Balancing Accountability and Improvement

The Use of Value-Added Models in Local School Systems

Dr. Theresa Alban

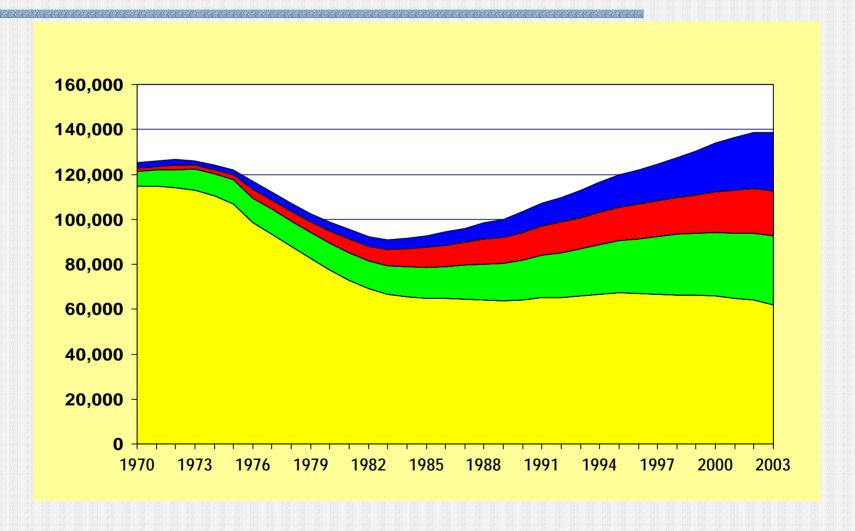
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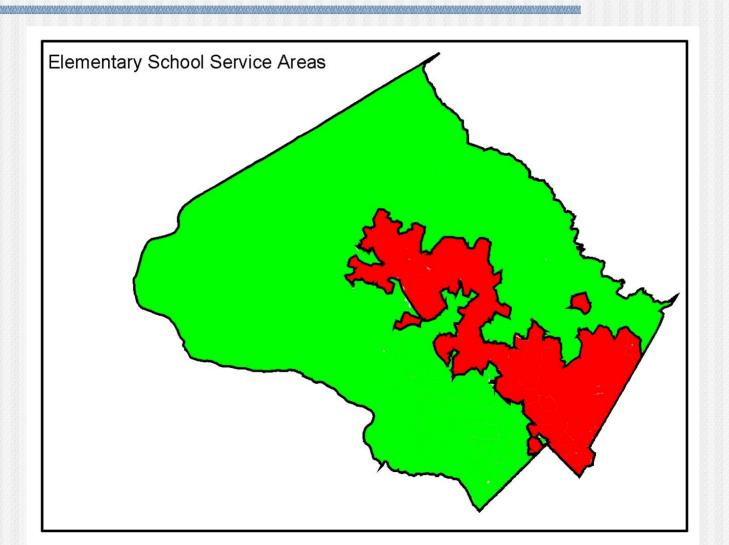
Where We Live

- Montgomery County Public Schools
 - 18th largest and 12th fastest growing district in U.S.
 - 192 schools
 - Nearly 140,000 students
 - 12,000 English Language Learners from 163 countries
 - 17,000 special education students
 - 32,000 low-income students

How We Are Changing



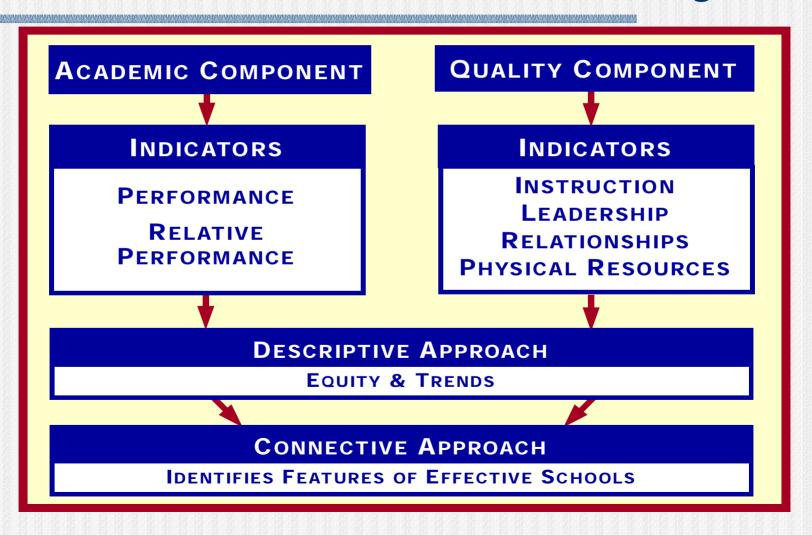
How Our Schools Are Impacted



What Challenges the 60 Focus Schools Face

- 80% of Total Elementary Low-Income Population
- 75% of Total Elementary English Language Learners Population
- 78% of Total Elementary Hispanic Population
- 70% of Total Elementary African American Population

Where We Started: System of Shared Accountability



Why We Started There

- Improve on the state's system
- Account for varying challenges schools faced

Include more than test scores

What Issues We Faced

- Philosophical
 - Model decisions
 - Teacher evaluation protocols
 - Consequences
 - Community Pressure
- Practical
 - Accountability from NCLB took precedence

Where We Evolved

- System of Shared Accountability
 - Accountability Components
 - Align with NCLB
 - Maintain high school component for academic attainment
 - Improvement Components
 - Designed to guide school improvement efforts
 - Comfortable fit for value-added models

a conceptual model of the System of Shared Accountability

Montgomery County Public Schools

Accountability Component

Maryland School Assessments Grades 3-8 & 10: AYP Measures

- Graduation Rate
- Attendance
- Mathematics
- · Reading

Early Success
Performance Plan

Birth to Grade 2

STUDENT

- MCPS Assessment Program Pre-K to Grade 2
- MCPS Assessment Program Grades 3 to 8
- MCPS Final Exams
- Report Card Grades

Opportunity Indicators

- · SAT
- · Career Licensing Exams
- · Integrated Employment
- ACT

SCHOOL ENVIRONMENT

- · Parent engagement
- Suspension
- Staff turnover
- Highly qualified teachers and paraeducators
- Staff, parent, and student surveys

Improvement

STANDARDIZED ASSESSMENTS

- CTBS
- * HSA
- PSAT
 AP exams
 - · IPT

Component

STUDENT ENGAGEMENT

- · Drop out rates
- · Internships
- Attendance
- · Learning Skills
- Special Education students receiving services in general education
- Enrollment in Honors/AP/ IB/Cambridge courses
- Enrollment in Grade 5 Math A and Grade 8 Algebra or above
- Participation in extra curricular activities

A Foundation of Continuous Improvement

The Improvement Component guides efforts to increase performance on the Accountability Component

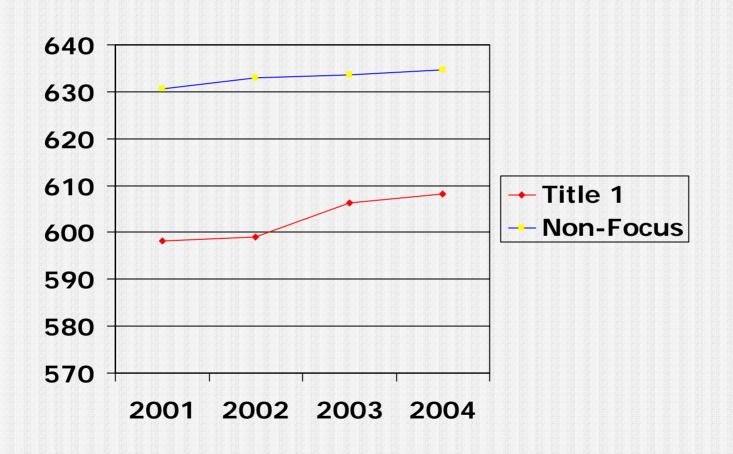
What We've Done

- Program Level Analyses
- School Level Analyses

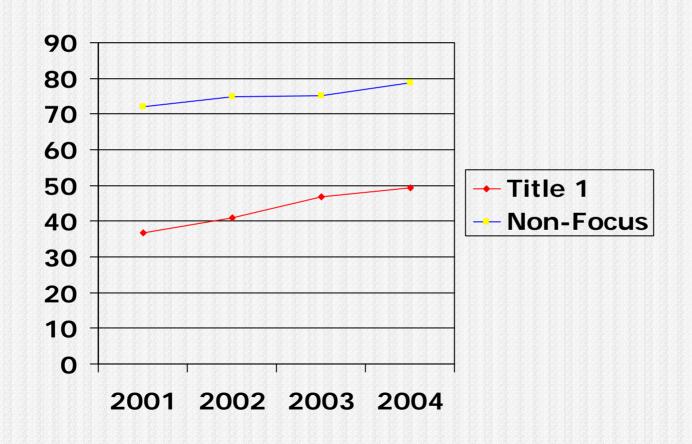
What About Programs

- HLM Model for Title 1
 - Examine effects of programming in Title 1 schools compared to non-focus schools
 - Needed to control for demographic variables at the student and school level
 - Wanted to examine trends

What Trends Are Evident



What Trends Are Evident



What About Schools

- Support school improvement efforts
 - Provide more meaningful context for interpreting test scores
 - Need model to be easily understood by administrators
 - Examine relative performance by each subgroup
 - Examine relative performance using multiple variables

School-to-County Comparisons 2004 Grade 3 MSA Reading Performance

School	ALL	FARMS	SP ED	LEP
County % Prof. / Adv.	78.5	58.5	53.6	56.4
County % Advanced	17.7	3.5	4.2	4.4
County Mean Scale Score	419	394	391	394
SCHOOL 1	+++		+++	+ +
SCHOOL 2		+++		
SCHOOL 3		+ +		+
SCHOOL 4	+	+ +		

Note: +/- denotes that school group performed above / below county group (p < .05).

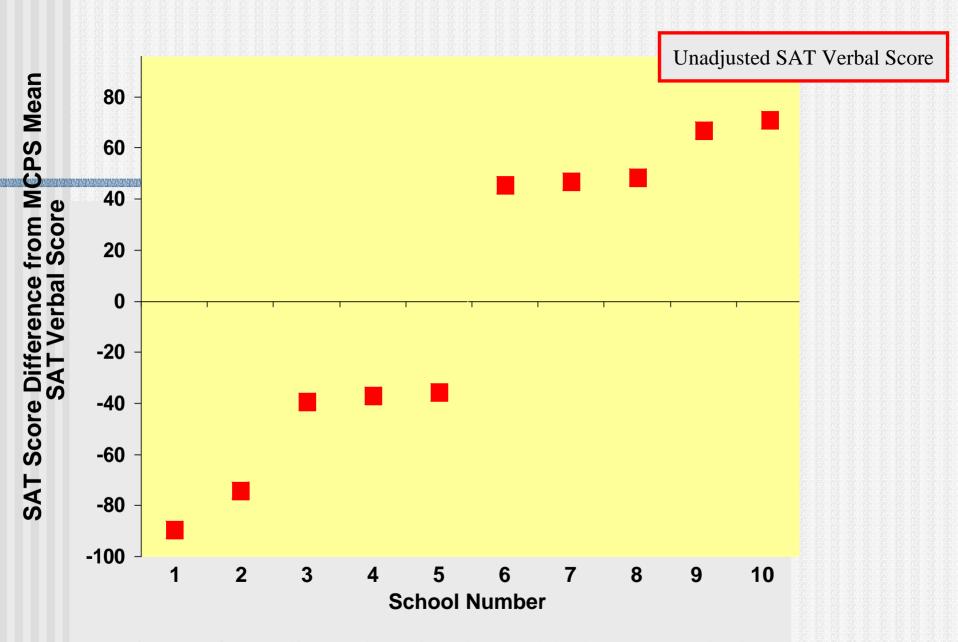
School-to-County Comparisons

2004 Grade 3 MSA Reading Relative Performance*

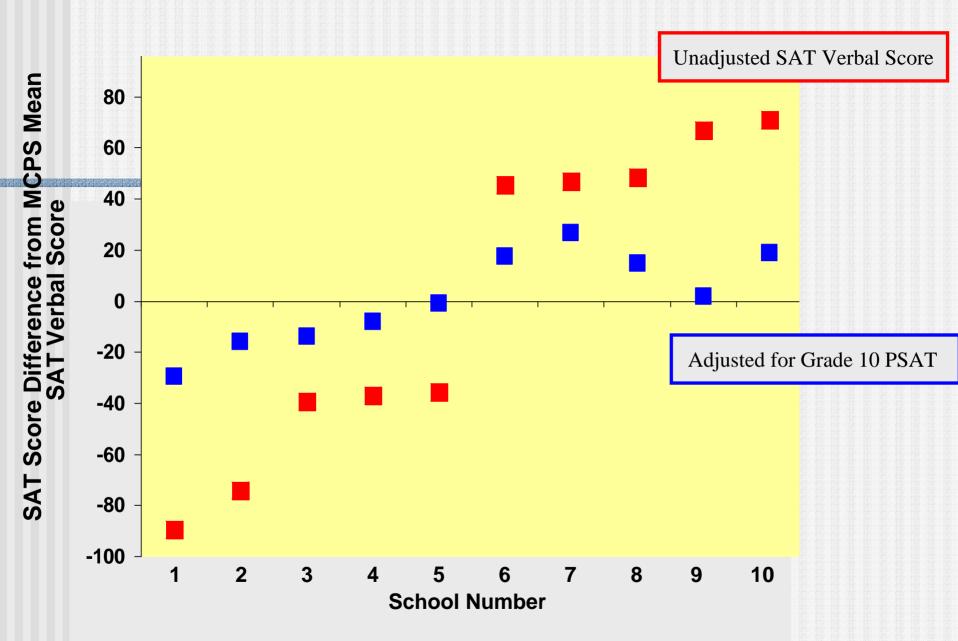
School	ALL	FARMS	SP ED	LEP
County Mean Residual	0.0	×	Y	Z
SCHOOL 1	+	+		+
SCHOOL 2		+	-	
SCHOOL 3	-			_
SCHOOL 4	+			

^{*}Relative Performance is how a student performed on an assessment compared to other students who had similar prior scores (Grade 2 CTBS Reading and Language).

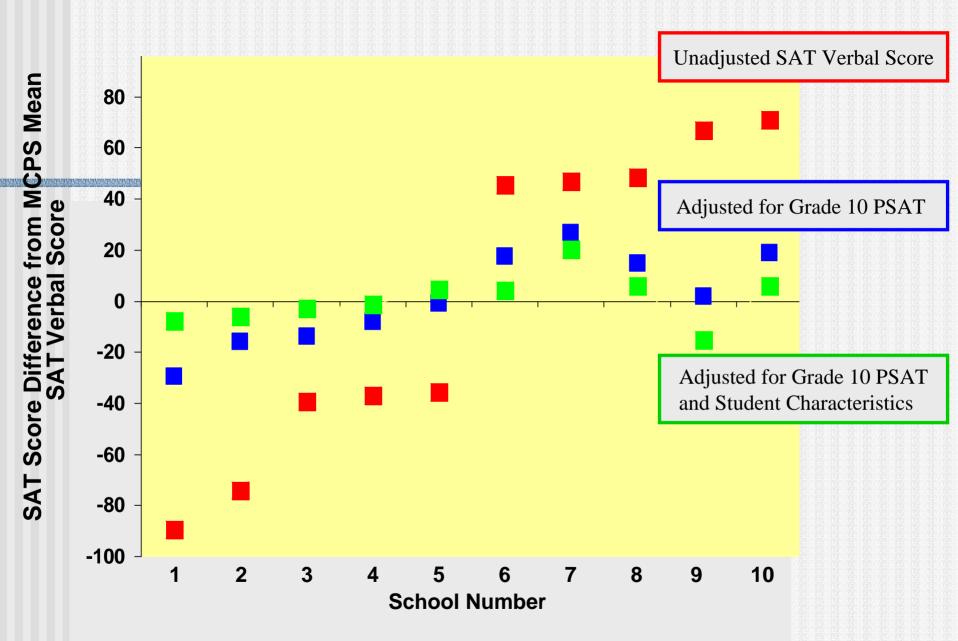
Note: +/- denotes that the average relative performance of the school group is above / below the relative performance of the county group (p < .05).



Comparison of unadjusted and value-added SAT verbal scores for the Class of 2004 by High School (1-10)



Comparison of unadjusted and value-added SAT verbal scores for the Class of 2004 by High School (1-10)



Comparison of unadjusted and value-added SAT verbal scores for the Class of 2004 by High School (1-10)

Where We Want to Go

Teacher Level Analyses

 Relative Performance at the Classroom Level

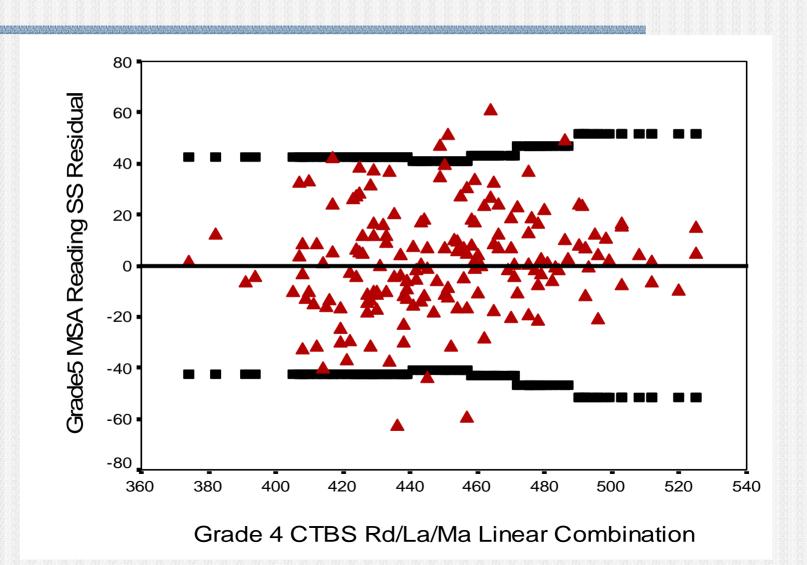
What About Teachers

- Just treading lightly....
 - Identifying high performers to investigate effective practices
 - Linking teacher training to student achievement

What About Classrooms

- Mapping student's relative performance for each teacher
 - Guiding teachers in analysis and interpretation
 - The true heart of improvement efforts!
 - The ultimate vision of "value-added"

Where Teachers Need to Go



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