

Model
Demonstration
Coordination
Center

Progress Monitoring Interventions for Elementary School Reading: Lessons Learned About Model Sustainability and Spread

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1. Introduction

Since the reauthorization of the federal Elementary and Secondary Education Act (ESEA) in 2001 (PL 107-110), the U.S. Department of Education has emphasized higher performance expectations for all students and greater accountability on the part of state and local school systems to meet those expectations. In parallel, federal funding has supported the identification of educational practices, programs, procedures, curricula, and technologies that have rigorous scientific evidence linked to improved student achievement, through vehicles such as the What Works Clearinghouse (<http://ies.ed.gov/ncee/wwc/>), Doing What Works (<http://dww.ed.gov/>), and the National Dissemination Center for Children with Disabilities (<http://www.nichcy.org/>). 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 have a significant impact on teaching and learning without widespread and sustained implementation.

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 and what schools implement, as it relates to improving outcomes for children and youth with disabilities. An important part of that pursuit is the technical assistance, model demonstration, and dissemination activities OSEP has supported since 1970. 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 the model.

Since 2005, OSEP has funded five 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. Also since 2005, OSEP has funded the Model Demonstration Coordination Center (MDCC) at SRI International. MDCC has worked with the MDPs in each of the first four cohorts to establish consistent design elements, such as sample definition and selection, data collection methods and timing, and instrumentation, and to synthesize cross-MDP data. Consistent data collection within a given cohort permits comparison of the relative ease with which the models were implemented with fidelity in participating schools and supports comparison of the relative outcomes achieved when the unique approach of each model was implemented.

The first cohort of projects, the focus of this report, implemented models that used progress monitoring within a response to intervention (RtI) framework to improve the reading skills of elementary school students. Progress monitoring, a research-based practice teachers use to assess students’ levels and rates of learning and to evaluate the effectiveness of their instruction, uses short, frequently administered, scientifically validated assessments that are sensitive to changes in student performance (Fuchs, Fuchs, Hosp, & Jenkins, 2001). Within an RtI framework, the models offered increasingly intensive interventions to students who progress monitoring data indicated were not responding to the core instruction provided students in general education classrooms.

The models were developed by the University of Minnesota, the University of Oregon, and Lehigh University in partnership with the University of Pittsburgh. Each MDP university team implemented its model in a single school district during the 2006–07, 2007–08, and 2008–09 school years. The Minnesota and Oregon districts are referred to here by their state location abbreviations, MN and OR. The Lehigh University team implemented the Pennsylvania model in a district in the eastern part of that state, referred to here as PA-E, whereas the Pittsburgh team implemented the Pennsylvania model in western Pennsylvania, referred to as PA-W. Implementing schools are referred to by their district location and number (e.g., OR1, PA-W2. MDP grantees provided a range of qualitative and quantitative data to MDCC on their models, their implementation contexts and experiences, and the outcomes achieved. The results of MDCC’s analyses of Cohort 1 (C1) data were reported in 2010 (Wagner & Levine, 2010).¹

As the first MDP cohort to complete model implementation, C1 offered OSEP the initial opportunity to explore issues related to the sustainability and spread of their intervention models. Although research on program sustainability “has not yet coalesced into a single research paradigm, a shared set of statistical methods, or even a common terminology” (Scheirer, 2005, p. 321), several conceptualizations of sustainability have agreed that sustainability can be considered as the continuation after initial implementation and funding of (1) program benefits to participants, (2) program activities within the implementing organization, and/or, (3) in the case of community-based programs, community capacity to deliver the program (Johnson, Hays, Center, & Daley, 2004; Mancini & Marek, 2004; Shediak-Rizkallah & Bone, 1998). Given MDCC’s role to support MDPs in implementing their models within organizations serving children with disabilities (e.g., schools, early intervention programs), our examination of the sustainability of the first cohort of MDPs focuses on the extent to which “core intervention components” (Fixsen et al., 2005) of the models were still in place 2 years after the MDPs discontinued their work in their implementing districts. Core intervention components refer to “the most essential and indispensable components of an intervention practice or program” (Fixsen et al., 2005, p. 24). With that focus, OSEP funded the cohort 1 MDP grantees, through MDCC, to document

- the core components of the models that were still in place in their model demonstration districts and schools as originally implemented and those that had been adapted or discontinued; and
- the extent to which the models, in whole or part, had been implemented in other schools within the model demonstration districts and/or outside those districts.

To do so, MDP principal investigators (PIs) and colleagues worked with MDCC staff to develop a protocol for qualitative data collection and a format for reporting findings. Using that protocol, MDP staff interviewed key district and school leaders and other personnel in their original implementation sites, conducted focus groups with teachers, and observed selected MDP-related activities that were core components of the models (e.g., school data review and decisionmaking meetings, tier 2 intervention group instruction). Table 1 summarizes the data collection activities of each MDP, which were conducted over a 2-month period. MDP staff then

¹ A summary of the findings from the cohort 1 final report can be found on the MDCC website, <http://mdcc.sri.com>.

Table 1. Key Informants and Data Collection Methods, by MDP

Data Collection Method	MDP School District			
	MN	OR	PA-E	PA-W
Interviews	<p>District Director of Special Education Special Education Administrator</p> <p>School Principals of two of three MDP schools</p>	<p>District Director of Special Education Professional Development Coordinator English Language Learner Coordinator</p>	<p>District Director of Curriculum and Instruction Director of Pupil Services Director of Special Education Coordinator of Professional Development</p> <p>School Principals of the three MDP schools</p>	<p>District Superintendent Rtl Coordinator Curriculum Coordinator Director of Special Education</p> <p>School Three MDP school principals Three district “roll-out” (i.e., newly adopting) school principals</p>
Focus groups	Three focus groups, one in each implementation school, a total of eight teachers and coaches who participated in the MDP in 2009	Two focus groups, one primarily members of Lead Teams from four schools, one a mix of Lead Team members and general and special education teachers from four schools	One focus group in each of two implementation schools, four teachers and three teachers, respectively, members of the school data team Two focus groups in the third school, one involving three teacher members of the school data team and one involving two teacher members of a grade-level team	One focus group at the first MDP school, six teachers representing three grade-level teams
Observations	Seven grade-level team meetings observed in two MDP schools	One data team observed involving four teachers (one special education, one kindergarten, two first grade), and the school psychologist.	Three grade-level team meetings observed (grades 1, 2, and 3) at one MDP school	Five classrooms observed in one MDP school representing core and intervention instruction across grade levels
Fidelity checks	Marston and Lau’s (2008) <i>Data Review Meeting Integrity Checklist</i> assessed fidelity of observed data team meeting processes		<i>Pennsylvania Checklist</i> assessed fidelity of Rtl overall MDP-developed checklist used for data/grade-level team meetings	Checklist of key elements that should be in place

reported findings from the data collection activities to MDCC using the agreed-upon reporting format,² responded to MDCC staff questions to clarify or expand on reported results, and participated in a cross-MDP teleconference to jointly discuss the implications of the findings. One staff person in each MDP, usually the PI, was contracted for \$16,000 to complete the follow-up task.

The following section reports the extent to which the components of each MDP were sustained in the original implementation districts and schools and the models had spread to other schools and/or districts. An analysis of those results identifies core intervention components of the models that were more and less likely to be sustained as originally implemented. The final chapter reports factors that MDP staff identified as promoting and hindering model sustainability at the school and district levels and spread within and outside the district.

² In addition to submitting the completed reporting protocol, some MDP PIs submitted additional data, such as focus group transcripts, summaries of classroom observations, and state accountability test scores for participating schools over several years.

2. Progress Monitoring Models 2 Years Later

MDP grantees each had developed a progress monitoring model that would be implemented within an RtI framework to improve the reading achievement of students in participating elementary schools. Although there were unique features to each model, each had the following core intervention components (Wagner & Levine, 2010):

- A progress monitoring measurement model, which included:
 - the progress monitoring measures that were administered;
 - the frequency with which data were collected;
 - the “cut points” or scores that would differentiate students who were meeting “benchmark” expectations for reading growth from those who were considered in need of targeted or intensive intervention to improve reading growth; and
 - the supporting technology used to manage and graph the data.
- Procedures for using progress monitoring data to:
 - identify students in need of intervention (e.g., hold grade-level data-review meetings);
 - modify instruction for students making insufficient progress (e.g., assign struggling students to tier 2 or tier 3 intervention); and
 - identify students who may be eligible for special education services because of a reading disability, develop IEP goals, and monitor progress toward them (e.g., consider progress monitoring data in student study team deliberations)

MDP staff returned to their implementation districts and schools in spring 2011, 2 years after concluding their model implementation activities there, to assess the extent to which these core intervention components were still in evidence and whether they were operating as they had during the MDP or had been adapted by the district and/or schools. Their findings are reported in the following sections.

University of Minnesota’s Implementing District (MN)

The University of Minnesota MDP team implemented their progress monitoring model in three elementary schools in their partner districts (MN); two began implementation in the 2006–07 school year (MN1 and MN2) and the third the following year (MN3).

Status of the MDP Schools

The MDP PI who had worked in MN reported that two of the three model implementation schools (MN1 and MN3) are continuing model implementation “without any changes.” They are doing fall, winter, and spring screening to determine which students are not meeting benchmarks, and both schools progress monitor students in tier 2 and tier 3 interventions, usually twice weekly, and weekly, respectively. Tier 2 interventions include *Reading Mastery*, *Corrective Reading*, *PALS*, *Words Their Way*, *Read Naturally*, tutoring by Minnesota Reading Corps volunteers, and *Early Intervention in Reading*. Typically, they are being provided to small groups for 30 to 45 minutes, usually daily. A problem-solving approach continues to be used to determine which interventions are best suited to the needs of students in tier 2 or tier 3 instruction.

Grade-level teams meet every 5 to 6 weeks in the two schools to examine students' response to intervention and to move students in and out of tiered interventions as appropriate. Participants at MN1 include general education, Title 1, ELL, and special education teachers; educational assistants, the RtI facilitator, and the principal, as during the project. Participants at MN3 include general and special education teachers; Title 1 interventionists; and the literacy coach, school psychologist, school social worker, speech clinician, and principal. MN3 reportedly had many visitors from around the district in the 2010–11 school year to observe how grade-level team meetings are carried out. Fidelity checks on the data-review meetings' adherence to the model protocol are being done at MN1 but less frequently than during the model implementation period; fidelity checks are not being done at MN3.

As part of their follow-up activities, fidelity checks were conducted by MDP staff, who observed three grade-level meetings at MN1 and four at MN3. At MN1, the average total rating across observations was 46.7 (out of 55), somewhat lower than the last year of project implementation. The average rating of fidelity to the grade-level meeting protocol was 4.24, compared with 4.61 when the project ended. Observers noted that an important difference in the meetings is that the data team has also become the school's Peer Learning Community (PLC), thereby combining data consideration with professional development (PD). This arrangement was said to create a certain efficiency in that student data are available at the meetings to inform PD needs as well as instructional decisions. However, observers of the meetings noted that less time is spent reviewing the data than when data review was the sole purpose of the meetings.

University staff observed four data meetings at MN3, which garnered an average total rating of 51, indicating high fidelity of the implementation. Further, the fact that the majority of the elements of the grade-level data-review meetings are in place (e.g., progress monitoring data are graphed and reviewed, the appropriateness of tiered interventions for specific students is considered, and adjustments to interventions are made as needed) is evidence that other core elements of the model are in place.

The third implementing school, MN2, was reported to be continuing benchmark screening and providing tiered interventions. However, progress monitoring to determine response to intervention and grade-level data-review meetings, both core intervention components of the model, are not being done. Meetings have been discontinued, reportedly for budget reasons; the district was said to recommend that teachers meet only after school and no more than once a week, leaving little time to consider data, so none beyond benchmark assessments are being collected.

Within-District Spread of the Model

In addition to the two MDP schools that are continuing model implementation, five additional elementary schools were reported to be implementing all components of the model, as described above for the two original MDP schools. In addition, because there is districtwide implementation of some elements of the model, the remaining elementary schools and some K-8 schools were reported to be "considered [as] partially implementing important elements of the model." For example, core reading instruction has been strengthened in all district K-5 and K-8 schools, an important foundation for an RtI tiered system of reading instruction. Although not all schools use curriculum-based measurement, as specified in the model, all elementary schools use the Northwest Evaluation Association's Measures of Academic Progress (MAP) for fall benchmark screening, and staff are asked to review MAP data and data from a behavior screener

by the end of September of each year. A problem-solving approach is then expected to be used to select a tier 2 intervention for students who need one. For students who continue to fall below benchmark, a school Problem Solving Team is expected to be convened and to develop and oversee implementation of a more intensive intervention.

All schools were reported to be continuing to use a district website for inputting, managing, and reviewing student data related to achievement, attendance, behavior, progress monitoring (when it is done), and documentation of interventions. The website also provides data on students receiving tier 2 and tier 3 instruction for grade-level data team meetings, where those are held. Another practice that has been implemented widely that “fits the RtI model” (but was not part of the MDP) is Professional Learning Communities (PLCs), which give teachers opportunities to meet frequently for PD. Many district schools were reported to be using these meetings to review student data and talk about core instruction and interventions.

Spread of the Model Outside the District

Although an RtI approach is said to have “spread across the state at many school districts,” it is not clear that the MDP contributed to that spread. When the MN district Director of Special Education was asked whether the model as implemented in his district had attracted attention or interest in adoption outside the district since spring 2009, he was quoted as saying, “I haven’t seen too many people looking to MN [the district] for leadership in RtI.” Instead, the MDP principal investigator attributed spread within the state to establishment of a state RtI center, funded by the state legislature for 2 years, but discontinued at the end of the 2008–09 school year. Nonetheless, its impact “is still felt throughout the state.”

Looking to the future, the MDP may indirectly contribute to expansion of RtI principles and procedures in the state via a partnership with the Minnesota Department of Education (MDE). Reportedly, because the emphasis of MN on student achievement, data-based decisionmaking, and improved core instruction are consistent with RtI implementation, the MN district and a neighboring district were recruited by MDE to participate in a State Professional Development Grant that will enable each of the two districts to implement RtI at four of its schools, beginning in the 2011–12 school year and extending for 3 to 5 years. Staff of both districts also are charged with creating PD models to support RtI implementation that can be disseminated to school districts around the state.

University of Oregon’s Implementing District (OR)

The University of Oregon MDP team began implementing their progress monitoring model in four OR elementary schools in the 2006–07 school year (OR1-4), one of which (OR3) withdrew from the project at the end of that year. Two additional schools were recruited and began implementation in the 2007–08 school year (OR5 and 6).

Status of the MDP Schools

The model implemented by the University of Oregon during the MDP was the foundation for a district-promulgated RtI model that became known as OR’s Instructional Intervention/Progress Monitoring (IIPM) model. By the end of the MDP, plans were underway to implement the IIPM adaptation of the MDP model in all district elementary schools.

As part of the IIPM model, benchmark screening is done three times a year in all elementary schools, with the data being used to identify students for the various tiers of instruction. District

guidelines have been promulgated as to which progress monitoring measures to use and how often to use them for students receiving tier 2 and 3 interventions. Data review meetings for purpose of considering progress monitoring data occur every 6 weeks. *EasyCBM*, the University of Oregon-developed and publicly available web-based system for managing and graphing progress monitoring data and supporting data-based decisionmaking, which was developed for and enhanced during the MDP, is used districtwide and is said to be a critical support for the IIPM model. Tiered instruction within the IIPM model provides all students with core reading instruction and “some form of tier 2 (differentiated instruction),” usually delivered by classroom teachers, in a 90-minute block each day. Students performing under the 20th percentile also receive 25 to 30 minutes of tier 3 intensive instruction twice weekly.

Follow-up visits to four of the MDP schools largely confirmed their adherence to the model’s core intervention components. For example, “Staff at OR4 were unanimous in their belief that [the school] has maintained completely, 100% true to the model developed during the project. They spoke with pride of OR4’s leading role in the development of the model.” Similarly, “the OR5 team agreed with the teacher who summed it up during the focus group, ‘We follow the original model quite closely.’ ” This view was echoed by staff of OR6, who “indicated that they are still following the original model quite closely.” However, the implementation strategy in OR had allowed for a notable degree of school-by-school choice regarding various aspects of the model, including the degree to which fidelity checks were done, resulting in variation in this practice. Viewing the practice as not an essential part of the MDP model, the district did not require fidelity checks as part of the district adaptation of it. Thus, no fidelity checks were reported as being done in the original MDP schools or elsewhere in the district.

The one exception to model adherence cited by MDP staff was OR1. This Spanish-emersion school conducted all instruction in Spanish through second grade, when instruction began to be delivered in both English and Spanish. That school reportedly had needed to adapt the assessment component of the IIPM model during the MDP and continued with that modified version of the model in the 2010–11 school year. A lack of appropriate Spanish-language assessment tools for students in the early grades gave OR1 staff no data on which to base decisions about students’ responses to instruction or appropriate tiered intervention. Although use of *easyCBM* and the other elements of the assessment component were in compliance with the IIPM model for fourth and fifth grades, “at the K-3 levels, teachers have to find their own testing materials, progress monitoring materials, and only have Excel or Word available to track data, because they are delivering their literacy instruction and assessments in Spanish.” Additionally, classroom teachers rather than grade-level teams are primarily responsible for selecting tier 2 interventions for young readers who struggle with the Spanish-language curriculum. An additional challenge in this school, which may be only tangentially related to the model itself, involves the expectation that progress monitoring data will be used to determine eligibility for special education. One teacher explained in a focus group, “This is the difficult part, because part of the referring guidelines for special ed asks if we’ve conducted teaching in English. Up until fourth grade, there is no English.”

Within-District Spread of the Model

With district sponsorship, the IIPM adaptation of the MDP model was being implemented in all district elementary schools in the 2010–11 school year. The IIPM model also was “partially in place” in all middle schools. All these schools give three benchmark screening assessments,

although how the data are used to make instructional decisions varies. MDP staff who conducted follow-up work in the district reported that, in about a quarter of the district’s middle schools, students are grouped into tiered instructional placements, and progress is monitored for RtI. In contrast, at about another quarter of the middle schools, staff do not consider the benchmark data at all in instructional decisions. In the remaining half of schools, some teachers choose to consider benchmark data and to progress monitor some students to help differentiate their instruction and others do not.

Spread of the Model Outside the District

MDP staff reported that “the district has received a lot of interest from other districts all across Oregon [and] ...they have received inquiries from districts as far away as the east coast. They do not, however, have any information about whether these other districts have implemented their model or to what degree.” The widespread external familiarity with the districts’ IIPM model and its MDP origins are attributed to the fact that “the district’s model demonstration [staff] have given more than 20 invited presentations across Oregon and Washington since the project was originally funded. They have presented at the Council of Oregon School Administrators conferences twice a year since 2007, the Oregon Conference, and several different regional conferences with an emphasis on special education and school psychology. In addition, two members of the district’s Lead Team co-authored two chapters in the RtI book edited by Shapiro, Zigmond, Wallace, & Marston (2011). They have received inquiries from people who have read the book chapters and have contacted them for more information.”

Lehigh University’s Implementing District (PA-E)

The Lehigh University partner in the Pennsylvania MDP team implemented their progress monitoring model in three PA-E elementary schools, one beginning in the 2006–07 school year (PA-E1) and two additional schools in the 2007–08 school year (PA-E2 and 3).

Status of the MDP Schools

The principal investigator of the PA-E MDP reported a “remarkable replication of the model at all schools,” with “very little variation in implementation, staff perspectives, or administrative support.” All three schools were said to “embrace the model and view RtI as part of the school culture.” “The processes used to reach decisions, the use and examination of data sources to substantiate decisions, and the full acceptance of the data as highly valued methods for decisionmaking was strongly evident...” Nonetheless, several enhancements have been made in one or more of the three schools involved as follows:

- **The measurement model.** The district directed that fall benchmarking take place in October rather than September, when it had occurred during the MDP. All three schools also have switched from using *DIBELS* to *AIMSweb* as a source of measures for both benchmarking and progress monitoring and as the data management system.
- **Tiered instruction.** In part due to the delay in having fall benchmark data on which to base students’ assignment to tiered instruction, schools have instituted a “jump start” program, which begins tiered instruction immediately upon the start of school, using spring benchmark data from the preceding school year. Some schools also have added a “second layer” for students receiving tier 3 instruction, which amounts to an added

period of instructional support beyond the time allotted for reading instruction for students at tiers 1 and 2. The menu of interventions developed through the MDP also has been enhanced to offer a wider selection of programs to meet students' needs.

- **Data-based decisionmaking teams and processes.** Monthly grade-level team meetings have been adapted in one school so that team members from all grades meet together every-other month, with the usual grade-level teams meeting the alternate month. This adaptation was suggested by teaching staff in that school to “allow more focused decisions on specific students.” All three schools have selected a point of contact (POC) staff member from the teaching or support staff to act as the grade-level contact for teachers in communicating with the data team.
- **Professional development.** All schools were reported to have continued PD to support implementation of core instruction and tiered interventions, but with an increasingly “strong effort to get teachers to see links between core and tiered group instruction.” A data-based perspective was said to be featured in all aspects of professional development, with “expansion evident in this area.”
- **Fidelity checks.** The fidelity of core instruction continues to be evaluated in all schools using the checklists and forms developed through the MDP. However, the principals have taken on a bigger role in conducting these checks than they had during the MDP, observing all tenured teachers at least once a school year and nontenured teachers at least twice and conducting “walk-throughs” as needed. Principals also complete fidelity checks for all tier 2 and 3 skill groups. When an intervention is changed for a group or a new teacher is assigned to an intervention, a new fidelity check is expected to be conducted.
- **Materials.** Some spreadsheets for data management and other forms generated by MDP staff have been adapted to better serve the needs of staff at individual schools.

In addition to these adaptations of the core intervention components of the MDP model, two MDP schools have extended the RtI approach to encompass student behavior, within the tiered framework of schoolwide positive behavior interventions and supports (PBIS). Additionally, all three schools applied for and were granted state approval to use the model's RtI framework as a method for determining students' eligibility for special education services because of a learning disability.

Within-District Spread of the Model

The MDP model has now been implemented in all 13 PA-E elementary schools. This expansion has reportedly challenged the district to consider a specific building's context in supporting implementation, as many of the schools to which the model has expanded have high percentages of students who are at or above benchmark. This is motivating newly adopting schools to consider how to implement an RtI model with differentiated instruction for both students who are struggling readers and those who are highly proficient. The newly adopting schools also are implementing the model with fewer resources than were available to the MDP schools. In addition to this elementary-school expansion, there is a pilot project in one PA-E middle school, a “statewide learning site” that is implementing a model established by a statewide team that is working toward widespread middle school adoption of an RtI framework.

Spread of the Model Outside the District

The principal investigator of the PA-E MDP reported that with state sponsorship, “the model in place [in PA-E] is being implemented throughout the state,” with about half of the 500 districts in the state reporting that the RtI model is being implemented “at some level in at least one building,” although many districts were said to be implementing the model in elementary schools districtwide. Additionally, eight schools in other districts have been granted permission by the Pennsylvania Department of Education for RtI to be one basis on which to determine students’ eligibility for special education services because of a learning disability. This across-state spread was reported to have been encouraged by MDP schools, from which staff have been invited to present at state conferences on their implementation experiences and outcomes. All three MDP schools also have been visited by staff from other schools in the state that are considering RtI implementation, and “[PA-E] as a district has been selected for examination in several national efforts to identify strong exemplars of RtI implementation.”

University of Pittsburgh’s Implementing District (PA-W)

The University of Pittsburgh partner in the Pennsylvania MDP team began implementing their progress monitoring model in one elementary school in the 2006–07 school year (PA-W1), and in two additional schools in the 2007–08 school year (PA-W2 and 3). In the last MDP implementation year, the model was implemented in elementary schools districtwide.

Status of the MDP Schools

Pointing to the success of the PA-W model in its MDP schools and districtwide, the interviews conducted in PA-W as part of the MDP’s follow-up activities revealed the following:

[The model] has become engrained into the very fabric of instructional practice across the district. All stakeholders, from the superintendent to the intervention teachers, report that “it [RtI] is how we *do* things in the [PA-W].” The atmosphere, environment, and conversation surrounding RtI sustainability and influence on student achievement and instructional practice throughout the district were nothing less than exuberant. All were “proud” of their schools’ transformations and “impressed” with the students’ growth and “confident” in their teachers’ skills, thanks to the institution and evolution of the model.

Another interviewee reported the following:

Implementation has looked different in different buildings because of different populations, needs, structures, spaces, staff, etc., but the basic tenants of the RtI program are the same across the board.

The continuing components of the model include core reading instruction provided 60 to 90 minutes daily using *Harcourt* curriculum materials and small-group tier 2 and tier 3 interventions provided for at least 120 minutes per week over 4 or 5 days, depending on the school. Benchmarking is conducted three times a year using *4Sight* measures; progress monitoring is done using *DIBELS* and *Maze* measures weekly for tier 3 participants, every 2 weeks for tier 2 participants, and monthly for those meeting benchmarks; and *MClass*, *IStation*, and *Study Island* technology tools continue to be used. Data reviews continue via Data Decision Making Team (DDMT) meetings, grade-level team meetings with coaches, and meetings with the district RtI Coordinator as needed. Professional knowledge continues

to be developed by the school literacy coaches, whose support for teachers is deemed “essential” to continuation of model components, and by an internal, ongoing PD and training process/system developed by the RtI coordinator and school literacy coaches.

Adaptations to these core intervention components also have occurred, however. A sustained attention to improving core reading instruction and the related notable increase in students’ basic skills has reportedly enabled teachers to broaden their perspective and “really ramp up higher-order skills and improve what we do in grade-level core instruction.” Staff of PA-W1 also have adapted core instruction by developing an “enhanced core” for students receiving tier 2 or 3 instruction. The same focus skills, vocabulary, spelling concepts, and lesson objectives and standards are the foundation of instruction for these students, but lower-level and shorter stories, longer lesson sequences spread over more time, and more intense reteaching and review are used to help them advance. The district also has expanded the original measurement battery to add some “holistic assessments” to the data collection process “because the principals and teachers wanted a better picture of students’ reading comprehension skills.” Resources allocated to implementing the model also have needed to change. The district has lost specialized reading intervention teacher positions due to budget cuts, and several intervention teachers have been moved from “improving schools,” including those that had originally implemented the model, to high-need schools to maximize overall district performance for accountability purposes. Thus, classroom teachers have needed to stretch to provide more intervention instruction in addition to core reading instruction. Despite these needs to adapt the model and shift resources to sustain it, one interviewee, when responding to a question about model sustainability was said to speak for many when asserting, “there’s no looking back!”

Within-District Spread of the Model

PA-W’s roll-out of the model to all K-5 schools in the district in the 2008–09 school year, has been “successfully sustained and enhanced at all buildings” since the end of the project. The district also has expanded its pilot of a sixth-grade model, which was developed with consultative support from the MDP staff in the final year of the project, into a broader middle/secondary-level model. That model was piloted by the district in the 2009–10 school and “continues to evolve.” Limits on funding and personnel are challenging the spread and expansion of the model, but it was reported that “each building (in collaboration with the RtI coordinator and literacy coaches) has figured out a way to ‘make the model work’ given their schedule, resources, staff, and students’ needs.”

Spread of the Model Outside the District

Staff of the Pennsylvania Training and Technical Assistance Network (PaTTAN), who engage in various ways in RtI training and implementation, have reported that “there is continued interest in ‘how things are going in [PA-W].’” However, the RtI model that is spreading widely throughout the state, although fundamentally similar in its core intervention components to the model implemented in PA-W, is more closely identified with the PA-E branch of the Pennsylvania MDP team than with the implementation experience in PA-W.

The Sustainability of Specific Model Core Intervention Components

One purpose of the follow-up work on the sustainability and spread of the C1 MDPs was to ascertain whether some core implementation components of the models were more likely than others to be sustained and to spread. The findings of the MDP staff who investigated the status of their models 2 years post-MDP suggest that two fundamental components of the models were maintained in all sites. Particularly, the tiered instruction component of the model was present in all original participating schools and districts, even when other components of the models were not. Perhaps because differentiating instruction to meet the needs of diverse learners is a well-known best practice in teaching, it found fertile ground or was already in place in MDP schools, apart from its incorporation into the progress monitoring models. Because identifying students in need of the various tiers of instruction requires periodic collection of data on students' learning growth, benchmark assessment procedures also were in place in all MDP schools.

All other core components of the models were abandoned in some schools or districts. MN2, for example, had discontinued data review meetings due to budget cuts; there was little reason to collect data frequently if there was no time to discuss their implications for instruction, so progress monitoring also was discontinued. OR1 also had relatively few components of the model in place, but that resulted from the unique challenges of being a Spanish-emersion school. Other than materials developed by OR1 teachers during the MDP, teachers had few assessment tools to use to monitor progress or provide data to serve as a basis for determining the need for tiered instruction for students in the early grades. Although not strictly a core intervention component of the model, fidelity checks to determine the level of adherence of school practices to model procedures was an important safeguard against deterioration in the quality of model implementation. Fidelity checks were abandoned in two of the three MDP schools in MN and were not required for any school as part of its implementation of the IIPM model in OR.

The situation in the two Pennsylvania districts primarily involved adaptation of model components to respond to the “new normal” generated by budget cuts or to be more compatible with the specific circumstances of individual schools. Adaptations were not considered by MDP PIs to threaten the functioning of the core components of the models.

3. Factors Related to Model Sustainability and Spread

MDP staff involved in the follow-up visits to C1 MDP schools and districts were asked to synthesize data collected from interviews and focus groups with district and school staff, from their own observations, and from documentary evidence obtained about the schools and district (e.g., minutes of grade-level data-review team meetings, school-level state accountability test scores) to suggest factors that appear to have promoted and those that appear to have hindered the sustainability of the models in the original MDP schools and districts, the spread of the models to other schools within the districts, and the spread of the models outside the original districts. The conceptual framework that has guided MDCC's work (Figure 1) suggests that variations in factors related to the model itself (i.e., the "source"), the composition and strategies of the MDP team (i.e., the "purveyor"), the organizations implementing the models (i.e., "destination organizations," in this case, schools), and the contexts in which those organizations implemented the models (e.g., district and state education agencies) might help explain variations in the implementation experiences and outcomes generated by the various MDPs. Findings related to these linkages were reported in 2010 (Wagner & Levine, 2010). Not surprisingly, many of the same factors also were reported by MDP staff to relate to model sustainability and spread. The following sections first present the factors reported to have promoted sustainability and/or spread of one or more of the MDP models, organized to correspond to the major elements of the conceptual framework, and then consider reported inhibitors of sustainability and/or spread.

Factors Reported to Promote Model Sustainability and Spread

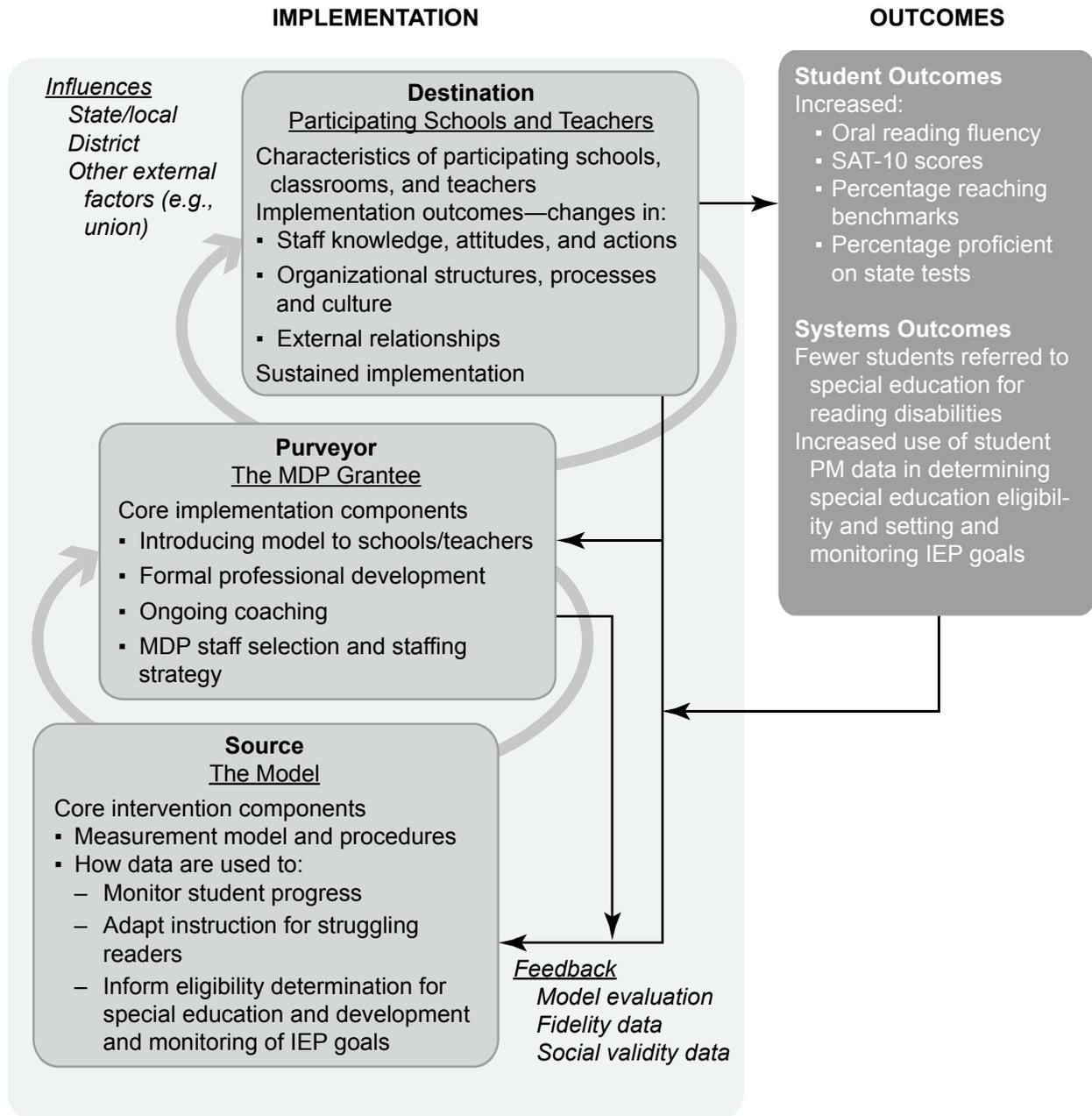
Core Intervention Components

Three key concepts from the body of research on the diffusion of innovations (Rogers, 2003) have helped to focus our analyses of variations in the MDPs' implementation experiences, outcomes, and sustainability and spread. They are:

- relative advantage—"the degree to which an innovation is perceived as being better than the idea it supersedes" (p. 229);
- compatibility—"the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters" (p.240);
- complexity—"the degree to which an innovation is perceived as relatively difficult to understand and use" (p. 257).

Research suggests that the relative advantage and compatibility of an innovation, as perceived by members of a social system, are positively related to its rate of adoption, whereas its perceived complexity is negatively related to its rate of adoption. MDPs report similar relationships to sustainability and spread.

Figure 1. Conceptual Framework for Model Demonstration Implementation and Outcomes: Cohort 1



NOTE: Adapted from *Implementation Research: A Synthesis of the Literature* (Fixsen et al., 2005).

Relative Advantage

All MDPs reported that the models' multifaceted benefits, as perceived by school and district staff, are a powerful force in sustaining and spreading the models. Benefits attributed to one or more of the models include improvements in (1) instructional practices; (2) the perspectives and attitudes of school staff; (3) systems, including special education practices and their alignment with general education; and (4) student achievement.

Instructional practices. The PD and coaching provided to school staff as part of model implementation is credited by them with improving the instructional practices in MDP schools. For example, general education teachers in one of the two MN schools where the model has been sustained most fully reported that: "Our system [now] is about changing instruction, not sending students out to get fixed [by special educators]." Similarly, a PA-W staff member at one implementation school asserted that "The initial impact [of the model] was on student achievement. The sustained impact is on instructional practices." Interviewers of PA-W staff reported that "all stated that working within the model has improved their own professional skills 'incredibly,' 'immensely,' 'immeasurably,' 'exponentially.'"

Staff perspectives and attitudes. As teachers were given and applied tools and strategies to improve their instruction, MDPs reported positive changes in how they viewed themselves, their work, and their students. The PA-E PI reported that teaching staff in all MDP schools "embraced a data driven decision model" and that "a recognition of the importance of accountability" that had developed during the MDP continued to be present in all MDP schools. PA-W MDP staff asserted that "the project had a profound impact on the level of discourse among teachers and on what they do." Interviews revealed that PA-W staff "appreciated and valued the teaming structure RtI helped to create," which has "created a culture of collaboration" and "instilled collegial support." One of the most important attitudinal shifts, though, involves teachers' views concerning which students could learn and how they learn. PA-W MDP staff reported that when the staff saw students achieving and reading who they had never thought could, it reinforced their value as a teacher and increased their motivation to teach all students. Positive changes in attitudes also were said to have extended beyond school staff: "Our administration, faculty, and even our students have a completely different mindset about reading instruction and learning to read than we did 5 years ago."

System improvements. Staff of some MDP schools and/or districts attributed implementation of their model with helping to resolve priority issues and to improve instructional programs. For example, members of the OR district lead team "emphasized that the grant helped them bring district initiatives together with a common focus... which enabled them to extend strategies they wanted to implement... [and] earmark funding to support [model] expansion." A district administrator also indicated that involvement in the MDP enabled OR to create a more comprehensive districtwide model for instructional evaluation, tiered interventions, and special education referrals:

The model became a road map—general education changed drastically as to how they do their curriculum, how they do tiered interventions, how we use progress monitoring, and that allowed special education to change also. So more kids are spending more time in the general education classroom.

Some PA-W interviewees "complimented the evolution and changes they've seen in the inclusive support of students with disabilities in the RtI framework and the district's institution

of co-teaching [among general and special educators].” Referrals to special education at one MDP school in PA-W have reportedly decreased because “why bother?”—i.e., within the RtI framework, students have access to instruction tailored to their individual needs without requiring a special education referral or eligibility determination. Staff of one sustaining MN school asserted that within the RtI framework, “When students are referred to special education they qualify, so the system is more efficient.” The three MDP schools in PA-E are among only 15 in Pennsylvania that have been approved to use RtI for special education eligibility determination for students with a learning disability; other district schools are applying for the same approval.

Student achievement. A particularly powerful argument for sustaining the models is the “evidence of results” (PA-E)—i.e., the positive effect of better teachers and teaching on student achievement. For example, staff of a sustaining MN school attributed their school’s commitment to the model’s RtI framework to “getting the results we hoped for; [achievement] growth is happening due to the tiered intervention system.” One PA-E implementation school that had shown the smallest improvement in student achievement during the MDP is among the top schools in the state in their 3-year annualized student achievement growth in a value-added analysis of scores on the Pennsylvania System of School Assessment (PSSA) of students who were exposed to the model for 3 years. PA-W staff interviewed for the follow-up study described the model’s impact on student achievement as “positive, “miraculous,” and “life-saving” and asserted that their “students are proud of their own achievement success and that of their peers at other schools.” Improvements in student achievement realized as part of the PA-W model also appear to be extending to other aspects of instruction; one teacher reported:

Now that we have seen such progress with basic skills and have improved intervention instruction, we recognize a need to really ramp up higher-order skills and improve what we do in grade-level core instruction.

Compatibility

The “fit” of the core intervention components of a model with the priorities, values, and culture of implementing schools, districts, and states is said to be a key factor in sustaining all of the MDPs. The PI working in MN described the schools that have sustained all of the MDP components as having “a strong history of using the problem solving model,” one of the MDP core components; thus, they have implemented and sustained the model with relative ease. The MN focus on student achievement, data-based decisionmaking and improved core instruction are district-level priorities that also are consistent with RtI implementation. MDP staff working in OR noted that schools receiving Title I funding seem to find it less challenging to adopt the model than non-Title I schools, suggesting that the model is more compatible with the existing focus of Title I on both collecting and using data than it might be in non-Title I schools. Compatibility also is an element to models being implemented districtwide in the two Pennsylvania MDP districts; the components of the model are compatible with the goals of the districts to improve instruction and boost student achievement. However, one PI noted that full compatibility is not necessary for strong implementation or sustainability; where there are tensions between some model elements and the district or school context, adaptations to the model is to be expected and should be supported in order to better align the intervention with its context. “If the model is a closed system that can’t adapt, then it won’t work or last in many places as is.”

Complexity

The complexity of the various models implemented by the MDPs in terms of measurement systems, PD and coaching requirements, data-based decisionmaking procedures, and other components was not reported to be a factor in understanding variations across schools within MDP districts or across districts in the extent to which models were sustained or had spread. The Pennsylvania model was implemented fairly uniformly in both its participating districts, as was the Oregon model in OR, despite earlier analyses of the models suggesting that the OR model might be perceived as more complex by school staff than the model implemented in PA-E and PA-W (Wagner & Levine, 2010).

Core Implementation Components

Two of the MDP PIs pointed to their overall implementation strategies as contributing directly to model sustainability. The PA-E team had “built sustainability into the project as a core implementation component from day 1. Your job is to do everything you can so the project is still there when you leave.” The approaches to PD and coaching, in particular, emphasized building local capacity for sustainability from the outset. The strategy in OR also was a key factor in sustainability, according to that MDP’s PI. “Our strategy was to build more of a grassroots effort; teachers own it and carried it through, which has contributed to long term success.” Elements of that strategy included initially relying on teachers who volunteered to participate in the MDP, thereby ensuring support, and having school staff provide leadership in data team meetings, rather than relying on MDP staff.

In addition to these kinds of broad implementation strategies, the variety of materials, tools, and technologies MDPs provided to support school staff in implementing various aspects of their models were considered to be important for sustainability and spread. For example, MDP grant funds helped pay for intervention curricula and materials and for handheld devices to record and manage progress monitoring data in PA-W, and the OR MDP invested in significant upgrades to the *easyCBM* assessment and data management system in response to school staff input regarding system features that would ease implementation of the assessment component of the model. The OR Director of Special Education noted that, “It makes a difference to have a good assessment system... one that is fine-grained enough to really be able to monitor progress on discrete skills; so a big part of [the value of] the grant was the measurement system.” OR school staff also mentioned the usefulness of the forms and written guidelines that were developed by school and lead teams during the MDP, indicating that they are still widely used throughout the district. The OR MDP also made available training materials via the Internet that district educators used for PD in support of sustaining the districtwide model. District PD specialists are expanding these online resources for use in introducing the IIPM model to new staff or reinforcing key features of the model for returning members of the team.

Characteristics of Schools and Their Contexts

Administrative leadership and support. All MDPs agreed that “it’s all about leadership at every level: district, building, teachers.” District commitment was a prominent factor in PA-E; the PI who worked there reported that “the strong and unwavering commitment of the Director of Curriculum and Instruction to the RtI process” was critical to the original implementation success, to the spread of the model districtwide, and “provides a key indication of its likely ongoing and expanded use in the district.” A similar attribution was made regarding PA-W,

where sustaining the model is said to reflect “the remarkable commitment of the Superintendent.” School district support also was instrumental in OR and included the school board, not just the district administration. It was reported that the board includes discussion of progress implementing the IIPM model as a regular agenda item for board meetings; this attention has garnered support throughout the community because board meetings are broadcast throughout the city on the local public radio station.

The MN experience underscores the importance of the principal because, according to the PI, the principal has control over critical resources needed for implementation and sustainability, particularly the school schedule and budget. Explaining OR’s spread of the IIPM model, the PI from that MDP asserted that “it’s critical that RtI is owned by the teachers. If it had been dependent on principals to be sustained, it would have been problematic, as there’s only one principal who has remained.” PA-W staff voiced a similar finding. Principals also are affected by teacher commitment: “When teachers are the impetus behind the intervention, it makes it easier for principals to lead and to provide administrative support.” One MDP staff member summarized: “All in all, it takes ‘the right people’ to change a school system.”

Access to outside resources. Particularly in the face of significant state and district budget cuts, staff of some MDPs asserted that gaining access to new funding is critical to sustainability. MDP staff working in MN attributed the sustainability of the model in two of the three MDP schools to the university obtaining grant funding via an OSEP Leadership grant that supports six Ph.D. students to take over the responsibilities of the half-time school-based coordinator originally funded by the MDP grant. Spread of the OR model is being facilitated by an Institute of Education Sciences (IES) grant to the state of Oregon to revamp the model’s PD materials and strategy to an online distance learning approach, which will reduce costs of training to implement the model and thereby increase the chance for sustainability and spread. MDP staff in PA-E and PA-W did not emphasize outside resources in the sustainability of their model in the original implementation districts, where administrators had prioritized district resources for model implementation, even in the face of budget cuts and competing demands for resources.

Unique features of particular MDPs. Some contributors to successful maintenance of the model and to its spread are unique to particular MDPs. OR MDP staff reported believing that the expansion of the OR model to all district elementary schools was facilitated by a planned 4-year adoption cycle,

“with sufficient time to enable educators from the schools participating in the grant model development to create materials to support implementation at other schools. Starting small with volunteer schools and not expanding districtwide until the model had been well-developed, implemented by project schools, and modified for improvements all helped support widespread adoption at all elementary schools.”

As another example, PA-E staff asserted that “the state’s approval of using the RtI process for SLD [specific learning disabilities] determination for special education identification makes sustainability of the model likely.”

Factors Reported to Hinder Model Sustainability and Spread

It can be expected that the absence of a factor that promotes sustainability and spread can be a hindrance to achieving those outcomes. For example, just as having leadership and support from district and school administrators and teachers was considered an important contributor to sustainability, their absence can hinder it. MDP staff working in MN said school staff reported that “there is district support for RtI and model elements, but not clear expectations for schools to implement them... and no PD to help them do it.” Teachers there also reported “they don’t have the support they used to have from principals, although they are still doing components of the model.” And one principal commented that, “You have to have the commitment from the school and the district to build RtI into the budget and the system (e.g., in terms of dollars for the position and time for data meetings and fidelity checks). If we don’t have that commitment...sustaining the model is going to be a challenge.”

Further, if achieving improvements in teaching, staff attitudes and culture, educational systems, and student achievement are not salient, high priority goals, implementation will not be sustained. As the OR MDP team pointed out, “The important lesson is to pick a school where staff are aware that they really need what you’re trying to sell them.” In the absence of that perceived need, the costs and burdens of making the changes inherent in the model are not perceived to be outweighed by the potential benefits that would accrue from the model. OR was the one district where an MDP school withdrew from the project; it was a school with a large percentage of high-performing students, a fact that was attributed to the existing high-quality teaching, resulting in little perceived advantage to continued participation in the MDP.

But in addition to the absence of promoters of sustainability and spread, two other factors were said to seriously challenge model sustainability and spread—budget cuts and staff turnover.

Budget Cuts

MDPs agreed unanimously that a shortage of resources has been a significant challenge to model sustainability and spread over the last 2 years, and the challenge is only expected to increase as all districts and schools experience additional budget cuts. These cuts impact model sustainability and spread in several ways. For example, MN MDP staff reported budgetary obstacles to providing enough coaching at the school level to sustain the model, with the principal of one school indicating that continued sustainability would be uncertain without outside grant funds compensating for cuts in district support. Budget cuts in OR reportedly have resulted in staffing reductions, school closures, and significant changes in leadership throughout the district as administrators have been “shuffled” to cover the workload with fewer positions. When asked about any drawbacks to implementing the model in PA-W, some school staff pointed to the need to hire new staff to fill new roles (e.g., literacy coaches and intervention teachers), which “is essential to continued success.” Budget cuts threaten that continued success, eliminating several specialized reading intervention teacher positions and straining the capacity of coaches, who report their responsibilities “seem to continue to grow and grow and grow.” The district also is reportedly considering adopting computer-based interventions for tiers 2 and 3 to compensate for personnel losses, but doing so with “some ambivalence” regarding trade-offs between cost savings and the “benefits of having a real teacher.”

In OR, the absence of any PD in the years since the end of the MDP has meant that new school staff have not had the same level of training or support in the district’s IIPM model or in specific interventions to support literacy development as early implementers. This has raised a

question among MDP staff about whether the model’s effectiveness in improving student achievement could be maintained, particularly in light of the fact that fidelity checks on key intervention components of the district’s model are not being done routinely. There is some hope that the district’s “push in” strategy for providing PD—funding school leaders directly involved in the MDP to be PD specialists—will be able to offset the challenges to sustainability generated by budget cuts. MDP staff working in MN also said the level of PD needed to sustain the model there is in jeopardy because all teacher release days are being used to address new curricular adoptions in reading and math. The reading-related PD is compatible with the MDP model, but the math focus competes for scarce resources that could support model sustainability. PA-W staff reported that a shortage of dollars for PD was being dealt with in that district by the superintendent’s and administration’s continued support for pooling funds to send the RtI coordinator and coaches to trainings and conferences; in this way they have extended and expanded the “internal expertise” that would continue to develop the district’s professional skills from within.

PA-W staff reported that cuts limited the available money to “update technology tools, data management subscriptions, fund nonessential personnel salaries, and buy additional instructional materials.” PA-W teachers are problem-solving ways of coping and reported they “may have to revert to the inefficiency of paper and pencil assessments and data management” if they cannot afford to renew licenses for their PalmPilot data entry and management tools. A similar situation was reported in PA-E regarding renewing *AimsWeb* licenses, where teachers are using simple electronic spreadsheets for data management, keeping it “tech-based” but at lower cost.

Staff Turnover

One lesson from the 4-year implementation experience of C1 MDP grantees was that “capacity does not stay built” (Wagner & Levine, 2010, p. 268). School and district staff turnover was a challenge to earlier implementation and is said to be a challenge to sustainability as well. In OR, MDP staff were concerned about model sustainability with fidelity because “some recent administration hires do not have the same understanding of the IIPM model as those who were involved in its creation.” The OR PI reported that because only one principal remained from the MDP years, district and teacher support became key to model sustainability and spread there. In PA-E, the superintendent position had changed hands twice since the MDP ended, and the district directors of personnel, special education, and professional development as well as the principal of one of the MDP schools were expected to retire at the end of the 2010–11 school year, presenting “important challenges for future sustainability.” Yet, the district’s handling of turnover in the principal’s position at one MDP school

is a good indicator of the district’s commitment to sustaining the model; the district explicitly sought someone who had already strong commitments to the data-based decisionmaking process and experience with RtI model implementation.

Yet turnover within a district can benefit model spread. PA-W MDP staff reported that “the project had a profound impact on the level of discourse among teachers and on what they do; teachers brought this to new schools when they moved within the district.”

Summary

Two years after leaving their MDP districts and schools, MDP staff found important differences in the extent to which their models had been sustained and had spread within and outside the original participating districts. They attributed the differences they observed to several factors related to the core intervention and core implementation components of the models and the school and district contexts in which they had been implemented. The powerful pull of the improvements in instruction, staff perspectives and attitudes, systems, and student achievement that were attributed to the models were reported to overshadow the resource investments that were required to generate those improvements, making “true believers” out of many teachers and administrators. Having a good fit between model procedures and school and district priorities also was said to support sustainability and spread, as was having implementation strategies that worked toward sustainability from the very beginning of the MDP. Garnering strong support for sustaining the model at the district, school, and teacher levels was said to be critical, although different experiences of the MDPs caused them to emphasize the importance of leadership at one administrative level more than others.

Although access to outside grant resources was said to contribute to the sustainability of the MN model in two of its three implementation schools, the pervasive impact of education system budget cuts across all MDPs was a cause for grave concern for the sustainability of the models and their spread going forward. Even in OR, PA-E, and PA-W, where districtwide implementation of the model had been achieved and sustained to date, the ability to maintain the specialized staff, PD, teacher release time, and measurement technologies that the models require is in deep doubt, despite administrators’ commitment to finding resources to maintain the models. Staff turnover also was an ongoing challenge in OR and PA-W, and was anticipated for the coming year in PA-E.

These findings regarding model sustainability and spread add a valuable, longer-term perspective to understanding the model demonstration processes of C1 MDP grantees. Conducting similar follow-up studies with MDP grantees from cohorts 2 through 4 over the next 3 years will enable us to draw further insights into factors that may promote or hinder model sustainability; insights that may help future cohorts of OSEP model demonstration grantees plan for, implement, and sustain models that will improve services to and the outcomes of infants, children, and youth.

References

- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network.
- Fuchs, L. S., Fuchs, D., Hosp, M. K., & Jenkins, J. R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading, 5*, 239–256.
- Johnson, K., Hays, C., Center, H., & Daley, C. (2004). Building capacity and sustainable prevention innovations: A sustainability planning model. *Evaluation and Program Planning, 27*, 135–149.
- Mancini, J. A., & Marek, L. I. (2004). Sustaining community-based programs for families: Conceptualization and measurement. *Family Relations, 53*, 339–347.
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: The Free Press.
- Scheirer, M. A. (2005). Is sustainability possible? A review and commentary on empirical studies of program sustainability. *American Journal of Evaluation, 26*, 320–347.
- Shapiro, E., Zigmond, N., Wallace, T., & Marston, D. (Eds.). (2011). *Models for implementing response to intervention: Tools, outcomes, and implications*. New York, NY: The Guilford Press.
- Shediak-Rizkallah, M. C., & Bone, L. R. (1998). Planning for the sustainability of community-based health programs: Conceptual frameworks and future directions for research, practice, and policy. *Health Education Research, 13*, 87–108.
- Wagner, M., & Levine, P. (2010). *Progress monitoring interventions for elementary school reading: An illustration of the model demonstration process*. Menlo Park, CA: SRI International.