# Education Transformation: Using Implementation Science to Support Systems Level Change

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Dartmouth College - October 10, 2023





### Who We Are...



The National Implementation Research Network (NIRN) uses the science and practice of implementation to help solve real-world problems. We are a multidisciplinary team with the mission to contribute to the best practices and science of implementation, organization change, and system reinvention to improve outcomes across the spectrum of human services.

NIRN is located within the Frank Porter Graham (FPG) Child Development Institute at the University of North Carolina at Chapel Hill.



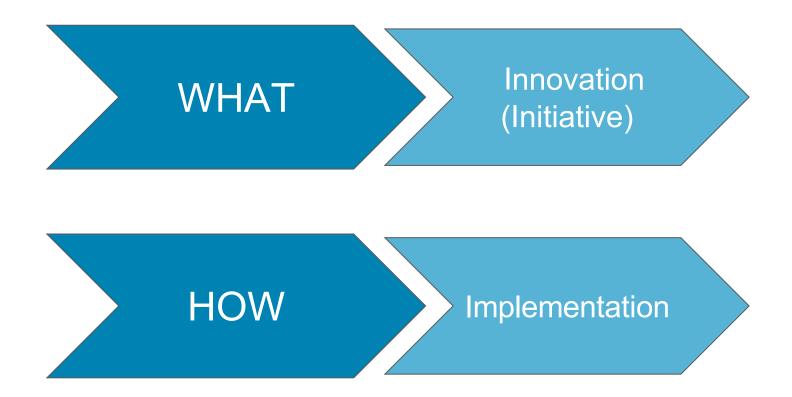
**Yolanda Perkins** Implementation Specialist



**Rebekah Hornak**Implementation & Communications
Specialist



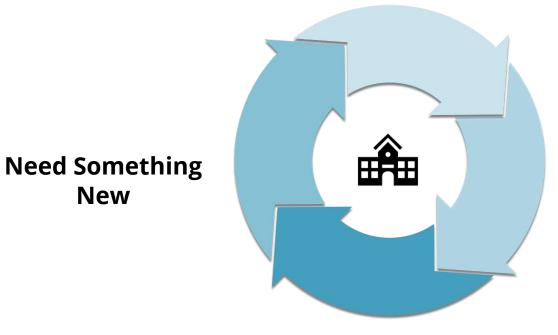
# Innovation and Implementation





### Too Often...

### New Innovation



**Use Innovation** 

6 Months - Limited **Outcomes** 



New

### Strategies, when used alone...

- Sharing information
- Training
- Policy Change
- Providing
   Funding/Incentives
- Organization Change



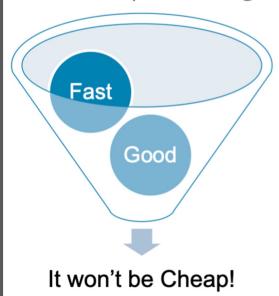
Use of Practices As Intended

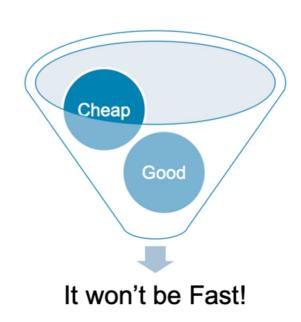
These strategies are necessary, but not sufficient when used alone.

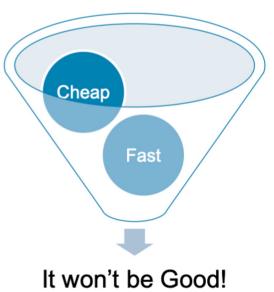


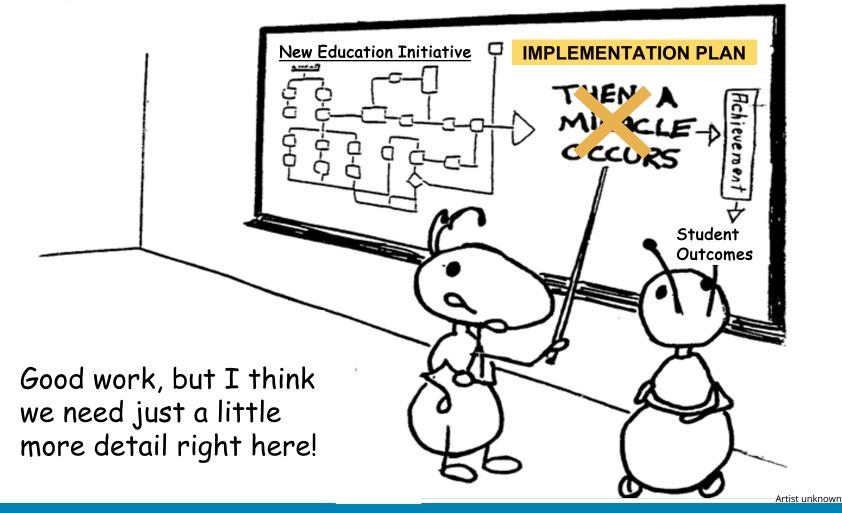
# Wexelblatt's Algorithm (Cheap, Fast, Good)

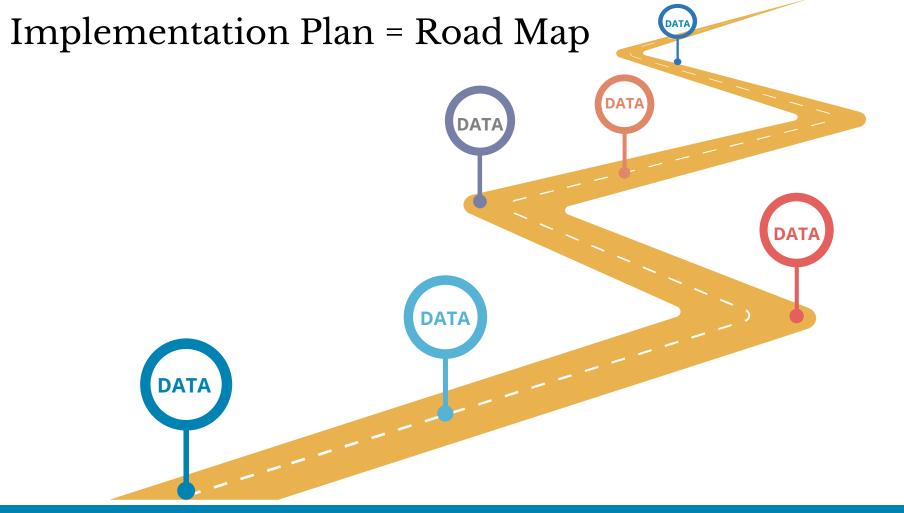
When implementing an innovation, you may only pick two...





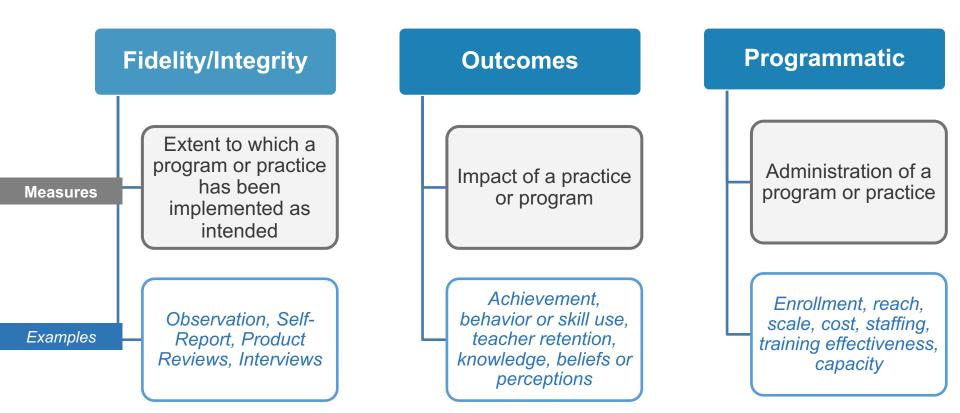








# Types of Implementation Data





# Levels of Data

Level	Purpose	Examples
Satellite Data	Illuminate group trends	Standardized test scores, attendance, graduation rates, teacher retention, parent participation
Map Data	Identify learning trends or instructional skill gaps	Progress monitoring, classroom assessments, surveys
Street Data	Gain insight of student, staff, parent experiences and mindsets & monitor internalization of skills	Empathy interviews, student work, observations



# Use Street Data for Equitable Implementation

### Integration of the community's

- Culture
- History
- Values
- Assets
- ❖ Needs





# Active Implementation







- What is being implemented?
- What is the evidence for its effectiveness? For whom?
- How well operationalized is the practice?
- How can it be adapted to the context?





- How does implementation progress over time?
- How do we build an infrastructure to support sustained implementation and achieve fidelity?
- How do we use data to communicate about and improve our work?
- How do we transition supports-build internal capacity?

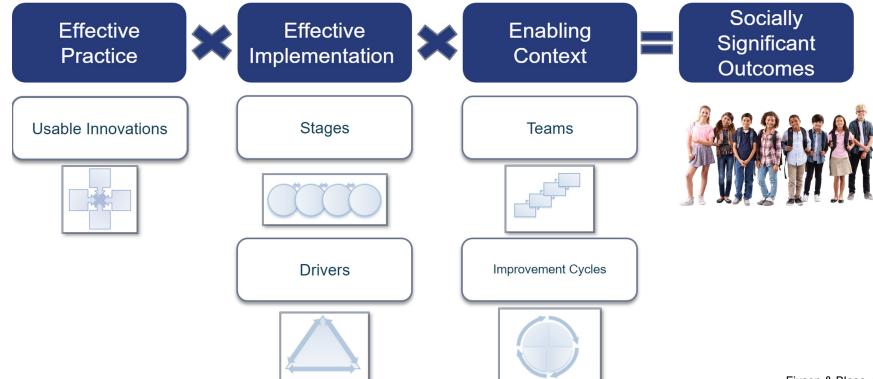




- How are implementation teams engaging critical perspectives in the process?
- How is data used for improvement and learning?



# Active Implementation Frameworks





### Discussion



 Reflect on current or past work related to improving socially significant outcomes.

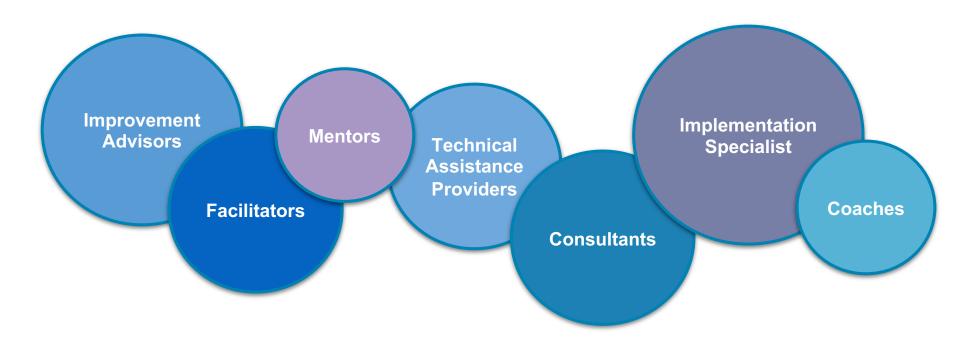


- Was a key factor missing? Which one?
- What was a key factor to success?
- Discuss with an elbow partner



# Implementation Support Practitioner Competencies

### Implementation Support Practitioners



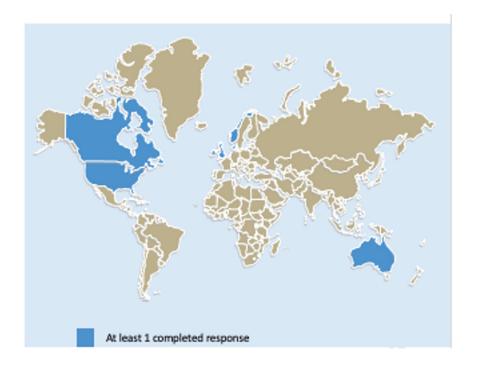
# What Competencies do Implementation Support Practitioners Need?

### 34 respondents

- 15 intermediary organizations
- Included Europe, United States, Canada, and Australia

### 420 Qualitative Comments

- 10,411 total word count
- 275 comments in the form of a question (36), suggested revisions (217), and affirmations (44)

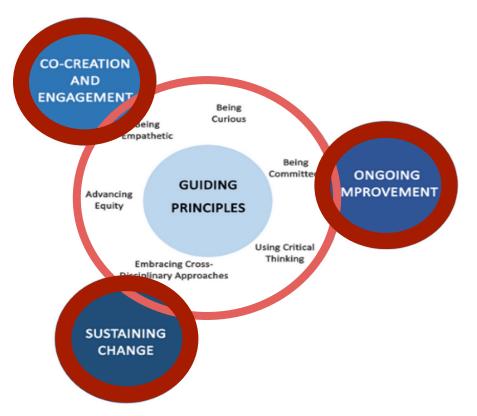


Metz et al., 2020



# Implementation Support Practitioners Competencies

- 6 guiding principles
- 3 competency domains
- 15 core competencies



Metz et al., 2020

# **Core Competencies**



- Co-learning
- Brokering
- Address Power Differentials
- Co-design
- Tailoring Support



- Assess Needs & Assets
- Understand Context
- Apply & Integrate Implementation Frameworks & Strategies
- Facilitation
- Communication
- Conduct Improvement Cycles



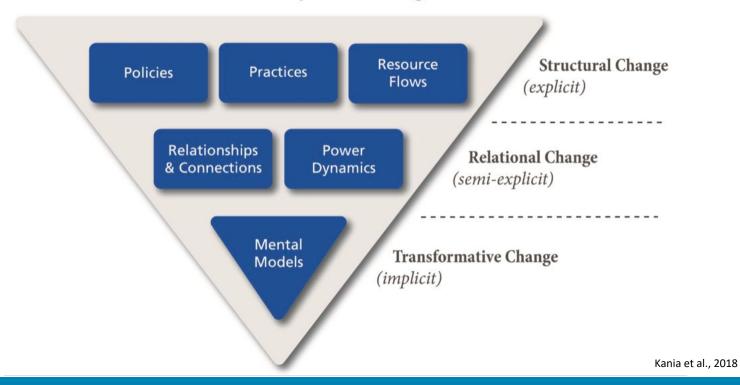
- Grow & Sustain Relationships
- Develop Teams
- Build Capacity
- Cultivate Leaders & Champions

Metz et al., 2020



## Transformational Change

### **Six Conditions of Systems Change**



# Systems change is about shifting the conditions that are holding the problem in place.

Kania et al., 2018

# District Examples

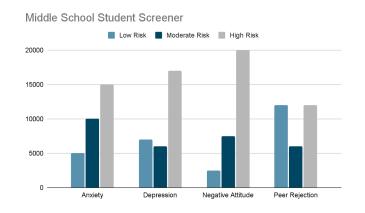


### District Stories - Social Emotional Learning Program



### District #1

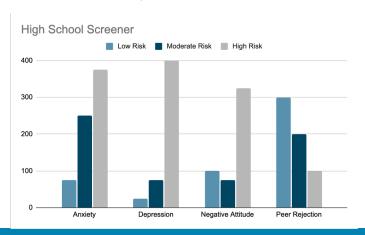
- Urban High Socio-economic rate
- 314 schools; 199,089 students





### District #2

- Rural High-poverty rate
- 3 schools; 1208 students





### A TALE OF TWO DISTRICTS

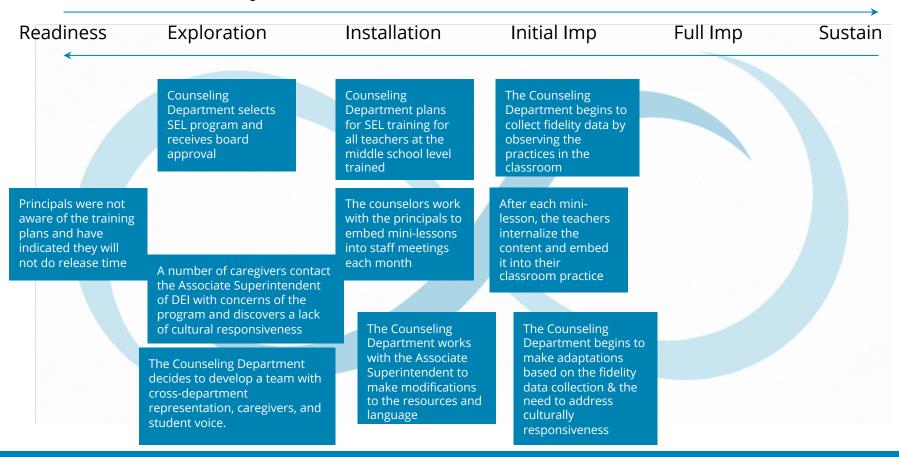
### DISTRICT 1



DISTRICT 2



# How it actually works for District 1





# How it actually works for District 2

Full Imp Readiness Exploration Installation Initial Imp Sustain An Assistant The SEL Trainers All teachers in the Principal attends a come to the school building begin to use conference and and facilitate a one the SEL Program in learns about a new their classrooms day training in **SEL Program** before school starts A parent complains He shares the about the program After a program is After the initial information with his and concerns around selected for the training, teachers building principal "SEL" to a board elementary and begin to receive and they decide to member middle/high school, monthly coaching or purchase the consulting hours training plans are program developed with the virtually with the trainers from the company to ensure The board member alignment with the company. has no knowledge of A district team is created community values the program and to begin the selection and teacher needs also has concerns process of an SEL that "SEL" is being program that meets taught in the schools their needs and The admin team discovers that includes, caregivers, they never received training students, board SFI Initiatives and effectiveness data or that the members and Data are shared with program does not have a fidelity community members the board measurement



### Implementation Results

#### District 1



### District #1

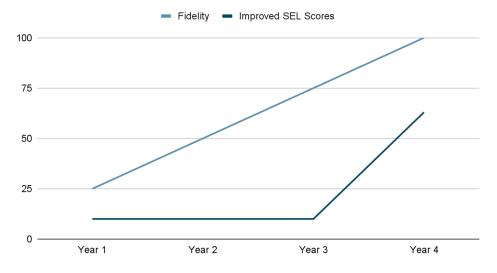
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### District #2

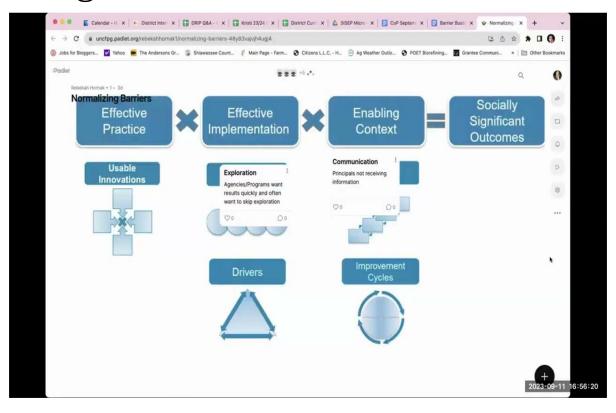
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### Fidelity/Student Improvement





### Normalizing Barriers





We need to remember...

# IMPLEMENTATION IS WHAT WE DO EVERYDAY!



## Partnering with NIRN

Our team aims to support and investigate implementation efforts to solve real-world problems and improve outcomes in K-12 Education, Early Childhood, Child Welfare, and Public Health services.

### **Implementation Practice**

- Implementation Partner Engagement
- Implementation Strategies Design
- Development of Implementation Teams
- Capacity Assessment and Building
- Technical Assistance & Coaching
- Training and Professional Learning

### **Implementation Research & Evaluation**

- Literature Reviews and Environmental Scans
- Research Designs, Planning, and Methodologies
- Assessments, Survey Development, and Test Construction
- Qualitative and Quantitative Methods
- IRB Preparation and Grant Writing
- Writing for Scientific and Non-Scientific Audiences



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https://nirn.fpg.unc.edu/



### **Additional Resources**

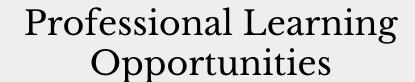
**NIRN Capabilities Statement** 

NIRN Research and Evaluation Agenda

**Active Implementation Hub** 

**YouTube Channel** 

**Podcast** 



**SISEP Communities of Practice** 

**SISEP Micro-Credentialing** 



### Citations

DuMont, K., Metz, A., & Woo, B. (2019). *Five recommendations for how implementation science can better advance equity.* Academy Health. <a href="https://www.academyhealth.org/blog/2019-04/five-recommendations-how-implementation-science-can-better-advance-equity">https://www.academyhealth.org/blog/2019-04/five-recommendations-how-implementation-science-can-better-advance-equity</a>

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