Authorizing Quality Charter Preschools to Close the Achievement Gap before Kindergarten

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The Need For Early Learning…

- Research shows 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 academic achievement and language development.

- In Washington, DC, one in every five children qualifies for special education, and 69 percent of fourth grade children cannot read at a basic level of understanding as measured by the NAEP (2010).

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Preschool Closing the Achievement Gap...

Programs need to do what matters, and do it well:
- Build oral language skills, vocabulary and background knowledge by teaching them about the world around them,
- Build alphabet knowledge and print knowledge,
- Build phonological awareness,
- Build early numeracy skills,
- Develop important social/emotional skills that lead to school-ready behaviors.

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Inputs, processes and outcomes...

- Inputs like teacher education, teacher credentials, teacher to student ratios, class size, and length of day, standards, and curriculum are easily measured but not sufficient to change children's learning.

- Processes should be data-driven and designed for continuous improvement of teaching and learning.

- Outcomes like gains in expressive and receptive vocabulary, phonological awareness, alphabet knowledge, print awareness, early numeracy and social/emotional skills and behaviors that contribute to success in school really matter.

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Characteristics of Effective Programs

- Warm, inviting, print-rich classrooms and nurturing, well educated teachers with strong vocabularies that engage children in learning,
- Standards-based, content-rich instructional programs with a scope and sequence and aligned assessments that are valid and reliable,
- Systems of data management, training and professional development that support continuous improvement of teaching, learning and management.
- Strong measurement of classroom quality, teacher engagement, growth in language, vocabulary, alphabet knowledge, phonological awareness, numeracy, and social emotional skills.

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AppleTree Early Learning PCS

Goal: To provide young children with the social, emotional and cognitive foundations that will enable them to succeed in school.

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Language and Pre-Literacy Skills that are Predictive of Later Reading Achievement

- Oral Language   ⟶   Most predictive of 3rd/ 4th grade reading

- Phonological Awareness

- Letter Knowledge   ⟶   Most predictive of first grade reading

- Print Awareness

- Invented Spelling

- Name Writing

- *From the National Early Literacy Panel Presentation, October 2005.*

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AppleTree's Evidence-based Inputs

AppleTree's pre-K program has been built in a manner consistent with the existing evidence from earlier effective experimental programs and with recommendations from leading scientific and educational organizations. These include:

- Lead teachers with a bachelor's degree;
- Highly qualified assistants, as defined by No Child Left Behind;
- Low child-to-teacher ratios, ranging from 5:1 to 7:1;
- Full-day program from 8:00 a.m. to 3:15 p.m., with nap and outdoor play;
- Screening and support services for children, including availability of social workers; and
- Provision of at least two meals per day.

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Additional evidence-based Inputs…

• All classrooms are supplied with rich, engaging materials and a content-centered curriculum, a thematic, comprehensive early childhood program with specific academic learning objectives along with well-defined daily activities and content to support children's attainment of objectives.

• Teachers, apprentice teachers, and teaching aides are all trained to use the curriculum and they receive support throughout the year in the form of professional development workshops and in-classroom coaching.

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The AppleTree difference: Evidence-based processes

AppleTree features the regular use of data to monitor each child's academic progress, the classroom environment, and teacher behavior. Adjustments are made in instruction and professional development in accordance with the data. Included in the periodic data collection are:

1. Regular assessments of instructional quality using two classroom observation systems-CLASS and ELLCO.
2. Regular assessments of children's academic progress to differentiate instruction in a three-tiered model:
   (1) Regular classroom
   (2) Intensive small group supplemental instruction, and
   (3) Supplemental individual support often provided in cooperation with a specialist.
3. Fall and Spring assessment of children's language, literacy, and mathematics skills using standardized and nationally normed measures.

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Measuring Outcomes: What Can Be Measured?

Classroom Quality: Measuring Educational Processes:

- Early Language and Literacy Classroom Observation (ELLCO) measures General Classroom Environment and Language and Literacy Environment.
- Classroom Assessment Scoring System (CLASS) measures Emotional Support, Classroom Organization and Instructional Support.

Child Outcomes: Measuring Growth in Key Domains:

- Peabody Picture Vocabulary Test IV measures growth in receptive vocabulary.
- Test of Preschool Early Literacy measures phonological awareness, print knowledge and definitional vocabulary.
- Alphabet Knowledge (26 upper case letters and letter sounds).
- Test of Early Mathematics Ability (TEMA) measures early math skills.

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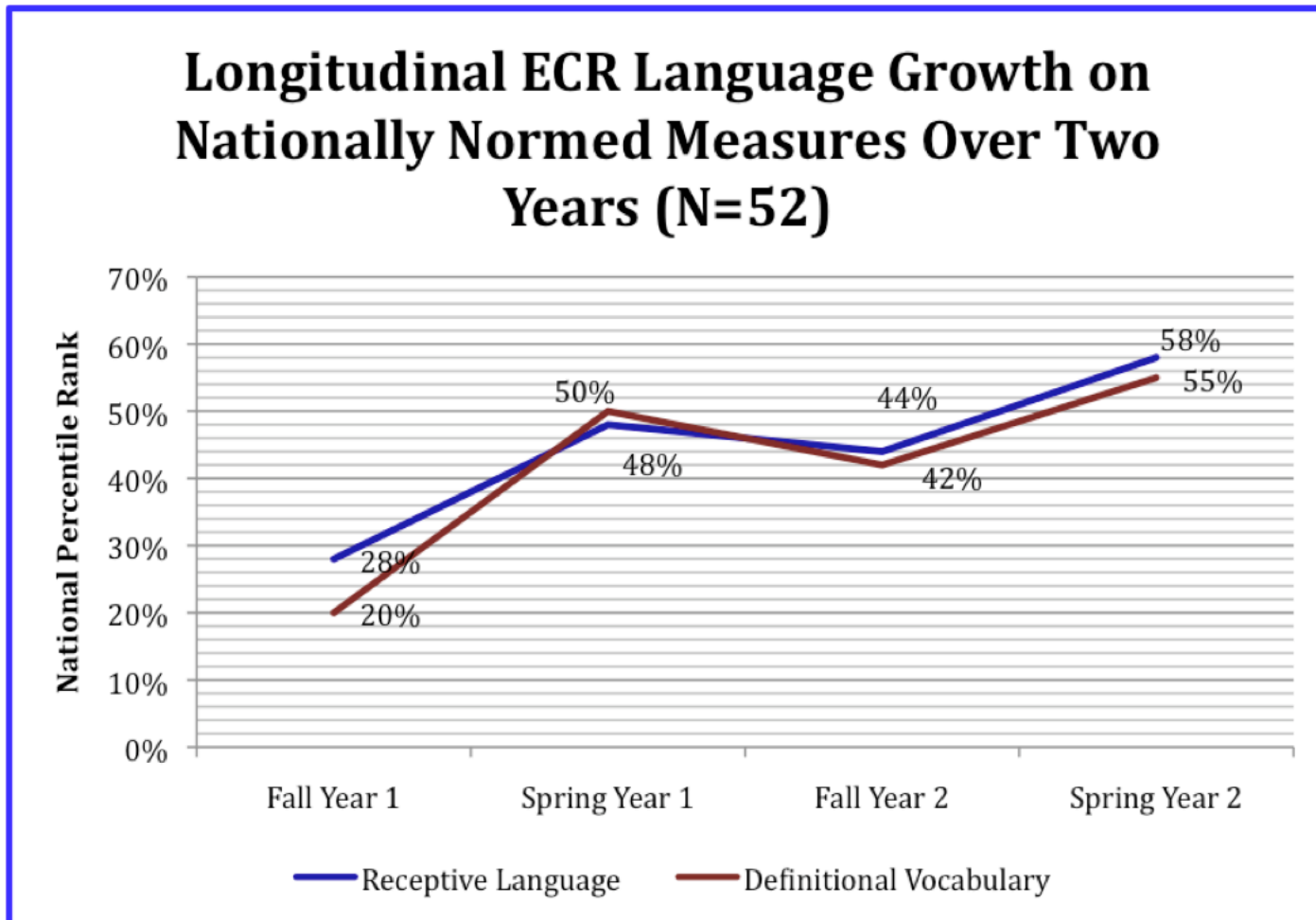
The Research Basis

The AppleTree approach to school readiness for children from low-income families has created "sizeable advancements in key developmental domains that have been identified in previous research as critical for school readiness. Two years of the [AppleTree] program raised children's performance by more than a full standard deviation (Effect size = 1.1), placing the AppleTree program among the most effective of which we are aware." –

-Dr. Craig Ramey, Director of Georgetown University's Center for Health and Education
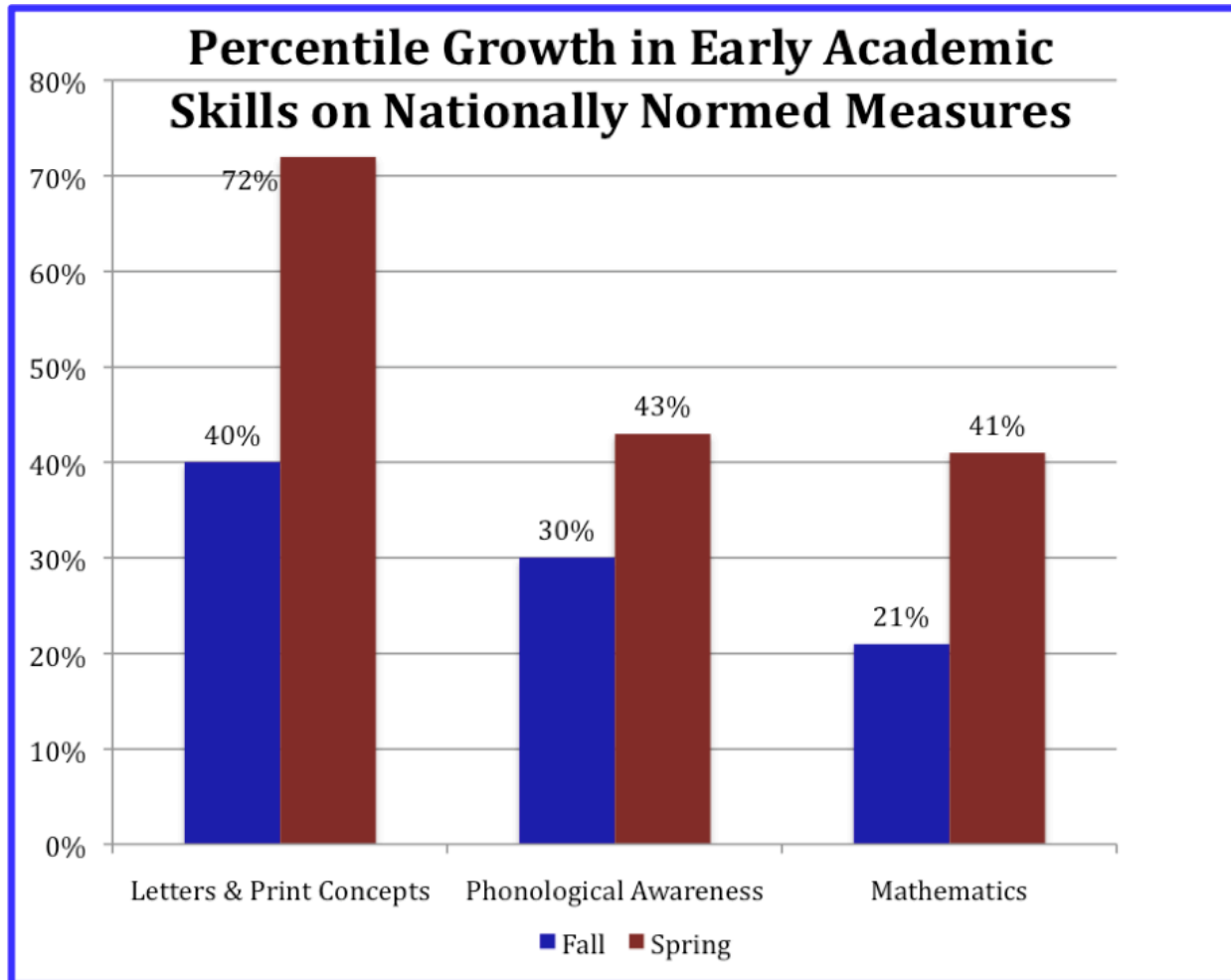
Student Data

Longitudinal ECR Language Growth on Nationally Normed Measures Over Two Years (N=52)

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Student Data

Percentile Growth in Early Academic Skills on Nationally Normed Measures

Category	Fall	Spring
Letters & Print Concepts	40%	72%
Phonological Awareness	30%	43%
Mathematics	21%	41%

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AppleTree Institute won an Investing in Innovation (i3) grant to develop *"Every Child Ready"*

i3 grants:

-target innovative practices that improve student achievement, close achievement gaps, decrease dropout rates, increase high school graduation rates, and increase college completion rates; and

-support grantee efforts to expand innovative practices that serve as models of best practices, working in partnership with the private sector and philanthropic community.

AppleTree Institute (ATI) is among 49 "Highest Rated" out of 1,698 I3 applicants nationwide—and the only DC-based organization with a program in the nation's capital selected. ATI's application was rated 13th overall.

Project Goals

- 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 the ECR model with fidelity.

- Goal 3: Children who participate in ECR demonstrate higher achievement in early elementary school than their non-participating peers.

- Goal 4: ECR is a documented system of tools and practices available to be scaled and shared. Every Child Ready will document and systematize its model, making it available for sharing across institutions.

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Core Deliverables

1) An Every Child Ready Handbook for principals and teachers that documents all of the systems, processes, and tools necessary to implement the model.

2) A 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, using EXCEED RTI, the project web-based data analysis program.

3) An Every Child Ready coaching progression to support targeted coaching interactions and objective assessment of teacher change.

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AppleTree's Strategic Plan

AppleTree's NewSchools Venture Fund-sponsored strategic plan identifies three core efforts that comprise an innovative education reform initiative that has the potential to dramatically change the way policy makers fund and early childhood providers implement public education strategies to close the achievement gap in the District of Columbia and nationally:

1) The development, codification, and dissemination of the Every Child Ready model, to support stream-lined, economically feasible implementation in early childhood education organizations focused on serving economically disadvantaged children.

2) The expansion of AppleTree Early Learning Public Charter School (AELPCS) to reach more than 700 three- and four-year-old children in the District of Columbia and to serve as a national prototype for Every Child Ready.

3) The longitudinal evaluation of Every Child Ready by Dr. Craig Ramey, Director of the Center for Health and Education at Georgetown University and author of the seminal Abecedarian study on early childhood education.

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Thank you!

For more information on AppleTree Early Learning Public Charter School please visit our website: www.appletreeinstitute.org
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