

## Core Components for Successful Implementation

Applying Core Implementation Components in ECE research, evaluation, and technical assistance

Working Meeting on the Application of Implementation Science to Early Care and Education Research

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#### Welcome!



#### Goals:

- Provide an orientation to Core Implementation Components
- Discuss the role that core implementation components can play in enhancing program evaluation, implementation research, and technical assistance in ECE settings
- Explore how Core Implementation Components can contribute to the development of ECE research, practice, and policy agendas

Between the saying and the doing is the sea.

~ Italian Proverb





## The Implementation Gap

"The failure of better science to readily produce better services has led to increasing interest in the science and practice of implementation."

Fixsen, et. al.

National Implementation Research Network



### **Science to Service**





## "What works" for implementation?

#### Scientific information

- Program development and replication data
- Qualitative study of program developers
- Synthesis of the implementation evaluation and research literature

### Craft knowledge

- Purveyors (program developers)
- Leaders of provider agencies
- Implementation researchers
- Policy makers





## **Evidence-Based Implementation Frameworks**

- Implementation Stages
- Core Components of Successful Implementation (Drivers)
- Implementation Teams
- Improvement Cycles

## nirn

## Stages of Implementation

- Implementation is not an event
- A mission-oriented process involving multiple decisions, actions, and corrections
- Implementing a new program or practice takes 2 to 4 years
- Evaluation, research and technical assistance strategies must be aligned with stage of implementation



### Stages of Implementation

#### Implementation occurs in stages:

- Exploration (sustainability)
- Installation (sustainability)
- Initial Implementation (sustainability)
- Full Implementation (effectiveness, improvement, sustainability)

2 – 4 Years

Fixsen, Naoom, Blase, Friedman, & Wallace, 2005



### **Core Implementation Components**

- Successfully implemented programs, innovations and systems changes share 7 **Core Implementation Components**
- The integrated use of these Core **Implementation Components supports** high-fidelity implementation
- Identification of the Core Intervention Components is a necessary pre-requisite; The "how" is only useful when we know the "it"
- **Best Practices associated with Core Implementation Components**



## Implementation vs. Program Quality

| / / / / /    |               | IMPLEMENTATION – The HOW |                      |  |
|--------------|---------------|--------------------------|----------------------|--|
| <b>∅</b>     |               | Effective                | NOT Effective        |  |
| Z            |               | BENEFITS                 | Paper Implementation |  |
| OIL          | Effective     | (High Fidelity)          | (Low Fidelity)       |  |
| INTERVENTION | NOT Effective |                          |                      |  |

Core implementation components and their outcomes exist independently of the quality of the program or practice. Desirable outcomes are achieved only when effective programs are implemented well.



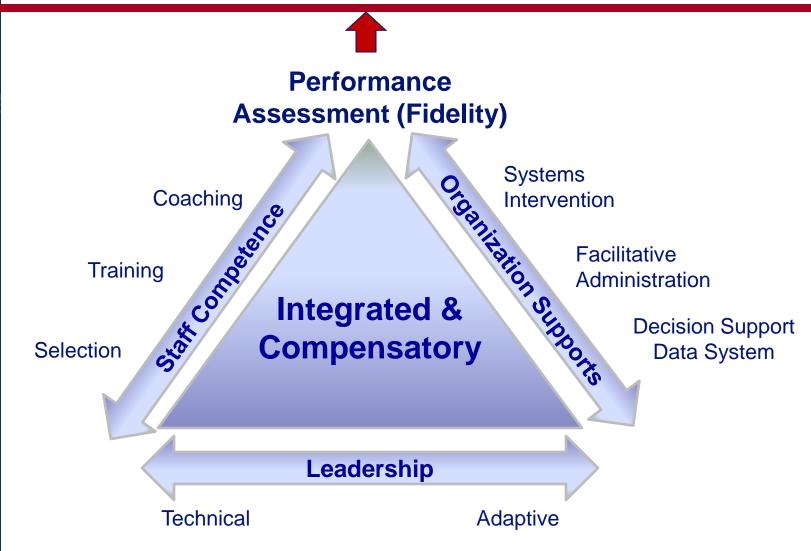
# **Creating the Infrastructure for Change**



- Help to develop, improve, and sustain practitioners'/supervisor's ability to implement an intervention or new practice to benefit children and families
- Help ensure sustainability and improvement at the organizational level
- Help guide leaders to use the right leadership strategies for the situation

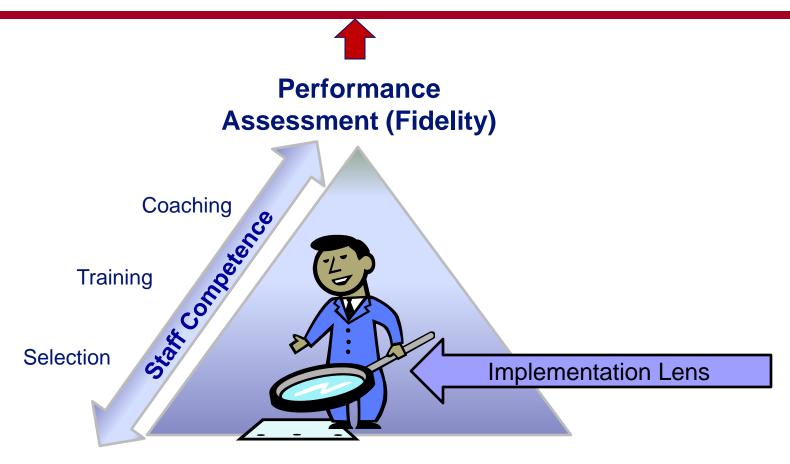


## Improved outcomes for children and families





## Improved outcomes for children and families





## Recruitment and Selection

- Select for the "unteachables"
- Screen for pre-requisites
- Set expectations
- Allow for mutual selection
- Improve likelihood of retention after "investment"
- Select for "coachability"
- Improve likelihood that training, coaching and supervision will result in implementation



### **Pre-Service and In-Service Training**

#### **Purposes:**

- Knowledge acquisition
- Skill development
  - Behavior Rehearsals vs. Role Plays
  - Knowledgeable Feedback Providers
  - Practice to Criteria
- "Buy-in"
- Theory grounded (adult learning)



## **Supervision and Coaching**

#### **Purposes:**

- **Ensure implementation**
- Develop good judgment
- **Ensure fidelity**
- Provide feedback to selection and training processes

## enirn Importance of Coaching

|                                   | OUTCOMES                                                                                                                             |                        |                         |  |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--|
|                                   | % of Participants who Demonstrate Knowledge,<br>Demonstrate New Skills in a Training Setting,<br>and Use new Skills in the Classroom |                        |                         |  |
| TRAINING COMPONENTS               | Knowledge                                                                                                                            | Skill<br>Demonstration | Use in the<br>Classroom |  |
| Theory and Discussion             | 10%                                                                                                                                  | 5%                     | 0%                      |  |
| +Demonstratio<br>n in Training    | 30%                                                                                                                                  | 20%                    | 0%                      |  |
| + Practice & Feedback in Training | 60%                                                                                                                                  | 60%                    | 5%                      |  |
| + Coaching in Classroom           | 95%                                                                                                                                  | 95%                    | 95%                     |  |



Joyce and Showers, 2002



## **Performance Assessment**

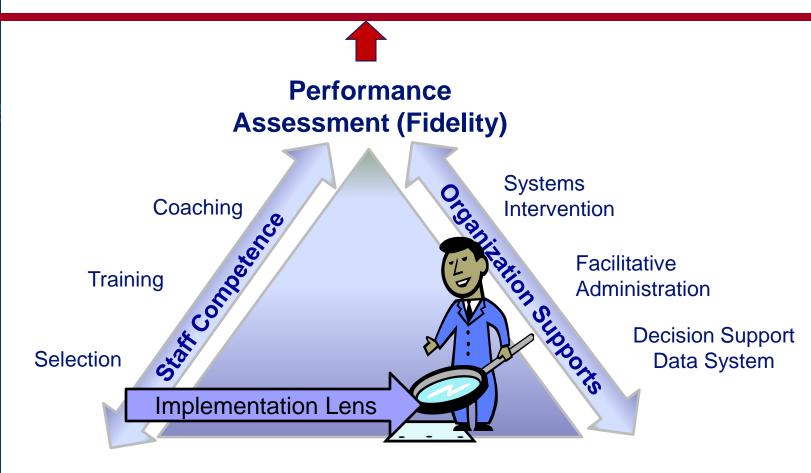
#### Purposes:

- Measure fidelity CRITICAL
- Ensure implementation, promote accountability
- Reinforce staff and build on strengths
- Develop staff skills and abilities
- Feedback on functioning of
  - Recruitment and Selection Practices
  - Training Programs (pre and in-service)
  - Supervision and Coaching Systems
  - Interpretation of Outcome Data
  - Systems Change Initiatives





## Improved outcomes for children and families





### **Decision Support Data Systems**

- Measure Fidelity <u>AND</u> Measure Outcomes BECAUSE you need to know:
  - Are we having an implementation problem?
    - Low fidelity & Poor outcome = implementation problem
  - Or are we having an effectiveness problem?
    - High fidelity & Poor outcome = effectiveness problem



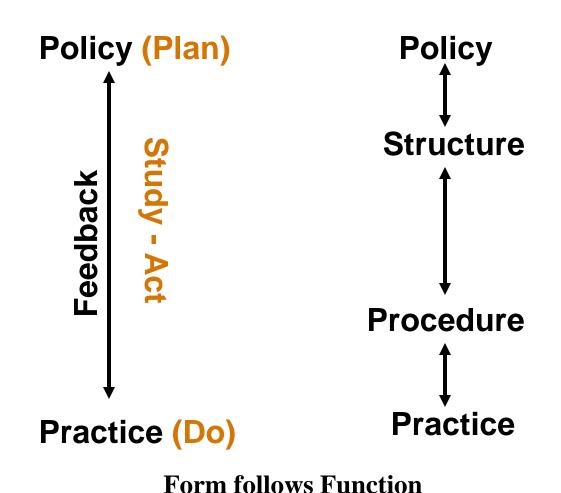
#### **Facilitative Administration**

In ECE, there are no "administrative decisions" – only decisions about children and families

#### **Purposes:**

- Facilitates installation and implementation of the core components
- Aligns policies and procedures
- Takes the lead on Systems Interventions
- Looks for ways to make work of caseworkers and practitioners more functional and "easier"!!

## nim Policy - Practice Feedback





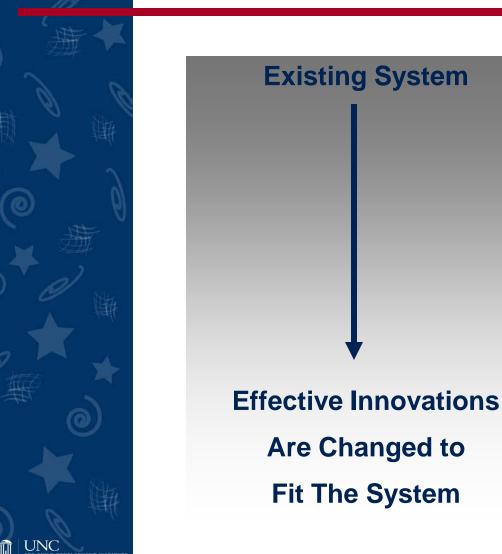
## **Systems Intervention**

#### **Purposes:**

- Identify barriers and facilitators for the new way of work
- Create an externally and internally "hospitable" environment for the new way of work
- Identify strategies to work with external systems to ensure the availability of financial, organizational, and human resources required to do the work.



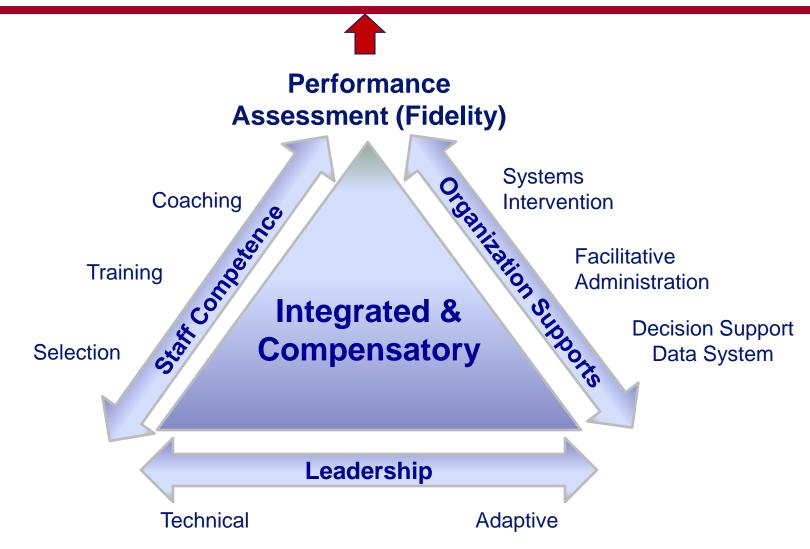
### System Change



**Existing System Is Changed To Support** The Effectiveness Of The Innovation **Effective Innovation** 



## Improved outcomes for children and families





## Integrated and Compensatory Implementation Core Components

## **Integrated**

Consistency in philosophy, goals, knowledge and skills across these processes (S/T/C/SE/DSDS/FA/SI)

## Compensatory

- At the practitioner level
- At the program level





## **Application of Core Implementation Components**

- Stage-appropriate use and assessment of Core Implementation Components
  - Early stages/Exploration
  - Implementation and Improvement
  - Transportability of model
- Implementation Research
  - Test hypotheses related to core components
  - Further science related to evidence-based implementation strategies
- Program Development and Technical Assistance



## **Early Stages of Program Implementation**

- Identify requirements for installation of core components
  - E.g., selection criteria for staff; training and coaching requirements; technology requirements; data collection needs; policies and procedures necessary for implementing innovation or system change
- Assess capacity to implement core components
  - E.g., workforces issues; staff readiness; capacity to implement sustainable staff training; ability to create and sustain necessary partnerships
- Document plans for installing core implementation components (for later process evaluation work)



# **Early Stages of Program Implementation**

- Conduct baseline assessment of Core Implementation Components
  - Does the component currently exist?
  - What is the source of the component? Who has responsibility for this component?
  - How does the component currently support implementation?
  - Is there a measure of the component's effectiveness?
  - How can the component be used more purposefully to support fidelity, outcomes, and/or sustainability?



## Initial and Full Implementation Stages

- Assess Best Practices
  - Not in place; partially in place; in place
- Assess fidelity of implementation core components
  - Implementation fidelity is distinct from intervention fidelity
  - Were core implementation components implemented as intended?



### Transportability of the Model

- Operationalize core implementation components
- Identify barriers and facilitators to fully implementing core components
  - Financial and human resources
  - Availability of purveyor or outside consultation
- Understand issues of integration and compensation
- Balance fidelity and adaptation of core implementation components



## ECE Example – MITT Initiative

Evaluation of MITT – an online PD system, anchored in AA program, for infant and toddler teachers

- Early Stage of Implementation (Year 1)
  - Core implementation components served as framework for implementation evaluation
  - Documented plans for installing core components
- Initial and Full Stages of Implementation (Years 2-3)
  - Best practices for implementation were assessed
  - Formative data were used to improve implementation





### **Early Childhood Mental Health**

- Child Wellbeing Project- Comprehensive service system for children exiting foster care to permanency
- Early Stage of Implementation (Year 1)
  - Evaluated installation of early childhood intervention focused on complex trauma
  - Observed training on intervention
  - Debriefed with Implementation Team on likelihood that Core Implementation Components could be installed fully
  - Decision made to not move forward



### Implementation Research for ECE

- Develop hypotheses for advancing implementation science in ECE
  - Hypothesis 1: Fully operationalizing core implementation components for ECE initiatives will result in higher levels of practitioner fidelity at ECE programs
  - Hypothesis 2: Comprehensive use and application of all implementation core components will result in higher levels of practitioner and organizational fidelity at ECE programs



## **Generate Implementation Research anim** Questions and Develop Designs

- FCE Implementation Research Questions
  - What are the most effective strategies for increasing staff readiness? (staff selection)
  - What are the most effective strategies for implementing sustainable training models? (staff training)
  - What are the most effective and sustainable coaching and professional development approaches and strategies? (staff coaching)
  - What are the most effective strategies for building sustainable, productive partnerships? (systems interventions)



## **Brief Thoughts about TA for** nirn ECE Programs

- Core Implementation Components enhance TA delivery:
  - Assess Readiness and Capacity
  - Select appropriate programs, practices and approaches
  - **Develop Implementation Plans**
  - Improve Staff Competency
  - Align Systems and Create Hospitable **Environments for Change**
  - Promote Data-Driven Decision Making and **Program Improvement**



## For More Information

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www.scalingup.org
<a href="http://nirn.fpg.unc.edu/">http://nirn.fpg.unc.edu/</a>
<a href="http://www.fpg.unc.edu/~nirn/resources/publications/Monograph/">http://www.fpg.unc.edu/~nirn/resources/publications/Monograph/</a>



## For More Information

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).

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