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### **Absolute Priority and Competitive Preference Priority Response (2 points)**

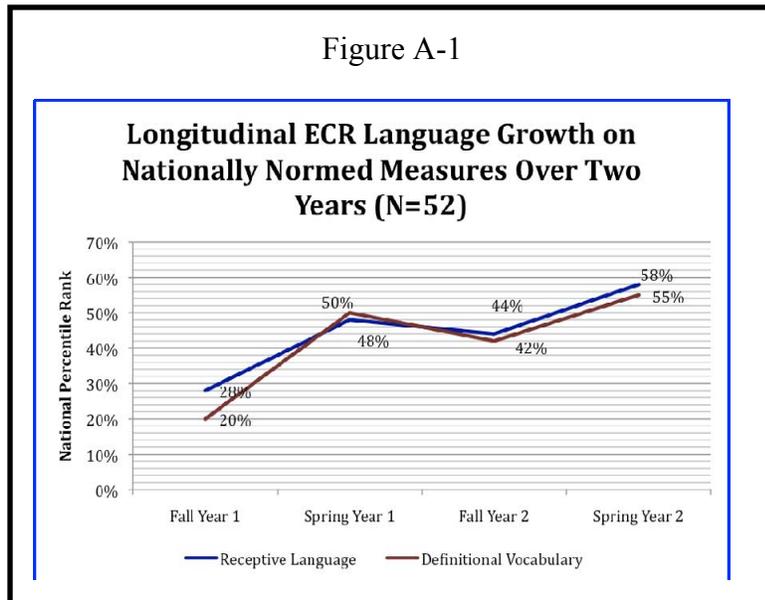
AppleTree Institute submits this application for an i3 Development Grant to fund further development of its Every Child Ready program, a data-driven, evidence-based, Response-to-Intervention (RTI) model for preschools that integrates special education children into the general education classroom in a meaningful way while dramatically improving the learning outcomes for all young children. This program addresses Absolute Priority 2 – Innovations that Improve the Use of Data – and fully meets the need of Competitive Preference Priority Five 5 – Innovations for Improving Early Learning Outcomes – and Competitive Preference Priority 7 – Innovations to Address the Unique Learning Needs of Students with Disabilities and Limited English Proficient Students. Please see the response to Selection Criterion A for the project description.

### **A. Need for the Project and Quality of the Project Design (up to 25 points)**

#### *Factor (1): The extent by which the project represents an exceptional approach to the priority*

The achievement gap—the difference in educational performance and achievement between white and minority students—is a pernicious and corrosive challenge to sustaining a vibrant democracy and a competitive economy. In a nation that values equal opportunity, data show that educational opportunity is often inequitable based on race and income status (National Center for Education Statistics [NCES], 2010). Ironically, the nation’s capital is home to one of the widest and most persistent achievement gaps in America (NCES, 2010). In 2009, African-American fourth grade reading scores averaged 60 points lower than white students’ scores (NCES, 2010). This performance gap has remained constant since 1992 (NCES, 1991-1999). In DC, one of every five students, the majority of them African-American males, qualifies for special education—one of the highest placement rates in the nation. Our lack of an effective systemic response dooms thousands of DC children to failure in school, work, and life each year.

While the statistics paint a bleak picture, solid evidence indicates that high-quality early



learning programs can help at-risk

children overcome these deficits

(Dotterer et al., 2009; NICHD

Early Child Care Research

Network, 2005; Peisner-Feinberg,

2001; Ramey et al., 2000).

Reading trajectories tend to be

highly stable once formal reading

instruction begins (Lonigan,

Burgess & Anthony, 2000) meaning that students who perform poorly in reading in the early

years are likely to remain relatively poor readers throughout their school careers (Juel, 1988;

Scarborough, 1998). These data underscore the need for intensive preventive efforts to

accelerate preschool children's language and early literacy development. Every Child Ready is a

data-driven, evidence-based,

Response-to-Intervention model for

preschools that dramatically raises

the trajectories of learning for young

children. Figure A-1 demonstrates

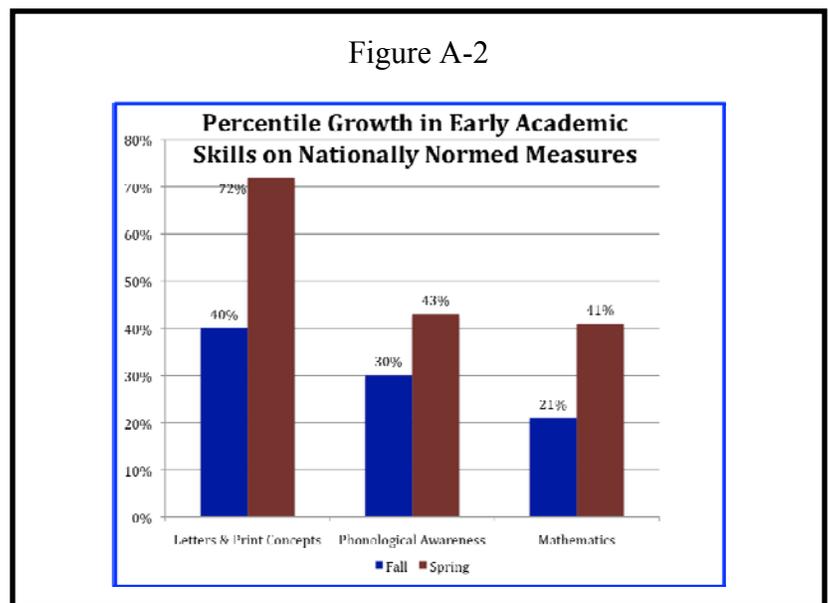
that the 52 children who participated

for two years in the pilot achieved

dramatic gains in vocabulary, a

strong predictor of 4<sup>th</sup> grade reading comprehension (Hart & Risley, 2003). Language is a

critical predictor of children's later academic success (Snow, Burns & Griffin, 1998) and low-



income young children are far less likely than their advantaged peers to develop strong language and vocabulary skills (Hart & Risley, 1995). On average, based on independent assessments, children entered the pilot program between the 20th and 28th national percentile rank and after two years, consistently scored above the national norm, an average growth of 16 percentile points per year. In comparison, Head Start, the nation's largest early childhood program, demonstrated average growth of two percentile points per year on similar language measures (ACF, 2009). Figure A-2 shows equally impressive gains in foundational academic skills for 180 children after just one year in an Every Child Ready classroom. Participating children were overwhelmingly African-American, with approximately 70 percent low-income and 25 percent English language learners (ELLs) in public preschool programs in the District of Columbia. Every Child Ready closes the achievement gap so that children arrive at kindergarten ready to learn.

Every Child Ready is an intervention grounded in research and practice for educating at-risk young children, consisting of:

- A full-day, engaging, evidence-based instructional program aligned with standards available to all children in a high-quality classroom led by a bachelor-degreed teacher (Brown et al., 2008; Dotterer, et al., 2009; Frank Porter Graham Institute [FPG], 2005);
- Universal screening, regular progress monitoring, and timely data analysis to ensure that children are making progress (Byrne, Fielding-Barnsley, & Ashley, 2000; Case, Speece & Malloy, 2003; Speece & Case, 2001; Speece & Ritchey, 2005);
- Differentiated instruction based on children's progress, adding additional layers of support until adequate progress is achieved (Fuchs & Fuchs, 2007; ResearchWorks, 2005; VanDerHeyden, Snyder, Broussard, and Ramsdell, 2007);

- Empowering general education teachers to collaborate with special education personnel, related service providers, and instructional coaches to create and implement specialized support plans. These specialized support plans provide additional targeted instruction related to students' Individualized Education Plans; and
- Professional development and individual coaching for teachers (Joyce & Showers, 1983; Neuman, 2009; Neuman & Cunningham, 2009).

In cities like Washington, DC, where two of every three children are born to single mothers living in poverty, where one in every five children qualifies for special education, and where 69 percent of fourth grade children cannot read at a basic level of understanding as measured by the NAEP (2010), AppleTree's Every Child Ready program has the potential to make a dramatic impact on the lives of thousands of young children if properly implemented and brought to scale.

Preschool as an academic intervention has been demonstrated to work in highly controlled research studies ([High Scope/Perry Preschool Project] Weikart, Deloria, Lawser, & Wiegink, 1970); [Carolina Abecedarian Project] Ramey & Campbell, 1984; [Chicago Parent-Child Center] Reynolds, Temple, Robertson, & Mann, 2001a, 2001b), leading to a philosophical change on the potential of preschool and the appropriate use of data. Only a few cities or states have adopted or implemented large scale programs with sufficient intensity or quality to achieve the impacts demonstrated by the research studies (ACF, 2002; Early, Barbarin, Bryant, Burchinal, Chang, et al., 2005; Henry, et al., 2001, 2003; Peisner-Feinberg & Maris, 2005a, 2005b; C.T. Ramey, Ramey, & Stokes, 2009; Zill & Resnick, 2006).

The landscape of public early childhood education in the United States is dominated by programs that operate in classroom settings that are not conducive to developing the cognitive domains needed for success in kindergarten and beyond, and employ undereducated,

inadequately supported instructional personnel lacking coherent curricula or measurement tools. It is particularly troubling that poorer children who benefit most from high quality instruction are the most likely to have undereducated classroom teachers (Dotterer et al., 2009).

Closing the achievement gap demands the creation of centers of excellence in preschool language and literacy that foster engagement in learning—for both children and parents—and that align, coordinate, and measure progress in the critical processes that develop young children’s cognitive domains and transition them into kindergarten. Success requires high standards, structure, measurement, qualified personnel, leadership, effective implementation, and resources.

*Factor (2): Strategy, goals, objectives, and projected outcomes of the proposed project.*

This project will (1) Implement Every Child Ready with more children featuring a more sophisticated evaluation to demonstrate the model’s impact; and (2) leverage the considerable knowledge gained in the pilot into standardized, documented processes, products, and tools that can be shared to scale this effective preschool intervention more broadly.

Every Child Ready project goals are outlined below:

*Goal 1. All participating children arrive at kindergarten with the language, early literacy, early math, and social/emotional skills necessary for school success.*

*Goal 2. All participating classrooms implement Every Child Ready Model with fidelity.*

*Goal 3. Children who participate in the Every Child Ready program demonstrate higher achievement in early elementary school than their non-participating peers.*

*Goal 4. Every Child Ready is a documented system of tools and practices available to be scaled and shared.*

We plan to implement the Every Child Ready program with a select group of committed charter preschool partners who enroll nearly 800 children. Partners are committed to work

together to create and maintain an environment where goals and objectives can be achieved and where the systems, processes, and tools will be adopted and sustained in forms aligned with their individual school cultures to close the achievement gap. Washington, DC's high level of public funding for charter preschools (\$12,000 per child) optimizes conditions for program implementation. (Please see Appendix H for a complete description of participating schools.) Every Child Ready's strategies for achieving each the goals are outlined below.

***Goal 1. All participating children arrive at kindergarten with the language, early literacy, early math, and social/emotional skills necessary for school success.*** Every Child Ready's foundational activity is to ensure that all schools provide a robust, engaging, and developmentally-appropriate instructional program to all children as part of their everyday classroom experience (Tier 1). Every Child Ready works with partner schools to ensure that they meet standards in the five Every Child Ready Core Non-Negotiables of Effective Preschools that are listed below:

1. **Structure**: Classrooms are appropriately staffed, furnished, and supplied. Time exists for Every Child Ready professional development and independent and coach supported team teacher planning.
2. **Curriculum**: A thematic curriculum that includes a defined scope and sequence of instructional activities that support the development of children's language, early academic, and social-emotional skills is implemented with fidelity
3. **Classroom Climate and Management**: Classrooms are warm, safe, and productive. Positive behavior expectations are communicated and upheld consistently. Time is allocated to valuable instructional activities and transitions are minimized.

4. Instruction: High levels of teacher interaction support learning and scaffold understanding. Teachers balance structure with choice and explicit instruction with exploration. Play supports children's learning.
5. Parent Engagement: Teachers actively seek to make connections with their children's family members and other important people in their children's lives. Teachers communicate the school's educational goals for children, how children are progressing toward those goals, and how families can complement and extend classroom learning.

Using child data and data from standardized classroom observations, as well as survey data, Every Child Ready provides a profile to school leaders and individual teachers regarding their strengths and opportunities in the five core areas. Every Child Ready staff together with school leaders and staff plan to address any deficiencies.

Once schools and classrooms achieve basic levels in the Every Child Ready Core Non-Negotiables, Every Child Ready begins universal screening, regular progress monitoring, and data analysis to ensure that children are making progress, and Every Child Ready uses data collected through baseline assessments (and regular progress monitoring, described in Table A-1) to improve teaching and learning for all children. Where possible, Every Child Ready utilizes validated research-based assessments. When necessary, Every Child Ready has created assessments aligned with the research. Teachers monitor progress through regular observations and direct assessment. All assessments are designed for young children and are individually administered.

Every Child Ready utilizes Spectrum K-12's EXCEED RTI, a web-based data analysis and student progress reporting system, to allow immediate access to data and data analysis tools. Coaches support the gathering of data, and along with teachers, use data from progress monitoring to plan whole-group, small-group, and individual instruction as well as to monitor of

children’s growth. Data are shared regularly with parents during conferences and Every Child Ready supports teachers in sharing the data.

| Table A-1 Comprehensive Progress Monitoring System |   |
|--|---|
| Construct  | Progress Monitoring (3 times/yr)  |
| Social/Emotional Development                       | <i>Observation of Child Classroom Functioning</i> – Every Child Ready (ECR) created observational assessment that documents child’s observable behavior related to approaches to learning, self-regulation, and peer relationships. |
| Language   | <i>Individual Growth and Development Indicators</i> (Missall & McConnell, 2004); one-minute timed picture naming task. Using local norms from pilot project correlated with end of year PPVT/EVT scores.                            |
| Phonological Awareness & Print Concepts            | <i>Get Ready to Read</i> -(Whitehurst et al., 2000) a brief assessment designed to assess children’s knowledge of phonological awareness and phonics, book conventions, print, and writing.   |
| Alphabet Knowledge                                 | ECR Letter Knowledge Assessment-Brief, criterion-based assessment of children’s knowledge of letter names and sounds.   |
| Mathematics  | ECR Early Math Assessment-Criterion based assessment of children’s mastery of early math skills.  |

Using baselines assessments described in the evaluation, observational assessments and the progress monitoring assessments outlined in Table A-1 above, coaches help teachers analyze individual children’s strengths and needs. Every Child Ready uses a dual discrepancy model (Fuchs, 2003) to identify children who score in the bottom quartile on baseline measures and who also display slower growth rates in the EXCEED RTI than their peers for targeted Tier 2 lessons. Teachers and coaches craft Tier 2 plans using targeted evidence-based activities from Every Child Ready’s Intervention Database for delivery of small group lessons to at-risk

preschoolers. Intervention activities are based on individual instructional need, classroom ecologies, developmentally appropriate practices, and child interests. Parents are encouraged to participate in the planning process, during which content, duration, intensity, and methods for determining effectiveness will be specified.

Research-based Tier 2 activities are delivered to individual children or groups of children in their regular classroom environment in addition to Tier 1. In most cases, targeted children will never know that they are receiving anything extra or different from their peers.

Brief appropriate curriculum-based assessments and observations administered in predetermined intervals will help teachers evaluate the effectiveness of Tier 2 lessons. Tier 2 plans are also stored online in EXCEED RTI giving access to coaches and school leaders. Using this information, teachers, coaches, and parents will carefully monitor children's progress and revise plans as needed, so that valuable learning opportunities are not lost.

*Professional development and individual coaching for teachers:* Instructional quality is a key contributor to children's achievement, yet varies immensely across teachers (NICHD ECCRN, 2000). Although professional development is often cited as the key to improvement, teachers rarely receive support in implementing what they have learned in professional development, a key to change in teacher practice (National Research Council, 2001; Ramey & Ramey, 2005). Classroom-based coaching to support implementation of content delivered through workshops is more effective than workshops alone (Neuman & Cunningham, 2009).

Every Child Ready provides high-quality, sustained, and intensive professional development to: (1) enhance overall instructional quality through research-based practices and (2) support teachers in using data to support improved teaching and learning. Currently, Every Child Ready utilizes workshops (approximately 80 hours per year), individual coaching

(approximately 120 hours per year per classroom), and principal administrator-led professional learning communities and portfolio development (approximately 30 hours per year).

The scope and content of the professional development is data driven. In addition to using child progress data, Every Child Ready collects classroom and instructional quality data using two research-based observational tools, the Early Language and Literacy Classroom Observation (ELLCO Pre-K; Smith, Brady & Anastasopoulos, 2008), which measures the quality of the literacy environment and literacy instruction, and the Classroom Assessment Scoring System (CLASS Pre-K; Pianta, LaParo & Hamre, 2004), which measures the quality of the overall classroom, classroom organization and management, and the level of instructional support.

While professional development workshops ensure that all participants have uniform access to information, Every Child Ready utilizes classroom-based coaching to translate new information into change in teacher practice. Classroom-coaching protocols that utilize observable classroom and instructional quality data, child progress data, and expressed teacher need are included.

***Goal 2. All participating classrooms implement Every Child Ready Model with fidelity.***

Georgetown University Center for Health and Education will document the required components of the Every Child Ready model and the extent to which they are implemented in project classrooms.

***Goal 3. Children who participate in the Every Child Ready demonstrate higher achievement in early elementary school than their non-participating peers.*** This project includes two years of program implementation and two subsequent years of research to establish the impact of Every Child Ready on children's achievement in early elementary school. Please see the response to

Selection Criterion D, *Quality of Project Evaluation* for additional information on how achievement of this goal will be measured.

***Goal 4. Every Child Ready is a documented system of tools and practices available to be scaled and shared.*** While Every Child Ready has proven effective at improving classroom quality, instructional quality, and child achievement, like many programs in development, much of the implementation of Every Child Ready should be better-documented and systematized, which is very resource and time intensive. Among the projected outcomes of the project, Every Child Ready will create a(n):

- Every Child Ready Handbook for principals and teachers that documents all of the systems, processes, and tools necessary to implement the model;
- Series of professional development modules available electronically that targets each of the five Core Every Child Ready Non-Negotiables, the assessment process, differentiating instruction and the most commonly selected interventions for teachers, and using EXCEED RTI, the project web-based data analysis program; and
- Every Child Ready coaching progression to support targeted coaching interactions and objective assessment of teacher change.

**B. Strength of Research, Significance of Effect, and Magnitude of Effect (up to 10 points)**

*Factor (1): Research-based findings or reasonable hypotheses that support the proposed project.*

The foundation for reading skills and academic success is developed early in life (National Research Council, 2001). Unfortunately, children are likely to start kindergarten farther behind than others if their parents (1) lack a high school diploma, (2) do not speak English as a first language, or (3) live in high poverty households. (Hart, B., & Risley, T. 1995). These children often become poor readers who struggle with literacy and learning throughout their often-abbreviated academic career.

Scientific research strongly supports the notion that children, from low-income, multi-risk families and communities, who participate in intensive, high quality preschool programs, show long-term benefits in the areas of general intelligence and language development. (e.g., Barnett, 1995; Bryant & Maxwell, 1997; Haskins, 1989; Karoly et al., 1998; S. L. Ramey & Ramey, 1999, 2000; Yoshikawa, 1995). Recent studies found that large-scale, public school pre-k programs help children reach the national average on measures of academic readiness (Gormley, Phillips, & Gayer, 2008; C. T. Ramey, Ramey, & Stokes, 2009), suggesting that it is possible to take high-quality early education to scale. Longitudinal research reveals that advancements in the quality of children's preschool experiences have effects that can be detected into adolescence and early adulthood (Cambell et al, 2008; Pungello et al., 2010; Tabors, P.O., Snow, C.E., & Dickinson, D.K. 2001).

*Factor (2): The extent to which the project has been attempted with promising results.*

Public charter preschools, educating at-risk children in the District of Columbia have piloted AppleTree's Every Child Ready intervention model. An independent evaluation of this program recently found *significant and large effect sizes (0.24 to 0.80) on child early language and math skills* (C. T. Ramey, Ramey, Crowell, & Polanski, 2010). *These effects were found for both three-year-olds and four-year-olds, as well as for children with and without disabilities.* Please see the response to Selection Criterion A for additional information regarding children's outcomes. Teachers in this program scored consistently well on measures of classroom emotional climate, instructional support, and support for early literacy (as measured by CLASS and ELLCO), while classrooms scored higher than averages reported for national studies on all three domains of the CLASS (6.3 versus 5.5 on emotional support for Partnership and national average, respectively; 5.6 versus 4.5 on classroom organization; and 3.7 versus 1.95 for instructional support) (see, Pianta, LaParo, & Hamre, 2008, Table A.8).

Factor (3): The extent that the project will have a positive impact on student achievement, student growth, and closing achievement gaps.

The Every Child Ready model has strong evidence of success as demonstrated and described above. Philanthropic organizations, technical assistance providers, the State Education Office, school administrators, principals, and teaching staff (Refer to Appendix D for MOUs and Letters of Support) recognize the program's value and potential impact.

By using child assessment data to implement a three-tiered RTI framework regularly and by providing professional development to highly qualified teachers and assistants consistently, AppleTree Institute believes Every Child Ready, if funded, will be recognized as a leading national model for ensuring children's success in early childhood education, improving the likelihood of participating students' overall academic success and empowering them to lead successful lives.

### **C. Experience of the Eligible Applicant (up to 25 points)**

Factor (1): Past experience in implementing projects similar to the proposed project

AppleTree Institute for Education Innovation is a fourteen-year-old 501(c)(3) organization dedicated to increasing access to quality preschool and pre-kindergarten that raises the trajectory of young children's learning to ready them for success in school, work, and life. AppleTree's original mission was to increase the supply of effective schools through innovation in the District of Columbia. AppleTree Institute created the nation's first charter schools incubator via a public-private partnership with the General Services Administration, the Environmental Protection Agency and the DC Department of Housing and Community Development. AppleTree Institute leased surplus federal office space, funded renovations through a community development block grant and private funds, created interim classrooms, and provided technical assistance and direct financial support for Washington Math Science

Technology PCS, Cesar Chavez Public Charter High School for Public Policy and Paul PCS.

These successful charter schools serve more than 1800 students, with combined operating budgets totaling more than \$21 million annually.

While AppleTree Institute's support launched these secondary schools successfully, Jack McCarthy, the AppleTree Institute's Managing Director, saw that most of the children entering 9<sup>th</sup> grade at these schools were years behind in reading and math ability. Intrigued by the progress report of the National Reading Panel in 1999 and emerging research on the impact of high-quality early education programs to create lasting and meaningful change in children and families, McCarthy redirected AppleTree Institute's focus to early childhood.

In 2000, AppleTree Institute created Apple Early Literacy Preschool, serving 36 children from families in TANF job training programs. Operated as a lab school, leading early childhood experts including Dr. Judy Schickedanz and David Dickinson collaborated with AppleTree Institute to pilot their research-based curriculum, *Opening the World of Learning* (now published by Pearson), at the preschool. Child outcomes in vocabulary and pre-literacy skills were strong. With the Research and Development phase completed, AppleTree Institute applied for and was awarded a charter for AppleTree Early Learning Public Charter School in 2005. The school added two new sites in 2007 and is building two new campuses this year.

*Factor (2): Information and data demonstrating improved student achievement and attainment*

In 2005, AppleTree Institute created The DC Partnership for Early Literacy (DCPEL) to create centers of excellence in early language and literacy with a community-based organization, a charter school, and a DC Public School. This partnership later included three charter schools and led to the "Every Child Ready" model. These partnerships produced outstanding child outcomes and demonstrated AppleTree Institute's ability to support implementation of the

instructional program in different settings under different conditions with successful outcomes.

(Refer to Section A Factor (1) and Section B Factor (1) for details regarding the model's success)

#### **D. Quality of the Project Evaluation (15 points)**

The project's independent external evaluation will assess the extent to which the project has achieved its goals. Dr. Craig Ramey and Dr. Sharon Ramey, frequently-cited research and program development leaders in this field, will lead the independent evaluation. Their extensive qualifications are discussed under Quality of Project Personnel.

##### *Factor (1): The extent to which methods of evaluation are appropriate to the project*

The evaluation will include a randomized controlled trial (RCT), which is feasible due to the charter school enrollment procedures in the District of Columbia. Charter schools with applications that exceed available placements must hold a publicly-witnessed lottery. Based on previous years' lotteries, it is anticipated that approximately 50 to 60 percent of eligible children will be accepted into one of the public charter schools participating in the Every Child Ready project. It is anticipated that the treatment group will contain 42 classrooms in 3 public charter schools. Those classrooms will enroll approximately 800 children.

The project will recruit those children and families randomly not selected for the participating charter schools for the control group. Various methods will be used to document the classroom experiences of the control group children in addition to the use of the same assessments and observations used with the treatment group. There are separate lotteries for three- and four-year-olds. Controls will be recruited separately for each age group. To encourage participation, parents will be offered age-appropriate literacy-related materials for their home and remuneration for the time involved for research, as well as clinical referral and resources information if clinical need is evidenced as part of the research and evaluation process.

*Factor (2): The extent to which the methods of evaluation will provide high-quality implementation data and performance feedback, and permit periodic assessment of progress*

Classroom observations by independent observers, using the Classroom Assessment Scoring System (CLASS) and Early Language and Literacy Classroom Observation Tool (ELLCO) will be conducted in the Fall and Spring of the 2nd and 3rd project years. Independent assessors will conduct child assessments in the Fall and Spring of the 2nd and 3rd project years. Assessors will be trained and must reach appropriate levels of reliability before performing the assessments. The measures to be used are described in Table D1. The child and classroom scores will be shared with treatment teachers and classroom coaches for differentiating instruction under the RTI model.

In addition to independent observers, teachers and coaches will be trained in child assessments and classroom observations, respectively, to be used throughout the school year to permit on-going assessment of child progress and teacher professional development needs.

Treatment and control children will be followed through the end of first grade. Children going to District of Columbia Public Schools or Public Charter Schools are assessed at the end of Kindergarten and first grade. These data will be obtained from the school. Kindergarten teachers will be asked to complete TCRS to monitor children's school-related behavioral competence. Parent interviews will ascertain whether children have experienced grade retention or special education placement during kindergarten or first grade.

*Factor (3): 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*

Data Collection: Procedures are presented in Table D-1, which outlines the indicators, the measures and their psychometric properties, and the data collection timeline for the project's independent evaluation. Baseline child-level data will be used to inform instruction, and to serve

as indicators of the child’s developmental status at time of enrollment in Every Child Ready classrooms; all children in Every Child Ready classrooms will participate in all assessments as part of their educational program. Parents will be informed of the use of assessment data to evaluate the Every Child Ready program, with full protection of child and family anonymity and privacy. The program will inform parents of their right to exclude their child’s data from the evaluation if they so choose. This follows the recommendations of the National Academy of Sciences about Institutional Review Board (IRB) procedures in studying educational program effectiveness, particularly for at-risk and minority children. Control group children will be assessed by blinded assessors on key outcomes and a parent survey will be used to collect information about family background and child participation, if any, in other pre-K programs. During the planning year we will also explore the feasibility of using the CLASS and ELLCO instruments in classrooms that control group children attend. This is similar to the procedures that we used in the Abecedarian Project and project CARE (Burchinal, Lee, & Ramey, 1989). The protocol will be reviewed by Georgetown University’s IRB during the planning year.

| <b>Table D-1. Evaluation Goals, Indicators and Measures</b>   |  |  |
|---|--|--|
| Goal 1. All participating children arrive at kindergarten with the language, early literacy, early math, and social/emotional skills necessary for school success |  |  |
| Indicator   | Measure/Psychometric Properties  | Schedule   |
| The percentage of participating children who achieve the national norm in receptive vocabulary.   | Peabody Picture Vocabulary Test IV (Dunn & Dunn, 2007)<br>Nationally normed measure of receptive vocabulary; test-retest $r=.93$ | September and May in years 2 and 3.<br><br>Assessment coverage will be 100%. |
| The percentage of participating children who make significant gains (standard score gains $\geq 4$ ) in the development of their receptive vocabulary.            |  |  |
| The percentage of participating children who achieve the national norm in   | Test of Preschool Early Literacy (TOPEL) Phonological  |  |

|   |  |   |
|---|--|---|
| phonological awareness.   | awareness subtest (Lonigan, et al., 2007) Coefficient alpha=.87; reliability=.83   |   |
| The percentage of participating children who can meet established benchmarks of kindergarten readiness in letter knowledge.                   | PALS-PreK Uppercase Letter ID subtest. PALS-PreK (Invernizzi, et al., 2004) a random array of 26 letters.                              |   |
| The percentage of participating children who achieve the national norm in print concepts.   | TOPEL, Print Knowledge Subtest, Coefficient alpha=.95; reliability=.89   |   |
| The percentage of participating children who achieve the national norm in mathematics.  | Test of Early Mathematical Abilities (Ginsberg & Baroody), Coefficient alpha = .94; reliability = .93.                                 |   |
| The percentage of participating children who make significant gains (standard score gains $\geq 4$ ) in mathematics.                          |  |   |
| The percentage of participating children who achieve the normal range in social emotional skills.   | <i>Teacher Child Rating Scale</i> (TCRS; Hightower et al., 1986). —a nationally normed measure of school-related behavior competencies |   |
| The percentage of participating children who have positive dispositions towards school and learning at the end of their prekindergarten year. | What I Think of School (Reid & Landesman, 1988) Assesses young children's perceptions of school.                                       | In May of years 2 and 3 of the project. |
| Goal 2. All participating classrooms implement Every Child Ready Model with fidelity.   |  |   |
| Indicator   | Measure/ Properties  | Schedule                                |
| The percentage of participating programs that include programmatic structures for program quality necessary for the ECR model.                | Checklist to be developed by project team and evaluators.  | Fall and Spring of Years 2 and 3.       |

|   |   |                                  |
|---|---|----------------------------------|
| The percentage of participating classrooms that achieve ratings of excellence ( $\geq 90\%$ of all possible points) on measures of Tier 1 classroom quality.          | Early Language and Literacy Classroom Observation (ELLCO).<br>Classroom Assessment Scoring System (CLASS).    | September and May, Years 2 and 3 |
| The percentage of teachers who implement universal screening and progress monitoring.   | The percentage of children in teachers' classroom who receive full battery of screens and progress monitoring | Years 2 and 3                    |
| The percentage of teachers who use data appropriately to differentiate instruction in Tier 2.   | The percentage of complete Tier 2 plans that include baseline data, progress monitoring, and fidelity.        | Years 2 and 3                    |
| The percentage of parents who participate in data conferences with teachers.  | Parent response sheet developed by project.   | Years 2 and 3                    |
| Kindergarten transition profile   | To be developed by project in year 1.   | Years 3, 4, and 5.               |
| Goal 3. Children who participate in the ECR demonstrate higher achievement in early elementary school.  |   |                                  |
| <b>Indicator</b>  | <b>Measure/ Properties</b>  | <b>Schedule</b>                  |
| The percentage of end of year kindergarten and first-grade students who achieve benchmarks in letter-naming fluency, initial sound fluency and nonsense word reading. | Dynamic Indicators of Basic Early Literacy Skills (DIBELS, Good & Kaminski, 1996)                             | Years 3, 4 and 5 of the grant    |
| The percentage of mid-year kindergarten students who achieve appropriate school-related behavior competencies.  | Teacher Child Rating Scale (Hightower, et al., 1986)  | December of years 3, 4 and 5     |
| The percentage of children a retained in grade K and 1 <sup>st</sup> .  | Parent interview  | Spring in years 3, 4, 5          |
| The percentage of children identified for special education in grades K and 1 <sup>st</sup> .   | Parent interview  | Spring in years 3, 4, 5          |

Data analytic strategy: The Georgetown University Center on Health and Education will have primary responsibility for designing the data entry, monitoring, and analysis plans. Consistent with our project's goal of long-term sustainability and building capacity for future data collection and practical use of assessment data, the Rameys will lead the design of easy-to-use data entry screens that will also generate profile and summary scores for classrooms and children. Data analysis will be approached at five levels: (1) ongoing descriptive reports about data quality, accuracy, and completeness; (2) descriptive summary statistics for each classroom and major groups of children (e.g., those with identified special needs, those who are English language learners, boys versus girls) that display distributions of data (and their central tendencies and variances) graphically and numerically, to be provided to classrooms and the project team twice per year (fall and spring); (3) comparative statistics that focus on the association between classroom instruction and child outcomes in the treated group. Treatment and comparison group children will be compared primarily through repeated measures ANOVAs and MANOVAS that permit taking into account baseline differences, if any, in children and classrooms; (4) model building will consider more detailed information about the children, the teaching team, the school environment, and the children's family background to estimate the magnitude of impact from a higher quality, exemplary program on children's academic achievement trajectory; and (5) exploratory data analyses that build upon the interactive knowledge of the participants and the evaluators, who will jointly ask questions (generate hypotheses) about factors that may be influencing classrooms and children (such as neighborhood level influences, children's attendance, overall classroom composition, school quality indicators).

Through the partnership model, we will write practical reports for the project participants, and select findings that will be of interest to wider practitioner and community audiences. The

Rameys and other Georgetown University investigators will conduct in-person data analysis sessions (providing multi-site software programs such as SPSS) with Every Child Ready project participants. Most importantly, the data analytic sessions will provide a natural link to underscoring the evidence base for the assessments and the scientific understanding of the factors that promote young children's learning.

Although the major focus will be on the assessments listed above in Table D-1, the local evaluation will include qualitative and documentation data about the extent to which proposed activities occur, such as participation rates in professional development, the distribution and amount of in-classroom mentoring supports, attendance at planned Partnership meetings, etc. The Georgetown team will conduct annual videotaped interviews with all project staff and participants about their experience, focusing on suggestions for strengthening the project each year.

*Factor (4): The extent to which the proposed project plan includes sufficient resources to carry out the project evaluation effectively.*

The Rameys have conducted and supervised many large evaluations of early education settings so are experienced in the planning and allocation of resources necessary to completing such an evaluation. The Georgetown University Center on Health and Education has staff experienced in hiring and training observers and assessors; managing data collection, verification, and entry; and analyzing research results. The Rameys and staff have successfully collaborated with AppleTree Institute in previous projects.

#### **E. Strategy and Capacity to Further Develop and Bring to Scale (up to 5 points)**

*Factor (1): The number of students proposed to be reached and the capacity to do so*

With its partners, AppleTree Institute is prepared to implement the Every Child Ready project in order to positively impact 800 students over twenty-four months. Please see Appendix

H for a description of the schools and their demographics. The three participating charter schools are projected to serve over 800 three- and four-year olds in Washington, DC during school years 2011-12 and 2012-13. These schools are currently operating, fiscally sound and in good standing with their authorizer, the DC Public Charter School Board.

*Factor (2): The eligible applicant's capacity to bring to scale the proposed program*

AppleTree has a 14-year history of designing, implementing and operating complex multi-year projects to both increase program quality and to expand enrollment successfully. AppleTree Institute's experience in designing, incubating and supporting expansion of charter school programs (Section C) that now serve thousands of DC children is further evidence of our capacity. AppleTree Institute is an experienced, trusted collaborator with city agencies, charter schools, the District of Columbia Public Schools, Institutes of Higher Education (Johns Hopkins University and Georgetown University), and both for-profit and not-for-profit organizations. AppleTree has strong fiscal and operational procedures and controls, aligned with Sarbanes Oxley best governance practices and 14 years of clean audits.

*Factor (3): The feasibility of the proposed project to be replicated successfully*

Despite a high percentage of children participating in preschool, the overall quality of early childhood education programs in Washington, DC is low. The District of Columbia Council enacted the Pre-K Enhancement and Expansion Act in 2008 to increase access to preschool and improve quality by providing nearly \$12,000 per child (annually via a Uniform per Student Funding Formula) to private and public pre-k providers. According to a recent program audit, no more than 20 percent of preschool seats meet established benchmarks for quality.

Responding to the need to improve quality, and recognizing AppleTree's track record of success in improving student outcomes, the Office of the State Superintendent of Education

(OSSE) has agreed to: (1) Support Every Child Ready’s efforts to track student achievement; (2) Participate in the project’s advisory committee to ensure alignment; and (3) Facilitate Every Child Ready’s dissemination of the tools and outcomes through their Office of Training and Technical Assistance in the Office of Early Childhood Education. This cooperation increases the project’s immediate impact to the nearly 14,000 preschool-age children in the District of Columbia. Hartman Business Consulting, a strong, reputable, regional technology firm, will work with AppleTree to develop systematic tools, multimedia professional development, and online portals intended to simplify dissemination of the needed materials, and reduce the cost and time associated with implementation significantly.

*Factor (4): Estimate of project cost which includes start-up and operating costs per student per year. Projected costs to reach 100,000, 250,000, and 500,000 students.*

In order to successfully impact 800 students over five years, AppleTree Institute estimates that \$6,437,835 is needed. This \$6,437,835 includes \$938,453 to cover initial start-up costs and \$1,375.00 as operating costs per student per year.

Table E-1 has been developed to estimate the cost needed in order to Every Child Ready to successfully reach 100,000; 250,000; and 500,000 students. Estimated costs for Every Child Ready assume existing full-day early childhood classrooms of mid-range quality with Internet access led by a bachelor degreed teacher. Costs are for materials, professional development and intensive in-classroom coaching.

| <b>Table E-1</b>          |                                    |
|---------------------------|------------------------------------|
| <i>Number of Students</i> | <i>Estimated Cost</i>              |
| 100,000 students          | \$42,500,000 or \$425 per child    |
| 250,000 students          | \$84,335,000 or \$337.34 per child |
| 500,000 students          | 131,210,000 or \$262.42 per child  |

In the District of Columbia, AppleTree will support further development, replication, and dissemination of information in two ways. First, information will be disseminated directly – by way of workshops, training, toolkits and presentation opportunities with existing partners and supporters including the DC Office of the State Superintendent of Education, Friends of Choice in Urban Schools, DC Prep Academy, Early Childhood Academy, and NewSchools Venture Fund, which recently provided a grant to AppleTree for business planning and expansion. Second, AppleTree will share information through a web-based portal that will be developed with our technology partner Hartman Business Consulting. This portal will provide access to program kits and reports that will track the progress of the program participants. Any and all student-related data provided by the portal will maintain complete anonymity and comply with all FERPA requirements.

**F. Sustainability (up to 10 points)**

*Factor (1): The extent to which the applicant has the resources and support from stakeholders.*

AppleTree Institute has gained the support of core stakeholders and partner organizations each of who is strongly committed and ready to implement Every Child Ready. These organizations include: AppleTree Early Learning Public Charter School, DC Prep Academy, Early Childhood Academy, and the Office of the State Superintendent of Education of the District of Columbia.

PNC Bank, Fight for Children, and The Morris & Gwendolyn Cafritz Foundation are all organizations that have supported AppleTree Institute in the past at levels consistent with the 20% matching fund requirements of i3. Each have expressed support for this proposal and indicated a willingness to provide support in the event that our proposal is selected (Appendix D).

Factor (2): The possibility for incorporating the project purpose, activities, or benefits into ongoing work at the end of grant

Washington, DC is implementing robust educational improvement strategies within DC Public Schools, the DC Public Charter Sector and the early education sector through the Pre-K Enhancement and Expansion Act. This reform-oriented landscape and the generous level with which the District of Columbia funds education provides an environment conducive to the long-term sustainability of the project's outcomes. Every Child Ready, which is focused on providing intensive professional development for staff and devoting resources to instructional quality, is designed to build capacity. Each participating organization will have the resources and capacity to continue as centers of preschool excellence after the grant period ends. Since Every Child Ready's outcomes will include a documented system of tools and practices available to be scaled and shared, staff turnover will not affect an organization's ability to implement it with fidelity.

**G. Quality of the Management Plan and Personnel**

Factor (1) The adequacy of the management plan to achieve the objectives.

Every Child Ready will be adequately staffed to begin successful and efficient implementation by November 1, 2010. It will benefit from a strong advisory board with knowledge, expertise, and experience in research, governance, training, implementation, and management. The implementation of the project will occur in three stages. Year 1 activities will be planning and intervention documentation. Years 2 and 3 are the implementation years of Every Child Ready with approximately 800 students at the partner sites. Year 4 and 5 activities are related to following the participating children and the control group to establish Every Child Ready's impact on early elementary achievement. The timeline and benchmarks outlined in Table G-1 specify the management plan and reflect the commitment to be fully implemented.

| <b>Table G-1 Management Plan</b>  |               |  |  |
|---|---------------|--|--|
| <i>Timeline Key: Q1(Oct.-Dec.), Q2(Jan.-March), Q3(April-June), Q4(July-Sept.)</i>                |               |  |  |
| <i>Benchmarks</i>   |               | <i>Indicator</i>   | <i>Responsibility</i>                        |
| Hold 2-day project leadership meeting; review all activities, timelines, requirements, and tasks. | Q1            | Meeting agendas; established detailed work plan with benchmarks and indicators | Project Director/Project Manager (PD/PM)     |
| Ensure Sr. project staff in place   | Q1            | Qualified candidates hired   | (PD/PM)                                      |
| Establish Advisory Board and twice yearly meeting schedule  | Q1            | Participants and meeting schedule established                                  | (PD/PM)                                      |
| Execute contract with Georgetown University, Hartman Business Technology and Spectrum K-12        | Q1            | Contracts on file  | (PD/PM)                                      |
| Develop draft ECR Handbook, establish PD schedule, and ECR coaching progression                   | Q1<br>-<br>Q3 | Drafts complete for distribution   | Prof. Dev Manager<br>Intervention<br>Writers |
| Exceed RTI data system updated with revised Intervention Database and ECR procedures              | Q3            | Documentation on file  | Prof. Dev Manager<br>Data Manager            |
| Hire and train ECR coaches  | Q3            | Qualified candidates hired   | Prof. Dev Manager                            |
| Obtain IRB approval   | Q2            | IRB approval on file   | Georgetown Univ.                             |
| Coordinate data-sharing with OSSE   |               | MOU on file  | PD/PM  |
| Document assessment and evaluation processes  | Q2<br>Q3      | Drafts complete for distribution   | Data Manager<br>Georgetown Univ.             |
| Establish control and intervention groups for year 2  | Q3            | Rolls on file  | Georgetown University                        |
| Hold week-long training with ECR partner teachers and administrators                              | Q1            | Agendas; invoices; sign-in sheets  | Prof. Dev. Manager                           |
| <i>Years 2 and 3 – Project Implementation.</i>  |               |  |  |
| Conduct ECR Non-Negotiables Analysis; Develop School Plans  | Q1            | Documentation on file  | PD/PM  |
| Deploy coaches to schools   | Q1            | Materials distribution log;  | Prof. Development                            |

|  |               |   |   |
|--|---------------|---|---|
|  | Q4            | coaching logs   | Manager   |
| Complete baseline child and classroom quality measures; data returned within two weeks of collection for project children  | Q1            | Data reports to teachers and administrators                   | Georgetown University                               |
| Collect video of exemplary classroom practice; develop web-based Modules with Hartman  | Q2<br>-<br>Q4 | Modules deployed in Q1 of Year 3                              | Prof. Dev Manager<br>Hartman Business<br>Technology |
| Implement and support progress monitoring and data analysis to improve instruction   | Q2<br>-<br>Q4 | Data in Exceed RTI  | Data Manager  |
| Conduct end-of-year child and classroom assessment   | Q3            | Data in file; reports returned to teachers and school leaders | Georgetown University                               |
| Meet with advisory and leadership groups; share data plan for continuous improvement.  | Q2<br>&<br>Q4 | Agenda/Recommendation on file                                 | PD/PM   |
| <i>Years 3 and 4 – Student Follow Up – Please see the response to Selection Criterion D, Quality of Project Evaluation for specific information regarding the follow-up study.</i> |               |   |   |

*Factor (2): The qualifications, of the project director and key project personnel.*

Mr. Jack McCarthy, AppleTree’s Managing Director, will serve as the project director. Please see the response to Selection Criterion C, Experience of the Eligible Applicant, for a summary of his accomplishments. Mary Anne Lesiak will serve as the full-time project manager. Mary Anne has served as project director for AppleTree’s Early Reading First grant that lead to the development of the Every Child Ready model. Lydia Carlis will serve as the Professional Development Manager, a role that she holds in the ERF grant as well. Resumes for each of these individuals and others who will likely play a role on the project team are included in Appendix C.