Strategic Use of Data for Improvement in the School District of Philadelphia

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The Goal: Turn. . .

Data into Knowledge
Knowledge into Action
Action into Improvement

- We often lose discipline on this last step:
    - How do we know if we have succeeded?
    - Are the measures clear and well defined from the start?
    - Did we define the instruments, the method, the frequency, the persons responsible?

Stage	Requirements	Tools
Data into Knowledge	•Data Access •Readily Available, Relevant, Reliable	• SchoolNet • DataWarehouse Dashboards
	•Assessment Literacy •Interpretive Knowledge and Skill	• SchoolStat • Professional Development • Data Coaching
Knowledge into Action	•Contexts for knowledge building and knowledge sharing	• SchoolStat • Benchmark Data Analysis Protocols •Regional and School Improvement Planning Processes
	•Clear and coherent systems for action design	• Plan-Do-Study-Act (PDSA) • SchoolStat • Regional and School Improvement Planning Models
Action into Improvement	•Clear and coherent systems for assessing both leading and lagging performance measures •Is our best thinking and action about improvement working? How do we know?	• Operational definition of success • Balanced Scorecard • Plan-Do-Study-Act (PDSA) • SchoolStat

Evaluation and Assessment

- Summative data tells the story of results
- The power and limitations of summative evaluation are well known
  - Doesn't provide the continuous data we need reshaping teaching and learning for urban teachers and learners
  - Seldom seen as actionable from the classroom teachers/principals perspective
  - Necessary, but not sufficient (no surprise here)

Evaluation/Assessment **FOR** Achievement	Evaluation/Assessment **OF** Achievement
Supports →	
•Leading	•Lagging
•Formative	•Summative
•Frequently analyzed:quarterly, monthly, weekly	•Analyzed far less frequently, usually annually
•Clear back-mapped targets and scaffolding	•Actionable for longer-term major changes in strategy
•Actionable in the short term:	•Benchmarking; "reengineering"
•Course corrections, changes in tactics, refinements and adjustments in programs, process improvements	
•Continuous improvement	

Balance of strategies and measures
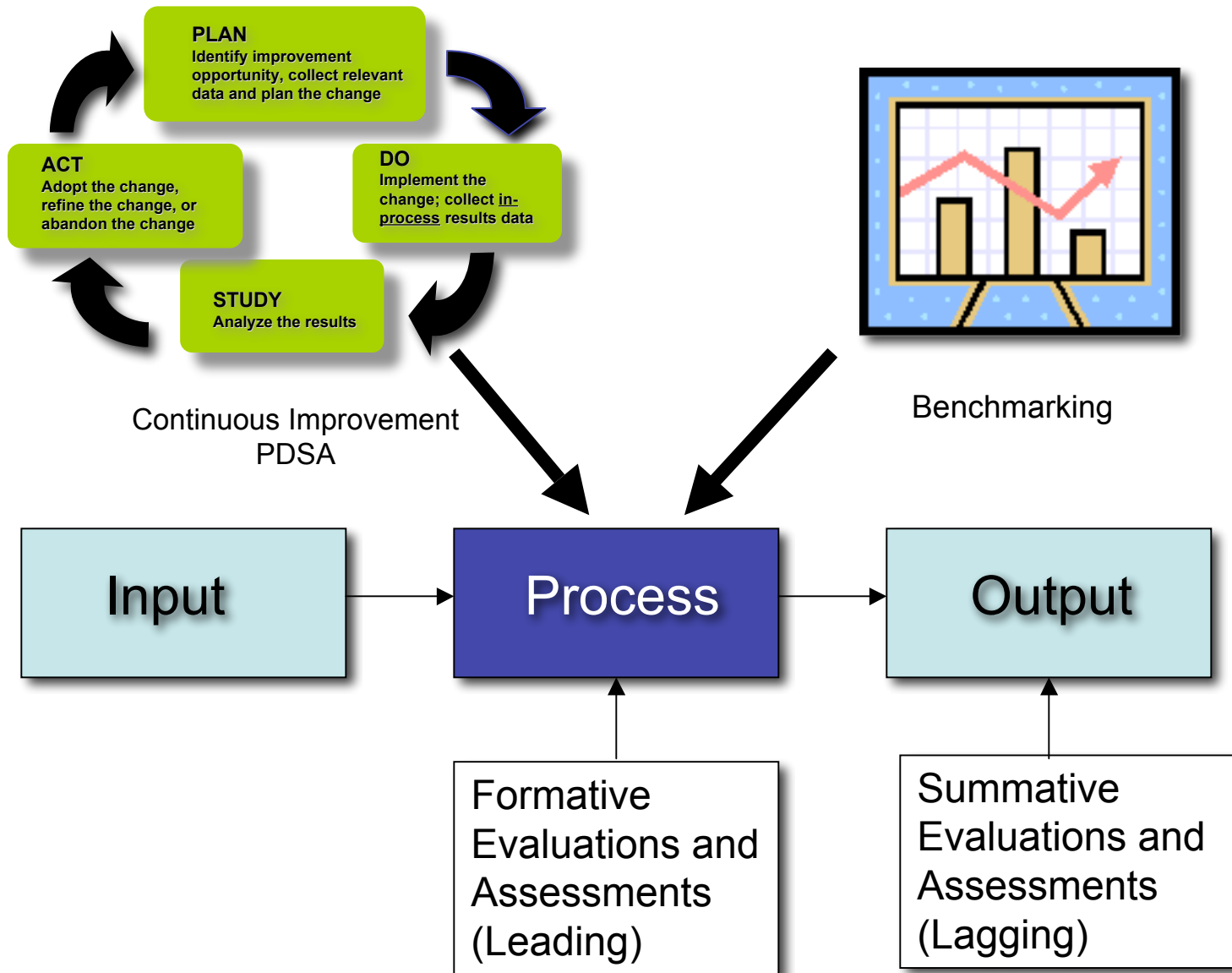Across all levels of the system

Benchmarking and Beyond

- Many districts, including our own, have developed benchmark tests to address these limitations
  - **Critical** improvement for making teaching and learning more data-driven
  - Just the beginning
- Beyond benchmark testing
  - There must be a deeper and ongoing change in school and organizational culture around looking at data for improvement

Commitment to Quality and Process Improvement

- This change taps Into the belief systems and behaviors of teachers, students and the entire organization

  - From admiring and continuously reframing problems;

    - ***to evidence-based action and management by fact***

  - From a belief that there are barriers to progress that cannot be changed;

    - ***to a belief that even the most entrenched problems are actionable,***

    - ***if we work continuously to improve using the <u>right measurements and processes as our guide</u>***

PLAN
Identify improvement opportunity, collect relevant data and plan the change

DO
Implement the change; collect in-process results data

ACT
Adopt the change, refine the change, or abandon the change

STUDY
Analyze the results

Continuous Improvement
PDSA

Benchmarking

Input → Process → Output

Formative Evaluations and Assessments (Leading)

Summative Evaluations and Assessments (Lagging)

Critical Success Factors

- That students, teachers, and administrators
  - Own the data, understand the data, and are skilled at using the data as the framework for deciding what and how to improve
- That leaders work to provide
  - Students, teachers, support staff, and administrators with relevant and timely data and the skills and tools to improve using the data
- Tools (especially technology tools)
  - Must always be the servant, never the master
  - Serve processes that are authentic and useful to improvement

SchoolStat: A Corporate-University-School System Partnership
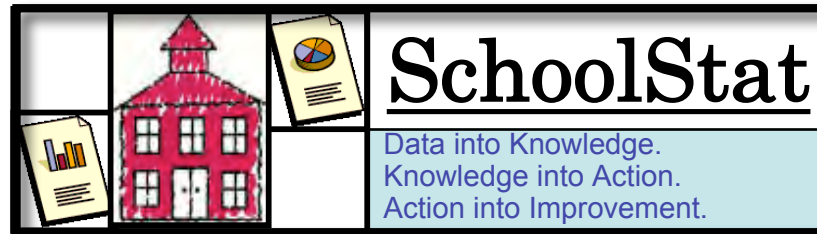
The SchoolStat Process

- *Before the meeting*
  - KPI Data are extracted for each school
  - KPI Data are analyzed and observations are reported in an executive briefing sheet

- *During the meeting*
  - Regional superintendent leads groups of 5-7 principals
  - KPI Trends are noted for each metric
  - Reasons are explored; strategies are cited
  - Best practices and experiences are shared
  - Action plans are developed
  - Timelines for assessment of action are set

- *After the meeting*
  - Results are reported at next meeting in an ongoing cycle
  - Accountability **and** professional developmental support

Actionable, Timely Data:
The SchoolStat Principal's Monthly Dashboard

SchoolStat PDSA Continuous Improvement Model

Stage	Plan	Do	Study	Act
Where	SchoolStat Meeting	School	SchoolStat Meeting	School
Steps	• Data analysis • Identify opportunities for improvement (OFIs) • Identify root causes • Share existing strategies and/or design new strategies • Design action steps • Design an evaluation plan	• Implement action steps defined in the PLAN stage	• Monitor implementation • Evaluate effect against defined desired outcome in PLAN stage • Revise action steps, refine, abandon strategy (as indicated)	• Implement revised action as defined in STUDY stage • Repeat cycle
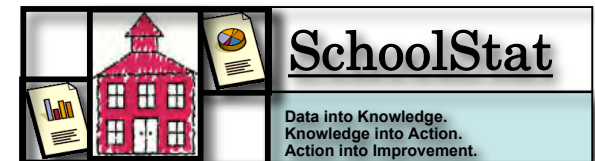
SchoolStat

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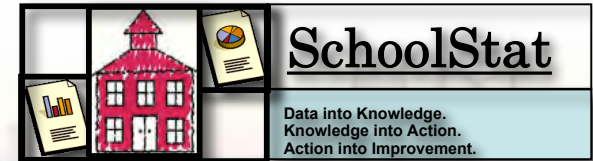
Principal's Dashboard and SchoolStat:
A Performance Management Process

Actionable Dashboard Data

Planned Strategies in Action

The Continuous Improvement Cycle

SchoolStat Meetings

Analysis, Sharing of Practices, Action Planning, Assessment