Same Students. Same Teachers. Better Results. Scaling-up the Validated BARR Model

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Introduction

Building Assets, Reducing Risks (BARR) is built from the foundational belief that high schools have the capacity to make key changes with their current staff to produce significant new results with all students, starting in the critical 9th grade year. BARR is a comprehensive school turnaround model that uses eight interconnected strategies and a set of simple to use, yet comprehensive tools and practices to address both whole-school and individual student change. The BARR model has the capacity to reach the whole school—all students and all teachers. Key to the BARR model is teachers' real-time analysis of student data, student asset building, and intensive teacher collaboration using BARR's tools as the structure and guide. It develops positive student-teacher relationships and integrates student supports into a school's existing operations for addressing academic and nonacademic barriers to learning.

The U.S. Department of Education awarded an Investing in Innovation (i3) development grant in 2010 to test the BARR school innovation at three persistently low-performing schools. This funding was focused on integrating student supports to address nonacademic barriers to learning, prioritizing college access and success, and impacting schools in rural LEAs. Based on positive findings, the U.S. Department of Education then awarded a 2013 i3 validation grant to BARR's fiscal sponsor, Spurwink Services, Inc. (Spurwink). The validation funding was used to evaluate BARR's ability to improve the effectiveness of teachers, encourage the broad adoption of effective practices, and serve rural communities.

In the last six years, implementation of the BARR model has expanded from one school to 44

. Given its proven evidence of effectiveness under multiple U.S. Department of Education priorities, its implementation in urban, suburban, and rural settings, and the considerable potential of this model to help turn around low-performing high schools, we seek to scale up the validated BARR

model to make it available nationwide. As one of the few evidence-based interventions shown to

Response to Priorities

Absolute Priority 3: Improving Low-Performing Schools

The BARR model is well-aligned with evidence-based recommendations to turn around low-performing high schools, with eight key BARR strategies that improve student and teacher outcomes for schools with large populations of high-need students (Appendix J1). These BARR strategies align with the key principles promoted for use in turnaround schools: school leadership, school culture and climate, instructional effectiveness, assessment and intervention systems, staffing practices, use of data, use of time, and family and community engagement (Jerabek, 2014; Perlman & Redding, 2011).

Scale-up funding will allow us to build our capacity to improve outcomes for more students in high-need schools around the country. A unique aspect of the BARR model is that BARR trainers are educators coming from schools that have successfully implemented the model. They will provide coaching to administrators and staff at new BARR schools to specifically address how the BARR model can be applied to all key features of school turnaround. The findings from the i3 scale-up study would generate important information about BARR's effectiveness as a school turnaround model while increasing practitioners' and policy makers' understanding of the skills and contexts needed for these changes to occur.

Competitive Priority 5: Broad Adoption of Effective Practices

This proposed project will test the scaling up of BARR in 66 study schools and will further implement the model in an additional 50 high schools (10 schools in five regional hubs) to impact 146,250 students and 11,600 staff in a total of 116 new BARR schools by 2021. We will

focus recruitment on five regional hubs across the country, each containing a significant portion of the lowest performing schools in their respective states, based on a variety of academic measures. The five regional hubs are located in (1) Southern California (Riverside County–San Bernardino–San Diego), (2) the Northeast (Maine–Massachusetts), (3) Minnesota (Minneapolis–St. Paul), (4) Tennessee (Nashville–Chattanooga), and (5) Texas (Dallas–Fort Worth). Currently, BARR has 11 letters of support from school districts and regions covering 50 possible schools across the regions (see Appendix G for commitment letters).

An important lesson learned from the i3 validation project has been the potential of a "snowball" strategy for scaling up BARR. This strategy begins with successful implementation in one or two schools within a region. This then allows us to demonstrate the improvements in student outcomes through rigorous evaluation; and use the improvements in student outcomes and the positive experiences of local "demonstration" schools to encourage additional high schools to observe and consider the BARR model. We have used this snowball strategy successfully in the area surrounding Hemet, California, where the results at Hemet High School inspired the superintendent to expand BARR implementation to three additional high schools in the district, one of which was designated as a study school for the i3 validation grant. Likewise, in Maine, by 2018, 20 schools will be implementing BARR through the successful broad adoption process we initiated and tested there.

A. Significance

Magnitude of the Problem

American high schools are not meeting the needs of today's students. Approximately 500,000 young people leave high school before graduating each year, severely limiting their options for further education and sustainable employment. Those not receiving a high school diploma will remain less likely to be employed, earn lower taxable income, be more likely to

require social services, be more likely to be involved with the justice system, and live shorter, less healthy lives (Caterall, 2011; Civic Enterprises, 2015; Rouse, 2007; Sum et al, 2009). According to America's Promise (2016), if the graduation rate increased to 90 percent for just one cohort of students, the country would see a $7.2 billion increase in annual earnings and a $1.1 billion increase in federal tax revenue.

In the United States, race and class remain the most reliable predictors of students' academic achievement (DePaoli et al., 2015). Black and Hispanic/Latino students are still graduating at rates that are ten and six percentage points behind the national average, respectively (U.S. Department of Education, NCES, 2013). As our public school system and nation become more diverse, it is critical that we implement school reform models that are centered around the needs of the students they serve, particularly recognizing students of color and students from low-income backgrounds. Numerous state and federal policies have attempted to narrow this gap, but the difference between White students and their Black and Hispanic counterparts in reading and mathematics scores is as wide as ever (U.S. Department of Education, NCES, 2013).

Many persistently low-performing schools lack a school culture that is conducive to learning and that includes high levels of interpersonal support and safety (Blum et al., 2002; Osterman, 2000). Research on students who drop out of high school has emphasized the importance of relationships and school climate, accessing the web of support of the community, and leveraging student strengths (Center for Promise, 2015).

While high-need students can drop out at any point before graduation, the 9th-grade year is critical. Research shows that 9th-grade retention rates and failure rates are higher than they are in any other grade (McCallumore & Sparapani, 2010; Smith, 2006). Students on track at the end of their freshman year, based on course performance and credit accumulation, are more likely to

graduate from high school within four years than their off-track peers (Allensworth & Easton, 2007). Strategies like those in the BARR model that combine caring and supportive environments with relevant and rigorous curriculum have been found effective at addressing high school dropout problems in a range of settings (Dynarski et al., 2008).

Although considerable attention has been paid to improving low-performing schools, the pace of progress continues to be slow and successes are rare and not systemic. A study of Title I, 2003(g) School Improvement Grant (SIG) funded low-performing schools revealed that one-third of these schools actually showed a decline in achievement as they received funding and implemented reforms (U.S. Department of Education, 2013). The same study concluded that high schools, compared to elementary or middle schools, were the least likely settings in which to improve student achievement.

Promising New Strategy

The BARR model trains staff to identify and leverage student strengths and provides the school with structures to ensure that all students thrive. BARR's eight strategies include a focus on the whole student, professional development, BARR's I-Time SEL curriculum to foster a climate of learning, formation of cohorts of students, regular meetings of the cohort teacher teams, Risk Review meetings to coordinate with community resources, engagement of families and administrators (Appendix J1). With funding from the i3 program for both a development grant and validation grant, the BARR model has been rigorously studied through several RCTs in schools in a range of geographic regions. This rigorous research has found statistically and practically significant increases in student achievement in mathematics and reading, increased credit accumulation, reductions in academic achievement gaps, and improved high school graduation rates. Evaluation results meet WWC standards for evidence without reservations and

provide mounting evidence that BARR is effective at increasing student academic achievement and educational attainment in schools with high 9th grade failure rates (Appendix D).

In addition to these academic program effects, evidence from survey data and qualitative data collected from teachers and counselors in schools participating in the BARR study indicate that BARR teachers feel more connected to their students, their colleagues, and their schools and report higher levels of engagement and self-efficacy as a result of participating in BARR. Outside of the narrow bounds of the i3-funded RCTs, BARR schools are showing sustained positive outcomes with regard to school climate and students' substance use through statewide surveys such as the California School Climate Survey, the California Healthy Kids Survey, and the Maine Integrated Youth Health Survey. Most strongly, our first RCT school, Hemet High School, now in its fifth year of BARR implementation, currently has a school climate that ranks in the top 5 percent of comparable schools in California. In comparing 2014 and 2016 data from the California School Climate Survey (two and four years after initial BARR implementation), Hemet High School staff reported statistically significant improvements in the student learning environment, the staff working environment, school safety, student discipline, positive relationships, and student behavior. Student data from Hemet mirrored these positive findings, as did comparable data for BARR schools in Maine and Minnesota.

The promising outcomes of the BARR model have resulted in a range of accolades. In June 2014, ACT awarded St. Louis Park High School with the National College and Career Transition Award. This award was based on the impact BARR has demonstrated in preparing students for success after high school, serving students of diverse backgrounds, and demonstrating student growth toward meeting ACT's college and career readiness benchmarks. This school and other schools implementing the BARR model have been successful at keeping more students on track

for graduation and helping more students, including students of color, take advanced classes, such as Advanced Placement (AP) and International Baccalaureate (IB) classes. The Collaborative for Academic, Social, and Emotional Learning (CASEL) has included BARR in its 2015 *CASEL Guide: Effective Social and Emotional Learning Programs - Middle and High School Edition.* BARR is also included in the National Registry of Evidence-based Programs and Practices of the Substance Abuse and Mental Health Services Administration (SAMHSA) because of the BARR model's ability to decrease the incidence of substance, academic failure, truancy, and disciplinary incidents among students.

Exceptional Approach

The BARR model's demonstrated success at improving low-performing high schools is attributed to its exceptional approach to school improvement. The model was developed in a school, has been refined through implementation at other schools, and has been rigorously evaluated. The BARR model targets the critical transition time of 9th grade, but impacts the whole school through three years of training, coaching, and materials for the entire staff. Unlike many other school reform programs, BARR works with the current staff at the school and acknowledges their experience, expertise, and student and community knowledge. BARR addresses developmental, academic, and structural challenges that low-performing schools face by combining student asset building, teachers' frequent analysis of student data, and intensive teacher collaboration to improve students' success. BARR develops positive student-teacher relationships and integrates student supports into a school's existing model for addressing nonacademic barriers to learning (Appendix J2).

BARR requires that 9th grade students are placed in cohorts with a shared teacher team. These teacher teams are trained and supported to be attentive to the whole student, building

relationships and using real-time data to engage in collaborative assessment and problem solving on a weekly basis. All staff in the building participate in training, receive coaching, and are equipped with skills to effectively build relationships and use their data. BARR has extensive fidelity markers and rubrics to assist school staff at schools with self-reflection and to improve implementation (see Appendix J9 for fidelity forms and scoring rubrics).

Historically, school reform methods have involved bringing in new leadership and/or replacing staff. These techniques have not yielded convincing short-term results nor long-term sustainability (Herman et al, 2008; U.S. Department of Education, 2013). BARR's tagline articulates our unique approach: "Same Students. Same Teachers. Better Results." BARR's ability to develop and leverage the capacity of existing school staff has proven to be a successful response to typical high-school turnaround approaches that rely too heavily on leadership change, outside experts, and the replacement of teachers. The BARR model builds on the talent already within the school. After BARR implementation, it is typical for a math teacher to prompt a student about his late English assignment, as well as congratulate him on making the varsity soccer team. In most high schools, students enter as a number, but in BARR high schools, multiple teachers will know—and act on—each student's interests, challenges, and strengths.

Following are some examples of why school leaders have found BARR to be an exceptional approach to improving student performance and the overall learning environment: (1) *BARR relies on the existing school staff to implement reforms and improvement.* In addition to being more cost effective than other improvement models, this model empowers the existing staff to drive improvement, encourages teacher buy-in, and leads to long-term sustainability. (2) *BARR serves all students in a school.* While other existing high school improvement strategies target certain students for extensive support, BARR is a whole-school model that improves overall

school performance and culture. (3) *BARR embraces a non-cognitive, strength-based approach.* This approach is a central component of school turnaround efforts, challenging teachers to focus on and encourage the strengths and assets of their students. (4) *BARR creates positive, intentional relationships among school staff, between staff and students, and among students.* The attentiveness to staff-staff relationships is critical in addressing the needs of low-performing schools to ensure that there is shared knowledge and collaboration when addressing student needs. (5) *BARR does not alter a school's existing academic curriculum.* Students fail classes largely for nonacademic reasons. BARR addresses that need.

BARR's Transition from Validation to Scale-Up

BARR has grown exponentially over the past six years. Since 2010, when BARR was being implemented in only one school in Minnesota, impacting 380 students and 20 teachers per year, BARR has grown to serve 44 schools in nine states, impacting more than 11,000 students annually (a 2,795 percent increase), and training 880 teachers (a 4,300 percent increase). This growth occurred across multiple settings as the model was being developed and validated as part of Spurwink's 2013 validation grant. Spurwink provides backbone organizational and fiscal services and is the formal applicant for this scale-up grant. In 2016, BARR Center became a 501(c)(3) nonprofit organization, fiscally sponsored by Spurwink, with offices in Portland, Maine, and St. Louis Park, Minnesota. By leveraging grant and matching funds, technical assistance providers, and the contributions of our research partners at American Institutes for Research (AIR) and Abt Associates, we have refined our approach, making dissemination more efficient and sustainable for the schools we serve. BARR's partnership with Hazelden Betty Ford Foundation (Hazelden Publishing) provides a strong platform for scaling efficient training, coaching, and material coordination systems. BARR is now ready to transition from validating

its approach in 44 schools to scaling up nationally to serve more than 63,000 students annually and train more than 11,600 teachers by 2021.

B. Strategy to Scale

Unmet Demand

Recent changes in national education policy will drive demand for BARR. The Every Student Succeeds Act (ESSA) will require all states to identify and intervene in the 5 percent of lowest performing high schools. These schools, along with all high schools that have a graduation rate below 67 percent, will be required to implement evidence-based interventions beginning in the 2017–18 school year. As one of the few evidence-based interventions shown to improve student achievement and the learning environment at low-performing high schools, BARR is ready to respond to this national mandate. Low-performing high schools will be seeking models to address the challenges of improving student preparation and decreasing socioeconomic and racial gaps in student performance. Many of the thousands of low-performing high schools across the country could benefit from the BARR model to potentially achieve similar beneficial outcomes and achieve a real turnaround in their students' academic success and preparation for postsecondary education and work.

BARR was initially conceived as a 9th-grade transition model, but because of its powerful results, and staff strongly embracing the model, many of the schools we are working with have chosen to expand it grades 10-12 and some school districts have begun adapting the model to grades 6-8. School administrators request BARR training for additional staff and that additional volumes of the I-Time SEL curriculum be developed because staff in multiple grade levels want to participate in BARR. The interest in BARR is driven both by the program's outcomes as well as by staff endorsement in schools currently implementing the BARR model.

There is significant unmet demand for the BARR model in low-performing schools and districts. Participation in the i3 validation study required a selective school application process and resulted in a waitlist of schools because of the high level of interest. Numerous local education agencies (LEAs), charter school organizations, foundations, universities, correctional facilities, and individual donors have approached the BARR leadership team to express their interest in supporting the expansion of the BARR model into schools in their regions. This proposed i3 scale-up project will begin our expansion of the BARR model in school districts in the following regional hubs: (1) Southern California (Riverside County-San Bernardino-San Diego), (2) the Northeast (Maine-Massachusetts), (3) Minnesota (Minneapolis-St. Paul), (4) Tennessee (Nashville-Chattanooga), and (5) Texas (Dallas-Fort Worth). BARR already has a growing presence in nine states: North Carolina, Florida, Kentucky, California, Minnesota, Wisconsin, Maine, Texas and Pennsylvania. We are intentionally seeding BARR nationwide to ensure that a rich diversity of schools, in a variety of geographic and demographic settings, are able to implement the model and serve as case studies and models ("snowballs") for others.

By developing regional hubs of schools and districts, we will facilitate systemic growth and sustainable success. Through i3 funding, the BARR leadership team has proven able to facilitate regional growth, as demonstrated by our expansion from one public high school in Hemet, California, to all four high schools in that district—and then into multiple schools in adjacent districts in Riverside County—Moreno Valley Unified School District and Val Verde Unified School District. Several BARR districts in California have brought district and local funding together to continue and expand BARR at schools that were previously "seeded," including funding new local schools and additional staff positions. Local foundations in Minnesota and Wisconsin have supported the purchase and implementation of BARR. In Maine, community

groups like Rotary, are helping to fund BARR implementation. This regional expansion has also occurred in Kentucky and Maine. The BARR leadership team has demonstrated that focusing our work at the regional level, rather than in isolated schools in multiple locations, facilitates systemic change, aligns resources, and promotes long-term system buy-in and sustainability.

Addressing and Removing Barriers to Scale

It is difficult to bring a model to scale, as well as work through the challenges that low performing schools face, such as high staff and leadership turnover, limited resources, "initiative fatigue," and location in high poverty areas (Herman et al, 2008). The BARR model trains the entire staff to help provide stability in these high staff-turnover schools. Many competing high-school turnaround models are dependent on a small group of individuals within a school while BARR equips the entire staff to implement this new model. BARR's reliance on leveraging student's strengths and staff collaboration and buy-in has shown to be a powerful mechanism to introduce new initiatives and lower the initiative fatigue that plagues many other interventions. The program also has been applauded by many administrators as an exemplary way to onboard new staff. Moreover, using the efforts and motivation of existing staff is the most cost-effective way to turn around low-performing high schools.

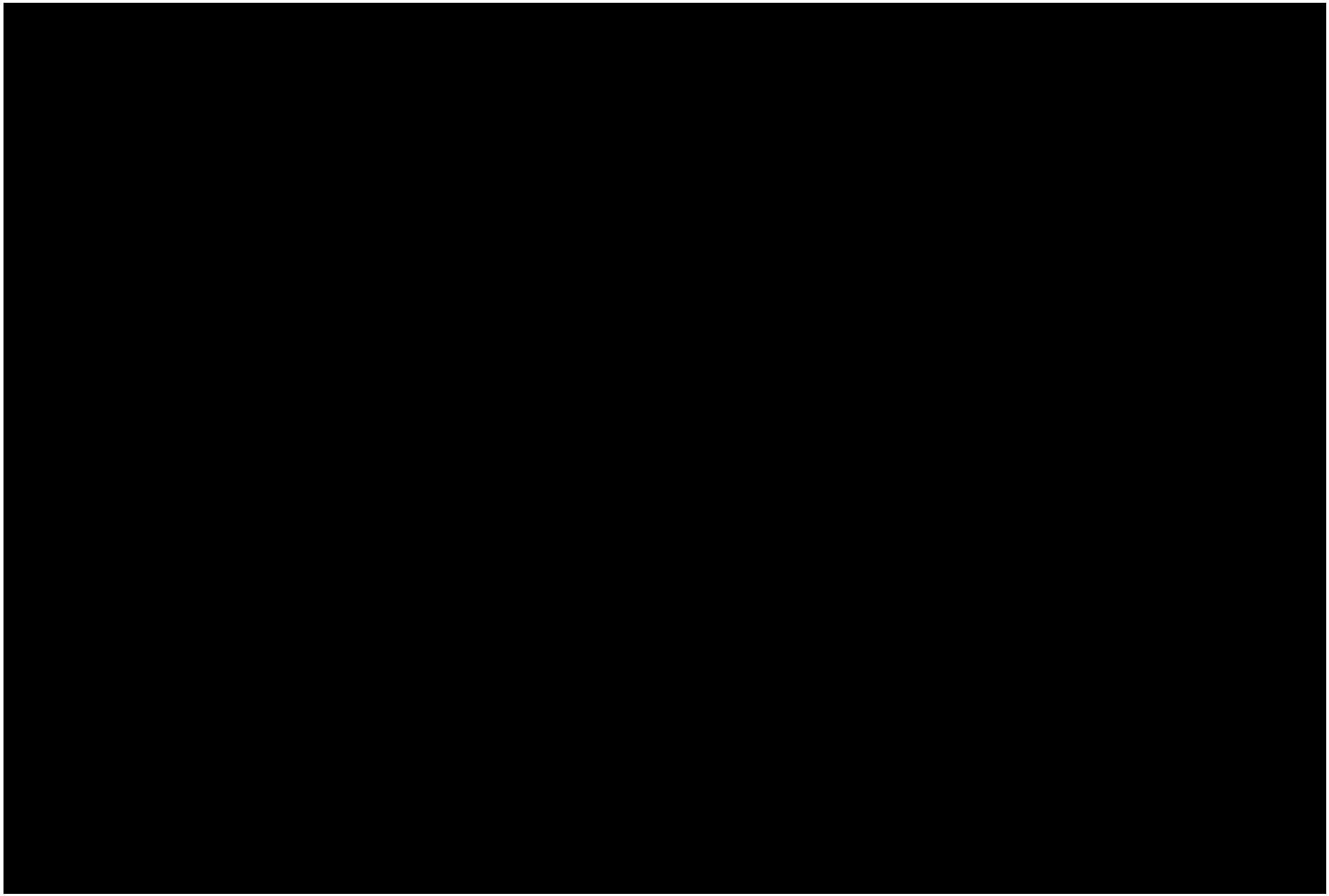
BARR's strength in using current school staff also poses the challenge of equipping all staff to implement the BARR model with fidelity. Since 2010, the BARR technical assistance team has made notable progress in coaching middle and high schools to high-fidelity implementation and becoming more efficient in providing both virtual and on-site support. A key to BARR's recent expansion and success has been the funding and support provided by technical assistance providers and evaluation teams as part of the i3 development and validation grants. BARR's technical assistance team has maximized these investments by developing new implementation

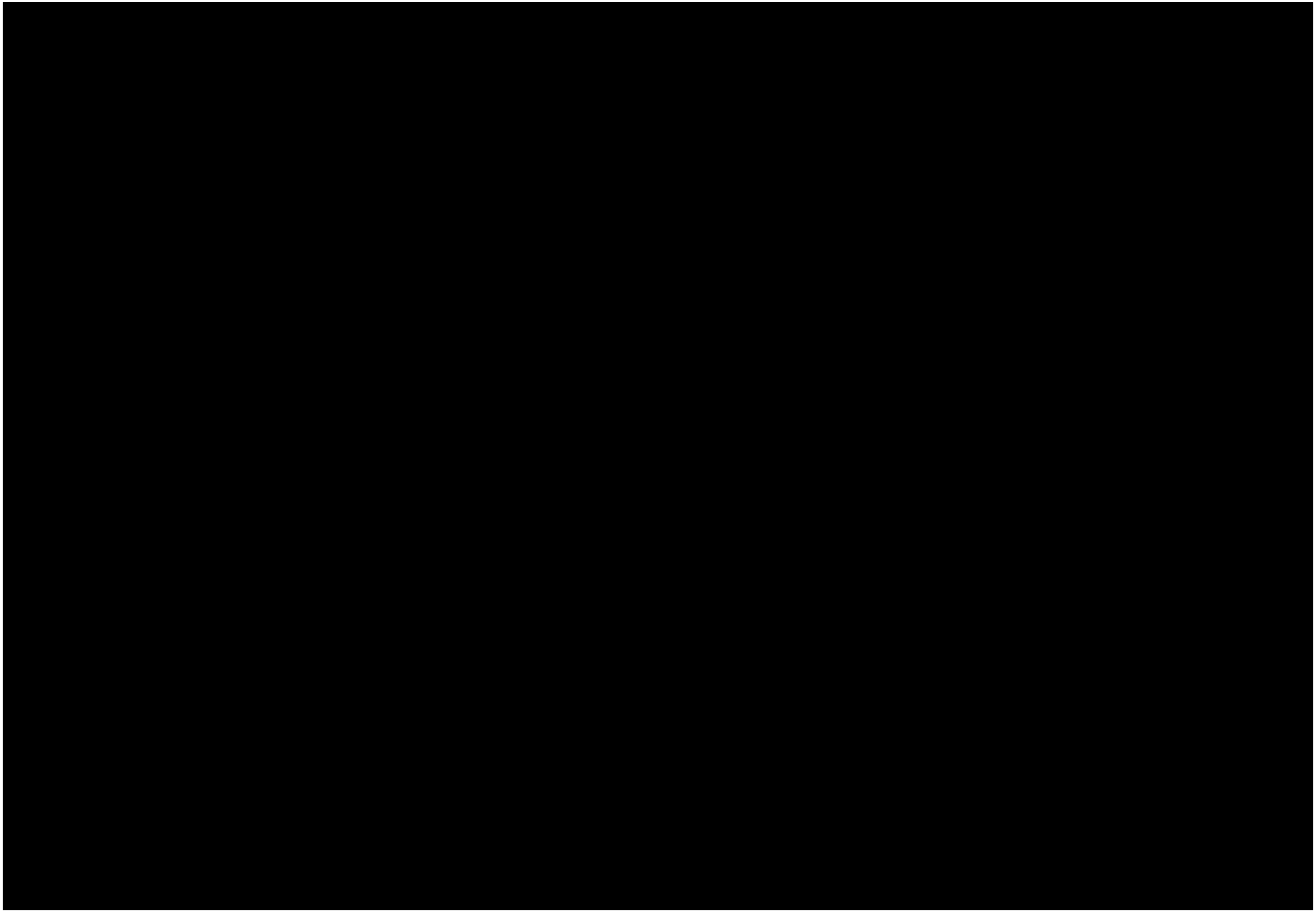
tools, coaching strategies, fidelity markers, professional learning communities, and regional trainings to increase each school's pace to fidelity. Schools must be willing to make changes to their master schedule to allow blocking of students and common meeting time for teachers, allocate time to deliver the SEL curriculum, allow transparency in the sharing of data between staff, adopt a whole student approach built on positive, intentional relationships, participate in three years of BARR training, and be accessible to BARR coaches and evaluators.

The BARR Center and its partners are prepared to take the BARR model to the next level of its evolution and have a clear vision for moving forward. In order to grow to meet market demand, we will use i3 scale-up funds to address the following six barriers to scaling up the proven BARR model: (1) regional awareness/expansion, (2) BARR's cost of service throughout implementation, (3) capacity to train and support staff, (4) tools to support fidelity of implementation, (5) sustainability of BARR infrastructure, and (6) sustainability of the BARR model within schools. Our evaluation partners will evaluate the success of our scale-up strategies using the short- and long-term outcomes identified in the BARR scale-up model in Figure 1.

Barrier 1: Regional Awareness/Expansion; Solution: Expand into Five Regional Hubs

With Spurwink's fiscal oversight, the BARR Center will use scale-up funding to expand BARR into five regions impacting 116 schools, 11,600 teachers, and more than 146,250 students (assuming 66 RCT-schools and 50 additional scale-up schools). The BARR leadership team has a strong history of successfully recruiting schools and is actively working with school officials in all school districts. The number of schools implementing BARR will increase in each year of the grant. As demonstrated in our validation grant, our broad adoption strategy of building out regionally around high-fidelity BARR schools has led to improved implementation each year based on lessons learned and continuous feedback. Hubs will be established in each of the five





regions to support implementation and facilitate systemic growth of the BARR model. Each region will be scaled to serve at least 23 schools in the named districts and adjacent LEAs, for a total of at least 116 new BARR schools. i3 scale-up funds will support 66 schools in five regions by fully funding the initial three-year cost of the model. Regional foundations and businesses will partner with adjacent LEAs to help fund the BARR model in 50 additional schools.

Three new regional BARR hubs will be established to accommodate Wave 1 of the scale-up effort: Southern California (Riverside County–San Bernardino–San Diego), Tennessee (Nashville–Chattanooga), and Texas (Dallas–Fort Worth). In the Minnesota (Minneapolis–St. Paul) region, Hazelden Publishing will serve as the existing regional hub location. For the Northeast (Maine–Massachusetts) region, current BARR staff located in Maine will serve as the regional hub to support schools in this area. At the time of submission, BARR has 11 letters of support from school districts and regions covering 50 possible schools across the regions, and strong commitments from district leaders to help with additional recruitment efforts before the 2017–18 academic year begins (see Appendix G for commitment letters).

As additional areas are identified, each will be evaluated geographically and financially to determine whether another regional hub should be created or whether the new region is better suited as a sub-region of an existing hub. For every 10 schools that implement BARR in each region, a local BARR coach/trainer will be hired to build out the school support network and keep travel costs down. BARR Center, Hazelden Publishing, and local funders will partner to provide ongoing support to the regional hubs. A financial analysis for sustainability has been completed to ensure the feasibility of sustaining the regional hubs beyond the life of the grant.

Regional Hub and Staffing. The staffing model described above will support the 66 study schools as well as increase the number of schools that are implementing BARR outside of the i3

grant. Regional BARR staff will provide training, coaching, implementation support, and recruitment support functions. As the key to our scale-up strategy, it is important that the BARR regional staff have a deep understanding of the intricacies of the education landscape in the areas in which they are located. As we recruit new BARR schools, these regional staff will be integral to the success of our expansion. Macro-level awareness building through marketing, strategic partnerships, live events, and conference presentations will increase the number of schools that are aware of BARR. Collaborative relationships between the BARR regional staff and current BARR schools (used as references) will be key to recruiting and managing new schools.

The three measures used to identify high schools within these regions include 1) low high school graduation rates and 2) low percentages of students achieving proficiency on end-of-course assessments for Algebra I and 3) students' performance in English language arts or reading relative to other schools within the state. To be identified as low performing, a school needs to fall within the lowest 25 percent of high schools within the state based on at least one of these measures. In our analysis of these academic measures for the 2013–14 school year, we identified high schools that 1) had at least 50 9^{th}-grade students and 2) for which the state education agency provided the percentages for all three academic measures. When applying these standards, large groups of low-performing high schools were identified in the target regions to be included in the recruitment sampling frame for this scale-up grant application.

Attention was also paid to the percentage of minority and high-need student subgroups in these schools, for which a positive impact of BARR would reduce the within-school performance gaps. We are defining "high need students" as students living in poverty who receive free or reduced-price lunch. In addition to the districts already identified in the regions, schools from nearby districts meeting the same criteria will be recruited for participating in the project as both

treatment and control schools. See Appendix J10 for detailed demographics of schools in targeted regions to be included in the recruitment sampling frame. This mix of regions provides a great deal of variation in student populations, allowing for deep analyses of the specific factors that may affect successful implementation of the BARR model.

BARR schools that meet the criteria for being a National BARR School of Academic Excellence (criteria in Appendix J3) in each region will serve as high-fidelity demonstration schools that will host neighboring district leaders and staff who are interested in BARR. Regional hub managers also will partner with local administrators, teacher-leaders, and key community leaders to host and collaborate at national and regional practitioners' conferences to increase awareness and encourage broad adoption of the model.

Barrier 2: Cost of Service; Solution: Establish Multiple Regional Funding Sources

The schools in each of our scale-up regions have a higher than average percentage of students who are high need and low performing (Appendix J10). In order to support and scale up BARR within each of these new regions, at least four private foundations and business partnerships will be established. These resources will support districts and lay the groundwork for sustainable, systemic growth throughout each region. Funders that have previously supported BARR and those already committed to doing so if this grant is funded are listed in Appendix J4.

Barrier 3: Capacity to Train and Support Staff; Solution: Hire New Regional Hub Staff

In order to provide the same proven quality of professional development and coaching as received by the BARR development and validation schools, the BARR model service provider, Hazelden Publishing, will hire, train, and supervise five regional staff for the scale-up regional hubs and ensure that a minimum of 10 trainers are available in each hub (Approximately 50 trainers). Currently, there are 32 trainers that serve BARR schools nationally. In addition to

delivering ongoing training and coaching to BARR schools, the new BARR staff will host regional BARR meetings with implementing schools and prospective schools. They will coordinate with community resources to support BARR implementation in the region and to maximize its impact. Regional BARR staff will also lead train-the-trainer sessions to increase our capacity to scale up beyond the grant within each region.

Train-the-Trainer Model. BARR training is a two-trainer model. One trainer is always a BARR educator who has implemented the BARR model in his or her own school prior to becoming a trainer. To keep school costs affordable, as each regional hub grows, BARR trainers will be trained locally. BARR educators who are chosen to become BARR trainers will be from National BARR Schools of Academic Excellence. Once selected, the new trainers attend a train-the-trainers event in which they are taught how to deliver the two-day training to new schools. During the three-day training event, new trainers learn how to best integrate all of the materials into the delivery of the training, are taught how to use effective facilitation skills and techniques and how to manage the logistics of providing BARR training, and work with a co-trainer to start identifying the roles in the training team. Each new trainer facilitates a session of the BARR training and receives feedback from peers as well as from those leading the train-the-trainers event. The new trainers also are trained on expectations and responsibilities. By the time the new trainers have completed the training event, they are prepared to deliver BARR training to other schools. First-time trainers are always paired with an experienced BARR trainer for their training debuts to increase the consistency across trainings.

By using scale-up funding to hire and train local BARR experts within each region, the cost of travel will be significantly reduced. In addition, having regional staff will facilitate the sharing

of best practices, enhance accountability, provide more opportunity for in-person collaboration, and ensure more sustainable growth.

Barrier 4: Tools to Support Fidelity of Implementation; Solution: New Technology Tools

During the past six years of i3 development and validation work, BARR staff have built and improved implementation tools to increase sustainability of the model at schools across multiple settings. In order to build and maintain fidelity to BARR in the proposed i3 scale-up regions, we will continue to expand our implementation and coaching tools. We will develop and implement video coaching protocols, create new best practice BARR training videos, and build a new Web-based platform to connect all of our sites and their individual staff virtually. This platform will assist BARR schools and coaches in providing and receiving high-quality, on-demand professional development. We will also use i3 scale-up funds to develop an online data collection system called the National BARR Center Database to monitor BARR implementation and assist schools with evaluation of the program. Currently, the collection of data from each BARR school is high-touch and human capital intensive. This tool will provide a consistent and sustainable approach to data collection and continuous improvement of the national model.

The BARR leadership team will work with its national and regional foundation and business partners to offer seed money to schools to build out the modest new technological infrastructure they need to implement BARR. These funds will supplement i3 scale-up resources to maximize each school's use of and connection to the BARR network.

Barrier 5: Sustainability of BARR Infrastructure; Solution: Strengthen BARR Center

The BARR leadership team is fully committed to the maintenance and sustainability of the evidence-based BARR model in each school that chooses to adopt it. In order to do so at scale, the BARR leadership team, in partnership with Spurwink, established the BARR Center as a

501(c)(3) nonprofit organization, which will serve as the central hub for the BARR network of regional hubs and schools. BARR Center will serve five essential functions as it expands nationally: BARR model refinement, operations/strategy, thought leadership, marketing, and fund development. BARR model refinement will focus on deepening our understanding of BARR implementation needs, results, and best practices. BARR Center will increase its presence as a visible thought leader and "go-to" resource on school transformation. BARR Center also will focus on marketing to develop significantly stronger market presence, distinction, and sales. The fifth key focus area will be on development as BARR Center works to secure sustainable short- and long-term funding through targeted relationship building. The strengthening of BARR Center as an innovative, independent, and sustainable nonprofit organization that is focused on these five essential functions will serve to ensure sustainability of the BARR model at scale.

Barrier 6: Sustainability of BARR Model Within Schools; Solution: Regional BARR Staff to Facilitate Integration into Local Context

As BARR schools implement the model, student and teacher outcomes lead to significant culture change and school transformation. The BARR leadership team recognizes the importance of working with school leadership, parents, and community to increase awareness and integrate BARR into each school's unique culture. By doing so, BARR becomes aligned with existing programs and initiatives in the school, belief systems change to focus on student strengths, administrators use BARR results to inform practice and policy, and, in turn, BARR extends to other grades or schools within the district. Implementing these targeted strategies to facilitate integration into local context is essential for adoption of the model and for sustained, systemic change within each region. If this proposed project is funded, we will use scale-up resources to facilitate this change by leveraging regional BARR staff. BARR staff will hold regional BARR

trainings to strengthen and maintain high fidelity to the model, host community meetings, and establish a professional learning community of regional BARR leaders. The establishment and facilitation of a BARR network within each region that is built on a shared belief system focused on student strengths and tied to proven academic outcomes is a recipe for systemic improvement of low-performing schools. BARR is the model to catalyze this change within each school and in the communities it serves.

Dissemination of Findings

The BARR leadership team will employ multiple approaches to disseminate information about the implementation and research findings from this scale-up project. Each regional hub will facilitate extensive outreach to area LEAs and will promote visits to BARR schools in the region to demonstrate the BARR model in action and create potential partnerships among schools. Schools that are interested in adopting the BARR model will work with the regional hub manager to ensure successful adoption and implementation. All BARR schools will have access to the latest online resources developed by the BARR Center. Regional professional learning communities, consisting of BARR site coordinators, regional hub managers, and BARR leadership staff, will meet quarterly to identify and spread best practices and troubleshoot common challenges.

The BARR leadership team will continue to present findings at regional and national education conferences, such as the National School Boards Association, the National Association of Secondary School Principals, the American Educational Research Association, the Society for Research on Educational Effectiveness, and the American Evaluation Association. In addition, the BARR leadership team and AIR will seek to have research reports on BARR's i3 scale-up project published in peer-reviewed journals. BARR Center will use social media and webinars to

provide regular promotion of the BARR model. BARR Center will continue to hold annual gatherings of BARR educators, trainers, and national thought leaders, as done in the i3 development and validation grants.

C. Project Design

Goals, Objectives, and Outcomes

The scale-up goals, objectives, and outcomes shown in Table 1 will be used to measure the impact of the BARR model.

Table 1. Scale-Up Project Goals, Objectives, and Outcomes

Project Goals: The BARR scale-up project aims to expand implementation of an effective solution to the persistent problem of low academic performance to approximately 103,500 high-need students in low-performing high schools by 2021. Students experiencing the BARR model will show increased educational attainment and achievement, enhanced social and emotional learning (SEL) skills, and will experience an improved school climate. The BARR model will establish and expand within five regions nationally, while addressing the following barriers to scale: awareness of the model, funding, staffing, tools, sustainability of BARR infrastructure, and sustainability of BARR within schools.

Project Objectives	Project Outcomes
1. **Implement the BARR model in low-performing high schools in five regions of the country that serve higher than average populations of high-need students**.	1. High schools in the RCT will be provided with validated BARR services (training, coaching, books/materials) during the three-year treatment (Q3 2017 through Q3 2020 for wave 1 and Q3 2019–2021 for wave 2). 2. Sixty-six schools will implement the BARR model with fidelity. 3. Approximately 103,500 high-need students will improve their academic performance as indicated by core credits earned and additional on-track indicators. 4. Approximately 103,500 high-need students will improve academic achievement in mathematics and reading on the ACCUPLACER exam (detailed below). 5. Approximately 103,500 high-need students will improve their SEL skills. 6. Staff and students from 66 schools will report improved school climate.
2. **Scale the BARR model and overcome challenges and barriers to scale**.	1. The BARR model will scale to 10 additional schools within each of the five regions. Develop, launch (by Q2 2017), and operate five BARR regional hubs to support successful scale-up and BARR implementation in study high schools and support LEAs in neighboring areas.

Project Objectives	Project Outcomes
2. **Scale the BARR model and overcome challenges and barriers to scale**. (*continued*)	3. Secure four funding sources per region to support schools and BARR Center infrastructure by Q4 2021. 4. Hire additional staff for five BARR hubs by Q3 2017 and additional coaches as needed to maintain quality of services. 5. Develop additional tools to support training, implementation, and data collection by Q3 2017. 6. Sustain the BARR Center infrastructure through securing funding from four national organizations, presenting at four national conferences, and publishing four peer-reviewed journal articles by 2021. 7. Help schools sustain fidelity to the BARR model and academic and school culture gains through 2021 by ongoing training, ongoing data collection, local financial support, and integration of BARR principles into local policies and practices.

Objective 1: Implement the BARR model in low-performing high schools in five regions of the country that serve higher than average populations of high-need students.

BARR Is a Comprehensive Whole-School Model

The BARR model includes strategies for helping students transition from grade to grade and ensures that students are on-track to graduate. It provides classroom SEL instruction (I-Time) across multiple grades and is a multiyear program. High-priority and intensive coaching occurs to ensure that information regarding students' performance, barriers, assets, and aspirations is shared with adults throughout the school system to enable successful transitions from year to year. The data that BARR teachers, counselors, administrators, and BARR Coordinators share include both traditional school data (grades, attendance, test scores, etc.), but also students' strengths and interests, often discovered through BARR's I-Time SEL lessons.

BARR Provides Three Years of Professional Development

The underlying philosophy of professional development in many secondary schools concentrates on content, instruction, and analysis of achievement data. Often absent is training on the importance of student-teacher relationships and teacher-teacher relationships as an

important driver of engagement, motivation, and student achievement. BARR puts the focus on relationships and systematically prepares educators to intentionally develop asset-oriented relationships in their interactions with students, parents/guardians, and colleagues in order to foster maximum growth for young people.

BARR includes six days of on-site training over a period of three years. Each year, a two-day BARR training occurs at each school for all educators. BARR's two-trainer model ensures that one of the trainers is a BARR educator and the other is a lead trainer. The first year of professional development consists of understanding the BARR model, adopting a whole-student approach, identifying and leveraging student strengths, and practice in facilitating the I-Time lessons. Each subsequent year of training focuses on the BARR model but also includes a topic area that is more fully explored to equip educators to look at the whole student. The Year 2 BARR training is focused on building a trauma-sensitive classroom and developing an equity lens. Year 3 covers substance use and effective team meetings.

BARR Materials

BARR schools receive BARR Implementation Guides with a DVD/CD, I-Time Classroom Curricula, and a video training program to assist schools with implementation of team meetings, risk review, and I-Time activities. I-Time is a key tool for building relationships between staff and students and among students themselves, and occurs weekly for 30 minutes. I-Time lessons are found in the handbooks provided to teachers, and structured lessons address topics in ten content areas including risk tasking, communication, and goal setting.

BARR Coaching

The BARR educator who conducts the training at each school becomes the school's dedicated BARR coach. Each school receives four on-site coaching visits in the first year, three

in the second year, and three in the third year. The coach uses the implementation fidelity forms for observations to assist the school with increasing its fidelity to the BARR model. Each BARR school has unlimited access to its BARR coach through virtual coaching. In addition to coaching support, BARR coordinators participate in quarterly professional learning community (PLC) calls with other schools across the country implementing BARR to share best practices, challenges, and strategies.

Objective 1 and its related outcomes will be achieved by using the eight strategies of the BARR model shown in Figure 1 (see the complete BARR logic model in Appendix J5). BARR's frameworks, school- and student-level strategies, and outcomes that will be evaluated for the i3 scale-up study are shown in Figure 2.

Objective 2: Scale the BARR model and overcome challenges and barriers to scale.

This objective addresses **Competitive Preference Priority 5: Enabling Broad Adoption of Effective Practices**. As part of the i3 scale-up grant, we will create five regional hubs to increase awareness and support marketing of the BARR model and provide services to BARR schools. We will develop BARR Center infrastructure through securing multiple funding sources, developing additional tools, hiring additional staff, forming strong connections with stakeholders, and providing thought leadership on national education issues. We will help BARR schools sustain the BARR model through ongoing coaching and evaluation reports, noting improved academic performance and school climate. Sustainability will be evaluated as measured by our outputs in our scale-up logic model.

C. Management Plan

Adequacy to Achieve the Objectives on Time and Within Budget

Spurwink's management of BARR's i3 validation project has ensured that all goals and objectives are implemented on time and on budget. To that end, Spurwink is knowledgeable about federal compliance, accountability, and reporting as well as best practices in governance and fiscal responsibility. The proposed i3 BARR scale-up project leverages the expertise gained from the development and validation projects as well as the organizational development efforts of those who have been applying their expertise to the growth of the BARR Center, with the support of Spurwink's strong infrastructure. The i3 Sustainability Community has been a key source of expertise in the conceptualization and implementation of strategic initiatives to create the BARR Center. In support of this growth, Spurwink has signed an Agreement for Fiscal Sponsorship with BARR Center (see Appendix J6) and will provide continuing support for the development of BARR Center during the scale-up project, including financial management and reporting, legal, and advisory services.

Spurwink Services, Inc. is a preeminent education, mental, and behavioral health organization dedicated to enhancing the quality of education, health, and youth development programs, with 949 employees and affiliates in 70 offices, schools, and residences. In fiscal year (FY) 2014, the agency operated on program funding of approximately $60 million from a variety of sources. Spurwink has a strong track record of improving student achievement through its direct work with districts and schools across Maine and New Hampshire (see Appendix C). With the proposed partners, Spurwink has the requisite personnel, financial, and management resources to bring the BARR project to scale on a national level.

The BARR leadership team has established the BARR Center, a 501(c)(3) nonprofit organization fiscally sponsored by Spurwink. With the BARR Center, Spurwink operates a lean organizational structure that is supported and enhanced by key, long-term strategic partnerships. These partners provide service delivery, staffing, and support services that expand BARR's reach without requiring the development of duplicative service delivery systems.

Hazelden Publishing is the BARR Center's key, long-term strategic partner, managing all of BARR's recruitment, training, scheduling, and material delivery fulfillment for regional teams. Hazelden Publishing will drive the dissemination of the BARR model both during and following the grant period. Hazelden Publishing is known internationally as one of the leading publishers of National Registry of Evidence-based Programs and Practices (NREPP)–approved programs, having 10 programs currently on the NREPP listing. Hazelden Publishing serves K–16 schools, school districts and LEAs, state and federal departments of education, colleges and universities, and other prevention providers. On an annual basis, Hazelden Publishing reaches more than 380,000 customers. In 2013, Hazelden Publishing became the publisher of the BARR model.

American Institutes for Research (AIR) is one of the largest not-for-profit organizations engaged in independent research, development, evaluation, and analysis in the behavioral and social sciences. AIR currently serves as evaluator of 16 i3 grants, including nine development grants, six validation grants, and the current i3 scale-up of the Children's Learning Initiative. AIR will be responsible for the impact and implementation evaluation of the i3 BARR scale-up grant, building on the knowledge and experience gained from conducting the current i3 BARR validation evaluation. AIR has nearly 1,800 employees and successfully executed nearly $480M of research, technical assistance, and educational assessment work in 2015. The emphasis of AIR's education work is to improve the operation and outcomes of school systems, including enhancing a wide range of student outcomes, such as achievement and social and emotional well-being. The proposed AIR staff brings extensive experience in large-scale random assignment studies conducted in schools.

Clearly Defined Responsibilities

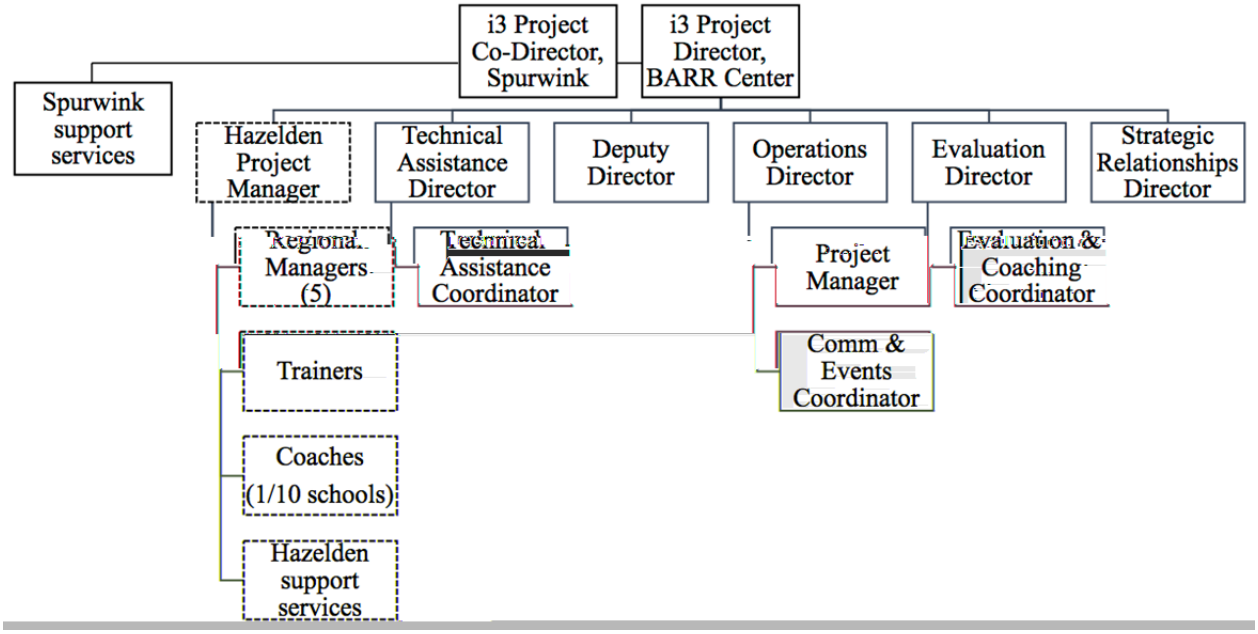
Spurwink relies on a core team of leadership-level staff, including the CEO, CFO, and operations director, as well as the leadership of the BARR Center, to develop, manage, assess, and improve the BARR model on a continual basis. BARR's leadership team has remained intact through the i3 validation grant, allowing staff to develop strong professional relationships and effective collaboration and execution practices. Further, the i3 validation grant resources have allowed Spurwink to invest in contracted personnel who have assisted with the development of the BARR Center.

Each area of focus within the scale-up project has a dedicated team composed of the key people needed to deliver on all project outcomes. There is intentional overlap of team members in various project teams to promote and ensure successful communication and feedback across

work areas and departments. These teams will be responsible for analyzing, addressing, and communicating key project performance metrics as well any challenges and solutions to project decision makers and leadership.

Figure 3 is an organizational chart that identifies the key roles to ensure the successful implementation of the i3 scale-up project. These teams are structured to take advantage of natural areas of focus, as aligned by the goals and actions identified in this application. They also represent the strong foundation created by the interwoven partnership network that has been established to disseminate the BARR model and support school implementation.

Figure 3. Organizational Chart



i3 Scale-Up Project Leadership Team. The BARR leadership team meets monthly, and includes the leaders of all core business areas. The team sets general vision and strategy, manages partnerships, and coordinates the daily activities of all staff as well as the project's integration with other work areas. The team is responsible for sourcing and allocating sufficient time and human resources to fully execute the project and ensure impact sustainability.

i3 Scale-Up Project Implementation Team. The implementation team is composed of key leaders and decision makers from every department involved in the project. The team is responsible for the oversight of all project areas, ensuring performance, and troubleshooting issues in real time. The team meets weekly to review grant progress, assess current strategy and actions, and make any alterations deemed necessary.

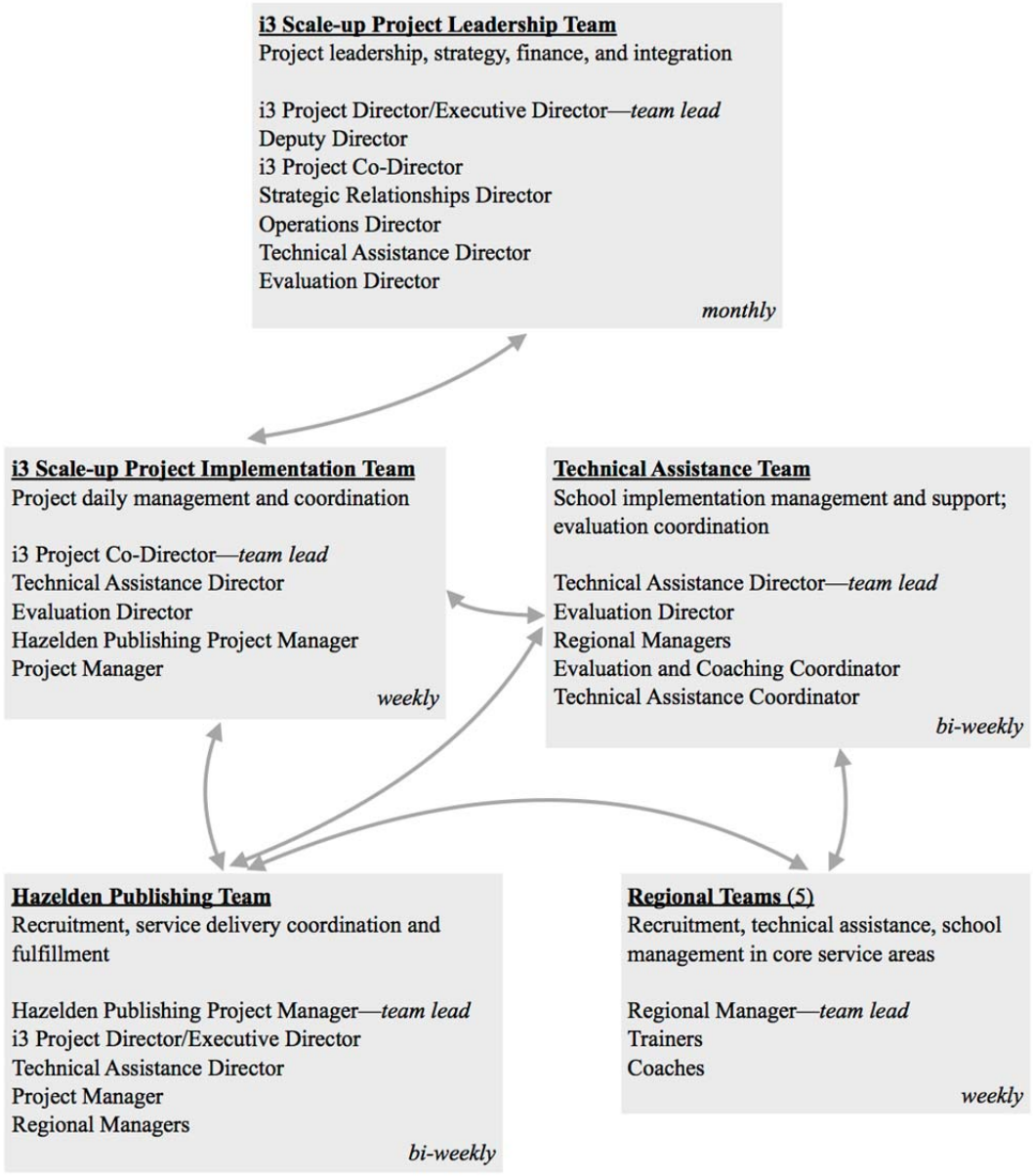
Technical Assistance Team. The technical assistance team includes key people who support BARR model implementation at schools. This team meets biweekly to create, assess, and improve the systems that track, evaluate, improve, and disseminate best practices and process improvement, which includes training and evaluating coaches and school-based coordinators. The team is responsible for maintaining implementation fidelity and elevating challenges and solutions to project leadership.

Hazelden Publishing Project Team. The Hazelden Publishing project team coordinates and integrates the BARR-model-related activities as a key scale-up partner. The team is composed of department leaders responsible for school recruitment, training, coaching, and regional implementation of the BARR model. The team also is responsible for managing the efficient communication with and service delivery by various support services provided by Hazelden Publishing, including human resources and employment and material publishing and order fulfillment. The team meets biweekly.

Regional Hub Teams. Regional hub teams will be established in core service delivery areas throughout the scale-up project, and meet weekly. Each regional hub team includes the regional hub manager, trainers, and coaches responsible for schools in the region. The team is responsible for coordinating all BARR activities within the region and ensuring effective communication, distribution, and implementation of project strategy, materials, and leadership decisions.

The communication structure among the teams, as shown in Figure 4, mirrors and scales the team communication structure proven effective through the successful implementation of the BARR i3 validation project.

Figure 4. Communication Structure



Qualifications of Key Leadership

Angela Jerabek, M.S., Director of the BARR Center and i3 BARR Scale-Up Project. Jerabek will lead all aspects of the i3 scale-up project, as she currently does for the validation

grant and previously did for the development grant. Jerabek developed the BARR model of school improvement. She is responsible for the implementation of BARR at all participating schools, including overseeing technical assistance, research, and evaluation. She is a licensed school counselor and teacher and an innovator in education.

Susan Savell, M.A., Co-Director, Spurwink Center for Positive Youth Development and Co-Director, i3 BARR Validation Project. Savell will provide administrative and conceptual leadership and oversight in all areas of the project, particularly in regard to promotion of positive school climates and youth development strategies. Savell has 18 years of experience in creating and directing positive youth development initiatives and managing federal grants for two Maine governors and Spurwink.

Maryann Corsello, Ph.D., Evaluation Director. Dr. Corsello has more than 25 years of experience in conducting evaluations in schools and community-based organizations and is a Professor Emeritus of Psychology at the University of New England, Biddeford, Maine.

Table 2. Key Personnel for Scale-Up Grant Implementation

Position	Function
Angela Jerabek, M.S., i3 Project Co-Director, BARR Center Executive Director	Founded the BARR model in 1998, curriculum author, provides leadership for BARR development, growth, and outreach.
Susan Savell, M.A., i3 Project Co-Director	Joined the BARR project in 2009. Coordinates fiscal agency partnerships; supports recruitment, leadership, and finance; ensures reporting accountability to U.S. Department of Education.
Justin Barbeau, M.A., Technical Assistance Director	Joined the BARR project in 2009. Develops and manages technical assistance to schools and coaching services.
Maryann Corsello, Ph.D., Evaluation Director	Joined the BARR project in 2013. Supervises school evaluation; primary liaison with project's independent evaluator (AIR).
Jon Terry, Strategic Relationships Director	Joined the BARR project in 2009. Coordinates government and foundation relations, outreach efforts, and development.
Andrew Leider, Operations Director	Joined the BARR project in 2015. Responsible for team coordination, general operations, development, and process improvement.
Janice Eldridge, Evaluation and	Joined the BARR project in 2016. Supports school

Position	Function
Coaching Coordinator	implementation fidelity and process improvement.
Hannah Scherer, Communications Coordinator	Joined the BARR project in 2015. Coordinates communications, website, and events.
Jennifer Urciaga, BARR Project Manager, Hazelden Publishing*	Joined the BARR project in 2015. Manages school recruitment, strategy, training execution, and fulfillment for BARR model at Hazelden.
Hazelden Publishing support services*	Employment, printing, publishing, legal, and back office services.
Spurwink support services	Financial, legal, contracting, human resources, and reporting services.
Trainers* (12)	Conducts multilevel BARR model trainings at the individual school, district, and regional levels.
Coaches* (20)	Provides fidelity assessment and process improvement within schools, primary practitioner point of contact, approximately one coach/10 schools.
To Be Hired	
Deputy Director	Responsible for executive leadership support, national education outreach and strategy, school district recruitment, and relationship management.
Regional Hub Managers* (5)	Within respective region, responsible for school relationship management, recruitment, trainings, and supervising coaches.
i3 Project Manager	Responsible for project schedule, deliverable tracking, team coordination, and general project support.
Technical Assistance Coordinator	Supports the scaling of technical assistance at the regional level, ensures dissemination of best practices and fidelity improvement.
Trainers* (1/10 schools)	Conducts multilevel BARR model trainings at the individual school, district, and regional levels.
Coaches* (1/10 schools)	Provides fidelity assessment and process improvement within schools, primary practitioner point of contact, approximately one coach/10 schools

* Employed by Hazelden Publishing

Timelines and Milestones for Accomplishing Tasks

Table 3 outlines the implementation timeline for activities and milestones for Objective 1 and Objective 2 over the course of the five-year i3 scale-up grant. These milestones cover the implementation and study of the BARR model as well as the scale-up of BARR through project infrastructure and the expansion of the model to 50 additional schools.

Table 3. Implementation Timeline and Milestones

Objective 1: Implement and Study of the	**FY17**				**FY18**	**FY19**	**FY20**	**FY21**
RCTs in 32 schools (16 treatment schools)			X	X	X	X	X	X
Delayed implementation 16 control schools						X	X	X
RCTs in 34 schools (17 treatment schools)					X	X	X	X
Delayed implementation 17 control schools							X	X
Objective 2: Scale-Up BARR	**FY17**				**FY18**	**FY19**	**FY20**	**FY21**
	Q1	**Q2**	**Q3**	**Q4**				
Project Infrastructure								
Leadership team meets monthly	X	X	X	X	X	X	X	X
Implementation team meets weekly	X	X	X	X	X	X	X	X
Project partner contracts	X	X						
Regional hub managers/coaches hired	X	X	X	X	X	X	X	X
Five regional hubs established		X						
Hire and train additional coaches			X	X	X	X	X	X
Develop National BARR Center Database			X	X	X	X	X	X
Develop interactive website			X	X	X	X	X	X
Regional conferences						X	X	X
Four funding sources per regional hub					X	X	X	X
BARR Center						X		
Model Expansion/Dissemination								
Implement BARR in 50 additional schools						X	X	X

Multiyear Financial and Operating Model at National or Regional Level

The i3 BARR scale-up project will serve 146,250 students at an estimated cost of the project over five years of $21,450,000, of which $4,969,619 is devoted to conducting the impact and implementation evaluation. Hazelden Publishing is providing BARR to schools at a cost of $100,000 over three years, for a total of $6,600,000 going directly for services to the 66 schools. Hazelden Publishing will drive the broad dissemination of the BARR model both during and following the grant period.

Hazelden Publishing will hire the regional staff, both through the management of the $100,000 cost for each school, but also through an in-kind match of $1.2M. All salaries and

resources were calculated into the cost of the operating costs of the project. The cost of the BARR model per student is therefore **$159.23** (see Appendix J7 for details).

These projected costs of scaling BARR to help turn around low-performing high schools are a sensible and sound use of limited resources, especially when examined in the context of other school turnaround efforts. The BARR model and services covered in the cost of the $100,000 per school are outlined in Table 4.

Table 4. Financial and Operating Model

Services	2017–18	2018–19	2019–20	2020–21	2021***	Total
No. of Schools	**16**	**33**	**49**	**50**	**33**	**66**
Funding	$640,000	$1,160,000	$1,630,000	$1,670,000	$1,500,000	$6,600,000
Readiness Calls	16 1/school	17 1/school	16 1/school	17 1/school	–	66
Training Days	32 2/school	66 2/school	98 2/school	100 2/school	100 2/school	396
I-Time Manuals	320 20/school	340 20/school	320 20/school	340 20/school	–	1,320
Implementation	48 3/school	51 3/school	48 3/school	51 3/school	–	198
HOD* User Names	160 10/school	170 10/school	160 10/school	170 10/school	–	660
Training Videos	16 1/school	17 1/school	16 1/school	17 1/school	–	66
Coaching Visits	64 4/school	132 4/school	196 4/school	200 4/school	200 4/school	792
Remote	256 16/school	528 16/school	784 16/school	800 16/school	800 16/school	3168
PLC** Hours	64 Quarterly	132 Quarterly	196 Quarterly	200 Quarterly	200 Quarterly	792
Evaluation	32 2/school	50 2 or 1/ school	65 2 or 1/ school	67 2 or 1/ school	50 1/school	264

*Hazelden On Demand **Professional Learning Community ***Note that services for the group of 17 control schools beginning in 2020 will have their services accelerated to meet the timeline of the i3 scale-up grant.

Ensuring Feedback and Continuous Improvement

Spurwink, with the BARR Center leadership team, has articulated a detailed plan to evaluate the success and challenges of the project and use feedback to make project improvements

(Appendix J8 – Project Milestones, Tasks, and Timelines). The metrics in this plan will be reviewed weekly by the project directors and monthly by the BARR leadership team to monitor progress and determine whether the project is achieving its goals. Adjustments to the project will be made as needed based on this review. BARR schools will monitor their implementation using a detailed plan in the BARR Manual (pp. 14–17) in addition to receiving implementation feedback from the evaluators and ETA providers. These tools will assist the schools to make necessary adjustments to ensure successful BARR implementation.

Support for the i3 Scale-Up Project and Match

Hazelden Publishing has committed $1,200,000 to the i3 scale-up project for the required private sector match, and AIR has also committed another $250,000, for a total of $1,450,000 in hand for the match. Spurwink has received additional letters of support from Congressional leaders, in Maine and Minnesota, including U.S. Senator Angus King, Jr; U.S. Senator Susan Collins; Congresswoman Chellie Pingree; U.S. Senator Al Franken; Congressman Keith Ellison; U.S. Senator Amy Klobuchar (see Appendix G for letters of support).

D. Project Evaluation

Focus of the Evaluation

In many ways, this scale-up evaluation builds on the ongoing i3 validation study that precedes it. We will measure many of the same outcomes, describe both the implementation and impact of the BARR model in participating schools, and carry out a rigorous RCT that meets WWC standards. However, the focus of the evaluation will change in three important ways: (1) we will explicitly evaluate the effectiveness of BARR as a school turnaround model for low-performing high schools, (2) we will document the process (and challenges) of bringing this promising high school intervention to national scale, and (3) we will extend our student-level outcome data to 10th grade to capture nationally validated measures of college-readiness. As

detailed below, the study will switch from student-level random assignment to school-level random assignment in our RCT, thereby allowing the BARR model to be implemented and evaluated as a truly schoolwide intervention. It also means that we will implement additional data collection activities to examine how BARR's core leadership team builds and supports its regional extension network to expand the program's reach.

Research Questions

The scale-up grant will include a rigorous evaluation of the impact and implementation of the scale up of the BARR model in five diverse regions across the country. A range of domains and outcome measures will be examined over the course of this study, with a multitude of quantitative and qualitative data sources, using analyses that will meet WWC standards without reservations. The domains include student-level outcomes related to educational attainment of course credits, achievement on standardized tests, being "on track" for graduation, and nonacademic factors. School-level outcomes include impacts on measures of school climate, fidelity of program implementation, and effectiveness of scale up strategies (See Appendix J9 for Domains, Outcome Measures, and Data Sources details).

The **confirmatory questions** are as follows:

1. Does the BARR model impact student educational attainment (i.e., core credits completed, grade point average (GPA))?
2. Does the BARR model impact student achievement in English language arts (ELA) and mathematics on a relevant and validated standardized test?

In addition, the study will answer several research questions related to differential outcomes for student subgroups: Students with minority status, students who are eligible for free or reduced-price lunch (FRPL), students who are English language learners (ELLs), and students

with individualized education plans (IEPs). Differences in gender and student groups below grade level will also be analyzed. The proposed **subgroup questions** are as follows:

3. What are the impacts of the BARR model on the achievement gaps in educational attainment across subgroups of students (i.e., minority status, FRPL eligibility, ELL, IEP, gender, below grade level)?
4. What are the impacts of the BARR model on the achievement gaps on standardized test scores across subgroups of students (i.e., minority status, FRPL eligibility, ELL, IEP, gender, below grade level)?

Extending beyond educational attainment and student achievement, the BARR model aims to impact student engagement in learning, increase social/emotional learning skills, and reduce adverse effects of alcohol and other drugs and also have broader school climate impacts as measures of successful school turnaround. To reflect changes in these outcomes, this study will look at measures of students being "on track" for graduation, nonacademic factors (i.e., self-management, social awareness, self-efficacy, growth mindset), and school climate factors (i.e., engagement, safety, environment). The proposed **exploratory questions** are as follows:

5. What are the impacts of the BARR model on students being "on track" for graduation?
6. What are the impacts of the BARR model on nonacademic factors affecting students' engagement and success in high school?
7. What are the impacts of the BARR model on student perceptions of their school's climate?

The evaluation will include an implementation study of the BARR model within schools using fidelity forms and rubrics developed and tested through the i3 development grant and refined under the i3 validation grant. Qualitative data will be collected from educators through

interviews to learn more about their experiences and summarize the facilitators and barriers they encountered in the schools. The proposed **implementation fidelity questions** are as follows:

8. To what extent is the BARR model implemented as intended?
9. What are the facilitators and barriers encountered to successful school implementation of the BARR model?

For the i3 scale-up study, specific measures of the proposed scale-up strategies for the BARR model will be evaluated to determine whether scale-up goals were successfully met. Interviews will also be conducted with school staff and BARR regional hub managers to detail facilitators and barriers encountered with this process. The proposed **scale-up fidelity questions** are as follows:

10. To what extent are the BARR scale-up strategies and infrastructure implemented as intended?
11. What facilitators and barriers to successful scale-up of the BARR model were encountered and how were they addressed/overcome?

Research Design

The research team will randomly assign participating schools within a region to the treatment or control condition, preserving a balance of school characteristics (e.g., student demographics, school size). The schools will maintain these RCT conditions for no less than two years. Schools in the treatment condition will implement the BARR model and receive supports from the BARR regional hubs during the study years. Following a delayed treatment design, schools in the control condition will maintain business-as-usual during the first two years and then receive the BARR model and supports starting in the third year.

This research design will produce evidence of the effectiveness of the scale-up of the BARR model that meets WWC standards for evidence without reservations, assuming low levels of

attrition. Although high levels of overall, differential, or nonrandom attrition would threaten the validity of the results, we expect attrition to be low because target districts have shown enthusiasm for this study and pledged support for recruiting and maintaining participation of their low-performing schools (both treatment and control). In addition, prior studies of BARR have not experienced school-level attrition, and all previous treatment schools have fully participated in study requirements. By offering the treatment to control schools after a two-year embargo, it is expected that control schools in this study will fulfill their study commitments in order to receive the BARR model in the third year at no cost. During the randomization process, the evaluation team will examine baseline equivalence of the analytic sample on observable school characteristics obtained prior to the intervention, to ensure that the study will be able to meet WWC standards without reservations if high attrition does occur.

Sample Size and Minimum Detectable Effect Sizes (MDES)

We conducted statistical power calculations to ensure that the evaluation will have a large enough sample to reliably detect program impacts specified in the confirmatory research questions. After reviewing typical high-school level effect sizes found in the literature for other successful interventions, we chose a target MDES of 0.15, with statistical power of 0.8. (That is, the evaluation will have 80 percent power to detect an effect as small as 0.15 standard deviations).[1] Given these assumptions, within five regional blocks, a minimum of 60 schools are needed for an adequately powered school-level RCT. To manage the potential threat of school attrition, we plan to recruit six additional schools (an additional 10 percent), for a sample size of

[1] We also assumed a school-level intra-class correlation (ICC) of the key outcomes of 0.1; an alpha of 0.05 for student outcomes; a conservative average of 500 9th-grade students per school (250 for each of two cohorts of incoming 9th-grade students); number of level-2 covariates equal to 5 (school-level student achievement plus dummy coded block effects (K-1) assuming five regions); average number of schools per region block equal to 12; the contribution of a single level-1 covariate to explain variation in the outcomes of R_1^2=0.50, and the contribution of a single level-2 covariate R_2^2=0.60 (Bloom, Richburg, Hayes, & Black, 2007).

66 schools, which would reduce the MDES to 0.14 if there were no school-level attrition. While the confirmatory analyses are conservatively powered to detect even small effects of the BARR model, some exploratory analyses will have somewhat larger MDES, ranging from 0.15 to 0.16 depending on the size of key student subgroups (Schochet, 2008).

To make implementation of such a large-scale RCT feasible, it will be conducted in two waves to facilitate recruitment and to allow for the second wave to expand out from the BARR regional hubs established during the first wave. The first wave will contain 32 schools (16 treatment, 16 control) starting in the first full academic year of the grant period (2017–18), followed by a second wave of 34 additional schools (17 treatment, 17 control) the next academic year (2018–19), for a total of 66 study schools. Within each wave, there will be two cohorts of incoming 9th-grade students who will participate in the RCT in sequential school years. Ninth and 10th-grade outcome data will be collected for all four cohorts. Table 5 provides a breakdown of student cohorts during the two RCT waves.

Table 5. Study Waves and Student Cohorts by School Year

Wave	Student	Year 1	Year 2	Year 3	Year 4
Wave 1 (32 schools)	**Cohort A**	**9th Grade** Treatment Control	**10th Grade** Assessment (Spring 2019)	**11th Grade** Follow-up	**12th Grade** Follow-up
	Cohort B		**9th Grade** Treatment Control	**10th Grade** Assessment (Spring 2020)	**11th Grade** Follow-up
Wave 2 (34 schools)	**Cohort C**		**9th Grade** Treatment Control	**10th Grade** Assessment (Spring 2020)	**11th Grade** Follow-up
	Cohort D			**9th Grade** Treatment Control	**10th Grade** Assessment (Spring 2021)

In preparation for this scale-up proposal, we have identified 177 low-performing schools from a range of locales (i.e., urban, rural, suburban) in the five regions to be included in the

recruitment sampling frame (See Appendix J10). Currently, 50 possible schools in 15 districts across the regions have already expressed interest in this study, and there are letters of support from district leaders to help with recruitment before the 2017–18 academic year begins (see Appendix G for commitment letters). For the second wave of recruitment, additional districts from the sampling frame will be approached with the support of leaders in the first-wave districts to help continued recruitment for the RCT study.

Scale-Up Measures

The i3 scale-up evaluation will include measures to describe the BARR Center's strategies to address the six scale-up challenges introduced above, the activities implemented to execute these strategies, and the challenges and successes encountered in the process. This will provide important lessons for other grassroots organizations like BARR that have successful programs they want to scale up. Figure 1 provides the logic model that specifies those challenges, as well as activities, outputs, and outcomes designed to overcome them. The AIR evaluation team will use the elements articulated in the logic model to guide the development of relevant measures to document and evaluate the scale-up process (see W.K. Kellogg Foundation, 2004 for an example of such a measurement strategy). AIR will document the BARR Center's and regional hubs' scale-up processes and outcomes throughout the study years and will triangulate findings using data from multiple sources at the national, regional, and school levels.

For this study, the evaluation team will collect documents and records from the leadership team, implementation team, and regional teams (see Figure 4) to evaluate fidelity to design and success of scale-up activities and outcomes. These documents and records will include summaries of resources secured, partnerships forged, staffing, and development of training and coaching materials; periodic regional manager logs documenting training activities as well as

outreach to schools, LEAs, and SEAs; and field notes from annual site visits to each regional hub to interview the regional manager and observe professional development and other hub activities. Questions about scale-up implementation will also be added to the interview protocols to be used with school-level staff related to their experiences with regional hubs and commitment to sustaining the program after the grant ends. Metrics and thresholds for scale-up measures will be designed in collaboration with the developers at the beginning of the study, to be implemented with the first wave of participating schools (See Appendix J9 for scale-up measures).

Using information on the scale-up process from each of these data sources, AIR evaluation staff will annually engage BARR leadership in a benchmarking meeting to articulate quantitative thresholds and qualitative goals for the coming year. Success in meeting these thresholds and goals will then be assessed 12 months after each annual benchmarking meeting.

Analytic Approach

Confirmatory Analyses. Analyses for the confirmatory research questions will provide estimates for the impact of the BARR model on educational attainment (**RQ1**) as measured by (1) credits earned in core courses and (2) GPA; and on student achievement (**RQ2**) as measured by scores on The College Board's ACCUPLACER assessment (2016) in the areas of (3) ELA (Reading Comprehension and Sentence Structure subtests) and (4) mathematics (Arithmetic and Elementary Algebra subtests). The ACCUPLACER assessment will serve as a replacement for the Northwest Evaluation Association (NWEA) assessment used in the two previous i3 grants to represent student achievement. We chose ACCUPLACER because it is a widely used and nationally validated assessment of college-readiness that is appropriate (as an early assessment) for 10th-grade students. This objective assessment will thus allow us to capture the full impact of BARR over two years (for both 9th and 10th grade), in order to determine whether the positive

9th-grade impact of BARR in the development and validation grants is sustained into the later grades. Moreover, the ACCUPLACER captures literacy, mathematics, and algebra skills across a wide range of ability levels and is a more relevant predictor of longer-term employment success for low-performing students than more traditional academic assessments.

To preserve the integrity of random assignment, outcome analyses will include all randomly assigned schools, even if they withdraw from the BARR intervention, in an intent-to-treat (ITT) design. ITT estimates can be interpreted as the effect of having been assigned to receive treatment, regardless of program attrition after assignment. The evaluation team will estimate program impacts by comparing outcomes for students in schools assigned to the treatment group to outcomes of students in schools assigned to the control group using a series of three-level nested models (students nested in schools nested in region blocks). These models will predict student outcomes based on characteristics related to students (e.g., prior test score, race, gender, ELL status, FRPL eligibility), schools (e.g., school mean achievement, percentage minority, percentage female, percentage ELL students. percentage students eligible for FRPL status), an indicator of assignment to the BARR group, and region fixed effects. These ITT analyses will provide evidence on the impact of BARR on the two measures of student educational attainment and the two measures of student achievement on standardized tests, meeting WWC standards for rigorous design (see Appendix J9 Table J9.3. for Model A).

Subgroup Analyses. Analyses conducted to answer the research questions related to student subgroups (**RQ3–RQ4**) will provide estimates for the differential impact of BARR on the four primary student outcomes (two measures of educational attainment and two measures of student achievement). The ITT analyses will explore differences in the effectiveness of BARR across subgroups of students by including an interaction term between school assignment to the

treatment condition and an indicator of student membership in a relevant subgroup (e.g., minority status, ELL status, FRPL eligibility). (see Appendix J9. Table J9.3. for Model B).

On-Track Analyses. This exploratory question (**RQ5**) will examine the impacts of the BARR model on the number of students who are on track for graduation after 9th grade and 10th grade. Based on current early warning system research (Allensworth & Easton, 2005), the evaluation team will create an on track indicator (1 or 0) based on students meeting both of the following criteria: (1) enough course credits to be promoted to the next grade and (2) no more than one failure in a semester-long course in a core subject area. Other factors that could be considered include data related to poor attendance, low GPA, or failures in any course (Allensworth & Easton, 2007; Kennelly & Monrad 2007).

Once an on-track indicator has been created for each student (1 for on-track, 0 for off-track), an analysis of this outcome will be carried out using an ITT three-level nested modeling approach which accounts for the non-normal distribution of "on track" status by assuming that the variable follows a binomial distribution (see Appendix J9 Table J9.3. Model C).

Nonacademic and School Climate Analyses. To examine impacts on student nonacademic factors (**RQ6**), the team will use psychometrically validated scale scores derived from the Transforming Education Survey on Mindsets, Essential Skills, and Habits (MESH) Competencies (2016) administered to students and teachers. The four main constructs contained on the MESH survey are (1) self-management, (2) social awareness, (3) self-efficacy, and (4) growth mindset. This survey was chosen because it is a valid and reliable measurement of several nonacademic factors that the BARR model specifically aims to impact for participating 9th grade students, and allows for a measurement of teacher perceptions of these same qualities.

For calculating impacts on school climate (**RQ7**), the ED School Climate Surveys (EDSCLS;

U.S. Department of Education, 2016) will be administered to students and teachers. The EDSCS was developed by the National Center on Safe Supportive Learning Environments (NCSSLE) under a contract from the U.S. Department of Education, operated and maintained by AIR.[2] This survey contains constructs in three main categories of school climate: (1) engagement, (2) safety, and (3) environment. Within these categories, there are specific survey constructs that align with the goals of the BARR model (e.g., relationships, emotional safety, substance abuse) that will be selected for administration. To help reduce burden, the evaluation team will work with the BARR developers to choose constructs from both the MESH surveys and the EDSCLSs to include in one student survey and one teacher survey not to exceed a sit-time of 30 minutes.

The analyses of student survey scale scores will be carried out using the same ITT three-level nested modeling approach as the confirmatory analyses (Model A), but the analyses of the teacher survey scale scores will use a model that includes teacher characteristics (e.g., gender, race, education level) instead of the student covariates (see Appendix J9 Table J9.3. Model D).

Implementation Analyses. The study will also examine the implementation of the BARR model within treatment schools to help contextualize the estimated program impacts and inform the replication of the BARR model nationwide. A variety of data sources, both quantitative and qualitative, will be used to examine the extent to which the BARR model is implemented as intended in schools (**RQ8**) and to identify facilitators and barriers to implementation (**RQ9**).

To assess implementation fidelity of the BARR model, researchers will systematically examine the extent to which teachers and schools implemented the BARR model using scores from observation of BARR activities (i.e., I-Time, block meetings, risk review) collected with

[2] Note, ED will be creating school climate benchmark scores in 2017 for the EDSCLS based on a nationally-representative sample of schools, which will be used to inform thresholds and comparisons for this study.

fidelity forms and a structural review form completed during an interview with the BARR coordinator (see Appendix J9 for fidelity forms and scoring rubrics). Cut-points created for the i3 validation study by the research team and the developers will continue to be used to signify whether the BARR model was adequately implemented within the school. For each indicator, researchers will assign a score of 0 if a school scores below the cut-point and a score of 1 if a school scores at or above the cut-point. Summation of these indicator-based codes, divided by the number of indicators, will provide an overall fidelity index for each BARR school during the study (see Appendix J9 for fidelity index).

To provide a qualitative perspective on implementation of the BARR model, the research team will collect interview data from treatment teachers, administrators, and BARR coordinators. A team of expert coders will systematically analyze the interview data using standard qualitative methods, such as an *a priori* coding scheme and constant comparison techniques (Miles, Huberman, & Saldana, 2013). Summaries of key implementation themes with representative quotes from the interviews will be created to support the fidelity index findings.

Scale-Up Analyses. The targeted outcomes for BARR's scale-up efforts center on expanding regional awareness, covering costs of service, developing tools to support implementation, increasing capacity to train and support staff, and attending to BARR's sustainability. To examine whether scale-up strategies have resulted in the program meeting target short-term and long-term outcomes (**RQ10**) and to identify the facilitators and barriers to scale-up (**RQ11**), multiple sources of data will be collected from the BARR leadership, regional managers, and school-level educators over the course of the study (see Appendix J9, Table J9.2.). A variety of quantitative and qualitative data sources will be used to determine whether goals were met not only in numbers (e.g., total presentations to prospective partners, schools using

video-conferencing for training, coaches and trainers recruited and trained, educators receiving training) but also on intangible factors (e.g., educators' commitment to BARR sustainability, inclination to communicate merits of BARR model with others).

A structured document review rubric will be created during the first quarter of the grant in collaboration with the developer to identify key elements of documentation needed to track scale-up strategies. Source materials for document review are those listed in the earlier section on scale-up measures: documents and records from leadership, implementation, and regional teams; activity and communication logs submitted by regional managers; annual site visits to regional hubs; and interview questions asked of educators at treatment schools asking about their experiences with the BARR regional centers and their commitment to sustainability. Interview data will be analyzed following standard qualitative analysis procedures mentioned above, and a summary of findings on scale-up strategies will be reported to the developers each study year to facilitate ongoing feedback and continuous improvement.

Evaluation Capacity

AIR has extensive experience in conducting rigorous evaluations on interventions similar to the BARR model. To name a few, AIR is currently conducting an i3–funded cluster RCT to evaluate the Families and Schools Together (FAST) Program within the School District of Philadelphia and recently concluded survey data collection with a responses rate of 99 percent among students remaining in district schools. In the i3 evaluation of The New Teacher Project's TEACh Program, AIR researchers collected student achievement data linked with teacher data, including observation measures, teacher credentials, and hiring information for all new teachers in six large urban districts. A number of expert staff in related areas such as school turnaround, dropout prevention, early warning systems, social emotional learning, and school climate will be

available to provide guidance on the measures and analytic processes to be used to evaluate the scale-up of the BARR model.

The external evaluation of the scale-up grant will be conducted by the AIR team currently overseeing the i3 validation study, under the direction of Principal Investigators **Dr. Johannes Bos** and **Dr. Trisha Borman**, with **Dr. Brenna O'Brien** continuing to serve as Project Director. Dr. Bos is a nationally recognized expert in the conduct of RCTs in education and other areas of social policy with more than 25 years of experience. Dr. Borman (previously Hinojosa) has more than 12 years of experience in education research, focused on designing and running large-scale studies that examine programmatic impact on student, school, and district outcomes. Dr. O'Brien has more than eight years of experience overseeing large-scale education evaluations and has demonstrated strong management of the current study through positive communication and collaboration with key staff at BARR and Spurwink. **Dr. Stephen Plank** has also been added to the team as senior advisor, bringing more than 20 years of experience with building effectiveness measures for grant-funded projects and studies that include scale-up efforts.

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