

# Improving Education Outcomes for American Indian Children

#### Parents as Teachers' Investing In Innovations (i3) Grant









# **Investing In Innovations (I3) Fund**

- US Department of Education Initiative
  - Established under the American Recovery and Reinvestment Act of 2009
- 1700+ applications submitted
- 49 awarded in September, 2010
- Awarded to PAT and its consortium of 22 BIE schools
  - The BIE, a partnering agency to the application, was not in itself an eligible applicant.
- Implementation began, March 2011
- Data collected by June, 2015
- Research completed and written by September, 2015



### Funds Provided to Support:

- local educational agencies (LEAs), nonprofit organizations in partnership with (a) one or more LEAs or (b) a consortium of schools.
- competitive grants to applicants with a record of improving student achievement and attainment in order to expand the implementation of, and investment in, innovative practices that are demonstrated to have an impact on improving student achievement or student growth, closing achievement gaps, decreasing dropout rates, increasing high school graduation rates, or increasing college enrollment and completion rates.
- I3 grants (1) allow eligible entities to expand and develop innovative practices that can serve as models of best practices, (2) allow eligible entities to work in partnership with the private sector and the philanthropic community, and (3) identify and document best practices that can be shared and taken to scale based on demonstrated success.



## **PAT's Qualifications for Selection**

- Partnership between PAT and a consortium of BIE schools (LEA's) was possible due to
  - the prior experience of the BIE in implementing the PAT Model and its ongoing relationships with PAT and BIE schools nationwide.
  - PAT has contracted with BIE for training and on-site technical assistance since 1991.
  - PAT currently provides training and on-site technical assistance to 67 programs and over 130 parent educators in American Indian communities.



- Demonstration of the existence of experimental and/or quasi-experimental evidence of success:
  - Prior studies of PAT programs
  - Prior studies of the BIE's Family And Child Education (FACE) model in which the PAT model was the homebased component
- These evaluations have shown significant results in the areas of health, development, school readiness and parent involvement.



#### Summaries of Previous Studies

- Two Impact Studies indicate that the Baby FACE and FACE model indirectly <u>impacts children's</u> <u>school readiness</u> through its direct, significant, and meaningful impacts on:
  - preschool attendance
  - the number of books and literacy resources in the home
  - increased home literacy activity
- A longitudinal follow-up of kindergartners in BIE schools demonstrates predictors of 3<sup>rd</sup> grade reading achievement:
  - school readiness is a large predictor
  - frequency that parents read to their child prior to kindergarten continues to be a significant predictor



## Priorities Addressed in PAT's Proposal

- Absolute Priority
  - Innovations That Turn Around Persistently Low-Performing Schools
- Competitive Preference Priorities
  - Innovations in Improving Early Learning Outcomes
  - Innovations That Serve Schools in Rural LEAs



## **Matching Funders**

Required that matching funds be 20% of total

- The Rural School and Community Trust (all)
- W. K. Kellogg Foundation (3 NM sites)
- Annie E. Casey Foundation (books)
- John T. Vucurevich Foundation (6 SD sites)
- Cherokee Preservation Foundation
- Arizona Community Foundation (8 AZ sites)
- Enterprise Holding Trust (vehicles)
- Penguin Group USA (books)
- Books By The Bushel (books)

## I3 "BabyFACE" Treatmentthe PAT Model



- PAT is a home visiting model
  - built on the belief, research-based knowledge, and subsequent validation through research, that parents are a child's best and most influential teacher. And that by becoming an effective and involved teacher, their child is more likely to enter school ready to learn.
- BabyFACE is the PAT model serving
  - 22 BIE-funded schools on very rural reservations
  - 6 states (NC, SD, NM, SD, ID, WA)
  - 900 families



## I3 "BabyFACE" Treatmentthe PAT Model

Each of the 22 programs provides:

- 24 <u>personal visits</u>, annually, for no more than 40-48 families
- Monthly <u>Family Circles</u>
- Health and developmental <u>screenings</u>
- <u>Resources and referrals</u>
- <u>Native language and cultural</u> enhancements
- <u>Children's books</u> to support early home literacy



# Personal Visits – Primary Delivery System

- 2 ½ hours per visit Includes:
- Preparation
  - Plan
  - Study
  - Gather materials
- Travel
- Visit—45-60 min
- Recordkeeping
- Follow-up





#### Personal Visit Content – PAT Curriculum

- Parent-Child Interaction
  - always includes
    a book sharing
    activity
- Development-Centered
   Parenting
- Family Well-Being





#### **I3-BabyFACE Specifics**



- Families with a child born in 2011 thru March, 2012
- Bi-weekly visits
- Support of Native language and culture
- Infusion of children's books







#### **100 Children's Books**



- Based on research that shows the presence of 100 children's books in the home makes a significant difference in kindergarten readiness.
- 2 books per month delivered and used in personal visits
- 1 book per month through Imagination Library



### Screening





- Developmental:
  - ASQ-3 (Ages and Stages Questionnaire)
  - ASQ:SE (Social Emotional)
- Health Record
- Hearing (OAE: otoacoustic emissions testing)
- Vision

#### **Resource and Referral Network**





- Parent educators
  become personally
  familiar with <u>child</u>
  health and development
  resources.
- Emphasis on <u>family</u> wellbeing means connecting families with community services to meet their broader needs and goals.

### **Family Circle**



- Monthly gathering led by parent educators
- Purposes:
  - child
    development
    and/or parenting
    information
  - parent-child activities
  - social network
  - encouragement of language and culture





### **Evaluation Requirements**

- Evaluate the fidelity of implementation.
- Provide scientific evidence of this program's success. A significant focus of the grant is the required conduct of an independent evaluation intended to provide further scientific evidence of the program's success. The evaluation of Validation Grants requires that experimental and/or quasi-experimental evidence be obtained during the implementation of the grant.
- <u>Contribute to the What Works Clearing House</u>. This research is designed to meet the What Works Clearing House: Procedures and Standards.



## **Evaluation Requirement**

Outside evaluator

- Research and Training Associates (RTA) is the outside evaluator.
- They have done evaluations of PAT and of FACE for more than two decades.
- They have similar history of evaluating the BIE's FACE and BabyFACE models.
- They are required to provide all components of the evaluation.
- They work closely with PAT's I3 project director and PAT's research director.



## **FOI Evaluation Design**

- Content
  - Training and professional development
  - Support and technical assistance
  - Service delivery
    - Correlated with PAT Logic Model
    - Uses PAT's data management system, Visit Tracker, which all parent educators use
- Uses
  - Informing technical assistance
  - Comparison with outcomes in final report



Most challenges are related to working in very rural settings. Some are aspects inherent to BIE schools.

#### **Staffing - parent educators**

- Challenges
  - Lack of qualified personnel in isolated communities
  - Requirements of BIE bureaucracy
  - Difficulty of communicating qualifications
  - Turnover
- Solutions
  - Education of supervisors about tasks and qualifications
  - Hire and train within 90 days
  - Strategies for stop-gap services by remaining parent educator



#### Supervision

- Challenges
  - Lack of time available
  - Turnover
- Solutions
  - Increase distance TA:
    - Monthly calls with individual parent educators
    - Include some supervisors/accountability elements
    - Monthly professional development and informational calls with all sites, sometimes including supervisors



#### Participation (dosage)

- Challenges
  - Meeting the standard of 24 visits annually, even for actively participating families:
    - Long distances and impassable roads
    - Illnesses, holidays, Tribal ceremonies
  - Engagement of some families
  - Documentation accurate and consistent
- Solutions
  - Leased Jeep provided for each parent educator
  - Two-week Schedule Plan developed and implemented
  - TA regarding documentation usage of Visit Tracker data management system



#### Quality

- Challenges
  - Variation in experience, knowledge and skill
  - Variation in personal/professional investment
- Solutions
  - Initial training (5-8 days)
  - Monthly individual TA
  - On-site TA 6 visits in four years
    - Supervisor participates
    - Includes observation of personal visit
    - Thorough report and follow-up
  - Monthly professional development by phone
  - Annual face-to-face professional development



#### **Outcomes Research Design**

Validation Grants require that experimental and/or quasiexperimental evidence be obtained during the implementation.

Therefore, in the BabyFACE evaluation:

- A *quasi-experimental design* uses a matched comparison group comprised of non-participating children born a year prior to participating children.
- An experimental design at one large site with a population of children born within a designated range of birth dates that exceeds the Baby FACE program's capacity to serve. At this site, children were randomly selected for participation.



## **Confirmatory Research Questions**

- What is the effect on children's *cognitive development* at age 3 years, as measured by the Boehm-3, compared to children who did not have access to the program?
- What is the effect on *children's socio-emotional development* (i.e., behavior concerns, protective factors) at age 2 years and at age 3 years, as measured by the Devereux Early Childhood Assessment (DECA) total score, compared to children who did not have access to the program?



### **Exploratory Research Questions**

- What is the effect on the *number of books in the home* and the *frequency of home literacy activity* when children are 3 years of age, compared to children who did not have access to the program?
- What is the effect on *protective factors in the home environment* when children are 3 years of age compared to children who did not have access to the program?
  - Family functioning and resiliency?
  - Family social support?
  - Family concrete support?
  - Parents' child development knowledge?
  - Parents' nurturing and children's attachment?



Acquire permission to conduct research

- Challenge
  - Original issues associated with tribal sovereignty vs. federal government oversight—tribal Institutional Review Boards, tribal authority to participate/not participate in research & evaluation, etc.
- Solutions
  - Get support from BIE
  - Require that all personnel on the project were school employees
  - Get signatures of understanding and agreement from each treatment and comparison family



Identify participants

- Challenges
  - Avoid self-selection.
  - Deal with "ill-will" in the community due to turning away eager families.
- Solutions
  - Participants: families with child born in the January 1,
    2011 thru March 31, 2012 time period (900+ children)
  - Comparison group: families with a child born in 2010 who are not receiving similar home-based services (400+ children)



Recruit participants

- Challenges
  - Maximize the power of both treatment and comparison groups
  - Find appropriate families in extremely rural settings
- Solution
  - Use parent educators from the community
  - Access all school, community and Tribal resources



Retain participants in a multi-year intervention.

- Challenges
  - Transience of families
  - Turnover of parent educators
- Solutions
  - Develop incentives and systems for maintaining contact
  - Replace parent educators quickly and provide contact during the gap



**Dosage Challenges** 

- Many obstacles to model dosage of 24 visits/year (discussed in FOI challenges and solutions)
- Solutions
  - Explore the extent to which we can report outcomes for families/children with significant dosage



Identify and train qualified site-based staff for data collection at age three

- Challenges
  - Can't be a parent educator
  - Must be BIE employee
  - BIE hiring restrictions
- Solutions
  - Create job description and get BIE approval
  - Schools identified the person; often already an employee
  - Training provided by phone



Meet I3 research requirements

- Challenges
  - Meet What Works requirements
  - Make adjustments based on knowledge that a single number will represent the fidelity and outcomes of each grantee.
- Solutions
  - Monthly consultation calls between RTA, PAT, and Abt.
    Associates
  - Frequent communication between RTA and PAT.

#### Results



- No outcomes at this point
- Anecdotal results
  - The 2-week Schedule Plan is increasing participation.
  - Books are a key incentive.
  - Families are reading more to their children.
  - Parent educators are establishing trusting relationships with families.
  - Referrals are occurring.

#### **Next Steps**



- Facilitate movement toward sustainability at each school
- Acquire funding to continue at least the evaluation – comparison between nonparticipant and participant children at kindergarten entry.





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