

Around the Corner: A Technology-Enhanced Approach to Early Literacy

Project Narrative

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Absolute Priority 4: Innovations That Turn Around Persistently Low-Performing Schools

The focus of the proposed project will be on Title I elementary schools that are in corrective action or restructuring, and preschools feeding into these schools.

Competitive Preference Priority 6: Innovations for Improving Early Learning Outcomes

The multimedia literacy program to be developed will focus on preschool and kindergarten.

Competitive Preference Priority 8: Innovations to Address the Unique Learning Needs of Students with Disabilities and Limited English Proficient Students

Building on the preschool and kindergarten components of Success for All (SFA), the program will use an approach consistent with response to intervention (RTI) to address the unique learning needs of students with disabilities. Research has found strong impacts of the related but non-multimedia SFA program for struggling readers (Borman et al., 2007; Slavin et al., 2011), as well as a 50% reduction in special education placements (Borman & Hewes, 2003).

The program will also have a strong emphasis on students who are limited English proficient, and one of our district partners, Allentown (PA), primarily serves Hispanic children. It meets the needs of LEPs by modifying instruction, providing constant opportunities to use

English generatively and using realia, video, and pictures to build English vocabulary. Research on the current program has found particularly large impacts on the achievement of LEP students (Slavin & Calderón, 2001).

A. Need for the Project

(1) The extent to which the proposed project represents an exceptional approach to the priorities established for the competition.

One of the most rigorously evaluated and effective approaches capable of making a difference in the reading success of large numbers of struggling young readers is *Success for All (SFA)*, a whole-school turnaround model for elementary schools (Slavin, Madden, Chambers, & Haxby, 2009; Borman et al., 2007). Recent research, based on emerging theory and research on multimedia learning (Mayer, 2008, 2009), has found that adding multimedia content to SFA first grade can greatly improve reading outcomes (Chambers et al., 2006, 2008, 2011). The success of adding multimedia to our first grade program justifies extending the approach to the preschool and kindergarten years, to increase the effectiveness of teaching at those levels. This proposal describes a plan to create interactive, multimedia pre-K and kindergarten programs, including content and activities from the award-winning PBS show, *Between the Lions*. We propose to call the new program *Around the Corner (ATC)*.

Around the Corner will add to existing SFA preschool and kindergarten programs extensive multimedia for use in school and at home. The existing *Curiosity Corner* (preschool) and *KinderCorner* (kindergarten) programs focus primarily on preparing every child to succeed in learning to read in the early elementary grades. The main elements of the programs are as follows:

- Extensive professional development for all school staff to help them understand and use research-proven approaches to teaching: cooperative learning, classroom management, motivation, teaching of metacognitive skills, effective multimedia and technology use, and assessment.
- Comprehensive preschool and kindergarten programs, *Curiosity Corner* and *KinderCorner* respectively, promote the development of the whole child, including the emotional/personal, interpersonal, language and literacy, cognitive, mathematical, scientific, creative, physical, and social studies domains (National Research Council and Institute of Medicine, 2000). They provide integrated curricula with specific thematic units that feature concrete, active experiences, cooperative learning, metacognition, and self-regulation to build a strong foundation in background knowledge and vocabulary (Boyd, Barnett, Bodrova, Leong, & Gomby, 2005; Slavin, Madden, Chambers, & Haxby, 2010).
- The *KinderCorner* (K) program uses cooperative learning to build phonemic awareness and phonics, and application of these skills to phonetic mini-books, which students read to each other in pairs. Language development and vocabulary are emphasized at all levels, as students have constant opportunities to learn and use new vocabulary in their small groups, both orally and in writing. Comprehension strategies include the use of clarification, summarization, prediction, graphic organizers, and other means of extracting and organizing meaning from all sorts of text, expository as well as narrative.
- Cooperative learning, which forms the basis of both programs, has strong evidence of effectiveness (Slavin, 1995, 2009; Rohrbeck et al., 2003; Webb, 2008).
- Frequent criterion-referenced, formative assessments make sure that all students are on track toward success (see Black & Wiliam, 1998).

- A facilitator in each school helps all teachers with program implementation, ongoing professional development, and assessments to ensure a coordinated school-wide approach that progressively improves student outcomes, helps to solve individual problems, and works with the staff to plan next steps.

Adding Technology to CuriosityCorner and KinderCorner

Beginning with a grant from the Interagency Educational Research Initiative (IERI), the Success for All Foundation added to *Reading Roots*, its first-grade reading program, a component that uses brief video vignettes to provide first graders with compelling visual images to anchor their understandings of key reading concepts and processes. In this component, called *Reading Reels*, children do not just watch the video vignettes but respond to them interactively, as described below:

Animated Alphabet: All 26 letters and common digraphs are introduced in brief, humorous animations in which the letter sound is repeated and linked to a mnemonic phrase. For example, the vignette for the letter “k” shows a mother kangaroo trying to open a door by kicking it, making the sound /k/ /k/ /k/. Joey hops up and turns the handle, embarrassing his mom. The children repeat the letter sound with the characters.

The Sound and the Furry: In a series of 120 vignettes, puppets use sound blending strategies to figure out how to read words. For example, a monster sees a sign that says (watch out for) “stick.” He sounds it out, and then picks up the stick, only to find it sticks to his fur. He bites it and his teeth get stuck, too. After the skit, children sound out the word with the puppet.

Word Plays: Live-action skits show the key words introduced in each decodable story in different context. At the end, children are shown stills from the video and asked to provide the word.

Strategy Modeling: Puppet skits are used to model behaviors for children, such as partner reading, comprehension strategies, and fluency practice.

Between the Lions: Engaging content from the award-winning PBS series, *Between the Lions*, is systematically integrated into the SFA reading curriculum. Built around a family of lions living in a library, *Between the Lions* employs humorous skits, songs, and animations that reinforce early reading skills. As part of their SFA lessons, students sing along as the “Vowelles” croon the sounds of vowels, and they race with on-screen characters to read words in letter-substitution games. This use of *Between the Lions* leverages the US Department of Education’s multi-million-dollar investment in a show to stimulate “incidental” learning, repurposing it for “intentional” use in the classroom, integrated with non-media teaching and adding interactive activities between children and the media.

Reading Reels content is shown on DVDs or, increasingly, on interactive whiteboards. Two randomized experiments (Chambers et. al., 2006, 2008), discussed later in this application, found that the addition of only about five minutes a day of *Reading Reels* to *Reading Roots* significantly improved reading outcomes. However, *Reading Reels* currently exists only for first grade. In this application, the Success for All Foundation proposes to work with Sirius Thinking, the creators of *Between the Lions*, and Concordia University, which played a key part in the creation of *Reading Reels*, to develop and evaluate interactive and multimedia-enriched adaptations of *Curiosity Corner* (pre-K), and *KinderCorner* (K) programs.

(2) The extent to which specific gaps or weaknesses in services, infrastructure, or opportunities have been identified and will be addressed by the proposed project.

The low reading achievement of disadvantaged and minority students remains the biggest problem in American education, and despite substantial investments and many attempts at

system-wide reform, reading is showing little improvement. According to the National Assessment of Educational Progress in 2009, fourth grade scores are not much better than they were in 1980 (NCES, 2010). There remain substantial gaps according to social class and ethnicity. Among fourth graders not eligible for free lunch, 45% scored at or above proficient, in comparison to only 17% among fourth graders eligible for free lunch. The percent proficient rates were 42% for White fourth graders, but only 16% for African Americans, 17% for Hispanics, and 20% for American Indians.

Preschool children's expressive language contributes to later higher-level language and literacy achievements (Huffman, Mehlinger, & Kerivan, 2000; Storch & Whitehurst, 2002). The vocabulary and complex syntax skills of low-SES preschoolers, particularly those of disadvantaged English language learners, have been found to be much lower than those of more advantaged children (Espinosa, 2007; Justice, Meier, & Walpole, 2005). Such findings suggest the importance of preschool classrooms in which children are exposed to diverse vocabulary and varied syntax through abundant opportunities for children to interact with teachers and peers.

(3) The extent to which the eligible applicant demonstrates that, if funded, the proposed project will have a positive impact, as measured by the importance and magnitude of the effect, on improving student achievement or growth.

There is good reason to expect that the addition of multimedia and other technology to *Curiosity Corner* and *KinderCorner* will have important impacts on the pre-reading and language skills of young children. Randomized evaluations of multimedia additions to the Success for All first grade program, *Reading Roots*, found substantial positive effects in comparison to the same program without multimedia (Chambers et al., 2006, 2008). Further, there is strong evidence that *Success for All*, and specifically *Curiosity Corner* and

KinderCorner, are effective in their current forms, so if adding multimedia enhances these effects, the program could have a profound effect on children's reading and language development.

Research on Embedded Technology in *Success for All*

The interactive, multimedia literacy program to be developed under this project, *Around the Corner*, will build on the research-proven *Success for All* (SFA) comprehensive reform program. A large-scale longitudinal cluster randomized experiment (Borman et al., 2007) found positive effects of SFA in comparison to control groups. In addition, there have been many high-quality, large, and longitudinal quasi-experiments, in which *Success for All* has been compared to matched control schools. Correnti (2009) and his colleagues at the University of Michigan carried out the largest matched evaluation of SFA over a 4-year period.

The findings of positive effects for SFA have been highlighted in several reviews of comprehensive school reform models, including those by Herman (1999), Borman et al. (2003), CSRQ (2006), and Social Programs that Work (2008).

Research on *Curiosity Corner*

The main independent evaluation of *Curiosity Corner* was carried out by the U.S. Department of Education's Preschool Curriculum Evaluation Research (PCER) Consortium, which conducted rigorous, randomized evaluations of 15 different early childhood curricula on a wide variety of child outcomes.

In the PCER *Curiosity Corner* evaluation, 18 sites in New Jersey, Kansas, and Florida were randomly assigned at the school level to implement *Curiosity Corner* or continue with the programs and practices that they had been using. Data were analyzed using repeated measures analyses and focused on the differences between the covariate-adjusted means for the

prekindergarten and kindergarten spring assessments. There were no differences found at the end of prekindergarten, but at the end of kindergarten the independent evaluator concluded that *Curiosity Corner* had a statistically significant positive effect on reading relative to the control condition, based on analyses of the Test of Early Reading Ability and Woodcock Johnson Letter-Word Identification, with a mean effect size of +0.43. *Curiosity Corner* was one of the few programs in the PCER evaluation to find significant effects at the end of kindergarten.

Research on *KinderCorner*

Several studies have found positive effects of *KinderCorner*, as the first year of multiyear evaluations of *Success for All*. A randomized evaluation of the kindergarten component of *Success for All* was reported by Borman et al. (2005), in a study of 41 schools randomly assigned to *SFA* or control conditions. They found significantly positive effects on Woodcock Word Attack (effect size = +0.22) in comparison to control groups. An earlier matched study by Jones, Gottfredson, & Gottfredson (1997) in Charleston (SC) found substantial positive effects of the *SFA* kindergarten program on state reading tests and SAT Reading (ES=+0.98). A matched study of mostly Hispanic children by Chambers et al. (2005) found positive effects of the *SFA* kindergarten program with *Reading Reels* (ES=+0.36).

Research on Media and Embedded Multimedia

Extensive research on the use of educational television has found that video content can greatly enhance children's learning if it directly reinforces instructional objectives. For example, research on the PBS television show *Between the Lions*, which uses puppets, animation, and live action to build early reading skills, has shown significant positive effects of this program for young learners (Linebarger, 2000, Linebarger, Kosanic, Greenwood, & Doku, 2004). Also, thirty years of research shows positive impacts of *Sesame Street* (Fisch & Truglio, 2000; Rice, Huston,

Truglio, & Wright, 1990). *Around the Corner* will use this impactful content in a more intentional manner, to directly reinforce teachers' lessons.

Embedded multimedia refers to the use of brief visual content, such as video, pictures and linked text, into daily lessons. By directly linking visual and auditory instruction, embedded multimedia can enhance students' cognition and motivation (Mayer, 2008). Research finds that animations, with content closely linked to the content being taught, can greatly increase learning (Hoeffler & Leutner; 2006; Neuman, 2006; Savage et al., 2010).

Two large, year-long randomized evaluations found that the addition of the *Reading Reels* embedded multimedia content to *Success for All* significantly increased reading outcomes (Chambers et al., 2006, 2008, 2011). Chambers, Cheung, Madden, Slavin, & Gifford (2006) evaluated *Reading Reels* in a year-long randomized experiment with 394 first graders in 10 high-poverty schools in Hartford, Connecticut. The schools served very disadvantaged populations that were approximately 60% Hispanic and 40% African American. The study compared first graders who learned to read using the *Success for All* program either with or without the embedded video components. In HLM analyses, controlling for pretests, the study found positive individual level effect sizes for Word Identification (ES=+0.15, n.s.), Word Attack (ES=+0.32, $p<.05$), and Passage Comprehension (ES=+0.08, n.s.).

Chambers, Slavin, Madden, Abrami, Tucker, Cheung, & Gifford (2008) carried out a randomized evaluation of high-poverty Hispanic schools in Los Angeles and Las Vegas. Within schools, children were randomly assigned to the experimental group (N=75) or the control group (N=84). Adjusted for pretests, posttest effect sizes were +0.33 ($p<.01$) for Woodcock Letter-Word, +0.28 ($p<.05$) for Woodcock Word Attack, +0.28 ($p<.05$) for GORT Fluency, and +0.17 for GORT Comprehension, an average effect size of +0.27.

B. Quality of the Project Design

(1) The extent to which the proposed project has a clear set of goals and an explicit strategy, with actions that are a) aligned with the priorities the eligible applicant is seeking to meet, and b) expected to result in achieving the goals, objectives, and outcomes of the proposed project.

In this i3 proposal, we describe a plan to work with district partners in Pennsylvania, Ohio, Alabama, Illinois, and Kentucky to accomplish the following specific goals.

- a) Develop and pilot *Around the Corner*, interactive, multimedia-enhanced versions of *Curiosity Corner* and *KinderCorner*.
- b) Create computer activities, video, and print materials to send home with children;
- c) Create interactive, video-enhanced professional development models; and
- d) Evaluate the full *Around the Corner* pre-kindergarten and kindergarten programs in a rigorous randomized formative experiment.

Developing a Multimedia Adaptation of *Curiosity Corner* – Prekindergarten

Based on the positive findings of *Reading Reels* in the first-grade program, we propose to work with our district partners to develop a version of the research-proven *Curiosity Corner* prekindergarten program to incorporate interactive multimedia activities throughout the preschool day. The main focus of *Curiosity Corner* is on language development; children are exposed to a broad range of language-rich experiences focusing on themes that build out from the children themselves, their families, and their neighborhoods, to age-appropriate experiences with the languages of science, social studies, mathematics, and other areas. Teachers introduce concepts and key vocabulary, and children work in pairs to explore the concepts and use their new language.

Interactive activities around embedded multimedia will enable teachers to show children how the world works for concepts that are not possible to illustrate in a classroom with actual objects. Embedding pictures and brief video clips teachers will show children, for example, how firefighters fight fires and how seeds develop into plants. Phonemic awareness activities will be presented via songs, rhymes, and chants, accompanied by pictures or video content to illustrate the thematic vocabulary. Children will sing and chant along and they will “jump right in” when there are pauses for them to fill in the rhyming words. Some of the children’s literature will be presented electronically with video enhancements to illustrate key vocabulary and story themes. Interactive activities will be designed for children to work individually and in pairs to learn language, literacy, and mathematics skills.

Because parental involvement with children’s education has been consistently shown to be a key factor in children’s success in school (Epstein, 1995; Reynolds et al., 2002), “transmedia” materials—books, audiobooks, e-books, video clips, interactive games, and other activities—will be created for use by parents to support their children’s language and literacy development at home. This print and digital content will be sent to parents via book and DVD distributions, online for parents with computers at home, or via MP3 players, mobile phones, or other digital devices.

Developing an Interactive, Multimedia Adaptation of *KinderCorner*

KinderCorner has substantial evidence of effectiveness in starting children off with success in reading (see Slavin et al., 2009). *KinderCorner* and *Curiosity Corner* are designed as a spiral curriculum, building on common thematic concepts with content that is very basic for the three year olds and get progressively more complex through the end of kindergarten. *KinderCorner* shares with *Curiosity Corner* a focus on language development, cooperative

learning, exploration, phonemic awareness, and development of the whole child. It adds a focus on phonics, vocabulary, and comprehension, using fast-paced instruction, paired reading activities, and comprehension-building experiences.

In the proposed project, multimedia will be added to *KinderCorner* as was described above for *Curiosity Corner*. In addition, interactive activities and video content will be adapted to be appropriate to younger learners from the first grade *Reading Reels* and *Between the Lions*, and embedded in the program.

Creating Technology-Enhanced Professional Development Models

To help teachers use the multimedia adaptations effectively, we will create professional development models that make creative use of multimedia and simulations. Video vignettes of teachers implementing the program effectively will be embedded in the *Around the Corner* software. Teachers will also be aided by the use of video presentations to their children, showing them how the various program elements work.

(2) The applicant’s estimate of the cost of the proposed project, which includes start up and operating costs per student per year for reaching the total number of students proposed.

(Must include estimates for 100K, 250K and 500K students).

The cost per student of implementing *Around the Corner* are different for schools already using *Curiosity Corner* and *KinderCorner* and those that are not. Both estimates appear below.

No. of Students	Adding to Existing Program		Adopting Whole Program	
	First Year	Subsequent Years	First Year	Subsequent Years
100,000	70	10	180	60
250,000	60	10	160	50
500,000	50	10	140	40

(3) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

Most of the costs of *Curiosity Corner* and *KinderCorner* are in professional development and print materials, so the additional costs of the multimedia supplements are minimal. If they add to program outcomes, their cost-effectiveness will be very high.

(4) The potential and planning for the incorporation of project purposes, activities or benefits into the ongoing work of the eligible applicant and any other partners at the end of the development grant

The Success for All Foundation has many years of experience in developing, evaluating and scaling up proven programs, especially the SFA turnaround program. We will work with many school district partners, state departments of education, intermediate units, and other entities to scale up the program, if it proves to be effective.

Around the Corner may actually reduce the costs of the regular *Curiosity Corner* and *KinderCorner* programs (since it will substitute software for some printed material). Also the professional development videos that are embedded in the software should reduce somewhat the need for face-to-face professional development, thus reducing costs. It should scale up readily within our entire network of elementary schools in 48 states, serving urban and rural locations, African American, White, Hispanic, Indian, and Inuit children. Success for All currently serves approximately 1000 Title I schools and 500,000 children. Under i3 scale-up funding, we expect to add an additional 1,100 SFA schools by 2015, and to be serving a million children. We will also disseminate the new *Around the Corner* program in schools not already using Success for All, as a stand-alone pre-k/k approach. With a network of 120 trainers located throughout the US, SFA can ensure dissemination on a broad scale.

Around the Corner will become part of the offerings of the Success for All Foundation. Continued development, dissemination, and scale-up will take place in the context of the work the Success for All Foundation expects to do indefinitely.

C. Quality of the Project Evaluation

(1) The extent to which the methods of evaluation will provide high-quality implementation data and performance feedback, and permit periodic assessment of progress toward achieving intended outcomes.

The formative evaluations of *Around the Corner* will be led by Steven Ross, Alan Cheung, and other researchers at Johns Hopkins University not involved in the development activities.

Beginning in Fall, 2014, Johns Hopkins researchers will carry out a randomized, 2-year experiment to evaluate the cumulative impact of the *Around the Corner* pre-kindergarten and kindergarten program. Impacts will be assessed at the end of the preschool and kindergarten years. The research questions are:

1. What is the cumulative impact over 2 years (preschool to kindergarten) of the *Around the Corner* components (*Curiosity Corner Interactive* and *KinderCorner Interactive*) in comparison to children experiencing *Success for All* without the interactive multimedia aspects?
2. How do the impacts of the multimedia-enhanced *Around the Corner* pre-K to K programs differ for children who perform at high, average, and low levels on pretests? For boys and girls? For children who are African-American, Hispanic, and White? For English language learners?

3. What is the relationship between the degree of implementation of key program elements (e.g., multimedia, cooperative learning, parent components) and program outcomes?

In this developmental experiment, a total of 12 schools will be recruited. All of these will be existing *Success for All* schools that provide preschool services to four year olds, with at least two teachers. These schools will also serve grades K-5. Preschool teachers and children within each school will be randomly assigned to ATC-Experimental or SFA-Control conditions. When the children enter kindergarten, they will remain in their respective treatments (*KinderCorner Interactive* or existing non-technology *KinderCorner*). The SFA-Control teachers will receive multimedia materials and training one year after the experimental teachers, so this is a delayed treatment control group.

Subjects

The study will involve a total of 12 schools currently implementing Success for All in pre-K and kindergarten, randomly assigned within schools to *Around the Corner* (N=500) or control (N=500) conditions. These will be Title I schoolwide projects currently using SFA recruited throughout the U.S.

Measures

Students will be pretested on Peabody Picture Vocabulary Tests (PPVT-III) (Dunn, & Dunn, 1997), a standardized, individually-administered measure of children's receptive vocabulary. The internal consistency of PPVT on Cronbach's alpha is reported to be 0.95, and the test-retest reliability was 0.92. Then they will be posttested on PPVT and Woodcock-Johnson III Letter-Word Identification at the end of their preschool year. At the end of kindergarten, PPVT, Woodcock Letter-Word Identification, and Woodcock Word Attack will be used. The Woodcock-Johnson III Tests of Achievement were normed on a national sample of children and

the test-retest coefficients for the two subtests used were 0.95 for Letter-Word and 0.83 for Word Attack.

Data on Students' Progress and Implementation

Success for All schools routinely collect extensive data on children's progress and program implementation quality. In the proposed project, these data will be supplemented by additional measures for purposes of triangulation and adaptation to the multimedia aspects of the experimental treatment. Implementation data and child outcome data will be summarized four times each school year, allowing for extensive assessment of progress toward high-quality implementations and outcomes in the two variations of *Curiosity Corner* and *KinderCorner*.

In addition to the standardized measures, curriculum-specific performance-based measure will be implemented throughout the school years. They include

- the Child Assessment Tool (CAT) which is an ongoing assessment of children's progress on all developmental domains, and the Structured Oral Language Assessment (SOLOs) which are authentic assessments of the children's receptive and expressive acquisition of vocabulary.

Specific implementation fidelity measures will include:

- Experienced observer SFA reports
- Experienced observer Multimedia Strategies Observation Measure
- Teacher logs on teaching practices (8-10 times per year)
- Teacher Questionnaire (once each year).

The SFA observation protocols and teacher logs for preschool and kindergarten are well-validated from prior studies. The Multimedia Strategies Observation Measure will be developed to explicitly address the major design components of each multimedia strategy, and will consist

of checklist items, frequency ratings, open-ended comments, and an overall rating of implementation fidelity. The Teacher Questionnaire will be adapted from instruments used in our prior studies so as to address, using Likert-scale and open-ended questions, practices/reactions to: (a) major literacy practices used (all schools), (b) SFA-specific strategies (all schools), and (c) ATC-specific strategies (6 schools).

Analyses

Assuming 60 children in each school starting preschool in 2014, the study will involve a total of 720 children, to be followed from preschool to kindergarten over a 2-year period. We will use Analyses of Covariance (ANCOVA) to compare the experimental group to each control group, with Huber-White corrections to adjust for clustering. Each contrast will involve 500 experimental and 500 control children, so with posttests predicted (based on prior research) to correlate +0.70 with pretests we will have adequate power to detect effect sizes of +0.20 or more, with a probability of .85 in Year 1. Assuming attrition of 20% per year, we will have a sample of 400 and 400 in Year 2, with a power of .80.

(2) The extent to which the evaluation will provide sufficient information about the key elements and approach of the project to facilitate further development, replication or testing in other settings.

The evaluation will provide extensive information to enable us to inform further development, replication, and testing. It uses a mixed-methods approach in which observations, interviews, and teacher logs will tell us a great deal about what is being implemented and about teachers' opinions about all aspects of the ATC approach. Structured oral language assessments and other program-specific data will tell us about children's progress within the program. Finally, a modest-sized randomized experiment comparing children in *Around the Corner* to

those in non-technology control groups will tell us whether children learn better in the technology-enriched innovative adaptation. All of this information will help us create and revise each element of the approach and to ultimately find out how the overall program affects children's learning.

(3) The extent to which the proposed project plan includes sufficient resources to carry out the project evaluation effectively.

We have set aside a total of \$423,000 over five years for the evaluation portion of the proposal (plus training and materials costs for the evaluation schools). This amount, 14% of the total federal funds requested, should be sufficient to do a high-quality formative evaluation, as we have proposed.

D. Quality of the Management Plan and Personnel

(1) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks, as well as tasks related to the sustainability and scalability of the proposed project.

Management Plan

The project will be managed by the leadership of the Success for All Foundation (SFAF), which has long experience in scaling up proven whole-school reform designs and innovative approaches to integrating technology in daily teaching. The capabilities and responsibilities of each partner are described in the following sections.

The creation of *Around the Corner* will require extensive development of multimedia materials for prekindergarten and kindergarten. We will begin with a review of national and state standards for these grade levels, and will engage consultants who are expert teachers from our

partner schools, early childhood experts, and researchers to advise us. We will create prototype multimedia units, which will be critiqued by our consultants and staff of our partner schools.

Then we will pilot the prototype units in partner schools, observing and obtaining feedback from teachers.

Once we have agreement on basic prototypes, we will begin to create whole units in relation to the themes and objectives of each grade level. These will be piloted in partner schools and revised based on feedback. Finally, year-long pilot tests will be carried out at each level, starting with pre-K.

<u>Timeline</u>		
<u>Dates</u>	<u>Activity</u>	<u>Annual Milestones</u>
January, 2012 – August, 2012	<ul style="list-style-type: none"> • Create development plan • Develop pilot pre-k • Pilot program elements 	<ul style="list-style-type: none"> • Development plan, pre-k • Revised pre-k program design
September, 2012 – August, 2013	<ul style="list-style-type: none"> • Pilot pre-kindergarten program • Develop kindergarten program 	<ul style="list-style-type: none"> • Revised kindergarten program design
September, 2013- August, 2014	<ul style="list-style-type: none"> • Pilot kindergarten program • Revise pre-K, K programs • Recruit schools for evaluation 	<ul style="list-style-type: none"> • Final pre-K, K program designs
September, 2014- August, 2015	<ul style="list-style-type: none"> • Administer pretests • Implement preschool program • Posttest preschools • Analyze data 	<ul style="list-style-type: none"> • Report on pre-k evaluation

September, 2015-	<ul style="list-style-type: none"> • Follow students into kindergarten 	<ul style="list-style-type: none"> • Final report on evaluation
December, 2016	<ul style="list-style-type: none"> • Posttest in kindergarten • Analyze data • Finalize pre-K and K programs • Begin dissemination 	

Coordination

The project partners have all worked together on previous projects, and are capable of closely coordinating their activities to complete objectives on time and with high quality. The leaders of the partner organizations will meet in Baltimore or by conference call quarterly throughout the project, to share reports of progress, solve problems, and revise plans in light of experiences in development, piloting, and implementation.

Specific memoranda of understanding will be developed with each partner, and tasks, deadlines, and progress indicators will be established. These will be reviewed on a regular basis to see that the entire project, and each project task, is on track toward completion on time with high quality.

Institutional Capabilities

Success for All Foundation (SFAF) is a nonprofit organization in Baltimore that spun off from Johns Hopkins University in 1998. SFAF develops, evaluates, and disseminates programs for high-poverty schools from prekindergarten to high school. With a professional development staff of approximately 120, SFAF has the resources to support principals, teachers, assistants, and central administrators. SFAF also has a staff of about 40 program developers working in reading, writing, math, social studies, and science, in grades prekindergarten to 10. SFAF has an

award-winning video production team that is experienced in creating television-quality content cost effectively. There is a staff of 22 publications professionals who do project management, artwork, design and layout, printing, and inventory control.

Johns Hopkins University is one of the nation's premier research institutions. The Center for Research and Reform in Education (CRRE) at Johns Hopkins will provide strong and consistent organizational support. CRRE has 5 Ph.D.'s and 3 other research and support staff engaged in a wide range of research involving children from preschool through high school. CRRE principal investigators are full-time researchers without teaching responsibilities who are therefore able to focus on high-quality longitudinal research, including many randomized and matched field experiments. CRRE's main office is located off campus, where it qualifies for low off-campus overhead rates.

Sirius Thinking, Ltd. creates high-quality multimedia educational content for children that is academically sound and highly entertaining. Based in New York City, Sirius Thinking currently has six full-time employees and several part-time associates and consultants providing various creative, production, and support services (line producers, directors, writers, composer-lyricists, actors, puppeteers, scenic designers, lighting directors, camera operators, production accountants, etc.). Sirius's staff includes some of the best and the brightest creative talent from Sesame Workshop and the Jim Henson Company. Among them, they have won many awards, including over two dozen Emmys, three Grammys, and many Parent's Choice Awards. Currently, Sirius Thinking's primary project is the creation and production of *Between the Lions*, a research-proven children's literacy initiative that includes a daily PBS television show, an on-line site, print and multimedia components, an ambitious national outreach program, and a

family literacy program based in libraries that strategically ties together video, interactive, and traditional print materials.

Concordia University's faculty, professional staff, and graduate students of the Centre for the Study of Learning and Performance (CSLP) in Montreal comprise a multidisciplinary research team with expertise in educational technology, cognitive and educational psychology, reading instruction, and learning strategies. They helped to create *Reading Reels* and *Reading Roots Interactive*.

District Partners

Steubenville, Ohio is a small city in southeastern Ohio. The Steubenville Public Schools have been using Success for All in all five of its elementary schools for more than ten years, and the district has received national recognition for its outstanding achievement. In the three original SFA schools, 98% of students passed the 2010 Ohio reading test, compared to 77% in the rest of Ohio. Steubenville serves 2340 elementary students, of whom 66% are White, 28% African American, and 62% qualify for free lunch.

Dolton, Illinois is a small district near Chicago in which 99% of its elementary students are African American and 1% is Hispanic. Among its 1962 elementary students, 82% qualify for free lunches. In 2002, the three initial SFA schools were averaging 32 percentage points below the state average. By 2010, they had gained 31 percentage points, while the state had gained 14.

Bessemer City, Alabama serves 2645 elementary students in a district near Birmingham, in which 88% of these students receive free lunches and 93% are African American and 3% White. Five Bessemer schools have used Success for All for 6-8 years. In 2003, only 39% of students in the original schools passed the Alabama state reading tests; in 2010, 71% passed.

Knox County, Kentucky is a small Appalachian community in which 74% of its elementary students qualify for free lunch. Almost all of its 2167 elementary students are White. Three highly successful SFA schools have gained much more than the state in reading since they began ten to eleven years ago, gaining an average of 40.6 percentage points, while the state gained 19.7.

Allentown, Pennsylvania is an urban, mostly Hispanic district of 8582 students, of whom 79% qualify for free lunch. 67% of students are Hispanic, 16% White, and 16% African American. Three schools will participate.

(2) The qualifications, including relevant training and experience, of the project director and key project personnel, especially in managing projects of the size and scope of the proposed project.

Nancy A. Madden, Ph.D. (SFAF), Project Director (10% FTE). Dr. Madden is the President and CEO of the Success for All Foundation, which provides the training and implementation support for 1,000 *Success for All* schools, and will provide the support for schools in this study. Dr. Madden has been President of the Foundation since it was established in 1997. Dr. Madden is also a professor at Johns Hopkins University and the University of York's Institute for Effective Education, UK. Dr. Madden will be responsible for the overall project, especially the training design for *Around the Corner*.

Robert E. Slavin, Ph.D. (SFAF), Co-Project Director (10% FTE). Dr. Slavin is Director of the Johns Hopkins University Center for Research and Reform in Education, Chairman of the Success for All Foundation, and Professor at the Institute for Effective Education at the University of York, UK. Dr. Slavin has carried out many rigorous field experiments, including randomized studies of *Success for All*, cooperative learning, peer tutoring, bilingual education,

and quasi-experimental studies of *Success for All* and other interventions. He has published more than 300 articles and 20 books on these and other topics. He will work on the overall design of *Around the Corner* multimedia.

Bette Chambers, Ph.D. (JHU), Preschool Coordinator (10% FTE). Dr. Chambers, Professor at the Center for Research and Reform in Education at Johns Hopkins University and Director of the Institute for Effective Education at the University of York, UK, is an educational psychologist who leads SFAF research on early childhood education and multimedia. Dr. Chambers was the PI of one of the Preschool Curriculum Evaluation Research (PCER) projects. Dr. Chambers will oversee the development of *Curiosity Corner Interactive*.

Steven Ross, Ph.D. (JHU), Evaluator (10%). Steven Ross is a widely respected evaluator, who has published dozens of formative and summative evaluations of educational programs, especially technology innovations. He will lead the independent evaluation.

Alan Cheung, Ph.D. (JHU), Evaluator (10%). Dr. Cheung, a researcher at Johns Hopkins University, will do data analysis and research design for the independent evaluation.

Christopher Cerf (Sirius Thinking), Multimedia Creator (10% FTE). Chris Cerf is one of America's leading producers of children's television. He has written and produced extensive video, print, musical, and interactive material for *Sesame Street* and *The Electric Company*, and is the co-creator and Executive Producer of *Between the Lions*. He has won numerous Emmy and Parent's Choice awards for these and other television shows. Mr. Cerf will write, design, and produce multimedia content.

Philip Abrami (Concordia), Technology Coordinator (10% FTE). Dr. Abrami is Director of the Centre for the Study of Learning and Performance, Concordia University, Montreal. Dr. Abrami will lead the development of the software for *Curiosity Corner Interactive*.

(3) The eligible applicant's capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to bring the proposed project to scale on a national, regional, or state level.

The Success for All Foundation (SFAF), the non-profit organization that will lead the proposed project, has an exceptional record in carrying out projects of the size and scope of this one, achieving positive student outcomes in urban and rural schools serving many children in poverty, and scaling up to serve hundreds of schools and hundreds of thousands of children.

The Success for All Foundation currently has an i3 scale-up grant intended to add 1,100 additional schools to the SFA network by 2015. If all goes as planned, more than 2000 schools and 1 million children will use SFA by 2015.

Matching Organizations

We are likely to obtain commitments from several private-sector organizations to provide matching funds of at least 15% of the amount of our request for federal funding (matching funds of \$450,000) to carry out scale up during and beyond the grant period. These include The Annie E. Casey Foundation, the Kellogg Foundation, the Pitney Bowes Company, and the HBP Printing Company.

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