



# Improving Education Practices: The Big Picture

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# Choosing Interventions

## Scientifically based research

-  **Scaling up requires an investment in system and practice change**
-  **What is worth all this trouble?**

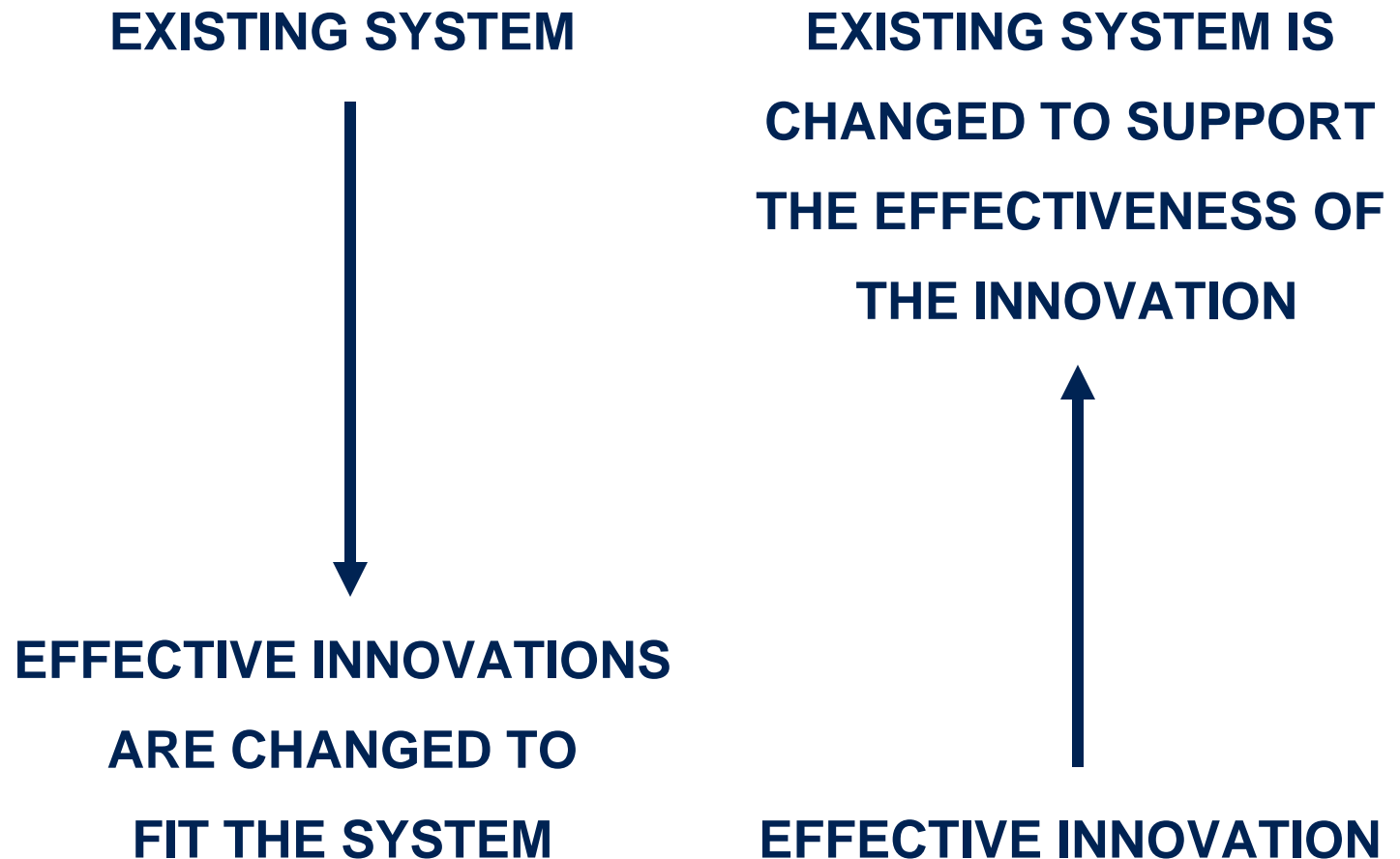
# Choose Interventions

- Effect size 0.50 or greater\*\*
- Must be “worth the effort” to scale up
- Eventually want to see big changes in student outcomes across the State

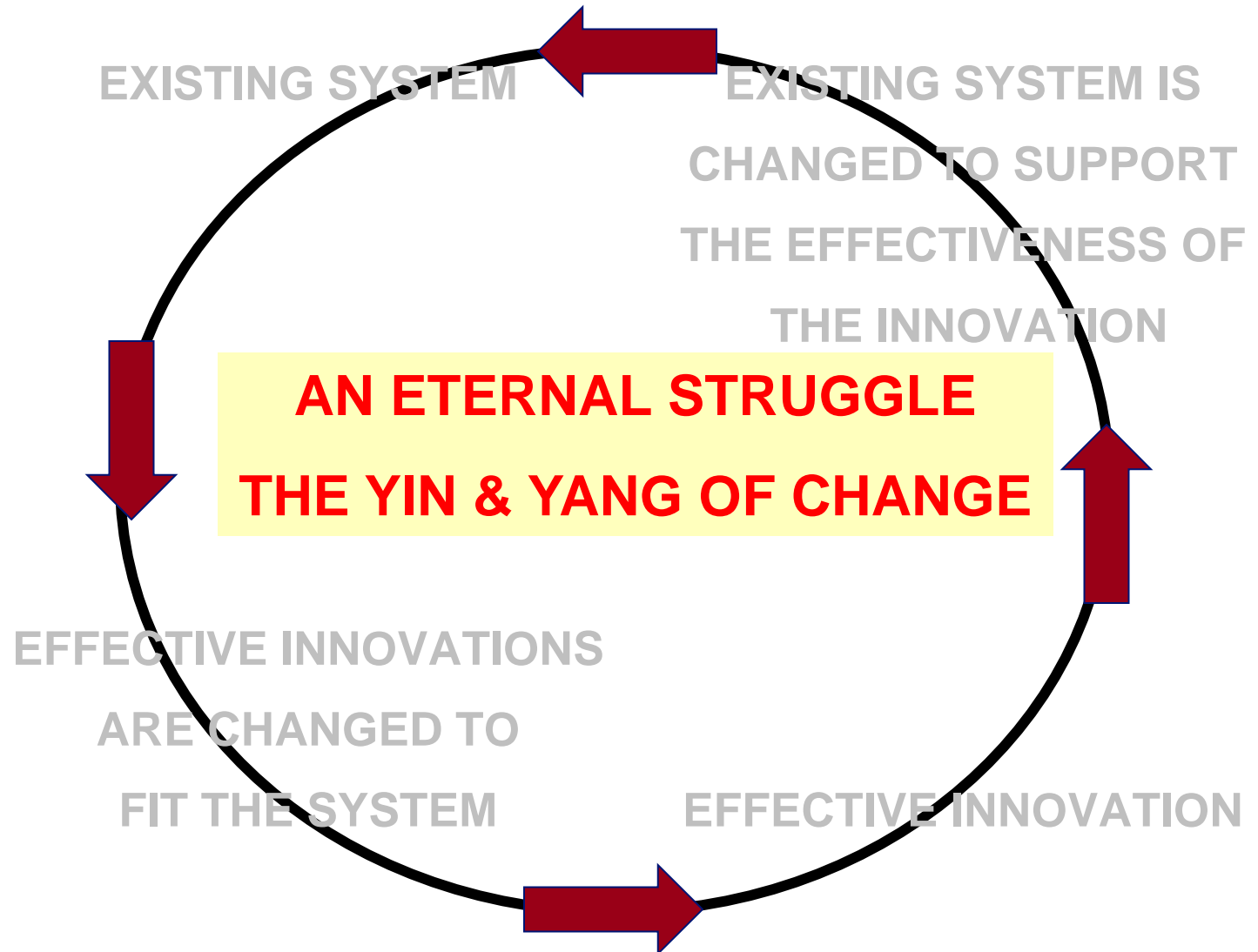
\*\* Experimental Avg. – Control Avg.  
Standard Deviation

\*\*  $8.0 - 6.0 / 4.0 = 0.50$

# Moving the Indicators



# Moving the Indicators



# System Change

- **Innovative practices do not fare well in existing organizational structures and systems**
- **Organizational and system changes are essential to successful use of innovations**
  - **Expect it**
  - **Plan for it**

# Wicked problems

- They are messy, devious, and fight back when you try to “solve” them.
- Each attempted solution alters the nature of the problem.
  - “The problem” is a moving target.
  - Attempted “solutions” often make the problem worse, not better
  - “Solutions” as defined by one group are seen as “calamitous failures” by other groups

# Wicked problems

➤ Based on a meta-analysis of 30 years of leadership studies, transformation leaders make changes that “disturb every element of a system.” They:

- break with the past,
- operate outside of existing paradigms,
- conflict with prevailing values and norms,
- find solutions that are emergent, unbounded, and complex.

Waters, Marzano, McNulty (2003)

# Transformation Zone

*People, organizations, and systems*

- Cannot change everything at once (too big; too complex; too many of them and too few of us)
- Cannot stop and re-tool (have to create the new in the midst of the existing)
- Cannot know what to do at every step (we will know it when we get there)
- Many outcomes are not predictable (who knew!?)

# Transformation Zone

 **Focus on innovations and implementation infrastructure development**

# Implementation Science

-  **Some fundamental features of implementation, organization change, and system transformation**

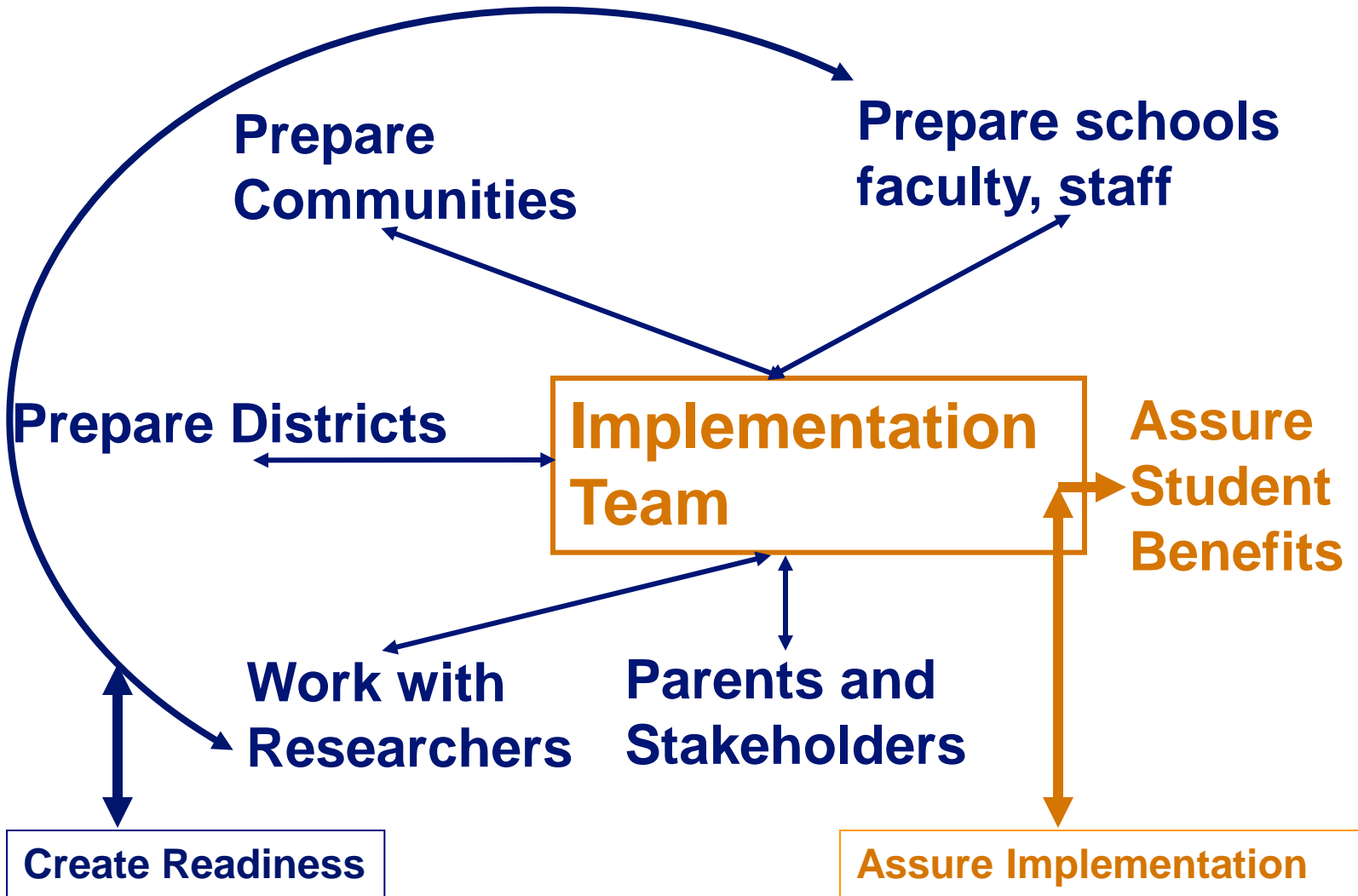
# Implementation Science

 **Students cannot benefit from interventions they do not experience**

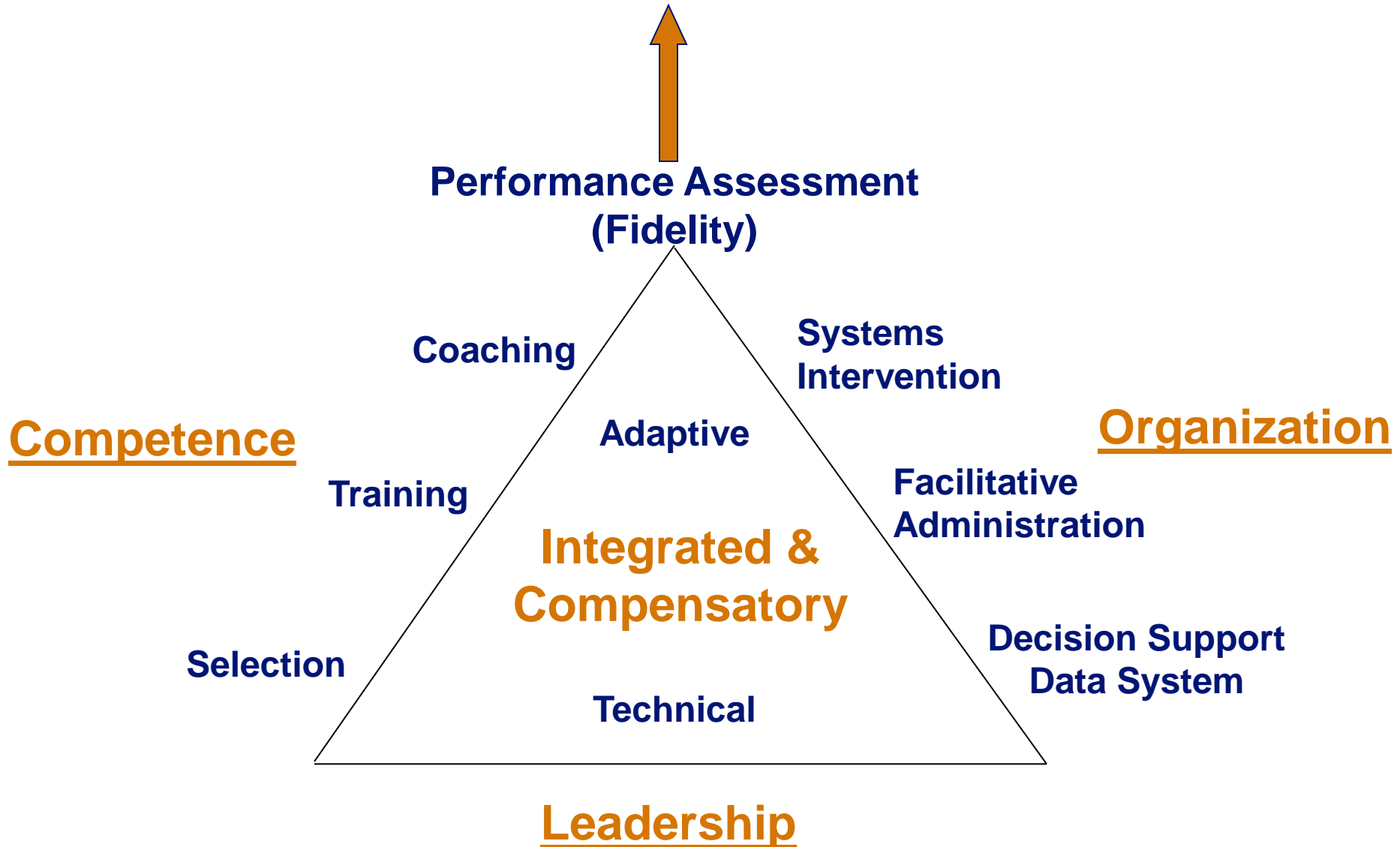
# Implementation Team

- A group that knows the innovation very well (formal and practice knowledge)
- A group that knows implementation very well (formal and practice knowledge)
- A group that knows improvement cycles to make intervention and implementation methods more effective and efficient over time

# Implementation Team



# Student Benefits



# Student Benefits

## Stages of Implementation

• Exploration

• Installation

• Initial Implementation

• Full Implementation

• Innovation

• Sustainability

Performance Assessment  
(Fidelity)

Coaching

Systems  
Intervention

2 – 4 Years

Adaptive

Organization

Facilitative  
Administration

Integrated &  
Compensatory

Decision Support  
Data System

Selection

Technical

Leadership

# Transformation Zone

- **Focus on innovations and implementation infrastructure development**
- **Begin the process of system transformation**

# PDSA Cycles: Trial & Learning

Shewhart (1924); Deming & Juran (1948);  
Six-Sigma (1990)

- Plan – Decide what to do
- Do – Do it (be sure)
- Study – Look at the results
- Act – Make adjustments
- Cycle – Do over and over again until the intended benefits are realized

# PEP-PIP Cycle

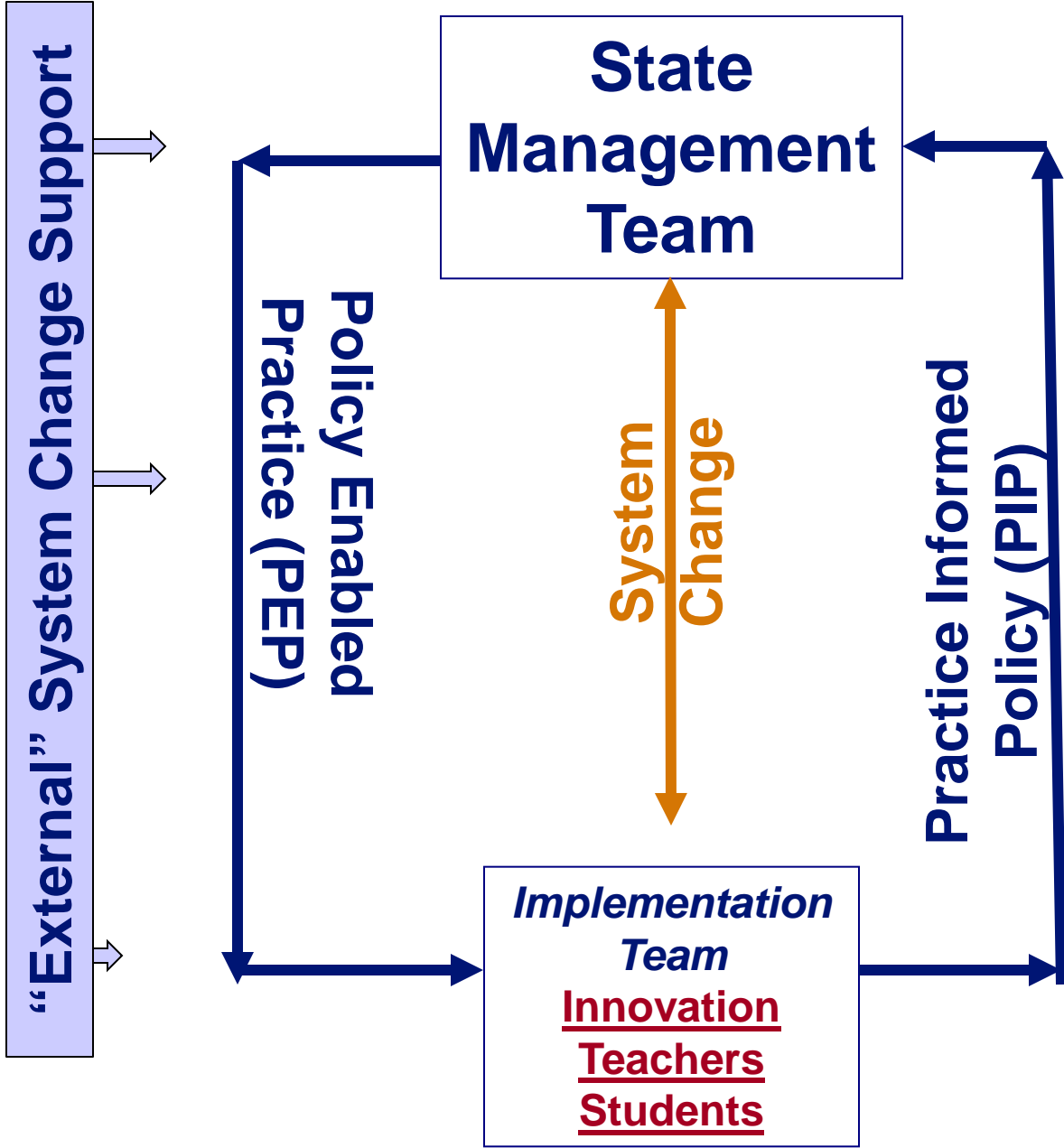
 **Policy enabled practice (PEP)**

 **Practice informed policy (PIP)**

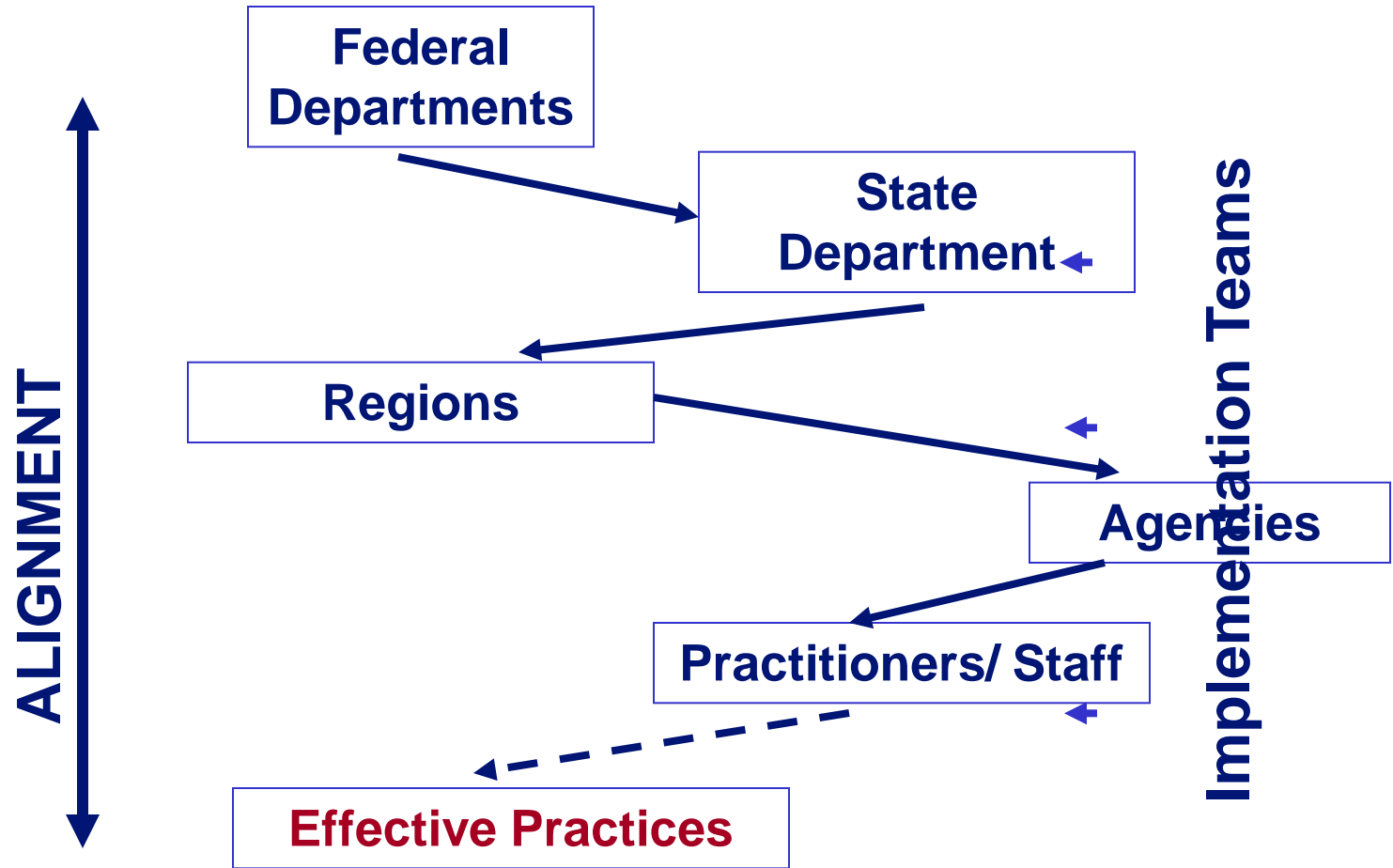
## The PDSA cycle in slow motion

 **Monthly instead of hourly, daily cycles**

 **Bigger issues where agreement (issues, solutions) and certainty (if this, then that) are not apparent**

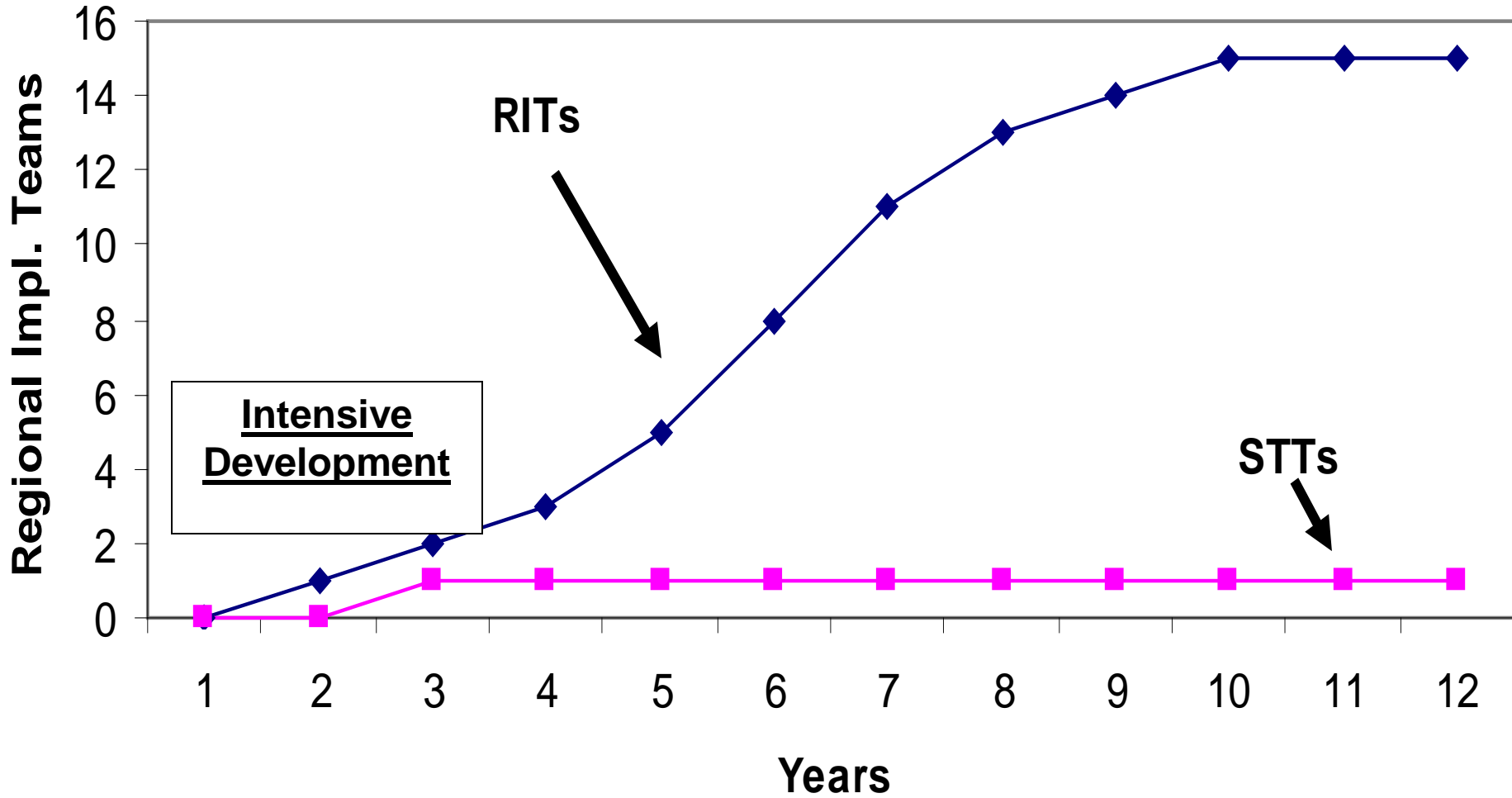


# System Alignment



**FORM SUPPORTS FUNCTION**

# State Capacity Development



# System Change




- **Given the recent advances in knowledge...**
- **it is now possible for States to deliberately and systematically develop and make effective use of an implementation infrastructure...**
- **to accomplish educationally and socially significant outcomes for children statewide.**

# System Change

- **Start with the end in mind**
- **What will it take to:**
  - **Make statewide use of education innovations...**
  - **That produce increasingly effective outcomes...**
  - **For the next 50 years?**

# Thank You

## We thank the following for their support

-  **Annie E. Casey Foundation (EBPs and cultural competence)**
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-  **Substance Abuse and Mental Health Services Administration (implementation strategies grants; NREPP reviews; SOC analyses of implementation; national implementation awards)**
-  **Centers for Disease Control & Prevention (implementation research contract)**
-  **National Institute of Mental Health (research and training grants)**
-  **Juvenile Justice and Delinquency Prevention (program development and evaluation grants)**
-  **Office of Special Education Programs (Capacity Development Center contract)**
-  **Agency for Children and Families (Child Welfare Leadership Development contract)**

# For More Information

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**[www.scalingup.org](http://www.scalingup.org)  
<http://nirn.fpg.unc.edu/>  
<http://www.fpg.unc.edu/~nirn/resources/publications/Monograph/>**

# SISEP Center

**State Implementation and Scaling up of Evidence-based Practices (SISEP)**

**Dean Fixsen, Karen Blase, Rob Horner, George Sugai**

**[www.scalingup.org](http://www.scalingup.org)**

## **“Resources”**

- Concept paper**
- Annotated bibliography**

# For More Information

## Implementation Research: A Synthesis of the Literature



Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. & Wallace, F. (2005). *Implementation Research: A Synthesis of the Literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

*Download all or part of the monograph at:*

<http://www.fpg.unc.edu/~nirn/resources/detail.cfm?resourceID=31>