# The Power of **PROGRESS** Pennsylvan Den Salen Dy & Frank

PENNSYLVANIA
Value-Added
Assessment System



**Derry Township School District** 

**School Board Presentation** 

Sept. 10, 2007

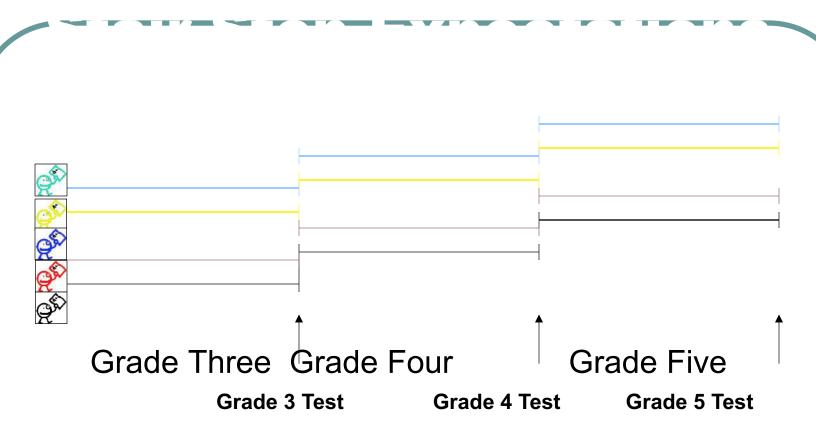
Dr. David Lillenstein and Cindy Goldsworthy

- Status Measures
  - PSSA
  - % proficient or not proficient
  - Other local assessment data
- Improvement Measures
  - Safe Harbor
  - PPI Pennsylvania Improvement Index
- Progress/Growth Measures
  - PVAAS (PA Value Added Assessment)
  - All PA school districts receive PVAAS reports

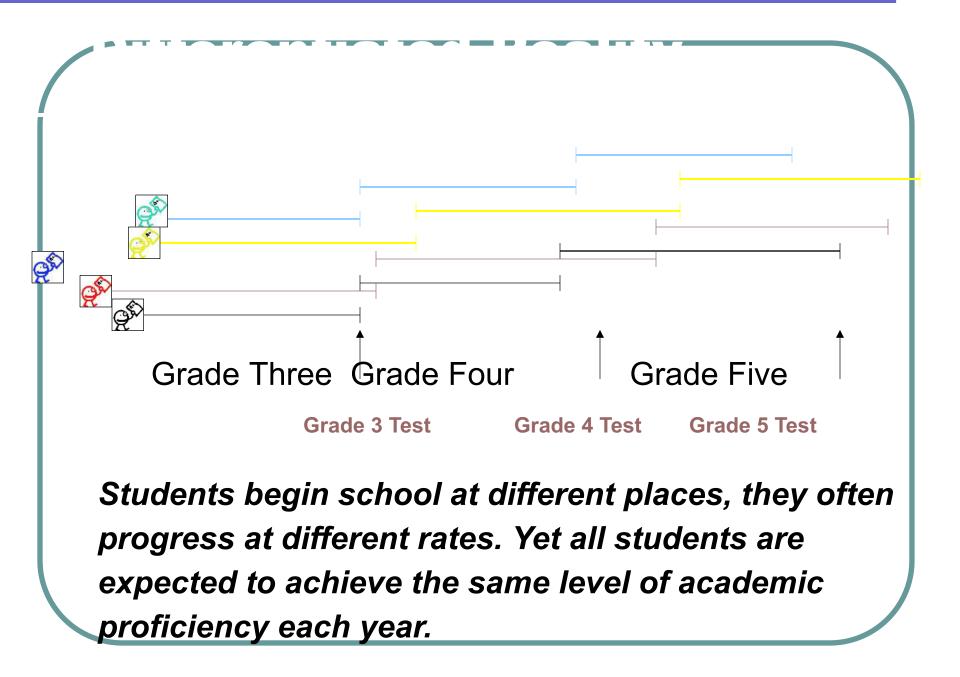
- Developed by Dr. William Sanders for Tennessee in 1992
- Largest database on educational performance ever assembled
- PVAAS is <u>not</u> another test to administer by schools
- PVAAS determines if students are making academic growth each year
- PVAAS provides projections at one, two years out

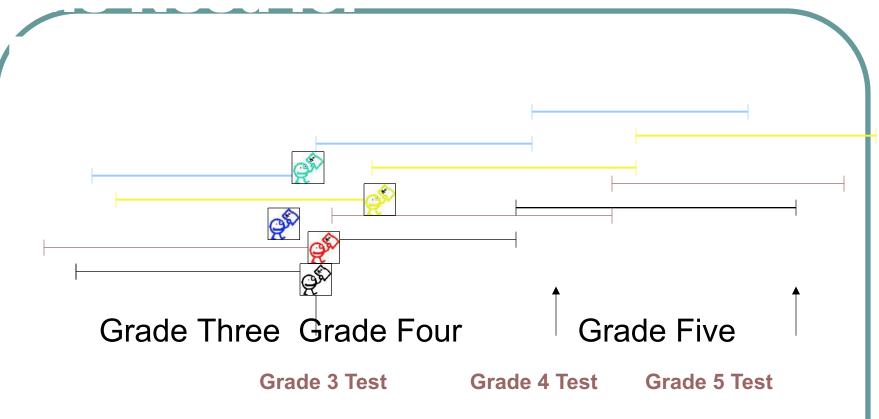
- Value-added Analysis for schools, grades, cohorts of students.
  - Growth/progress measure
- Projection capability to calculate the likelihood of a student achieving a specified target performance level on a future PSSA test.

- Another test
- Being used for teacher-level accountability in Pennsylvania
- A metric on a specific teacher's effectiveness



In a perfect world students would start school at about the same academic level. Proficiency levels could simply be achieved by students gaining age appropriate knowledge and skills each year.





To measure school effectiveness in this "differentiated" world, we need to pay attention not only to proficiency levels, but also to how much progress students make in a given year.

Low Progress

**Expected Progress** 

High Progress

Progress is based on each student's starting point and illustrates what value "schooling" has had on students - regardless of variables such as ethnicity, economic status, ESL, and students with disabilities.

## **PVAAS**

- Multiple measures over a period of years to measure growth
- Not influenced by demographics variables beyond a school's control

## **PSSA**

- Information on a single point in time based upon a single observation
- Influenced by demographics and other variables beyond the school's control

## **PVAAS**

- Compares students of similar ability to determine predicted and actual growth
- Results are NOT influenced by student's mobility

## **PSSA**

- Does not compare students similar ability to determine predicted and actual growth
- Results are influenced by student's mobility

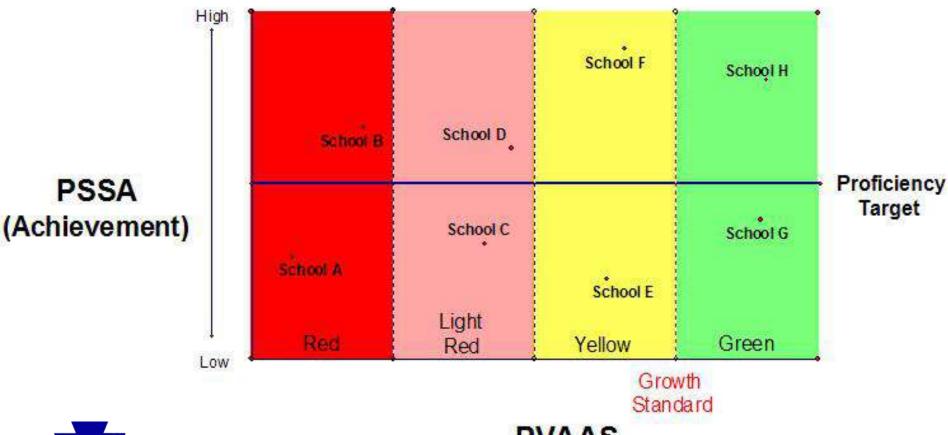
## **PVAAS**

 Data are independent of the wealth of the school district

# **PSSA**

 Makes advantaged schools look good and disadvantaged schools look bad

# **Achievement and Progress**





PVAAS (Progress)

- Adds the critical dimension of progress and growth.
- DOES NOT tell you what to teach or how to teach.
- Provides reporting at a macro level to guide your conversation around student learning opportunities.

- District Level
  - By School
- School Level
  - Across Grades
  - Reading and Math
- Student Reports
  - Longitudinal Reports
  - "Projections" on Future PSSAs

- Diagnostic Reports
  - By Quintiles
  - By Performance Levels
- DiagnosticSubgroup Reports
- Custom Reporting/Querying

- Educators have no control over the prior achievement level of students that enter their classroom; however, they do have responsibility that every student grows academically each year.
- The most effective way to improve student achievement is to "ratchet up" the individual progress of all students.



Estimated mean NCE gain equal to or greater than growth standard.

Estimated mean NCE gain below growth standard, but by less than one standard error.

Estimated mean NCE gain below growth standard by at least one, but less than two, standard errors.

Estimated mean NCE gain below growth standard by at least two standard errors.

-- The school does not have data for this test and subject in the most recent year.

- Green is better
- The higher the number in the colored box, the stronger the gain/loss from the previous cohorts for a particular grade

### 2007 Value Added Summary Report for Derry Township School District PSSA Reading

School Name			5	6	7	8
Hershey Intermediate Elementary School 2007		4.6	2.2			
Hershey Middle School	2007			1.6	2.5	-0.9

- Overall, Grades 4, 5, 6, and 7 held their position or advanced from the previous year
- Overall, Grade 8 did not hold its position or advance from the previous year

#### 2007 Value Added Summary Report for Derry Township School District PSSA Math

School Name	4	5	6	7	8	
Hershey Intermediate Elementary School 2007			-2.5			
Hershey Middle School	2007			2.5	6.4	1.5

- Overall, Grades 4, 6, 7, and 8 held their position or advanced from the previous year
- Overall, Grade 5 did <u>not</u> hold its position or advance from the previous year

# 2007 PVAAS At-a-Glance Performance Diagnostic Summary by Grade and PSSA Level

- \* Dark Green indicates significant gains
- \* Light Green indicates borderline significant gains
- \* Dark Red indicates NO significant gains
- \* Light Red indicates borderline NO significant gains
- \* X indicates no data available

# 2007 PVAAS At-a-Glance Performance Diagnostic Summary by Grade and PSSA Level

# Reading

#### ALL Students

	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade
Advanced					
Proficient					
Basic					
Below Basic					

#### IEP Students

	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade
Advanced	Х	Х	Х	Х	Х
Proficient			Х		
Basic				Х	Х
Below Basic					

# 2007 PVAAS At-a-Glance Performance Diagnostic Summary by Grade and PSSA Level



## ALL Students

	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade
Advanced					
Proficient					
Basic					
Below Basic					

#### IEP Students

	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade
Advanced		Χ	Х		Χ
Proficient			Х		Χ
Basic	Х		Х	Х	
Below Basic					

- PSSA tells us where a student is.
- PVAAS tells us <u>where that student is headed</u>.
- Location and direction are critical partners in the quest for having all students achieve proficiency
- The data from both achievement and progress measures gives schools valuable information to make data-informed decisions.

Without data, all we have is an opinion!

- Produces information about school practice by leveraging student achievement data with complex statistical tools.
- Provides an estimate of school effectiveness based on the progress students make.
- Measures growth of individual students over time.

#### What has the analysis of

- The single most important variable in a child's growth is the quality of a teacher.
- The residual effects of low quality teachers is evident even after 3 years of high quality teachers.
- Low quality teachers are ineffective with all levels of students.
- As the level of teacher effectiveness increases, students in a lower quartiles benefit.

- Integrated into Strategic Plan
- Execute communication plan
- Provide professional development training around data analysis
- Develop a profile for each student who is not achieving proficiency and a plan to gain the necessary skills

