

# **CONDUCTING RANDOMIZED TRIALS IN SCHOOL SETTINGS: P4K**

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# Critical Actors

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- **Haan Foundation for Children**
  - Organized overall effort
- **Florida State University**
  - Overall study direction for intervention and evaluation
- **Mathematica Policy Research**
  - Leading the impact study and data collection
- **American Institutes for Research**
  - Leading implementation study
- **Allegheny Intermediate Unit**
  - Involved in all phases, particularly intervention component

# Points to Cover

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- **Context and Research Questions**
- **Study Design**
- **Challenges**
  - **Evaluator's perspective**
  - **Participant's Perspective**

# Context and Questions

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- **About 40% of the nation's 4<sup>th</sup> graders have not reached their appropriate reading level**
- **30% of elementary, middle, and high school students have reading problems that limit their ultimate educational attainment**
- **Reading First will probably help some of these children, but not all of them**
- **Recent research, conducted in clinical settings, has shown that intensive and well implemented instruction can accelerate reading skills of children**

# Context and Questions (cont.)

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- Can remedial reading interventions make a substantial impact on the reading achievement of children?
- Can the interventions affect all critical reading skills (e.g., accuracy, comprehension, fluency)?
- Do some students benefit more than other students?
- What intervention approaches make the most difference and for whom?

# Context and Questions (cont.)

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- **Interventions**
  - Selection of interventions
  - Pull-out program
  - Three students per teacher
  - Five days a week for about 1 hour per day
  - Average of 100 hours of instruction
  - Reading instruction emphasis
    - ◆ **Phonemic word-level interventions**  
Establishing phonemic awareness, decoding skills, and reading fluency
    - ◆ **Word-level plus comprehension**  
Balance between building word-level skills and, and vocabulary and comprehension strategies

# P4K Design

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- **Recruitment of schools**
  - Intervention
  - Evaluation
  - On-site coordinator
- **Experimental design**
  - ◆ 40 school units randomly assigned to one of four treatment conditions  
School unit?
  - ◆ Eligible students within schools randomly assigned to T and C conditions  
Eligible students?

# Educational Service Agency (ESA)

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- 600 in 41 States
- Different names – serve clusters of school districts  
I.U., B.O.C.E.S, ESD, E.S.C., County Offices
- Serve 81% of all students
- 79% of all K-12 education staff are in schools served by E.S.A.'s

# Challenges for the Evaluator

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- **Interaction between the intervention and the evaluation**
  - Approval of school boards
  - Recruitment of teachers for instruction
  - Need for quick RA for teachers to be instructed in the delivery of specific interventions
- **Limited information about how many eligible students we could expect in each school**
  - ◆ **Construction of instructional groups**
    - Ideal is 6 students per group and 4 controls
    - Issues around other combinations (e.g., 7 students)
    - Siblings – both to T or C, or split them up

# Challenges for the Participants

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- **Climate and culture of school/district**
- **Overcoming philosophical differences**
  - **Ensuring commitment to scientific based research**
  - **“Local Control” issues**

# Challenges for the Participants

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- **Accessing decision makers within a district --  
Communication between superintendents, curriculum coordinators, principals and others**
  - **Issues of timing**
  - **Who really makes the decision?**
  - **Board approval**

# Challenges for the Participants

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- **Union Issues in teacher selection and placement**
  - Teacher assessments
  - Seniority vs. best candidate in teacher nominations
  - Posting of positions
  - 42 different union contracts
- **Responsibility of school districts to students in the control group**
  - Ethical “withholding” interventions

# Challenges for the Participants

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- **Delivery of services through a “pull-out” program**
  - **Scheduling students**
  - **Missing instruction**
  - **Screening and assessing of students-time commitment and scheduling conflicts; allowing “outsiders” student access**