

Toward Sustainability: Strategies from four cases of teacher leadership in NSF Math and Science Partnerships

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Introduction

In 2002, the National Science Foundation launched the Math and Science Partnership (MSP) initiative. MSP provided funding to partnerships of universities and school districts around the country, aimed at deepening teachers' content knowledge in mathematics and/or science and improving K-12 student achievement in these core subjects. Among the funded MSP projects, a number utilized teacher leadership as a strategy for impacting the quality of K-12 instruction. These MSP projects included a variety of programs to develop the knowledge and skills for teacher leadership and to support the work of teacher leaders with classroom teachers.

The MSP-Knowledge Management and Dissemination project has seized upon the opportunity presented by the MSP initiative to investigate the sustainability of teacher leadership in a selected set of MSPs. Four MSPs were examined as cases that were illustrative of strategies, employed by project leaders, which contributed to the sustainability of teacher leadership within their partnerships. The precise model of teacher leadership in the four MSPs varied, with most featuring teacher leaders in school- or district- based positions who worked directly with classroom teachers to improve instruction in mathematics and/or science.

The cases examined the strategic decisions of project leaders and the key issues and conditions that affected the design and implementation of the teacher leader programs. This report is an analysis across the four cases to identify themes in the strategic decisions that contributed to the sustainability of these teacher leader programs.

The findings presented here are intended as guidance for decisions that current and future designers of K-12 teacher leader programs face. However, these findings are not offered as a guaranteed step-by-step guide to success (if only!). Rather, this report recognizes that programs cannot do it all with limited resources and that designers benefit from access to the lessons of others whose strategic decisions contributed to the sustainability of their teacher leader programs.

What is sustainability?

In this cross-case analysis, judgments of sustainability of teacher leadership were based on evidence of the continued presence of features of MSP teacher leader programs in the participating districts and/or universities and the likelihood that these features would be continued in the future. This report links evidence of sustainability to the decisions and actions of project leaders to create favorable conditions for sustainability of teacher leader programs over the course of the MSP project and beyond. Sustainability did not signify the continuation of the entire MSP teacher leadership program. On the contrary, we recognized that programs are rarely sustained in their entirety once the original funding has ended. We focused on identifying evidence of the ongoing presence of specific features of teacher leader programs such as the continuation of particular teacher leader practices or teacher leader positions in schools or districts; coursework adopted by

a university as part of a graduate-degree program to prepare teacher leaders; or the establishment of new policies at the district or state level that support teacher leadership.

The framework for identifying decisions and actions of project leaders that appear to have contributed to sustainability was adopted from The Handbook for Enhancing Strategic Leadership in the Math and Science Partnerships (Weiss, Miller, Heck & Cress 2004). In this framework, four inter-related components were identified as critical to enacting and sustaining change through school reform efforts:

- Designing and implementing interventions
- Garnering support from key stakeholders
- Aligning policy
- Developing capacity and infrastructure to scale up interventions

The framework presented in the Handbook focused on the decisions of project leaders, considering strategies that relate to these four components. In our research, project leaders from the MSPs attended to the four components to varying degrees. We found that this framework allowed our research to maintain a focus on the sustainability of teacher leadership while also allowing for variation among strategies enacted in real programs. The components structured our investigation into the sustainability of teacher leader programs. The presentation of findings in this report is organized into four sections, each dedicated to a single component of the framework.

The components of the framework are not discrete steps; rather, strategic leaders work iteratively, attending to and devoting resources to different components at various points over the course of carrying out a program. For example, an intervention to prepare a cohort of teacher leaders through a graduate degree program in science might require the creation of courses to develop teacher leaders' understanding of science concepts and inquiry-based teaching strategies. The designers of this program would work to garner the support of stakeholders within the school districts, to ensure that course content was aligned with the goals of the district science curriculum, and stakeholders within the university, to recruit science and education faculty to lead the courses. The content of the program could be affected by university policies for designing and accrediting graduate courses. To complete this example, the sustainability of the graduate courses may depend on having the appropriate instructors and the commitment of school districts to scale up the intervention to continue to offer these courses in successive years.

The strength of the framework is that it provides project leaders with a map of the terrain that they will encounter when attempting to sustain school reform programs. The four components provide distinct vantage points from which strategic project leaders can design strategies, allocate resources, and build support for their programs.

Highlighted in the Handbook was the need for leaders to consider the trade-offs of their decisions and to be aware of the implications of choices made in designing and implementing their programs. While trade-offs are inevitable, examining and articulating the reasons for programmatic decisions helps project leaders identify alternative courses of action and weigh the benefits and costs when faced with changing conditions for their

reform efforts. In this report, examples of trade-off thinking in the case MSPs are presented. Project leaders in the case MSPs weighed which stakeholder groups to initially focus upon to garner support for their programs, determined whether to adapt programs to existing policies or attempt to enact new policies, identified the appropriate content and duration of teacher leader preparation and support programs, and considered a myriad of other issues that shaped the short- and long-term impact of their programs.

Also worth noting is that, in this report and in the Handbook, sustainable school reform efforts were viewed as the product of partnerships. The case MSPs were partnerships of different organizations, drawing from the capacities and resources of universities, school districts and other partners in K-12 education. Sustaining the teacher leader programs in the case MSPs was not the result of the decisions or actions of a single person or institution. The case MSPs, to varying extents, build from the foundation of pre-existing partnerships that had been established in earlier school reform efforts. As a result, the case MSPs were not starting from scratch in bringing together an array of organizations, but instead each benefited in different ways from a shared history of partnering in education reform. In this report, examples from the case MSPs illustrate how partnerships engaged in strategies that appear likely to sustain teacher leader programs.

About the MSPs described in this report

The NSF-MSP initiative was a fertile ground for an investigation into teacher leadership, as the grant solicitation highlighted the development of teachers as intellectual leaders in mathematics and science as one of the goals of the initiative. At the heart of the MSP program was the strengthening of collaborations between school districts and universities. In the MSPs selected as cases, university mathematicians (and scientists, in one case MSP) and education faculty worked with K-12 school personnel to design and implement a range of teacher leadership programs.

The cases include detailed information on the organizations involved in the partnership, the specific strategies of project leaders in their teacher leader programs, key issues addressed by project leaders during implementation of their programs and an analysis of the sustainability of the programs. These are cases of *teacher leadership* in four MSPs: these cases do not address all facets of these MSP projects. The cases are available on this web site (www.mspkmd.net):

- [**The Use of Structures and Tools to Support the Work of Teacher Leaders: The Case of the El Paso MSP**](#)
- [**Preparing Teachers for Formal and Informal Leadership Roles: The Case of Nebraska's Math in the Middle MSP**](#)
- [**From Content Experts to Change Agents: The Case of the Vermont MSP**](#)
- [**The Use of State Policy to Support Teacher Leader Programs: The Case of the Virginia MSP**](#)

We encourage readers of this report to also read the individual cases for additional, detailed descriptions of the actions of project leaders to support the sustainability of their

teacher leader programs. In particular, you may find it helpful to refer to the case MSP that addressed issues similar to those that you may face or an MSP which operated in a context that matches your own.

In this report, “teacher leader programs” is a general term used to refer to MSP activities for selecting, preparing, and supporting the practice of teacher leaders in schools and districts. All four case MSPs included teacher leader programs to develop classroom teachers’ knowledge and skills in preparation for roles as teacher leaders. The El Paso and Vermont MSPs included programs to support teacher leaders as they worked with classroom teachers.

Brief summaries of the four case MSPs are presented here. These summaries provide an overview of the goals and strategies of each MSP and demonstrate how the cases varied in the types of teacher leadership programs that were implemented:

El Paso MSP

The El Paso MSP began in 2002 as a community-wide partnership among school, university, business and civic leaders and involved schools from three urban and nine rural school districts. As an MSP “comprehensive” project, the El Paso MSP addressed school reform in grades K-12 in mathematics and science through enhancing the knowledge and skills of mathematics and science teachers. The El Paso MSP featured staff developers in school-based teacher leader positions created through MSP funding. Twenty five staff developers in mathematics and science were originally assigned to high schools in the urban districts, and four staff developers split their time between schools in the rural districts. Staff developers were fully released from classroom teaching responsibilities and were expected to spend much of their time working directly with teachers in their classrooms. In the final two years of the MSP, staff developers were transitioned out of high schools and into middle schools in their districts, where project leaders saw a greater need for support of mathematics and science teaching.

Project leaders in the El Paso MSP utilized tools and structures to shape and support the work of the staff developers and maximize their impact on instruction. Instructional coaching tools were developed that highlighted strategies for critically observing and guiding reflection on teachers’ classroom instruction. Staff developers participated in ongoing trainings designed and led by staff of the El Paso MSP, which focused on the knowledge needed to use these tools effectively. Project leaders also used MSP funding to create new district positions, the MSP district directors, to supervise and support the staff developers within each district. The district directors helped integrate the goals of the MSP with those of the districts, to ensure that the work of the staff developers remained consistent with the expectations of MSP project leaders. At the end of the El Paso MSP, sustainability of the staff developer program was evident in the continued use of the instructional coaching tools to shape the practice of coaches in two of the three urban districts, which also created district positions that resembled the role of the MSP district directors.

Nebraska’s Math in the Middle MSP¹

Nebraska’s Math in the Middle partnership was launched in 2004, bringing together a university and teachers from one urban and over 60 rural districts from across Nebraska. The case of the Nebraska MSP highlighted a program that prepared teachers for formal and informal leadership roles. As an MSP “institute” project, a central effort was the creation and delivery of graduate courses for teachers to deepen their knowledge of mathematics and pedagogy. Both the summer institute and school-year courses were designed and led by mathematicians and education faculty and were attended by teachers from districts around the state.

Through the years of MSP funding, nearly all of the over 130 teachers who enrolled completed the intensive graduate program of the Nebraska MSP. In one participating district, graduates of the program were hired into new district-based coaching positions. Teachers in these coaching positions were fully released from classroom teaching in order to lead workshops of teachers in grades 3-9 and provide direct support to teachers in their classrooms. A number of graduates of the Nebraska MSP also emerged as informal leaders in rural and urban districts, assuming roles as staff developers and curriculum designers in their districts, as board members in the state association of mathematics teachers, and as instructors of the Nebraska MSP courses. The coursework continued to be offered as a graduate degree program after the end of the original MSP grant at the original university site and at additional universities across the state.

Vermont Mathematics Partnership

The Vermont MSP began in 2003 as a partnership of five universities and sixteen schools in seven districts. The project was designed to expand the impact of teachers viewed as content experts in mathematics in their schools, who were seen by Vermont MSP project leaders as a potent source of teacher leadership in their schools. As an MSP “targeted” program, the Vermont MSP focused on impacting mathematics instruction across the sites involved in the partnership. Teacher leadership was one strategy employed by project leaders to accomplish this goal, which also included providing professional development to all teachers in the schools and the launch of ongoing assessments of student learning.

Vermont MSP project leaders met with staff from the partner schools to plan interventions to impact mathematics education across their schools. A key feature of these interventions was the development of new teacher leader roles. Each of the seven sites created site coordinator positions, filled by full-time teacher leaders with responsibilities determined by the needs of their particular sites. A total of nine site coordinator positions were created in the Vermont MSP, with two districts employing two coordinators. Site coordinators received professional development through the MSP, which included training in the use of the Ongoing Assessment Project, a strategy for working with teachers to assess the learning of their students and design lessons appropriate for their students. Depending on the size and organization of each site,

¹ The official title of the project is the Math in the Middle Institute Partnership. Throughout this report, the project is referred to as the Nebraska MSP.

additional mathematics teacher leader positions were also created to support the work of the site coordinators. In the districts that had additional MSP teacher leader positions, teacher leaders were either partially released from classroom teaching or had no release time, with the expectation that teacher leader work would occur outside the regular teaching schedule. With the end of MSP funding, all of the sites continued to fund teacher leader positions based on the roles of the site coordinators and other MSP teacher leaders. In addition, districts outside of the Vermont MSP have sought training for their teachers in the use of the formative assessment system created during the MSP, which also continued to be applied in the schools involved in the partnership.

Virginia MSP²

Launched in 2004, the partnership of the Virginia MSP included three universities and nine school districts. As an MSP “institute” project, its programs were focused on developing knowledge and skills for teacher leadership. Project leaders included mathematicians and mathematics education faculty members from the universities and district mathematics supervisors from the school districts. Prior to the MSP, project leaders had teamed together to advocate for the creation of a state-wide K-8 Mathematics Specialists license. When the license was established in Virginia, it created requirements for the Mathematics Specialist position, a school-based teacher leader, fully released from classroom teaching responsibilities. Mathematics Specialists were charged with deepening the overall capacity for mathematics instruction within their schools, although the actual practices of the Specialists varied.

The MSP project was linked to the passage of the Specialists license, as project leaders recognized the need for rigorous graduate coursework in Virginia universities that led to licensure. Further, project leaders collaborated to define the responsibilities of Mathematics Specialists and districts in the partnership agreed to fund Specialist positions aligned with the MSP definition. In the Virginia MSP, mathematicians, mathematics education faculty members and district mathematics supervisors teamed together to design and teach graduate courses in the Mathematics Specialists degree programs. The three-year programs were offered at each of the universities in the partnership and included an intensive four-week summer institute as well as courses during the school year. Overall, the MSP prepared 50 Mathematics Specialists in two cohorts and the graduate degree programs continued to be offered by the original university partners. Further, by the end of MSP, project leaders had begun to assist other Virginia universities to implement similar graduate programs.

The four case MSPs varied in ways that are important to note because they provide context for the findings that emerged in cross-case analysis. While all MSPs received sizable, five-year grants, the total amount of funding received by the case MSPs varied. The MSPs worked with different teacher and student populations. The Nebraska and Vermont MSPs featured teacher leadership in a mix of urban and rural districts, which

² The official title of the project is the NSF-MSP Institute: Preparing Virginia’s Mathematics Specialists. Throughout this report, the project is referred to as the Virginia MSP.

had small populations of students of color and a high percentage of students on free/reduced lunch. The El Paso MSP focused on teacher leadership in urban and rural districts with a high percentage of students of color and students on free/reduced lunch. The Virginia MSP included districts with a range of student demographics, some with predominantly white student populations with high socio-economic status and others with a high percentage of students of color and/or students on free/reduced lunch.

Project leaders in the case MSPs designed their teacher leader programs to address their particular context. Each individual case offers a detailed and valuable account of the issues faced by project leaders and their strategies for supporting and sustaining teacher leadership. It is our hope that the four cases provide access to project leaders' actions to sustain teacher leader programs in different contexts and related to different models of teacher leadership, which will help others design and implement programs that will have a lasting impact.

Analytic Process

The four case MSPs were selected because they provided a variety of approaches for supporting the development and practice of teacher leaders, operating in different grade levels and settings. These four case MSPs were identified from among a larger group of MSPs with well-designed teacher leader programs. A review of MSP annual reports and publications shared by the MSPs with MSP-KMD and interviews with the MSP principal investigators about preliminary evidence of sustainability of their teacher leader programs informed the selection of the four MSPs that became the case MSPs. The bulk of data collection for the cases was conducted between December 2007 and April 2008, with follow-up data collection continuing through July 2010. Data collection occurred when all of the case MSPs had had three or more years of MSP funding so that, at the time of data collection, the implementation of teacher leadership programs was well underway. During data collection, project leaders shared their strategies related to the sustainability and, in some instances, indicators of the sustained presence of their teacher leader programs.

Data collection consisted of interviews with project leaders and other project participants identified by the MSP principal investigators. Interviews were conducted with university STEM faculty and education faculty, professional development designers and providers, district administrators, school principals, teacher leaders, and, in one case, a state legislator. A multiple-day site visit was made to each MSP, during which interviews were conducted and teacher leaders were observed at work with classroom teachers. Documents collected from MSPs, such as annual reports, research publications, and conference presentations, were reviewed as additional data sources.

Initial steps of data analysis consisted of creating interview summaries for each interview, which highlighted comments related to sustainability of teacher leadership and the reasoning behind or impact of project leaders' strategic decisions. Analytic memos were drafted that combined data from the interview summaries with analysis of other data sources. From these data analysis products, the four cases were written.

Cross-case analysis began with the creation of a working set of hypotheses based on the components and sub-components in the Handbook. Hypotheses were tested for fit against a single case, by considering the accuracy of a hypothesis against the completed case as well as the data analysis products (analytic memos, interview summaries, and MSP document summaries). Some hypotheses were discarded at this point, while others that were confirmed by the data were shaped into *key ideas* that supported the sustainability of teacher leadership in the MSP. The key ideas were tested across the set of cases, which led to further revisions to the key idea or its refutation, and ultimately led to the identification of a final set of key ideas presented in this report.

The cases and the cross-case analysis were reviewed prior to publication, in order to check for accuracy. The principal investigators of each MSP had multiple opportunities to review and provide input on drafts of the case of their MSP. The cases and cross-case analysis were also reviewed by staff at Horizon Research, Inc., a partner in the MSP-Knowledge Management and Dissemination project, and by external reviewers.

About this report

The report is organized into four sections, representing the components highlighted in the Handbook. First, the work needs to be worth sustaining, with *interventions* that lead to improved mathematics/science teaching and learning. Second, *key stakeholders* have to consider the work important and worth sustaining. Third, *key policies* need to be aligned in support of the vision, providing guidance and incentives for the continuation of the work. Finally, there needs to be sufficient *capacity and infrastructure to scale up* the teacher leader programs successfully, and continue the work with quality.

While this report is based on the analysis of the past work of MSP project leaders, the findings are presented here as key ideas that could guide the decisions of future designers of teacher leader programs, such as district administrators, university faculty members or other leaders of education reform efforts. Program designers face a myriad of decisions to determine where to focus their attention and how to allocate resources. The key ideas in this report will help them think about ways to leverage their limited resources in order to sustain the essential aspects of their programs. Key ideas are written as possible actions for program designers to consider within each component. For each key idea, illustrative examples are drawn from the case MSPs to play out the key idea. To find more detailed descriptions of the actions of project leaders related to the key ideas and the sustainability of teacher leader programs, refer to the individual cases of the four MSPs.

Worth noting is that, throughout this report, when an example is drawn from a specific case, the teacher leadership position is referenced by the title used in that particular MSP. We do this to signify that there are variations in the responsibilities and context of the teacher leaders in each MSP, so it is important to communicate which MSP teacher leader position is being referred to. When we discuss teacher leadership generally, we use the term “teacher leader.”

Designing and Implementing Interventions

Interventions refer to the activities undertaken to improve instruction and, thus, student learning either throughout a system, or in selected schools, grade levels, and subjects. Professional development to deepen teachers' understanding of disciplinary content and pedagogy, activities to build community involvement in schooling, or efforts to increase administrator involvement in instruction are examples of interventions in K-12 reform. In universities, interventions may include developing new courses or altering the content or pedagogy of existing courses to align teacher preparation programs with the skills needed for effective classroom instruction. Interventions involving teacher leaders typically include: 1) interventions to impact the knowledge and skills for teacher leadership, and/or 2) interventions to impact the practice of teacher leaders in their work with classroom teachers. While all of the case MSPs we studied included both types of teacher leadership interventions, each MSP tended to focus resources on one type of intervention.

All four case MSPs designed interventions to develop the knowledge and skills of teacher leaders. The Nebraska and Virginia MSPs each featured a multi-year sequence of graduate-level courses, the bulk of which were completed during intensive summer institutes with some courses offered during the school year. In both projects, university mathematicians and education faculty collaborated with school district personnel to design and lead instruction of the courses. In the El Paso and Vermont MSPs, interventions to develop the knowledge and skills of teacher leadership consisted of regular, ongoing trainings for practicing MSP teacher leaders. The trainings in these case MSPs focused on specific topics connected to the work of the teacher leaders, and were designed and led by MSP project leaders.

The Vermont and El Paso MSPs also led interventions to support the practice of teacher leaders. These interventions had some common features, including efforts to structure the work of teacher leaders and provide them with tools and resources to impact classroom teaching. The projects adopted different approaches in certain aspects of their interventions. The Vermont MSP invested in customizing teacher leader positions to fit the particular needs of each district in the partnership. The El Paso MSP emphasized the need for a common set of practices among teacher leaders, in order to effectively support their work and assess the effectiveness of the program.

While there were similarities and differences among the MSP interventions, cross-case analysis identified three key ideas that influenced the design and implementation across the cases.

Key ideas for designing and implementing interventions

Look to other teacher leadership programs for possible models for sustainable interventions and adapt the model program to fit your particular context.

Prepare teacher leaders to share their content expertise with classroom teachers.

Align interventions to the selection of candidates for the teacher leader programs.

These key ideas, illustrated by examples from the case MSPs, have implications for people who are designing and implementing teacher leader programs, whether or not they are supported by external funding.

Look to other teacher leadership programs for possible models for sustainable interventions and adapt the model program to fit your particular context.

The most substantial investment of both money and human resources in the case MSPs was in the design and implementation of the interventions of their teacher leadership programs. By finding quality examples of programs to serve as models for their own teacher leader programs, project leaders saved resources that would have been required if they had created new programs from scratch. Project leaders also benefited from the experience of model programs by anticipating challenges that arose for the models or adapting aspects of the models that had demonstrated effectiveness. However, project leaders did not simply replicate the interventions of the model program in their MSP.

Rather, project leaders strategically adapted the model programs to fit their own settings. Project leaders utilized common steps to identify how their programs needed to differ from those that they were modeled upon and to address the implications of those differences for their programs. In the case MSPs, project leaders looked for model programs that resembled their own in key ways, by having similar goals, working with similar teacher populations, and/or addressing similar challenges.

Project leaders of the Nebraska MSP focused on the project goal of developing the mathematical knowledge needed for teaching mathematics and serving the needs of mathematics teachers in rural communities. They found a model program in the Vermont Mathematics Initiative (VMI)³, which had been in operation for over 10 years, providing graduate courses to a similar population of teachers to deepen their mathematical knowledge for teaching.

Project leaders in the El Paso MSP built their program on earlier initiatives that they had led which had featured teacher leadership. These earlier initiatives laid the groundwork

³ The Vermont Mathematics Initiative (VMI) was a precursor to the Vermont Mathematics Partnership, one of the four MSPs described in this cross-case report.

for the staff developer program and yielded important lessons for supporting teacher leadership that were incorporated into the MSP interventions.

In the case MSPs, after identifying a model program, project leaders then adapted the model programs to fit their own specific context and goals. Project leaders benefited from access to lessons learned from the leaders of the model programs. The lessons learned provided a reflective account of what worked and what didn't in the model program and why, which informed adaptations made in the MSP interventions. In the El Paso MSP, project leadership included several of the same people who had led the model programs. In the Nebraska MSP, project leaders contacted the director of the VMI for his help in launching the MSP and from those conversations accessed lessons learned in VMI. To further access lessons learned, after receiving MSP funding, project leaders of the Nebraska MSP visited Vermont, observed professional development sessions with teachers, and met in-person with VMI leaders.

These lessons learned highlighted activities from the model program that were seen as essential to its success, or revealed steps which, in hindsight, would have helped the model program in achieving its goals. In the Nebraska MSP, project leaders noted that a valuable lesson learned from the VMI director was the importance of giving teachers ample support during mathematics courses. They incorporated this advice by employing master teachers (often graduates of the MSP program) and mathematics graduate assistants as aides in their graduate mathematics courses, and attributed the high completion rate among program participants, in part, to providing abundant support to teachers.

For project leaders in the El Paso MSP, earlier initiatives had revealed conditions that could limit the impact of teacher leaders, such as a lack of teacher leader content area expertise and a reliance on the personal relationship between teacher leader and teacher to impact instruction. Project leaders adapted their MSP program to address these limiting conditions. In hiring for the staff developer positions, project leaders required that candidates had a degree in mathematics or science, and project leaders developed a set of instructional coaching tools to be used by the staff developers in order to focus their work on instructional issues.

Prepare teacher leaders to share their content expertise with classroom teachers.

The four cases highlighted the importance of content area expertise for teacher leadership. In the Virginia and Nebraska MSPs, which created graduate degree programs to develop teacher leadership, the majority of the required courses attended to deepening participants' understanding of mathematics. Alternatively, the Vermont and El Paso MSPs, which provided training to practicing teacher leaders, filled their teacher leader positions with candidates who had degrees in the content area in which they worked. These cases also demonstrated that content area expertise alone was not sufficient for effective teacher leadership. The teacher leadership interventions in the case MSPs included attention to developing the ability of teacher leaders to share their content expertise with classroom teachers in ways that impacted instruction.

In the case MSPs, courses were designed to deepen teacher leaders' capacity to articulate and reflect on their mathematical thinking and their practice teaching in these subjects. Coursework in the Nebraska and Virginia MSPs required participants to publicly explain their reasoning when solving mathematics problems. Project leaders viewed the experience provided in these courses as an opportunity for teacher leaders to develop the ability to communicate mathematics in ways that would benefit their own teaching as well as their work with other teachers. For teacher leaders in these courses, the process of explaining their own thinking helped make them more effective in their interactions with teachers. Teacher leaders also learned to empathize with classroom teachers by experiencing how it felt to reveal one's lack of content knowledge to others.

The El Paso and Vermont MSPs provided teacher leaders with instructional tools that structured the interactions of teacher leaders with classroom teachers in ways that could be applied to classroom teaching. Teacher leaders in these two MSPs received training, designed and led by project leaders, in the effective use of the tools.

The El Paso MSP created a set of instructional coaching tools to be used by the mathematics and science staff developers. These tools included observation protocols, an assessment of the cognitive demand of observed lessons, methods for guiding teacher reflection on lessons, and other strategies that capitalized on the staff developers' content expertise for the benefit of the classroom teacher.

Site coordinators in the Vermont MSP contributed to the creation of the Ongoing Assessment Project, a collection of materials to support formative assessment in specific mathematics topics in grades 2-5. With these tools, site coordinators worked with teachers to assess students' understanding of mathematical concepts and use the results in planning instruction. A project leader described the process as providing a focus and shape to teacher leader interactions with classroom teachers, in a way that was usually missing from traditional teacher leader programs. "The teacher leaders told us that [use of the assessment materials] was the first time that they had a concrete and substantive way to interact with the teachers in their schools."

Align interventions and the selection of candidates for the teacher leader programs.

MSP project leaders found the success of their interventions was tied to the creation of effective processes for selecting candidates to participate in their teacher leader programs. Project leaders developed different strategies to align the process for selecting candidates and the teacher leader program. One, university and district partners collaboratively created criteria for selection into teacher leader programs. Two, for projects with interventions to support practicing teacher leaders, project leaders designed teacher leader positions based on their prior knowledge of the available pool of candidates. Three, project leaders aligned the content of their programs to both the skills needed to serve as teacher leaders and the skill levels of the entering participants.

In the case MSPs, project leaders and stakeholders from other organizations in the partnership collaborated to establish criteria for admittance into the teacher leader programs. The case MSPs presented two different strategies for determining the final decision on which candidates would be selected into the teacher leader programs. In the Vermont and Nebraska MSPs, project leaders noted that, although the selection process was predominantly collaborative, district partners had the final say in determining which teachers would be admitted into the teacher leadership programs. Project leaders believed that this was necessary because, ultimately, district support for the teacher leaders was what would sustain the positions after the completion of MSP. In the Virginia and El Paso MSPs, consensus between partners was required. These project leaders noted that, in rare instances, when there was a disagreement on a candidate, project leaders relied on the discussions of specific criteria to help reach an agreement.

In the Vermont MSP, in which candidates were placed into newly-created teacher leader positions at the outset of the MSP, it was important for project leaders to be strategic in considering the match between the criteria for selection and the available pool of candidates. The Vermont MSP relied upon finding candidates with content expertise in mathematics that could begin work as site coordinators soon after they were hired. Project leaders were confident that enough suitable candidates would be found because of their prior knowledge of the pool of candidates in the participating schools. The Vermont MSP invited schools to join the partnership that had teachers who had participated in a state-wide mathematics teaching graduate degree program which deepened teachers' content knowledge in the discipline. Several project leaders in the Vermont MSP had worked in the graduate degree program prior to joining the MSP, were familiar with the knowledge and skills developed through the program, and knew that this had helped to create a strong pool of candidates for the site coordinator positions.

In the case MSPs, the criteria for selecting participants, as well as the requirements for teacher leader positions, shaped the interventions to develop teacher leadership. In the Nebraska and Virginia MSPs, entering participants in these programs were expected to be teachers experienced in and committed to mathematics teaching. Project leaders anticipated that these participants would need a deeper understanding of mathematics and pedagogy in order to serve as teacher leaders in their schools. As a result, the interventions in these MSPs were extensive, designed as multi-year graduate-level programs with several courses in mathematics and mathematics education in order to develop the expertise needed for leadership roles. In comparison, the El Paso MSP, where teacher leaders were selected based on their content area expertise, the interventions attended equally to deepening teachers' pedagogical content knowledge and to developing coaching skills and strategies for providing instructional support to classroom teachers.

Garnering Support from Key Stakeholders

In education reform initiatives, the support of stakeholders is critical. Key stakeholders are those people whose involvement can directly affect an initiative's effectiveness: their support makes success more likely, while their opposition or neutrality towards the project makes success more difficult. Garnering the support of key stakeholders includes taking steps to include their input in the initial design of the school reform initiative to ensure that the goals of the initiative align with those of the stakeholders and the organizations they represent. Building the support of key stakeholders for the vision of reform helps ensure that they will sustain the reform efforts beyond the initial period of implementation. Stakeholders can become advocates for the initiative and are able to champion the initiative among their constituencies to create ongoing support for the reform efforts. In programs involving teacher leaders, key stakeholders are often school and district administrators who provide access to funding and entry into the classrooms of other teachers through their public support for teacher leaders. Other key stakeholders in programs to prepare teacher leaders are university faculty members, whose involvement and commitment to a teacher leader preparation program help ensure that the courses will continue to be taught after the initial implementation period.

In the case MSPs, project leaders took steps to align the goals of their projects with the interests and obligations of key stakeholders. Project leaders developed strategies for garnering support among the large number of stakeholders who could impact the success of MSP teacher leader programs: district and school administrators, classroom teachers, university faculty, parents of students, and state and local legislators. With the possible involvement of so many stakeholders, identifying who was really "key" among them and how to garner and then leverage their support was a crucial issue in the case MSPs.

The four case MSPs largely shared a common set of stakeholders in their projects, owing to the common design of all NSF-funded MSP projects. District administrators, school principals, and teacher leaders were present as important stakeholders in all of the cases. In the Nebraska, Vermont, and Virginia MSPs, education and mathematics faculty members from local universities were also essential stakeholders in their projects, and although active in the El Paso MSP, these stakeholders were not as central. In specific cases, additional stakeholders joined this set, depending on the particular context and design of the project, and included state legislators, technical assistance providers, and regional education agencies serving rural school districts. Two key ideas characterized the MSP work in engaging stakeholders and building their ongoing support for teacher leader programs.

Key ideas for garnering support of key stakeholders

Identify district and university leaders who can build long-term support for, and involvement in, teacher leadership programs among their colleagues.

Establish a shared vision for the work of teacher leaders among key stakeholders prior to implementing teacher leader programs.

While few would argue against the importance of garnering the support of stakeholders, it can be difficult to know how to go about this crucial activity. These two key ideas highlight strategies for identifying and involving stakeholders to build ongoing support for teacher leader programs, with illustrations from the case MSPs.

Identify district and university leaders who can build long-term support for, and involvement in, teacher leadership programs among their colleagues.

Teacher leadership programs in the case MSPs relied on the involvement of university and district partners. Because the case MSPs could not actively solicit the involvement of all possible stakeholders, project leaders were strategic in how they built support for teacher leadership through the partnership. Project leaders identified a targeted number of district and university leaders as key stakeholders to support the MSP teacher leadership programs. These district and university leaders served as advocates for the MSP and built broad support among their colleagues for the teacher leadership programs of the case MSPs by forging common ground between the goals of the organizations that they represented and the MSP vision for teacher leadership. The active role of the district and university leaders as advocates went beyond the liaison-type roles that may be found in other partnerships, which focus solely on facilitating communication among organizations.

In the case MSPs, district leaders were recruited from among administrators who worked closely with the district curricula in the subject area (mathematics or science) of their teacher leader programs. These district advocates had an understanding of the needs and history within their subject area that, if not addressed, would threaten the effectiveness of teacher leader programs. District advocates played an important role in framing the MSP teacher leader programs to avoid these possible hazards and were able to present the programs to other school personnel in ways that spoke to the needs of their schools and districts.

In the Virginia MSP, mathematics supervisors from each partner district were members of the MSP leadership team and oversaw the work of the Mathematics Specialists in their districts. Mathematics supervisors shared their knowledge of the needs of their schools in mathematics to inform the design of courses and the job description for the K-8 Mathematics Specialists. The mathematics supervisors built support for the teacher leadership program by working closely with principals to develop a shared vision for the

role of Mathematics Specialists, given the preparation that they had received. The supervisors were also able to capitalize on the selection process for Specialists, building interest and support by recruiting strong candidates and participating in the selection of candidates for the graduate degree program.

In the El Paso MSP, a district leader and program advocate was placed in a position created through MSP funds: an MSP district director. The district director built support for the staff developers with middle and high school principals, meeting with them regularly to ensure that the work of the staff developers was consistent with what had been outlined by the MSP project leaders and that it met the needs of the schools for improved mathematics and science education. Since the district directors had supervisory responsibility for the staff developers, they were frequently in schools and had first-hand knowledge of staff developers' efforts, useful in building long-term support for the program. One former district director described the role as "merging the goals of the district and the MSP, to align them and make sure that they were going in the same direction by identifying the commonalities that they both had and making those visible."

In the Virginia and Nebraska MSPs, where graduate degree programs were the hallmark, project leaders were strategic about identifying faculty within the university to build broad-based support. In the two cases, the principal investigators were established mathematics faculty members with a history of work in K-12 school reform. Both advocated for the MSP through their professional networks, within and beyond the university, and tapped both tenured and non-tenured faculty to work in their projects.

Establish a shared vision for the work of teacher leaders among key stakeholders prior to implementing teacher leader programs.

The obvious importance of having a shared vision for teacher leadership belied the complexity of creating an agreement among partners that reflected the actual work of teacher leaders. In the case MSPs, key stakeholders from across the partnership were brought together to establish a shared vision for teacher leadership which aligned with the goals and needs of the stakeholders.

To build a shared vision, project leaders employed purposeful strategies to elicit the input of key stakeholders in shaping the expectations for teacher leadership, often in the form of job descriptions for teacher leaders. For example, in the El Paso MSP, project leaders met with the superintendent of each district in the partnership to create a contract for the deployment of the staff developers that included the expectation that they would have access to teachers in their classrooms.

Project leaders in the Vermont MSP conducted a needs assessment in each partnership district to identify the strengths and needs of mathematics education in their schools, and used these data in discussion with district and school administrators to determine the nature of the work of site coordinators in the school, such as the how and when the site coordinator would work with classroom teachers.

Across these case MSPs, the job descriptions were a public statement of a shared vision for teacher leadership, as well as a practical tool for recruiting and selecting these teacher leaders. They were also used to frame the graduate courses and professional development experiences for teacher leadership, ensuring alignment between preparation of and practice by teacher leaders.

Although having agreement about the work of teacher leaders from the beginning of the project was necessary, it was only the first step for garnering the continuing support of key district stakeholders. In the Vermont and El Paso MSPs, the shared vision formed the basis for an ongoing assessment of teacher leader programs; each of these MSPs held regular meetings between district and project leaders to revisit the teacher leadership model, focusing on the actual work of the teacher leaders, not just their intended work. These discussions were valuable, as they allowed project leaders to adapt their programs – realigning preparation or reworking teacher leader responsibilities – to ensure that teacher leaders still addressed key stakeholder interests and obligations.

Aligning Policy

School reform initiatives are situated against a backdrop of policies that have a substantial impact on how teaching and learning happens. Policies at the federal, state, district, university and school levels set incentives and directives that govern the activities that occur in K-12 classrooms, district offices and universities. It is important that the designers of school reform efforts are aware of the implications of existing policies for their programs. In teacher leadership, federal and state policies connected to the No Child Left Behind legislation influence which subject areas teacher leaders are assigned to and the nature of their work with teachers. District and school policies impact the availability of teachers to meet with teacher leaders, as policies around class schedules, professional development time, or the use of substitute teachers can limit when and how often teacher leaders work with classroom teachers. University policies impact the ability of faculty members to design new graduate programs and courses and the willingness of mathematics or science faculty members to participate in a K-12 teacher leader program.

Project leaders in the case MSPs recognized that the policy environments they worked within had implications for both the initial implementation and the sustainability of their teacher leader programs. They looked for ways to leverage existing policies and take advantage of new opportunities to align policy with best practice. An important aspect of aligning programs to the policy environment was differentiating between policies that could be adapted to further support teacher leadership and policies that were beyond the influence of the MSP. For policies that they believed could be modified, project leaders determined how to go about getting those adaptations enacted. For policies that were viewed as beyond the influence of the MSP, project leaders attempted to avoid conflicts with these policies in the design and implementation of their teacher leader programs.

Two key ideas emerged as important strategies for aligning teacher leadership programs in the case MSPs with policies at the district, university, state and federal levels. One, project leaders identified existing policies, particularly at the state level, that could be leveraged to support their teacher leader programs. Two, project leaders attempted to enact new policies, particularly at the district or university level, to support collaboration among the partnering organizations.

Key ideas for aligning policy

Leverage existing policies in designing and implementing teacher leader programs.

Enact new policies to support ongoing collaboration within the partnership and the initial implementation of teacher leader positions.

These two key ideas highlight strategies for designers of teacher leader programs to assess the alignment of their programs with the policy environment. As illustrated in the case MSPs, by determining where policies present opportunities or challenges for their programs, designers of teacher leader programs can affect the conditions that contribute to sustainability of their programs.

Leverage existing policies in designing and implementing teacher leader programs.

When present (as in the Virginia MSP), state policy related to licensure of teacher leaders was an influential factor in the design of teacher leadership programs. Prior to the beginning of the Virginia MSP project, project leaders had made major efforts to encourage the state to adopt a new endorsement for Mathematics Specialists. As a result of these efforts, the state school board formally initiated the process to create a state Mathematics Specialist license shortly after the MSP grant was awarded. This proposed legislation presented an opportunity for the MSP to design course work aligned with the proposed licensure requirements, an opportunity which they seized. While the creation of the license highlighted the need to strengthen mathematics instruction in grades K-8, project leaders recognized that, across Virginia, there were no existing graduate programs explicitly designed to meet the qualifications for the license. Further, project leaders had a vision for the Mathematics Specialists and their role for leading improvement in mathematics instruction in schools that went beyond the criteria for the license set by state policy. By creating graduate degree programs aligned with licensure, project leaders were able to prepare Specialists for the role that was envisioned by the MSP and provide a model for other Virginia universities to prepare Mathematics Specialists around the state.

In the other case MSPs, project leaders looked at changes in state policy more broadly to determine how teacher leader programs could support recent policy developments in the K-12 education arena. Project leaders were aware of changes in state curricula and benchmarks for student learning that were established in relation to the implementation of the No Child Left Behind Act of 2001. The decisions of project leaders in the case MSPs ensured that the abilities and roles of teacher leaders suited the changing policy environment that was affecting their districts.

Situated in Texas, the El Paso MSP utilized the creation of new state curriculum standards just prior to the beginning of the MSP in 2003 as a focus of the work of the staff developers. Project leaders prepared staff developers to assess the alignment of observed lessons with the state curriculum and to collaborate with teachers in planning lessons that addressed standards within the state curriculum.

The Nebraska MSP was located in a state where each school district created its own curriculum standards and assessments to meet the requirements of the federal No Child Left Behind legislation. This environment influenced project leaders' decision to focus the MSP coursework on mathematical thinking and the teaching of mathematics, rather than on a particular curriculum to avoid limiting which courses would be appropriate for teachers from various districts.

Enact policies to support ongoing collaboration within the partnership.

When project leaders in the case MSPs created new policies, it most frequently occurred at the district or university level rather than at the state or federal level. The new district or university policies were enacted in order to eliminate potential obstacles that limited collaboration between partners involved in the MSP.

In the Virginia and Nebraska MSPs, collaboration among three groups – mathematics and education faculty at the universities and school district staff – was viewed as essential for designing and teaching graduate courses for teacher leaders. In these two cases, policies at the university level which were obstacles for sustaining the MSP programs were targeted for change.

The Virginia MSP worked to change university policies governing the transfer of credits between universities for graduate students. The Virginia MSP summer institute, in which participating teachers received the majority of their graduate credits, rotated annually among the three core partner universities. As a result, participants received graduate credits from each of the three universities, but were matriculated into a graduate program at only one. In order to receive the graduate degree and Mathematics Specialists licensure, participants needed to transfer more graduate credits than was typically allowed by each university. At each of the three universities, project leaders were able to get administrators to institutionalize a more liberal transfer policy to support the graduate degree programs. These policies remained in place after the conclusion of MSP funding.

In the Nebraska MSP, project leaders initiated new policies to support collaboration between the teacher education and mathematics departments of the lead university. The mathematics department created several new graduate courses for middle grades mathematics teachers and modified the degree requirements for the department's Master of Arts for Teachers degree to enable a degree path leading to a "Specialization in the Teaching of Middle Level Mathematics." The education department authorized changes to two core courses to focus on teaching mathematics rather than requiring the courses to address the teaching of a variety of disciplines. Moreover, the two departments agreed that certain courses offered by the MSP graduate degree program could be taken as a course under either the mathematics or teacher education departments, thus enabling teachers to choose a master's degree from either department.

The Virginia and El Paso MSPs focused on district policy as a powerful influence over the work of MSP teacher leaders. The project leaders in these case MSPs developed policies through contractual agreements with their partner districts articulating the role that teacher leaders would play. The project leaders in these case MSPs developed policies about the nature of teacher leader work which was evidenced in the contractual agreements established with their partner districts. In the Virginia MSP, districts were obligated to place graduates of the Mathematics Specialists degree program into Mathematics Specialist positions where teacher leaders were released from classroom teaching responsibilities. In the El Paso MSP, the contract between the MSP and school

districts stipulated that the staff developers be trained by the MSP, supported by school administrators, and spend a significant portion of their time working directly with classroom teachers.

Developing Capacity and Infrastructure to Scale Up Interventions

In many instances, the initial implementation of an intervention is only the first step toward the longer-term goal of scaling up the intervention, to be sustained beyond the grant funding and to reach a larger number of people. In scaling up interventions, program designers develop the capacity of those who carry out the intervention to ensure that they have the requisite knowledge and skills so that the quality of the intervention is maintained, such as the capacity of instructors to lead courses for teacher leadership or district leaders to oversee and support practicing teacher leaders in their schools. Program designers must also build the appropriate infrastructure in organizations by establishing the necessary resources, organizational structures, and policies that will support an intervention at scale, such as policies to continue graduate degrees and secure district funding for release-time for teacher leaders.

In developing capacity and infrastructure in the case MSPs, project leaders looked beyond their staff and MSP leadership teams toward other key stakeholders who would need to assume leadership roles in order for the MSP programs to have an expanded and sustained impact. Project leaders targeted areas where capacity building was needed and where infrastructure work was called for, and devised strategies for addressing these needs. This included consideration of the pipeline of candidates to fill teacher leadership positions, ways to continue to offer coursework and/or trainings to develop teacher leadership, and the assimilation of aspects of the MSP programs into the infrastructure of the partner districts and universities.

Key ideas for developing capacity and infrastructure to scale up interventions

Build the capacity of partner institutions to continue to prepare teacher leaders after the completion of grant funding.

Use the grant period to implement changes to the infrastructure of the partner institutions to ensure that the teacher leadership work can be maintained over time.

The two key ideas highlight strategies to develop the capacity and infrastructure to scale up interventions beyond initial implementation of a teacher leader program. By taking these steps, as illustrated in the case MSPs, designers may sustain and bring their programs to greater number of participants while maintaining the quality of the intervention.

Build the capacity of partner institutions to continue to prepare teacher leaders after the completion of grant funding.

Among project leaders in the case MSPs, a key to scaling up their teacher leadership programs was building the capacity of districts and universities to prepare teacher leaders during and beyond the timeframe of MSP funding. Initially, courses and other professional development activities for teacher leaders were led by members of the MSP leadership team and paid for by MSP funds. In order to continue these programs with quality, capacity for preparing and supporting teacher leaders needed to be established at the districts and universities.

The El Paso and Vermont MSPs built the capacity of districts to scale up the preparation and support of teacher leaders by equipping MSP teacher leaders to spearhead these programs. In these two MSPs, teacher leaders were placed in schools from the outset of the project and received training, led by MSP project leaders, while providing support to classroom teachers. By the end of MSP grants, the teacher leaders who had participated in the MSP held a central role in programs to prepare the next generation of teacher leaders in their schools and districts.

In the El Paso and Vermont MSPs, teacher leaders provided to other teachers training that resembled their own preparation, and they educated others in the use of instructional tools that had been the focus of teacher leader practice during the MSP. For example, in the Vermont MSP, site coordinators were trained in the use of the materials of the Ongoing Assessment Project when working with classroom teachers, and later in the MSP, site coordinators trained a pilot group of teachers to also employ these materials. In the final years of the project and continuing after the MSP, each site coordinator helped small groups of teachers use the Ongoing Assessment Project materials and supported these teachers in applying the materials in their work with colleagues in their schools.

The Nebraska and Virginia MSPs built the capacity of universities to scale up the MSP graduate degree programs for preparing teacher leaders by creating detailed documentation of the courses that other faculty could use in teaching these courses. In these two cases, the instructors who developed and led the courses also created in-depth descriptions of the materials used and the design of the learning experiences in the courses. The written documents were critical to efforts to adopt (or adapt) these courses at other institutions. For example, the detailed descriptions of the Virginia MSP courses were made available by project leaders to instructors at other Virginia universities who wished to create graduate degree programs leading to Mathematics Specialists licensure.

Use the grant period to implement changes to the infrastructure of the partner institutions to ensure that the teacher leadership work can be maintained over time.

In the case MSPs, the teacher leader programs necessitated changes to the infrastructure – positions, policies, resources – in place in districts and universities to support teacher leadership. Project leaders used the period of MSP funding to initiate changes so that, by the end of the grant, these changes were successfully integrated into the infrastructure of the partnering organizations and were likely to be sustained after MSP funding.

In the El Paso and Vermont MSPs, new teacher leadership positions were started during the period of grant funding which affected the existing infrastructure in school districts for supporting classroom teachers. Project leaders utilized a range of strategies to implement these changes. In the El Paso MSP, districts were obligated to pay for the staff developers through the sub-contracts they received as part of the MSP. By committing financial support for teacher leader positions and securing district commitments for those positions, project leaders bought time for the teacher leaders to prove their effectiveness and to become part of the infrastructure of the schools that they worked within. After the completion of MSP funding, two districts in the partnership continued to support teacher leader roles that were modeled on the staff developers. The El Paso MSP employed a second strategy for developing infrastructure, requiring districts to use MSP funds to create a district director position, a district staff member who supervised the staff developers. Two of the districts sustained these positions after the end of MSP by having coaches report to a district administrator with responsibilities similar to those held by the MSP district director.

In the Nebraska and Virginia MSPs, project leaders used the grant period to modify the university infrastructure for designing and teaching graduate degree courses for teacher leaders. For example, an important dimension in the Virginia MSP was the collaboration between mathematics and education faculty and district staff in a co-development and co-teach model for the graduate courses. Project leaders viewed this collaboration as central to the effectiveness of these courses: it tapped into the different expertise of faculty and staff and strengthened the content of the courses. To encourage other universities to take this approach, project leaders created a formal "Statewide Masters Programs" cooperative with the involvement of the state council of Higher Education. Other universities in the state were invited to participate in this new entity, which espoused that universities adopt a collaborative approach to course development and that courses be taught in partnership with other universities involved in the cooperative.

Conclusion: Towards Sustainability

In the beginning of this report, we noted that strategic thinking was important to designers and implementers of teacher leadership programs because, with limited resources, they can not do it all. Yet, we have advocated for the importance and relevance of making strategic decisions with regard to designing and implementing interventions, garnering support from key stakeholders, aligning policy and scaling up interventions (Weiss et al., 2004). Deciding what actions to take and why to take those actions can be challenging, and that is why we've offered in this report a set of key ideas, to provide some direction for program designers as they determine where and how to focus their resources to lead towards sustainability.

The key ideas are inter-related, and taking action based on a single key idea quickly links to one, two or three others. Thus, being strategic in developing and implementing sustainable teacher leadership programs is always about weighing trade-offs that must be made. Take this action or that? Focus here or focus there? While there is no obvious "right" answer, it is useful to consider that there are many points of entry. The strategic nature of leadership is in considering all actions in light of the big picture: toward sustainability of teacher leadership program.

To that end, there are two overarching features that these MSP cases demonstrate are vital, regardless of which key ideas are pursued or in which sequence. The first is a genuine commitment to teacher leadership: as a strategy to improving mathematics and science education, as a role carried out by individuals in schools and districts, as an initiative demanding substantial preparation for and support of those individuals. These case MSPs illustrate that commitment to teacher leadership, as evidenced by the careful planning, thoughtful implementation, purposeful reflection and revision of their work, and efforts to ensure that something of substance is sustained beyond their MSP funding.

The second feature is a commitment to partnership, to the belief that not only are two heads better than one and many hands are needed on deck but, more importantly, to the belief that ownership of teacher leadership needs to be shared and that expertise and resources is not the province of only a few. These case MSPs illustrate partnerships, not only because such partnerships were called for as part of the MSP initiative, but because partnerships brought capacity and will, and meant that the teacher leadership program could be bigger, deeper and richer than what could ever be accomplished by a single player or institution.

The hallmarks of sustainability of teacher leadership programs are not just evidence of effectiveness. Certainly, an effective program is one worth sustaining. More important, though, is evidence of broadly-shared ownership by more than those who gave birth to the program and nursed it during its early implementation. With these case MSPs, we see evidence of that ownership, moving beyond the project leaders and staff that put so much energy, thought, and care into designing and implementing teacher leadership programs.

We see that the ownership – the sense that this is “our” teacher leadership program – extends into the districts and schools, as seen in the El Paso MSP where districts retained and had made their own the staff developer and district director positions and in the Vermont MSP where schools continued the site coordinator position after MSP funding had ended. That ownership extends beyond the original university partners, as seen in the Virginia MSP as the courses and approach to the graduate program has spread to other institutions and in the Nebraska MSP with adaptation of courses into other professional development venues. Ownership is evident in the many tools, protocols, job descriptions, syllabi, and activities that have continued to be used in teacher leadership programs beyond the end of the MSP. These are more than artifacts; they reflect a vision for teacher leadership that has been instantiated in materials that have proved to be useful as well as meaningful to prepare teacher leaders and support their work.

The case MSPs featured in this report offer insights into sustainability of teacher leadership programs that have application for schools, districts, universities and partnerships that will never see MSP dollars. These insights come from the strategic use of those dollars – and, indeed, any dollars – to design, implement and sustain teacher leadership programs that matter, and therefore illustrate key ideas that are applicable in many settings.

References

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