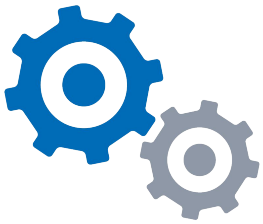
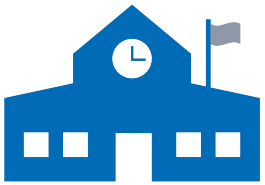
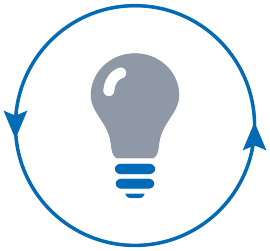
Scaling Improvement Work in Secondary Schools

April 4-5, 2018

New Visions for Public Schools

New Visions Through Five Stages

New Visions for Public Schools


1989

The Beginning

Founded by Richard I. Beattie with visionary seed funding from the Carnegie Corporation to mobilize private support to enable innovation in New York City's public schools.

1993-2007

School Creation

Created 135 small elementary and high schools, almost 10% of New York City's public school system. Independent evaluation by MDRC found that small high schools increased graduation rates by 10 percentage points and decreased the achievement gap by nearly half.

2007-

School Management

Invited by Mayor and Chancellor to manage a network of schools. Today, New Visions serves as lead partner to 69 public schools with over 40,000 students, a greater share of whom are low income, minority, or have special needs than those in public schools district-wide.

2011-

Charter School Creation

State-authorized as a charter management organization in 2011, today we operate ten charter public high schools in underserved neighborhoods, including two charter transfer schools serving the highest-challenge students in New York City's high schools.

2013-

Scalable Innovation

Focused on developing scalable solutions for school improvement, including creating open-source core curriculum used by 1000's of teachers in NY State and data / management tools used by over 300 NYC schools.

After Small Schools Gains, We Confronted a Dilemma in Extending Improvement

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System	"[D]iverse people actually work together to direct their specialized capabilities toward common goals for patients [students]. They are coordinated by design." - Atul Gawande

- Schools rely heavily on weak systems for tracking student progress towards outcomes, assigning students to activities and monitoring progress
- Inefficiency, lack of intentionality, and human error in these systems undermines impact both of existing activities and more ambitious work
- Weak infrastructure makes it difficult to see what has transpired and even more difficult to understand the relationship of activities to outcomes
- This means school systems generally have no scalable and reliable way of becoming smarter from year-to-year

Without Robust Systems, We Observed Wide Variation in Performance

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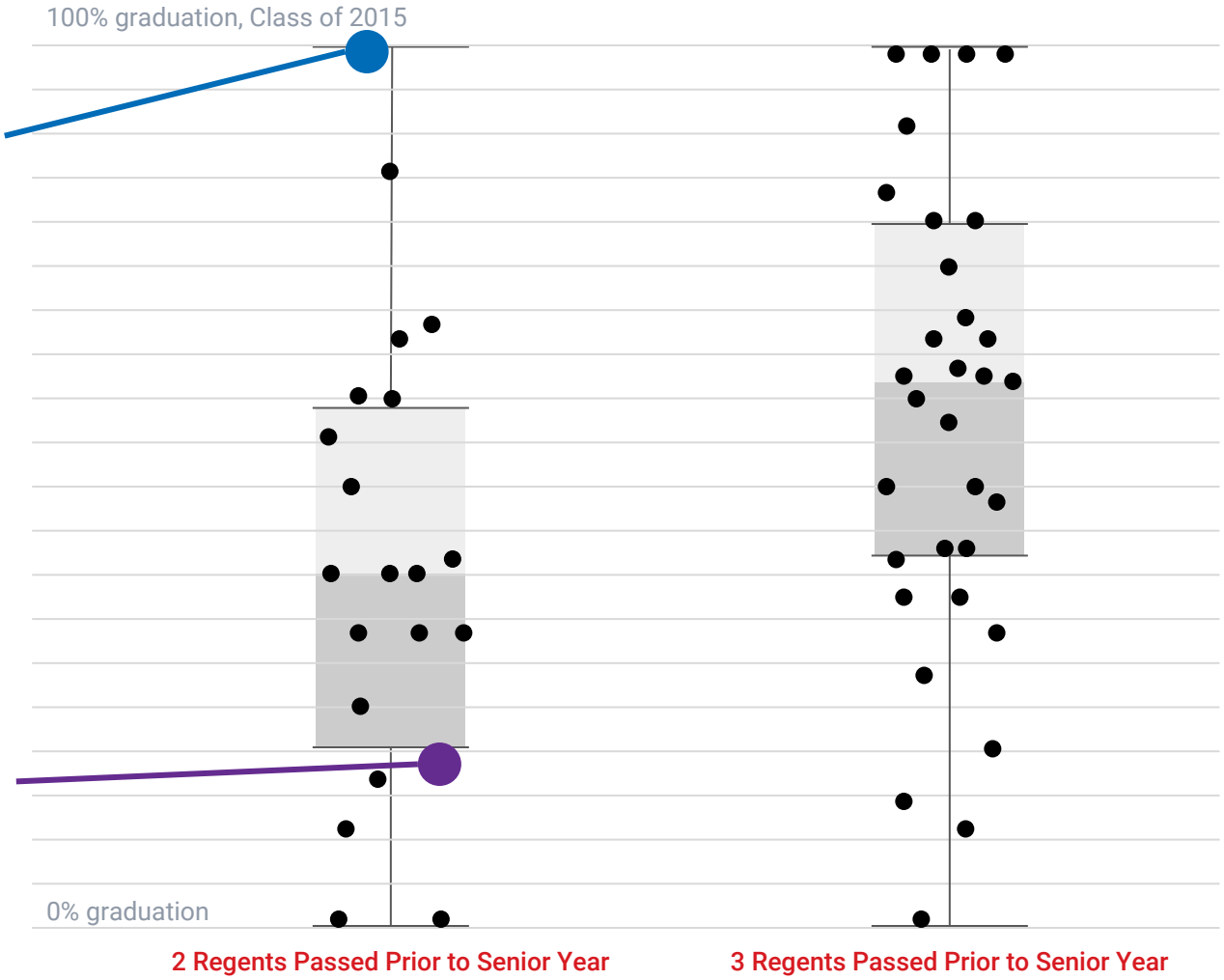
In School A, 100% (5 of 5) students who began the year with 30+ credits and 2 Regents graduated

In School B, 19% (6 of 32) similar students graduated



Schools Are Environments of Unmanaged and Underappreciated Complexity…

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Analyzing the school operations and performance of a single cohort can be overwhelming. In a small high school of 425 students there are:

30,000 Lessons Taught Annually

9,000 Possible Regents Administrations

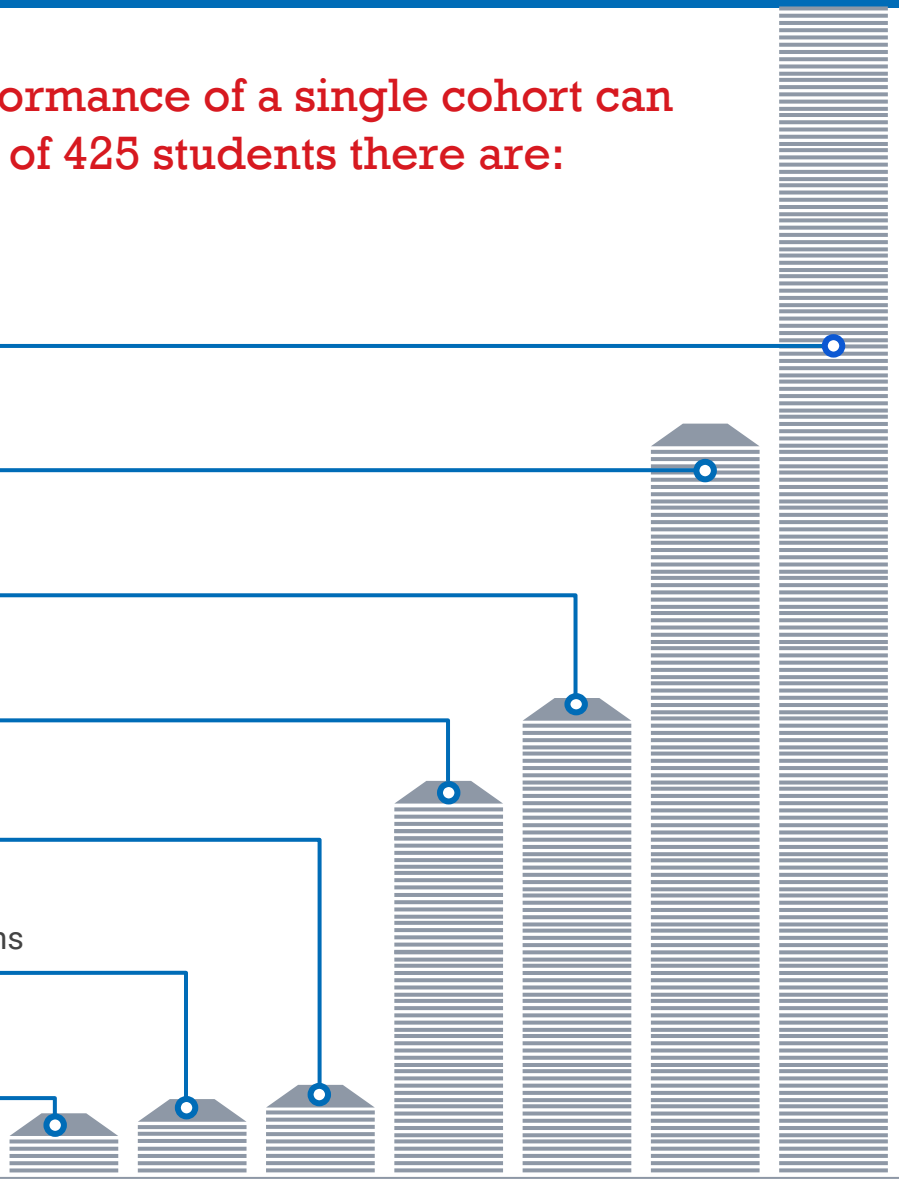
4,708 Credits Toward Graduation To Track

4,494 Marking Period Grades Per Year

300 Individual Course Codes And Titles

250 Teacher Team Meeting Notes & Reflections

200 Annual Teacher Observations



…And Still We Need to See *Every* Student to Ensure Reliable Support

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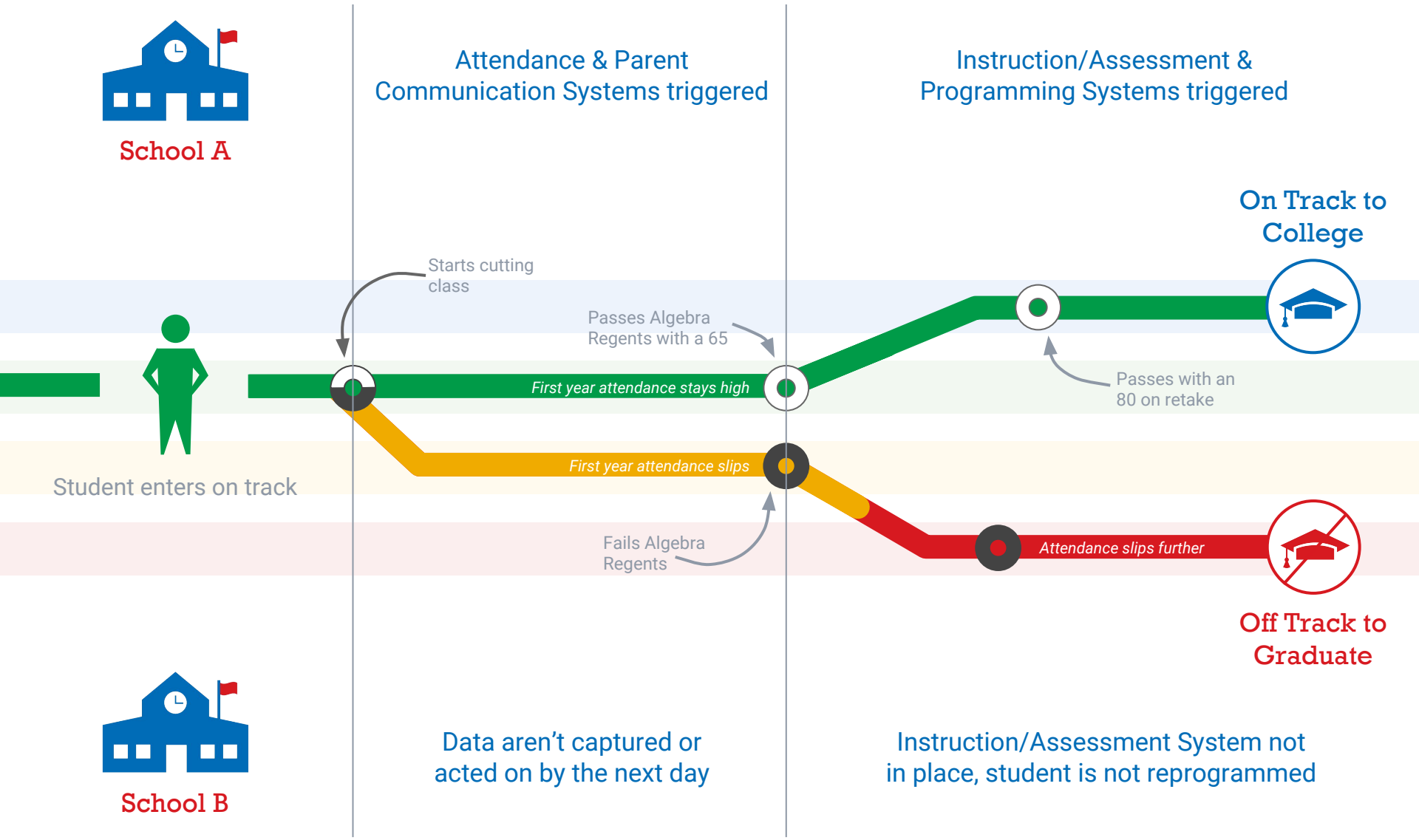

Getting Better Information Is Critical to Informing and Measuring Improvement

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- Descriptive data revealed weaknesses in systems but information for improving decision making and management unavailable in real time
- Weaknesses in systems at individual schools was a driver of unintentional variation in practice related to outcomes
- Large investments in data infrastructure for accountability not matched with investments in management tools
- Schools lack the capacity to adequately address systemic limitations in access to timely and appropriately organized data

Achieving Near-Real Time Access has Been a Multi-Year Process

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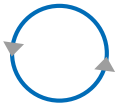
	2012-13	2013-14	2014-15	2015-17	2017-18
Processing Time	20-50 days	3-8 days	1-2 days	1 day	Overnight (automated)
Update Frequency 	3x / year	6x / year	40x / year	50-100x / year	Daily or multiple times per day
Tools 	Internal presentations	Student Sorter and related tools; interactive dashboards for NV staff	Student Sorter and related tools; Interactive dashboards for NV and district staff	Student Sorter and related tools; Interactive dashboards for NV and district staff	Tools within data portal move from descriptive to analytic
Primary Technology 	STATA, Excel, Powerpoint	STATA, Google Apps Scripts, Tableau	STATA, Redshift, Google Apps Scripts, Tableau	STATA, R, Redshift, Mongo, Google Apps Scripts, Node, Tableau	R, Python, Redshift, Mongo, Google Apps Scripts, Node, Tableau, d3

Creating Tools That Provide Access to Information Proved Insufficient

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- We built tools to aggregate real time student information, but only a few schools used them regularly
- The goal is to routinize and ensure a baseline of quality in how key planning tasks are executed in schools
- This enables deeper improvement work by generating momentum through increased outcomes and increasing reliability of administrative planning
- We concluded that a more structured and explicit approach to building new routines was needed - our response was Strategic Data Check-Ins

We Built and Iterated Human Routines to Support More Consistent, Managed Outcomes

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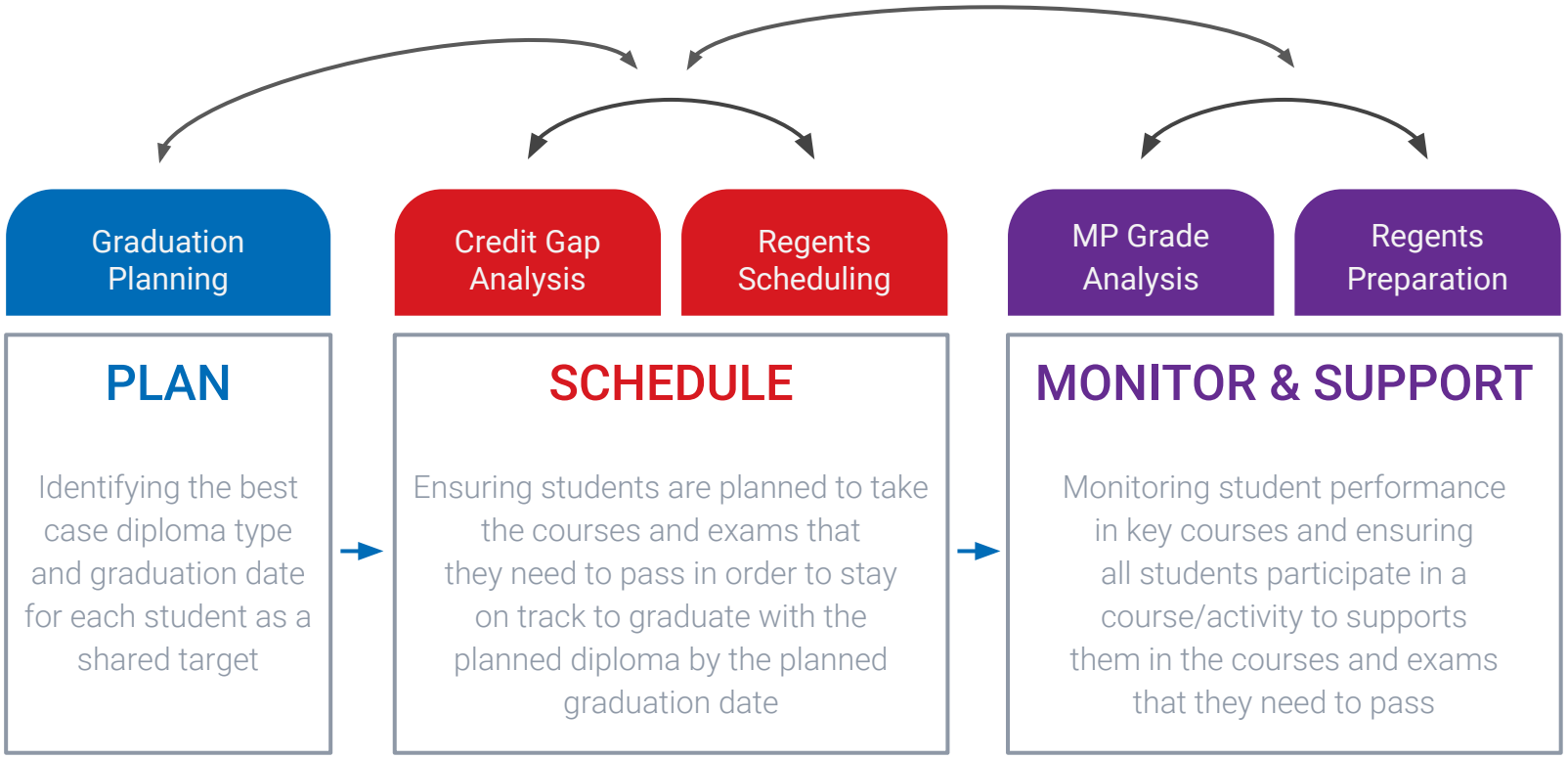
Strategic Data Check-ins (SDC)	Protocol-driven conversations between New Visions staff and school leadership teams that support decision-making based on data, not anecdote or conjecture or inertia.



As We Have Developed Those Routines, We Have Built Our Tools Around Them

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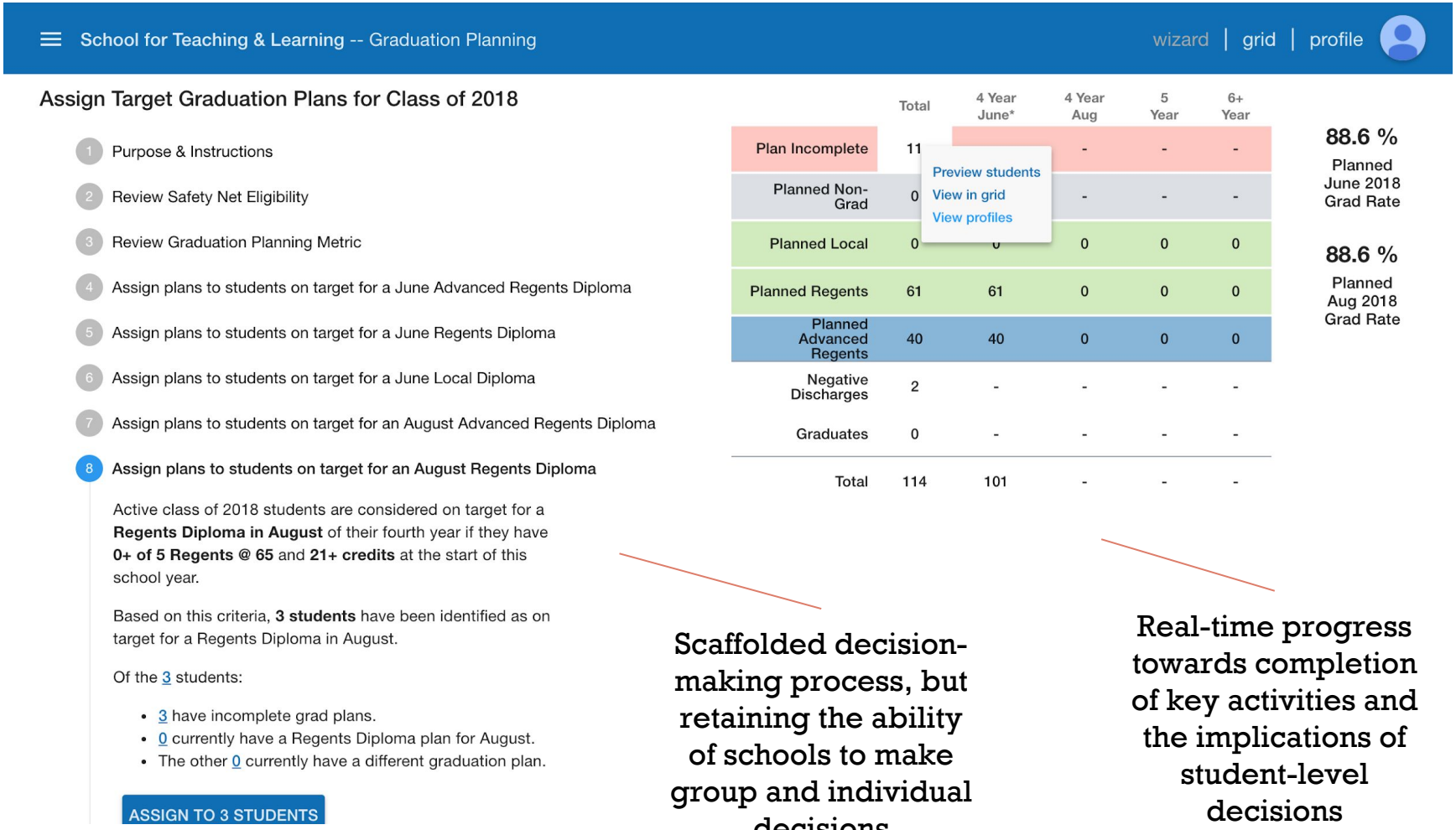

Scaffolded decision-making process, but retaining the ability of schools to make group and individual decisions

Real-time progress towards completion of key activities and the implications of student-level decisions

Better Baseline Routines Reveal the Deeper, More Complex Improvement Work

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- As we began to improve the quality of systems related to student level planning, we noticed continued variation in the capacity of schools to enact plans
- For the past two years, we have supported schools in mapping and intentionally iterating processes related to student supports
- This has created opportunities for schools to learn from one another and accelerate their work strengthening core systems

This Has Meant an Ongoing Shift from Administrative to Program Decisions

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Administrative → **Program Design**

Strategic Data Check-Ins

Standardize primary processes for grouping students, assigning to activities, tracking participation and monitoring milestones

Continuous Improvement 1.0

Improve secondary processes for enacting school level plans related to student assignment and monitoring

Continuous Improvement 2.0

Use comprehensive school and network level data on the relationship between activities and outcomes to improve the design of activities

Returning to Our Dilemmas, We Have Made Significant Progress

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- ✓ Schools rely heavily on weak systems for assigning students to activities and monitoring progress
- ✓ Inefficiency, error and lack of intentionality in these systems undermines program impact
- ✓ Weak infrastructure makes it difficult to see what has transpired and even more difficult to understand the relationship of activities to outcomes
- ? This means school systems generally have no scalable and reliable way of becoming smarter from year-to-year

Progress Is Evident in Both Graduation and CR Rates

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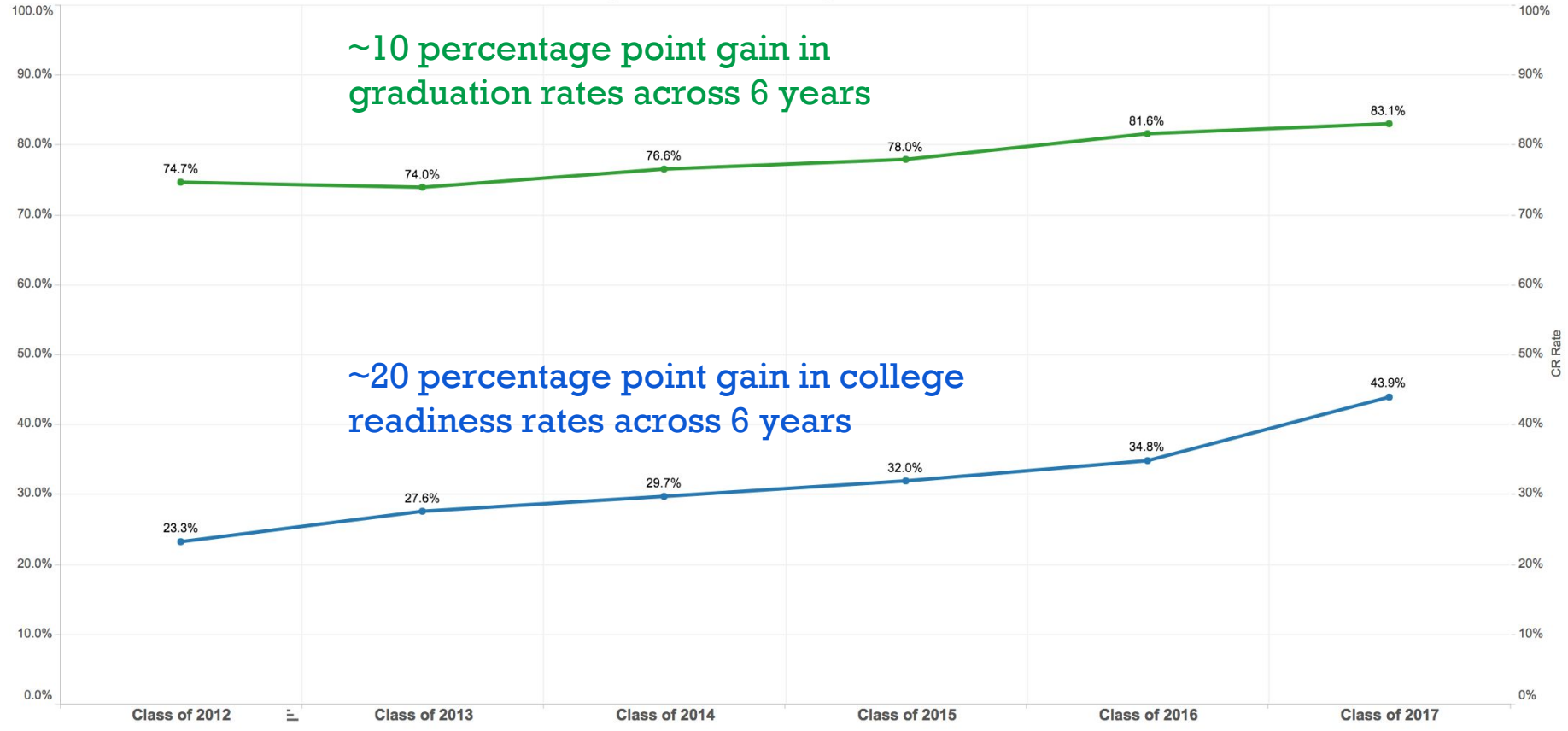
New Visions' Graduation & College Readiness Rates



Reducing Variability Is a Major Part of That Progress

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Achievement Gaps Have Also Closed, While Graduation Rates Have Risen for All

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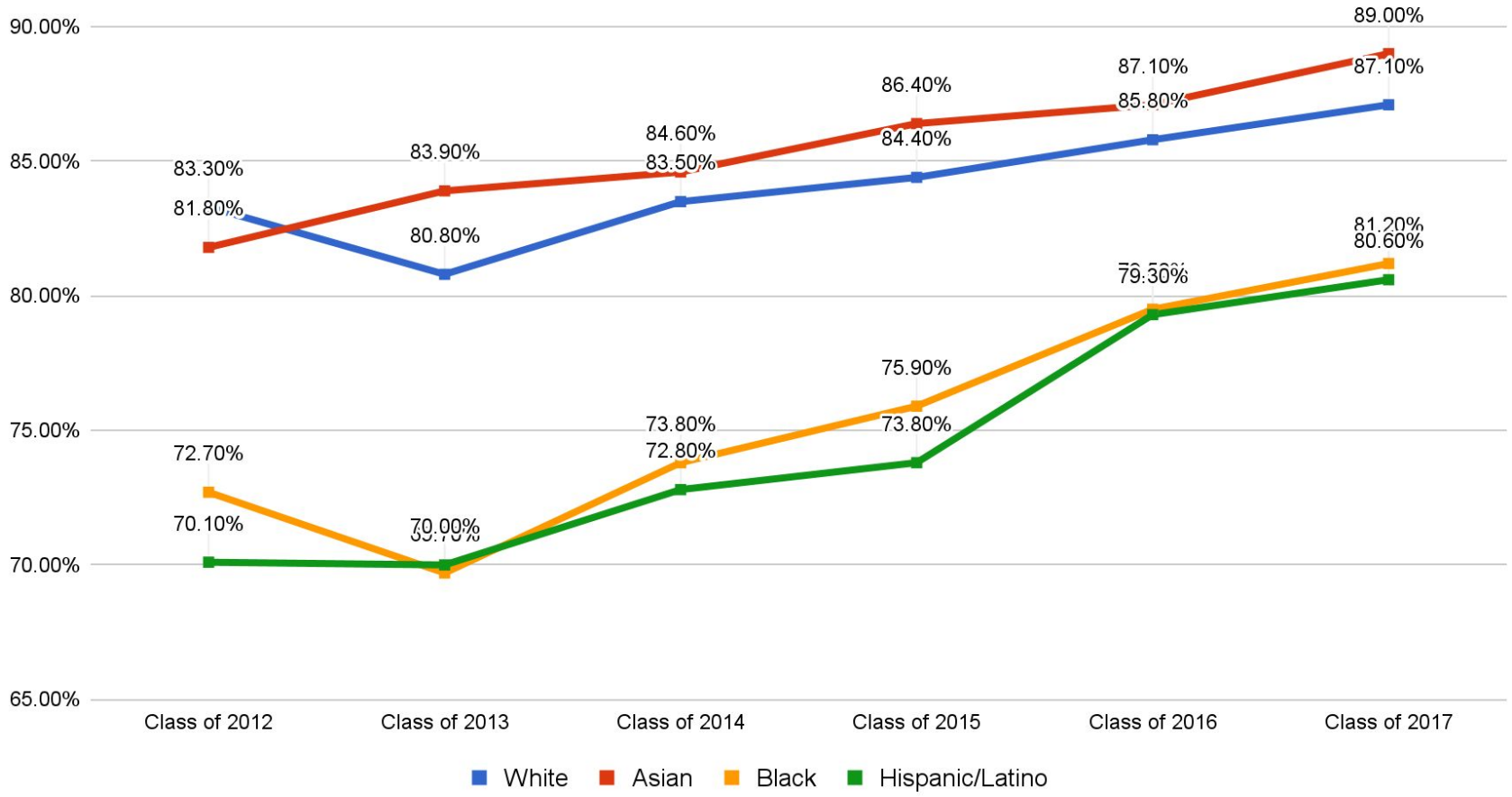

Some Lessons We've Learned, and Others We're Still Learning

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What We've Learned:

- Start with flexible tools to allow for rapid iteration
- Ensure the work addresses immediate felt needs WHILE ALSO increasing data transparency
- Pair "short term" and "long term" drivers of change so that schools see progress from their efforts

What We're Still Learning:

- Our ability to communicate compelling, consistent narrative is critical
- Small details like language make a huge difference (expectation v. plan)
- Simple, consistent routines that build on an understanding of schools' existing routines really matter
- Consistent team structures and clear roles at the school level support independence

As We Shift Focus to Postsecondary, We See Similar Patterns of Variability

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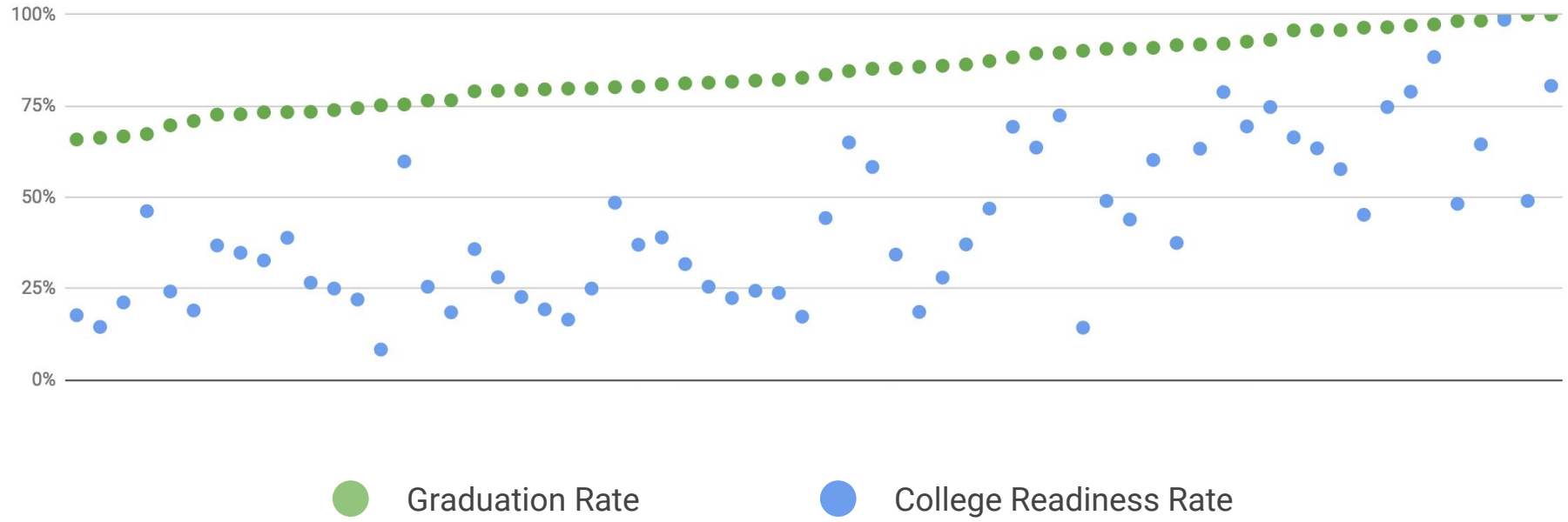
Graduation and College Readiness Rates, Class of 2017



Our Postsecondary Approach Applies Developed Methods to New Activities

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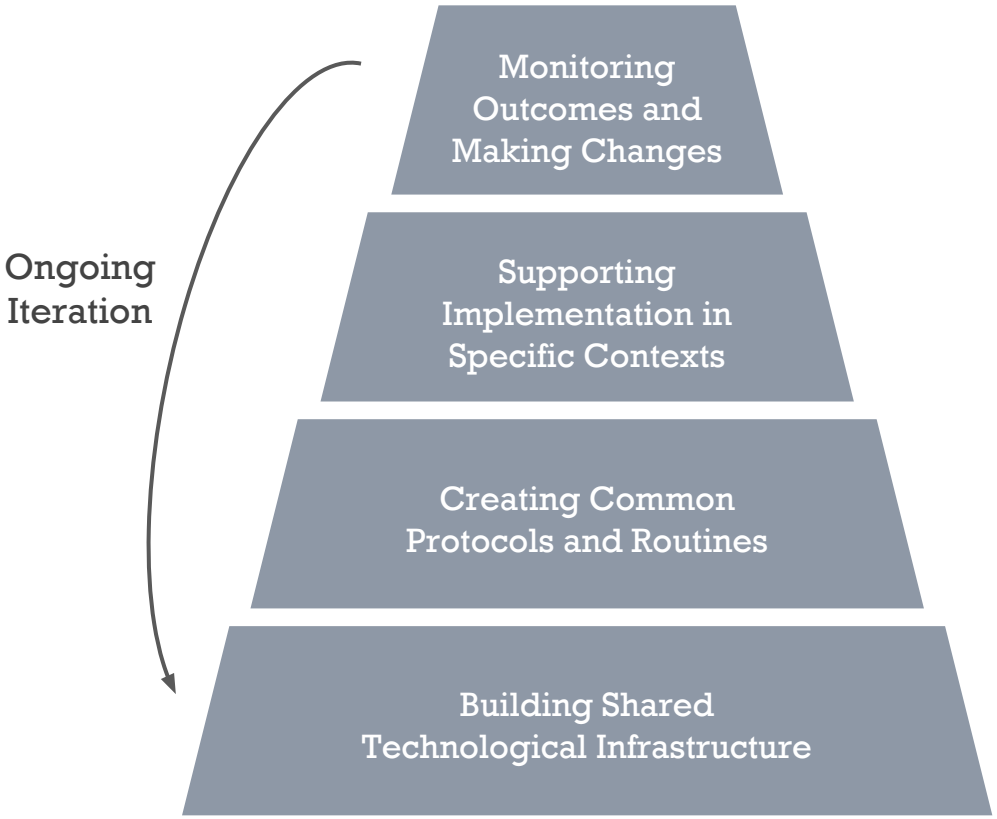
Using an existing set of methods...



...for postsecondary specific activities