



The Art of Implementation Science

Caryn Ward, PhD

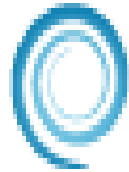
May, 2021



University of North Carolina at Chapel Hill



Frank Porter Graham Child Development Center



NIRN

NATIONAL IMPLEMENTATION
RESEARCH NETWORK



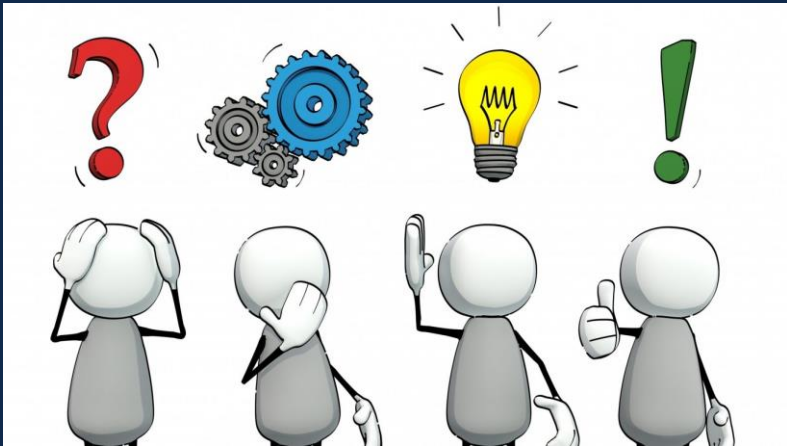
SISEP

State Implementation
and Scaling-up of
Evidence-based Practices

Setting the Stage

[Discussion/Activity]

Think, Write, & Share

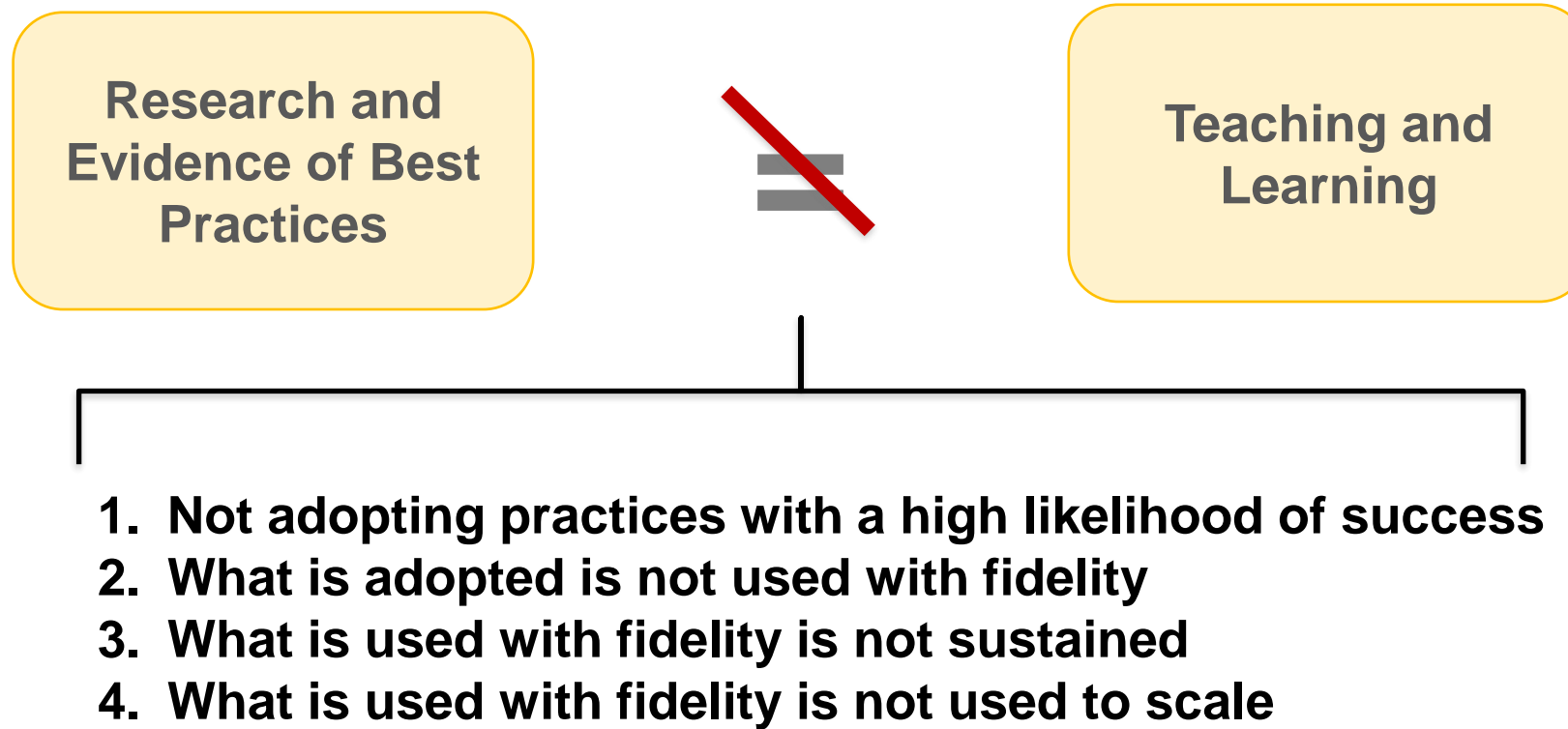


In your own words, what rationale do you use when introducing the importance of implementation in your work?

What do you hope to gain from this discussion?

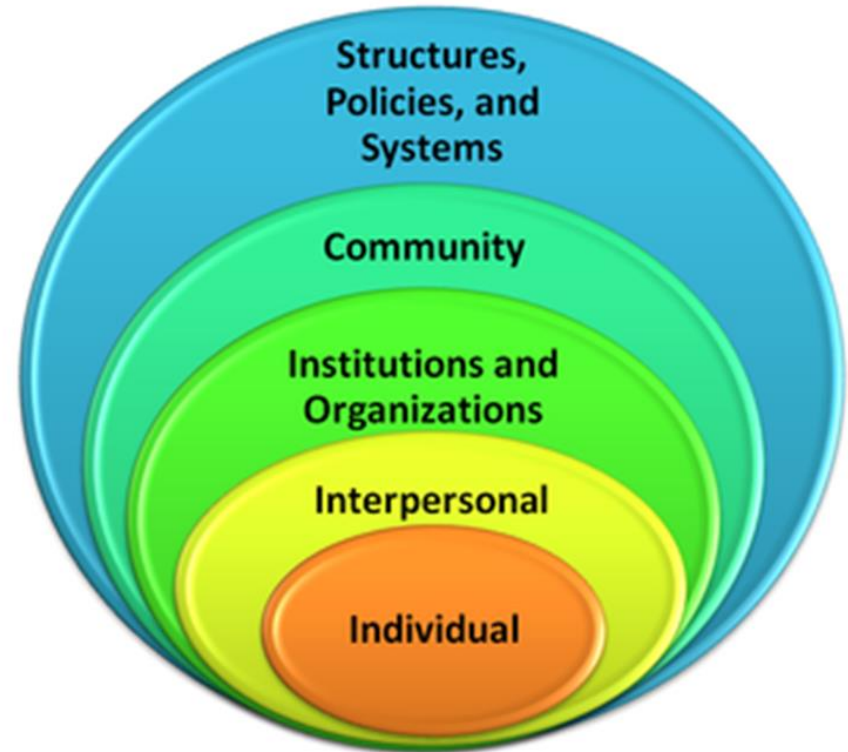
- Think – Write
- Share with a Partner

Science to Service Gap



Why Does Implementation Matter?

Results from over 500 studies offered strong empirical support to the conclusion that the level of implementation affects the outcomes obtained in promotion and prevention programs.



(Durlak & Dupree, 2008)

When used alone...

- **Diffusion/ Dissemination of information**
- **Training**
- **Passing laws/ mandates/ regulations**
- **Providing funding/ incentives**
- **Organization change/ reorganization**



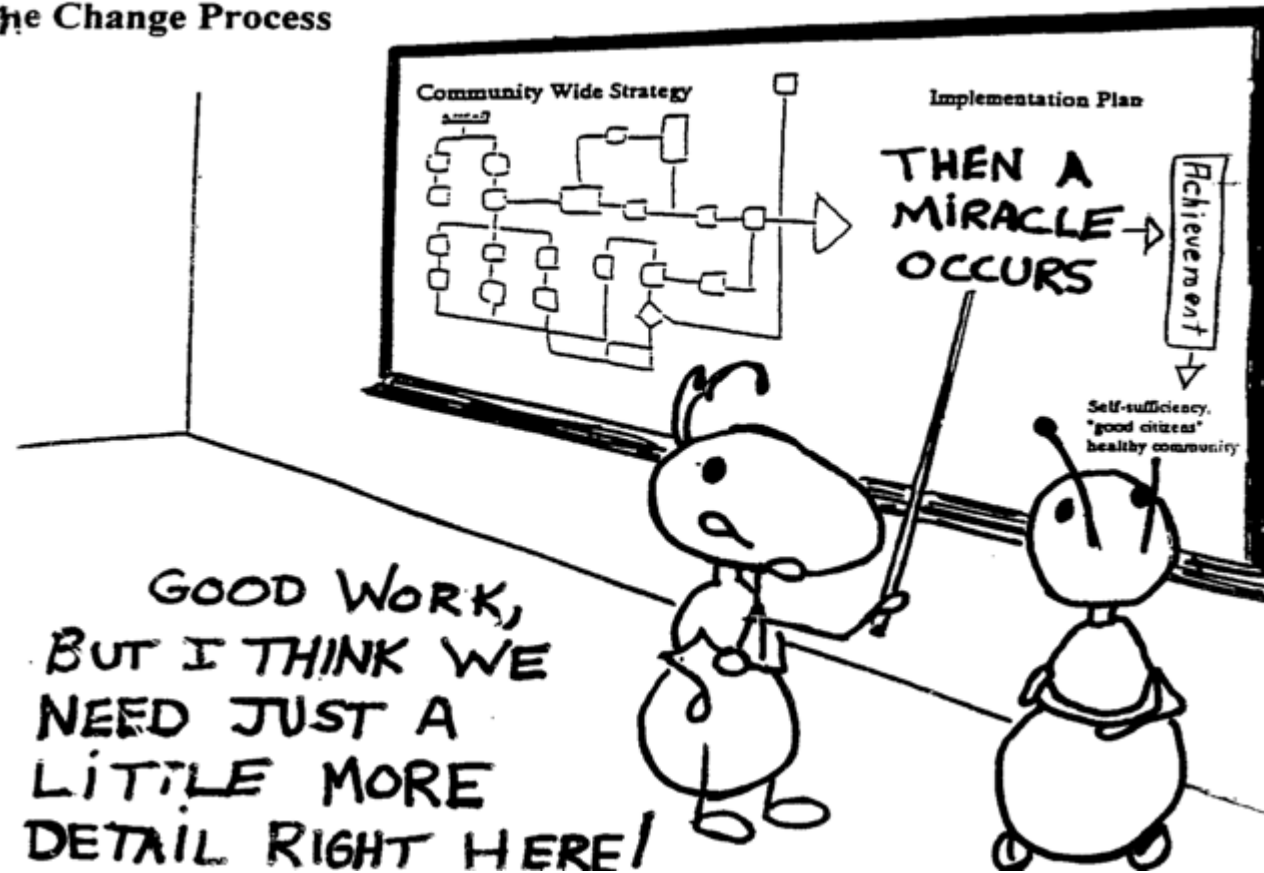
Use of Practices /
Innovations As
Intended



Return on Investment: 5-15%

Implementation

The Change Process



Implementation science refers to the “methods or techniques used to enhance the adoption, implementation, and sustainability” of an intervention (Powell et al., 2015)

Implement = Use

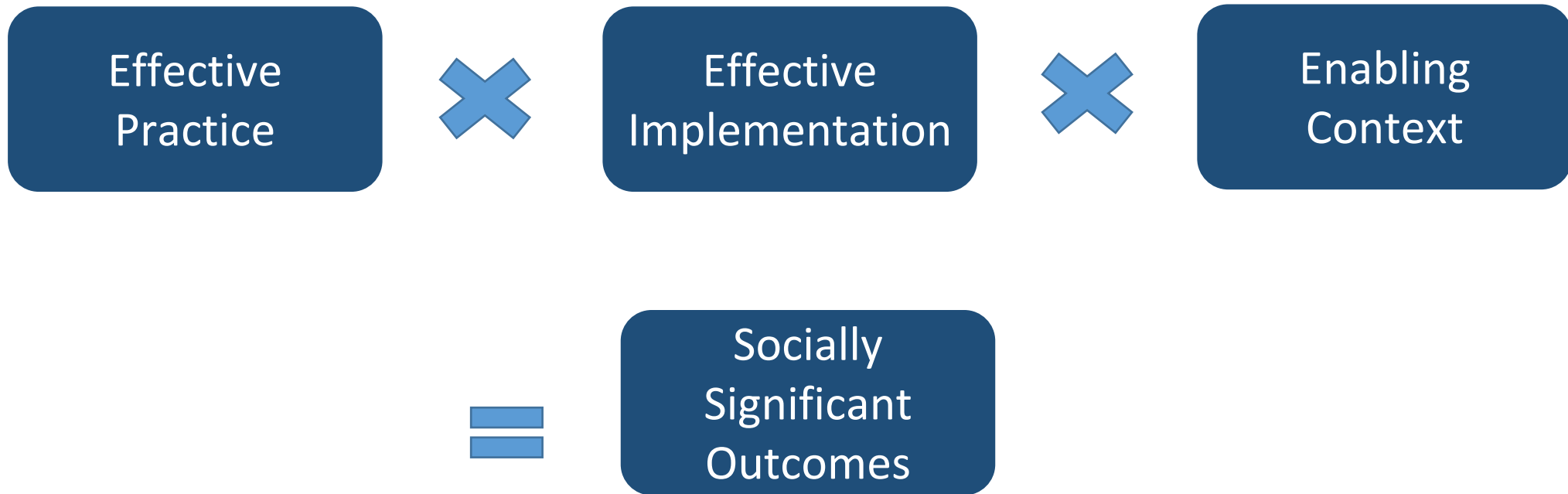
Equitable Implementation

- Occurs when strong equity components (including explicit attention to the culture, history, values, assets and needs of the community) are integrated into the principles and tools of implementation science to facilitate quality implementation of effective programs for a specific community or group of communities



(DuMont, Metz, & Woo, 2019)

Active Implementation



What is Effective Implementation?

Effective Practice

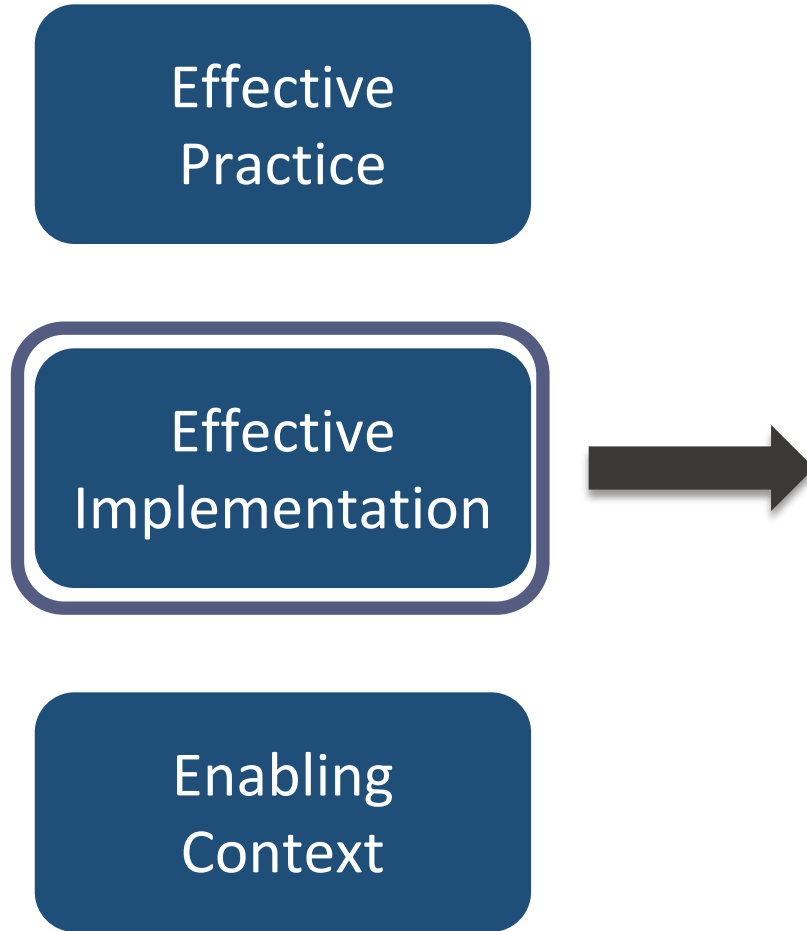


Effective Implementation

Enabling Context

- 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 context?

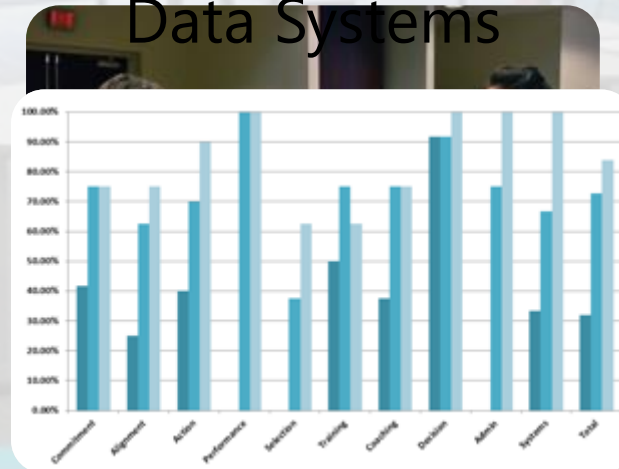
What is Effective Implementation?



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

- Competency Supports
- Organizational Supports
- Leadership Supports

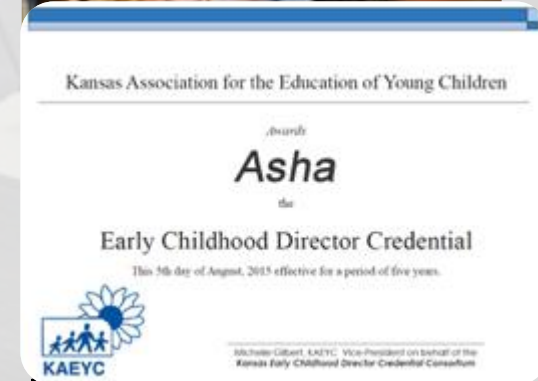
Decision Support
Data Systems



Training
Administration



Coaching
Intervention



Fidelity Assessment



What is Effective Implementation?

Effective
Practice

Effective
Implementation

Enabling
Context



- How are stakeholders engaged in supporting implementation?
- How is data used for improvement and learning?



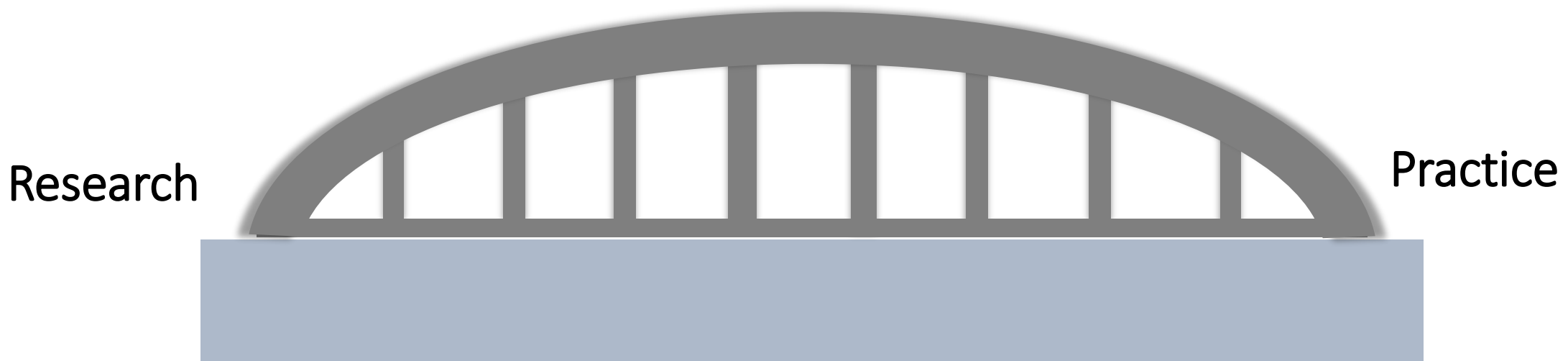
Change is great...

...you go first!

Bridging the Gap

Historically, implementation relied on rigor, dissemination, incentives.

Now, implementation also relies on relevance, capacity and relationships.



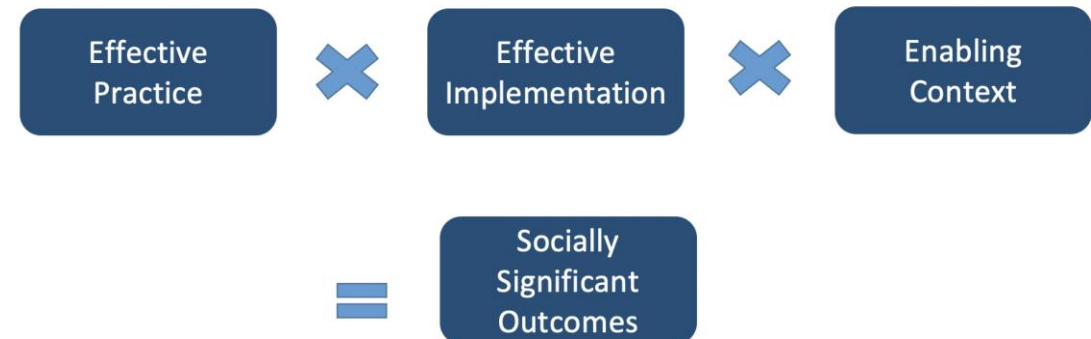
REFLECT AND SHARE

Formula Reflection

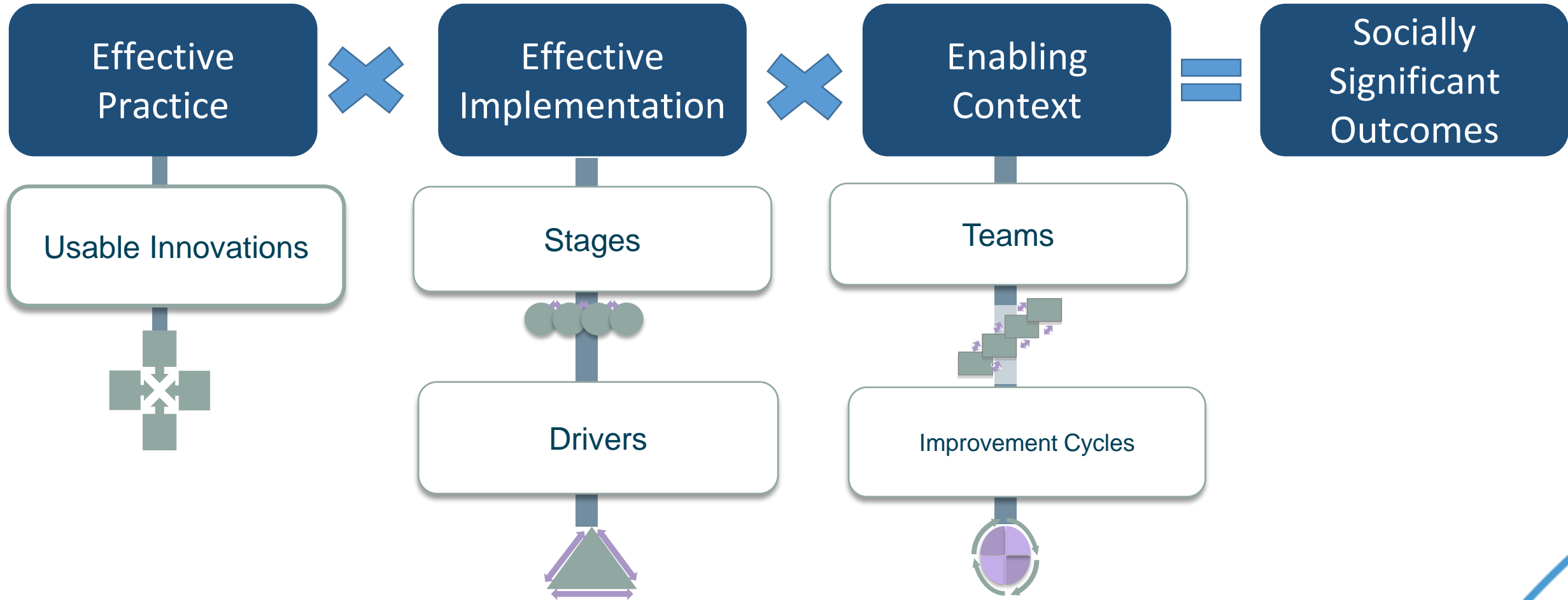
Individually reflect on current implementation work and jot down answers to the following:

- Are all three factors from formula present?
- If no, what is missing
- If yes, what is a key factor of success

Share your reflection with a different partner.



Active Implementation Frameworks

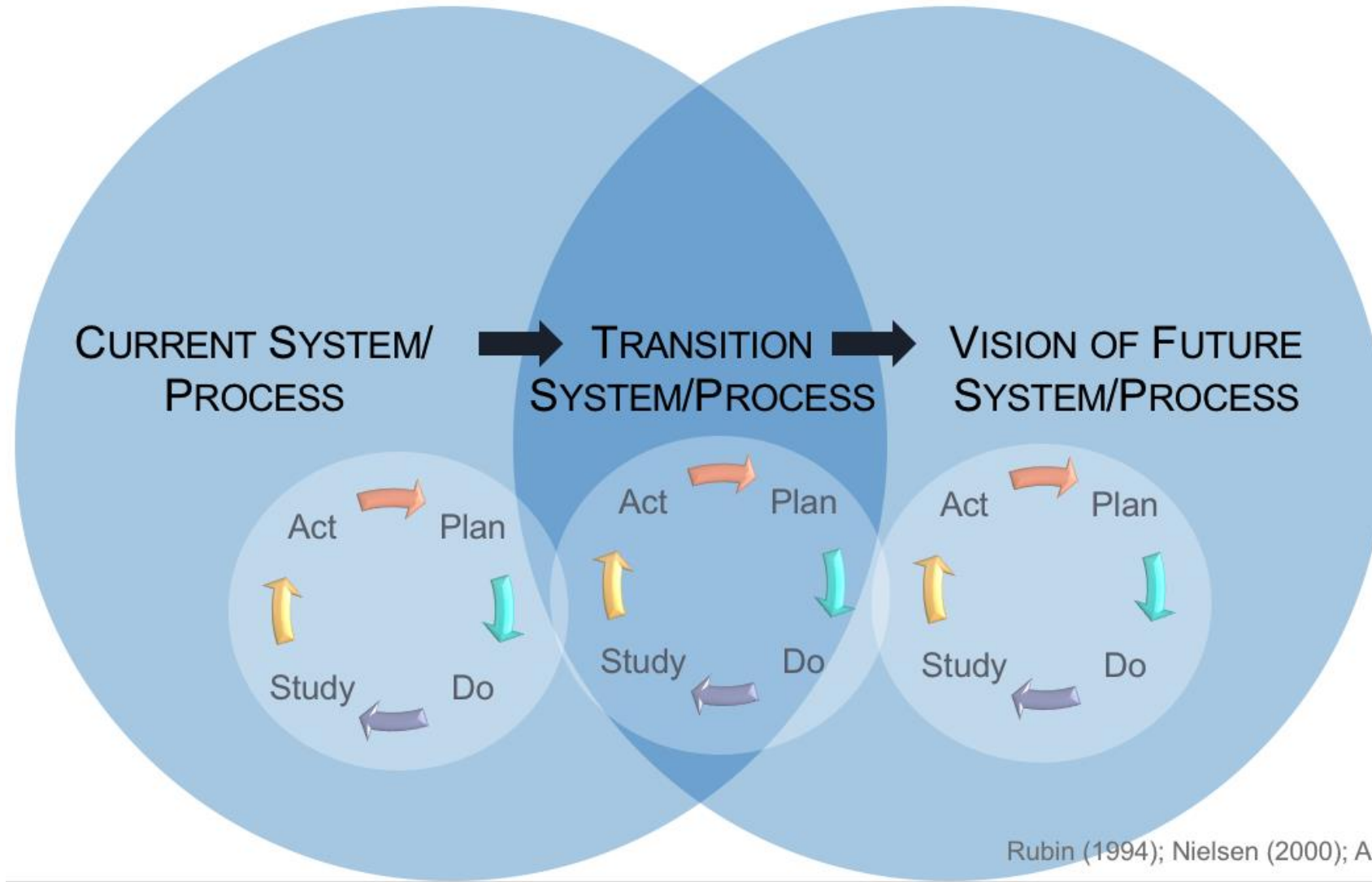


SEA Implementation Science Case Illustrations

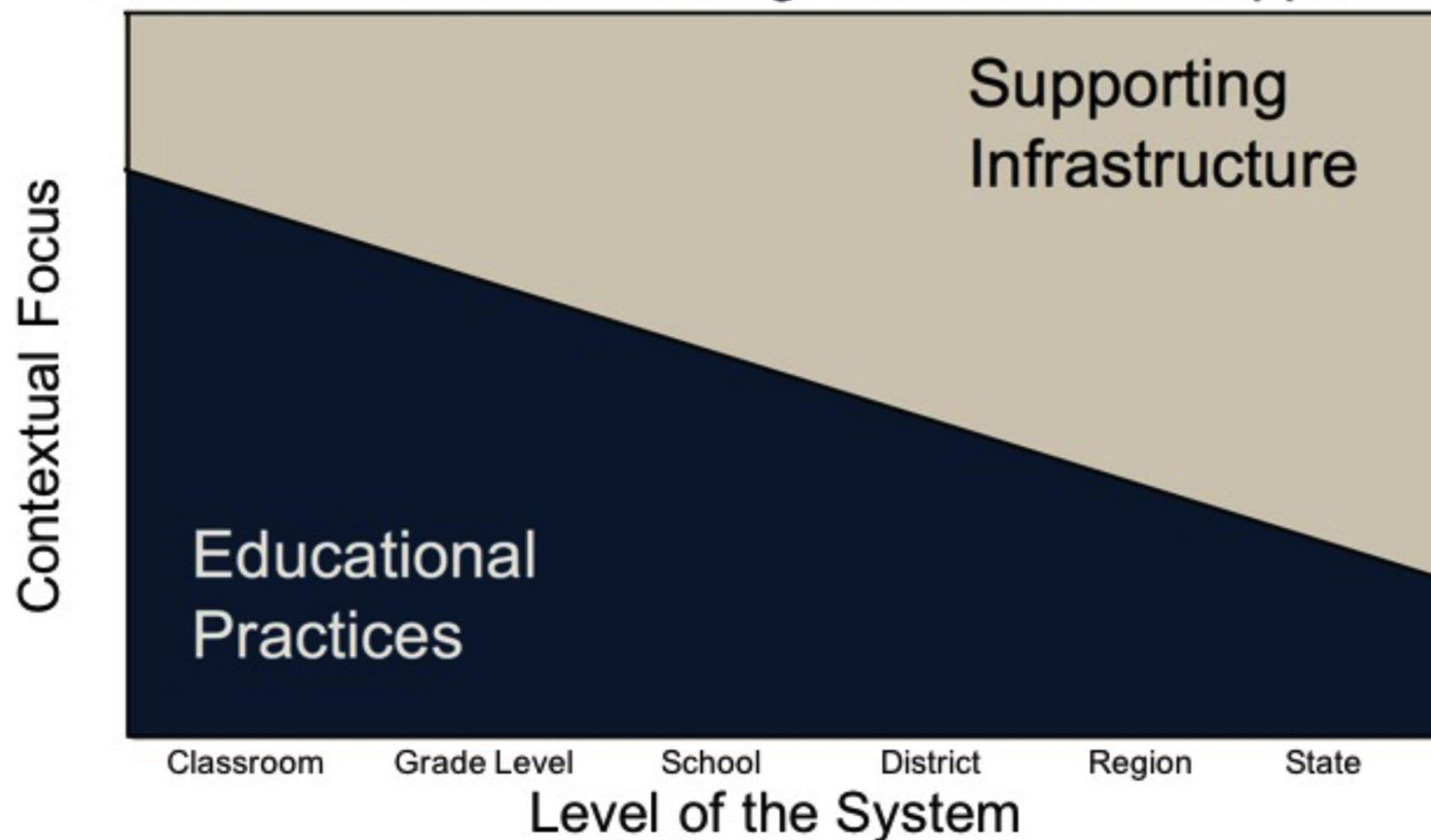


**How do we work together to improve equitable outcomes
for each and every student?**

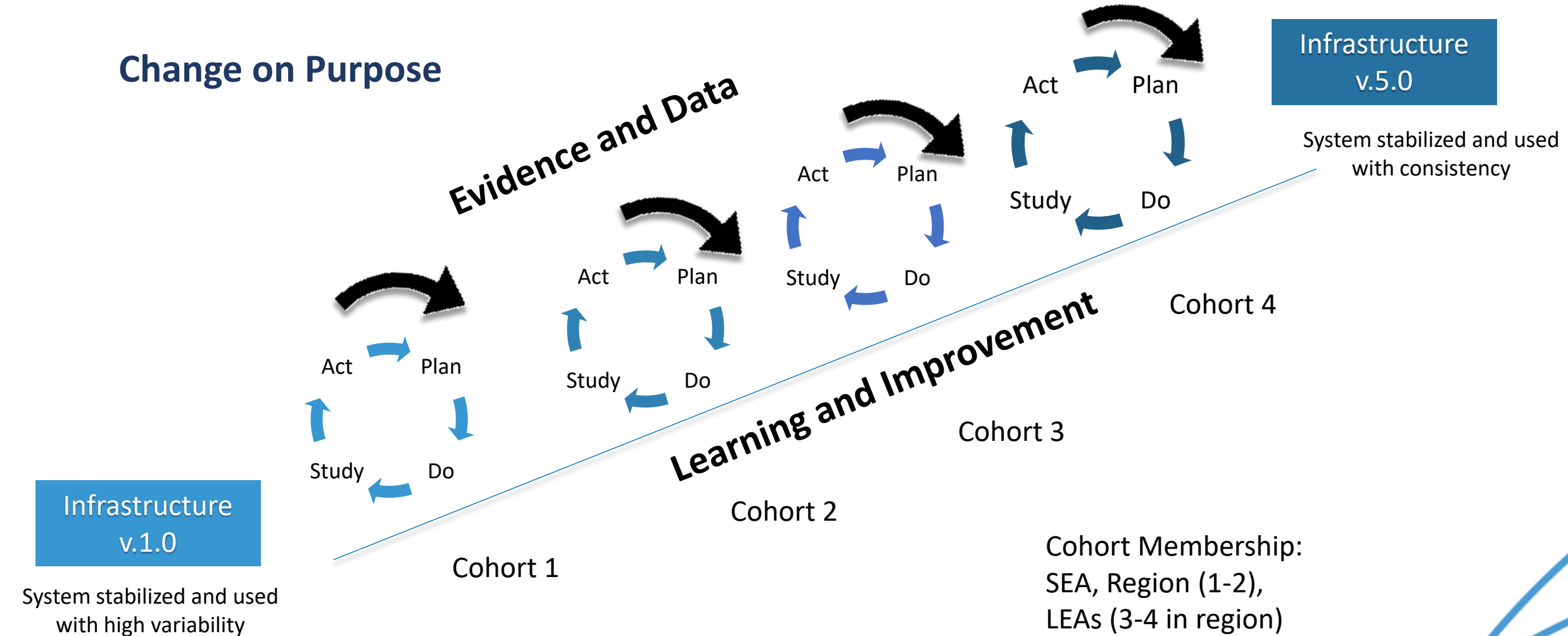
Developing Capacity within Education Systems



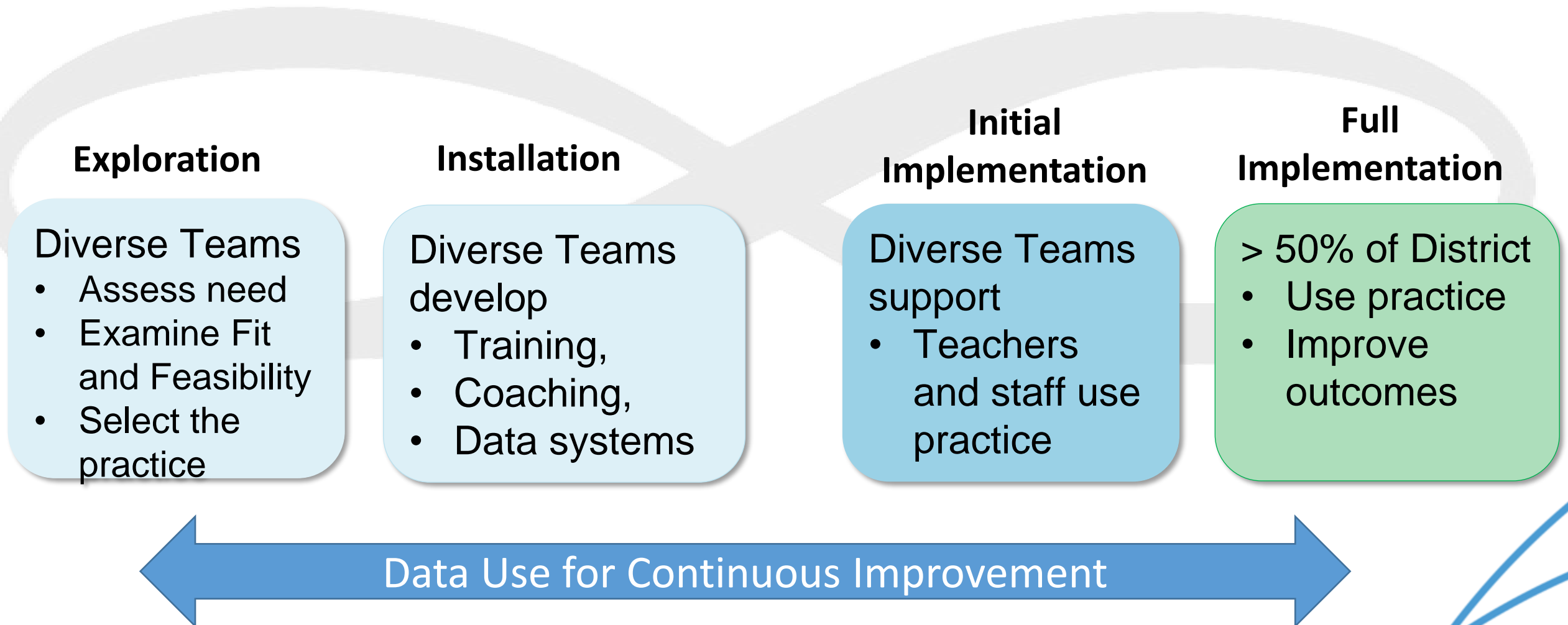
Framework for Addressing Practice and Supports



Implementation & Scaling Approach



Our Approach: Implementation Stages



Kentucky's Implementation Story



Amanda Waldroup



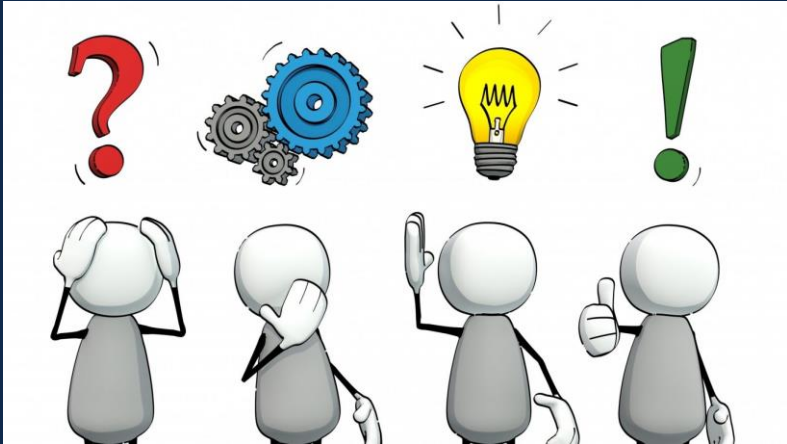
Wisconsin's Implementation Story



Gail Anderson & Melissa Kahn



[Discussion/Activity]



What are strengths to the implementation in each state?

What are opportunities for improvement in each state?

What are relevant implications for NC DPI implementation efforts?

Think

- Write 1 reflection for each Question
- Share reflections with a Partner

SEA Implementation Learnings & Key Takeaways

Lessons Learned: Challenges

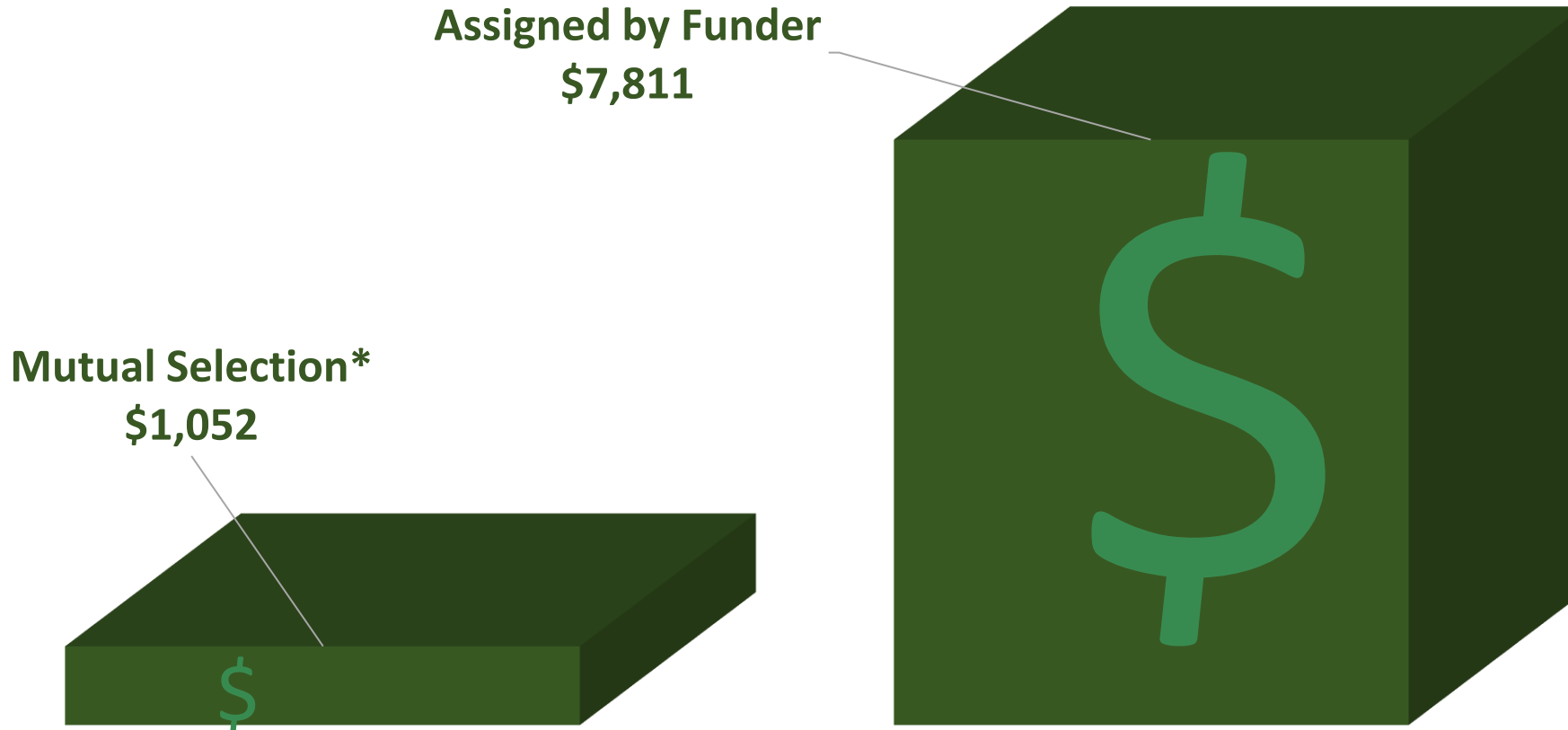
- A usable innovation is critical - cant build an infrastructure to support unless know what it is we are supporting
- Focusing on processes alone (e.g., Continuous Improvement Process, MTSS – generic) wont improve outcomes
- Ex Leadership and Staff turnover and transitions
- Maintaining expectations and pace while staying focused and using learnings
- Need to create value for implementation data on the way to outcome data
- Supporting competency development among staff as role is transformed or changed

Lessons Learned: Facilitators

- Data flowing within the first six months is critical for life expectancy of teams
- Build competency within the “middle” of the SEA (embedded FTE)
- Align and leverage strategic plans and legislative priorities for work
- Exploration: Pay now or pay later
- Political visibility and support
- Feasible Learning – start small and get better; reduce frustration and false starts with allocation of resources needed
- Using a co-creation approach with stakeholders

Why Exploration Matters

Cost per practitioner



Romney, Israel, &
Zlatevski (2014)

* 8 Selection criteria; readiness worksheet for agencies; on-site meetings with leaders and staff; leadership understanding of criteria; mutual agreement on plan to meet criteria



SEAs need...

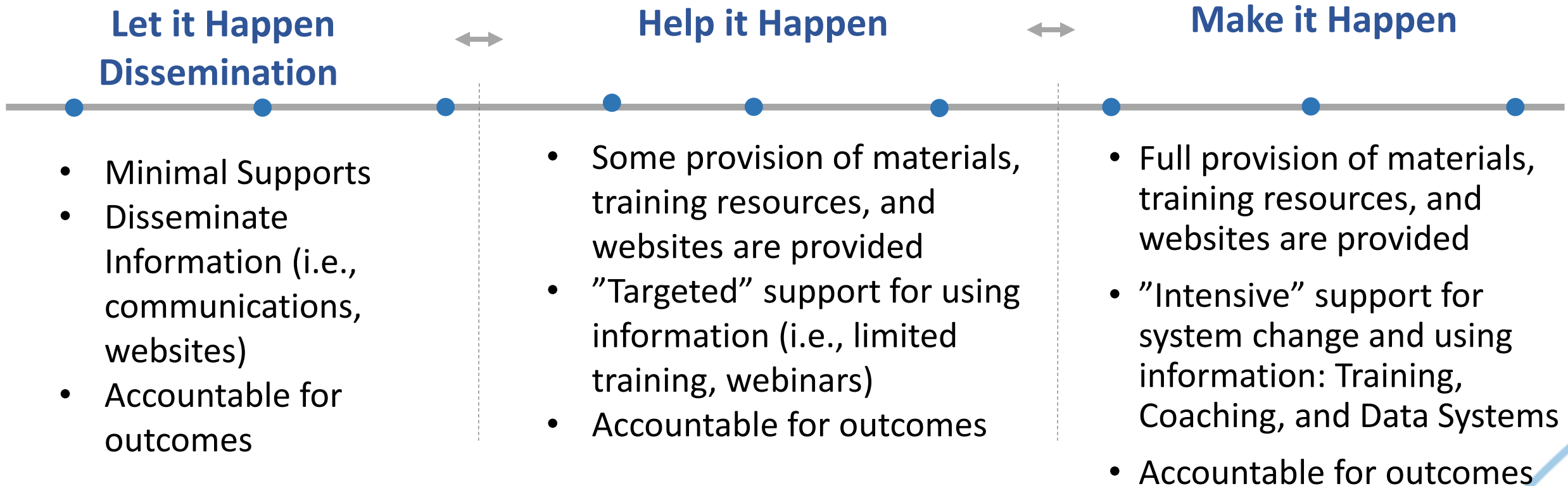
Strategic Plan & Vision

Implementation Science

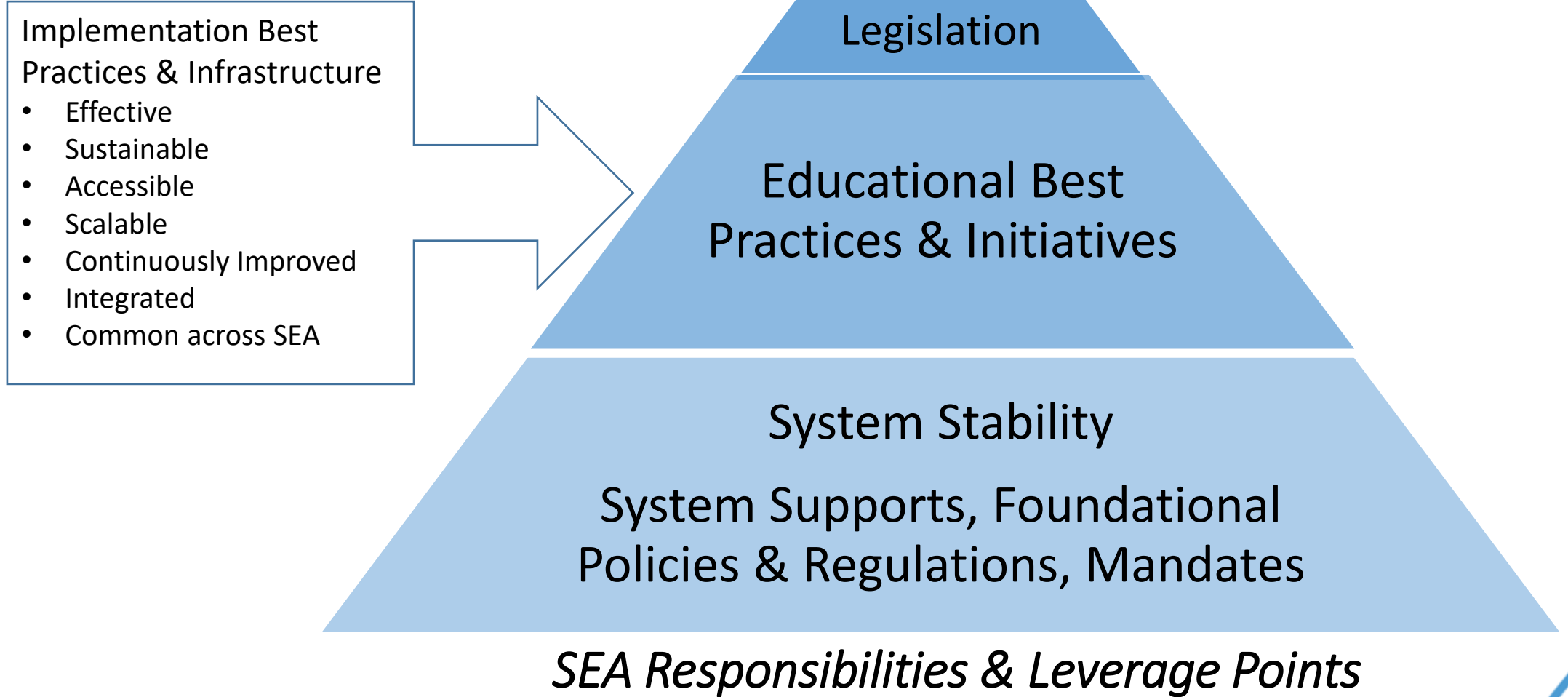
Project Management

Dissemination & Implementation Supports

Align on Outcomes & Intensity of Support



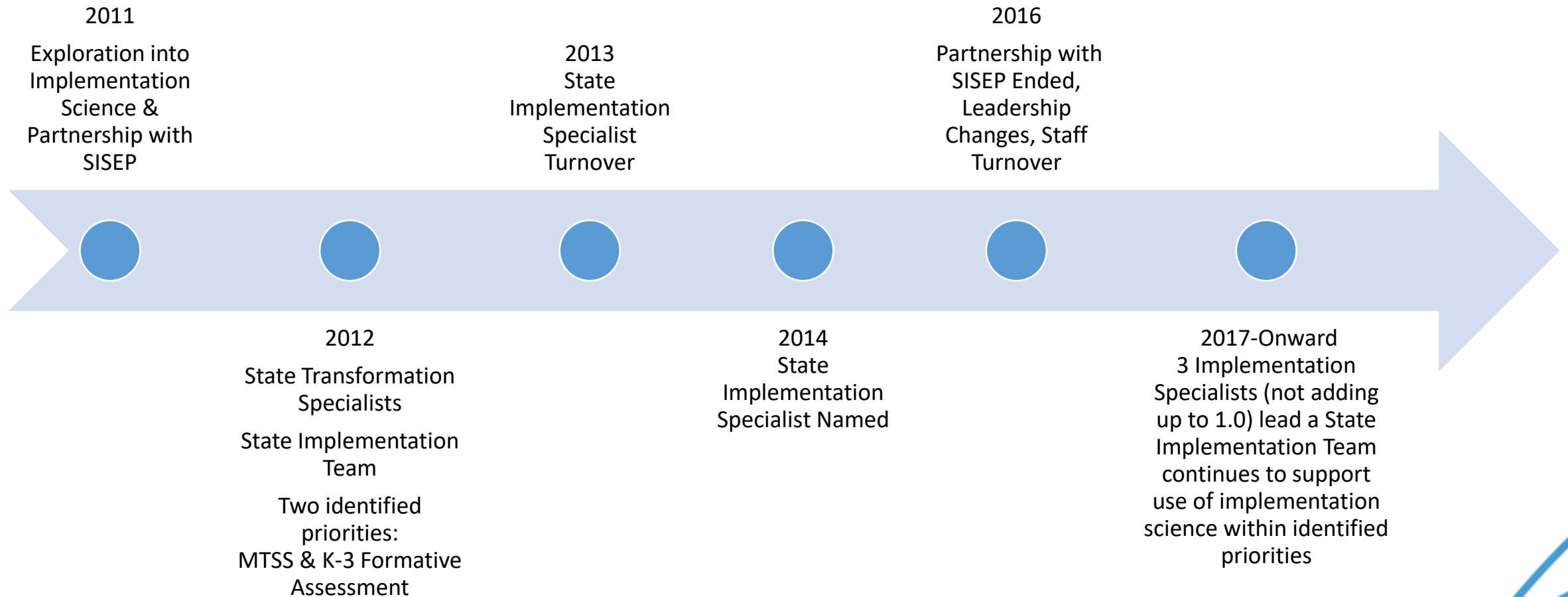
Systems Change



North Carolina DPI's State Capacity



NC DPI & Implementation Science



NCDPI: Successes & Opportunities

Challenges

- Lack of cohesive regional structure & support to the local districts and schools
- Practice to Policy Feedback loops were weak
- Loss of engaged executive leadership
- Lack of agency wide engagement
- Data system to monitor implementation progress
- State Implementation Specialist Roles identified but limited FTE
- LEAs participating in priority efforts using implementation science were ahead of other divisions/offices not using implementation science

Facilitators/Successes

- Engaged Executive Sponsor for a period of time
- Consultant level staff engaged in the learning and use of implementation practices
- Agency wide professional development on operationalizing practices
- Curriculum Leaders Collaborative – Regional professional development on implementation science

Why a State Capacity Measure?



Offers an **indicator** of a system's capacity to implement

Provides data about **progress** toward capacity-building goals

Serves as an indicator of **TA Effectives**

Leads into a structured process for the development of an **Action Plan**

Supports a **common infrastructure** for effective education for all students

State Capacity Assessment Scales

Scale	Description
Leadership Items: 1, 3, 4, 9, 11, 13, 19, 21, 22	Assesses leadership and coordination functions that champion change and on-going improvement across the system, including external stakeholders. These nine items address advocacy, accountability, and shared decision-making while creating a culture of ongoing learning and improvement.
Infrastructure & Resources Items: 2, 6, 7, 10, 12, 17	Refers to leadership's commitment to development of an infrastructure that supports effective and sustained implementation of innovations. This includes attention to policies and procedures and allocation of resources to support continuous improvement.
Communication & Engagement Items: 5, 8, 14, 15, 16, 18, 20, 23, 24	Nine items examine leadership's communication with and support of collaborative partnerships with stakeholders, including their regional and local agencies. This includes a focus on establishing collegial trust and shared understanding of key initiatives both internally within the agency as well as with external stakeholders.

State Capacity Assessment Key Points

Key Point in General	NCDPI November 2020 Specification
Identified Focus of Implementation – an “IT”.	Use of a consistent implementation framework
“Who” in items: Leadership to be defined	DPI Leadership Team
Support of “Implementation Team” Items: “implementation team” to be defined	DPI State Implementation Team

Administration Process Overview

- Completed as a team using a simultaneous scoring process and discussion towards consensus facilitated by a trained administrator
- Each item (N = 24) is identified as “Fully in Place,” “Partially in Place,” “Not Yet,” or “Do Not Know”

Scoring Rubric

Item	Fully in Place (2)	Partially in Place (1)	Not Yet in Place (0)	Examples of Potential Evidence
1. Leadership creates a vision for achieving equitable outcomes within the agency's implementation work.	Leadership sets and maintains a focus on achieving equitable outcomes through the agency's implementation work.	Leadership sets a focus on achieving equitable outcomes through the agency's implementation work.	Leadership does not set or maintain a focus on achieving equitable outcomes through the agency's implementation work.	Strategic plan
2. Leadership commits to developing or improving their infrastructure to support effective	Leadership actively supports the development, improvement, and use of shared implementation activities to create efficiencies that ensure	Leadership provides limited supports for the development, improvement, and use of shared implementation	Leadership does not provide supports for the development, improvement, or use of shared implementation activities to create	Activities that support staff/team to develop/improve shared implementation

**Fully
In Place**

**Partially
In Place**

Not Yet

Consensus Defined:
Can the few live with the most and publicly support it?

Do Not Know

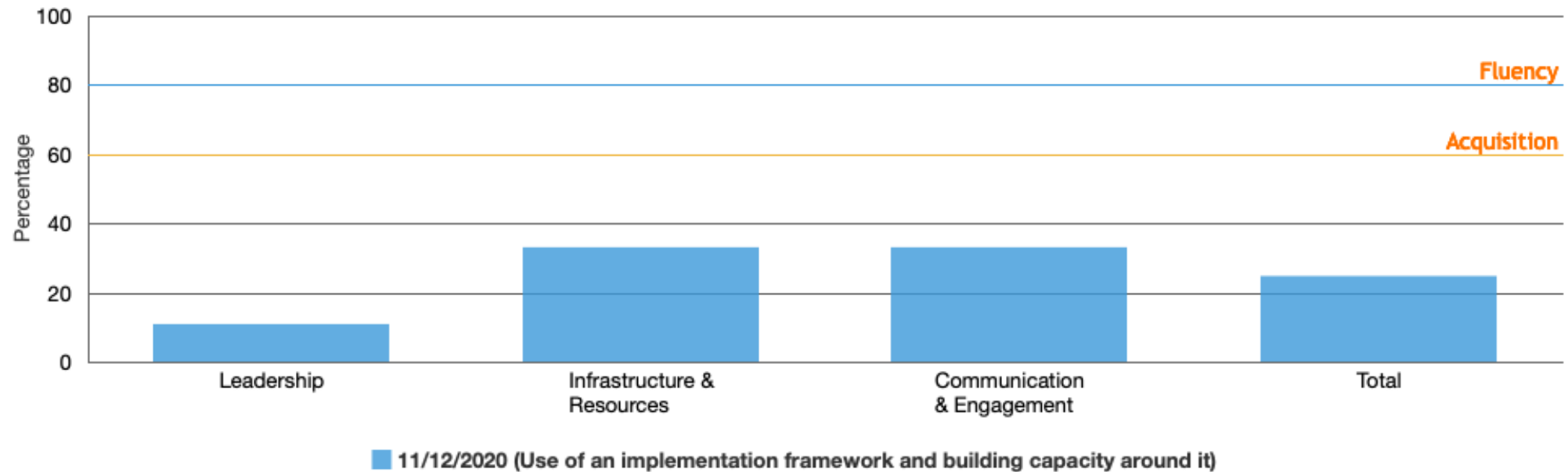


New Baseline: State Capacity Assessment Results (11/2020)

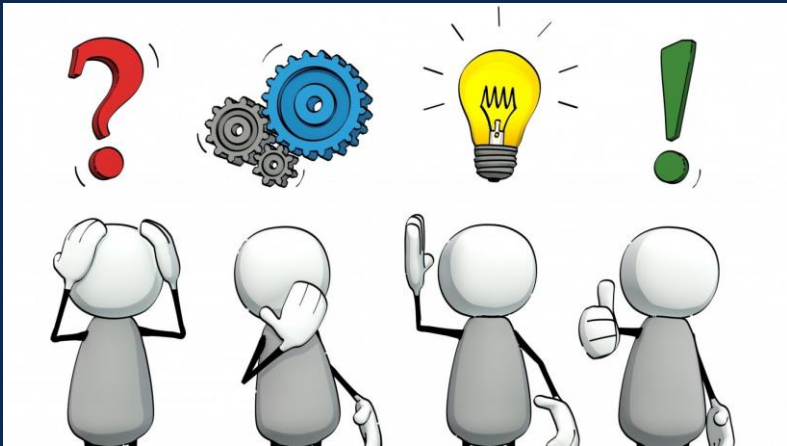
State Capacity Assessment (Scale Scores Graph)

Organization(s): North Carolina Department of Public Instruction

Report Date: May 7th, 2021



[Discussion/Activity]



Count off (15, 20) for random groups of 4 to 5 and find your assigned group

Individually:

- Review the SCA Results & Item Report
- Highlight the 0s and the 1s

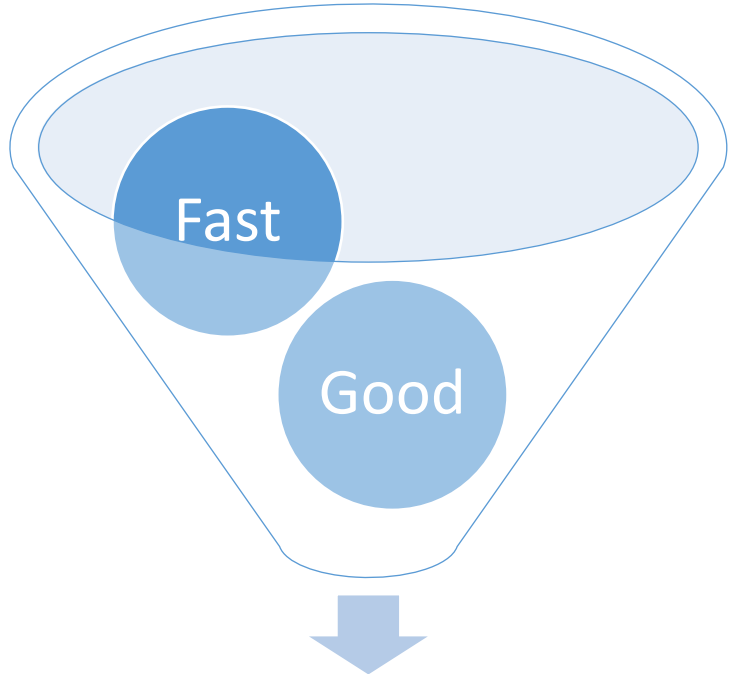
Discuss:

- Agreement with score. If no, what is your evidence/rationale?
- What is needed to move that score to a 1 or 0?

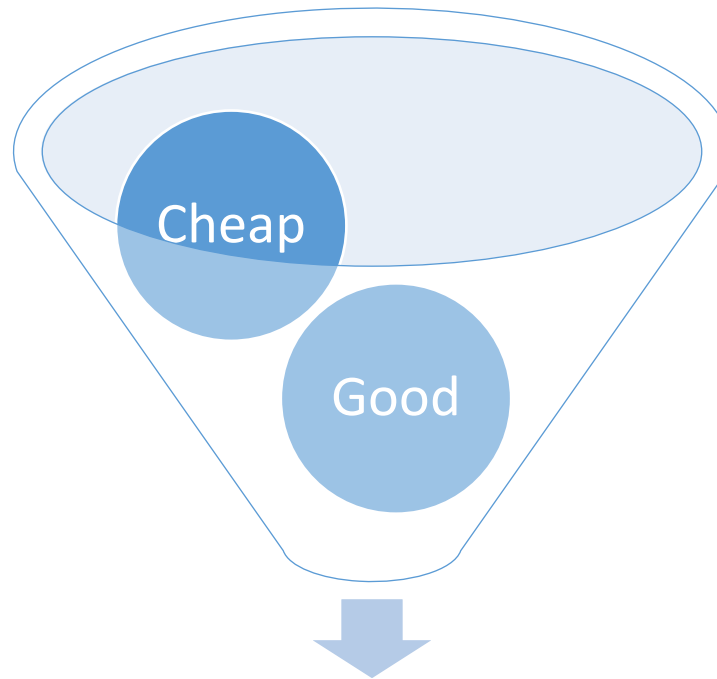
Identify an individual to share with 1-2 reflections from your group's discussion.

Wexelblatt's Algorithm (Cheap, Fast, Good)

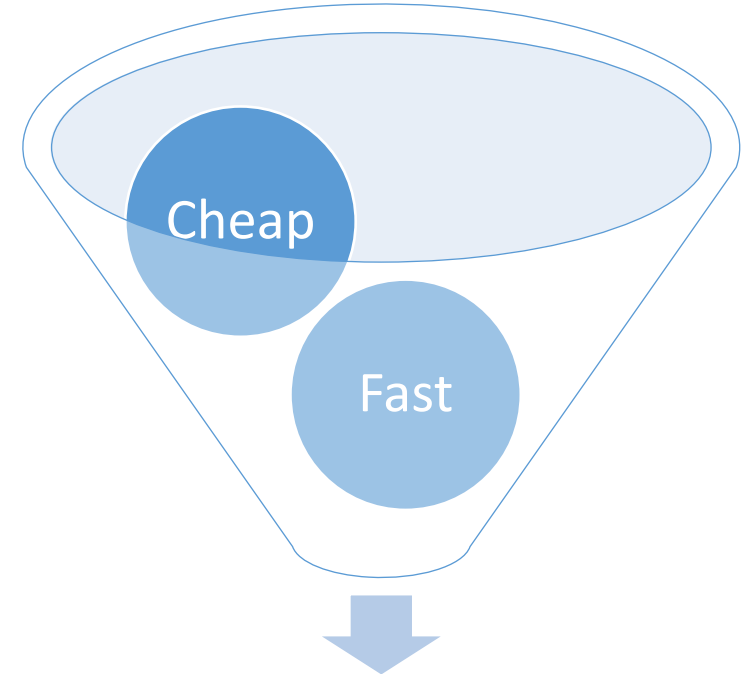
When implementing an innovation, you may only pick two...



It won't be Cheap!



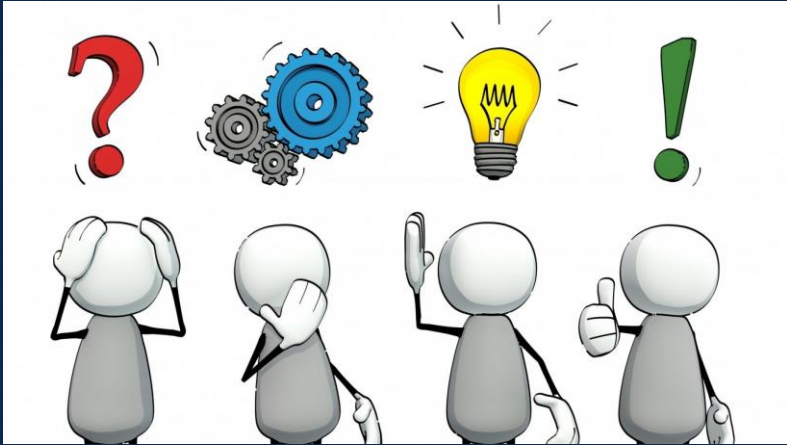
It won't be Fast!



It won't be Good!

You can't have all 3!

[Discussion/Activity]



What is your biggest takeaway from today's discussion?

What are one or two implications for your work?

What questions are you left with?



US Department of Education's Office of Special Education Programs TA Center

Levels of Technical Assistance Support Available:

- Intensive
- Targeted
- Universal

Active Implementation Tools & Resources

<https://nirn.fpg.unc.edu/ai-hub>

Online Learning Includes:



Modules

Check out internet based training on active implementation, including content, activities and assessments, designed to be self-paced or blended with in pre-service or in-service training.



Lessons & Short Courses

AI Hub Lessons and Short Courses will get you and your team started using implementation tools and practices, so that you can build implementation skills and capacity. These resources can be used for self-paced learning or professional development in a team setting.



Resource Library

Find just-in-time active implementation resources and tools (e.g., planning tools, handouts and video clips)

Believe in Possibilities....



Citation and Copyright

This document is based on the work of the National Implementation Research Network (NIRN).

© 2021 NIRN-UNC

This content is licensed under Creative Commons license CC BY-NC-ND, Attribution-NonCommercial-NoDerivs . You are free to share, copy, distribute and transmit the work under the following conditions: Attribution — You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work); Noncommercial — You may not use this work for commercial purposes; No Derivative Works — You may not alter, transform, or build upon this work. Any of the above conditions can be waived if you get permission from the copyright holder.

email: nirn@unc.edu

web: <http://nirn.fpg.unc.edu>

The mission of the National Implementation Research Network (NIRN) is to contribute to the best practices and science of implementation, organization change, and system reinvention to improve outcomes across the spectrum of human services.



Advancing knowledge to
transform children's lives



FRANK PORTER GRAHAM
CHILD DEVELOPMENT INSTITUTE