Introduction to Improvement Science

Lessons Learned about Engaging in Continuous Improvement from a Research-Practice Partnership

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“The problem-solving work of innovation requires access to ‘sticky’ information regarding user needs and the context of use . . . we need design which explicitly aims to function in the hands of diverse individuals working in highly varied circumstances.”

Bryk et al, 2011
Learn from schools that beat the odds

Inform, Inspire, & Improve

**NYKids mission is to:**
- **Inform educators** and others about school performance in comparison to other schools in the state
- **Inspire educators** through case studies and other reports of promising practices in odds-beating schools
- **Improve schools** through professional development in continuous improvement processes (COMPASS-AIM)

[https://ny-kids.org/](https://ny-kids.org/)
“How do we tap wisdom of others and accomplish together?”

“What specifically is the problem we are trying to solve?”

“How and where do we start small, learn fast, and improve quickly?”

“What works, for whom and under what set of conditions?”

“How do we know if a change results in improvement?”

“How do local conditions shape our work?”

See https://www.carnegiefoundation.org/
Not All Problems and Solutions Are Created Equal

Consider your options...

a.  Implement fast – learn slow
Or
b.  Start small – learn fast

(See Bryk et al, Harvard Ed Letter, 2015)
NYKids COMPASS Process

- **Monitor** ("check the pulse")
- **Action Plan**
- **Implement Plan**

**Plan**
- Compare processes and practices to evidence-based practices
- Assess priorities based upon local constraints and affordances
- Select evidence-based practices
- Set SMART goals/AIMS

**Do**

**Act**
- Recalibrate as needed and continue cycle

**Study**

**NYKids COMPASS Process**
How COMPASS works

SUMMER: COMPASS~AIM Intensive Institutes (Planning)

LATE FALL/EARLY WINTER: Mid-year "Check the pulse" follow-up session (Doing, Studying, Acting)

LATE SPRING/EARLY SUMMER: End-of-year "Check the pulse" follow-up session (Doing, Studying, Acting)

SUMMER: Continued Monitoring, Networking, and Repeat Cycle
Problem-focused and User-Centered

Six Principles

Organize as networks
Learn through disciplined inquiry
Embrace measurement
Attend to variability
See the system

Be problem-focused and user-centered

CORE PRINCIPLES OF IMPROVEMENT

Improving literacy and math proficiency
SEL
Parents/Relationships
Math
Block Scheduling

Buckets
Attend to Variability

Six Principles

- Be problem-focused and user-centered
- Organize as networks
- Learn through disciplined inquiry
- Embrace measurement
- Attend to variability

CORE PRINCIPLES OF IMPROVEMENT

- See the system

Augen will improve relationships among all community members.

- staff
- parents
- kids

Child to Child
- PD
-⋆ Fun Activities
- Collaboration
- Shared Celebrations
- Field Trips
- Third Day School-wide Events

Staff to Staff
- Staff Meetings
- Team Building
- Staff Nits
- PLC night

Child to Adult
- Family Engagement
- Parent Conferences
- Library
See the System

Six Principles

- Be problem-focused and user-centered
- Organize as networks
- Learn through disciplined inquiry
- Attend to variability
- Embrace measurement
- See the system

Core Principles of Improvement

Action steps:
- Math Block - look at exemplar math block structures - workshop model, delivery of instruction
- Engage/Analyze data
- Quarterly assessments
- Interventions to compile/organize interventions
- Re-teach resources based on skill standards - progress monitoring
- PD - Go Math, eVoca, any topic based on students needs as seen on data
Embrace Measurement

Six Principles

- Be problem-focused and user-centered
- Organize as networks
- Attend to variability
- Learn through disciplined inquiry
- See the system
- Embrace measurement

By the end of 18-19 school year, Arongen faculty will close student performance gaps as measured by individual growth in math and ELA literacy measures.
Learn Through Disciplined Inquiry
Organize in Networks

Six Principles

- Organize as networks
- Learn through disciplined inquiry
- Be problem-focused and user-centered
- Attend to variability
- See the system
- Embrace measurement

6 CORE PRINCIPLES OF IMPROVEMENT

The Odds-Beating High Schools

- Alfred-Almond Junior-Senior HS, Alfred-Almond Central School District
- Canajoharie-Cayahoga Central School District
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- Canajoharie-Cayahoga Central School District

This scorecard analysis includes the case reports for each of the schools in our sample. These case reports are available at www.nysed.gov/nysed and highlights from them appear throughout this report. An introduction to the case study methodology can be found on page 19. A separate methodological report provides more detail, and it is available on our website.
Thank you

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