IMPLEMENTATION SCIENCE AND ITS APPLICATIONS TO STATE-LEVEL INTEGRATED PROFESSIONAL DEVELOPMENT SYSTEMS FOR EARLY CARE AND EDUCATION

NATIONAL CENTER ON CHILD CARE PROFESSIONAL DEVELOPMENT SYSTEMS AND WORKFORCE INITIATIVES (PDW CENTER)

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TAMARA HALLE
RESEARCH SPECIALIST, PDW CENTER

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OVERVIEW

- Defining Implementation and Implementation Science
- How Readiness to Change interacts with Implementation
- Implications for developing integrated ECE PD Systems
- Summary and Further Discussion
DEFINING IMPLEMENTATION AND IMPLEMENTATION SCIENCE
DEFINING IMPLEMENTATION AND IMPLEMENTATION SCIENCE

- Implementation is defined as a specified set of activities designed to put into practice an activity or program of known dimensions.

- Implementation Science uses common frameworks, principles, and best practices to study and improve implementation of evidence-based or evidence-informed practices in the real world through:
  - Theoretical framework based on extensive analysis and review of evaluation literature
  - Testable Hypotheses
  - Organize Implementation Knowledge
  - Identifying Gaps
  - Guided Development of Implementation Capacity
IMPLEMENTATION IS AT THE INTERSECTION OF RESEARCH AND PRACTICE

WHY FOCUS ON IMPLEMENTATION?

“Children and families cannot benefit from interventions they do not experience.”
POTENTIAL IMPLEMENTATION
“GAPS”

- What is adopted is not used with fidelity and good outcomes
- What is used with fidelity is not sustained for a useful period of time
- What is used with fidelity is not used on a scale sufficient to impact social problems

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THE SCIENCE AND PRACTICE OF IMPLEMENTATION

Implementation Research: A Synthesis of the Literature


Download all or part of the monograph at: http://www.fpg.unc.edu/~nirn/resources/detail.cfm?resourceID=31
ACTIVE IMPLEMENTATION

☐ To successfully implement and sustain evidence-based and evidence-informed innovations in ECE, we need to know:
  ▪ The WHAT – The effective interventions or approaches that meet the needs of the population of concern
  ▪ The HOW - Effective implementation and sustainability frameworks (e.g. strategies to change and maintain behavior of practitioners and create hospitable organizational systems)
  ▪ THE WHO – Organized, expert implementation assistance (i.e., Implementation Teams)
ACTIVE IMPLEMENTATION FRAMEWORKS

- Successful implementation on a useful scale requires...
  - Active use of implementation core components “best practices”– “IMPLEMENTATION DRIVERS”
  - Purposeful matching of critical implementation activities to the stage of the process – “STAGES OF IMPLEMENTATION”
  - A focus on continuous, purposeful improvement – “IMPROVEMENT PROCESSES”
Improved Outcomes for Children

Effective ECE Strategies

Performance Assessment (Fidelity)

Coaching

Training

Selection

Competency Drivers

Systems Intervention

Facilitative Administration

Decision Support Data System

Leadership

Adaptive Technical © Fixsen & Blase, 2008
Improved Outcomes for Children

Effective ECE Strategies

Performance Assessment (Fidelity)

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Systems Intervention

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Decision Support Data System

Leadership

Adaptive

Technical

Training

Competency Drivers

Organization Drivers

Selection

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Improved Outcomes for Children

Effective ECE Strategies

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Systems Intervention
Facilitative Administration
Decision Support Data System

Integrated & Compensatory

Leadership

Adaptive Technical

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HOW READINESS TO CHANGE INTERACTS WITH IMPLEMENTATION
HOW IS READINESS TO CHANGE RELATED TO IMPLEMENTATION?

- Understanding how readiness of individuals interacts with the willingness and capacity for organizations or systems to change is important.
- Creating readiness for change is a critical component of both initiating and scaling up the use of evidence-based practices and other innovations.
- Proceeding with implementation prematurely (i.e., before an individual or an organization is “ready” to change) can lead to both ineffective and expensive implementation efforts.
“Readiness” is defined as a developmental point at which a person, organization, or system has the capacity and willingness to engage in a particular activity. (Fixsen, Blase, Horner & Sugai, 2009)

Both willingness and capacity are important

- Willingness: the desire to put change into effect
- Capacity: having the resources available to help put change into effect (Peterson, in preparation)
"Readiness for change" is something that needs to be developed, nurtured, and sustained.

Readiness is not a pre-existing condition waiting to be found or an enduring characteristic of a person, organization, or system.

Accountability for creating readiness rests with the implementation team, not with those who are expected or invited to change (Fixsen, Blase, Horner & Sugai, 2009)
USING IMPLEMENTATION FRAMEWORKS AND TOOLS TO ASSIST STATES
IMPLICATIONS FOR WORKING WITH STATE PD SYSTEMS: CREATING READINESS TO CHANGE AND IMPLEMENTING CHANGE

- For scaling-up integrated PD Systems to reach providers in ECE settings state-wide, states need to “be ready” along a number of dimensions:
  - Identification and validation of need
  - Consideration of required changes
  - Planning for change
  - Communication plan
  - Implementation plan
  - Data collection and reporting plan
IDENTIFICATION OF NEED

- Scaling up requires recognition of a clear need for comprehensive change
  - The need for change must be:
    - Substantiated enough and broad enough to merit using the energy and resources that are required for scaling up innovations.
    - Validated with data or broad consensus in order to stimulate sustained action.
CONSIDERATION OF CHANGE

- Convening groups at practice, policy, and management levels is an important part of preparing for change.
  - Considerations of alternatives is a key part of getting ready to change
  - Readiness includes consideration of the feasibility of change
PLANNING FOR CHANGE

- As the state management team and major stakeholders move from exploration to installation, readiness to change depends upon the team having a plan to initiate the change process and a plan for managing the change process once it begins.
  - Teams need to anticipate the risks involved
  - Teams should provide a “readiness checklist” that can be used by local/district teams to help guide them in assessing and building readiness.
FIT AND FEASIBILITY ANALYSIS

FIT:

- How does the proposed intervention (e.g., integrated PD system)...
  - “fit” with other current interventions (e.g., QRIS)?
  - “fit” with the priorities of your State’s ECE system?
  - “fit” with current organizational structures?
  - “fit” with community values, including the values of diverse cultural groups?

FEASIBILITY:

- What are the Needs of the community for this intervention?
- What are the Resources, Readiness, and Capacity to implement innovative or evidence-based practices?
Assessing Evidence-Based Programs and Practices

Capacity to Implement
- Staff meet minimum qualifications
- Ability to sustain Imp Drivers
  - Financially
  - Structurally
  - Buy-in process operationalized
  - Practitioners
  - Families
  - Agency

Intervention Readiness for Replication
- Qualified purveyor
- Expert or TA available
- Mature sites to observe
- Number of replications
- How well is it operationalized?
- Are Imp Drivers operationalized?

Evidence
- Outcomes – Is it worth it?
- Fidelity data
- Cost – effectiveness data
- Number of studies
- Population similarities
- Diverse cultural groups
- Efficacy or Effectiveness

Need in Agency, Setting
- Socially Significant Issues
- Parent & Community Perceptions of Need
- Data indicating Need

Fit with current -
- Initiatives
- State and Local Priorities
- Organizational structures
- Community Values

Resource Availability
- IT
- Staffing
- Training
- Data Systems
- Coaching & Supervision
- Administrative & system
- supports needed

EBP:

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5 Point Rating Scale: High = 5; Medium = 3; Low = 1. Midpoints can be used and scored as a 2 or 4.

Total Score:
COMMUNICATION PLAN

- A critical component of successful system change is frequent and accurate communication between the practice level and the policy level.
  - Rapid feedback cycles (weekly, monthly communication)
  - Adaptive leadership
IMPLEMENTATION PLAN

- Comprehensive implementation strategies need to be in place to effectively and efficiently help those involved in the innovation.
  - This typically means investing in:
    - Building local capacity or on-going training
    - Developing and supporting coaches who can facilitate implementation
    - Organizing a formal plan of evaluation that emphasizes fidelity and outcomes
    - Regular and repeated professional development experiences for those involved in the day-to-day implementation efforts
DATA COLLECTION AND REPORTING PLAN

- Reliable, valid, and trusted indicators of progress must be established.
- The data and indicators need to include measures of the development of an infrastructure (e.g., trainers, coaches, evaluation system) for implementation.
SUMMARY: USING IMPLEMENTATION FRAMEWORKS AND TOOLS TO ASSIST STATES

- **Identification and Validation of Need**
  - Fit and Feasibility Assessment (Need)

- **Consideration of Required Changes**
  - Fit and Feasibility Assessment (Fit, Resource Availability, Evidence)

- **Planning for Change**
  - Fit and Feasibility Assessment (Evidence, Resource Availability, Capacity to Implement, Intervention Readiness for Replication)

- **Communication Plan**
  - Feedback Loops
  - Adaptive Leadership

- **Implementation Plan**
  - Fit and Feasibility Assessment (Capacity to Implement, Intervention Readiness for Replication)
  - Competency Drivers, Organization Drivers, Leadership

- **Data Collection and Reporting Plan**
  - Fit and Feasibility Assessment (Evidence)
  - Performance Assessment/Fidelity
IMPLICATIONS FOR DEVELOPING INTEGRATED ECE PROFESSIONAL DEVELOPMENT SYSTEMS
INTEGRATED PD SYSTEM CONTINUUM

- Singular components and/or initiatives

- Aligned components and/or initiatives

- Single sector system

- Single sector systems with components and/or initiatives that are aligned within the sector (e.g., child care PD system aligned with child care licensing regulations)

- Cross-sector system components and/or initiatives

- Cross some sectors system (e.g., child care and Head Start PD system)

- Cross all sectors system (e.g., crosses all primary ECE and SA sectors)

- Cross-sector system with some integration (e.g., serves all sectors AND has intentionally integrated requirements and data systems)

- Integrated systems (e.g., mission/vision/purpose, policies, services, infrastructure have all been intentionally and sequentially integrated)
INTEGRATED PD SYSTEMS -- EXAMPLES

- Identification and validation of need
  - Why do we want an integrated PD system? What do we want to achieve by creating an integrated PD system?
  - What do we mean by “integrated”?

- Consideration of required changes
  - Which sectors need to change practices in order to be part of the integrated PD system?
  - How will we standardize Core Knowledge and Competencies across sectors? What about compensation?

- Planning for change
  - Who needs to be involved in making an integrated PD system successful within the state? Do we have their buy-in? Is there political will?
INTEGRATED PD SYSTEMS--EXAMPLES, CONT’D

- Communication plan
  - How do we communicate with different stakeholder audiences about the PD system?
  - Do we have good communication across ECE sectors? How do we overcome cross-sector privacy issues?

- Implementation plan
  - Is it better to integrate a component across all sectors, or just a few sectors and then expand?

- Data collection and reporting plan
  - How will system integration be tracked? What infrastructure is needed to track it? What data will be gathered to determine successful implementation of an integrated PD system?
NAEYC STATE PD POLICY BLUEPRINT

Six Essential Policy Areas
NAEYC PD SUMMIT TOPICS

- **Advisory Structure**: Governance, Communication with players, Linkage with ECAC, Agreements
- **Compensation Parity**: Increasing Wages and Benefits
- **Articulation**: Credential Portability and Reciprocity
- **Financing**: Developing Affordable and Sustainable Integrated Professional Development Systems
- **Integrated Professional Standards and Career Pathways**: Cross-Sector Core Knowledge & Competencies and Career Lattices
- **Workforce Data**: Building and Funding Systems that Meet Longitudinal Needs
COMPENSATION--EXAMPLES

- Identification and validation of need
  - Is there consensus among stakeholders that compensation is an important investment – for children, families, the workforce, the economy?
  - Is the existing evidence for the need for compensation perceived as valid by the various stakeholders in the state?

- Consideration of required changes
  - What reallocations of investments, changes in policies, QRIS or licensing standards, or contracts for services are needed to improve salaries, benefits, and/or work environments for the early childhood and school-age workforce?

- Planning for change
  - What agencies and/or organization(s) are best positioned to implement, grow, and sustain the integrated approach to improving access to professional development, compensation, and work environments?
  - Who will coordinate the effort of establishing and maintaining the changes in compensation?

SOURCE: Working DRAFT “Targeting Workforce Essentials: Access, Compensation, and Workforce Conditions A Tool to Support the Early Childhood and School-age Workforce”, PDW Center
COMPENSATION--EXAMPLES, CONT’D

- **Communication plan**
  - How will we market this initiative? How will stakeholders understand the priorities set for the initiative?

- **Implementation plan**
  - Who will be on the Implementation Team to guide implementation and ongoing monitoring of the initiative? What infrastructure is needed? What staff is available to coordinate? What training and supervision will staff need to coordinate this work?

- **Data collection and reporting plan**
  - How will staff monitor the implementation of the compensation initiative? What indicators of successful implementation will be collected over time?

SOURCE: Working DRAFT “Targeting Workforce Essentials: Access, Compensation, and Workforce Conditions A Tool to Support the Early Childhood and School-age Workforce”, PDW Center
SUMMARY AND FURTHER DISCUSSION
KEY TAKE-AWAY MESSAGES

- Creating readiness for change is an on-going activity of science-based interventions and other innovations.

- The capacity to create readiness for change, manage the change process, implement innovations effectively, and establish reliable and enduring indicators of progress is an essential part of effectively using evidence-based programs and other innovations.

- Implementation Teams must be prepared to effectively support individuals, organizations, and systems in the process of change.
  - Some tools and resources exist to assist in this effort, such as the NIRN Fit and Feasibility Analysis.
THINGS TO CONSIDER/DISCUSS

- Practical implications of this work for developing integrated PD systems in states
  - How will this actually be implemented in our state?
    - What human capital, training and supervision is needed?
    - What infrastructure is needed?
    - What leadership is needed?
    - Who constitutes the Implementation Team(s)?

- Policy implications of this work for developing integrated PD systems in states
  - Are we ready as a state for this integration of PD elements?
  - Are our providers ready?
Communication across sectors and systems is often challenging. How do we address this within an integrated PD system?

What should be done if an element of the PD system is intended to be cross-sector but states only have funding to implement in one sector (e.g., child care)?

How do we integrate PD systems and QRIS?
REFERENCES AND RESOURCES


THANK YOU!

National Center on Child Care Professional Development Systems and Workforce Initiatives

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ZERO TO THREE
1255 23rd St. NW, Suite 350
Washington, DC 20037
202–857–2673
PDWCenter@zerotothree.org