Technical Assistance as the Bridge from Science to Service

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OBJECTIVES

I. Provide an Overview of Types of TA

II. Provide an Overview of Active Implementation Frameworks Based on Implementation Science

III. Explore How the Active Implementation Frameworks Might Apply to the work of Technical Assistance Centers
Matching TA to Desired Outcomes

Intensive TA
Blended Intensive and Basic TA
Basic TA

Systems Change
Capacity Building

Knowledge
Information
Attitudes

Blase, 2009
Matching TA to Desired Outcomes

- **Basic TA**
  - Provides information
  - Influences attitudes
  - Provides advice and support to solve specific problems
  - *Creates readiness for change*

- **Basic TA** is...
  - Short term or more episodic over time
  - Builds on current skills and abilities within hospitable contexts
    - If the context is inhospitable, only minor changes are required (e.g. pilots, demonstrations)

Blase, 2009
Matching TA to Desired Outcomes

- Intensive TA...
  - Includes the tasks of Basic TA (provides information, influences attitudes, creates readiness for change, provides advice and support to solve specific problems)
  - Results in systems change to support instructional and intervention change
  - Builds capacity to sustain and ‘grow’ the change.
Pre-Requisites for Any TA Effort: Identified Needs and A Defined “IT”

● From what current state to what future state?
  ◦ Current State = Identified Needs
  ◦ Potential Solutions = Defined “IT”
  ◦ The “IT” must be operationalized whether it is:
    • An Evidence-Based Practice or Program
    • A Best Practice Initiative
    • A Systems Change Initiative

● Operationalize

Part of Speech: verb Definition: to define a concept or variable so that it can be measured or expressed quantitatively

Webster's New Millennium™ Dictionary of English, Preview Edition (v 0.9.7)
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Formula for Success

Effective **Interventions and/or Defined System Supports**

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Effective **Implementation practices**

\[ = \]

Effective **Outcomes**
A Cascade of Outcomes to Strategies to Outcomes

- The “IT” (the Defined Intervention) at one level becomes the “OUTCOME” at the next Level

<table>
<thead>
<tr>
<th>Population (WHO)</th>
<th>Intervention Strategies and Measures (WHAT)</th>
<th>Intervention Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young Children With or At Risk of Developmental Disabilities</td>
<td>Pyramid Model (fidelity measures) CELL early literacy (fidelity measures) Inclusion Models(fidelity measures)</td>
<td>Improved Social Emotional Outcomes Improved language development Improved Inclusion in Settings</td>
</tr>
<tr>
<td>Populations (WHO)</td>
<td>Organizational and Systems Change Strategies (HOW)</td>
<td>Change-Related Outcomes</td>
</tr>
</tbody>
</table>
| Practitioners, Teachers, Staff and Supervisors         | Provision of skillful, timely training, coaching, performance assessments in supportive administrative environments | Competent use of selected Interventions:  
  - Pyramid Model (fidelity measures)  
  - CELL early literacy (fidelity measures)  
  - Inclusion Models(fidelity measures) |
| Personnel in Early Childhood PD Collaboratives, Agency staff, Regional Staff | Agreements with TA Providers & Program Developers Training and coaching for Trainers, Master Cadres, Coaches Release time for Supervisors/Coaches to learn to coach Installation of fidelity monitoring and outcome data systems | Skillful, timely training, coaching, performance assessments in supportive administrative environments |
“A serious deficiency is the lack of expertise to implement best practices and innovations effectively and efficiently to improve student outcomes.”

Rhim, Kowal, Hassel, & Hassel (2007)
Ineffective Approaches

Best data show these methods, when used alone, Do Not result in uses of innovations as intended:

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

5 to 10% return on investment

NECESSARY BUT NOT SUFFICIENT
Active Implementation Frameworks

- Implementation Teams
- Implementation Stages
- Implementation Drivers
- Improvement Cycles
Letting it happen

Helping it happen

“Do it yourself” approaches

Making it happen

“Do it with expert help”

Implementation Teams are accountable

Based on Hall & Hord (1987); Greenhalgh, Robert, MacFarlane, Bate, & Kyriakidou (2004); Fixsen, Blase, Duda, Naoom, & Van Dyke (2010)
Implementation Teams

State, Regional, District, Building/Setting Teams

- **Know innovations** very well (formal and craft knowledge)
- **Know implementation** very well (formal and craft knowledge)
- **Know improvement cycles** to make interventions and implementation methods more effective and efficient over time

*Re-purpose, re-configure, revitalize, re-allocate*
Implementation Teams ARE NOT

- Committees
- Advisory Groups

Implementation Teams DO

- Know the innovation – the WHAT
- Know and use implementation science and best practices – the HOW
- Use Plan, Do, Study, Act Cycles to “get started” and “get better”
- Stay on “mission”
  - Engage in the right work at the right level at the right time.
Feedback Loops

- State Level Team
- Regional Level Teams
- District Level Teams
- School/Setting Level Teams

New Approaches Need New Ways of Work
- Transparent, protocol-driven feedback loops and processes
- Aligned policies, funding, guidance to support new ways of work

There are no administrative decisions, they are all education and intervention quality decisions.
**Cascading Logic Model**

- Improve **student and child outcomes**
- Improve **teacher and staff skills & instruction**
- Improve **school and setting supports for teachers and staff**
- Improve **district and regional supports for schools and settings**
- Improve **State supports for Districts and Regions**

Re-define relationships among system components
Focus fully on **student and child outcomes**
Tools and Processes

- The right work at the right level
  - Cascading logic model
- Terms of Reference
- Linking Communication Protocols
  - Feedback Loops
  - Integration

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Reflection and Questions
Teaming Structures and Processes

- Your TA efforts are designed to impact which levels?
- Is there an identified “team” at each level?
- Right people on the “team(s)”?
- Functions as an Implementation Team?
- Clarity of Purpose?
- Linkages to Move The Work?
- Feedback Processes?
Effective Implementation

Implementation Team members make effective use of:

✓ Implementation Stages
✓ Implementation Drivers
✓ Improvement Cycles
Sages of Implementation

How long at a district level?
How long at a state level?
How long at a national level?

School or Setting Level Implementation Takes Time: 2 – 4 Years

EXPLORATION
INSTALLATION
INITIAL IMPLEMENTATION
FULL IMPLEMENTATION
Lessons Learned

- You don’t get to skip any stages
- Do the right work for the stage
- Exploration and installation are neglected
- Always in “exploration” with somebody, somewhere
- Not linear – iterative and overlapping
- Do the right work for the Stage
Tools and Processes

- **Exploration**
  - Hexagon Discussion Tool (Need, Fit, Resources, Evidence, Readiness for Roll Out, Capacity to Implement)

- **Stage-Based Assessments**
  - How well did we align our work with the stage?
  - What recovery do we need to do?
  - What planning needs to be done to move forward?
Assessing Readiness: EBPs and Implementation

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

<table>
<thead>
<tr>
<th>EBP</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
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<tbody>
<tr>
<td>Need</td>
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<tr>
<td>Fit</td>
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<td>Resources Availability</td>
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<td>Evidence</td>
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<td>Readiness for Replication</td>
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<tr>
<td>Capacity to Implement</td>
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Need in Education Setting
Socially Significant Issues
Parent & Community Perceptions of Need
Data indicating Need

Fit with current -
• Initiatives
• Educational Priorities
• Organizational structures
• Community Values

Resource Availability

Intervention Readiness for Replication

Capacity
Staff meet minimum qualifications
Able to sustain Imp Drivers
• Financially
• Structurally
Buy-in process operationalized
• Practitioners
• Families
• Agency and Departments

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

© National Implementation Research Network 2009
Adapted from work by Laurel J. Kiser, Michelle Zabel, Albert A. Zachik, and Joan Smith at the University of Maryland
Reflection and Questions
Reflection

Right Activities For Each Stage of Implementation

“Stage-based Supports and Technical Assistance”

- What “exploration stage” work needs to be done?...has been done? ....with whom?
- What are we already doing that is “stage-based”?
- What are the facilitators and barriers to doing stage-based work and support?
IMPLEMENTATION DRIVERS

Common features of successful supports to help make full and effective uses of a wide variety of innovations
Implementation Drivers

- Help to develop, improve, and sustain teachers’ and practitioners’ competence and confidence to implement effective practices and supports.
- Help ensure sustainability and improvement at the organization and systems level
- Help guide leaders to use the right leadership strategies for the situation
Improved Outcomes for Children and Families

Consistent Use of Educational Innovations

Performance Assessment (Fidelity)

Interventions meet Implementation

Coaching

Competency Drivers

Training

Adaptive

Organization Drivers

Selection

Integrated & Compensatory

Technical

Facilitative Administration

Leadership

Decision Support Data System

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Stages AND Drivers

Implementation Takes Time: 2 – 4 Years

EXPLORATION

INSTALLATION

INITIAL IMPLEMENTATION

FULL IMPLEMENTATION

“DRIVERS”
Tools and Processes

- Implement Mapping
- Drivers’ Best Practices Assessments
  - At each Stage
  - Common framework for all initiatives
  - Actionable items for action planning
- For Coaching
Reflection and Questions
Infrastructure Insights

- How do our TA efforts develop or support the infrastructure needed to implement well?
- Do we need to promote ‘competence and confidence’? Do we build in-state capacity to select, train, coach, and assess performance well?
- Are we engaged in promoting more hospitable organizational environments?
- How relevant are leadership issues? What’s our role? Have we attended to adaptive challenges?
Improvement Cycles

**ACT**
Plan the next cycle
Decide whether the change can be implemented

**PLAN**
Define the objective, questions and predictions. Plan to answer the questions (who? what? where? when?)
Plan data collection to answer the questions

**STUDY**
Complete the analysis of the data
Compare data to predictions
Summarise what was learned

**DO**
Carry out the plan
Collect the data
Begin analysis of the data
Types of Improvement Cycles

Plan-Do-Study-Act Cycles

✓ Rapid cycle problem solving (Shewhart; Deming)
✓ Usability testing (Neilson; Rubin)
✓ Practice-policy communication loops
✓ Transformation Zones
Tools To Create Alignment

- Tool to prompt discussion of systems issues and factors that facilitate or hinder effective implementation.

- Linking communication protocol –
  - Guidance document to support developing communication and problem-solving protocol from one “level” to the next (practice-policy communication loop at each “level”).
Reflection and Questions
Capacity Building

Implementation Teams
Organization Change
System Reinvention

AMOUNTS

Funding

Capacity

YEARS
Stay Connected!

www.scalingup.org

For more on Implementation Science
http://nirn.fpg.unc.edu
www.implementationconference.org
Implementation Science

Implementation Research: A Synthesis of the Literature


HTTP://NIRN.FPG.UNC.EDU