



Model Demonstration Coordination Center

Planning for Replication and Dissemination from the Start: Guidelines for Model Demonstration Projects (Revised)

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About this Brief

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Model Demonstration Coordination Center

Overview of the Model Demonstration Coordination Center

The Research to Practice Division of the Office of Special Education Programs (OSEP), U.S. Department of Education, is charged with addressing the gap between what research demonstrates to be effective programs and practices for improving outcomes for children and youth with disabilities and what schools and programs implement. An important part of that pursuit is the technical assistance, model demonstration, and dissemination activities OSEP has been supporting since 1970. Since 2005, OSEP has funded seven cohorts of model demonstration projects (MDPs), each of which has focused or is focusing on a single new and promising (or perhaps poorly understood or implemented) practice, procedure, program, or technology that is deemed to have high potential for improving outcomes for children and youth with disabilities. Each project implements its model in typical settings and assesses its outcomes.

Also since 2005, OSEP has been funding the Model Demonstration Coordination Center (MDCC) at SRI International. MDCC staff members have worked with the MDPs to establish consistent design elements, such as sample definition and selection, data collection methods and timing, and instrumentation; for some cohorts, MDCC staff members also have synthesized cross-MDP data. Consistent data collection within a given cohort permits comparison of the relative ease with which the models were implemented with fidelity and supports comparison of the relative outcomes achieved when the unique approach of each model was implemented. Comparing and contrasting implementation experiences and model sustainability and spread within and across cohorts also enables MDCC to distill from MDP data the factors that have hindered and promoted these aspects of model implementation.

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Contents

Introduction	1
Planning for and Supporting Model Replication	3
What is the model and how does it work?	5
Who needs to be involved in delivering or supporting the model? .	7
What professional development (PD) will be needed?	7
What resources will be needed?	10
How can progress be assessed?	12
How can assessment data/feedback be used to address implementation challenges?	14
Planning for Dissemination of the Model	
Identifying the target audience	16
Selecting dissemination formats	16
Creating and executing a dissemination plan	17
Evaluating dissemination results	17
Next Steps in Planning for Model Replication and Dissemination	18
References	19

Appendices

A.	Illustrative Replication Manual Table of Contents	. 21
Β.	Model Replication and Dissemination Tools and Resources	. 25
Ap	pendix References	. 28
Fig	gures	
1.	An Approach to Model Replication	4
2.	Example Model Description	6
3.	Example Description of Roles and Responsibilities for Model Implementation	8
4.	Considerations for Developing PD Resources to Support Model Replication	9
5.	An Approach to Determining Costs of Model Implementation	11
6.	Example Criteria to Assess Readiness to Adopt a School-Based Model	. 12
7.	Example Assessment of Implementation Fidelity	. 15

Planning for Replication and Dissemination from the Start



Introduction

In recent years, the United States has seen large federal investments aimed at improving the guality of education in our public schools, as in the Race to the Top program (http://www2.ed.gov/programs/racetothetop/ index.html) and the Investing in Innovation Fund (i3) (http://www2.ed.gov/ programs/innovation/index.html). Federal funding also has supported the identification of educational practices, programs, procedures, curricula, and technologies that have rigorous scientific evidence linked to improved student achievement through such vehicles as the What Works Clearinghouse (http://ies. ed.gov/ncee/wwc/), Doing What Works, and the National Dissemination Center for Children with Disabilities (NICHCY). Yet despite the fact that "the science related to developing and identifying 'evidence-based practices and programs' has improved, the science related to implementing these programs with fidelity and good outcomes for consumers lags far behind" (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005, p. vi). Even effective practices and programs cannot significantly improve teaching and learning without widespread implementation with fidelity.¹

A major objective of the Model Demonstration Coordination Center (MDCC) in working with cohorts of the Office of Special Education Programs' (OSEP) Model Demonstration Projects (MDPs) has been to conduct cross-project and cross-cohort analyses of the factors that facilitate or hinder implementation with fidelity. These factors may relate to the intervention itself (e.g., its complexity or resource requirements), grantees' implementation strategies and procedures (e.g., staffing strategies, professional development approaches), the organizations in which the intervention is implemented (e.g., characteristics of implementing schools or early childhood programs and their staffs), the children or youth whose outcomes are the target of intervention efforts (e.g., disability, demographics), and/or the contexts of the implementing organizations (e.g., communities, school districts, early intervention systems).

A primary goal of OSEP's Research to Practice Division, which funds MDCC, is to facilitate the transfer of knowledge about successful implementation strategies and approaches, as well as about evidence-based practices, from research and demonstration projects to the individuals and organizations that work directly with children and youth. In recent years, OSEP has explicitly addressed this goal in the request for applications for model demonstration projects (e.g., Office of Special Education and Rehabilitative Services, 2012a, 2012b, 2012c) with a requirement that grantees "initiate a process for carefully documenting the model's practice components, implementation processes, and implementation tools and guides sufficient to allow for replication of the model" (Office of Special Education and Rehabilitative Services, 2012b, p. 32955), if evidence supports

¹ Fidelity of implementation is generally understood to be the extent to which the core components of an intervention are implemented as originally designed and tested in an efficacy and/ or effectiveness study (O'Donnell, 2008), or "the extent to which the user's current practice match[es] the...'ideal" (Loucks, 1983, p. 4).

its benefits to children or youth with disabilities. Grantees also are expected to "develop a high-quality dissemination plan that reaches broad audiences including regular educators, special educators, related services providers, administrators, families, policymakers, and researchers" (Office of Special Education Programs, 2009, p. 33421).



To support current and future grantees, OSEP charged MDCC with developing guidelines for model replication and dissemination efforts. This brief is the response to that request. It includes "lessons learned" from MDPs that may help future projects succeed.

The challenges in moving from research and successful model demonstration (i.e., high-fidelity implementation and improved outcomes) to widespread use of evidence-based practices are well documented (e.g., Domitrovich et al., 2008; Fixsen et al., 2005; Odom, 2009). This brief addresses one part of this challenge: developing accessible, usable, and high-quality information products so that practitioners and organizations:

- know about the model and its potential effects,
- are motivated to make the changes necessary to adopt and implement it,
- understand how it works,
- can implement it with fidelity, and
- can assess whether it is helping them achieve desired outcomes.

Achievement of these results requires sufficiently documenting model practices, providing related supports for model replication, and developing "active" dissemination strategies that attract and engage potential users, strategies that are not typically employed in efforts to move research into practice (e.g., Cook, Cook, & Landrum, 2013).

To inform the creation of guidelines for developing model replication and dissemination products, MDCC staff performed a series of Internet and literature searches on implementation, dissemination, and knowledge transfer. In addition to reviewing research and other literature, 20 exemplary implementation manuals and guides in the areas of education, early childhood intervention, educational technology, behavioral health, and public health were identified and reviewed as background to developing the guidelines. MDCC staff members noted similarities and differences between the kinds of information addressed by each manual related to, for example, descriptions of the interventions, materials needed for implementation, professional development, and use of media. In addition, MDCC personnel drew on the implementation experiences of MDP leaders, and some of these leaders provided examples included in the brief. Information from these sources was synthesized in determining the aspects of model replication and dissemination that are important, both for a model developer to consider and for a model user to know before implementation.



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Developing materials for model replication requires careful documentation throughout the life of the model demonstration project, documentation that evolves as implementation evolves through experience and evaluative feedback.

This brief is organized in two primary sections. The first section outlines the factors that model developers should consider and document as their models are developed, implemented, and refined in preparation for replication. When developers keep these factors in mind from the beginning, they will have the needed information to produce replication products efficiently. The second section presents considerations for developing a dissemination plan for communicating information about a model in ways that reach and are useful to practitioners and others. Planning for dissemination should begin early to maximize dissemination results. Appendices contain an example table of

contents for a replication manual, drawn from manuals MDCC staff members have reviewed, and a resource list for supports and tools that may help grantees prepare for replication and dissemination.

Planning for and Supporting Model Replication

To support replication of their models by others, MDP grantees have the responsibility to provide enough information to potential adopters for them to:

- (a) determine whether the model has the potential to address a salient need;
- (b) understand what is involved in adopting the model in terms of preparation, resources required, and processes for implementing it with fidelity (i.e., as it was designed); and
- (c) assess whether the model, once implemented, will produce the hoped-for benefits relative to the potential user's need.

The purpose of this brief is to help model developers turn what may be implicit knowledge about model implementation into explicit information about what the model is, how it works, and what is needed to implement it to achieve the intended results.

Developing materials for model replication requires careful documentation throughout the life of the model demonstration project, documentation that

evolves as implementation evolves through experience and evaluative feedback. Thinking about replication early in the model development and demonstration process will help developers identify the elements that need to be clearly defined and enable them to be strategic about sharing the model with future adopters. Blase and Fixsen (2013) noted the importance of operationalizing and documenting core intervention components: "This means allowing the time and allocating the resources for this important work [specifying model components] to occur before and during initial implementation of the



innovation as it moves from research trials into typical service settings" (p. 7).

In addition to supporting model replication, early attention to specifying and documenting model practices and processes will benefit implementation during model demonstration. Clear documentation will help model demonstration site personnel understand model components and enable them to provide feedback about the usefulness and clarity of documentation. The model demonstration

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"In planning for replication, it is important to frontload support to help leaders explore the decision to adopt a model. They need to have a very clear understanding of the commitment that will be required during each stage of implementation, including resources, supports, and capacities."

—Lucille Eber, Model Demonstration Project Leader

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process can help developers gain the experience and information necessary to iteratively define and refine model components, as well as the documentation and products that will be needed for others to replicate the model.



The amount and type of information needed for replication will vary, depending on the scope and complexity of the model. Sometimes a model will involve practices that are highly aligned with existing programs in an organization or system, may be fully implemented in a relatively short time, involve a limited number of people, and require few changes in the infrastructures and systems needed to support its implementation. The decision to adopt such a model and the activities and supports needed to implement it may be fairly straightforward, accomplished fairly quickly, and require minimal replication documentation. Implementation of other models may be more complex and require substantial change at many levels, as in organization-wide or system-level initiatives. Deciding to undertake that effort and achieving full implementation may be accomplished only through careful planning that is organized in stages and implemented over multiple years. Typical stages of implementation include exploration and adoption,² preparation, initial implementation, full implementation, and sustained implementation (Fixsen et al., 2005). For complex models, replication materials will need to be more extensive and address the practices, supports, and related activities required across different stages of implementation (see Figure 1 for one approach to model replication).

Figure 1. An Approach to Model Replication

Lucille Eber, Statewide Director of the Illinois PBIS Network, was Co-Principal Investigator of a model demonstration project focused on tertiary behavior interventions within a schoolwide model of positive behavior supports. The demonstration project ended in 2010. She shared the strategies her team has used to help schools replicate the model.

"To support model replication, we have tried to create routines that mimic the effective processes that we learned during the model demonstration project. For example, we learned that it is critical for district and building leaders to have an understanding of the system supports that are necessary for successful implementation. Replication efforts, therefore, have focused on helping administrators through a process of assessing readiness, making a decision about model adoption, and building capacity for model implementation. Tools we have created to facilitate this process include self-guided readiness checklists, webinars for leaders in the model exploration and adoption stage, and a day-long accredited course for administrators.

We have created a variety of tools and products to support model replication, from checklists, protocols, and documents that can be downloaded from our website, to webinars and other web-based technical assistance, to in-person trainings, meetings, and technical assistance (TA). We have had to be creative in making sure training, tools, and TA are available distally to provide access for practitioners who cannot attend in-person trainings; however, we continue to provide in-person TA for complex components such as Tier 3 interventions that require practice and feedback to achieve fluency.

In planning for replication, it is important to frontload support to help leaders explore the decision to adopt a model. They need to have a very clear understanding of the commitment that will be required during each stage of implementation, including resources, supports, and capacities. The support and information provided up front will help them decide whether they have the capacity to go forward and create conditions for successful model replication."

² In the exploration and adoption stage, organizations assess the match between the intervention and the organization's needs to make a decision about implementing it (Fixsen et al., 2005).

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The absence of clear definitions of the core components can be a significant hindrance to high-quality implementation and successful replication efforts.

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Regardless of the model's breadth and complexity, there are some basic questions that potential and actual users will need answered, including:

- What is the model and how does it work?
- Who needs to be involved in delivering or supporting the model?
- What professional development is needed?
- What resources (e.g., staff, funds, space) are needed?
- How can progress be assessed?
- How can assessment data/feedback be used to strengthen implementation?

The sections below present further details on how model developers can help users answer these questions and make informed decisions about adopting the model and achieving high-quality implementation and improved outcomes for target populations and systems.

What is the model and how does it work?

Large-scale implementation studies in education (e.g., Desimone, 2002; Kurki, Boyle, & Aladjem, 2006) have shown that teachers and principals sometimes train for and implement an innovation without having sufficient information about how it is intended to work. This information is fundamental for potential adopters of an innovation or model in any organizational context or substantive area. Yet often the core components are not clearly defined at the outset. Reviews of documentation of evidence-based programs and practices suggest that very few programs provide sufficient information about the model components, practices, and activities that are essential for producing positive outcomes (Blase & Fixsen, 2013; Dane & Schneider, 1998). The absence of clear definitions of the core components can be a significant hindrance to high-quality implementation and successful replication efforts (Hall & Hord, 2011; Michie, Fixsen, Grimshaw, & Eccles, 2009).



Therefore, model developers will need to document the critical features of the model as a first step in preparing for implementation and later replication. Potential users will need a clear understanding of the following features of a model:

- The need or problem it addresses. Why was this model developed? What is the problem or need that it was designed to address, and who has that need/problem? Which specific aspects of the need/problem does the model address, and which aspects does it not address? How might implementation of the model fit with other approaches to addressing the need?
- **The model's approach to the need/problem.** How does the model address the need/problem? What theory guided the design and implementation of the model to address the need/problem? What evidence was collected to demonstrate that the model addressed the need/problem, and what conclusions can be drawn from it?



Model components. What are the key components of the model, and what purposes do they serve? What are the critical elements within each model component? Which components are essential to replication efforts to maintain the integrity of the model, and which components could be considered optional or might be adapted by users?



Model users. Who will use the model? Do users need to have specific qualifications (e.g., education, experience)? In which types of settings is the model intended to be used? Are formal partnerships or cooperative arrangements required for implementation? Are specific organizational conditions required for model implementation (e.g., population served, how services are delivered)?

Figure 2. Example Model Description

The Strategic Writing Program, developed by the Center for Research on Learning at the University of Kansas, was funded as a model demonstration project using tiered approaches to improve the writing proficiency of secondary school students. The project ended in 2013.

The Strategic Writing Program

The problem. Students in secondary schools can benefit from a tiered support system that focuses on mastery of critical academic skills (in this example, academic writing proficiency). The structure of secondary schools requires different solutions than those implemented in elementary school settings.

Approach to the problem. The Strategic Writing Program is included in the 9th grade English Language Arts (ELA) curriculum. The program incorporates a direct instruction, mastery approach focused on the technical skills of correct sentence, paragraph, and theme structure. Students are screened in 8th grade on writing proficiency relative to types of complete and correctly punctuated sentences and expository paragraph structure. Depending on student profiles at entry into 9th grade, ELA teachers provide core instruction with fidelity in sentence writing, and then emphasize paragraph and theme writing in both expository and narrative writing. Tier 2 supports are provided through differentiation in ELA classes, and Special Education or English Learner teachers provide Tier 3 as additional or separate instruction. Social studies, science, and math teachers support students in applying learned writing strategies and skills to writing within the various disciplines. Tenth grade ELA teachers continue to develop writing skills by requiring students to apply skills learned in 9th grade and focusing on the use of evidence and argumentation in writing.

Model components.

- 1. Curricular program in key writing skills (correct sentence structure and variety, correct punctuation, correct paragraph and theme structures for different types of writing), supplemented by strategies for differentiated instruction (Tier 2), and more intensive, individualized instructional sequence (Tier 3) for students who do not respond adequately to core and supplemental instruction.
- 2. Curriculum-based assessment system to determine student mastery of skills and teacher pacing of instruction.
- 3. Tier 3 considerations include a) benchmark performance levels to determine student mastery of curriculum, b) a communication system between teachers providing core and supportive instruction, and c) an administrative structure for moving students into and out of tiered support instruction.
- 4. Professional development, coaching, and ongoing feedback to teachers to maintain fidelity of instruction (in both quality and quantity of writing instruction, student practice opportunities, and student feedback on writing proficiency).



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The challenge in designing model replication materials is to determine what information and supports will be needed to help different types of users acquire the requisite knowledge, skills, and attitudes for successful implementation.

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An example model description from one of OSEP's model demonstration projects is presented in Figure 2. The level of detail depicted here would be appropriate to introduce potential users to the model; however, actual users will need much more information about the core features of the model and how they work to achieve outcomes, information that can be documented in a replication manual and other replication tools and products.



Who needs to be involved in delivering or supporting the model?

Addressing this question requires providing potential model adopters an understanding of the multiple players who are likely to be involved in replicating a model. These include both direct users—those whose actions in implementing the model are expected to contribute to improved outcomes for children or youth—and other individuals who will need to be involved in supporting model implementation (e.g., administrators, specialists, staff of community agencies, family members). The roles of volunteers, community representatives, and other nonpaid staff should also be considered. An example description of key roles and responsibilities for one model demonstration project's Response to Intervention (Rtl) component is presented in Figure 3 on the next page.

The players and their responsibilities may change as the stages of implementation proceed. For example, model developers may want to specify the roles and responsibilities of those involved in exploring and deciding whether to adopt the model, particularly for large-scale or systemwide programs that may require significant organizational attention, resources, and investment. Similarly, descriptions of the roles and responsibilities of those expected to support longterm sustainability of model practices and procedures might be included in replication materials.



What professional development (PD) will be needed?

Introducing new practices into organizations requires changes in the knowledge and skills, and often the attitudes, of direct users (e.g., teachers, service providers), as well as those expected to provide resources or support for implementation (e.g., administrators, support staff, parents). The challenge in designing model replication materials is to

determine what information and supports will be needed to help different types of users acquire the requisite knowledge, skills, and attitudes for successful implementation. In some cases, the changes required are straightforward, in which case materials for self-guided PD may be sufficient. Many model developers and change agents would agree, however, that to produce desired results, most change efforts require targeted PD and ongoing coaching to change adult behavior. When PD is needed, the model developer may be the source of the PD. Regardless of whether the materials can stand alone for selfguided PD or external PD is required, replication materials should communicate the extent of PD that is needed for users to develop the skills and knowledge necessary for implementation.

Figure 3. Example Description of Roles and Responsibilities for Model Implementation

Project ELITE, led by researchers at the University of Texas at Austin, is a model demonstration project using tiered (Rtl) approaches to improve reading and language outcomes for English language learners.



Each campus should designate an RTI Leadership Team whose members are responsible for implementing and monitoring their campus's RTI framework. Membership on such a team will vary from campus to campus and will depend on the personnel available at each campus. At a minimum, the RTI Leadership Team should include an administrator, the building testing coordinator (specifically to help with data collection and analysis), and a lead interventionist. Other possible members include lead general education teachers, other reading interventionists, and special education or dyslexia teachers.

RTI: Key Personnel's Roles & Responsibilities.

Campus Administrator RTI Leader Lead the campus's RTI program and process Designate other leaders to facilitate implementation and monitoring of the RTI framework Conduct regular data analysis meetings Deserve core and intervention instruction for fidelity of Lead all meetings related to RTI program and process Communicate with other cam leaders about RTI program an process Lead campus PD efforts rela- to RTI
implementation Support teachers through professional development (PD) Participate in ongoing PD
Building Testing CoordinatorAssessment and data coordinator• Oversee data collection related to screening, progress-monitoring, and outcome measures • Oversee data management • Provide data reports as needed by administrators and teachers• Schedule data collection and management activities • Provide data reports as needed by administrators and teachers
Reading Interventionist Lead interventionist Provide effective interventions to students Support administrators with of analysis Note: Support administration in the students Assess students Provide expertise in instruction implementing effective instruction Provide expertise in instruction Support administrators in monitoring effective instruction Support administrators in monitoring effective instruction Provide expertise in instruction Participate in ongoing PD Provide expertise in ongoing PD Provide expertise in instruction
General Education Teacher(s)Core instruction expertProvide effective instruction to studentsSupport administrators with o analysisAssess students Participate in ongoing PDProvide expertise in instruction content and delivery
Reading Interventionist Intervention expert • Provide effective instruction to students • Support administrators with or analysis • Assess students • Assess students • Provide expertise in instruction content and delivery
Special Education or Dyslexia TeacherExpert in reading instruction for struggling studentsProvide effective instruction to students• Support administrators with or analysisPyslexia Teacher• Provide effective instruction to students• Provide effective instruction to students• Provide effective instruction to or tudents

Taken from: Del Valle Independent School District (2013). *Response to intervention: Elementary reading, K-5 district handbook.* The PD decisionmaking equation involves identifying the critical elements from a larger information set that are absolutely required for successful model adoption and implementation, key individuals at each stage who must process and use this information, and appropriate vehicles for providing the needed information to the right individuals. Figure 4 provides additional considerations for developing PD resources and products.



Model developers should consider the PD materials, products, and supports needed for different audiences as implementation proceeds through each stage of implementation. For example, initial PD might consist of program overviews designed for different audiences during the exploration and adoption stage that helps create a basic understanding of model components, anticipated outcomes, timelines for implementation, internal and external resources required from initiation through sustainability, time commitments required for different audiences, and the extent and nature of assessment activities required to monitor implementation and evaluate changes in intended outcomes. Program

Figure 4. Considerations for Developing PD Resources to Support Model Replication

- What PD is needed for whom and when to:
 - Develop prerequisite knowledge/skills?
 - Help users ease into implementation and experience success?
 - Reinforce and build on initial skill building?
- What types of PD are needed (e.g., formal large-group PD, informal coaching, colleagueto-colleague collaboration, online/virtual PD) to enhance understanding and engagement of different audiences?
- How can evaluative feedback (e.g., fidelity data, student data, feedback from implementers) be used to refine PD content and approach?
- How can PD be sustained as new users come on board (e.g., resources to help sites develop on-site PD providers)?
- Where can model adopters obtain PD resources (e.g., from the model developer, other external providers, online or print training modules or materials)?

overviews also can be designed to help in creating possible visions of how and what the model might accomplish at the site and provide opportunities for discussion, problem solving, and stakeholder buy-in. Some model developers carefully define the types of learning experiences needed by potential users that must precede model implementation and the level of awareness and buyin that is required before model implementation begins. Materials supporting initial PD about the model and the demands that it will place on a site help set the stage for successful model implementation.

Once a model has been

adopted, the nature of the PD experiences required as implementation progresses should be articulated to implementers. It is important to identify the information that ALL stakeholders must know about the model, what information should be known by most stakeholders, and what information might be needed by only some stakeholders. Identifying the knowledge levels and how they may change as implementation proceeds will provide direction in designing PD materials. For example, if an element is judged to be critical for

The goal is to provide PD products and vehicles that will ensure user engagement, understanding, and interest in order to build a positive implementation culture.

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all users (e.g., aligning curriculum, instruction, and assessment in writing to the Common Core State Assessments), then inperson PD, colleague-to-colleague learning activities, media supports, written products, in-class coaching, facilitated work sessions, and modeling by experts might all be elements of PD that are developed for all users to ensure attainment of this implementation outcome. However, many implementers may need



implementation outcome. However, many implementers may need to go deeper and may have the interest and the need for additional information for successful implementation (e.g., implementation of writing across specific content areas). In this case, PD for all users may need to be supplemented by additional or different types of PD activities.

The reality of adult learning is that, regardless of the nature or quality of PD that is provided, different users will approach learning about the model in different ways and at different rates. A variety of PD vehicles should be considered, including implementation guidebooks, online resources, fact sheets, face-toface presentations, media clips, presentation slides, site visits to implementing sites, expert speakers, and focus groups or forums to enable discussions about the potential positive and negative effects of implementation at a site. The goal is to provide PD products and vehicles that will ensure user engagement, understanding, and interest in order to build a positive implementation culture.

It is also important to identify the expected outcomes of PD activities—the knowledge and skills participants should have as a result of their participation in the PD. Model developers are encouraged to establish benchmarks or criteria for the knowledge and skills that should be acquired by PD participants and provide assessment tools for measuring whether these benchmarks are met in the training session and sustained in practice.

What resources will be needed?

Potential model adopters need to understand the range and level of resources required for the model to function effectively in their setting. Different types of resources will be required as implementation proceeds. However, an overall estimate of the resources that will be needed and when they will be needed should be addressed in model replication materials. This information will help potential users make model adoption decisions and help actual adopters assemble the requisite resources.

Estimates of the expected internal and external costs may depend on the number of users of and/or participants in the model, demands for additional space and/or personnel or the realignment of them, whether the model needs to be integrated into existing organizational improvement and assessment initiatives, and resources needed for essential planning and collaboration, management, and evaluation. Costs of model implementation may be related to core instruction/service delivery, infrastructure, and systems support (see Figure 5 for an example approach to determining costs).

Core instruction/service delivery resources are those that are essential for implementing model practices and programs. These resources typically relate



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"Potential scaleup districts cannot make a decision about adopting the model without knowing the resources that will be required to adopt it."

—Robert Stodden, Model Demonstration Project Leader

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directly to delivering the model practices to children, youth, and/ or families and might include the initial and replacement costs for the following:

- Instruction/service delivery materials (e.g., instructional materials, user guides, textbooks, other curriculum materials).
- Model-specific software or technology (e.g., a model-developed or commercial progress monitoring system).
- Supplemental services, materials, and supplies (e.g., duplication, technology supplies, notebooks, general supplies, etc.).
- Other recommended resources and supplies needed by different users.

Infrastructure resources include those associated with model implementation that place specific demands on areas such as facilities, personnel, time for personnel learning and planning, and equipment. These types of resources might include the following:

- Physical space (e.g., classroom, meeting, office space configurations and capabilities).
- Staffing (e.g., instructional staff or service providers, administrators, support staff to implement and sustain the model).
- Professional development and/or ongoing coaching (e.g., costs for PD providers, time allocations for staff to attend PD, release time or overtime costs, time for staff to participate in ongoing coaching, travel costs).
- Furniture, technology, and equipment (e.g., computer hardware and software, Wi-Fi access, security for mobile technologies, lab furniture or equipment).

Figure 5. An Approach to Determining Costs of Model Implementation

Robert Stodden, University of Hawai'i at Manoa, was Principal Investigator of a model demonstration project on tiered approaches for improving 9th-grade students' writing proficiency. He shared his team's approach for determining the costs of professional development and technical assistance for model implementation.

"We have been interested in understanding the costs of implementation since the beginning of the project. Potential scale-up districts cannot make a decision about adopting the model without knowing the resources that will be required to adopt it. Professional development (PD) and ongoing coaching are critical for successful implementation of the model, so we wanted to know the costs of these activities. We tracked the hours our staff spent at the schools across 4 categories: primary tasks, secondary tasks, related tasks, and miscellaneous tasks. We categorized costs in this way, because we wanted potential adopters to understand the costs of the components of PD that are essential for successful implementation (i.e., primary tasks) and those that are not essential. We can flex or eliminate nonessential tasks depending on the needs, resources, and priorities of the host district. For example, we can use technology to eliminate some of the secondary tasks (e.g., by providing online training instead of PD staff members traveling to the sites). Tracking costs has really helped us communicate the requirements of model implementation with districts."



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Model users need ways of measuring progress and an understanding of how they can use the resulting data to determine their readiness to move to the next implementation stage. **Systems resources** will be needed to support implementers in communicating, problem solving, collaborating, and developing and maintaining new knowledge and skills. These types of resources might include the following:



- Scheduling (e.g., use of existing instructional or service delivery time or reorganizing of schedules).
- Assessment/data management system (e.g., collection, storage, analysis, and reporting of model-related data).
- Communication and collaboration (e.g., meetings/systems for problem solving and sharing information, review of evaluative data, collaborative decisionmaking about child/youth progress, communication and collaboration with parents and students).
- Supervision and management of model components (e.g., project and timeline management, staff oversight).

How can progress be assessed?

Research has repeatedly demonstrated that intervention fidelity is critical for an intervention to achieve its intended benefits (Derzon, Sale, Springer, & Brounstein, 2005; Noell, Gresham, & Gansle, 2002). Therefore, model users should be encouraged to track their progress toward implementing with fidelity over time. In support of that effort, developers should consider identifying the benchmarks that could be used to judge whether or not implementation is proceeding satisfactorily. Further, model users need ways of measuring progress and an understanding of how they can use the resulting data to determine their readiness to move to the next implementation stage.

Assessing readiness to adopt a model. To judge whether an organization is ready to commit the resources and the energy of some or all of its personnel to a model, a model developer could suggest the criteria for decisionmakers to use to assess whether or not the organization is likely to embrace the challenge of implementation and support commitment of the necessary resources (Figure 6).

Figure 6. Example Criteria to Assess Readiness to Adopt a School-Based Model

Does the school staff exhibit:

- Knowledge of the evidence supporting the effectiveness of the model?
- An understanding of how the model would fit with other initiatives and with state, district, and school priorities?
- An understanding of how infrastructure and district, school, and classroom practices will need to change?
- An understanding of the types of activities that might be required for all teachers, for most teachers, and for some teachers and who will be affected?
- A strong commitment to investing the requisite time and resources to this vision and to the success of the initiative?*

*For example, promulgators of positive behavior interventions and support (PBIS) require that schools document that 80% of staff members agree to support PBIS implementation before training in PBIS will be provided (Simonsen, Sugai, & Negron, 2008).

Assessing progress in preparation stage. In this implementation stage, an organization works to acquire or repurpose the resources needed to implement the adopted model. Criteria for assessing progress in this stage relate to whether or not the infrastructures, systems, and supports that are needed at all levels to begin implementation are in



place. The developer's task is to identify the elements that are essential to begin implementation, with an appreciation for the need for organizations to grow structures over time that can be aligned with available resources. Clear documentation of core model components, as described earlier, is fundamental to helping model users determine whether they are sufficiently prepared for implementation. In addition, a developer-created checklist indicating what must be in place (e.g., trained staff, instructional materials) before implementation begins would be useful for model implementers, because it would specify criteria that, when met, would give them confidence in moving into implementation.

Assessing initial implementation. Criteria for determining that the goals of this early implementation stage have been achieved involve confirming that initial implementation hurdles have been overcome and staff members have achieved some level of fluency with and confidence in their implementation of the model. These criteria might focus on whether or not the following are in place partially, in place, or not in place:

- Qualified, trained staff for all implementation roles.
- PD and coaching plans, schedules, and accountability procedures.
- Procedures for performance assessment and recognition of implementing staff.
- Data collection, analysis, and reporting procedures to track fidelity and outcomes.
- Policies and procedures to support the new way of work.
- Communication mechanisms to provide feedback up (e.g., from school to district) and transmit success stories out (e.g., to the school, district, and community).

Full implementation has occurred when a model and its related supports,

procedures, resources, and infrastructure have become "business as usual" in the implementing organization. Specifically, it has been suggested that "full implementation of an innovation is reached when at least 50% of the currently employed practitioners simultaneously perform their new functions acceptably, that is, when measured by criteria that denote fidelity to the original innovation in their replication" (Fixsen, Naoom, Blase, & Wallace, 2007, p. 6). Assessing whether full implementation has been achieved generally focuses on two factors: "The essential



outcome of implementation done well is consistently high fidelity performance by practitioners. The essential outcome of high fidelity performance is consistently desirable outcomes" for the intended beneficiaries of the model (State Implementation and Scaling-up of Evidence-based Practices, 2011, p. 4). Thus,

sustained high fidelity and improved/improving child outcomes (e.g., higher test scores, fewer discipline referrals, improved language acquisition among young children) are crucial criteria for determining when full implementation has been achieved. Model developers would encourage ongoing fidelity assessment by adopters by providing strategies and tools for conducting



such assessments of the core model components at a minimum (see Figure 7 for example fidelity measures).

How can assessment data/feedback be used to address implementation challenges?

When an implementing organization has assessed its progress at any stage of implementation, staff may find that some criteria for moving to the next stage have not been met. Model developers may be able to provide suggestions about what to do in such cases, such as increasing feedback related to meeting the troublesome criterion, providing more information or PD, and developing problem-solving teams to generate ideas for improving performance on the criterion. Particularly important is that implementers have established systems for generating data that enable them to monitor progress frequently and take actions to correct problems before they become significant. These typically are the types of supports that are established during the preparation stage of model implementation; their importance will be increasingly apparent as model users move through later stages of implementation.

Model developers may also want to provide suggestions for addressing challenges by documenting those experienced during the model demonstration project and how they were or could be addressed. Information about how the model can be adapted to address implementation challenges or local conditions without jeopardizing the integrity of the model could also help model users.

Planning for Dissemination of the Model

Research suggests that effective dissemination requires careful planning. Simply generating manuals, tools, and other products and making them available does not guarantee that the intended users will know about them, want them, use them, or find them useful. If the goal is to provide information that will build capacities and ultimately improve outcomes, dissemination activities should address "access, understandability, and utilization" (National Dissemination Center for Children with Disabilities, 2009, p. 2). Addressing these issues early will support development of the primary dissemination products, identification of the variety of resources needed to encourage and support the effective use of the products (e.g., virtual or in-person technical assistance, communities of practice, supplementary tools and resources), and selection of appropriate dissemination formats and venues.

The first step in promoting access, understandability, and utilization is identifying and understanding the target audience. Questions to consider about the target audience are presented below, followed by considerations for formats of dissemination products, creating a dissemination plan, and evaluating the results of dissemination efforts.



Figure 7. Example Assessment of Intervention Fidelity

This graphic displays a section of a tool developed by Indiana University's Center on Education & Lifelong Learning/Equity Project for assessing intervention fidelity of PBIS Indiana, a tiered approach to behavioral interventions in schools. The graphic shows 5 of 10 criteria for the implementation of data-based decision making, which is 1 of 9 model components included in the full fidelity rubric.

			ul SIBA	diana Rubric			
Component	Criteria	Evidence for Portfolio	4 Exemplary	3 Proficient	2 Emerging	1 Novice	Non- negotiable
Data-Based Decision Making	Data collection system in place to track ODRs and consequences, and is able to disaggregate data	Submission of disaggregated data system print outs	Point person for data entry exists, reports are early generated with graphs and tables, data is disaggregated, data consistently entered	Reports are generated, but some information is missing (i.e., 1 of the big 5, not disaggregated, or summary reports are only generated in table format); data is consistently entered	Data is consistently entered, but reports are not generated	Data is not consistently entered, data system is not able to produce reports or reports are not generated	
	ODR form exists, is consistently used, and contains all necessary data collection components	Submission of ODR form, SET #E1	ODR form consistently used and contains all necessary components as indicated on the SET	ODR form is consistently used but missing some components from the SET	ODR form inconsistently used and is missing some components from the SET	Minimal, or no, use of ODR forms	
	ODR data summarized by big 5	Submission of critical summary (disaggregated)	All 5 areas are summarized	Data summarized by 3-4 areas	Data summarized by 1-2 areas	No summarized data available	
	Academic, ODR (i.e., Big 5), and consequence data disaggregated by ethnicity, FRL, disability, and gender to determine if all groups are equally represented	Submission of critical summary (disaggregated)	Data disaggregated for all 4 subgroups and in each of the big 5 reports	Data disaggregated for 3 subgroups	Data disaggregated by 1-2 subgroups	No data disaggregated available	
	Hypotheses around data include considerations of considerations of culture and school practices. There is evidence to support the hypothesis.	Site visit notes Hypothesis worksheet completed and submitted	Hypothesizing around data occurs regularly and includes consideration of cutture and school practices by all team members, with evidence to support hypotheses	Hypotheses focus on culture and school practices by some, but not all, team members. There is evidence to support hypothesis	Hypotheses focus on students and family factors with little consideration of cutture and school practices. Little evidence to support hypothesis.	Hypothesizing does not take place, or if present, is defensive	×
Note: ODR = Office di Source: PBIS Indiana,	scipline referral . Center on Education &	Lifelong Learning/Equity	y Project, Indiana University, 20	110.			



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Key Dissemination Questions

Who is the audience?

How do they access information?

What

information, resources, and supports do they need to implement or support the model successfully? Identifying the target audience

Effective dissemination strategies "are oriented toward the needs of the user, incorporating the types and levels of information needed into the forms and language preferred by the user" (National Center for the Dissemination of Disability Research, 2001). Therefore, understanding whom a manual and other dissemination products are meant to reach is critical. Consider the following questions:

- Who is the audience? It is important to consider the needs, priorities, common characteristics, and contexts of the intended audiences to produce products and information that are relevant, understandable, and useful to them. Developers are encouraged to take into account not only potential implementers of the model, but also support staff, administrators, parents, community members, and others whose support or involvement would facilitate implementation. Dissemination efforts may need to be multifaceted to address the needs and characteristics of different types of audiences.
- **How do they access information?** Answers to this question will help determine the optimal formats of dissemination products (e.g., print, web-based text, online videos, audio files) and potential dissemination partners (e.g., professional associations, user groups, other organizations familiar to the users), as well as how to promote awareness of the model and dissemination products (e.g., through conferences, professional journals, social media, websites).
- What information, resources, and supports do they need to implement or support the model successfully? What kinds of tools and resources are potential users likely to already have that will support the model? What baseline knowledge do various types of users and supporters most likely have? In addition to providing information about implementing the model, effective dissemination efforts need to "include social components that engage, motivate, and support the user in applying the info [sic]" (National Dissemination Center for Children with Disabilities, 2009, p. 1). What kinds of supports would engage and motivate different types of users?

Selecting dissemination formats

The appropriate formats and vehicles for communicating information about the model will depend on the intended users, the type of information to be communicated, and resources available to produce and distribute dissemination materials. Options range from social media posts to scholarly articles and reports, videos to MP3 audio formats, single-page flyers and briefs to comprehensive print or electronic implementation manuals and resources, and more. A replication manual is one vehicle for communicating this information; a variety of other support tools (e.g., web videos demonstrating model procedures, checklists to assess fidelity, PD materials) can augment a manual in supporting implementation.



High-quality dissemination products have formats that are:

 Accessible. Knowing how target audiences access and take in information is key to selecting appropriate formats for dissemination. Considering principles of universal design for learning (e.g., multiple ways or formats of presenting information, multiple means of engaging with the information) increases accessibility for



engaging with the information) increases accessibility for all potential users, including those with disabilities (CAST, 2012).

Engaging. Visual aids such as checklists, flowcharts, tables, diagrams, and animation help capture the user's attention and enhance learning. Engagement also can be enhanced by the use of real-world examples that are familiar to users. Electronic formats provide opportunities for users to actively interact with the materials

(e.g., by completing surveys or selfassessments, using templates and other tools, or selecting links to obtain additional information).

 Understandable. Using language and a communication style that are appropriate for the audience (e.g., academic or researchbased language, language to accommodate low literacy levels, profession-based terms and examples) promotes use. The purpose of



the dissemination product will also guide decisions about language and content (e.g., whether the purpose is to promote awareness among lay persons or action by practitioners).

Creating and executing a dissemination plan

A written plan that includes dissemination goals, strategies, products, audiences, and vehicles can help model developers be intentional about getting information about the model into the hands of potential users. The National Dissemination Center for Children with Disabilities created *Build Your Dissemination Plan: A Workbook* to help audiences such as model developers create a useful dissemination plan (see Appendix B for more information).

Understanding the resources available and those needed to produce and maintain various products will help guide decisions about dissemination. What resources are available within the developer's organization? Who will be responsible for developing, producing, and/or maintaining products? When the model demonstration period is over, will there be resources to maintain a website, communicate with potential users, or provide technical assistance for users?

Evaluating dissemination results

Assuming that the goal of dissemination is to deliver products to individuals, organizations, and systems to increase capacities and improve outcomes, how will it be evident that this goal has been reached? Are the products being accessed? Are they being used? Do the users find them helpful? A comprehensive dissemination plan builds in mechanisms for answering these questions (e.g., a count of website downloads and requests for information,

satisfaction surveys or focus groups of users). Demonstrated success in dissemination and model replication can help leverage additional resources from interested parties.



Next Steps in Planning for Model Replication and Dissemination

The goal of planning for model replication and dissemination is to determine the information, tools, and supports potential users need to successfully launch, implement, and sustain a model that data suggest is efficacious in improving specific outcomes. The starting point for planning for dissemination and replication will differ with the complexity of the model, the stage of model development and demonstration, and the developer's priorities, among other factors. Starting this planning early in a model demonstration project will help model developers identify, evaluate, and revise plans and products and will lead to more thoughtful and tested approaches than waiting until the final phase of model demonstration.

Additional resources for developing replication and dissemination materials are presented in the appendices. Appendix A includes an example table of contents for a model replication manual. Manual developers may want to condense or expand the level of detail according to their needs. Appendix B provides information on additional resources, including links to example replication manuals and other useful resources and websites. These tools are presented with the recognition that each model is unique, and goals for model dissemination and replication vary widely. This brief, as well as the tools and resources cited, are intended to encourage thoughtful consideration of how to share successful practices, interventions, and programs with others who need and want to experience similar successes.



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Appendix A Illustrative Replication Manual Table of Contents



1. Introduction

Purpose of the Manual

[How the manual intends to help the user, a general description of the audience, how to use the manual]

Model Description

The need it addresses

[Describe the problem the model will address and related problems/needs]

How it works

[Logic model or theory of change showing how the model leads to improved outcomes, key model components, how the pieces work together]

History and background

[When model was developed, funding sources and partners in model development]

Research evidence supporting the model

[Research results from model demonstration project (including social validity), research/literature on related models, interventions, or practices]

Intended users

[Direct users (e.g., teachers, early childhood education providers), target population (e.g., children, youth, families), and settings (e.g., elementary schools)]

2. Is the Model Right for You?

Assembling a Team

[Purpose of the team (i.e., exploring the model and deciding whether to adopt it), likely participants—e.g., administrators, staff, other providers, parents]

Assessing Need and Model Fit

[Describe kinds of data that help decisionmaking related to model adoption and how it fits with other initiatives; various strategies for gathering data related to need, attitudes of direct users, costs/benefits of model adoption; provide measurement tools]

Communicating the Decision to Adopt the Model

[How decisions could be communicated to various stakeholders to increase buy-in and support]

3. Getting Ready for Implementation

Developing an Action Plan

Who does what

[Indicate who might need to be involved in action planning; describe their roles and responsibilities]

Resources needed/available

[What resources and supports are likely to be needed during each stage of implementation, including instructional/service provision materials and technology, infrastructure supports, and systems supports]

Timeline

[Provide an example timeline for completing the "getting ready" stage]

Illustrative Replication Manual Table of Contents (continued)



Identifying Key People and Building Support

[List likely key players, such as administrators, program leaders, community leaders; describe strategies for soliciting support; example parent/community letters explaining the intervention]

Assembling Staff

Roles and responsibilities

[Describe the number and kinds of staff needed, outline the essential qualifications and skills; outline the roles and responsibilities of those involved and lines of supervision/ reporting]

Existing staff and new hire considerations

[Which roles are likely to have staff available and which may require new hires?]

Training Needs and Plan

Contents

[Critical PD components; identify the information that all key stakeholders must know to understand the model]

Delivery approaches

[Describe training vehicles (e.g., group training sessions, ongoing individual coaching, professional learning communities) and rationale; evidence supporting their effectiveness]

Number and timing of training sessions

[How much time will be devoted to PD, in what segments, and for how long]

Materials and tools

[Training materials, guidebooks, web resources, fact sheets, presentations, media clips, etc.]

Staffing

[Who provides components of PD (e.g., the model developer, certified PD instructor, implementer coaches/trainers?]

Taking Baseline Measures of Processes and Outcomes

Procedures

[Which baseline factors should be measured so that progress can be assessed, including measures of organizational/systems factors (to measure systems outcomes), staff knowledge and skills, and baseline measures of targeted child/youth/family outcomes? Provide possible measurement strategies, their pros and cons, and estimates of effort required]

Tools

[Provide measurement tools or indicate tools available and their sources]

How You Will Know You Are Ready?

Criteria for assessing readiness for implementation

[Describe the criteria for readiness, including staff skills and attitudes, resources and supports that need to be in place]

Data needs

[What data should be collected, describe the variables that are most important to assess readiness; provide measurement tools]

What to do if you are not ready

[List possible steps to take to meet readiness criteria]

Illustrative Replication Manual Table of Contents (continued)

4. Implementation

Selecting the Population

Procedures

[Identify the intended population of participants and procedures for recruitment]

Tools and materials

[Provide example recruitment letters, consent forms (if needed), suggestions for how potential participants can get further information]

Getting Feedback on Training and Coaching

Strategies

[Identify methods for obtaining feedback from participants]

Tools

[Provide example end-of-session surveys, rating forms, protocols for focus groups/ interviews/surveys for obtaining feedback, observation scoring forms]

Analyzing and using the data

[Describe how to use data to update/better target PD and coaching plans]

Measuring Fidelity

Procedures

[Discuss importance of fidelity; identify steps and timing for assessing fidelity; identify who is involved in fidelity checks]

Tools

[Provide fidelity checklists, other tools]

Analyzing and using the data

[Describe how to use data for formative evaluation, intensive PD efforts, and model improvements; discuss factors that may impede fidelity and how to avoid them]

Measuring Outcomes

Procedures

[Identify intended outcomes at organizational/systems, staff, child/family level; describe protocols for measurement]

Tools

[Suggest or provide evaluation/measurement tools]

Analyzing and using the data

[Describe potential analysis strategies and formats for reporting; indicate how to use outcome data to inform model delivery decisions]

Sharing data

[Identify stakeholder groups with which different kinds of data will be shared, such as students, parents, and staff]

5. Maintenance and Sustainability

Maintaining Skilled Staff

New-hire training

[Describe new-hire PD and evaluation of their readiness for implementation]

Ongoing coaching

[Describe what ongoing coaching will look like in subsequent years]



Illustrative Replication Manual Table of Contents (concluded)

Model Adaptations



Model components that should and should not be

adapted

[List flexible components; describe how to adapt components while maintaining the integrity of the model; list essential components that are off limits to adaptation]

Example adaptations

[Provide examples of how the model can be and/or has been successfully adapted]

Building Visibility, Public Awareness, and Community Support

[Describe potential strategies for using outcome data and participant/implementer testimonials to build visibility, awareness, and support for sustainability and spread]

Appendices

Appendix B Model Replication and Dissemination Tools and Resources



Table B-1. Model Replication and Dissemination Toolsand Resources

Example Model Replication Manuals		
Text-to-Speech (TtS) and Accessible Instructional Materials (AIM): An Implementation Guide for Use of TtS and AIM in Secondary Classrooms	Developed to support the use of text-to- speech and accessible instructional materials as a compensatory strategy for students with learning needs at the secondary level (National Center on Accessible Instructional Materials at CAST, Inc., 2010).	
http://aim.cast.org/sites/aim.cast.org/files/AIMIm	plementationGuide6.28.10.pdf	
Play Time/Social Time: Organizing Your Classroom to Build Interaction Skills	A curriculum developed by the Vanderbilt- Minnesota Social Interaction Project that uses children's natural inclination to play to improve the social interaction skills and behaviors of young children with disabilities (Odom, et al., 1997). Available from the University of Minnesota Institute on Community Integration (see link below).	
http://ici.umn.edu/index.php?products/view/12		
Safe and Sound: An Educational Leader's Guide to Evidence-Based Social and Emotional Learning (SEL) Programs	Developed by the Collaborative for Academic, Social, and Emotional Learning (CASEL) to help educational leaders select from among a number of evidence-based SEL programs highly rated by CASEL and implement them effectively (Collaborative for Academic, Social, and Emotional Learning, 2003).	
http://casel.org/wp-content/uploads/1A_SafeSound-rev-21.pdf		
A Guide to the Implementation of the WHO Multimodel Hand Hygiene Improvement Strategy	Developed by the World Health Organization (WHO) Patient Safety team to support implementation of the WHO Multimodal Hand Hygiene Improvement Strategy in order to improve hand hygiene practices among health care workers throughout the world (WHO, 2009).	
http://www.who.int/gpsc/5may/Guide_to_Implementation.pdf		
Classroom Assessment Scoring System (CLASS) Implementation Guide: Measuring and Improving Classroom Interactions in Early Childhood Settings	Developed to support the use of CLASS by early childhood educators who seek to understand the nature of teacher-child interactions in the early childhood education setting (Hamre, Goffin, & Kraft, 2009).	
http://www.teachstone.org/wp-content/uploads/2010/06/CLASSImplementationGuide.pdf		

Table B-1. Model Replication and Dissemination Toolsand Resources (continued)



Other Model Replication	on Resources and Tools
Logic model resources	A number of resources on developing logic models can be found on the CDC's website under "Manuals/Assistance with Specific Evaluation Steps - Logic Models" at the first website listed below. Video presentations by Courtney Brown, Ph.D., on developing a logic model are available at the second link (or see Brown, n.d.).
http://www.cdc.gov/eval/resources/ http://www.tadnet.org/pages/589	
Communication Planning for Sustainability and the 8-Step Communication Planning Model	Using an 8-step Communication Planning Model, this resource explains the importance of communication in the process of obtaining and maintaining sustainability. It describes the various ways grant sites define sustainability and provides the 8-step Communication model as a tool to achieve sustainability.
http://www.promoteprevent.org/sites/www.promo planning_for_sustainability.pdf	teprevent.org/files/resources/communication_
National Dissemination Center for Children with Disabilities (NICHCY),legacy resources	This legacy webpage includes many of the tipsheets and tools for effective disseminatoin that were developed by NICHCY (the National Dissemination Center for Children with Disabilities), including <i>Writing for the Web</i> and <i>Build Your Dissemination Plan: A Workbook</i> .
http://www.parentcenterhub.org/repository/dissem-tools/#plan	
National Implementation Research Network (NIRN)	NIRN's mission is "to contribute to the best practices and science of implementation, organization change, and system reinvention to improve outcomes across the spectrum of human services" (from the home page of NIRN website). The website has links to many resources related to documenting model processes and components.
http://nirn.fpg.unc.edu/	
State Implementation & Scaling-up of Evidence-based Practices (SISEP) Center	SISEP Center is a program of the Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill and NIRN (see above). The website has links to documents and videos related to replicating or scaling up evidence-based practices and models.
http://sisep.fpg.unc.edu/	
The IRIS Center (example professional development modules)	This OSEP-funded center provides free web- based training modules and other resources for college faculty and professional development providers to help move evidence-based practices for students with disabilities from research to practice.
http://iris.peabody.vanderbilt.edu/index.html	

Table B-1. Model Replication and Dissemination Toolsand Resources (concluded)



Disseminat	ion Resources	
OSEP's Technical Assistance and Dissemination Network (TA&D)	In OSEP's TA&D Network are more than 40 national centers providing information and technical assistance on topics related to improving outcomes for children with disabilities.	
http://www.tadnet.org/		
National Dissemination Center for Children with Disabilities	The National Dissemination Center for Children with Disabilities was funded from 2008 to 2014 to offer information and tools on dissemination. Many of their dissemination resources are still available through the Center for Parent Information and Resources	
http://www.parentcenterhub.org/?s=dissemination		
National Center for the Dissemination of Disability Research (NCDDR) NATIONAL CENTER FOR THE DISSEMINATION OF DISABILITY RESEARCH Advancing Research, Improving Education SEDIC		
http://www.ncddr.org/		

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