

Leveraging Data:

Collecting and Using Data to Demonstrate Program Performance and Improve Programmatic Activities

Workshop Presented at the
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Session Participants

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Context:

Demands for Expanded Use of Data



Questions

- What data does your organization collect?
- For what purposes does your organization use data?
- What data does your organization desire but is unable to collect?
- What challenges have you encountered with collecting data?
- What challenges have you encountered with using data?

About Our Case Study

- **Leveraging Data:**
A Case Study of One Pre-College Access Organization
- **Research questions**
 - What data?
 - For what purposes?
 - Promoting and limiting forces?
- **Selected case**
 - Steppingstone Scholars, Inc., Philadelphia
- **Data**
 - 34 semi-structured interviews with a variety of stakeholders
 - Program documents, publicly available data, prior research

Data Collection: Methods and Types

- **Data collection methods**
 - Systematically collected
 - Ordinarily collected
- **Types of data collected**
 - Characteristics of program applicants & participants
 - Demographic & academic information
 - Participation in mandatory & optional program activities
 - Student outcomes related to college-going

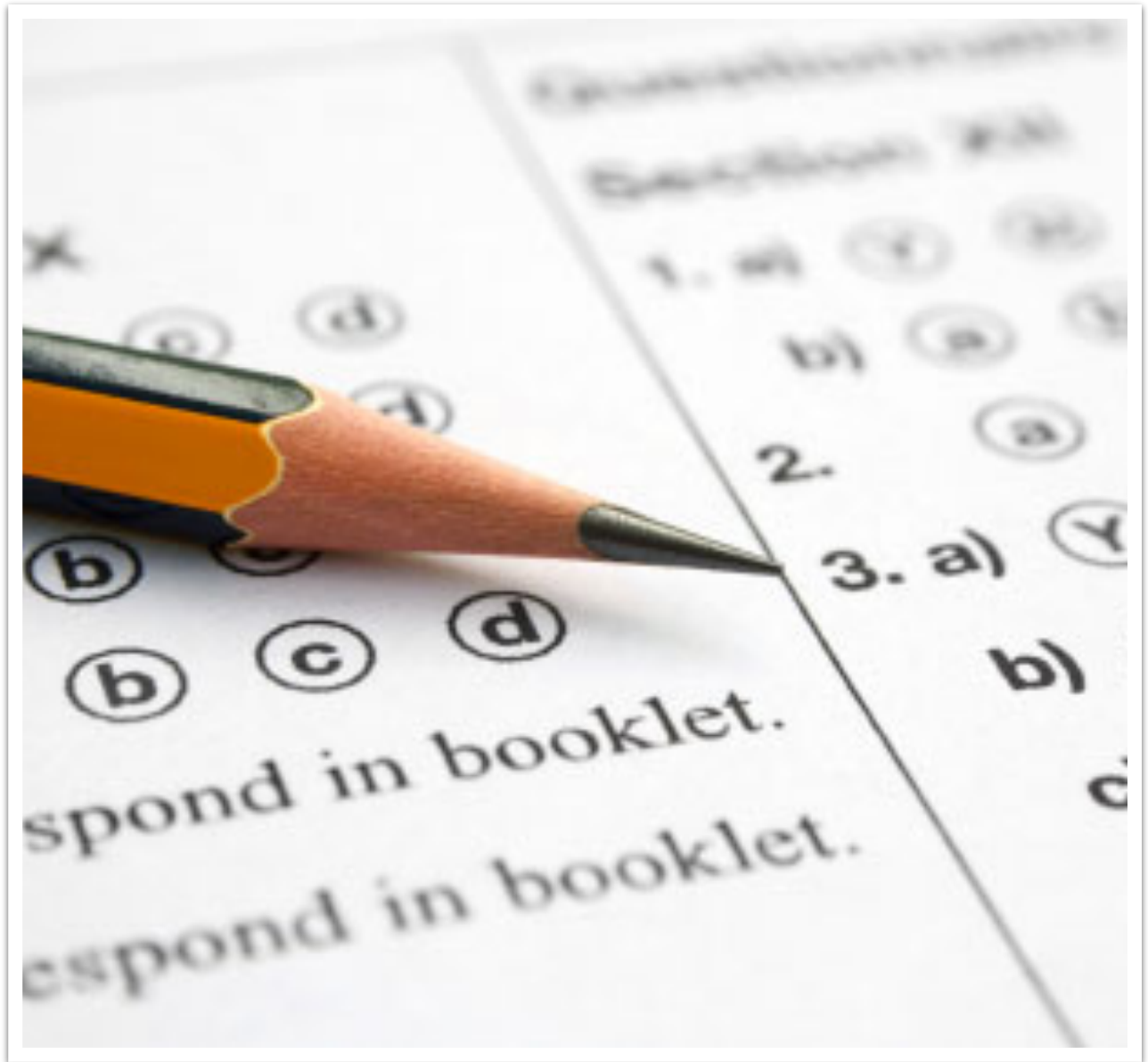
Data Use:

Goals and Purposes

- Inform participant selection
- Document student outcomes
- Inform stakeholders about processes & outcomes
- Inform program design & delivery

Data Use

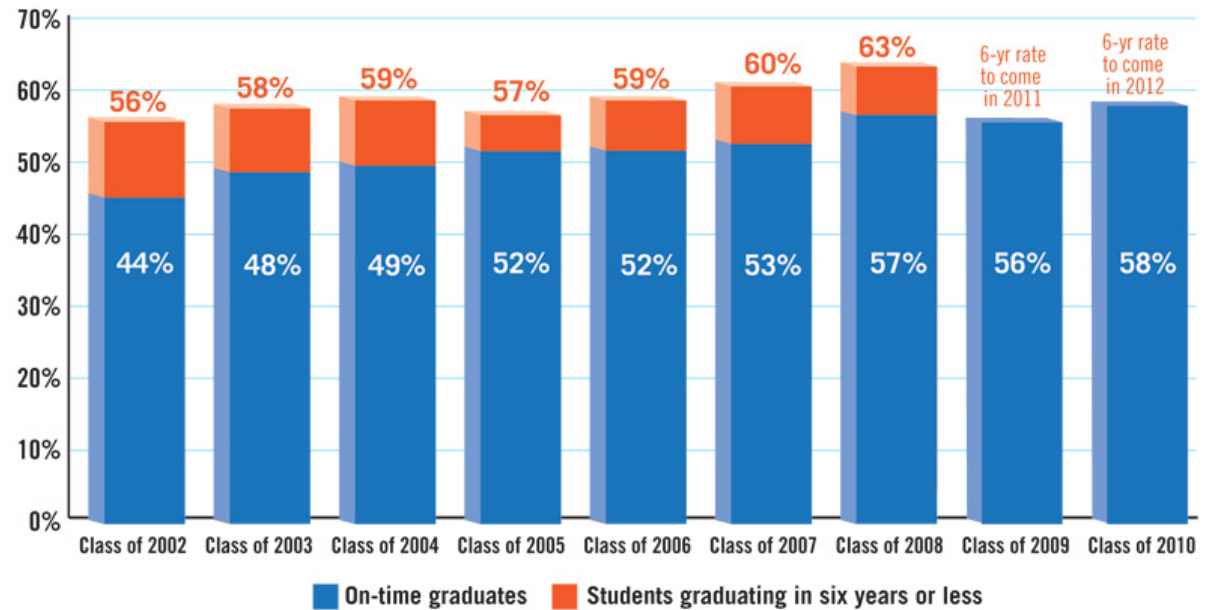
Inform
Participant
Selection



Data Use

Document
Student
Outcomes

School District of Philadelphia Graduation Rates, 2002-2010



Source: Office of Accountability, School District of Philadelphia

Data Use

Inform
Stakeholders

Jlon Flippens
Steppingstone Class of 2009



Jlon, who is currently a sophomore at William Penn Charter, continues to excel as a student athlete. She is currently ranked 10th in the country on the United States U15 National Team and supports her school as one of the top-ranked women's soccer players in the league while balancing her studies in school.

Data Use

Inform
Program
Design and
Delivery



Forces Shaping Data Use: Organizational & Contextual

- **Organizational Characteristics:**
 - Goal certainty / uncertainty
 - Availability of staff and other resources
 - Relationships with clients & partner organizations for acquiring data
- **Contextual Forces:**
 - Availability of “big data”

Challenges

Associated with Data Collection and Use

- Imperfect alignment between organizational goals and available data
- Limited staff time and other resources to collect and analyze data
- Availability of measures of “value-added”

Implications for Practice

- **Align** organizational goals and data collection and use
- **Define** desired program outcomes to determine needed metrics to document them
- **Recognize and account for** selection bias and identify comparison group to measure program impact
- **Provide** staff training to ensure consistency and efficiency in data collection and use

Lessons Learned:

Moving from Reporting Results to Understanding Value Added

Results

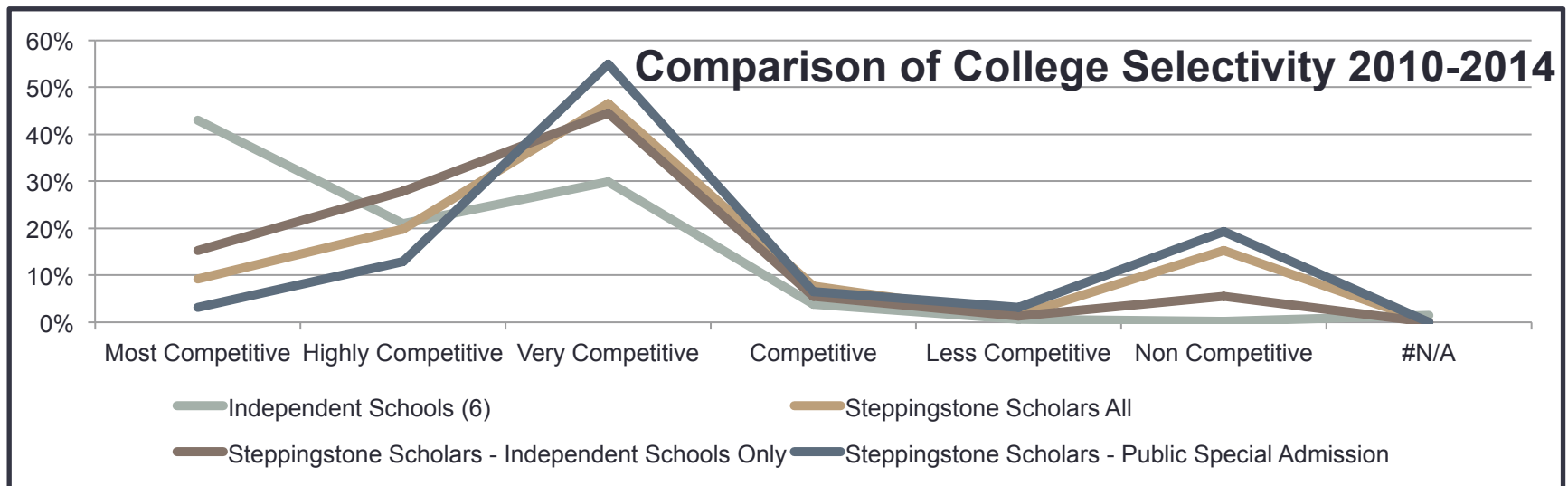
95% Scholars commenced from Academy 6 Program

92% Scholars successfully placed into college prep schools (Public 46%/ Independen. 54%)

100% of Class of 2014 graduated from high school / matriculation to 20 colleges.

83% Scholars at two or four-year colleges and universities

75% Scholars at colleges and universities rated *Very, Highly, Most Competitive* (Barron's)

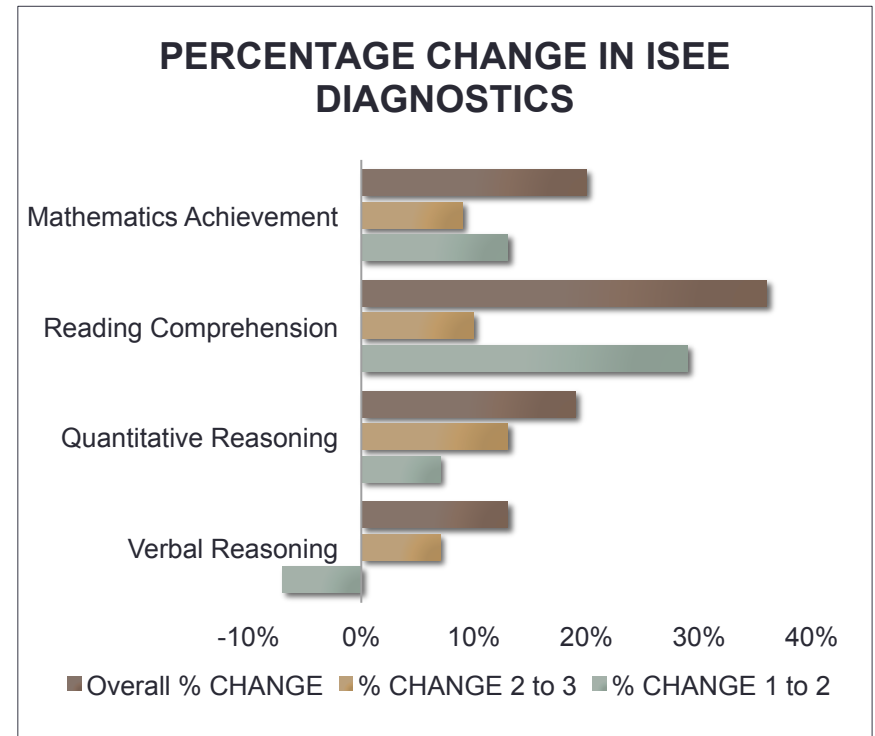


Lessons Learned:

Using Data to Do Better

Understanding and Addressing the Gap: Back Mapping Project & Diagnostic Testing

Mathematical Standards: Development and Progression												
Standards for Mathematical Practice												
Make sense of problems and persevere in solving them. Construct viable arguments and critique the reasoning of others. Use appropriate tools strategically. Look for and make use of structure.						Reason abstractly and quantitatively. Model with mathematics. Attend to precision. Look for and express regularity in repeated reasoning.						
	PreK	K	1	2	3	4	5	6	7	8	HS	
2.1 Numbers and Operations	(A) Counting & Cardinality								(D) Ratios and Proportional Relationships		(F) Number and Quantity	
	(B) Numbers and Operations in Base Ten				(C) Numbers and Operations — Fractions				(E) The Number System			
	(A) Operations and Algebraic Thinking						(B) Expressions and Equations		(D) Algebra			
2.2 Algebraic Concepts							(C) Functions					
2.3 Geometry	(A) Geometry											
2.4 Measurement, Data, and Probability	(A) Measurement and Data						(B) Statistics and Probability					



Lessons Learned:

The Challenges to Becoming a Data Driven Organization

- Investing the Resources
 - Partnership with University & Research for Action
 - Director of Operations
 - Creating Metrics for Action Plan
- Are we ready for a better understanding of “The Truth”?
- How do we change practice when we analyze data?

The Steppingstone Academy (TSA)					
- Narrow the Achievement and Services Gaps Our Scholars Face -					
GOALS	Develop an integrated & tested curriculum that narrows 2+ year gap in academic skill expectation	Develop & Integrate STEAM Enrichment Programming from 5 th – 12 th Grades	Increase % of Scholars in high and most selective colleges and universities	Increase % of Scholars in AP/Honor Courses	Publish Curriculum and Initial Results
METRICS	% in AP/Honors Courses in HS	% Growth in Diagnostic Tests (i.e. ISEE)	% Going to College	Selectivity of College Attended & Completed	% College Graduation Rate

Discussion Questions

- What data does your organization collect?
- For what purposes does your organization use data?
- What data does your organization want but not have?
- What challenges have you encountered with
 - Collecting data?
 - Using data?

Takeaways

1. What, if anything, will you bring back to your organization?
2. What other questions do you have?
3. What have we missed?

Questions?

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