

Magnifying Leadership Effectiveness with Master Principals

A Career Ladder and Rigorous Support System for Advanced Certification

National Institute for School Leadership, a division of Criterion Education

FY 2015 Supporting Effective Educator Development Grant Program Proposal

Project Narrative

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Absolute Priorities

- Absolute Priority 1: Supporting Practices and Strategies for Which There Is Moderate Evidence of Effectiveness
- Absolute Priority 4: Advanced Certification and Advanced Credentialing

Competitive Preference Priorities

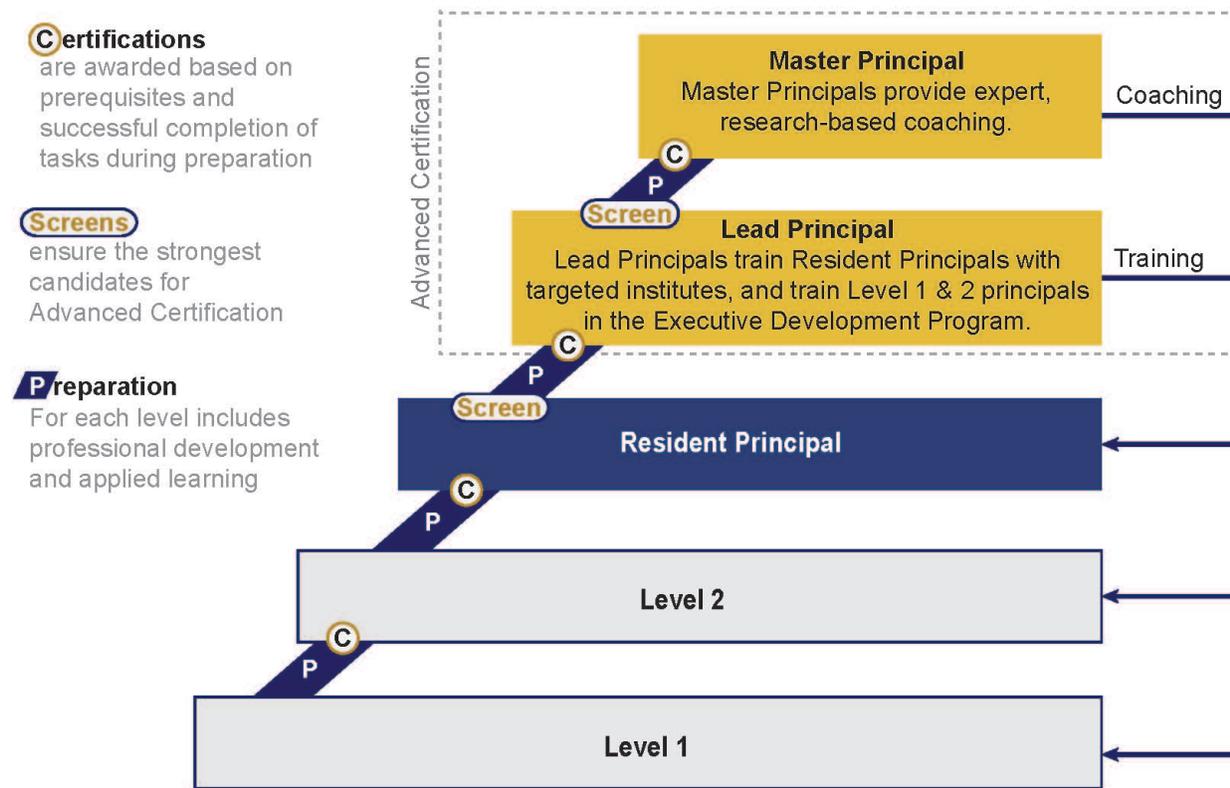
- Competitive Preference Priority 2: Improving Efficiency
- Competitive Preference Priority 3: Promoting Science, Technology, Engineering, and Mathematics (STEM) Education
- Competitive Preference Priority 4: Supporting High-Need Students

ABSOLUTE PRIORITIES

Within this three-year project, the National Institute for School Leadership (NISL) will create a National Advanced Certification System for Principals that rivals those of the highest-performing education systems in the world. This national system will include a comprehensive principal career ladder that defines a rigorous set of professional experiences, achievements and evidence required to put principals at all levels on the path to extraordinary results—and to *advance* the most effective purposefully toward mastery. The national certification system and career ladder will create an aspirational career trajectory for principals, and would-be principals, with ambitious but achievable standards of leadership excellence.

To embed these structural innovations into practice, NISL will use its proven Executive Development Program (EDP) for school leaders, targeted leadership institutes and a research-based coaching model—all tightly aligned into a cohesive leadership development system (see, e.g., Augustine et al., 2009). Animating this holistic vision at the top of the career ladder will be Master Principals, whose talents will be leveraged to provide leadership coaching to less accomplished principals, resulting in improved teacher effectiveness and student achievement—*across whole schools and districts*. Together, the National Advanced Certification System, career ladder, training and coaching will create a virtuous circle of support for principals throughout their careers. The comprehensive career ladder that we will create and implement during this project is shown in Figure 1.

Figure 1. A Comprehensive Career Ladder for Principals



NISL submits this SEED proposal under **Absolute Priority 1, Supporting Practices and Strategies for Which There Is Moderate Evidence of Effectiveness**, and **Absolute Priority 4, Advanced Certification and Advanced Credentialing**. NISL has a track record of training and coaching aspiring, novice and veteran principals to turn around struggling schools or move schools from good to great. The EDP, a cornerstone of this project, is one of the few rigorous school leadership programs with multiple third-party, quasi-experimental evaluations that show its direct link to statistically significant student achievement gains (Nunnery, Ross, Yen & Bostic 2010; Nunnery, Ross & Yen 2010; Nunnery, Yen & Ross 2011; Nunnery et al. 2011). EDP results exceed the requirement for moderate evidence of effectiveness, which factored into NISL’s FY 2014 Investing in Innovation (i3) Validation grant award to scale up the EDP. NISL also brings to this project:

- A National Certificate for school leaders, which is earned by successful selection, training and evaluation to be a certified trainer of NISL’s EDP. The certificate is recognized nationally by state departments of education and districts.
- Targeted leadership institutes to develop specialized leadership knowledge and skills
- A proven train-the-trainer delivery model for the EDP and leadership institutes
- A rigorous, focused and research-based leadership coaching model aligned with the EDP

NISL will partner with the Pennsylvania Department of Education (PDE), Mississippi Department of Education (MDE) and select districts in these states. Pennsylvania and Mississippi already have well-defined pathways to Level 1 and Level 2 principal certification—the first two rungs of the career ladder. In both states, NISL leadership programs play prominent roles in principal certification. In Pennsylvania, state law *requires* all novice principals to complete the Pennsylvania Inspired Leadership (PIL) program, which consists almost entirely of two of the EDP’s four courses of study. In Mississippi, state policy makes NISL leadership principles a significant component of the Mississippi Alternate Path to Quality School Leadership Program (MAPQSL)—the only alternate route to certification for entry-level principals. This project will take on several key challenges:

- How to create a rigorous system of advanced professional certification for principals built on a career ladder grounded in a modern vision of principals as instructional leaders
- How to deploy the Master Principals that at the top of the ladder to share their expertise (a mix of knowledge and trade craft) to coach, guide and advise other principals in their districts, regions and states to become strategic thinkers and more effective school leaders

- How to shape a career ladder for principals that recognizes that their development doesn't conclude on their first day in the principalship and that sensibly develops knowledge and skills over time, linked to increasing levels of responsibility as they move up the ladder
- How to create a scalable model of professional education grounded in leadership theory and research that yields principals adept at marshaling all school resources in the service of student learning and development, and at creating a work environment and culture that yields such results—and do this in a manner that is consistent with the operational goal of preparing students for life, citizenship and postsecondary learning

Specifically, this project will:

- Build on the foundation of existing state policies, and state and NISL leadership recruitment, selection and preparation practices, to create a **National Advanced Certification System for Principals** that defines recruitment and selection criteria, structured support, and criteria to access two advanced tiers of principal certification—*Lead Principal* and *Master Principal*—and get this system up and running.
- **Greatly increase the numbers of principals who reach the “middle rung” of certification**—an important benchmark for establishing effective school leadership—by providing comprehensive EDP leadership training to Level 1 and Level 2 principals to become *Resident Principals*.
- **Recruit and screen exceptionally effective Resident Principals to become *Lead and Master Principals*.**
- **Train and certify Lead Principals** to deliver comprehensive EDP training to cohorts of Level 1 and 2 principals and targeted leadership institutes to Resident Principals in their districts, states or anywhere in the country.

- **Train and certify Master Principals** to coach Level 1 and 2 principals, and Resident Principals, to deepen their leadership practices in the strategic areas that matter most to improved student achievement and human development, recognizing that schools have a mission and obligation not only to academic learning, but to social development and citizenship as well.
- **Leverage the knowledge, experience and skills of Master Principals as coaches across schools and districts** to provide intensive, sustained, one-on-one coaching to less accomplished principals.
- **Improve the learning opportunities of an estimated 770,000 students led by the 1,282 principals who will receive training**—and potentially many more, as these increasingly effective principals will continue to positively impact new groups of students every year they remain in the principalship.
- **Conduct two randomized control trial (RCT) evaluations** to measure the effects of coaching by Master Principals and the EDP on student achievement in English language arts, mathematics, and science, on social development and on school climate, against control principals that do not enjoy these new treatments and receive only “business as usual” professional development.

While the goal of this project is to create a replicable, scalable and sustainable National Advanced Certification System for Principals—the focus of Absolute Priority 4 of the SEED program—the ultimate goal is improving student achievement and social development and school climate through this certification system.

A. SIGNIFICANCE

1) National Significance. For more than 25 years, the National Center on Education and the Economy (NCEE), the founder of NISL, has engaged in a comprehensive research effort to examine systemic change in education and the effective practices of principals and teachers in the world's leading education systems. More recently, NCEE's Center on International Education Benchmarking has carried that work forward with information, analysis and thought leadership on the keys to these nations' success. This work is especially relevant to U.S. states and districts that are trying feverishly to transform schools for this century's challenges and improve the achievement of *all* students from basic to much higher levels. In a global economy that rewards knowledge, innovation and creativity, basic skills simply are not good enough anymore to secure individual prosperity or national competitiveness. The U.S. education system is in the untenable position of being behind the curve on this. We must catch up—fast.

In Finland and Japan, Singapore and Canada, and in other countries whose students consistently outperform those in other nations on international assessments, education systems carefully orchestrate the professional development and support for principals and teachers (see, e.g., Tucker 2011, 2014). Some nations in this realm created their education systems from whole cloth, focusing relentlessly on preparing students who historically had limited or no access to education to compete globally. In school leadership, the most accomplished Master Principals are recognized and highly respected. Their school systems expect them to teach, coach and mentor their peers to develop their skills, working on problems encountered in their schools to elevate leadership practices systematically. Highly skilled Master Principals are given greater autonomy, responsibilities and compensation—and dedicated time away from their own schools to work with other principals in theirs. By leveraging the leadership competencies of Master

Principals *across schools*, the top-performing nations magnify the positive leadership effects on teaching and learning in *all* schools.

Similar leadership and professional development strategies are embedded in the cultures of top professions, as NCEE and NISL discovered in the research that led to the creation of the EDP. In medicine, law, business and the military, the most successful and effective people—e.g., partners, executives, officers—devote a considerable amount of their time helping to build the “human capital” capacity of the organization, in addition to their core responsibilities. In medicine, for example, the most accomplished physicians conduct grand rounds and lead seminars with medical students to examine complex problems of practice in their specialties. Every aspect of medical practice, from bedside examinations to surgeries, doubles as a teaching and learning opportunity. Once they graduate from medical school, doctors-in-training work as residents under the watchful guidance of expert physicians in their fields, a requirement for earning a medical license—the minimum credential for diagnosing and treating patients. Board-certified physicians must demonstrate a higher level of expertise to earn this trusted credential, which is built on professional standards and core competencies. To keep that credential, physicians must maintain their expertise with robust professional development.

States and districts are desperate for more principals with advanced and specialized skills and effective models of leadership development and support. The leadership and talent development practices in top-performing education systems and leading professions are codified, transparent and respected within these fields and beyond—by parents and the public in education and, in medicine, by healthcare delivery organizations, payers and patients. This is what our National Advanced Certification System for Principals will bring to U.S. education.

States, districts, principals and teachers will know what it means to be a principal with advanced proficiency. A multi-step career ladder will define the steps toward mastery, competitive performance criteria for advancing up the career ladder, and rigorous professional development and support that can help principals accelerate student achievement. To step up the career ladder, principals (like other professionals) need high-quality training and on-the-job support, especially early in their careers. Comprehensive EDP training, targeted institutes and coaching bring together the core elements of leadership development aligned to this national system and career ladder—and in the process, create a virtuous circle of support for principals.

Only by systematically educating principals to take on the challenges of leadership will states and districts have the capacity to implement major initiatives, such as college and career readiness standards, and improve teacher effectiveness and student achievement *across whole schools*. This project will directly and positively impact significant numbers of principals in two states and provide these states the capacity to lift the practice of principals statewide. The implications of this project likely will go much further. The National Advanced Certification System will be immediately available nationally—backed by a model designed to build local capacity and scale quickly, with fidelity. The initiative also will inspire and inform states, districts and other education organizations to develop the systems and policies necessary to create powerful career ladders for principals that will strengthen instructional leadership and improve student learning on a wide scale.

2) Contribution to Developing and Advancing School Leadership. NISL is already leading the way in developing and advancing theory, knowledge, and practices principals apply in their schools. More than 15 years ago, NCEE recognized that system change and innovation required reimagining school leadership—traditionally a purely administrative job—for the 21st

century. No school can achieve the profound instructional shifts required to spur student achievement without school leaders who truly know how to lead and drive for results.

To address this national need, NCEE launched a four-year, \$11 million R&D initiative, with strong philanthropic support from the Carnegie Foundation, The Broad Foundation, the New Schools Venture Fund and the Stupski Foundation. The R&D effort stretched far and wide, benchmarking the best educational leadership development practices worldwide and identifying the best adult learning methods and strategies used in business, medicine, law, education and the military, such as case studies, computer-assisted simulations, video presentations and facilitated group discussions among district and school leaders. After a successful pilot, NCEE launched NISL to spearhead the implementation of the EDP nationwide.

Exceptional leadership development approaches culled from international best practices and leading professions are infused throughout the EDP. The program positions principals to take on new leadership responsibilities for the first time, turn around struggling schools or move schools from good to great. The program trains principals to build school leadership teams and capacity within their schools. The enhanced EDP fully aligns with the leadership competencies in the Interstate School Leadership Licensure Consortium (ISLLC) Standards (Council of Chief State School Officers 2008, revised 2014), Public Impact's competencies for turnaround leaders (Public Impact 2008) and the Common Core. NISL spends \$500,000 to \$1 million every year on enhancements to the EDP to keep it engaging and relevant to changing leadership demands.

The EDP offers a sustained, cohort-based, job-embedded approach that features and applied learning, using a blended model of face-to-face and digital learning. Every EDP participant researches, proposes and implements an Action Learning Project, using theory, knowledge, and best practices to tackle current challenges facing their own school with a school

or district leadership team. Every EDP cohort functions as a professional learning community. Principals rely on the relationships forged in these communities for continued professional growth long after their training ends. The EDP curriculum is carefully sequenced and structured—and interwoven with key themes and concepts throughout, as shown in Table 1.

Table 1. Summary of NISL Executive Development Program (EDP)

Phase 1
<p>Course 1: World-Class Schooling—Vision and Goals</p> <ul style="list-style-type: none"> • Unit 1: The Educational Challenge • Unit 2: The Principal as Strategic Thinker • Unit 3: Standards-based Instructional Systems and School Design <p>Course 2: Focusing on Teaching and Learning</p> <ul style="list-style-type: none"> • Unit 4: Foundations of Effective Learning • Unit 5: Leadership for Excellence in Literacy • Unit 6: Leadership for Excellence in Math • Unit 7: Leadership for Excellence in Science
Phase 2
<p>Course 3: Developing Capacity and Commitment</p> <ul style="list-style-type: none"> • Unit 8: Promoting Professional Learning (includes Simulation) • Unit 9: The Principal as Instructional Leader and Team Builder • Unit 10: The Principal as Ethical Leader <p>Course 4: Driving for Results</p> <ul style="list-style-type: none"> • Unit 11: The Principal as Driver of Change • Unit 12: Leading for Results • Culminating Simulation

Completion of the full EDP is the *baseline* for effective school leadership—the path to the position of Resident Principal. Multiple third-party, quasi-experimental evaluations have shown that students in schools led by principals who have completed the EDP outperform their peers on state tests in both math and reading at the elementary, middle, and high school levels. Principals themselves recognize the value of EDP training: in both Pennsylvania and Mississippi, hundreds have gone beyond state requirements for entry-level or career certification to complete

the full EDP. More than 300 principals in Pennsylvania and more than 150 in Mississippi have successfully completed the EDP, which has more than 8,000 graduates in 21 states.

This project will contribute to the development and advancement of theory, knowledge and practices by increasing the number of principals who have completed the EDP in both states. This project will further develop and enhance practice by creating a state-of-the-art principal career path, with National Advanced Certificates for Lead and Master Principals based on rigorous criteria; using a proven train-the-trainer model and research-based coaching program to embed theory, knowledge and best practices deeply into the work of less accomplished principals; and providing targeted leadership institutes to further elevate principal knowledge and use of best practices.

Equally important, this project will contribute to the development and advancement of knowledge about the effects of coaching *by* principals, *for* principals, on student achievement. Much of the literature on coaching in education focuses on coaching of teachers, and the teaching profession already benefits from nationally recognized advanced certificates. This project will test the premise that coaching of principals by Master Principals, embedded in a clearly articulated and proven professional development framework, is a powerful change strategy. Indeed, some literature does promote coaching for school leaders (see, e.g., Lovely 2004), much as the private sector embraces executive coaching to successfully manage change, develop and retain leaders, and change organizational culture (see, e.g., Reiss 2006). However, the research on leadership in coaching is mixed. In our estimation, there are two reasons for this. First, the research methodologies of the limited studies conducted so far are of poor quality. This project includes a rigorous evaluation that meets What Works Clearinghouse guidelines. Second, and more important, the leadership coaching models studied to date are not robust. Most

leadership coaching now is a proxy for mentoring, in that it is informal, unfocused, and limited in rigor and scope. NISL's coaching program is different—rigorous and explicitly connected to the EDP and to improved school and student performance. This program is novel in providing:

- Significant training for coaches to sharpen key coaching skills (listening, questioning, observing, reflecting and providing feedback) and instructional knowledge
- A methodology and tools to focus coaching interactions on areas that research shows are most important for student learning gains—strategic initiatives that address both the needs of principals and the priorities of their schools

Because this coaching is tightly connected to the EDP, the professional development and coaching are a seamless, integrated *system*. Coaching relationships between Master Principals and the principals they coach are ingrained with common understandings of leadership themes and strategies, and shared experiences and language—a strong foundation on which to build.

3) Importance and Magnitude of Likely Results. We are confident that this project will have the anticipated impact on principal effectiveness, instructional climate and student results. Why? Because NISL has been running a successful statewide principal program for the past seven years in Pennsylvania and already has demonstrated its positive impact on student achievement. Independent researchers used a rigorous methodology to evaluate the Pennsylvania EDP implementation (Nunnery, Yen & Ross 2011) and found statistically significant gains in student learning in English language arts (ELA) and mathematics as measured by state test scores. The effect sizes were .08 and .07 in ELA and math, respectively. This translates to roughly one to two months of additional learning on average for the 57,000 students in 101 Pennsylvania treatment schools. Another way to measure student learning is state proficiency. In the Pennsylvania study, researchers found that 2.16% more students achieved ELA proficiency

in treatment schools than otherwise would be expected and 1.92% more did so in math. This translated to 1,225 more proficient students in ELA and 1,089 more in math.

NISL also has run a statewide leadership development program in Massachusetts since 2006. Whereas the Pennsylvania project focuses on novice principals across all schools, the Massachusetts project focuses on all principals in high-need schools, including novice principals. Using a rigorous methodology, researchers from Old Dominion University and Johns Hopkins University evaluated the results of the second round of training (Nunnery, Ross, Chappell Moots, Pribesh & Hoag-Carhart 2011). The researchers found statistically significant impact on student achievement in both ELA and math. The effect sizes were .11 in ELA and .14 in math for the 21,000 students in 38 Massachusetts treatment schools (average poverty level of 69%).

There is a strong correlation between the number of key concepts that a principal implements after completing the EDP and the gains in student achievement. In fact, student achievement gains doubled for principals who were identified as more aggressive implementers versus the average incremental gain (The Meristem Group 2009). This project's highly focused coaching model, with intensive coaching delivered over 30 months, is designed to hasten and deepen the implementation of key EDP concepts.

If the 120,000 students led by the 200 principals who will receive coaching in this study gain a month or so of learning (on average) in ELA, math and science, that would be an important effect on its own. However, we also expect that the other 740 principals who receive training in this project—as we jumpstart the career ladder and build the pipeline for Advanced Certification—will have positive effects on as many as 444,000 additional students similar to those achieved on EDP-only studies. The potential magnitude and importance of effects is even greater. The EDP can be expected to have an impact on student achievement on science, which

the program covers with the same intensity as ELA and math, and other subjects as well.

Several factors make us optimistic that this project could lead to even greater gains than have been documented to date. First, the findings cited above were for cohorts trained simultaneously in Massachusetts and Pennsylvania only a few years after the EDP launched. We now have much greater implementation capacity—and are more effective from training more than 8,000 educators over the past 10 years. Second, the studies were performed on statewide implementations with varying levels of commitment from districts. For this project, only districts committed to the project will participate, which should yield greater results. Third, the documented gains to date did not include coaching, which will provide principals in the treatment group for this project with an extra, sustained “dose” of professional development that helps them embed their EDP training into their daily practice. Fourth, the National Advanced Certificate and career ladder could be very motivating to principals, as such career trajectory opportunities are in other professions.

Increased medial and indirect impacts on teacher effectiveness and teacher retention are expected as well. Already, principals trained in our program spend more time on instructional leadership and dissemination and promotion of best practices (The Meristem Group 2009). Principals’ competencies can directly influence school conditions and professionalism; teacher quality, placement and retention; instructional quality; collegial, team-based culture; use of data; resource management; and the successful implementation of programs that impact school performance and learning (Clifford, Behrstock-Sherratt & Fetters 2012). In addition, effective principals are more likely to experience satisfaction with their jobs and more likely to stay at their schools and within the principal profession (Branch, Hanushek & Rivkin 2012, 2013).

Finally, one study identified seven exemplar leadership training programs (Cheney,

Davis, Garrett & Holleran 2010); all cost between \$100,000 to \$200,000 per graduate. The EDP has produced better student achievement results than all seven programs for an average of \$10,000 to \$20,000 per graduate (depending on implementation design). This makes this project particularly important: It will validate a different approach to school leadership that produces stronger results for a fraction of the investment and will create a career ladder system that provides a scalable, sustainable model for school leadership development and improvements in instructional leadership, teaching and learning.

B. QUALITY OF THE PROJECT DESIGN

We have carefully designed every aspect of this project to meet all of the criteria for a high-quality project design. To facilitate the randomized control trial evaluation, and to maximize the time available for project activities during the three-year grant period, we are already laying the groundwork for a successful project. In just a matter of days, our state partners recruited enough an initial pool of partner districts—seven in Pennsylvania and six in Mississippi. This rapid recruitment is a testament to our strong and productive relationships with the Pennsylvania and Mississippi departments of education—and the high regard with which they hold the EDP and other NISL leadership programs. The chance to participate in building, implementing and benefitting from a comprehensive career ladder for principals is a powerful incentive for districts as well. With this many confirmed districts, and a pool of existing EDP graduates to supply the ranks of Lead and Master Principals, we know we can obtain adequate numbers of principals with the right mix of leadership preparation and experiences to populate treatment and control groups in the project evaluation, which are estimated in Table 2.

Table 2. Planned Distribution of Training and Coaching Treatment

Pennsylvania				
	Treatment			
Current Status	EDP + Coaching	EDP	Control (no treatment)	Total
EDP graduates	33 (coaching only)	0	147	180
Pennsylvania Inspired Leadership (PIL) Program graduates	33	94	94	221
No EDP training or exposure	34	75	75	184
Mississippi				
	Treatment			
Current Status	EDP + Coaching	EDP	Control (no treatment)	Total
EDP graduates	50 (coaching only)	0	49	99
No EDP training or exposure	50	100	114	264

The evaluation design for these groups of principals is as follows:

- 180 EDP graduates in Pennsylvania and 162 EDP graduates in Mississippi who are Resident Principals and have at least two years of experience as a principal—From this group, we will screen, select and train approximately 70 of the most effective EDP graduates in Pennsylvania and 62 in Mississippi to become Lead Principals who will then train less accomplished principals in the EDP. From this same pool, we also will screen and train approximately 50 principals in each state to advance from Lead Principals to the top of the career ladder as Master Principals who will coach Level 1 and Level 2 principals, and Resident Principals.
- 221 graduates of the Pennsylvania Inspired Leader Program who have earned Level 2 Principal Certification by completing two of the four EDP courses—Of these, 33 will

complete the full EDP and receive coaching from Master Principals (treatment group), 94 will complete the EDP and receive no coaching (part of control group 1) and 94 will receive no intervention (part of control group 2). Those who successfully complete the EDP will become Resident Principals.

- 184 principals Pennsylvania and 215 in Mississippi with no EDP training or exposure— Of these, 34 principals in Pennsylvania and 50 in Mississippi will complete the full EDP and receive coaching (treatment group); 75 principals in Pennsylvania and 100 in Mississippi will complete the full EDP with no coaching (part of control group 1); and 75 principals in Pennsylvania and 114 in Mississippi will receive no intervention (part of control group 2). Those who successfully complete the EDP will become Resident Principals.

NISL also has developed rigorous and competitive screening criteria for selecting and certifying candidates to become Lead and Master Principals, described below. Notably, principals must successfully complete professional development *and* demonstrate their competencies in applying their learning in their schools to earn certification and advance up the career ladder. We will refine the details of the criteria in partnership with each state upon award of a SEED grant. In addition, the evaluation team will plan the evaluation and begin collecting data and randomly assigning principals to treatment groups when the grant period begins on Dec. 1, 2015. With this advance work completed, we will hit the ground running with the random assignment to treatment and control groups completed in January 2016, with training beginning the following month.

1) A Clear Set of Aligned Goals, Objectives and Outcomes. The goals, objectives and outcomes for this project are clearly specified, aligned and measurable, as described below.

Goal 1. Design and implement a process for identifying promising candidates to become Lead Principals. In December 2015, districts will nominate Lead Principal candidates who have completed the full EDP and can demonstrate their qualifications to advance up the career ladder as trainers of other principals. NISL will approve approximately 70 candidates from Pennsylvania and 62 from Mississippi based on rigorous evidence of achievement from their EDP participation. Screening criteria will be negotiated between NISL and each state at the start of the project to account for local contexts. Criteria may include:

- **At least three years of experience as a principal**
- **An Applied Learning Project** that shows coherence of strategic thinking and change management principles, aligned with district strategic goals and NISL quality criteria
- **A portfolio** with artifacts from the school, including a) a school vision statement and goals; b) strategic school improvement planning that reflects analysis of NISL proprietary diagnostics (Instructional Leadership Instrument, Learning Context Assessment, Diagnostic of Standards-based Instructional System); c) examples of school-developed curricula that show alignment with rigorous college- and career-readiness expectations; d) interventions in English language arts, mathematics and/or science based on review of summative and formative assessment data; and e) evidence of school-wide coaching (peer and team) and organizational learning (professional development agendas)
- **Active participation in networks or communities** as measured by consistent contributions (e.g., shares, blogs, peer feedback) throughout the EDP

Prior to training Lead Principals, NISL Master Faculty and NISL coaches will attend a five-day orientation in January 2016 to plan for implementation of the Advanced Certification System and rollout of the train-the-trainer and train-the-coach components. Once this orientation

is complete and the Lead Principal candidates selected, they will be trained by NISL Master Faculty from February to April 2016 to deliver the complete EDP. This can be accomplished on such a short timeline because all Lead Principal candidates will have already completed the full EDP themselves before the grant period begins—a prerequisite for NISL-certified facilitator training. NISL will use its proven train-the-trainer delivery model, a rigorous, six-day certification program that prepares Lead Principal candidates to deliver the EDP on their own. NISL Master Faculty will then provide quality assurance during the Lead Principals' first round of delivery of the complete EDP, including advance co-planning before EDP courses, as well as observation and feedback as they begin to train Level 1 and 2 principals. To achieve Lead Principal (Level 4) certification in April 2016, these candidates must successfully complete the facilitator training, successfully complete assessments of EDP content, present portions of selected EDP units and create a portfolio of EDP unit artifacts.

From March to September 2017, NISL Master Faculty will train certified Lead Principals to deliver three targeted NISL leadership institutes (described in Goal 3). Each of these training sessions lasts two to three days. Once trained, Lead Principals will then deliver the institutes to Resident Principals beginning in January 2018 with the same quality assurance and support from NISL Master Faculty that they receive when they begin delivering the EDP, described above.

Goal 2. Design and implement a process for identifying promising candidates for Advanced Certification as Master Principals and coaches. For this project, screening of Master Principal candidates will occur simultaneously with screening of Lead Principal candidates. Absent the time constraints of a three-year grant, Lead Principals would have more time to hone their skills in that position before becoming candidates to be Master Principals. With the compressed timeline for this project, this design will enable us to train 100 Master

Principals and get them working as coaches to other principals expeditiously, which will allow enough time to investigate their effectiveness as coaches for the project evaluation. The remaining 32 Lead Principals will provide EDP training, as described in Goal 4.

From the pool of Lead Principal candidates, districts in each state will nominate Master Principal candidates who can meet even more rigorous screening criteria that demonstrate their qualifications to become Master Principals—possibly including existing principal evaluations. NISL will approve approximately 50 Master Principal candidates in each state based on a school portfolio. The portfolio artifacts will be negotiated between NISL and each state at the start of the project to account for local contexts. Criteria may include:

- **At least four years of experience as a principal**
- **Student achievement data**, including a) summative assessments used for accountability that focus on closing the achievement gap in high-needs schools and maintaining performance in high-achieving schools; and b) other measures of student growth, including benchmark assessments, teacher-administered periodic assessments, and student work samples and commentary
- **Non-academic measures of performance**, including a) student engagement, b) student/group awards and recognitions, c) college enrollment rates, d) high school graduation/dropout rates, and d) out-of-school suspensions
- **Organizational learning and coaching practices**, including a) evidence from school-wide strategic planning, b) presentation of a school case study with analysis and reflection on school-wide instructional focus, c) artifacts from accountable teacher teams (vertical and horizontal) driving instructional practice, d) agendas and development

progress reports from the instructional leadership team, and e) sample coaching plans for individuals (with identifying information redacted)

- **Stakeholder engagement around teaching and learning**, including a) parent/community surveys and focus group data and b) artifacts and schedules from community programs

Once selected, NISL Master Faculty will train the Master Principal candidates as coaches beginning in May 2016 (after they have earned Lead Principal certification). The NISL School Leadership Coaching Program is a comprehensive professional development program that empowers top principals to take on a different and important role—coaches to less accomplished peers. Delivered over a period of five days, this research-based coaching program deepens principals’ instructional leadership knowledge, strengthens their leadership competencies, sharpens their coaching skills, and provides tools to focus their coaching on strategic initiatives that address both the needs of the principals with whom they work and the priorities of their schools (see, e.g., Cornett & Knight 2008; Grant, Cutayne & Burton 2009; Sanzo n.d.; Reiss 2006; Bloom, Catagna, Moir & Warren 2005).

Once they successfully complete the NISL School Leadership Coaching Program in July 2016, each Master Principal will be assigned to two principals from the Level 1, Level 2 or Resident Principal ranks to coach. NISL will use best practices from coaching research and work with districts in the summer of 2016 to match Master Principals with the principals they will coach. We will make every effort to make “good fit” assignments. For example, Master Principals might coach principals in schools of similar grade levels, geographic regions, student demographics or school challenges.

NISL Master Faculty will support Master Principals as they begin coaching others, first by planning the focus of coaching by reviewing the coached principals' school and individual needs, then with shoulder-to-shoulder, on-site support to model successful coaching interactions.

To achieve Master Principal certification in November 2016, the candidates must successfully complete the coaching program and meet other criteria, including creating a portfolio of videos of personal coaching conversations with reflection, annotating and analyzing NISL coaching videos, and analyzing and reacting to problems of practice.

To mitigate the risk of attrition of Master Principals, NISL will coordinate with districts to develop a training schedule that provides minimal interference with day-to-day work. In addition, all districts will have thorough understanding of the time commitment required of Master Principals prior to committing to this project.

Goal 3. Leverage Master Principals to provide exemplary coaching to fellow principals. Master Principal candidates will begin coaching in June 2016 and continue coaching for 30 months, through the end of the project in November 2018. The EDP is the foundation of NISL's School Leadership Coaching Program. This means Master Principals and the principals they coach have a common framework of effective leadership practices and a shared understanding of their goals, including:

- Thinking strategically
- Implementing a standards-based instructional system
- Integrating theory into practice
- Building teams
- Creating a just, fair and caring environment
- Creating a collaborative culture

- Supporting teachers for instructional improvement and improved student achievement
- Using an Action Learning Project that directly relates to the coached principal’s school improvement plan and the needs of students in literacy, math or both

NISL’s coaching program also provides specific tactics for leveraging the many strategic tools embedded in the EDP to focus coaching interactions and deepen leadership practices in schools.

Master Principals will work monthly with coached principals in face-to-face meetings, and provide telephone and/or email support to bridge the face-to-face sessions. NISL Master Faculty will provide quality assurance, including “shoulder to shoulder” support visits, to ensure full participation of Master Principals and coached principals, and optimal coaching conditions.

Notably, NISL distinguishes rigorous coaching from more informal mentoring. “Coaching and mentoring are different roles and different processes, each requiring different skills and experiences. Coaching is an inquiry, a discovery and learning process, whereas mentoring is about sharing experiences and what’s worked for another” (Reiss 2006).

Goal 4. Establish a rigorous and self-sustaining executive development and support structure for each level of the career ladder. To strengthen the principal career ladder in every participating district in Pennsylvania and Mississippi, this project will provide professional development to principals *at every level*, as described below. *An important note: Not all Level 1 principals, Level 2 principals or Resident Principals will receive professional development described below during the grant period because the evaluation plan requires control groups of principals who do not receive training or coaching interventions. However, all districts will have the capacity to provide this professional development on their own at no additional external cost after the 2017–18 school year, as detailed in Goal 4.*

Level 1 and Level 2 principals who have not completed the full EDP will be given the opportunity to do so. Given the time constraints of the grant, NISL Master Faculty and current NISL-certified facilitators in Pennsylvania and Mississippi will deliver the first round of training beginning in February 2016. The Lead Principals who will be trained as NISL-certified facilitators of the EDP in this project, as described in Goal 1—will deliver the second round of training beginning in April 2017. This design makes it possible for Master Principals to deliver coaching support to principals who are either actively taking the EDP or have graduated from the EDP, as they should when the National Certification System and career ladder are well established. Allowing Lead Principals to deliver EDP training to a second cohort of Level 1 and 2 principals within the grant period ensures that their training skills do not atrophy after certification and that they will have NISL quality assurance as they being the rollout.

Full EDP training will be delivered over a period of 12 months, which currently includes 24 classroom days combined with professional reading, a 40-hour, online self-study curriculum and an Action Learning Project. Spreading the 24 classroom days over this period is consistent with the research on adult learning, which stresses smaller doses of training over an extended period of time rather than a large block of training all together. This calendar also gives principals time to apply their training in their schools with Applied Learning Projects, which customizes the program to meet individual learning needs and connects the curriculum to identified school and district challenges. Typically, the training calendar includes about two days every month and skips busy months at the start of school and when state tests are administered.

Partial EDP training for Pennsylvania principals who have completed two of the four EDP courses of study also will begin in February 2016. Current NISL-certified facilitators will deliver the final two courses of study over six months, with completion in June 2016.

For all Level 1 and 2 principals, successful completion of the full EDP is the first step toward becoming a Resident Principal.

Some Level 1 and 2 principals also will receive intensive and sustained leadership coaching from the Master Principals who will be trained as NISL-certified coaches early in the project, as described in Goal 3. Coaching will begin in June 2016, after principals have completed several EDP units and Master Principals have been trained as coaches, and continue until November 2018, the end of the grant period.

Resident Principals who have completed the full EDP will be provided with opportunities to participate in one or more NISL targeted leadership institutes. NISL Master Faculty and current NISL-certified facilitators will deliver the first round of institutes from February to August 2017. Lead Principals trained as NISL-certified facilitators earlier in the project will deliver a second round of institutes from January to July 2018 to the first cohort of EDP graduates. The institutes focus on common challenges in improving student achievement:

- **English Language Learners Institute**—This three-day institute supports principal efforts to strengthen and improve a school’s response to the specific educational needs of English language learners (ELLs). Principals learn what they need to know and do to increase their leadership effectiveness in a school with a culturally and linguistically diverse student population. Through an Action Learning Project, principals craft a plan for professional development and overall English language learning excellence for their own school. The institute focuses explicitly on how schools can improve the student achievement of ELLs, targeting college and career readiness as well as how schools should provide appropriate and differentiated instructional services and fair assessment to ELLs in all classrooms. The institute provides ELL program models and strategies that a

principal should promote to create collaborative learning teams among teachers.

- **Students with Disabilities Institute**—This three-day institute gives principals the knowledge they need to develop and implement a school-wide action plan that puts students with disabilities on a solid path toward proficiency and productive lives. Closing achievement gaps for students with varying disabilities requires principals to know how to provide leadership strategies to the teachers who serve these students. This institute covers research-based leadership strategies that improve learning for students with disabilities, including assessing school demographics; developing needs assessments; engaging parents and community; describing the legalities of special education; recognizing inclusive practices for students; applying leadership strategies for fair assessment and appropriate accommodations; identifying factors important to the writing of Individualized Education Plans (IEPs); promoting best practices and assistive technology for student learning; implementing effective resources for prevention; developing quality professional development; developing quality behavioral intervention strategies; and strengthening instructional techniques.
- **Parent and Community Engagement Institute**—This two-day institute gives principals the knowledge and actions needed to engage parents, families and the community in the success of K–12 students. Principals study examples of effective practices in schools, including policy involvement; shared responsibilities for improved academic achievement; capacity building for parents, families and communities; and parent information centers. This institute covers a comprehensive parent and community involvement framework (Epstein 2009) to create school, family and community partnerships, including structures and processes for developing effective partnerships.

This framework focuses on six types of involvement: parenting, communicating, volunteering, learning at home, decision making and collaborating with the community.

NISL also will provide opportunities for Resident Principals to participate in online communities or networks to collaborate, share best practices and engage in joint problem solving. In addition to being a valued form of professional development, such activities will help Resident Principals develop evidence of active participation in online forums—a screening criteria for principals to advance to Lead Principals.

Some Resident Principals also will receive intensive and sustained leadership coaching from the Master Principals who will be trained as NISL-certified coaches early in the project, as described in Goal 2. Coaching will begin in June 2016 and continue for 30 months until November 2018, the end of the grant period.

Goal 5. Build a sustainable pipeline for advanced principal certification. All of the project activities described in Goals 1, 2, 3 and 4 are intended to build a sustainable pipeline for advanced certification. Constructing a National Advanced Certification System and comprehensive career ladder will make the trajectory of principal careers transparent. This also will offer districts and states a opportunity to incent principals both to move up the ladder and better deploy their most accomplished principals to the schools where they might have the greatest effects. States, districts, principals and aspiring principals will have a shared understanding of what it takes to be a highly effective school leader and how to advance up the ladder. Throughout the project, we will work with states and districts to embed this system and into policies and practices.

Successful completion of EDP training will prepare Level 1 and 2 principals to become Resident Principals—the initial benchmark for leadership effectiveness, as EDP completion has

been show to yield statistically significant improved student achievement, according to multiple research studies comparing EDP-trained principals to principals without this training. Coaching of Level 1 and 2 principals will provide them with the intensive one-on-one support they need to strengthen their leadership competencies and practices in their schools. This training and support will help to minimize the burnout and attrition that plague principals in their crucial early years as school leaders.

Advancing hundreds of Level 1 and 2 principals up the career ladder, as we will do in this project, will increase the ranks of Resident Principals who will be poised to move toward advanced certification, thus providing districts with deeper and more highly skilled reservoirs of talent in the pipeline. Likewise, professional development for Resident Principals in the form of targeted leadership institutes and intensive one-on-one coaching will strengthen and energize the middle rung of the career ladder. Indeed, leadership development often focuses on aspiring or novice principals at the expense of principals who have more experience. Focusing on the continued professional growth of Resident Principals can help move them and their schools from good to great. Attention to Resident Principals could make them exceptional candidates to take on tough leadership challenges, such as those in schools with high concentrations of high-need students and chronically low-performing schools.

Cultivating the talents of the most effective school leaders as Lead and Master Principals makes the pipeline sustainable as well. Both Lead and Master Principals can be tapped to train other principals in the EDP and NISL leadership institutes after the grant period ends—in their own districts and beyond. Master Principals can continue to provide intensive, one-on-one coaching to other principals as well. This system creates a virtuous circle of support for principals, with Lead and Master Principals prepared to train and coach less experienced or less

accomplished principals, or struggling principals, when they need this professional development or support. At this same time, taking on these different and vitally important professional roles is a way for Lead and Master Principals to continue building their own leadership skills. The system elevates the entire leadership development endeavor, from the principal pipeline through high levels of mastery.

Furthermore, the National Advanced Certification System will build in professional development supports and periodic reviews of the work of Lead and Master Principals, which will help sustain the pipeline for advanced principal certification. These activities will be designed to ensure that Lead and Master Principals:

- Maintain their leadership competencies
- Demonstrate that they are continuing to increase their knowledge and skills
- Stay up to date with enhancements to the NISL EDP, leadership institutes and coaching model
- Have opportunities to collaborate and learn from their peers in other districts

Planned professional development supports and evaluation criteria are detailed in Table 3.

Table 4, included in Section C. Quality of the Management Plan and Personnel, summarizes the project goals, objectives and milestones, along with the project personnel responsible for achieving a successful project.

Table 3. Ongoing Professional Development Supports and Evaluation Criteria for Lead and Master Principals

Lead Principals
<ul style="list-style-type: none"> • Participate in periodic developmental and informational conferences, teleconferences and webinars for NISL-certified facilitators • Maintain a portfolio of facilitation artifacts: <ul style="list-style-type: none"> ○ Unit case study with analysis of facilitation planning and reflection on outcomes ○ Video of facilitation with commentary ○ Formal reflections on NISL facilitator webinars and teleconferences ○ Documentation from one quality assurance planning and support visit • Attend NISL recertification assessment center every three years to: <ul style="list-style-type: none"> ○ Facilitate a segment from the EDP ○ Role play Socratic questioning ○ Participate in professional development study groups of leadership themes and texts
Master Principals
<ul style="list-style-type: none"> • Participate in periodic developmental and informational conferences, teleconferences and webinars for NISL-certified coaches • Maintain a portfolio of coaching artifacts: <ul style="list-style-type: none"> ○ Coaching case study with analysis of outcomes tied to context and actions ○ Sample coaching plans showing developmental activities ○ Video of a coaching conversation with commentary ○ Formal reflections on NISL coaching webinars and teleconferences ○ Documentation from shoulder-to-shoulder support visits • Attend a NISL recertification assessment center every three years to: <ul style="list-style-type: none"> ○ Present a coaching case study ○ Engage in a scenario-based role play ○ Participate in professional development study groups of leadership themes and texts

2) A Comprehensive Effort to Improve Teaching and Learning and Support Rigorous

Standards for Students. Every aspect of the training and coaching in this project is designed to improve teaching and learning and support rigorous standards for students.

The EDP empowers principals to become instructional leaders and drive their schools to high performance. The program emphasizes the role of principals as strategic thinkers, instructional leaders and creators of a just, fair and caring culture in which all students, including high-need students, meet high standards. It ensures that principals can effectively set direction for teachers, support their staffs and design an efficient organization. Principals learn to establish, share and reach the vision and goals of world-class schooling in standards-based

systems. They are given tools to become instructional leaders and gain the knowledge to confidently recognize and guide strong instruction in literacy, math and science. They develop the capacity to promote professional learning, build collaborative teams, drive change and lead for results. Throughout the EDP, discussions with principals are focused on teachers, and especially teacher leaders, as the key agents for change in a school. Principals complete the EDP with a strong understanding of the benefits and skills required to develop teachers' instructional skills, distribute leadership and create empowered leadership teams focused on improving instruction in their own schools.

EDP training in itself is a comprehensive effort to improve teaching and learning and support rigorous standards for students—yet it is just one component of this project. Coaching of principals will deepen instructional leadership practices that support rigorous standards for students and improved student achievement. EDP training will be supplemented with training in NISL leadership institutes that enhance principals' abilities to address targeted needs. And the National Advanced Certification System and defined career ladder for principals represent a comprehensive effort to improve not just school leadership effectiveness, but the effectiveness of teachers and student proficiency in rigorous standards *across whole schools, in every subject*.

3) High-quality, Intensive and Sustained Training and Professional Development.

Multiple third-party, quasi-experimental evaluations have proven that the EDP is a high-quality program that yields results in terms of school leadership effectiveness and student achievement, as well as with principal satisfaction with the training. The program incorporates research on leadership development in education and other professions and best practices in leadership in the United States and internationally. NISL leadership institutes draw from this same research base, along with research and best practices on specific leadership topics. Likewise, NISL's proven

train-the-trainer model and research-based train-the-coach model immerse principals in high-quality training and professional development for advanced leadership roles. NISL continually updates the research and best practices to stay current with the field. The full research base of EDP courses of study and leadership topics is included in Appendix E3.

All NISL training and professional development is intensive and sustained. The EDP includes 24 days of intensive, active classroom instruction and 40 hours of online, interactive instruction. The program leverages leading research in adult pedagogy, including job-embedded instruction, direct instruction with highly interactive methods, such as Socratic questioning, group discussions, role playing, case studies and technology-assisted simulations. The program extends professional learning beyond the classroom with Action Learning Projects in schools, professional readings and participation in communities of practice. Successfully completing the EDP requires a sustained effort—unlike “seat time” initiatives.

Training and professional development of NISL-certified facilitators and coaches is similarly rigorous. For the EDP, Lead Principals will receive six days of training to become EDP facilitators and supported practice during their first delivery of the full EDP to other principals. For the NISL leadership institutes, Lead Principals will receive two to three days of training (depending on the length of the institute) to develop the content knowledge and skills to deliver the institutes. Master Principals will receive five days of training to become coaches. Even after this high-quality and intensive training, these principals are not expected to go off on their own to make their own way in these new roles. Instead, NISL will provide them with shoulder-to-shoulder support and model effective practices, both for training cohorts of principals in the EDP and leadership institutes and for coaching individual principals.

4) Addressing the Shortage of Highly Effective School Leaders. The challenges that Pennsylvania and Mississippi want to address with NISL reflect an endemic school leadership crisis across the country. There is significant evidence that the majority of the nation’s 100,000 current principals are ill prepared to do the job—and most principal training and on-the-job support are mediocre at best, if they exist at all. Implementation of the Common Core and other rigorous college and career readiness standards is only exacerbating this problem, and effective approaches to the distinct needs of struggling students is another area where principals are typically at sea. Most principals have never been taught how to carry out major changes, let alone create a standards-based, high-performing school. The limited number of principals with the specialized skills required to turn around chronically low-performing schools makes the leadership crisis even more acute. In 2014, for example, Council of the Great City Schools superintendents, administrators and school board members warned that “principal supply and capacity remain among the most pressing challenges for school districts”— and this could impede the U.S. Department of Education’s \$5.5 billion School Improvement Grant (SIG) program in 1,400 schools nationwide (Maxwell 2014).

School leadership is a latecomer in the national endeavor to boost student achievement. While teachers have long been recognized as the greatest influence on student success, empirical evidence links strong principals to positive student, teacher and school outcomes *across whole schools* as well. Leadership is second only to teaching among school influences on student success—and the impact of school leaders is greatest in schools with the greatest needs (Leithwood, Louis, Anderson & Wahlstrom 2004; Branch, Hanushek & Rivkin 2009; Hallinger & Heck 1998). Principals’ influence accounts for about one-quarter of school-level variation in student achievement (Leithwood et al. 2004; Waters, Marzano & McNulty 2003). Effective

leadership is essential for turning around persistently low-performing schools. “Indeed, there are virtually no documented instances of troubled schools being turned around without intervention by a powerful leader. ... [L]eadership is the catalyst” (Leithwood et al. 2004).

States and districts are playing catch-up to recruit, select and prepare talented individuals to lead schools effectively. Many current initiatives focus on training aspiring or novice principals to reach entry-level certification. This is necessary, but not sufficient, to achieve much better results for students—a necessary, not optional requirement for this nation.

Novice principals encounter a bracing “blast of reality” as they first enter a school as its leader. Their central responsibility for improving teaching and learning, and their sense of isolation, can swamp their best intentions and efforts early on (see, e.g., Turnbull, Riley & MacFarlane 2013). Many novice principals are left to sink or swim on their own—with alarming results. A RAND Corporation study, for example, found that one-fifth of novice principals leave their schools within the first two years (Burkhauser, Gates, Hamilton & Ikemoto 2012), while a study by the George W. Bush Institute found that almost 50 percent leave the field within their first five years (Briggs, Davis & Cheney 2012).

Every aspect of this project is designed to address the shortage of highly effective leaders, including the National Advanced Certification System, the career ladder, professional development, training and coaching at every level of the career ladder; and the leveraging of the knowledge and skills of Lead and Master Principals. The project will result in hundreds more highly effective principals in Pennsylvania and Mississippi—and the potential for tens of thousands to be similarly prepared throughout the nation beyond the grant period.

5) Addressing the Needs of Disadvantaged Individuals. This project will focus on serving the needs of large numbers of disadvantaged students. Among the districts in

Pennsylvania and Mississippi that have submitted letters of intent to participate, the proportions of their students who are eligible for the federal free and reduced-price lunch program range from 100 percent to 37 percent. The average poverty rate for all confirmed districts is 69.54 percent. Mississippi has large challenges related to poverty and its highly rural system; Pennsylvania faces the challenges of poverty in urban, rural and suburban districts.

The EDP has demonstrated results in raising student achievement in diverse settings and in elementary, middle and high schools—across whole schools—and in schools with large proportions of disadvantaged students. For example, the average poverty rate in the 38 schools in the EDP evaluation in Massachusetts was 69 percent.

Researchers have found that it is virtually impossible to increase the performance of high-need schools without strong school leadership. Yet principals often use schools with many poor or low-achieving students as “stepping stones” to assignments perceived as more desirable (Béteille et al. 2011, 2012), which results in a revolving door in the principal’s office. Districts can exacerbate principal turnover by rotating school leaders—and principal turnover disrupts the entire school community, the stability of the teaching staff and student learning (see, e.g., Branch et al. 2008; Gates et al. 2005). Schools with the greatest needs have the least experienced principals: 20 percent of principals in high-poverty schools are first-year principals, compared to 11 percent overall (Béteille et al. 2011). Of equal concern is that, once principals are placed in schools, few district central offices focus strategically on helping them “grow as instructional leaders who lead powerfully for improved instruction in every classroom” (Center for Educational Leadership 2013).

This project will address the needs of disadvantaged students by equipping principals at every stage of their careers with the leadership competencies to address the needs of

disadvantage students, including teacher effectiveness, school climate and improved student achievement in ELA, math, science and other subjects. Coaching by Master Principals will hasten and deepen the implementation of effective leadership strategies, which will accelerate learning for disadvantaged students.

C. QUALITY OF THE MANAGEMENT PLAN AND PERSONNEL

The management plan, key personnel and resources for this project will allow us to achieve our project goals on time and within budget.

1) A Highly Qualified Management Team. We have carefully chosen top national staffers to lead this project and ensure successful, scalable implementations across Pennsylvania and Mississippi. We also will partner with an evaluation team of top education researchers with decades of experience on similar projects. Both state partners share our vision for implementing a National Advanced Certification system and comprehensive career ladder for principals, and have already recruited many district partners for this project. All partners—the evaluation team, state departments of education and district superintendents—are committed to full participation in the project, including regular engagement in the Project Coordinating Committee.

Jason Dougal, JD, CEO of Criterion Education LLC, will oversee the implementation and evaluation from a leadership standpoint (5% FTE). He will direct delegation of regular implementation activities to key leadership staff, while monitoring all essential tasks and deliverables and ensuring continuous quality assurance procedures and resource allocation.

Juan Baughn, PhD, a NISL Resident Master Faculty member, will be the Project Director (50%). Baughn has extensive project management experience and is a proven leader of large state and district education initiatives through his years of leadership in the Pennsylvania Department of Education, including as Special Assistant to the Secretary of Education. Prior to

working at the state level, he served in key leadership roles for districts in Pennsylvania and Washington, DC, for more than three decades. He will oversee all implementation activities and key deliverables, manage the work of NISL project staff, and coordinate relationships with district and state partners and the external evaluation team. He also will work with the Project Manager, Director of Coaching, Project Coordinator, Director of Research and Evaluation, and State Coordinators to identify and address any issues and drive project success in the field. He will integrate NISL, district and evaluation leadership team partnerships; monitor partner performance for key deliverables; lead Project Coordinating Committee meetings; manage the finances; monitor the budget; develop and institute a quality assurance protocol; administer the grant; and comply with U.S. Department of Education requirements.

Ramona Hollie-Major, EdD, NISL Director of Operations, will be the Project Manager (20%). She is currently responsible for all logistics and operational deliverables for the NSL EDP and institutes in more than 20 states. She will coordinate the project planning and logistics, including scheduling EDP training, overseeing coaching and mentoring schedules, arranging fulfillment of curriculum materials, and enrolling participants in the NISL learning management system. She will assign NISL facilitators to train cohorts, allocate additional NISL resources to the project if necessary, and plan for the sustainability and scale-up of the career ladder beyond the grant period.

Bobbie D'Alessandro, NISL Director of Coaching, will monitor all coaching processes within the career ladder system (10% FTE). She led NISL's development of a research-based coaching protocol, including writing the training curriculum and training for all NISL National Faculty coaches. Prior to joining NISL, she developed the statewide administrative leadership programs for the Massachusetts Department of Education, in addition to extensive experience

leading schools in districts and schools in Florida. She will work with the State Coordinators to coordinate the screening of Master Principal candidates and ensure that all coaching and mentoring adheres to NISL's research-based coaching procedures.

David Mandel, Director, Research and Evaluation, will direct the research for the project evaluation (5% FTE). His current work focuses on defining college readiness, bringing world-class, aligned instructional systems to the nation's high schools, and supporting state efforts to fundamentally change their education systems. His previous work includes leadership positions at the Carnegie-IAS Commission on Mathematics and Science Education, the Mathematical Sciences Education Board at The National Academies, and MPR Associates' Center for Curriculum and Professional Development. As the primary liaison between NISL project staff and the evaluation team, he will monitor all key deliverables for the evaluation and assist with the dissemination of findings and data.

NISL's **State Coordinators** for Mississippi (25% FTE) and Pennsylvania (25% FTE) will work with NISL national staff to coordinate all relationships with partner districts and implementation activities. **Susan Rucker**, EdD, Mississippi NISL State Coordinator, will manage the project activities in Mississippi. She has coordinated NISL's activities in Mississippi and neighboring regions since 2006, overseeing the training of more than 5,000 members of school and district leadership teams. She previously served as Deputy State Superintendent and Associate Superintendent at the Mississippi Department of Education. **Tom Jones**, PhD, Pennsylvania NISL State Coordinator, will manage project activities in Pennsylvania. As one of NISL's first employees, he was integral to the EDP development. Since then, he has led NISL's work in Pennsylvania, working in close partnership with the Pennsylvania Department of Education and eight regional offices in the state, overseeing training for more than 2,000 people.

Sharon Brumbaugh, NISL Director of Client Engagement, will provide additional support to the Pennsylvania implementation (10% FTE). Previously, as Special Assistant to the Secretary of Education in Pennsylvania, she led the implementation of the statewide novice principals program that uses the EDP as its core curriculum. She will work with the Pennsylvania State Coordinator to provide quality assurance and logistical assistance to the implementation.

NISL will hire a full-time Project Coordinator (100% FTE) upon award of a SEED grant. This staff member will gather and analyze project management data; organize logistics and support of the Project Coordinating Committee; capture and track issues for resolution; and provide technical support for instructional, communication and collaboration technology.

The Pennsylvania and Mississippi departments of education each will appoint a **State Liaison** who will work with NISL staff to ensure all project activities are aligned with state priorities and participate in quarterly meetings of the Project Coordinating Committee. Each participating district will appoint a **District Liaison** who will be the point person for coordination between the district and NISL national staff. District Liaisons from key regions will participate in quarterly meetings of the Project Coordinating Committee. NISL staff will support District Liaisons throughout the grant period to ensure smooth transitions to district ownership of the National Advanced Certification system and career ladder when the grant period ends.

NISL Master Faculty, National Faculty and NISL-certified facilitators will deliver the initial rounds of EDP training and assist with training all Lead and Master principal candidates as they complete NISL facilitation training. NISL has more than 60 Master and National Faculty across the country who will assist with facilitation of the EDP cohorts, in addition to more than 300 NISL-certified facilitators.

A **Project Coordinating Committee** will communicate and coordinate activities and

progress and identify and resolve any issues. The committee will include the NISL CEO, Project Director, Project Manager, Project Coordinator, Director of Research and Evaluation, and Director of Coaching, along with State Liaisons and District Liaisons from key regions. This committee will hold monthly online meetings with the state leadership teams, quarterly online meetings and annual face-to-face meetings.

A top research team from the RAND Corporation will evaluate this project. **Rebecca Herman**, PhD, principal investigator (PI), is the education policy chair at the RAND Corporation. Her school improvement research consistently identified principals as central to improvement efforts and highlighted conditions that support principal effectiveness. As PI for the Impact Evaluation of Race to the Top and the School Improvement Grants and first author of the issue brief *Operational Authority, Support, and Monitoring of School Turnaround*, she examined the changing role of principals in high-stakes school improvement. She also co-led recruitment and implementation for the Study of Teacher and Leader Evaluation Systems, a randomized control trial for the U.S. Department of Education examining effects of principal and teacher evaluation systems that use value-added modeling, structured teacher observations and VAL-ED to systematically evaluate and support principals and teachers. She led Identifying Potentially Successful Approaches to Turning around Chronically Low-Performing Schools, an *Educator's Guide to Schoolwide Reform* and the U.S. Department of Education's *School Turnaround Practice Guide*. She served as senior advisor on the Study of Schools Targeted for Improvement Using Title I Section 1003(G) Funds Provided under ARRA, and the National Longitudinal Evaluation of Comprehensive School Reform. Each of these projects involved examining principal roles as critical factors in school improvement; much of this work included designing, conducting and analyzing data for case studies. She has successfully managed large

projects, including managing 60 staff and seven organizations for What Works Clearinghouse.

Benjamin Master, PhD, co-principal investigator, is an associate policy researcher at the RAND Corporation. His research focuses on human capital development in K–12 schools. He has managed large-scale research projects in the New York City and Miami-Dade County school systems on effective school leadership and teacher evaluation and development. He has extensive methodological expertise in longitudinal data analysis, quasi-experimental techniques to support causal inference, value-added modeling, survey methods and analyses, and experimental research design.

Julia Kaufman, PhD, implementation study task lead, is an associate policy researcher at the RAND Corporation. Her work investigates how innovative education policies and programs can best support high-quality instruction and student learning. Her expertise includes using survey, interview and observational methods to study the complex and inter-related issues that affect educator and student work. She has co-led or served as a researcher on multiple projects investigating the implementation of large-scale K–12 reforms, initiatives and policies.

Louis T. Mariano, PhD, senior statistician, will serve as an expert technical advisor on the project. **Jonathan Schweig**, PhD, and **Laura Hamilton**, PhD, all of the RAND Corporation, also will participate in the evaluation process.

Resumes for all key NISL and RAND Corporation staff are included in Appendix A.

2) A Management Plan with Clearly Defined Responsibilities, Timelines and Milestones. The management plan for this project has clearly defined responsibilities for every aspect of the implementation for key NISL leaders and staff, State and District Liaisons, and the evaluation partners. The project management chart is shown in Figure 2. The management plan

is tightly connected to the project goals, objectives and milestones, as shown in Table 4. The Detailed Project Timeline and Calendar is shown in Appendix E5.

Figure 2. Project Management Chart with Clearly Defined Responsibilities

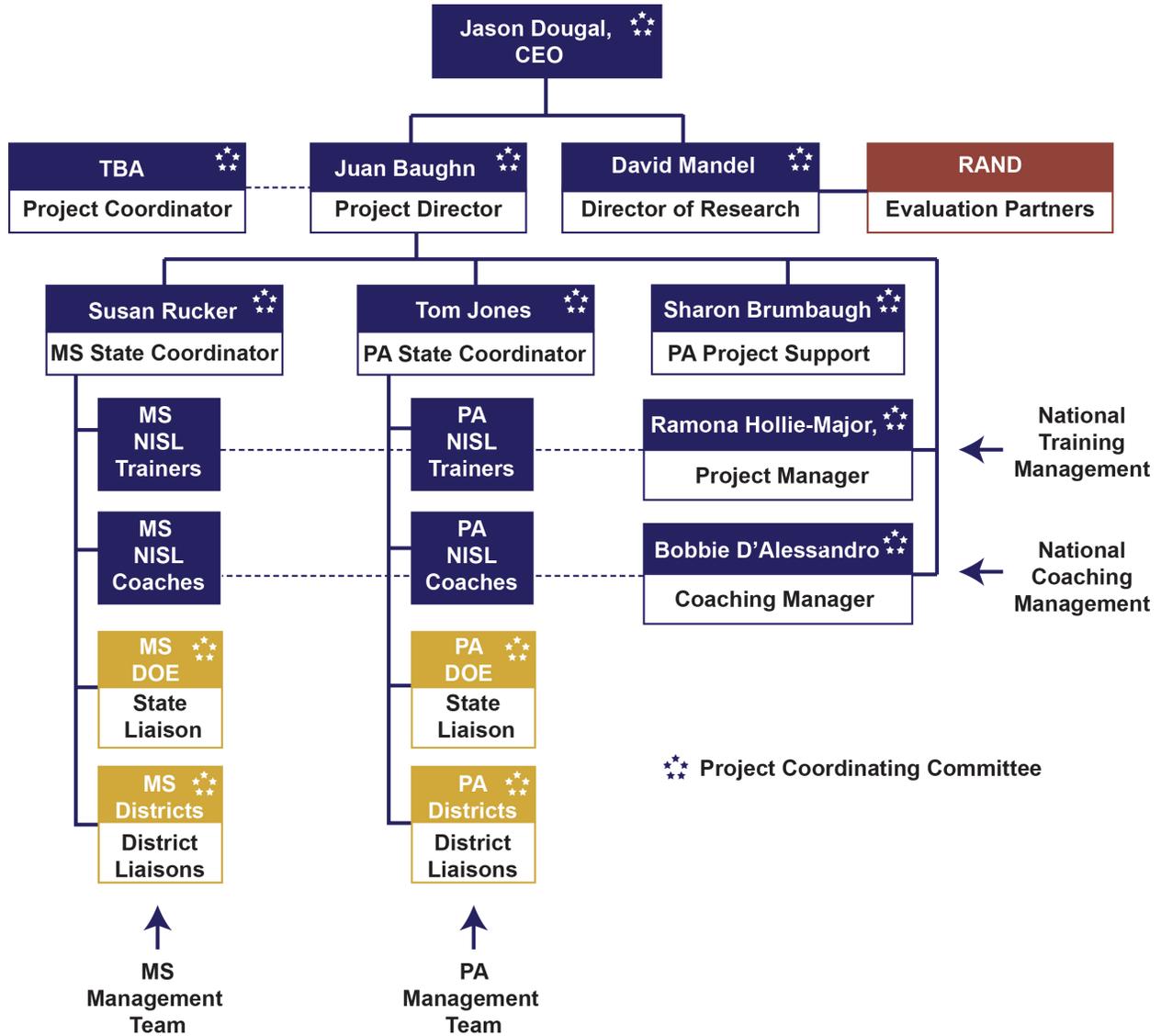


Table 4. Project Goals, Objectives, Milestones and Responsible Personnel

Project Goal	Objectives	Milestones	Responsible Personnel
1. Design and implement a process for identifying promising candidates to become Lead Principals.	<ul style="list-style-type: none"> Identify well-qualified principals to advance up the career ladder. Prepare Lead Principals to train other principals in the EDP. Prepare Lead Principals to deliver leadership institutes. 	<ul style="list-style-type: none"> Candidates selected (January 2016) Lead Principals trained and certified as NISL-certified facilitators of EDP (April 2016) Lead Principals trained to deliver targeted leadership institutes (September 2017) 	<ul style="list-style-type: none"> District Liaisons, State Coordinators Project Director, State Coordinators Project Director
2. Design and implement a process for identifying promising candidates for Advanced Certification as Master Principals and coaches.	<ul style="list-style-type: none"> Identify highly qualified principals to advance up the career ladder. Prepare Master Principals to coach other principals. 	<ul style="list-style-type: none"> Candidates selected (January 2016) Master Principals trained and certified as NISL-certified coaches (November 2016) 	<ul style="list-style-type: none"> District Liaisons, State Coordinators Project Director
3. Leverage Master Principals to provide exemplary coaching to fellow principals.	<ul style="list-style-type: none"> Support Level 1, Level 2 and Resident Principals with sustained, intensive coaching to improve their effectiveness in schools. Determine the effectiveness of principal coaching by Master Principals on student achievement and growth, teacher effectiveness and school climate. 	<ul style="list-style-type: none"> 31 months of coaching completed (December 2018) Baseline school and principal qualitative data and student performance data collected (January 2016) Annual school/principal data collected (May 2018) Annual treatment and control group student data collected (September 2016, 2017, 2018) Evaluation completed (November 2018) 	<ul style="list-style-type: none"> Director of Coaching Director of Research, RAND RAND RAND RAND, Director of Research
4. Establish a rigorous and self-sustaining executive development and	<ul style="list-style-type: none"> Train Level 1 and 2 principals with EDP Train Resident Principals with 	<ul style="list-style-type: none"> Round 1 EDP training completed by NISL (January 2017) 	<ul style="list-style-type: none"> Project Director

support structure for each level of the career ladder.	leadership Institutes	<ul style="list-style-type: none"> • Round 2 EDP training completed by Lead Principals (January 2018) • Round 1 leadership institute training completed by NISL (August 2016) • Round 2 leadership institute training completed by Lead Principals (July 2018) 	<ul style="list-style-type: none"> • Project Director • Project Director • Project Director
5. Build a sustainable pipeline for advanced principal certification.	<ul style="list-style-type: none"> • Provide participating districts with materials and site licenses for EDP and leadership institutes. 	<ul style="list-style-type: none"> • NISL provides all participating districts with materials and site licenses (June 2018) 	<ul style="list-style-type: none"> • Project Manager

3) Sufficient and Reasonable Resources. To assure the successful implementation this project, we have carefully developed the budget, which is based on our experience with previous projects of this scale. Only costs that are sufficient, reasonable and necessary to achieve the goals, and allowable under OMB A-122, are included in the budget.

A full 73 percent of the project budget will directly benefit schools and districts. The budget targets every aspect of the career ladder—and does so at the low cost of less than \$8,500 per school. By the end of the grant period, 1,282 principals will have benefited from this project, which will have a significant impact on the lives of approximately 777,000 students, including large numbers of high-need students. That works out to a cost per student of just \$14.15, including the project evaluation, project management and indirect costs. The cost-effectiveness of the project is very strong.

The grant also will fund a rigorous evaluation of the initiative—with two randomized control trials—to validate the positive impact of the Advanced Certifications and the training and coaching that result from the certification. The budget for the evaluation is 19 percent of the total

budget, making it sufficient and reasonable to meet What Works Clearinghouse guidelines.

D. SUSTAINABILITY

1) Capacity building and sustainability. When NCEE leaders created NISL, they envisioned an organization that would develop research-based leadership programs and build district and state capacity to delivery them at scale. NISL has since realized this vision through a train-the-train delivery model to make the NISL EDP the most widely used, research-proven school leadership program in the country. This project will build on this experience to develop capacity and sustain leadership development programs beyond the grant period. Pennsylvania and Mississippi will use this project to study how they can embed the National Advanced Certification System and career ladder model into state policies and practices. NISL will work with state leaders throughout this project to ensure that this happens. Already, we have strong relationships with leaders in both states and the precedents of state legislation in the Pennsylvania Inspired Leadership (PIL) program for novice principals and state policy in Mississippi’s alternate certification that incorporate the EDP.

The train-the-trainer model for the EDP and NISL Leadership Institutes and the coach certification model for Master Principals will build capacity in partner districts to take on advanced leadership development programs on their own. With more principals in the talent pool who have completed the EDP, and with Lead and Master Principals who can train and coach less experienced principals, our partner states and districts will be well positioned to take advanced certification to scale at an affordable and sustainable cost.

We anticipate that there might be legitimate questions about the impact of this project for our partner districts—and we will address them directly with the State and District Liaisons, district leaders and the Project Coordinating Committee throughout the project. First, districts

might question whether it is feasible or advisable for Master Principals to spend time away from their schools coaching other principals. Master Principals by definition are masters at distributed leadership—building leadership teams; delegating responsibilities wisely; and cultivating the leadership talents of assistant principals, lead teachers and department heads. Providing these backup teams with opportunities to lead their schools on days when Master Principals are out of their buildings gives them valuable leadership experiences, which deepens the bench of leadership talent district-wide. Indeed, districts could be very strategic about staffing the schools of Master Principals with promising leadership candidates who would benefit from this experience—and could be next in line for EDP training. Second, districts might question whether coaching of principals in turnaround schools, such as SIG schools, would conflict with existing efforts, including coaching, to support these schools. We would answer that coaching by EDP-trained Master Principals to principals who are going through the EDP, or have completed it, provides exactly the right support at the right time to coached principals. The EDP and coaching are tightly aligned and focused on effective strategies for principal effectiveness and school improvement, which creates an inherent alignment between school improvement efforts and coaching. We also will work very closely with districts in advance of random assignment to identify principals and schools that would most benefit from coaching, and do this with an eye to avoid non-compliance as much as possible. Third, districts might question whether Master Principals would require additional compensation. We would argue that Master Principals will add value to their districts and, in fact, could save districts time and budget they already spend on struggling principals and schools by lifting them out of that status. We would strongly recommend increases in compensation for Master Principals, and advocate for this with districts throughout the grant period.

2) Strong likelihood of producing useful findings and products. This project will implement and evaluate a National Advanced Certification System and comprehensive career ladder that address a national need for more highly effective principals. Proven and promising leadership development programs, a high-quality project design, highly qualified management and evaluation teams, and highly committed state partners make it highly likely that this project will yield useful findings. Likewise, NISL’s track record of success implementing other large, complex leadership development projects with fidelity, and working with multiple independent evaluators who have validated the effectiveness of similar projects, contribute to the likelihood of success with this project. Based on these experiences, we are confident that the project will yield useful findings about the positive impact of highly effective Master Principals on student achievement and useful policies, processes and practices of advanced leadership development.

3) Disseminating useful information. NISL and our evaluation partners will work actively to disseminate project results and outcomes. We will meet with national association leaders—such as the AASA, The School Superintendents Association; Council of Chief State School Officers; National Association of Elementary School Principals, National Association of Secondary School Principals; National Education Association; and American Federation of Teachers—to report on progress and evidence of effectiveness. We will work with a communications firm to reach the media and the general public about the project and its evidence. We will create a dedicated web portal for this project, updated quarterly. NISL, and its state and district partners, will present at major conferences, such as AASA, The School Superintendents Association; ASCD; and National School Boards Association. Finally, our evaluators will publish at least two articles on the project results in peer-reviewed journals and present their findings at several research conferences.

E. QUALITY OF THE PROJECT EVALUATION

NISL will contract with the RAND Corporation, a nonprofit research organization, to provide an independent evaluation of the project’s impacts and implementation. The proposed evaluation plan will contribute high-quality evidence and insights to the field about the effects of advanced certification and training for K–12 principals. The evaluation will include an Impact Evaluation component, consisting of two randomized control trials (RCTs) that will be used to assess the effectiveness of the project’s core activities, and that will produce *evidence that meets WWC Evidence Standards without reservations*. In addition, the evaluation will include an Implementation Evaluation that will consist of a mixed-methods investigation of representative project activities, and that will serve both to provide evidence of the fidelity of project implementation and to illuminate key mechanisms of its impacts on schools.

1) Methods of Evaluation. The proposed evaluation of the project activities is *thorough*, in that it addresses both the project’s intended outcomes on schools and its fidelity of implementation, while also exploring interim outcomes and potential mechanisms of impact. It is *feasible*, consisting of targeted research activities to develop rich qualitative data on program implementation, alongside larger-scale randomized control trials and data collection activities that participating districts have already agreed to take part in. Finally, the plan is *appropriate* to the project’s goals and objectives, and will produce evidence about a variety of potential impacts at a scale commensurate with the scale and scope of project activities.

Research Questions. The proposed project aims to 1) establish systems for principal development and advanced certification at scale in two states; and 2) improve the effectiveness of hundreds of K–12 principals and their schools. RAND will evaluate both project impacts and implementation by investigating the five research questions, as shown in Table 5:

Table 5. Evaluation Plan Research Questions

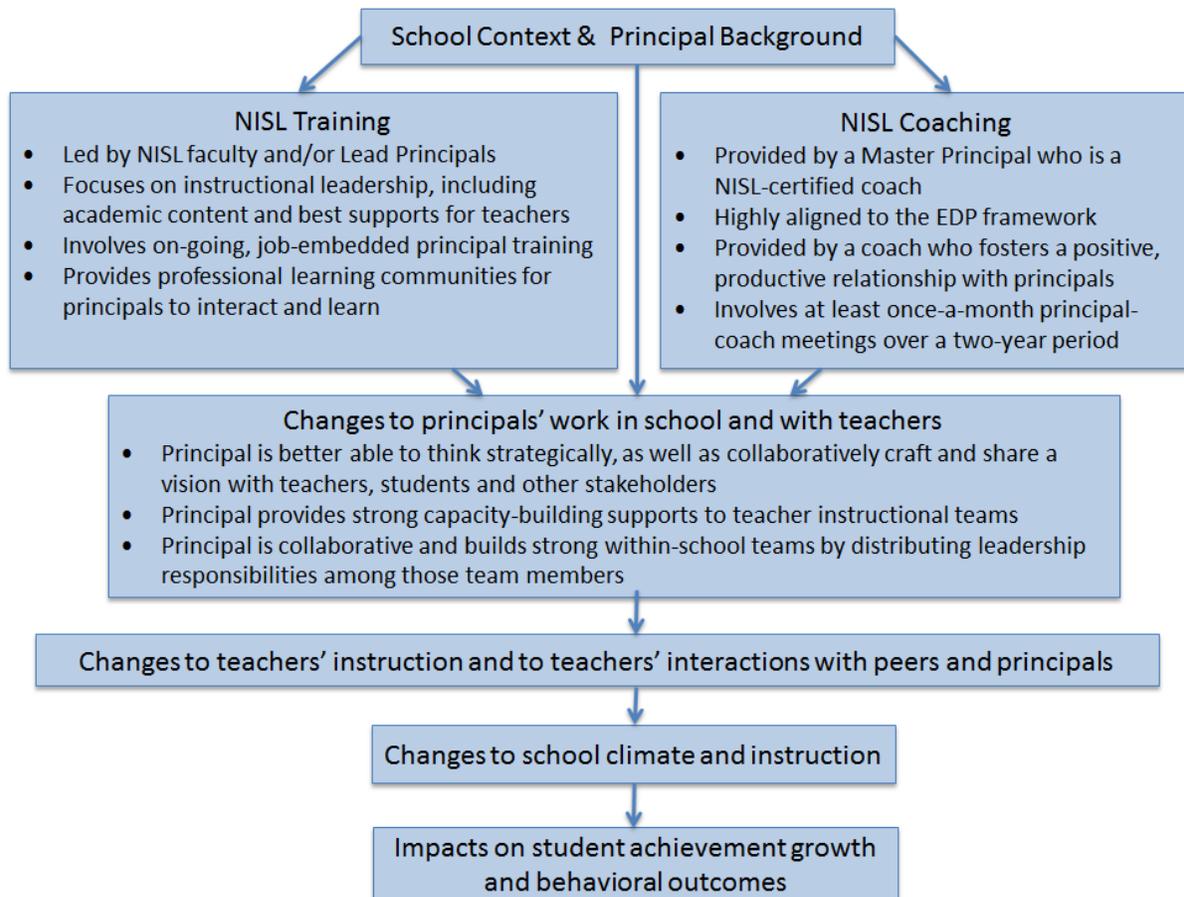
Research Questions	
RQ 1	To what extent are the key components of NISL selection, training and coaching implemented as intended in schools and districts?
RQ 2	To what extent do NISL and participating districts identify strong principals to take advanced leadership positions and support them to apply for and work toward Lead and Master Principal positions?
RQ 3	What are the key mechanisms through which the project's coaching and/or training activities lead to changes in leadership, teaching, the working environment and culture of the schools and eventually student learning?
RQ 4	What is the effect of providing “gap-filling” EDP training to principals on their leadership practices, school climate and culture, and academic and behavioral outcomes in schools?
RQ 5	What is the <i>incremental</i> effect of providing intensive coaching to school principals who are engaged in, or have completed, EDP training, on their leadership practices, school climate and culture, and academic and behavioral outcomes in schools?

Theory of Change. As illustrated in Figure 3 below, NISL aims to provide high-quality training and coaching to principals that is targeted to their contexts and levels of prior expertise, to transform educational practices and improve school effectiveness on a large scale. We hypothesize that many of the impacts of these principal development activities will be observed first in the practices of principals themselves and of the teachers they manage, and then in changes in student academic performance and behavioral outcomes. This chain of effects is reflected in the design of both the Implementation Evaluation and Impact Evaluation components of the evaluation plan, which consider potential mechanisms and mediators of impact, alongside investigation of ultimate benefits that may accrue to students.

Concurrent with efforts to directly develop principals’ skills and improve their schools’ effectiveness, the project also aims to develop and leverage a growing talent pool of school leaders in participating districts through a virtuous circle of “train-the-trainer” and “train the coach” development activities. These activities require the successful transfer of leadership skills from NISL-trained staff to additional cohorts of new Master and Lead Principals. The

Implementation Evaluation includes steps to evaluate the fidelity and quality of this component of the project in each state.

Figure 3. Theory of Change for Impacts on School Effectiveness



Implementation Evaluation (RQ's 1, 2 and 3)

The Implementation Evaluation has three major goals, which will be accomplished through mixed methods data collection and analysis: 1) monitoring the fidelity of the project's overall implementation; 2) exploring how well districts and/or NISL identify strong principals to take advanced leadership positions and support their work toward those positions; and 3) identifying the key mechanisms through which principal coaching and advanced leadership training change leadership, teaching, the working environment and culture of the school and eventually learning.

To meet these goals, RAND will, first, utilize quality assurance data collected by NISL itself, including data on the number of principals receiving training and coaching, as well as observations of a sample of NISL trainings by NISL master faculty and participants' individual evaluations of their training and coaching program experiences. Second, RAND will conduct observations of a small sample of NISL trainings, along with focus groups of participating principals immediately following the training and follow-up interviews with the same principals six months to a year after the training. Observations and focus groups will allow RAND to investigate the extent to which the trainings address core intended components (per Figure 3 above), as well as explore how trainings are potentially impacting principals' practices. Focus groups will also explore connections between the trainings and any coaching supports that trainees may also be receiving. Observations and focus groups in Spring 2016 will include two different EDP training seminars, as well as one Train-the-Trainer seminar and one Train-the-Coach seminar in each state. Observations and focus groups in Fall 2017 will include two different EDP training cohorts in each state from the second EDP cohort, which will be taught by the newly trained Lead Principals who were prepared via Spring 2016 Train-the-Trainer sessions. Collectively, these data will offer insights into the utility of training for participating principals, as well as the relative quality of EDP training provided by NISL staff, in comparison to that provided by new Lead Principals.

Lastly, as part of the Implementation Evaluation, RAND will holistically evaluate the implementation of NISL's coaching activities in four "Case Study" districts (two in each state) during the fall of the first and second year of coaching implementation (i.e., SY 2016–17 and 2017–18). Case Study districts will be recruited by NISL and each will encompass a closed network of coaches and coached principals within a limited geographic area. In these districts,

RAND will, first, interview district administrators and key principal support staff once per year to understand coaching guidelines set forth by the district, as well as relevant district context. Additionally, RAND will gather data from logs (i.e., 5–10 minute online surveys administered once a week over a one-month period) to understand the frequency of principal interaction with coaches – as well as the content, usefulness and applicability of that interaction – to create a picture of principal-coach interaction within each district and gauge the extent to which coaching reflects key intended components.

Following log administration, RAND will interview each Case Study coach and principal individually to gather additional qualitative data that will both explain and expand the data gathered through logs on principal-coach interaction. RAND expects to collect log and interview data for approximately 8–10 principals and 4–5 coaches in each Case Study district in each year. Collectively, this qualitative data will provide a rich investigation of the experiences and interactions that occur as part of coaching. Training and coaching data gathered as part of the Implementation Evaluation will be supplemented with survey data gathered from principals and teachers as part of the Impact Evaluation, which is described in more detail below.

Impact Evaluation (RQs 4 and 5).

The proposed Impact Evaluation consists of two randomized control trials (RCTs) designed to evaluate the effects of key project activities on student academic and behavioral outcomes, and to gauge the extent to which these effects are mediated by changes to principal practices and school climate. The first study (Study 1) will investigate the effects of providing “gap-filling” EDP training to principals who have previously received either no exposure or only partial exposure to the EDP curriculum. NISL will recruit approximately 620 schools in two states to participate in Study 1. In Study 1, outcomes for schools whose principals are randomly

assigned to participate (with participation enforced as a requirement by participating districts) in the first cohort of EDP training (beginning in February 2016) will be compared to those of control schools, whose principals will experience “business as usual” through the Summer of 2018.

NISL will similarly recruit a total of approximately 889 principals to participate in a second RCT (Study 2). This study will investigate the incremental effects of being assigned to receive coaching from Master principals. In Study 2, outcomes for schools whose principals are randomly assigned to receive coaching (which lasts from June 2016 through May 2018) will be compared to outcomes for control schools whose principals do not experience coaching through the close of SY 2017–18. The coaching treatment in Study 2 will be made available only to principals who have been randomly selected to participate in EDP training (via Study 1) or who have previously graduated from the EDP program. Based on prior experience, NISL anticipates a very high take-up rate when coaching is offered to principals.

Randomization. Samples for the RCTs will be partially overlapping, as detailed in Table 6 below. RAND will first conduct the randomization lottery for Study 1, sub-setting principals who are not prior EDP graduates into treatment and control conditions. Subsequently, RAND will conduct a block-randomized lottery for Study 2. A block of prior EDP graduates who were not eligible to participate in Study 1 will be randomly assigned to receive treatment or to the control condition; an additional block of participants designated to be *treated* in Study 1 will be randomly assigned to *also* receive coaching, or to the control condition for Study 2.

Table 6. Randomization Plan and Resulting Sample Sizes, by State

Principal Background	Pre-Lottery Sample	Lottery for Study 1, Gap-filling EDP		Lotteries for Study 2, Coaching		
Pennsylvania						
Partial or No Prior EDP <i>(Eligible for Studies 1 & 2)</i>	N=405	N=236 Treated (T1)	N=169 Control (C1)	N=67 Treated (T2 and T1)	N=169 (C2 & T1)	N=169 (C2 & C1)
Prior EDP Graduates <i>(Eligible for Study 2 only)</i>	N=180			N=33 Treated (T2)	N=147 Control (C2)	
PA TOTALS		236 Treated	169 Control	100 Treated	485 Control	
Mississippi						
Partial or No Prior EDP <i>(Eligible for Studies 1 & 2)</i>	N=215	N=150 Treated (T1)	N=65 Control (C1)	N=50 Treated (T2 and T1)	N=100 (C2 & T1)	N=65 (C2 & C1)
Prior EDP Graduates <i>(Eligible for Study 2 only)</i>	N=99			N=50 Treated (T2)	N=49 Control (C2)	
MS TOTALS		150 Treated	65 Control	100 Treated	214 Control	
STUDY TOTALS		386 Treated	234 Control	200 Treated	689 Control	

In total, RAND anticipates that 386 out of 620 eligible principals will receive gap-filling EDP training via Study 1, while 200 out of 889 initially eligible principals will receive coaching via Study 2. The specific unbalanced N's detailed in the treatment and control conditions of Table E2 correspond to practical and logistical requirements of the project's implementation in the two states, including coaching capacity and demand for gap-filling EDP training. In order to maximize statistical power, RAND intends to report estimates that pool outcome data across the two states. In each study, RAND estimates that the available samples will yield a minimum detectable effect (MDE) of 0.06 student-level standard deviations or less with 80 percent power at a 5 percent level, which are highly plausible effect sizes given impacts observed in prior

research on NISL school leader development activities (Nunnery, Ross, Chappel Moots, et al. 2011; Nunnery, Yen and Ross 2011).

RAND will estimate random-effects regression models and will utilize conventional hypothesis tests of the null hypothesis to assess whether the estimated “intent to treat” (ITT) effects are distinguishable from zero. RAND’s models will include controls for baseline school and principal characteristics to guard against spurious differences between treatment and control groups that may arise by chance, and also because doing so will improve statistical power. To account for potential non-compliance among lottery losers or winners, RAND will also estimate the effects of “treatment on the treated” (TOT) via a two-stage least squares regression, using randomization as an instrumental variable for program participation. Specific model specifications to be used in ITT and TOT estimation are detailed in Table 7 below. RAND will also utilize Structural Equation Modeling (MacCallum & Austin 2000) to differentiate any direct effects of treatment on student academic outcomes from indirect effects on student academic outcomes that are mediated through changes to school climate or principals’ practices.

Table 7. Model Specifications

Estimation	Key
Effect of Intent to Treat (ITT): $(1) Y_{is} = \gamma T_s + X_{is}'\beta + R_s'\theta + u_s + \epsilon_{is}$	<ul style="list-style-type: none"> • Y_{is} is an outcome for student i in school s • T_s is an indicator of school assignment to treatment status • X_{is}' is a vector of student background characteristics • R_s is a vector of school and principal background characteristics • u_s is a random effect common to all students in school s
Effect of Treatment on the Treated (TOT): $(2) Y_{is} = \gamma Z_s + X_{is}'\beta + R_s'\theta + \epsilon_{is}$	
$(3) Z_{is} = \alpha T_s + X_{is}'\varphi + R_s'\pi + \epsilon_{is}$	

Intermediate Outcomes. While the primary goal of the impact studies will be to evaluate the effects of the training and coaching “treatments” on student academic and behavioral

outcomes, identifying changes in educator practices will be key to understanding why effects do or do not occur. In keeping with the theory of change described in Figure 3, RAND will collect survey data annually from all treatment and controls principals in the studies, and from teachers in a blocked-random sub-sample of up to 600 schools (drawn from treated and control schools in each RCT) in approximately 60 participating districts, in January of 2016 and April of 2018. To facilitate data collection efforts, NISL will coordinate with districts to collect staff contact information and to ensure district support for the RAND-administered surveys. This survey data will also provide information about principal support in both treatment and control districts that will enhance and inform data gleaned through the Implementation Evaluation.

Surveys of teachers will focus on the school instructional climate, which recent research has shown can contribute to student learning (Ladd 2011; Kraft & Papay 2011). RAND will draw from existing survey instruments such as the Teaching, Empowering, Leading and Learning (TELL) survey (New Teacher Center 2014), which measures school climate and teacher working conditions, and includes areas such as the level of feedback and support that teachers receive for improving their instruction and supporting struggling students, and the extent to which teachers are held to high and clear professional standards. Surveys of principals will focus on their own school leadership practices, particularly those related to instructional leadership. The principal survey instrument will draw on NISL's training/coaching foci, Interstate School Leaders Licensure Consortium (ISLLC) leadership standards (2008, 2014), and measures validated in RAND and other studies on leadership practices (Augustine, Gonzalez & Ikemoto et al. 2009; Gates, Hamilton & Martorell et al. 2014; Grissom & Loeb 2011).

2) Performance Measures. Table 8 lists *objective performance measures* included in the evaluation that are related to the project’s *intended outcomes* and that include a mix of *qualitative* and *quantitative* data.

Table 8. Objective Performance Measures

Questions	Performance Measures
RQs 1–3	Extent to which NISL training is implemented as intended (<i>via observations of EDP/train-the trainer trainings and principal focus groups with Cohorts 1 in Spring/Fall 2016 & EDP Cohort 2 in Fall 2017</i>)
	Extent to which NISL coaching is implemented as intended (<i>via principal coaching logs and interviews with coaches/principals in case study districts in Fall of 2016-17 and 2017-18</i>)
	Of principals who receive coaching, % who perceive change/improvement to their leadership practices (<i>via principal coaching logs, interviews with coaches and principals, questions on annual Principal Practices surveys included for coached principals</i>)
RQs 4–5	Principal Practices surveys in all participating district schools (<i>in January 2016 and April 2017 and 2018</i>).
	School Climate surveys of teachers, in a sub-sample of up to 600 schools in 60 districts (<i>January 2016 and April 2018</i>).
	Annual school average retention rates of teachers deemed effective according to state-wide teacher evaluation criteria, where this data is available
	Student achievement on state tests in Math, Reading, and Science, by year
	Student attendance, discipline, graduation, and grade progression outcomes, by year

Data on student academic, behavioral, discipline, and grade progression outcomes in schools and data on teacher retention and performance will be collected from existing datasets available via each state Department of Education and will include both baseline data (i.e. from SY 2014–15) and subsequent data through SY 2017–18. Because achievement data spans multiple years, with potential changes to statewide exams due to Common Core test implementation, RAND will standardize data within year and grade to facilitate comparisons of performance over time. All other data will be collected directly by RAND and/or by NISL, in coordination with participating districts, as discussed previously in section E1.

3) Performance Feedback. Data collected as part of the project evaluation will provide *performance feedback* and *assessment of progress* towards achieving the project’s *intended outcomes*, as shown in Table 9 below.

Table 9. Performance Feedback Provided to Stakeholders

Performance Feedback	Purpose and Benefits
Bi-monthly update calls with NISL staff	Informal updates on evaluation progress and findings to-date regarding implementation quality
Interim report 1 with implementation assessment results (Spring 2017)	Share findings from interviews, logs, observations and focus groups from NISL program participants
Interim report 2 including implementation and impacts assessment results (Winter 2017)	Share findings from the implementation evaluation and interim analysis of project impacts on principal practices and school effectiveness.
Final published project report and impact analyses (Fall 2018)	Share, and disseminate more broadly, the final results from both the Impact and Implementation Studies

4) Quality of Evidence. The two school-level RCTs proposed as part of the evaluation plan will identify the effects of gap-filling EDP training and of principal coaching on school effectiveness. Each of these RCTs will, if well implemented, produce evidence that meets WWC Evidence Standards without reservations. The evidence of impacts that they provide corresponds to the primary project activities to be funded by the SEED grant. Attrition rates of schools present in the study sample (e.g. due to school closures) are expected to be very low. However, RAND will work with NISL to collect pre-treatment data on principals and schools, and will use this data to check that randomization was successful, using appropriate strategies to deal with any imbalance.

COMPETITIVE PREFERENCE PRIORITIES

Competitive Preference Priority 2: Improving Efficiency and Cost-Effectiveness

This project will empower states and school districts to implement a National Advanced

Certification System and a defined career ladder for principals, and a tightly aligned professional development and coaching system for principals and aspiring school leaders. Connecting all of these pieces together, rather than providing them separately, will improve efficiency. Every aspect of this project reflects a cost-effective, high-quality and sustainable leadership development and rigorous support system.

This project will substantially improve efficiency and student outcomes without commensurately increasing per-student costs. The Executive Development Program (EDP), an integral component of this project, is a cost-effective model for improving principal effectiveness and student achievement. Every principal is trained to cultivate the conditions for high performance school-wide. Training just one principal positively impacts hundreds of students every year, over many years. Documented learning gains averaged one to two additional months of learning per student in both math and English language arts (ELA) in the EDP's large-scale study in Massachusetts. Middle school proficiency rates increased four percentage points faster in English language arts and two percentage points faster in mathematics than comparison schools in the EDP's large-scale study in Pennsylvania.

We have made improvements to the EDP since those evaluations were completed. We also have many more years of experience implementing the program. With the addition in this project of coaching by Master Principals and training by Lead Principals in both the EDP and targeted NISL leadership institutes, we expect at least similar results—and potentially greater results—from this project. These substantial learning gains will be obtained for just \$14.15 per student! This is calculated by taking the total project cost of approximately \$10.9 million and dividing it by the estimated 777,000 students we expect to impact. This estimated per-student cost is based on the 1,282 principals who will have benefitted from the high-quality leadership

preparation, training and coaching in this project by the end of the grant period, each with an average of 600 students their school. And the student estimate is conservative, because it does not take into account new students who will enter schools during the three-year grant period.

The per-student cost of \$14.15 is just a fraction of a percent of the 2011 national average cost per student of \$11,353. Several evaluations of the EDP have detected average proficiency gains of two to four percentage points in both math and ELA, which translates into a 4% to 8% proficiency rate gain for a school that started with a 50% proficiency rate (the likely average for high-need schools in this project). Therefore, the increased proficiency rates are expected to easily outpace the additional costs incurred, significantly improving cost-effectiveness.

At the school level, the full cost for this project, including evaluation and indirect costs, is \$8,500 per school (\$10.9 million ÷ 1,282 schools). This includes not just EDP training, but also a National Certification System for Principals, a comprehensive career ladder, training that results in hundreds of Lead, Master and Resident Principals in two states, 30 full months of intensive leadership coaching for 200 principals, and targeted NISL leadership institute training for hundreds more principals! The EDP alone is substantially more affordable than other high-quality principal training programs. The value of the other components makes this an even more efficient and affordable project.

By way of comparison, consider the KIPP program for aspiring school leaders, which received a \$60 million i3 Scale-up grant in 2010 to train 250 principals, a cost per principal of \$240,000, or New Leaders, which received a \$16.5 million i3 Validation grant in 2012 to train 145 principals, a cost of \$113,000 per school.

Likewise, high-quality “pipeline” programs cited as “innovative” by the Rainwater Leadership Alliance (Cheney, Davis, Garrett & Holleran 2010) cost over \$100,000 per

graduate—and more if required internships are factored in. In marked contrast, the average cost of the EDP is less than \$10,000 per school (without the evaluation that is required for this SEED grant). Despite costing just 10% to 20% as much as pipeline programs, the EDP has documented student learning gains as strong as or stronger.

In addition, the effect sizes of .07 to .14 found in recent rigorous evaluations of the EDP (Nunnery, Ross, Chappell Moots, Pribesh & Hoag-Carhart 2011) are comparable to the effect sizes found for comprehensive school reform models and greater than the impact found in class-size reduction initiatives (Borman, Hewes, Overman & Brown 2003). However, these initiatives typically cost between \$250,000 and \$500,000 per school—*10 to 20 times* the cost of the EDP.

The EDP itself is different—it is structured to be cost-effective. Cohort-based training using blended (face-to-face and online) learning modules is far more cost-effective—and pedagogically effective as well—than training single principals in leadership development programs or in graduate schools of education.

NISL’s proven train-the-trainer model for the EDP makes leadership training at scale much more affordable for states and districts. For this project, we will train and certify local Lead Principals as facilitators to deliver the EDP with fidelity and efficacy—and equip other principals to achieve strong results. These NISL-certified facilitators will be able to continue to deliver the EDP and NISL leadership institutes in their districts, states or even nationally after the grant period end. Similarly, we will train and certify local Master Principals to provide high-quality coaching to less accomplished principals in their districts, states or even nationally after the grant period ends. This model builds state and district capacity and efficiency in elevating leadership capacity *across whole districts and states*.

It is also important to acknowledge the unique role that principals play in a school and

district. Almost every initiative a district implements to improve instruction and student learning can be positively or negatively affected by the quality of school leadership. NISL’s EDP coupled with the paired coaching initiative will maximize the effectiveness of school leaders. School leaders learn how to allocate limited resources to achieve strategic goals, how to create and lead teams, how to distribute leadership, and how to free up more of their schedule –without additional resources– to focus more of their time on instructional leadership.

Finally, states and districts will be able to use the National Advanced Certification System for Principals and career ladder to strengthen their principal pipelines and build a sustainable system for leadership development at every level. This model is efficient, because states and districts will not have to spend valued time and money developing their own unique systems. In addition, states and districts will have everything they need to implement this system expeditiously—a defined national certificate and career ladder, aligned professional development and coaching, and a proven train-the-trainer and research-based coaching program, and all the curricular and other materials that go with this system.

This is important. Few districts have the money, time or staff capacity to research, design or develop high-quality Advanced Certificates, career ladders and leadership development program (or programs).

Competitive Preference Priority 3: Promoting Science, Technology, Engineering, and Mathematics (STEM) Education

3 a) Increasing opportunities for high-quality professional development for teachers of STEM subjects. NISL Executive Development Program (EDP) training and coaching prepare principals to be effective instructional leaders who provide and support high-quality professional development for teachers in all subjects, including STEM subjects. Already, research shows that

principals trained in the EDP spend more time on instructional leadership and dissemination and promotion of best practices than principals without this training (The Meristem Group 2009).

This project is particularly important for promoting STEM education, because it includes a rigorous, randomized control trial evaluation that will examine the impact of principal coaching on student achievement in science *for the first time*.

To play the role of instructional leader, principals must understand what good instruction looks like in these disciplines (see, e.g., Hill 2002; Council of Chief State School Officers 2008, revised 2014). The EDP covers mathematics and science with intensity. In early EDP implementations, in fact, principals asked for training in science to match the rigor of training in mathematics and literacy, and NISL met this need with a full EDP unit on science. The curriculum includes six full days of best practices training for principals in key STEM subjects—two days in mathematics, two days in science and two days in literacy, an essential foundation for STEM learning. Students need to be able read and comprehend complex informational texts to succeed and advance in STEM learning.

The EDP curriculum aligns with the Common Core State Standards in Mathematics and in English Language Arts & Literacy and with the Next Generation Science Standards. In mathematics, principals learn to recognize and support instructional excellence in developing students' mathematical knowledge, skills and understanding over time. In science, principals learn to recognize and support instructional excellence in developing conceptual understanding and “minds-on” learning in an authentic, thinking curriculum in the physical sciences, life sciences, earth and space sciences, and engineering, technology, and applications of. In literacy, principals learn to recognize and support instructional excellence in reading, writing, speaking and listening across the disciplines, including the specialized discourse and complex

informational texts of mathematics, science and technical subjects. The EDP provides principals with an instructional coaching model, and experience using it, to effectively coach and mentor individual teachers to elevate their practice.

The EDP also focuses on driving for results using data. Principals are trained to examine student achievement and many other types of data to identify school, teacher and individual student needs. EDP participants have used the array of powerful data-mining tools included in the program to take strategic actions to improve teacher effectiveness in STEM education. For example, EDP principals have completed Action Learning Projects to establish a carefully sequenced, standards-based program of study in a STEM subject; provide targeted professional development, coaching and mentoring to STEM teachers; and focus on closing achievement gaps in STEM subjects. In Mississippi, in fact, EDP principals lead 10 of the 20 distinguished schools that made the greatest academic progress in reading, language arts and math for two or more consecutive years. The EDP also helps principals better implement school programs, including STEM initiatives.

In addition, the EDP trains principals to establish professional learning communities in their schools and promote collaborative teacher inquiry, collective learning and a shared sense of responsibility for student learning in the subject areas and across grade levels. The EDP also focuses on team building and distributed leadership, which give teachers opportunities to engage in strategic planning and take on leadership roles.

In this project, coaching provided to less experienced principals will help them further hone all of their instructional leadership skills, including coaching teachers toward instructional excellence in STEM subjects, using data to improve professional development opportunities for STEM teachers and to strengthen STEM programs, establishing productive professional learning

communities of STEM teachers and including STEM teachers on leadership teams.

While the focus of this project is on the effects of principal training and coaching on student academic and behavioral outcomes, intermediate outcomes on teachers in terms of changes to teacher practices and school instructional climate will be evaluated. Surveys of teachers will focus on the school instructional climate, which recent research has shown can contribute to student learning (Ladd 2011; Kraft & Papay 2011), and on teacher working conditions, and includes areas such as the level of feedback and support that teachers receive for improving their instruction and supporting struggling students, and the extent to which teachers are held to high and clear professional standards. To examine teacher effectiveness, data on teacher retention and performance will be collected from existing datasets available via each state Department of Education and will include both baseline data and subsequent data.

In summary, the EDP improves teacher effectiveness in STEM subjects, as evidenced by a consistently large impact on student achievement. When school leadership improves, it impacts *all teachers, all subjects and all students*. Some STEM-related examples:

- Four rigorous, large-scale studies (ranging from 38 to 101 schools) found statistically significant impact in mathematics and reading scores at elementary, middle and high schools. One study found that average learning levels increased for all students by an average of two to three months. Another study found that high schools led by EDP graduates increased math proficiency rates nine percentage points *faster* than comparable schools just 18 months after the training ended.
- Documented learning gains in schools with EDP-trained principals averaged one to two additional months of learning per student in both math and English language arts in a large-scale study of the EDP in Massachusetts. Middle school proficiency rates increased

four percentage points faster in English language arts and two percentage points faster in mathematics than comparison schools in a large-scale study of the EDP in Pennsylvania.

As further evidence of our leadership in promoting STEM education, Business Roundtable (BRT) recognized the EDP in 2013 as one of just five “outstanding” K–12 programs in the nation that have demonstrated a strong potential for helping prepare more students for college and the workplace. After an independent review of more than 100 applicants by a panel of experts using a stringent set of criteria, the EDP was selected to address BRT priority issues—including improving student achievement in one or more STEM-related subjects.

Competitive Preference Priority 4: Supporting High-Need Students

This project will improve c) both academic outcomes and learning environments for high-need students, including i) students served by Rural Local Educational Agencies, ii) students with disabilities, ii) English learners, iv) students in the lowest performing schools, v) students living in poverty and are served by schools with high concentrations of students living in poverty.

This project will focus on serving the needs of large numbers of disadvantaged students. We chose our state partners very carefully. Mississippi faces significant challenges relating to its high poverty rates and highly rural school districts. Pennsylvania faces the challenges of poverty in urban, rural and suburban districts.

Among the districts in Pennsylvania and Mississippi that have submitted letters of intent to participate, the proportions of their students who are eligible for the federal free and reduced-price lunch program range from 100 percent to 37 percent. The average poverty rate for all confirmed districts is 69.54 percent. Statewide, 71 percent of the Mississippi students qualify for the federal free and reduced-price lunch program, 13 percent participate in special education and

54 percent are minorities, according to the National Center for Education Statistics. Statewide, 39 percent of Pennsylvania students qualify for the federal free and reduced-price lunch program, almost 17 percent participate in special education and 29 percent are minorities, according to the New American Foundation.

Turning around schools with high concentrations of high-need students requires “a special breed of leadership” (Steiner & Hassel 2011). A growing body of research and best practices indicates that turnaround leaders need specialized leadership competencies to drive rapid, dramatic change (see, e.g., Kowal & Hassel 2011; Kowal, Hassel & Hassel 2009; Steiner & Hassel 2011; Steiner, Hassel & Hassel 2008). Moreover, turnaround leadership competencies are *different* from the competencies needed to lead better performing schools. Building leadership competencies can support turnaround leaders in persistently low-achieving schools.

NISL’s leadership programs and services are specifically designed to develop the competencies associated with leading successful school turnaround efforts. NISL enhanced its Executive Development Program (EDP), the foundation of this project, in 2010 to ensure consistency with the latest research and best practices in leadership development, including the Interstate School Leaders Licensure Consortium (ISLLC) Standards (Council of Chief State School Officers 2008, revised 2014) and Public Impact’s competencies for turnaround leaders (Public Impact 2008). The enhanced EDP imbues participants with specific competencies and skills known to be critical to high levels of success for turnaround leaders, according to Public Impact (Steiner & Hassel 2011) and *Leading Change Step by Step: Tactics, Tools, and Tales* (Spiro 2011).

NISL has undertaken EDP implementations with dozens of school districts with high concentrations of high-need students and with schools in desperate need of turnaround leadership, as exemplified by these engagements:

- **MS LEADS Project:** The Mississippi Leadership Excellence for Acceleration in Developing Schools Program (MS LEADS) is a partnership with eight high-need Mississippi school districts including many of the state’s persistently lowest performing schools. The project design utilizes NISL’s research-based leadership development program, enhances it by adding an integrated coaching component, and then implements it on a district-wide basis across all eight districts, having all principals, assistant principals and other senior district leaders attend the intensive training. The project is in its fifth year of implementation. In Mississippi, EDP principals lead 21 of the 51 state’s top Title I schools recognized in March 2015 by the Mississippi Department of Education for making academic progress and closing achievement gaps over the past two years;
- **Arizona Leadership Academy**—The Arizona Department of Education (ADE) selected NISL to train three cohorts of district and school leadership teams in 15 of the state’s persistently lowest-achieving schools funded by the federal School Improvement Grant (SIG) program. NISL worked collaboratively with ADE staff to customize the EDP to focus on turnaround leadership competencies. This engagement, which is in its fourth year of implementation, includes the EDP, on-site and off-site coaching and a 360° evaluation instrument to track participants’ progress. One of the first schools to receive the EDP and receiving coaching showed an especially rapid achievement increase, rising from failing school status to a “B” school only a year after completing the NISL programming.

- **Minnesota Principals Academy**—Minnesota uses the EDP to provide leadership development for principals. In response to changes in the federal SIG program, NISL worked closely with Minnesota to create a modified version of the EDP to provide leadership development for new leaders in all of the state’s persistently lowest-achieving schools. This project is in its ninth year of implementation.
- **State of Massachusetts**—The focus of the NISL program implementation and independent evaluation in Massachusetts was on 20 high-need districts in the Commonwealth, including many large and small urban centers (e.g., Boston, Springfield, Fall River, Lowell). Old Dominion University and Johns Hopkins University performed a scientifically rigorous study to measure the effects of the NISL implementation. It included 38 elementary, middle and K–8 schools with an average free and reduced lunch rate of over 60%. Researchers found that schools led by NISL graduates increased student learning faster than schools in the rest of the state (adjusted for demographic factors) in both English language arts and mathematics. “NISL schools” managed to increase achievement levels by an average of one to two months per student over the three-year study. The effect size was .14 in math and .11 in English language arts. Researchers concluded, “When it is considered such effects apply to an entire school and that the NISL program costs only about \$4,000 per participant principal, the educational value to individual schools and to multiple schools state-wide is obvious.”
- **Holyoke School District**—The Massachusetts State Superintendent asked NISL to work with this school district after it was taken over by the state due to low academic performance. It was one of several state interventions. All of its principals, assistant

principals and key district staff went through the EDP. A year later, student achievement rose sufficiently that the state released the district from state supervision.

- **Chambersburg School District**— A school district in Pennsylvania that had failed to meet state accountability targets for six years in a row decided to send all of its school and district leaders through the EDP as one of its key turnaround strategies. The turnaround was successful. The district met math and reading proficiency targets for the next two years, allowing it to avoid severe sanctions.

This project also will provide NISL targeted leadership institutes to Resident Principals—those who have already completed the EDP. These institutes will help principals better support high-need students:

- **English Language Learners Institute**—This three-day institute supports principal efforts to strengthen and improve a school’s response to the specific educational needs of English language learners (ELLs). Principals learn what they need to know and do to increase their leadership effectiveness in a school with a culturally and linguistically diverse student population. Through an Action Learning Project, principals craft a plan for professional development and overall English language learning excellence for their own school. The institute focuses explicitly on how schools can improve the student achievement of ELLs, targeting college and career readiness as well as how schools should provide appropriate and differentiated instructional services and fair assessment to ELLs in all classrooms. The institute provides ELL program models and strategies that a principal should promote to create collaborative learning teams among teachers.
- **Students with Disabilities Institute**—This three-day institute gives principals the knowledge they need to develop and implement a school-wide action plan that puts

students with disabilities on a solid path toward proficiency and productive lives. Closing achievement gaps for students with varying disabilities that prohibit learning requires principals to know how to provide leadership strategies to the teachers that serve these students. This institute covers research-based leadership strategies that improve learning for students with disabilities, including assessing school demographics; developing needs assessments; engaging parents and community; describing the legalities of special education; recognizing inclusive practices for students; applying leadership strategies for fair assessment and appropriate accommodations; identifying factors important to the writing of Individualized Education Plans (IEPs); promoting best practices and assistive technology for student learning; implementing effective resources for prevention; developing quality professional development; developing quality behavioral intervention strategies; and strengthening instructional techniques.

- **Parent and Community Engagement Institute**—This two-day institute gives principals the knowledge and actions needed to engage parents, families and the community in the success of K–12 students. Principals study examples of effective practices in schools, including policy involvement; shared responsibilities for improved academic achievement; capacity building for parents, families and communities; and parent information centers. This institute covers a comprehensive parent and community involvement framework (Epstein 2009) to create school, family and community partnerships, including structures and processes for developing effective partnerships. This framework focuses on six types of involvement: parenting, communicating, volunteering, learning at home, decision making and collaborating with the community.