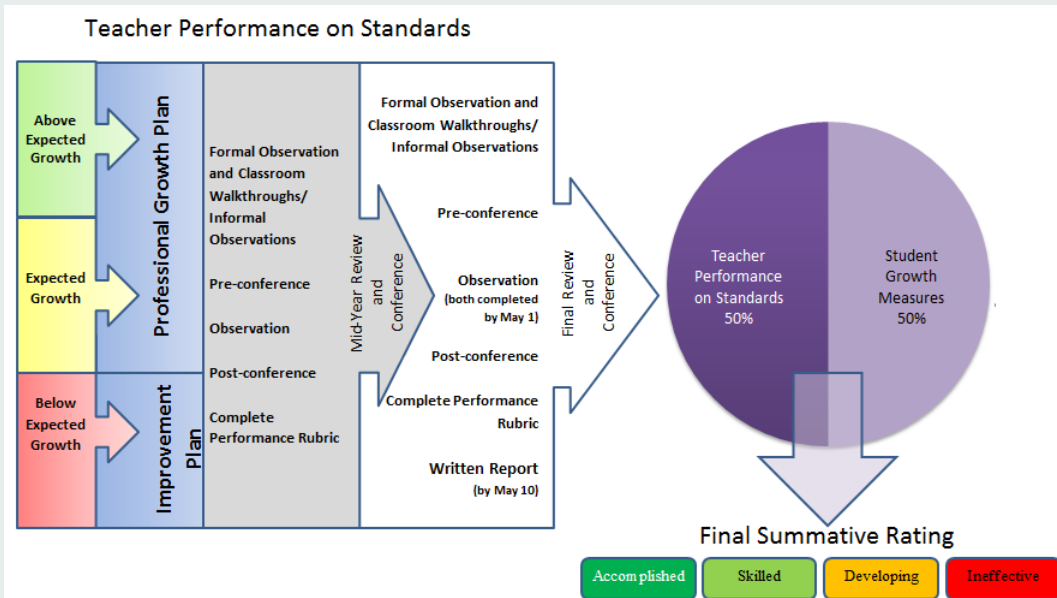


DUAL SGM RESEARCH AGENDA

- Measuring Student Growth
- Using Student Growth Measures in relation to other variables to guide policy & practice



OTES FRAMEWORK



(1) Performance Standards (50%)

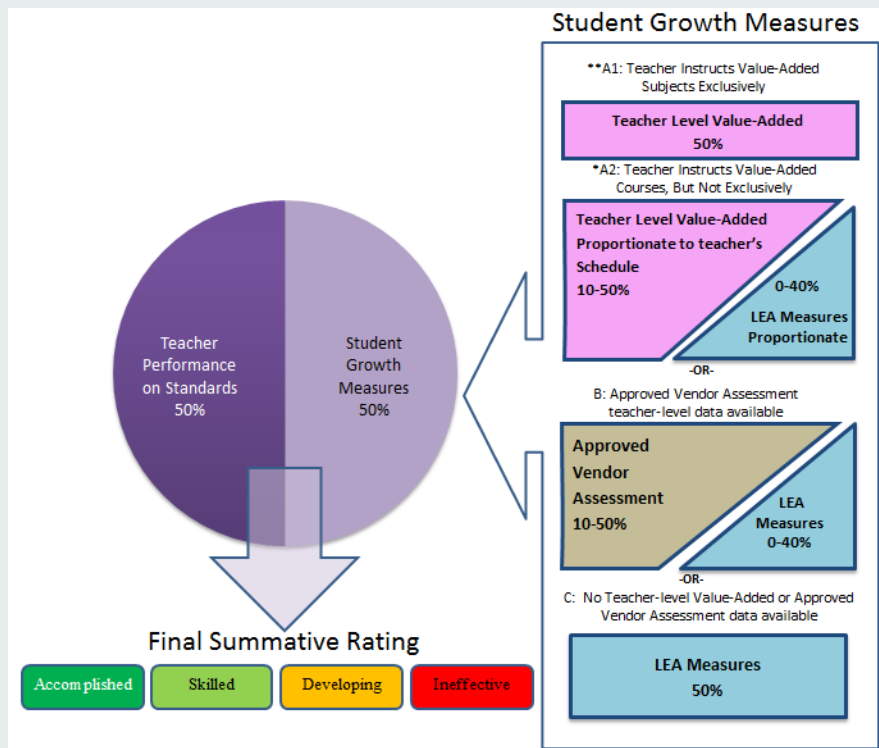
- Developed by OH Educator Standards Board
- Seven components
 - Students
 - Content
 - Assessment
 - Instruction
 - Learning Environment
 - Collaboration and Communication
 - Professional Responsibility and Growth

(2) Student Growth Measures (50%)

- Value-Added
- Approved Vendor Assessments
- LEA Measures



STUDENT GROWTH MEASURES IN OTES



(A) Value-Added

- Grades 4th – 8th, ELA & Math
- Until June 30, 2014, majority (>25%) of SGM shall be based on Value-Added
- On or after July 1, 2014, all (50%) of SGM shall be based on Value-Added.

(B) Approved Vendor Assessments

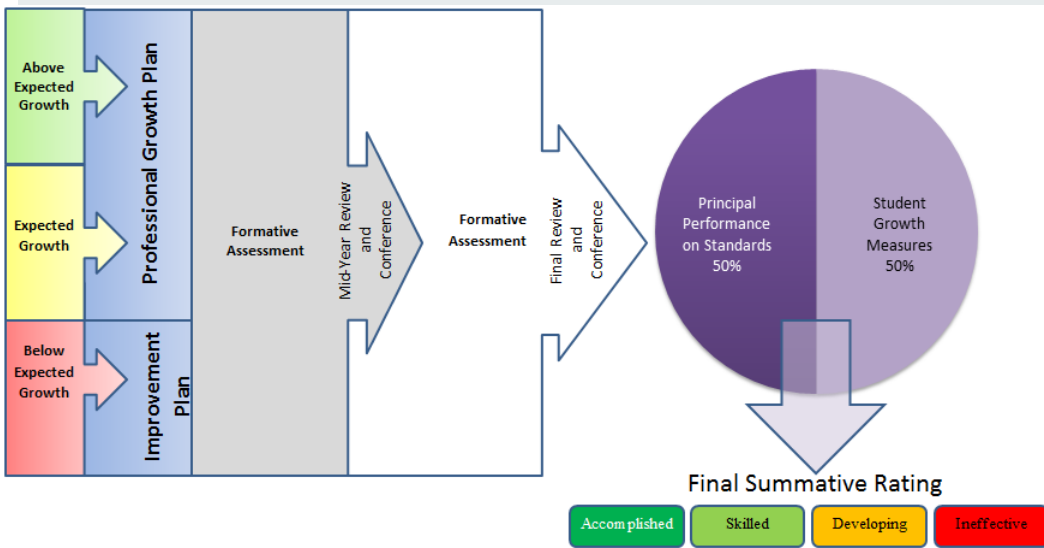
- Terra Nova
- ACT End-of Course
- NWEA MAP
- STAR
- ...

(C) LEA Measures

- Student Learning Objectives
- Shared Attribution
 - LEA\School-level Value-Added
 - LEA\School-level SLO



OPES FRAMEWORK



(1) Performance Standards

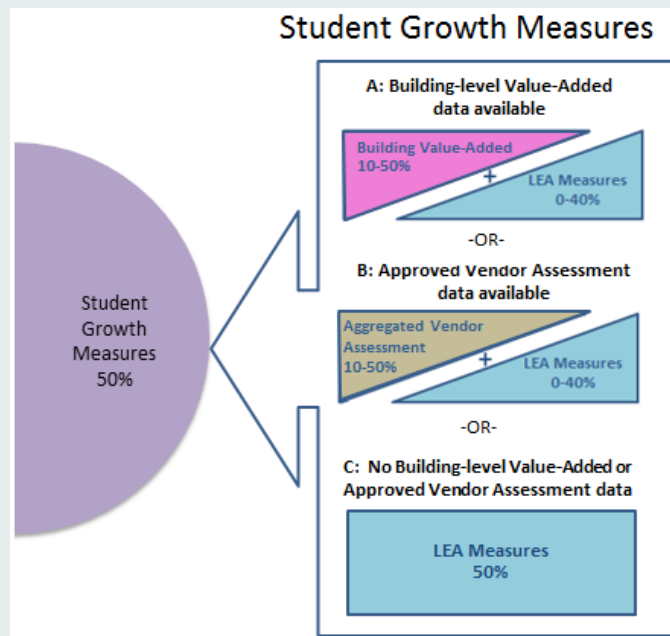
- Shared vision, establish goals, continuous improvement
- HQ instruction -> increased student achievement
- Manage resources\operations
- Establish collaborating learning, shared leadership
- Engage parents, community

(2) Student Growth Measures

- Value-Added
- Approved Vendor Assessments
- LEA Measures



STUDENT GROWTH MEASURES IN OPES



(A) Value-Added

- School-level Value-Added

(B) Approved Vendor Assessments

- School-level Composite Measure
- School level aggregate of AVA scores

(C) LEA Measures

- District SLOs
- District Value-Added
- Aggregate of Teachers' Value-Added Scores
- Student Achievement trends
- Progress on Improvement Plans
- Student course-taking trend (e.g., AP)



... OTES\OPES FINAL RATING DETERMINATION

Performance Standards

| | 4 | 3 | 2 | 1 |
|------------|-----------------------|-----------------------|------------------------|------------------------|
| SGM Rating | Above Accomplished | Above Accomplished | Above Skilled | Above Developing |
| | Expected Skilled | Expected Skilled | Expected Developing | Expected Developing |
| | Below Developing | Below Developing | Below Ineffective | Below Ineffective |



EDUCATOR EVALUATION STUDY (OTES/OPES) FINDINGS RELATED TO SGM

- LEAs piloting or implementing in 2012-13 did not use SGM (n=37)
- Educators were generally positive about the new evaluation systems
- Educators expressed a lack of trust & misunderstandings about value-added data and SGM
- Educators expressed concerns about unfairness of using different student growth measures for evaluation



EXTENDED TESTING FOR VALUE-ADDED REPORTING (SGM MINI-GRANT) STUDY

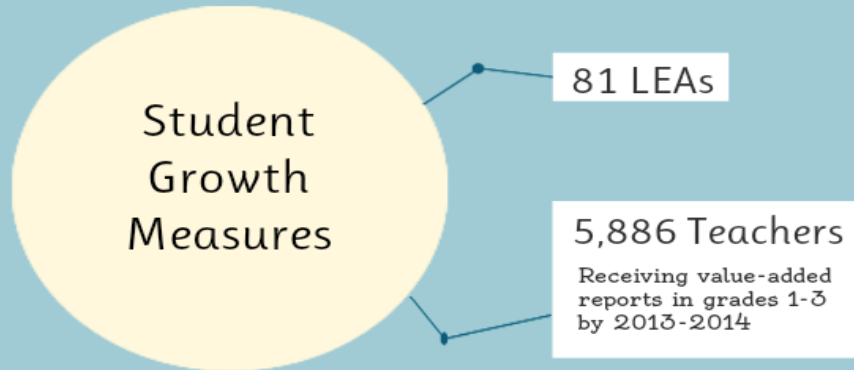
One visit to

- 11 of the 13 Round 1 LEAs
- 12 of the 81 Round 2 LEAs
- 28% of 81 MG recipients visited
(13 Round 1 LEAs are included in the Round 2 total of 81)



Extending Value-Added Data to Primary Grades

via Student Growth Measures
Mini-Grant Program



1,344 Teacher-level Value-Added reports
-- Reading
-- Mathematics

1,688 Teacher-level Value-Added reports
-- Reading
-- Mathematics
-- Science
-- Social Studies

2,854 Teacher-level Value-Added reports
-- Reading
-- Mathematics
-- Science
-- Social Studies

EXTENDED TESTING FOR VALUE-ADDED REPORTING (SGM MINI-GRANT) STUDY

- Eager for reliable student growth measures for "untested" grades and subjects
- Question validity of vendor tests & lack assessment literacy
- Worry about too much testing and stress on primary students (k-2)
- Question how # students and % instructional time impact VAM
- After HB required LEAs to use Extended Testing VAM in evaluation, a few LEAs dropped out



EXTENDED TESTING FOR VALUE-ADDED REPORTING (SGM MINI-GRANT) STUDY

Evaluation

- Confusion regarding teachers' metrics
- Student and parent accountability missing
- Teachers/Principals report a high level of stress.
- Negative impact on time for principal leadership. (voiced by teachers and principals)
- Increase the motivation for grouping and providing the best services for every student.



SGM POLICY AND PRACTICE STUDY

Researching current policy and practice regarding:

- Teacher-Student Data Linkage
- Student Growth Measures in OTES/OPES—early implementation



EXAMPLE OF LINKAGE SCREEN-TEACHER

[My BFK](#) > [My Linkage](#) > Class Roster

Class Roster

LA Integrated English Language Arts K-3 [Rename](#) **Status:** Not Started

Course Name: Integrated English Language Arts K-3 (050152) **District:** Link Demo District #1B [Copy Students](#)

Subject Area: Language Arts **Building:** Singleton Elem (DD1B_105) [Contact Support Team](#)

Approval Status: Not Started **Staff:** Marks, Kelly

| 1 I taught these Students Add Students | 2 Enter by month during these months | 3 for % of instruction |
|--|---|---|
| Students (12) | From | To |
| Set Values for All Students >>> | Aug/Sep | May/Jun |
| 🗑️ Aguilar, Miriam (200504) | Aug/Sep | May/Jun |
| 🗑️ Armstrong, Derek (201365) | Aug/Sep | May/Jun |
| 🗑️ Cardenas, Miguel (201413) | Aug/Sep | May/Jun |
| 🗑️ Carrillo, Amber (200469) | Aug/Sep | May/Jun |
| 🗑️ Elliott, Myrtle (200038) | Aug/Sep | May/Jun |
| 🗑️ Foreman, Andre (201243) | Aug/Sep | May/Jun |
| 🗑️ Hobbs, Claude (201533) | Aug/Sep | May/Jun |
| 🗑️ Payne, Gene (201358) | Aug/Sep | May/Jun |
| 🗑️ Robbins, Gloria (201097) | Aug/Sep | May/Jun |
| 🗑️ Rocha, Chris (201204) | Aug/Sep | May/Jun |
| 🗑️ Small, Isaac (201150) | Aug/Sep | May/Jun |
| 🗑️ Washington, Clifton (200724) | Aug/Sep | 16 |

LINK/ROSTER VERIFICATION SURVEYS

- Surveyed a sample of Ohio teachers who linked for the first time in 2011 and all Ohio teachers who linked in 2013.
- Asked about experiences with linkage training, linkage process, perceptions of accuracy, suggestions for improvement...



LINK/ROSTER VERIFICATION SURVEYS

Teachers- Did you have any students this year for whom you shared the proportion of instructional time with another teacher?

| | 2011 | 2013 |
|-----|------|------|
| Yes | 80% | 81% |
| No | 20% | 19% |



LINK/ROSTER VERIFICATION SURVEYS

Teachers- Do you think the linkage process accurately captured what was happening in your classroom (i.e. students you taught last year, their length of enrollment, and your percentage of instructional time with them)?

| | 2011 | 2013 |
|------------|------|------|
| Yes | 46% | 58% |
| No | 23% | 26% |
| Don't know | 31% | 16% |



LINK/ROSTER VERIFICATION SURVEYS

Teachers- Given your experience with the linkage process, how confident are you that the linkage process improves the accuracy of the teacher-level value-added data?

| | 2011 | 2013 |
|----------------------|------|------|
| Not at all confident | 39% | 31% |
| Somewhat confident | 55% | 61% |
| Very confident | 6% | 9% |



TEACHER-STUDENT DATA LINK SENSITIVITY ANALYSIS

Another question in SGM Research Project:

How consequential to teacher-level value-added measures is the precision of their reported percentages of shared instructional responsibility?



TEACHER-STUDENT DATA LINK SENSITIVITY ANALYSIS

- Provided SAS list of districts that responded to 2011 linkage survey
- Developed nine scenarios of instructional responsibility (varied # students, % students shared)
- SAS identified 882 teachers in the 62 districts and recalculated their value-added scores for 9 instructional time scenarios (10% responsibility through 90% responsibility)



TEACHER-STUDENT DATA LINK SENSITIVITY ANALYSIS

| # of students linked to teacher | % of students teacher shares with another teacher |
|---------------------------------|---|
| <20 | <20% |
| | 20%-50% |
| | >50% |
| 20-50 | <20% |
| | 20%-50% |
| | >50% |
| >50 | <20% |
| | 20%-50% |
| | >50% |

| | Percentage of instructional time scenarios | | | | | | | | |
|-------|--|-----|-----|-----|-----|-----|-----|-----|-----|
| Tch_1 | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% |
| Tch_2 | 90% | 80% | 70% | 60% | 50% | 40% | 30% | 20% | 10% |



TEACHER-STUDENT DATA LINK SENSITIVITY ANALYSIS

- Teacher value-added effectiveness levels (5 categories) remained largely stable with changes in % instructional responsibility.
 - 5 Categories from Teacher Value-Added Reports:
 - Least effective (OTES SGM rating “below”)
 - Approaching average effectiveness
 - Average effectiveness
 - Above Average effectiveness
 - Most effective (OTES SGM rating “above”)
- (OTES SGM rating “expected”)



TEACHER-STUDENT DATA LINK SENSITIVITY ANALYSIS

- For OAA Math 2012 overall:
 - Moving teachers from 50% to 60% responsibility resulted in <4% of teachers being classified into adjacent effectiveness level.
 - Moving teachers from 50% to 90% responsibility resulted in 14% of teachers being classified into another effectiveness level. All but 3 teachers classified into adjacent effectiveness level.

*(Reclassification likely further reduced by
OTES SGM classification into 3 levels)



TEACHER-STUDENT DATA LINK SENSITIVITY ANALYSIS

- Teachers most affected by changes in % instructional responsibility are those who share >75% of their students with another teacher.
- Analysis is not complete at this time so results are preliminary.



STUDENT GROWTH MEASURES IN OHIO'S NEW TEACHER EVALUATION SYSTEM

- The Ohio Teacher Evaluation System (OTES) was implemented for the first time in 2012-13 by 26 Ohio LEAs.
- OTES final summative rating of teacher performance is comprised of 50% teacher performance on standards and 50% student academic growth measures.



OTES\OPES DATA FOR 2012-2013

- OTES - 26 LEAs = 23 PSDs + 1 JVSDs + 2 CSs

| Ineffective | Developing | Skilled | Accomplished | Total |
|-------------|-------------|---------------|--------------|--------------|
| 13 (0.6%) | 298 (12.8%) | 1,580 (67.8%) | 441 (18.9%) | 2,332 (100%) |

- | Ineffective | Developing | Skilled | Accomplished | Total |
|-------------|------------|------------|--------------|------------|
| 0 (0%) | 22 (12.9%) | 98 (57.3%) | 51 (29.8%) | 171 (100%) |

- 24 LEAs ~ 2,001 Teacher records
 - 15 LEAs ~ 62 Principal records
 - ... These sub-sample sizes drop further once “Exempt” records are excluded



OTES\OPES DATA FOR 2012-2013

OTES\OPES Final Summative Ratings

| Final Summative Rating | Teachers | | Principals | |
|------------------------|--------------|--------------------|------------|--------------------|
| | Frequency | Rel. Frequency (%) | Frequency | Rel. Frequency (%) |
| Ineffective | 13 | 0.65 | 0 | 0.00 |
| Developing | 281 | 14.04 | 12 | 19.35 |
| Skilled | 1,332 | 66.57 | 38 | 61.29 |
| Accomplished | 375 | 18.74 | 12 | 19.35 |
| Total | 2,001 | 100.00 | 62 | 100.00 |



OTES PERFORMANCE STANDARDS BY SGM RATING

| Performance Standards | Student Growth Measures | | | Total |
|-----------------------|-------------------------|---------------|---------------|---------------|
| | Below | Expected | Above | |
| Ineffective | 0 | 1 | 0 | 1 |
| | 0.00 | 100.00 | 0.00 | 100.00 |
| | 0.00 | 0.10 | 0.00 | 0.07 |
| Developing | 11 | 35 | 5 | 51 |
| | 21.57 | 68.63 | 9.80 | 100.00 |
| | 4.53 | 3.49 | 2.43 | 3.51 |
| Skilled | 212 | 817 | 156 | 1,185 |
| | 17.89 | 68.95 | 13.16 | 100.00 |
| | 87.24 | 81.37 | 75.73 | 81.56 |
| Accomplished | 20 | 151 | 45 | 216 |
| | 9.26 | 69.91 | 20.83 | 100.00 |
| | 8.23 | 15.04 | 21.84 | 14.87 |
| Total | 243 | 1,004 | 206 | 1,453 |
| | 16.72 | 69.10 | 14.18 | 100.00 |
| | 100.00 | 100.00 | 100.00 | 100.00 |



OTES SGM RATINGS BY SGM TYPE

| SGM Category | SGM Rating | | | Total |
|--------------|---------------|---------------|---------------|---------------|
| | Below | Expected | Above | |
| A | 55 | 245 | 52 | 352 |
| | 15.62 | 69.6 | 14.77 | 100.00 |
| | 22.63 | 24.4 | 25.24 | 24.23 |
| B | 20 | 49 | 17 | 86 |
| | 23.26 | 56.98 | 19.77 | 100.00 |
| | 8.23 | 4.88 | 8.25 | 5.92 |
| C | 168 | 710 | 137 | 1,015 |
| | 16.55 | 69.95 | 13.50 | 100.00 |
| | 69.14 | 70.72 | 66.50 | 69.86 |
| Total | 243 | 1,004 | 206 | 1,453 |
| | 16.72 | 69.10 | 14.18 | 100.00 |
| | 100.00 | 100.00 | 100.00 | 100.00 |



OTES VALUE-ADDED RATINGS BY WEIGHT

| Value-Added Weight | Value-Added Rating | | | Total |
|--------------------|--------------------|---------------|---------------|---------------|
| | Below | Expected | Above | |
| 10% | 12 | 105 | 17 | 134 |
| | 8.96 | 78.36 | 12.69 | 100.00 |
| | 21.82 | 42.68 | 34.00 | 38.18 |
| 26% | 3 | 14 | 4 | 21 |
| | 14.29 | 66.67 | 19.05 | 100.00 |
| | 5.45 | 5.69 | 8.00 | 5.98 |
| 40% | 4 | 8 | 0 | 12 |
| | 33.33 | 66.67 | 0.00 | 100.00 |
| | 7.27 | 3.25 | 0.00 | 3.42 |
| 50% | 36 | 119 | 29 | 184 |
| | 19.57 | 64.67 | 15.76 | 100.00 |
| | 65.45 | 48.37 | 58.00 | 52.42 |
| Total | 55 | 246 | 50 | 351 |
| | 15.67 | 70.09 | 14.25 | 100.00 |
| | 100.00 | 100.00 | 100.00 | 100.00 |



SLO RATINGS BY WEIGHT

| SLO Weight | SLO Rating | | | Total |
|--------------|---------------|---------------|---------------|---------------|
| | Below | Expected | Above | |
| 30 | 0 | 7 | 0 | 7 |
| | 0.00 | 100.00 | 0.00 | 100.00 |
| | 0.00 | 1.84 | 0.00 | 1.23 |
| 40 | 31 | 62 | 22 | 115 |
| | 26.96 | 53.91 | 19.13 | 100.00 |
| | 43.06 | 16.32 | 18.80 | 20.21 |
| 50 | 41 | 311 | 95 | 447 |
| | 9.17 | 69.57 | 21.25 | 100.00 |
| | 56.94 | 81.84 | 81.20 | 78.56 |
| Total | 72 | 380 | 117 | 569 |
| | 12.65 | 66.78 | 20.56 | 100.00 |
| | 100.00 | 100.00 | 100.00 | 100.00 |



INITIAL CONCLUSIONS FROM OTES/OPES DATA ANALYSIS

- Value-Added fairly congruent with other evaluation measures
- Weight placed on Value-Added seems to be of no consequence for final summative rating
- Our early results in line with NYC (<http://bit.ly/16qYVYg>) ... possibly other states as well.
- **Strong Caveats**
 - Limited data at hand
 - Potentially biased set of LEAs studied here
 - Value-Added well studied but not so Vendor Assessments & SLOs
 - Questions of OTES\OPES reliability only answerable with multiple waves of data



QUESTIONS:

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