



Wicked problems: From Demonstrations to Transformation Zones

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Topics

-  **Types of Problems**
-  **Transformation Zones**
-  **Organize for Complexity**
-  **Resistance to Change**

We want to:

Reliably produce...

**predictable outcomes for
students, families, and
communities...**

that improve every year...

for the next 50 years.

We work in:

Complex environments with

 **Unpredictable people**

 **Competing demands**

 **Shifting priorities**

 **Fluid leadership**

 **Various points of view**

Kinds of problems

Tame Problems

 Often complicated (e.g. safety of nuclear generators, air traffic control)

Wicked Problems





 Always complex (e.g. effective human service systems, educational reform)

Rittel & Webber, 1973

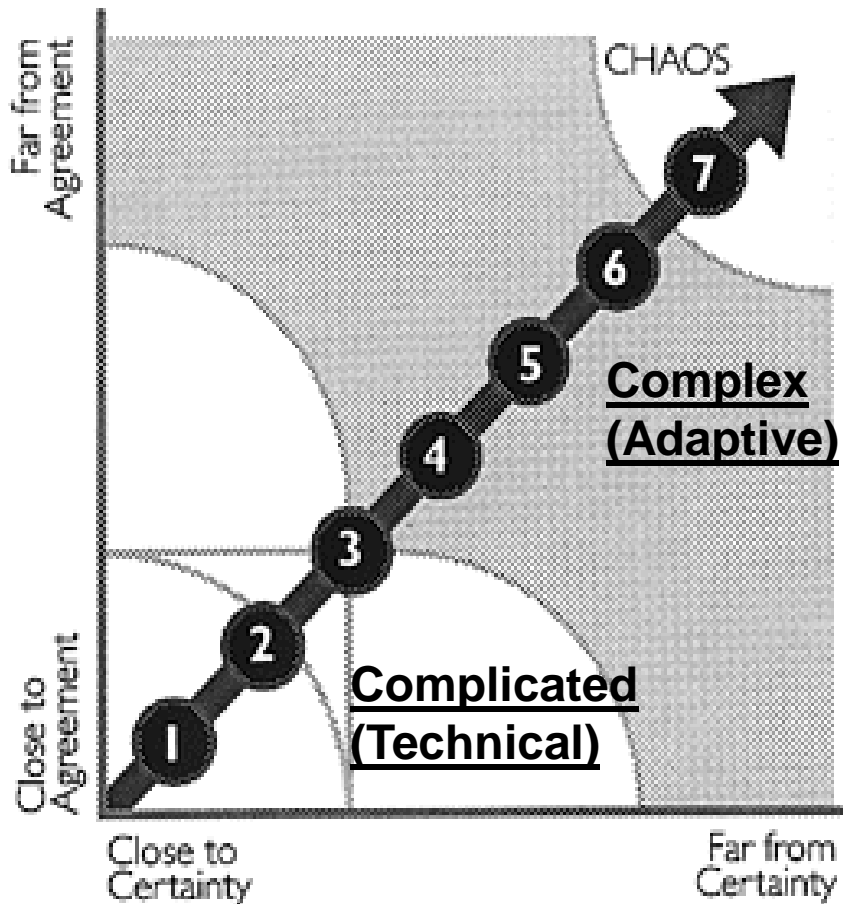
Wicked problems

- 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

-  **Wicked problems are never “solved” in any final sense**
 -  **Circumstances are always changing and solutions need to keep up.**
 -  **Wicked problems can be resolved**
 -  **Re-solved, as the context continually changes**

Ralph Stacey



- ① **Direct**
- ② **Change Work Processes**
- ③ **Modify Structure**
- ④ **Convene and Intervene**
- ⑤ **Convene**
- ⑥ **Examine, Describe Patterns**
- ⑦ **Seek Patterns**

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)

TABLE TALK

- **What are some examples of wicked problems you have encountered recently?**
- **What surprised you when you tried to solve an apparently “simple problem?”**

Education Improvement

 **Turning policy into effective practice**

 **Turning effective practice into policy**

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

- A “vertical slice” of an organization or system
 - Small enough to be manageable
 - Large enough to include nearly all of the relevant aspects of the current system
- Operations in the TZ allow strengths and problems to “rise to the surface”
 - Reality-based, in the moment

Transformation Zone

- **Changes begin in the first month or two (not a few years later when the “demonstration” has concluded)**
- **Changes continue until critical problems have been solved and system alignment within the transformation zone has been achieved**

Transformation Zone

- Establish an innovation in practice (operationalize, fidelity, outcomes)
- Establish implementation supports (practical Drivers and Stages)
- Engage leaders in the PEP-PIP improvement cycle to align system components and functions
- Create capacity and momentum for larger scale changes

Transformation Zone

- **Policy, funding, and regulatory exceptions are anticipated, welcomed, and tested at the practice level with respect to enhancing capacity building.**

Transformation Zone

- 🚩 Suspend/ amend the usual rules
- 🚩 Demonstrate the operational value of a system change, EBP, or innovation
- 🚩 Retain the best (of the old) while changing the rest (discriminate between the two)
- 🚩 Reduce impact of mistakes (minimize damage, increase flexibility, repair rapidly)
- 🚩 Begin to build scale-up capacity
- 🚩 Begin work on “alignment” of policies and regulations

Transformation Zone

 **NOT demonstration projects**

 **NOT pilot projects**

A Transformation Zone is the first example of the new ways of work in the new education system (get it right, get on with it)

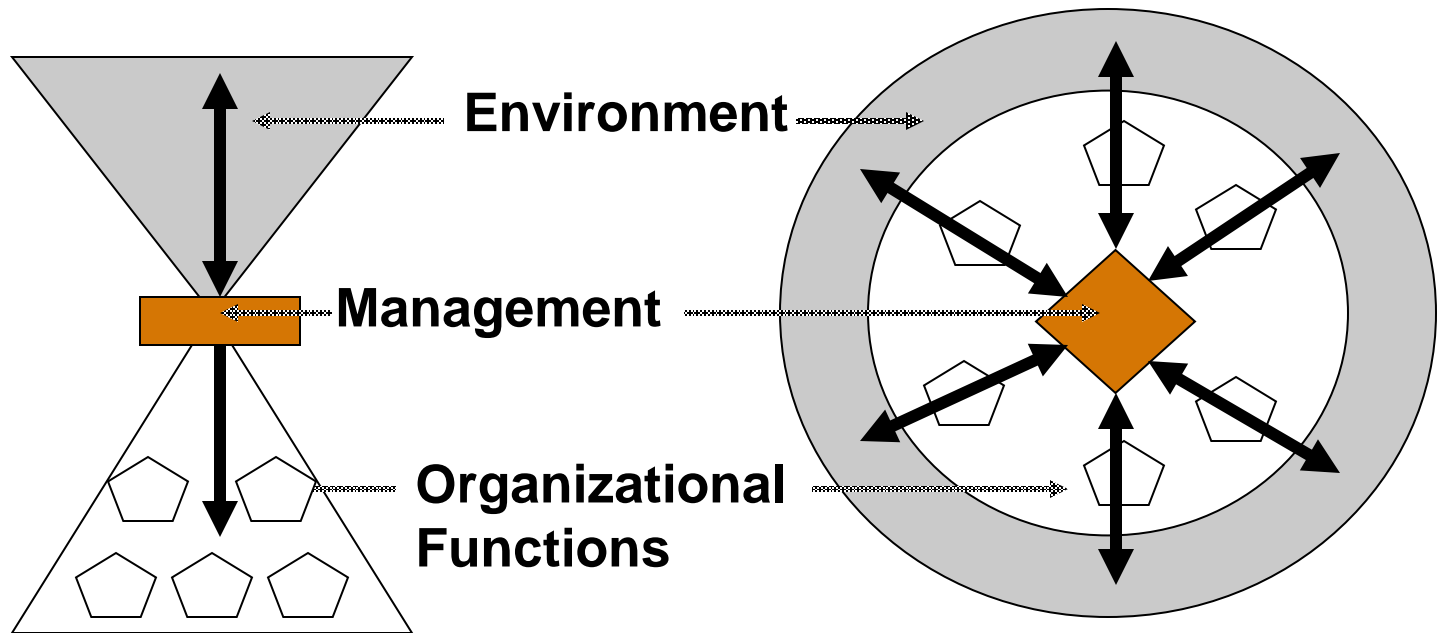
TABLE TALK

- **What are some current policies or regulations that get in the way of providing effective education to students?**
- **What are some current policies or regulations that strengthen effective education to students?**

Requisite Variety

- **Ashby's (1956) law of *requisite variety* states that the internal *complexity* of an organization should match the *complexity* of the external environment.**
- **In education, the complexity of the external environment equates completely with the complexity of society itself.**

Tackling Wicked Problems

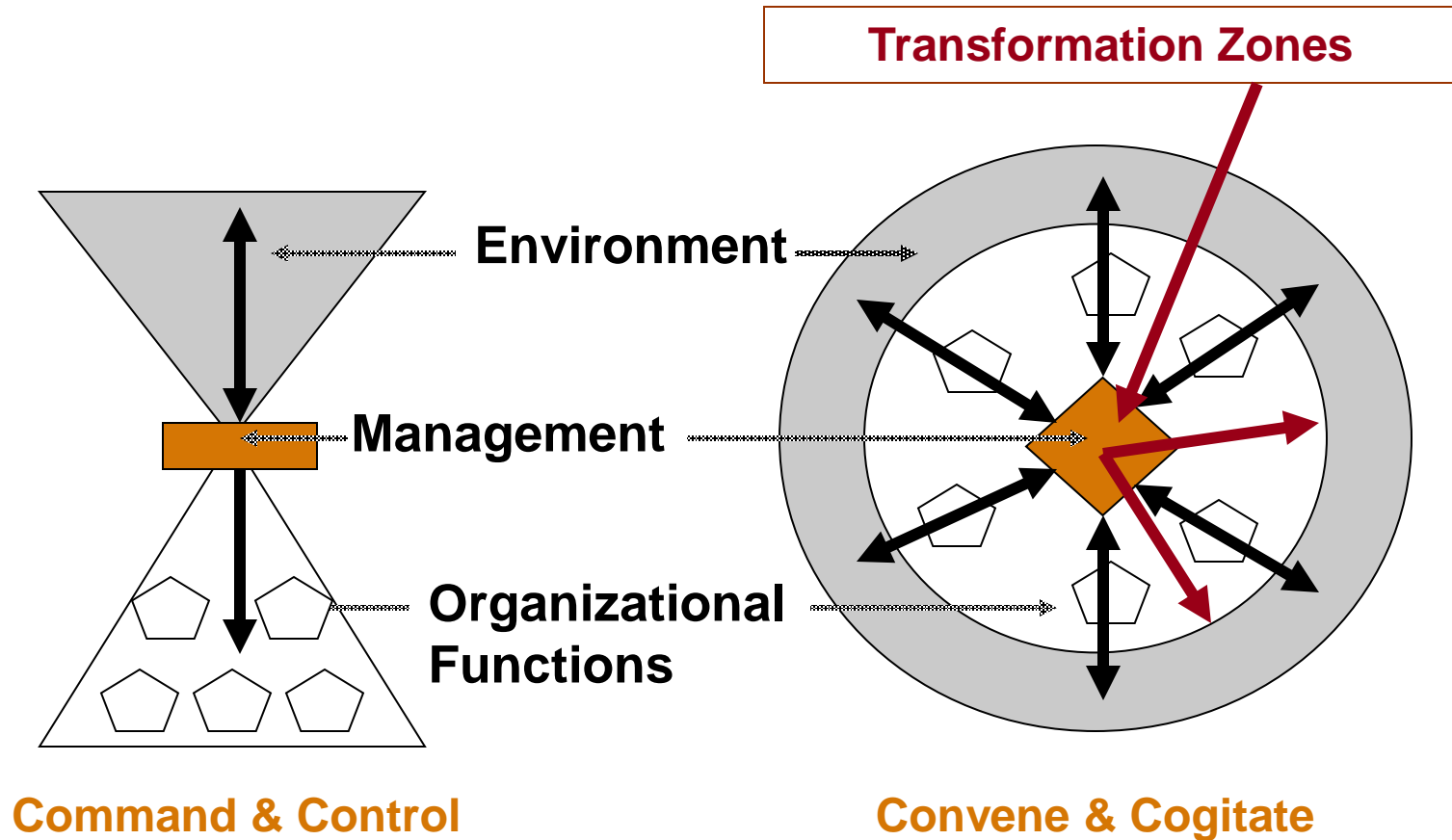


Command & Control

Convene & Cogitate

Requisite Variety, Ashby, 1976

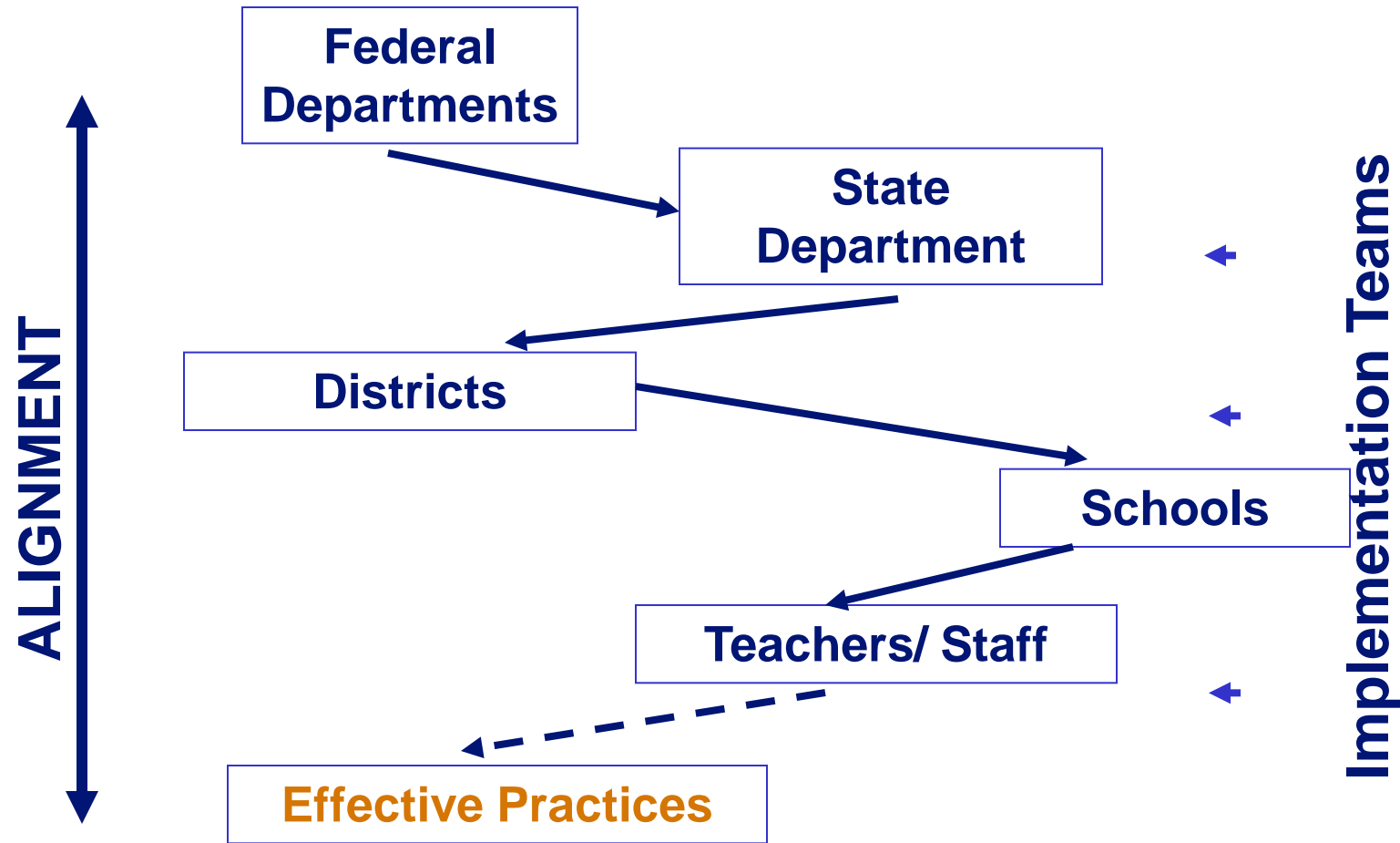
Tackling Wicked Problems



Transformation Zone

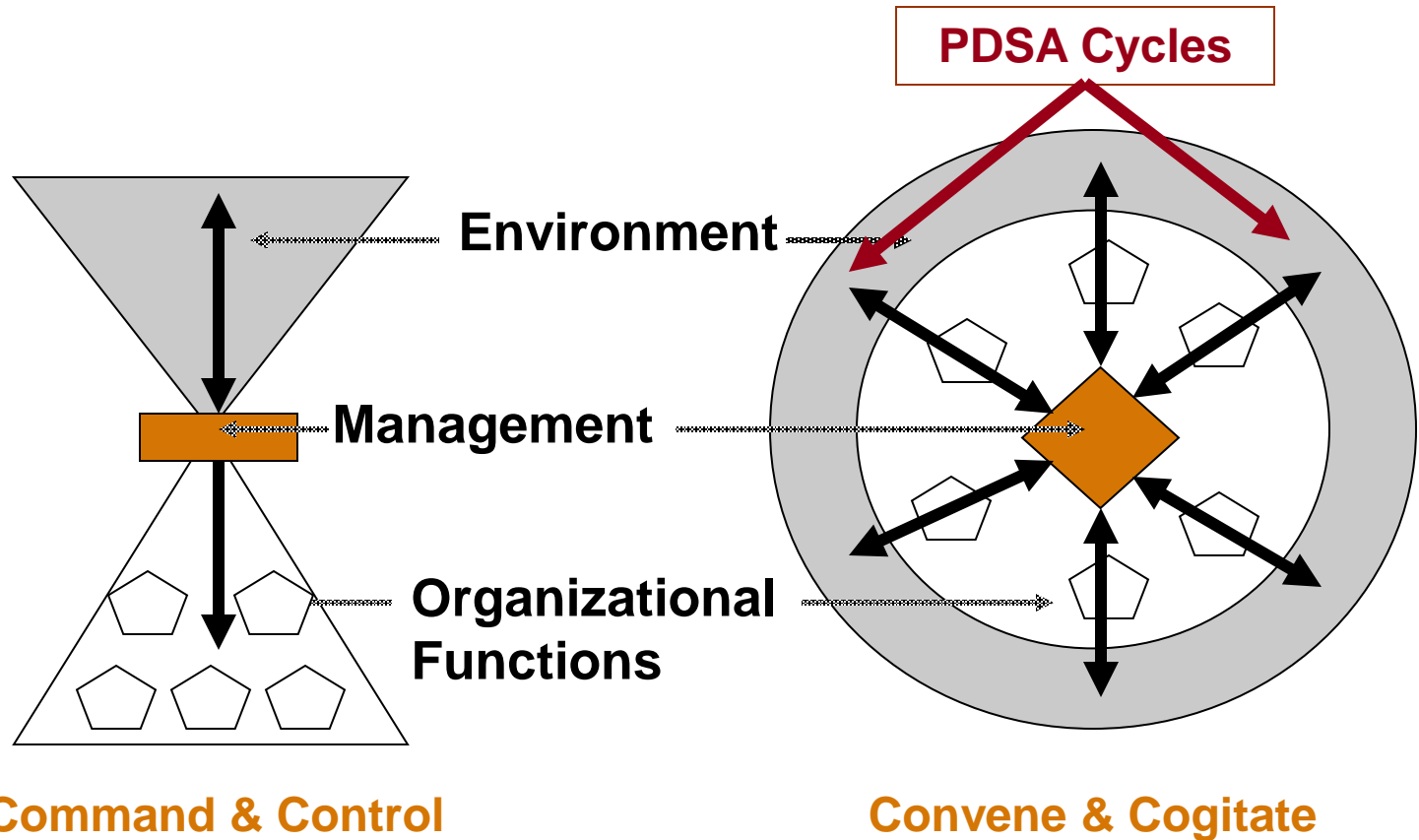
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Transformation Zone



FORM SUPPORTS FUNCTION

Tackling Wicked Problems

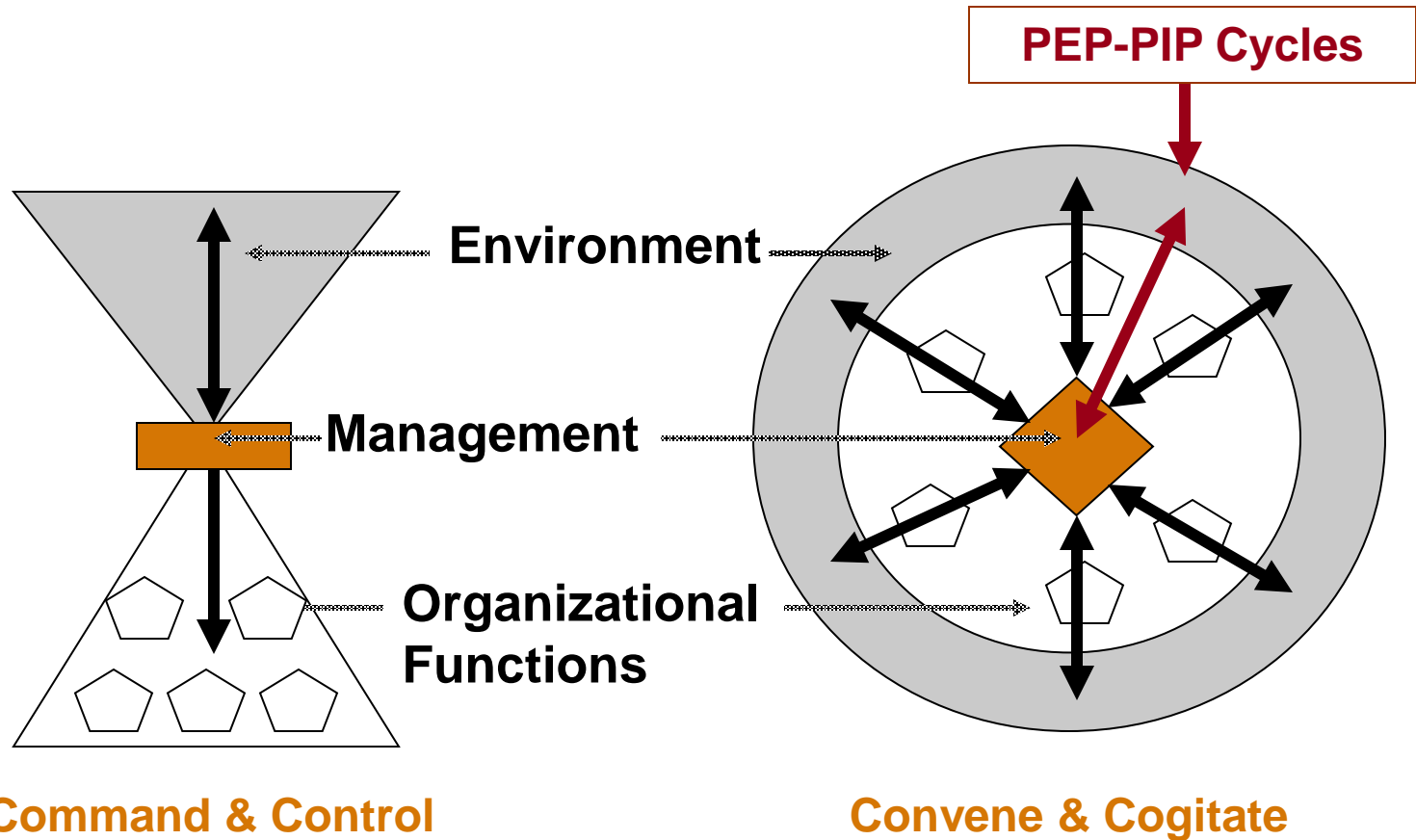


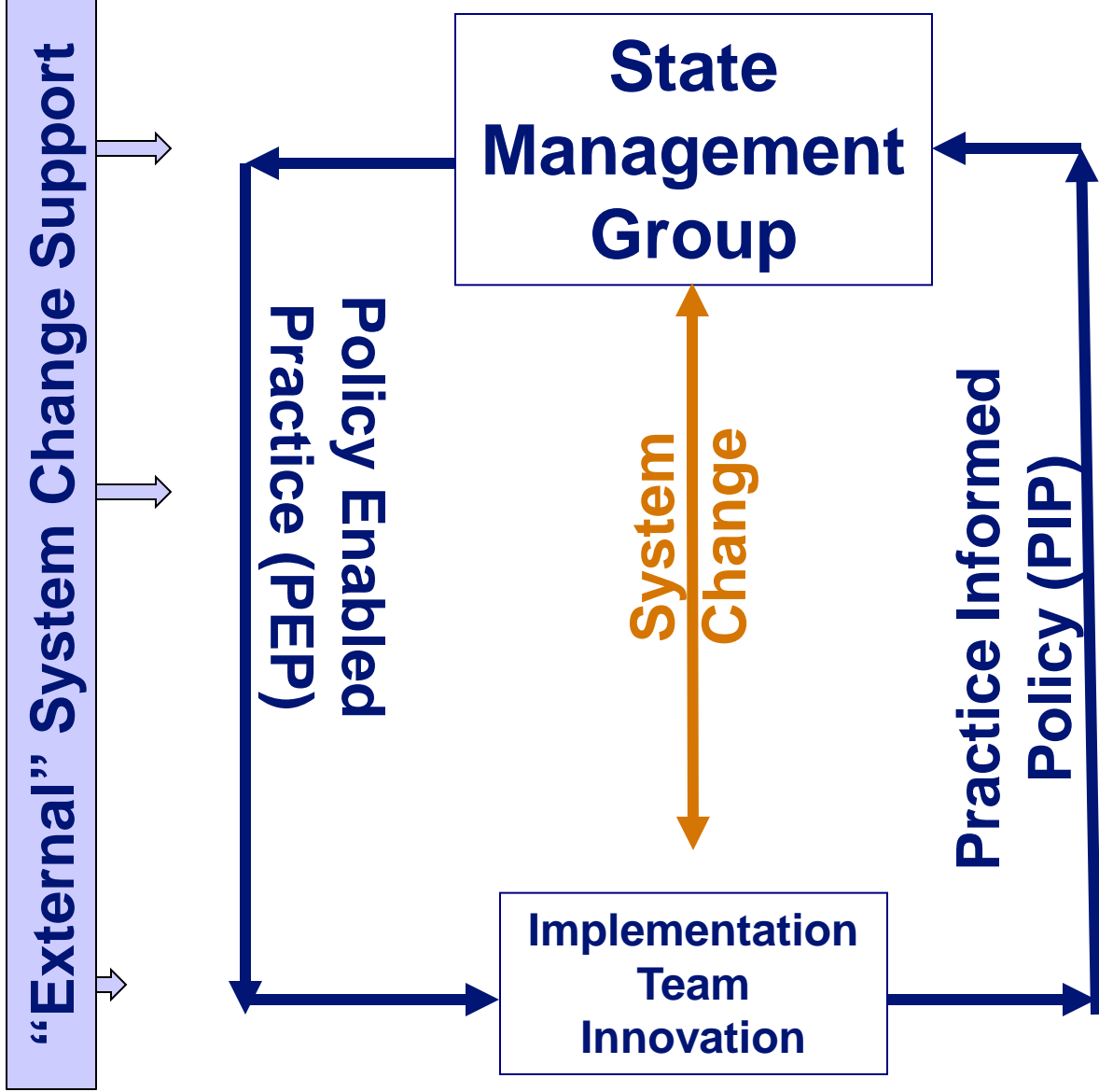
Rapid Problem Solving

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

- ▶ **Plan** – Develop specific things to do
- ▶ **Do** – Do them (make sure)
- ▶ **Study** – See what happens
- ▶ **Act** – Make adjustments
- ▶ **Cycle** – Do over and over again until the goal is reached

Tackling Wicked Problems







System Change

**“Systems don’t change,
people do.”**

Jim Wotring, Georgetown University

Resistance to Change

-  **There is no such thing – only inadequate preparation**
-  **It is not their problem, it is ours.**

Stages of Change

- **Pre-contemplation (Say what?)**
- **Contemplation (Let me think about it.)**
- **Preparation (I think I will do that.)**
- **Action (I am trying it now.)**
- **Implementation (I am working out the bugs as I try to do it.)**
- **Maintenance (Say what?)**

Hall & Hord, 1978

Prochaska & DiClemente, 1982

Student Benefits



**Performance Assessment
(Fidelity)**

Coaching

Competency

Training

Selection

Student Benefits

Stages of Implementation

• **Exploration**

• **Installation**

• **Initial Implementation**

• **Full Implementation**

• **Innovation**

• **Sustainability**

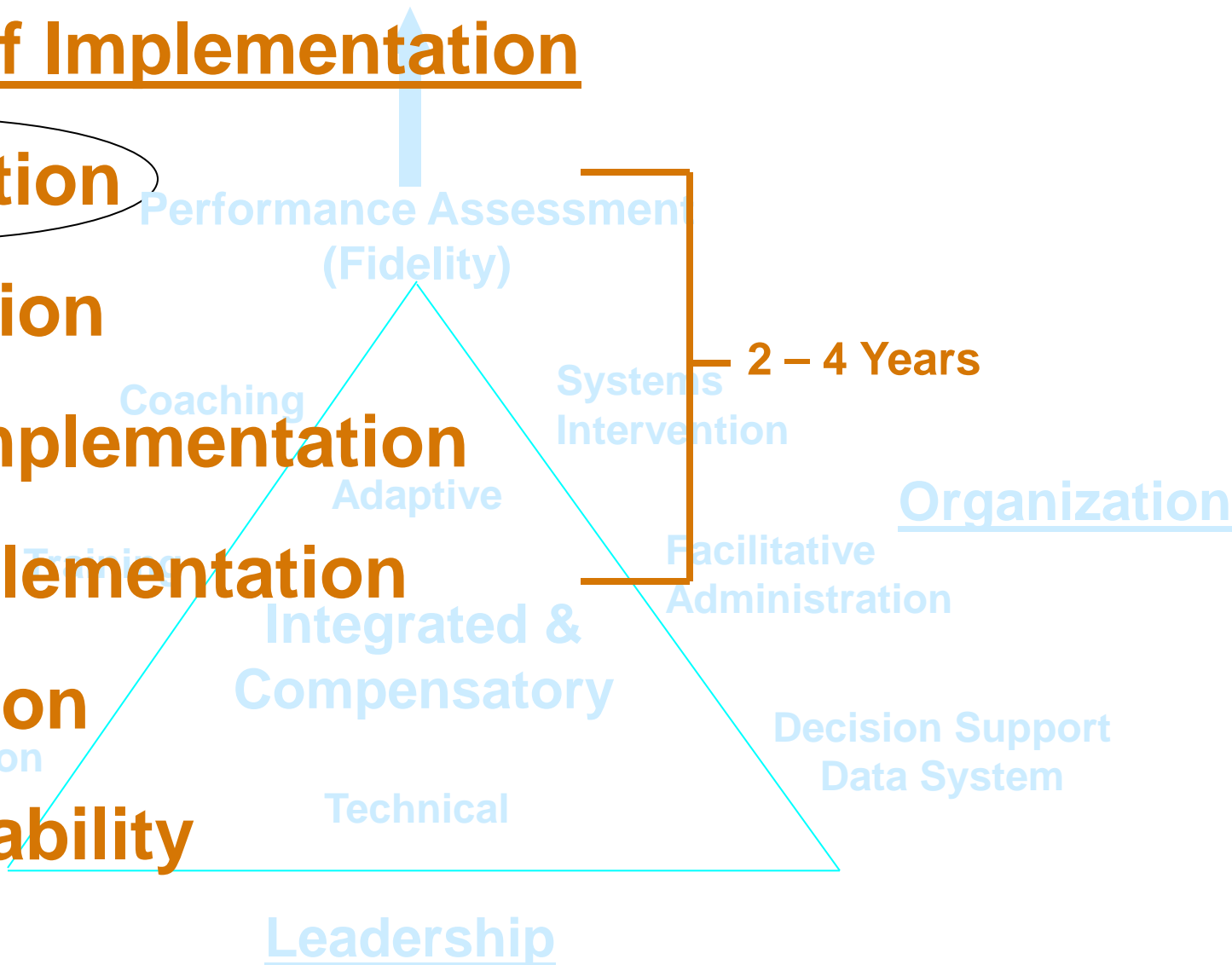










TABLE TALK

- **How does establishing a Transformation Zone help resolve difficult issues in education?**
- **Advantages and disadvantages**
- **Think of an example of how to use the law of “requisite variety” in your daily work.**

Thank You

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**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)

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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>