K-3 FAP Research Update

An Examination of the Implementation of a Statewide Kindergarten Electronic Portfolio Assessment

Priscila G. Baddouh, Erica Merrill, Richard Lambert, and Angela Ferrara

UNC CHARLOTTE
College *of* Education

CEME

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Research Questions

- How do children's demographic characteristics affect implementation?

- How do teachers' perceptions and resources affect implementation?

- Does implementation vary across school districts?

Overview

- Fall, 2015 Data - First year of full state implementation

- Almost all districts in the state participated:
- ~ 1,100 elementary schools
- ~ 5,300 kindergarten teachers
- ~ 87,000 children

Overview

- Fall, 2015 Survey of All KEA Teachers statewide

- 736 responded
- 104 volunteered for a follow-up interview
- 44 were interviewed
- 36 were retained for mixed-methods HLM analyses
  - Retained if they entered at least 10 children in the system

# Mixed Methods Model

- Sample:
  - 36 were retained for the HLM analyses
  - 678 children
  - 35 schools
  - 22 districts

- Method:
  - Dependent variables: evidences per child, evidences per child for each progression: Object Counting, Book Orientation, and Print Awareness
  - Level I – child
  - Level II – teacher / classroom

Mixed Methods Model

- Level 1: new student, age, repeated kindergarten, White male, African American male, Hispanic/ Latino male, African American female, Hispanic/ Latino female

- Level 2:
  - Classroom characteristics: rural, number of students
  - Teachers' perceptions:
    - BP Decision: Were you able to make instructional decisions for your students based on the data generated from the Book Orientation and/ or Print Awareness progressions?
    - OC Decision: Were you able to make instructional decisions for your students based on the data generated from the Object Counting progression?
  - Resources: coach/ mentor, peer support, computer, iPad/ tablet, livebinder, administration support, technical support, TA

Descriptive - Mean

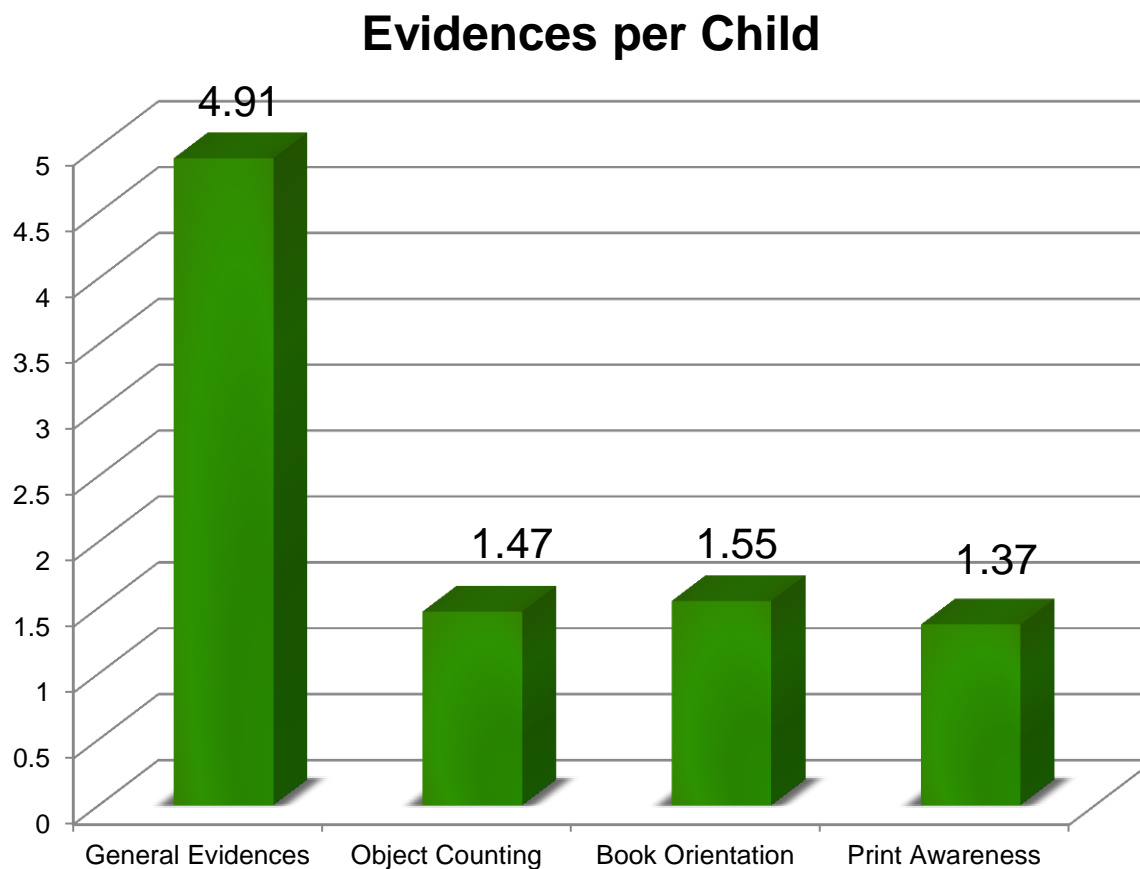**Comparison between Complete Sample (5,300 teachers) and 36 Teachers**
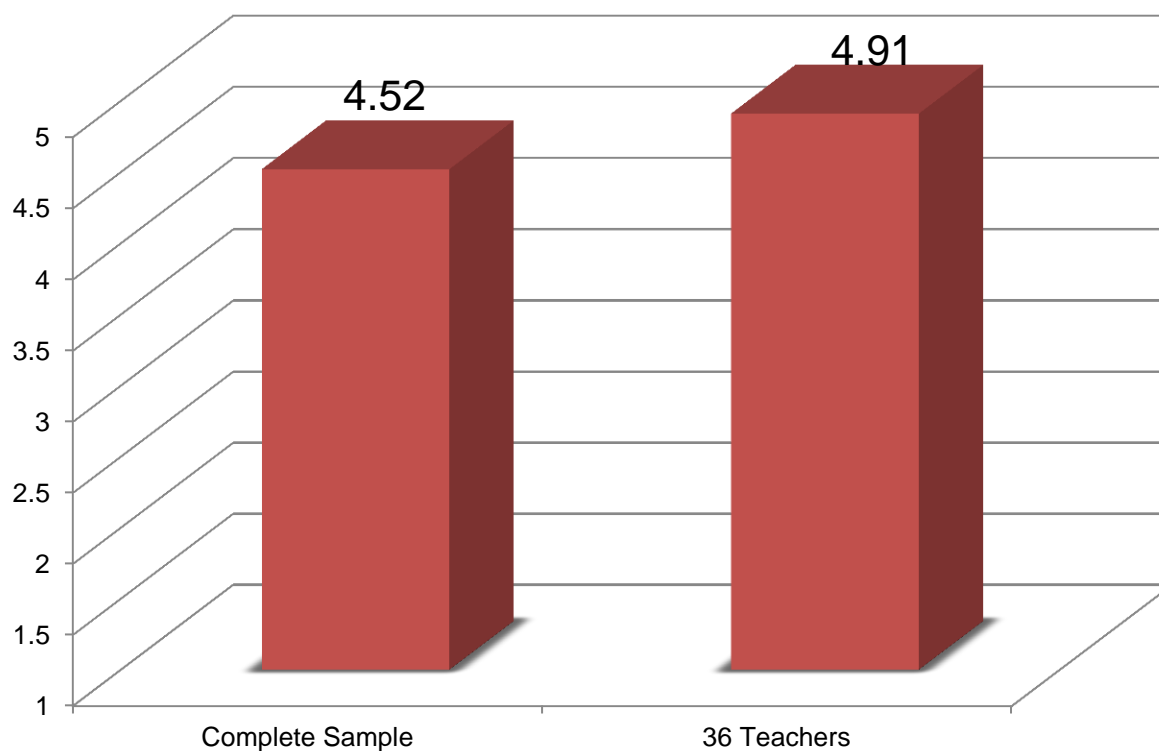
Complete Sample SD: 3.10

36 teachers SD: 3.93

Descriptive - Mean

Evidences per Child

HLM Results – General Evidences

- No differences in evidences collected by child demographics:

- Level 2 variables that are statistically significant at least at 5% level of significance:

  - Students: -0.5235
  - BD Decision: 3.0621
  - Computer or laptop: -4.1565
  - Coach or mentor: -1.8766
  - Livebinder: 2.3861
  - Administrative support: 4.0345
  - TA: -4.4348

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HLM Results – Object Counting

- No differences in evidences collected by child demographics:

- Level 2 variables that are statistically significant at least at 5% level of significance:

  - Rural: 0.5808
  - iPad or Tablet: -1.6131
  - Livebinder: 0.7388
  - Technical Support: -0.7583

HLM Results – Book Orientation

- No differences in evidences collected by child demographics:

- Level 2 variables that are statistically significant at least at 5% level of significance:

  - Rural: 0.4837
  - Students: -0.0759
  - BP Decision: 0.6218
  - Computer or laptop: -0.8983
  - Administrative support: 1.4121
  - TA: -0.8163

HLM Results – Print Awareness

- No differences in evidences collected by child demographics:

- Level 2 variables that are statistically significant at least at 5% level of significance:

  - Students: -0.0896
  - BP Decision: 0.6466
  - Computer or laptop: -1.1349
  - Coach mentor: -0.7215
  - Administrative support: 1.3753
  - TA: -0.8526
  - Technical support: -1.0050

HLM Results – Summary

Positive

- Livebinder
- BP Decision
- Administrative support
- Rural

Negative

- Coach and Mentor
- Technical support
- Technology in the classroom
- TA

Variances for Overall Evidences

- Variance between and within classrooms for the 36 teachers:

    - Between: 74.79%
    - Within: 25.21%

- Our question: how much of the variance is coming between classrooms and between districts?

Second HLM- Model

- Dependent variable: evidences per child

- Level 1: Children's demographics

- Level 2: Classroom intercept

- Level 3: School district intercept

- Sample:
  - 1,100 elementary schools
  - 5,300 kindergarten teachers
  - 87,000 children

Second HLM- Model Results

- Level 1 variables that are statistically significant (5% level):
  - African American males: -0.0464
  - Hispanic males: -0.0385
  - New students: -0.4961
  - Repeated kindergarten:-0.0775

- Variance:
  - Between districts: 28.86%
  - Between classroom: 58.94%
  - Within classroom: 12.20%

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