

AUTOMATED DECISION SYSTEMS FOR TEACHER EVALUATION IN NEW YORK CITY

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“ADVANCE” UNDER STATE LAW §3012-D

		MOSL			
		Highly Effective	Effective	Developing	Ineffective
M O T P	Highly Effective	Highly Effective	Highly Effective	Effective	Developing
	Effective	Highly Effective	Effective	Effective	Developing
	Developing	Effective	Effective	Developing	Ineffective
	Ineffective	Developing	Developing	Ineffective	Ineffective

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WHO COMES UP WITH THIS STUFF?

- ❖ NYC DOE Office of Talent Research & Data
- ❖ Education Analytics (spin-off of Value-Added Research Center at University of Wisconsin-Madison)
- ❖ Technical Advisory Committee
 - ❖ Heather Adams, New York State United Teachers
 - ❖ Rob Meyer, Founder & President of Education Analytics
 - ❖ Aaron M. Pallas, Professor of Sociology and Education, Teachers College, Columbia University

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GUIDING PRINCIPLES

- ❖ Fairness
- ❖ Feasibility
- ❖ Instructional Viability
- ❖ Developmental Support
- ❖ Reliability and Validity
- ❖ School-Level Autonomy
- ❖ Transparency

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THE LOGIC OF THE GROWTH MODEL

- ❖ Use “business rules” to link and attribute students to teachers
- ❖ Use statistical tools to find similar students taught by *other* teachers (re prior academic performance, demographic, school and classroom characteristics)
- ❖ Examine how each teacher’s student performed on an end-of-year assessment compared to similar students taught by other teachers
- ❖ Calculate Student Growth Percentile for each student, ranked against other similar students
- ❖ Calculate teacher’s Mean Growth Percentile across all students
- ❖ Adjust for imprecision and uncertainty
- ❖ Assign a HEDI score and value

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MORE THAN 100 END-OF-YEAR ASSESSMENTS

NYSED Exams, 4 th & 8 th Grade, Science	Scantron Performance Series, Grades 3-8, HS in Reading and Math
NYS Regents Exams in Math, Science, English and Social Studies	Fountas & Pinnell Running Records (F&P), Grades K-5, ELA
New York State English as a Second Language Achievement Test (NYSESLAT), Grades K-8 & HS	Teachers College Reading and Writing Project Running Records (TCRWP), Grades K-5, ELA
NYC Performance Tasks (NYCPT), K-12, ELA, Math, Science, Social Studies, Visual Arts	Degrees of Reading Power (DRP), ELA Grades 6-8

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JUST ONE OF SEVERAL GORY EQUATIONS

$$Y_{it} = \zeta + \sum_{p=1}^P \lambda_p Y_{pi,t-1} I_{pi} + \sum_{q=1}^Q \lambda_q Y_{qi,t-1} I_{qi} + \sum_{r=1}^R \lambda_r Y_{ri,t-1} I_{ri} + \sum_{p=2}^P \gamma_p I_{pi} \sum_{q=2}^Q \gamma_q I_{qi} + B'X_i + \pi'Z_i + \delta'W_i + \epsilon_{it}$$

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WHAT'S THE RESULT?

MOSL Rating Category	Percentage of Teachers
Highly Effective	6%
Effective	81%
Developing	9%
Ineffective	4%

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TRANSPARENCY

- ❖ Overall Advance ratings e-mailed September 1 (start of the *next* school year)
- ❖ Link to Overall Rating Report with data on each student attributed to teacher
 - ❖ Pretest scores
 - ❖ End-of-Year assessment scores
 - ❖ Student Growth Percentiles
 - ❖ Enrollment
 - ❖ Attendance
- ❖ Model Technical Report posted on DOE Intranet available to DOE employees