Preparing for Model Demonstration Implementation

April 2013

Debra Shaver
Mary Wagner
Overview of the Model Demonstration Coordination Center

Beginning as early as 1970 and continuing through the reauthorization of IDEA 2004, Congress has authorized the U.S. Department of Education’s Office of Special Education Programs (OSEP) to conduct model demonstrations in early intervention and special education to improve results for children and youth with disabilities [Sec. 661 (a)]. The purpose of model demonstration projects (MDPs) is to develop new practice, procedure, or program models on the basis of theory and/or evidence-based research. Each project then implements its model in typical settings, assesses impacts, and, if the model is associated with benefits, may go on to disseminate it or scale it up. Since 2005, OSEP has funded eight cohorts of MDPs, each focused on a single new and promising (or perhaps poorly understood or implemented) practice, procedure, or program that is deemed to have high potential for improving child outcomes.

To better inform OSEP’s model demonstration program, SRI International was awarded contracts in 2005 and 2010 to collect consistent data across MDPs—both within each cohort and across cohorts over multiple years and topic areas. The Model Demonstration Coordination Center (MDCC) works with each cohort to establish consistent design elements such as sample definition and selection, data collection methods and timing, and instrumentation; and for some cohorts, MDCC staff members also synthesize cross-MDP data. Comparing and contrasting implementation experiences within and across cohorts enables MDCC to distill from MDP data factors that have hindered and those that have promoted full implementation of their models. With this information, MDCC helps OSEP better understand what makes an effective model demonstration.

Contact Information

Mary Wagner, MDCC Principal Investigator
SRI International
mary.wagner@sri.com

Debra Shaver, MDCC Project Director
SRI International
debra.shaver@sri.com

Patricia Gonzalez, Project Officer
Office of Special Education Programs
U.S. Department of Education
Patricia.Gonzalez@ed.gov

MDCC Website: http://mdcc.sri.com/

The Model Demonstration Coordination Center has been funded with Federal funds from the U.S. Department of Education, Office of Special Education Programs, under contract number ED-CFO-10-A-0133. The content of this publication does not necessarily reflect the views or policies of the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.
Contents

Introduction .......................................................................................................................... 1
Defining the Preparation Stage ..................................................................................... 3
Reflections by MDP Leaders on Preparing for Implementation ....................... 4
 Building Relationships .................................................................................................. 4
 Understanding Site Conditions, Priorities, and Needs ......................................... 5
 Building the Capacity of Model Implementers ....................................................... 7
 Building the Organizational Capacity of Sites ...................................................... 9
 Building MDP Team Capacity .................................................................................... 10
 Conclusions .................................................................................................................. 11
 References .................................................................................................................... 12
Preparing for Model Demonstration Implementation

Introduction

The field of education has experienced growing interest in evidence-based practices to improve outcomes for children and youth. Large federal investments have supported the identification of educational practices and programs with rigorous scientific evidence demonstrating positive effects. There is a gap, however, between identifying effective practices and successfully implementing them and replicating effects in real-world settings (Cook & Odom, 2013; Domitrovich et al., 2008; Fixsen, Naom, Blase, Friedman, & Wallace, 2005; Taylor, Nelson, & Adelman, 1999). Implementing promising or evidence-based practices in schools and other organizations involves changing the attitudes, beliefs, and behaviors of individual practitioners and support personnel, shifting organizational structures and cultures, and sometimes reforming systems. Even under supportive conditions, contextual factors and outside influences can thwart implementation efforts and diminish results.

Model demonstration projects (MDPs) provide a valuable opportunity to test promising practices and programs in real-world settings, and through its Model Demonstration Coordination Center (MDCC), the U.S. Department of Education’s Office of Special Education Programs (OSEP) has a unique opportunity to learn about the factors that promote or hinder implementation of evidence-based practices across a range of interventions, populations, and settings.

MDCC’s work is guided by literature from the fields of implementation science, organizational change, and diffusion of innovations (e.g., Adelman & Taylor, 2003; Fixsen et al., 2005; Rogers, 2003; Weiner, 2009), which suggests that the changes required for successful and sustained implementation emerge over time. For example, research on school change indicates that adopting new practices or programs takes a significant amount of time and requires a range of conditions and supports (e.g., Fullan, 2007; Hall & Hord, 2011). Much of this research focuses on the change process of organizations independently choosing to adopt new practices or programs. MDPs, however, typically do not originate as part of an organization’s natural improvement process; rather, they are initiated by an external entity (i.e., the MDP grantee) looking to evaluate the implementation of a specified set of practices in multiple natural settings within a time period dictated by the MDP funding source. Therefore, the motivation for change, as well as the change processes and timeline, may be different for MDPs than for organizations independently opting to adopt an innovative practice or program.

Nonetheless, establishing conditions for successful model demonstration implementation typically evolves through multiple stages. We identify 6 stages of MDPs (Figure 1): initiating collaboration with model demonstration sites, preparing for implementation, initial implementation, full implementation, sustained implementation, and dissemination. MDP teams work with host
organizations (sites) to create conditions for success at each stage. In the first stage, MDP leaders look for and secure the commitment of sites where there is a reasonable chance of implementation success. A previous MDCC brief\textsuperscript{1} presented information from OSEP-funded MDPs about assessing site conditions for factors that may affect model implementation, such as administrative support, buy-in among implementers, and model compatibility with the site, among other factors (Shaver, Wagner, & Lenz, 2011). In addition to providing valuable information for site selection, initial site assessments help MDPs tailor their capacity-building activities to the strengths and needs of the selected sites.

The current brief addresses the second stage, in which MDPs prepare for initial implementation. The goal of this stage is to build the capacity of individual implementers as well as the organizations or systems in which they work to support implementation and optimize conditions for success. Much of the implementation literature highlights the importance of preparation in achieving high-quality implementation and ultimately improved outcomes for the target population. As noted by one research team, “Many implementation efforts fail because someone underestimated the scope or importance of preparation” (Barton & Krause, 1985, p. 103).

The purpose of this brief is to help future MDPs and others successfully prepare for implementation by sharing the reflections of leaders from OSEP-funded MDPs about their experiences in the preparation stage. MDCC staff gathered information from five cohorts of MDPs that were in different stages of implementation, from one cohort that was planning for but had not begun implementation, to cohorts that had completed several years of implementation, to a cohort that had completed implementation and conducted a follow-up study on model sustainability. Across the five cohorts, 14 MDPs worked in about 50 sites. Information for this brief came from two primary sources: qualitative

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Stages_of_Model_Demonstration_Projects}
\caption{Stages of Model Demonstration Projects}
\end{figure}

\textsuperscript{1} The MDCC brief, Assessing Sites for Model Demonstration: Lessons Learned from OSEP Grantees is available at \url{http://mdcc.sri.com/prod_serv.html}
templates completed by MDPs in all five cohorts about their implementation experiences, including their experiences during the preparation phase, and discussions held in the summer of 2012 with leaders of MDPs in three cohorts. MDPs focused on a variety of interventions and implementation settings, from early intervention programs to elementary and secondary schools were represented.

This brief begins with the MDP leaders’ thoughts on how the preparation stage is defined, followed by their insights into how to use this stage to effectively prepare for model demonstration implementation.

**Defining the Preparation Stage**

The timeline and activities required for the preparation stage are likely to vary, depending on several factors. First, the readiness of selected sites to implement a new program can vary widely, with implications for the length of time needed for preparatory activities. Furthermore, factors related to the model itself such as its state of development and complexity may dictate the preparation timeline and activities. Finally, the 3- or 4-year life span of OSEP-funded MDPs requires a fairly rapid implementation schedule, which may limit time for preparation. Given these likely variations, we asked MDP leaders how they defined this phase.

Many respondents commented on the continual nature of MDP preparation. When asked to define the time period for the preparation stage, one MDP principal investigator (PI) responded that preparing for implementation “... was a work in progress. The first year we were still learning to work with each other, and we were still developing the model.” Other MDP leaders agreed that preparing for implementation is an ongoing process, especially during the first year of implementation.

Leaders of MDPs in later stages of implementation noted that implementation stages are not necessarily linear. Even when full implementation is reached, activities associated with the preparation stage may need to be repeated. For example, high staff turnover may require offering professional development to new staff members to build the implementation skills that other personnel had already acquired. One MDP leader concluded that it is important to understand “what it really takes to get school personnel to commit, recommit, and recommit again to making organizational changes and developing new sets of skills.” The leader of another MDP posited that helping sites develop the capacities for model implementation begins at the site selection stage and continues through full implementation.

For the purpose of this brief, however, MDP leaders were asked to reflect on the time between the selection and commitment of partnering sites and the launching of model implementation. These leaders asserted that the suggested strategies and activities benefit implementation at all stages.
Reflections by MDP Leaders on Preparing for Implementation

The reflections of MDP leaders on the preparation stage of implementation address five primary objectives:

- Building relationships
- Understanding site conditions, priorities, and needs
- Building the capacity of model implementers
- Building the organizational capacity of sites
- Building MDP team capacity.

Building Relationships

Most MDP leaders recognized the importance of building and nurturing relationships with stakeholders in their implementation sites. As one MDP PI stated, “Relationships are key” in laying the groundwork for successful model implementation. The goal is to build a foundation of trust between members of the MDP team and site personnel. For some MDPs, this foundation had already been established through prior collaborations. In contrast, MDP staff working in new sites had to begin at the ground level to build trust. Regardless of the history with their sites, MDP leaders used such intentional relationship-building strategies as being present on site, developing relationships with organizational leaders and those directly involved in model implementation, and demonstrating respect for the skills, experience, and perspectives of site personnel.

Conducting site visits was frequently identified as a valuable way to develop relationships and understand conditions at the sites. In addition to MDP staff providing information about their model and answering questions, listening to site personnel was described as a very important relationship-building strategy by a number of MDP leaders. One MDP PI reported that “interviewing people and just talking to them about their professional lives as teachers” helped the MDP team develop a rapport with them. Her team members asked such questions as, “What do you like about your job?” “What are the difficulties?” and “What are your hopes and fears regarding participating in a project like this?” Members of another MDP team attended school events such as open houses, parent meetings, and school competitions “to be a presence and provide support” as they worked on building relationships within the schools.

Several MDP staff members highlighted the importance of building relationships with leaders. The PI of an MDP that had completed its project observed that garnering the support of high-level leaders early on was an important contributor to successful and sustained implementation in several sites. Developing these relationships from the beginning increased the project’s
visibility and made it easier to align the project with other high-priority local initiatives. Another MDP leader observed that nurturing relationships with “natural leaders” among those who would be implementing the model was also beneficial. Her team looked for those leaders and got them on board with the project early. She stated, “When others see them [the leaders] beginning to implement and being enthusiastic, they will see that it [changing practices] can be done.”

Demonstrating respect for site personnel as professionals is another component of successful relationship building, according to some MDP leaders. The personnel of one MDP made it clear to teachers that they were not coming in to judge what the teachers were doing but to help them reflect. “One of the powerful things we do as observers is that we really do observe—we don’t judge. We don’t go in as if we were the experts and tell them what to do.” Leaders of other MDPs agreed that setting a tone of mutual respect and collaboration helps build strong relationships. One MDP respondent added that being flexible is one way to demonstrate respect for the needs and perspectives of site personnel: “We flexed and adapted to them” as part of the relationship-building process.

This kind of relationship building takes some skill and intentionality, as one MDP leader noted: “We are not novices at this. … We are really thoughtful about going into the schools, following up with the principal, asking, ‘How are you doing?’ letting them know we are there, meeting with the secretaries and the staff so they understand what we are doing.” Furthermore, this leader believed that the effort and work required to build relationships for successful collaboration and model implementation can be easily overlooked in model demonstration.

Understanding Site Conditions, Priorities, and Needs

Another purpose of site visits is to gain an understanding of the capacities, beliefs, and priorities of site personnel as well as of the organizational structure and culture, which is critical to assessing how compatible a model is likely to be with a site’s realities. In the preparation stage, MDP leaders work to identify both facilitative and potentially hindering conditions and opportunities for capacity building. “It is important to understand the baseline, to get a clear understanding of where the school is, what they have, and what they need,” asserted an MDP PI. As MDP staff members identify the gaps between the capacities of the implementing organizations and those required for successful implementation, they can determine whether they need to build capacities at the site or adjust the model to adapt to local conditions.

MDPs used a variety of methods to obtain information about site conditions. One MDP’s staff members who were working with secondary schools shadowed students for a day to get a sense of what was going on at the school. They were able to observe pedagogy and obtain a snapshot of what students experienced on a typical day. They noted that this was valuable because it gave them a starting point for discussions with school personnel. Observers shared themes about what they saw and had school personnel respond to the observations.
Another MDP leader talked about the importance of seeking feedback after sharing findings from observations and interviews by asking, “Are we correct about the way you view this?” By soliciting this kind of feedback, “We are making sure we got our story straight,” added this MDP respondent.

Other methods of gaining an understanding of site conditions included attending meetings and training sessions at the sites. The leaders of an MDP that focused on tiered interventions for English language learners reported that they attended district professional development sessions on the district’s response to intervention program to determine how the model could be incorporated into existing practices and policies. MDP leaders also reported that they attended staff meetings to gauge aspects of the organizational climate that might affect model implementation.

Some MDP teams used formal needs assessments as part of their site preparation work. For example, the PI of an MDP on tertiary behavioral interventions reported that her team had sites examine data already available at the site. This MDP team approached this task by saying, “Let’s look at your data and see if you’re satisfied with what you see.” This process helped site personnel identify where they needed help. Surveys of site personnel represented another mechanism for assessing needs as well as strengths.

The preparation stage also is a time to appraise the buy-in of site personnel for model implementation. Even when site personnel appeared to be very committed to a model during the site selection process, MDP leaders asserted that buy-in could be accurately ascertained only through face-to-face contact with site personnel. In schools, understanding buy-in among implementing teachers is essential because, as one leader concluded, “Teachers can secretly opt out, close their doors, and teach how they want.” Some MDP leaders felt that individual interviews were important to get “real” information from site personnel about buy-in, but others acknowledged that time and scheduling constraints did not always allow for individual interviews.

Gaining an understanding of an organization’s key players and their strengths is another aspect of preparation for model implementation. “We try to get a feel for the power structure and who are the power people who make things happen,” stated one MDP PI. Understanding other sources of power and influence at a site is also important. One MDP experienced implementation challenges because of an unusually powerful union in one district. If the MDP team had realized up front that the union was such an important player, it could have worked to build those relationships before conflicts arose.

Understanding the model-site fit requires two-way communications—both listening to and receiving information from sites and communicating to site personnel what is required for successful implementation. The members of
one MDP team shared that although they thought they had clearly articulated what model implementation would require of teachers, they discovered later in the year that the teachers did not fully understand what it really would involve. Part of the MDP staff's role according to one PI is “to help adjust people’s reality to a new reality and help adjust their expectations.”

When MDP teams learn about gaps between model requirements and conditions and capacities at a site, one course of action is to make changes to the model. In fact, most of the MDP leaders reported having to make major or minor changes to their model to adapt to local conditions. For example, one MDP team had to rethink its approach for multitiered supports in a school that had stratified students into different learning communities based on achievement levels. “There was a lot of work initially in developing a model that would match the needs of that school and any other school as we progressed.” Similarly, other MDP leaders asserted, “We have to be willing to constantly meet them where they are,” and, “While we have a model in place, it can’t be rigidly administered. It has to be open to what they [site personnel] say their needs are.” In one MDP, site capacities and needs were accommodated through a collaborative process whereby early childhood service providers and MDP leaders jointly developed and modified the intervention to address the needs of children and their families.

Not all MDP leaders advocated this level of flexibility. Some spoke of the balance that is required between listening and adapting to the organization and staying true to the vision of the project team. One MDP team reported that it negotiated with site personnel in a respectful way, noting, “We need to co-construct the model but with the critical components the project leaders believe are important.”

Through initial visits and contacts, model leaders may determine that the requisite conditions for successful model implementation are not present. This was the case for one MDP. After observing teachers, conducting interviews, and communicating with administrators in a school that had committed to the project, MDP personnel concluded that poor internal communications, tensions between teachers and administration, and organizational instability were likely to create significant implementation issues. Given these suboptimal conditions, the MDP leaders made the difficult decision to pull out of the school and find a replacement school.

**Building the Capacity of Model Implementers**

MDP leaders reported engaging in several types of activities to help those who would be implementing the model acquire the skills, knowledge, and attitudes for success. Almost all the MDPs provided formal professional development (PD) activities to prepare site personnel for implementation. For school-based programs, these typically took place in the summer. Offering follow-up coaching sessions with individual implementers also
was a common way to reinforce content from the formal PD sessions and provide individualized support. One MDP team recognized the variation in resources, staffing patterns, and training needs in its participating early childhood programs and modified the training format accordingly (e.g., one-to-one and small-group format training).

Many MDP leaders reported working with site personnel during initial visits to identify gaps in knowledge that needed to be addressed in formal PD sessions. For example, after seeing teachers struggle with classroom management during their early observations, the leaders of one MDP added this topic to their summer PD. This topic was not directly related to the model; however, the training was added to support the model's implementation.

By involving site personnel in identifying training topics, MDP leaders sought to increase engagement in training and model implementation, but respondents articulated other strategies as well. Several MDP leaders pointed to the importance of engaging training participants in self-reflection, stating that when site personnel can consider challenges and come up with their own solutions, they deepen their understanding of the model, and new practices are more sustainable. Providing practice opportunities was another strategy to help participants gain knowledge and skills. MDP teams also developed a variety of training materials for model implementers, including print and online manuals, video modules, check lists, and other resources.

The formal PD sessions were valuable for continuing to gain an understanding of site personnel's capabilities and for building relationships. Initial PD sessions often helped MDP staff identify topics for subsequent training sessions. Several MDP leaders reported that they were intentional about using training sessions to build trust with participants and garner credibility with the host organizations.

Building the capacity of implementers also involved addressing their attitudes and beliefs. Most MDP teams had some reluctant site personnel and had to work to help them see the potential benefits of the model. One MDP leader claimed that “one of the best ways of changing beliefs is through informal TA [technical assistance].” Thus, this MDP used informal TA such as one-on-one coaching to listen to the concerns of those involved in model implementation, help resolve problems, and gain their trust, in hopes of increasing their buy-in, commitment, and confidence in implementing the model.

The preparation stage was just the beginning—MDP leaders acknowledged that developing the capacity of implementers does not happen overnight. Nor does it happen without the leadership and structural supports of the host organizations, as described below.
Building the Organizational Capacity of Sites

Many of the MDP preparation activities targeted the development of the leadership, infrastructure, and resources of the host organizations to support model implementation. MDP leaders reported that the effort this entails depends on the complexity of the model, how well the model fits in with other site initiatives and practices, and the existing capacities of sites. For example, the leaders of several MDPs indicated that their models did not require major changes at their host organizations, with one leader noting, “We are embedding this model into the context of what teachers do naturally in their classroom,” adding that the project team did not require the school to do much differently at the beginning of model implementation. Similarly, other MDP leaders reported that especially at the beginning of implementation, they centered their efforts on increasing the effectiveness of existing practices at the sites rather than asking sites to make significant changes. Nonetheless, almost all the MDPs used the preparation stage to build organizational support for implementation, even if major organizational changes were not required.

Developing leadership capacity was a common MDP priority in this stage. For example, one MDP leader reported being intentional about building administrative capacity to support implementation. At this MDP, as well as others, frequent meetings with administrators and other leaders were held in the early stages to equip them to support the staff members who would be implementing the model. The goal of these meetings was to ensure that administrators fully understood the project and could share their knowledge with their staff. The MDP leaders did not want implementing staff to rely on the MDP personnel as the experts with all the answers, knowing that in the long run this would not lead to sustained implementation.

Several MDPs formalized the implementation roles of both administrators and other staff through site-level leadership teams. For example, one MDP team worked with its sites to identify administrators and practitioners to serve on such a leadership team. Before implementation began, the team members received extra PD on the model and their role as leaders. To further build organizational capacity, some MDPs involved local personnel in developing and conducting some of the implementation-related staff development activities. The PI of an MDP that had completed implementation and participated in a follow-up study to assess model sustainability emphasized the importance of involving people at the site early and preparing them to provide the TA and other supports necessary for implementation, starting with small steps at the beginning and then building on their skills and responsibilities over the life of the project.

A few MDPs helped sites assemble local advisory groups made up of staff members, parents, and others. These groups, formed before the launching of implementation, were designed to foster the involvement and commitment of site
staff and stakeholders and use their collective knowledge and perspectives to reflect on implementation.

In addition to preparing leaders and supporters, MDP preparatory activities involved working with sites on logistics related to resources, communications, scheduling, and release time for site personnel to participate in PD. Reflecting on initial contacts with sites, an MDP PI noted, “We spent a lot of time talking with the administrators. … In retrospect, we should have done more.” This leader regretted not spending more time developing a strong communication channel between project staff, the model implementers, and administrators, noting some communication glitches that had occurred. Scheduling presented challenges in some cases, so preparation involved working through these issues with administrators to develop solutions that worked for the organization and the model. Building systems for data-based decisionmaking, a common component of many of the OSEP-funded MDPs, required up-front work with schools and districts. The PI of an MDP that had not yet begun implementation observed, “How they collect and use data is going to be critical in the future for them to do this independently;” therefore, helping site personnel build their data system capacity was an important role for the MDP during its preparation stage.

**Building MDP Team Capacity**

Some MDP leaders noted that preparation efforts also need to extend to the MDP team itself. As an MDP leader said, “You need to build your team first before you can work successfully with the schools.” This entailed developing communication and oversight structures, learning about the perspectives and abilities of team members, and defining roles. “We needed to know the skills that each team member brought to the project. We had to begin building communication and trust and relationships within the team.” Team-building work was especially critical for MDPs that involved team members from different organizations. In one case, two institutions co-led the MDP. Developing their ability to successfully facilitate model implementation required frequent communication and integrating the strengths and perspectives of staff members across the two institutions into a unified approach.

Not all MDPs were intentional about building their own team. A number of MDPs had teams that had already worked on similar projects together and did not feel they needed further preparation as a team. These MDPs benefitted from the collective expertise, experience, and team work developed from these prior collaborations.
Conclusions

Successful implementation of model demonstration projects requires changes in adult behaviors and attitudes and often in institutional structures and processes, changes that are rarely simple. Leaders of OSEP-funded MDPs advised that helping implementers make these changes must start early. Staff members of MDPs that were at various stages of implementation reported that successful pre-implementation activities include developing relationships with site personnel, understanding site conditions, improving the capacity of those who would be implementing the models, building the capacity of organizations to support implementation, and building the capacity of MDP teams to facilitate implementation.

Especially given the fairly rapid implementation schedules of MDPs, leaders agreed that preparation is vital. To assist leaders of future MDPs, a PI advised, “The more time spent up front, the better.” Another leader suggested, “Spend more time with people [on site] to really understand their world. Then you will know when you can and cannot change things,” and, “Talk to as many people as you can, so you’re not surprised when you discover that certain people are not on board.”

MDP leaders also acknowledged that capacity building is an ongoing process. One PI noted that when projects are launched after preparation activities, “Not everyone is going to say, ‘Okay we are ready,’ because readiness is really a process of adoption.” However, he and other MDP leaders believe there are many issues that can be addressed early to create conditions for success. Especially for organization- or system-wide interventions, it takes a long time for change to happen. The earlier the change process is started, the better.
References


