

Investing in Innovation



K-3 PLUS EXTENDED SCHOOL YEAR PROGRAM

Legislative Education Study Committee
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WHAT HAPPENS TO STUDENTS IN SUMMER?

- Many students experience a decrease in academic achievement levels over the course of the summer.
- This “Summer Learning Loss” hits students from low income backgrounds particularly hard
- As it accumulates across years of education, a substantial achievement gap can emerge.

THE NEW MEXICO STATE K-3 PLUS PROGRAM

- Provides an additional 25 days of school to children in at risk schools (85% or higher FRL)
 - Focuses on Literacy & Numeracy
 - Includes Class sizes no larger than regular school year
 - Provides Breakfast, Lunch & Transportation
 - Provides Professional Development for K3+ Teachers
 - Includes Parent Involvement Component
- Served about 11,639 students statewide in 2013



WHAT IS STARTSMART K-3 PLUS?

- Utah State University received funding through the Innovation in Innovation Fund (i3) program to evaluate the effectiveness of NM State K-3 Plus. The project includes funding from:

- * U.S. Dept. of Education
- * JP Morgan
- * Annie E. Casey Foundation
- * Sandia National Labs
- * Kellogg Foundation
- * Rural School & Community Trust
- * Pearson & Riverside Publishers

- Participating districts included:

- * Albuquerque Public Schools
- * Gallup-McKinley
- * Gadsden
- * Hobbs
- * Deming
- * Roswell
- * Santa Fe
- * Belen & Las Cruces (1 year only)

IS K-3 PLUS EFFECTIVE?

- Comparing K-3 Plus with non-K-3 Plus = *selection bias*. For Example:
 - K3+ students are more likely to be ELLs
 - K3+ students are more likely to be FRL
- The StartSmart K-3 Plus Randomized Controlled Trial compares students randomly assigned to...
 - *Intervention Group*
 - *Control Group*



RESULTS OF DATA GATHERED TO DATE

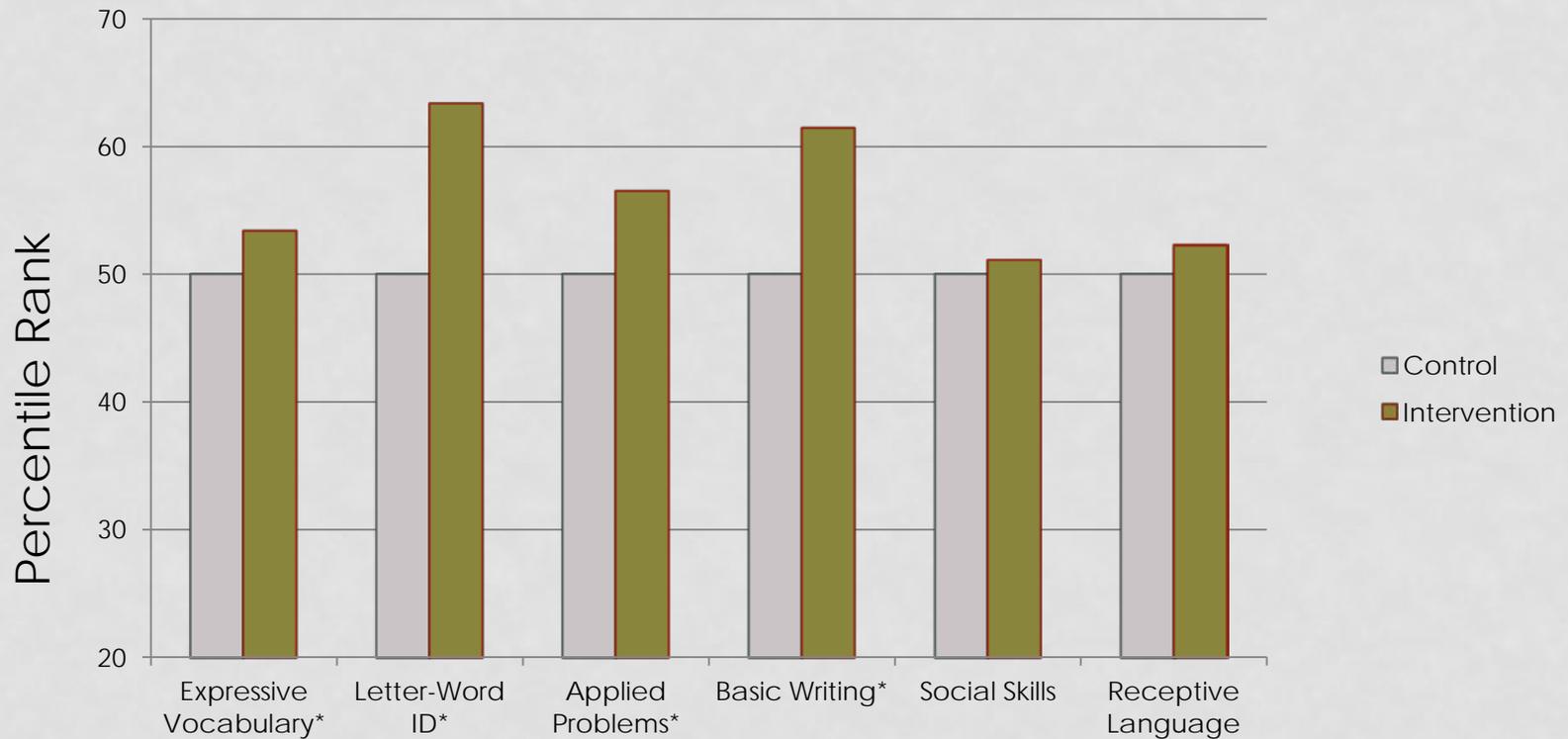
- After random assignment, we follow students for 4 years, evaluating outcome in reading, math, writing, language, and social skills.
- Answers are not always clear cut—Evidence can point in multiple directions (stay for the full presentation!)
- Three key questions
 - Does the summer program improve student performance?
 - Are gains from the summer program maintained for all students?
 - Are there some students who benefit more from the program than other students.

DOES K-3 PLUS IMPROVE PERFORMANCE?

- Consider a “control group” student (no attendance in K-3 Plus) who scores at the 50th percentile on an achievement test.
- How much better would we expect a student to do if they had been an intervention group student who attended the program?

BEGINNING OF KINDERGARTEN

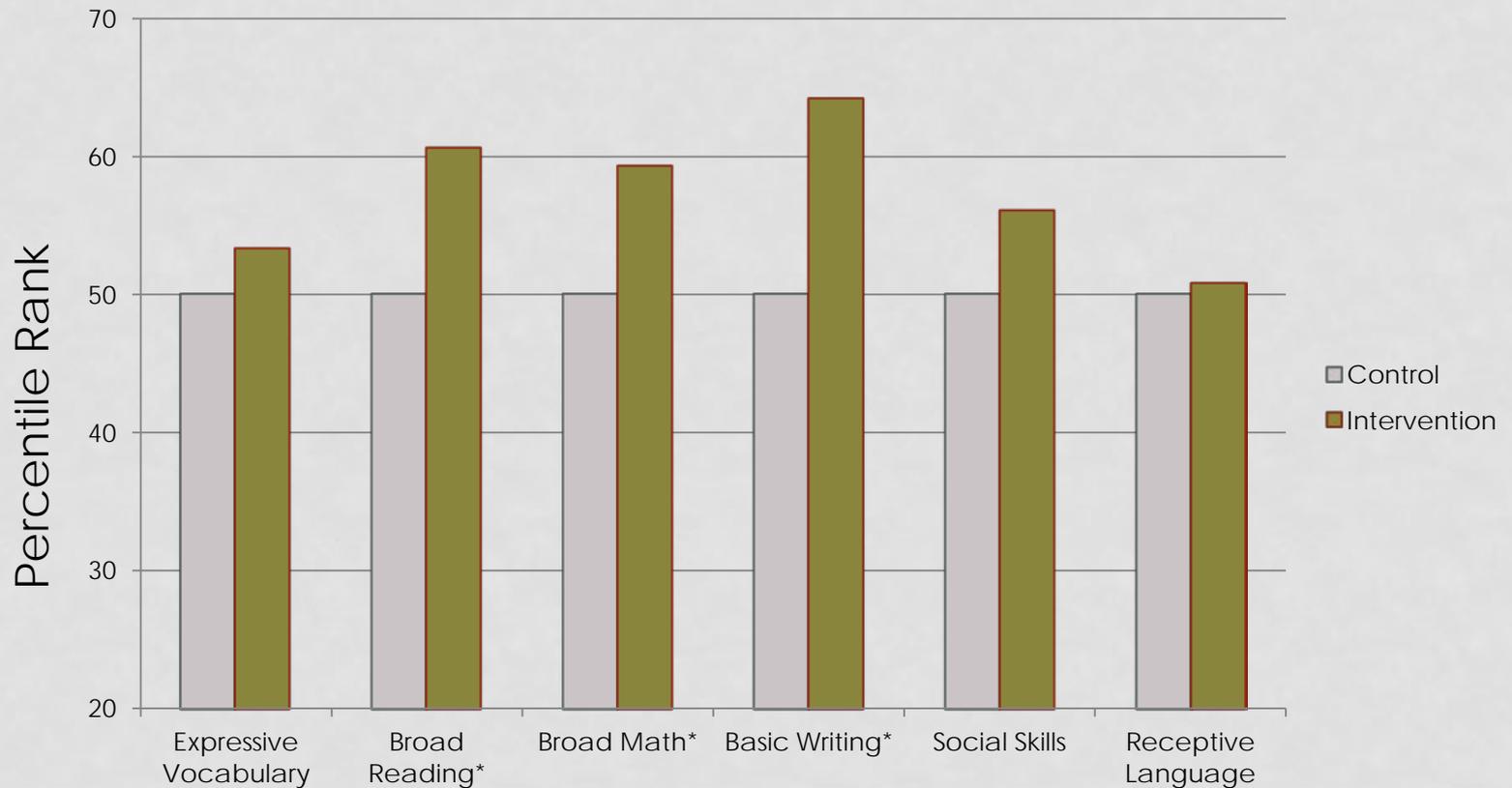
- The Effects: Percentile Ranks



* Denotes statistical significance at $p < .05$

BEGINNING OF 3RD GRADE

- The Effects: Percentile Ranks



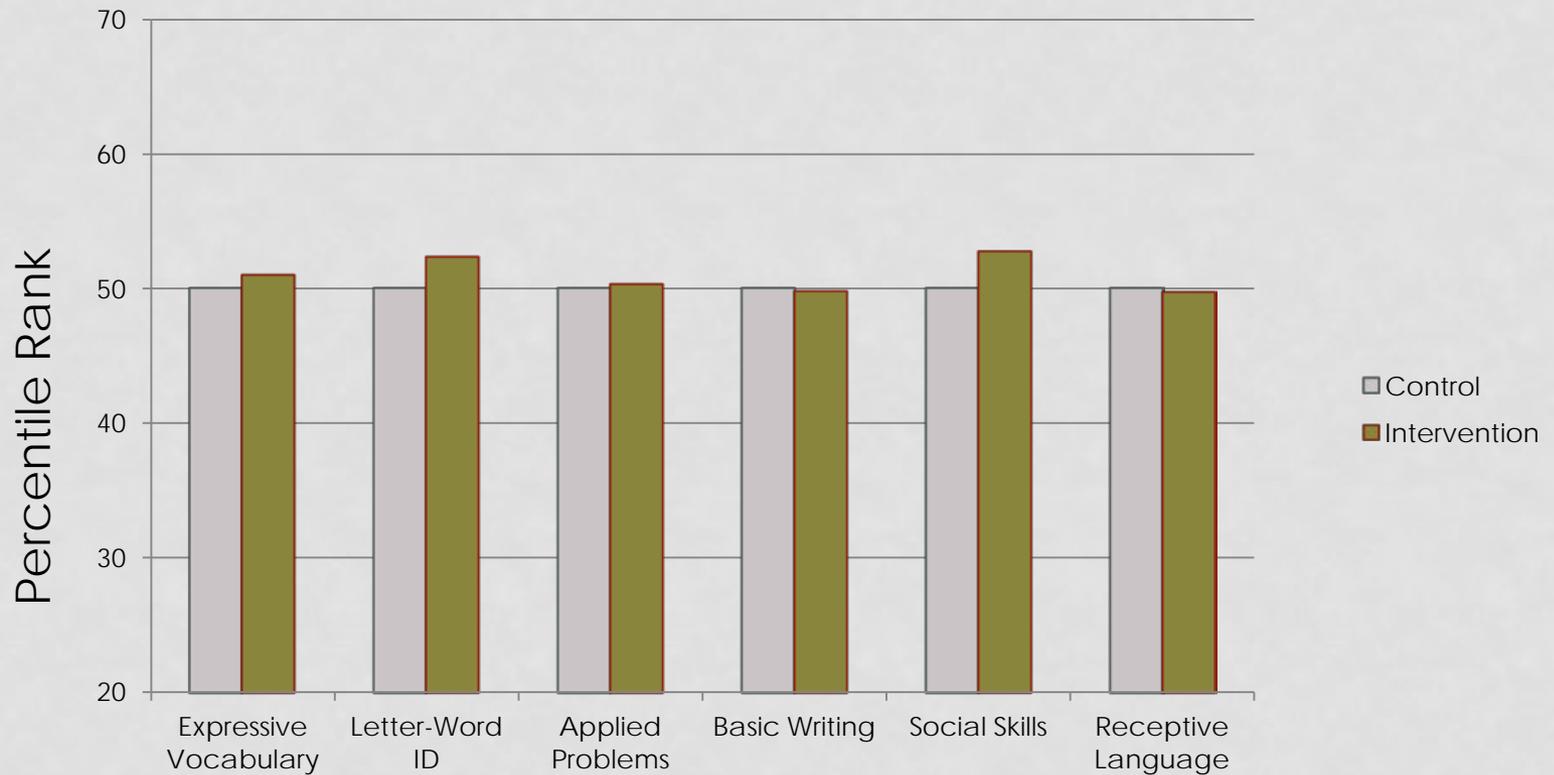
* Denotes statistical significance at $p < .05$

ARE GAINS FROM K-3 PLUS MAINTAINED?

- When performance is measured within 1-2 months of the beginning of school, students who attended K-3 Plus improve in core academic areas (Reading, Writing, and Math)
- Are these gains still evident at the end of the school year?

END OF KINDERGARTEN

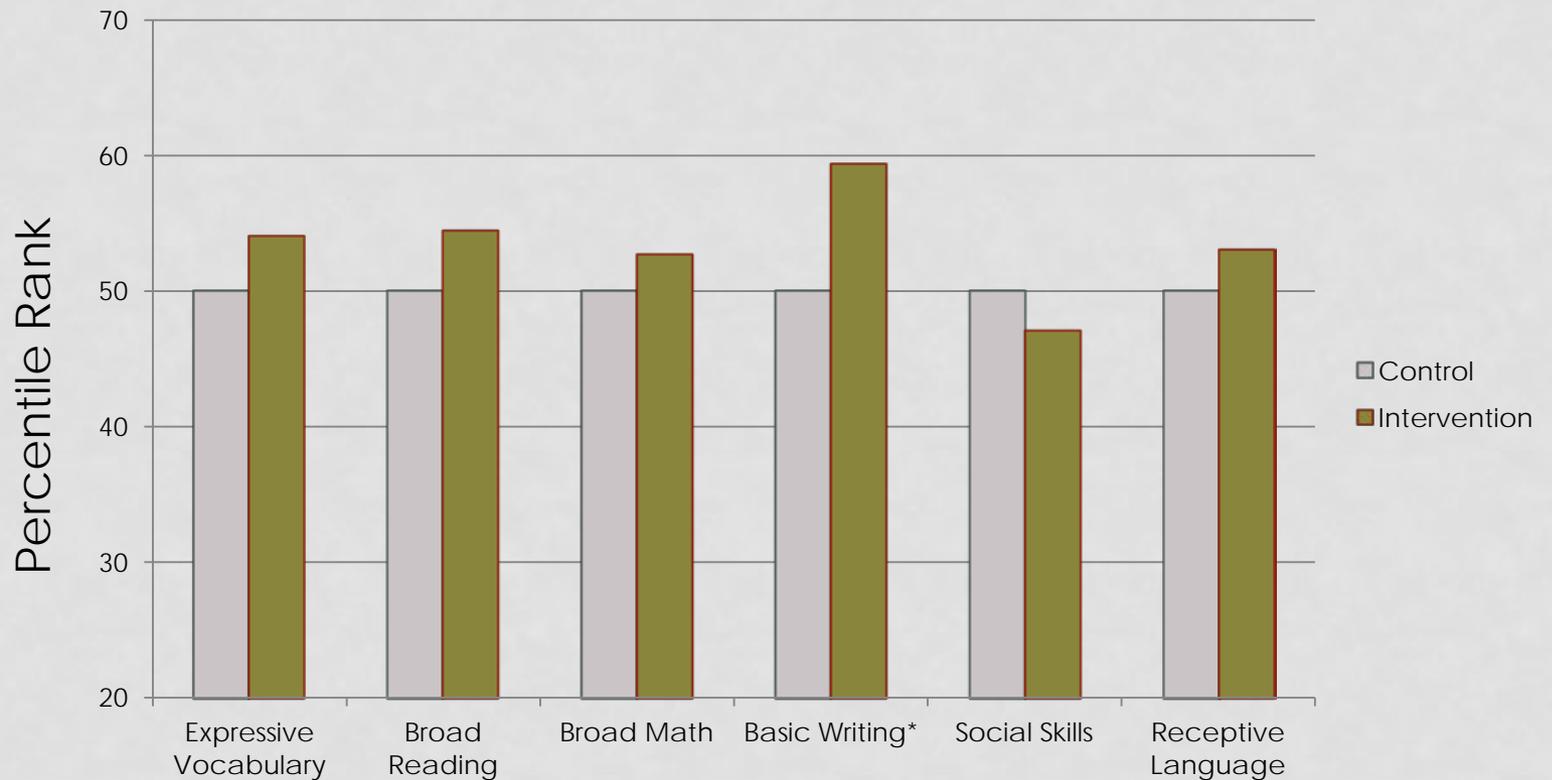
- The Effects: Percentile Ranks



* Denotes statistical significance at $p < .05$

END OF 2ND GRADE

- The Effects: Percentile Ranks



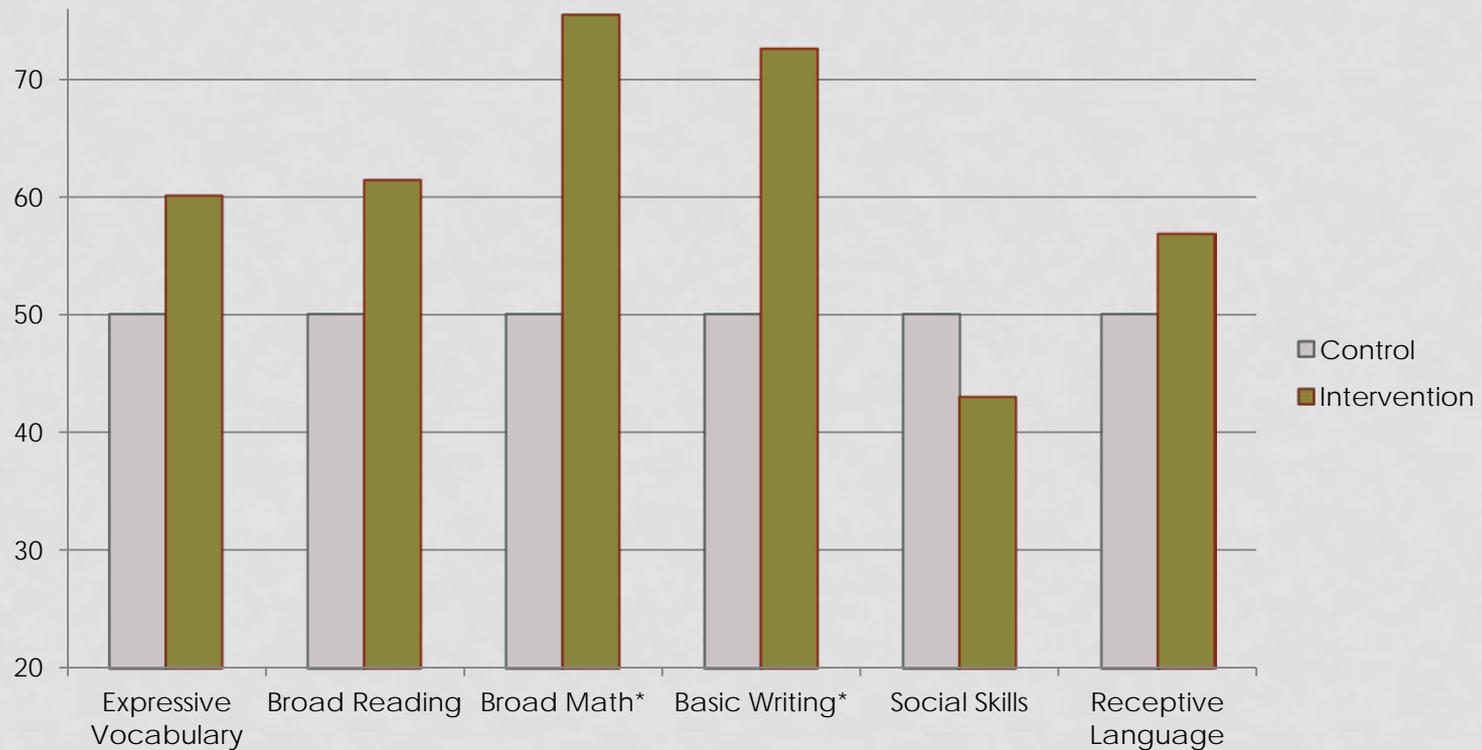
* Denotes statistical significance at $p < .05$

WHY AREN'T GAINS MAINTAINED?

- Many possible reasons exist
- Teachers may simply re-start the curriculum on day 1
 - While schools are encouraged to keep students from the summer class together, this often does not happen
- Language Issues Exist in Some Schools
 - While some schools provide summer services in both Spanish and English there are logistical challenges
 - Suppose a school is 1/3 Spanish-speakers and 2/3 English. With 60 students in a grade level, they may offer a classroom with Spanish instruction
 - That same school in summer may enroll 18 kids: 6 Spanish-speaking and 12 English. The school would typically offer an English class.

SAME TEACHER

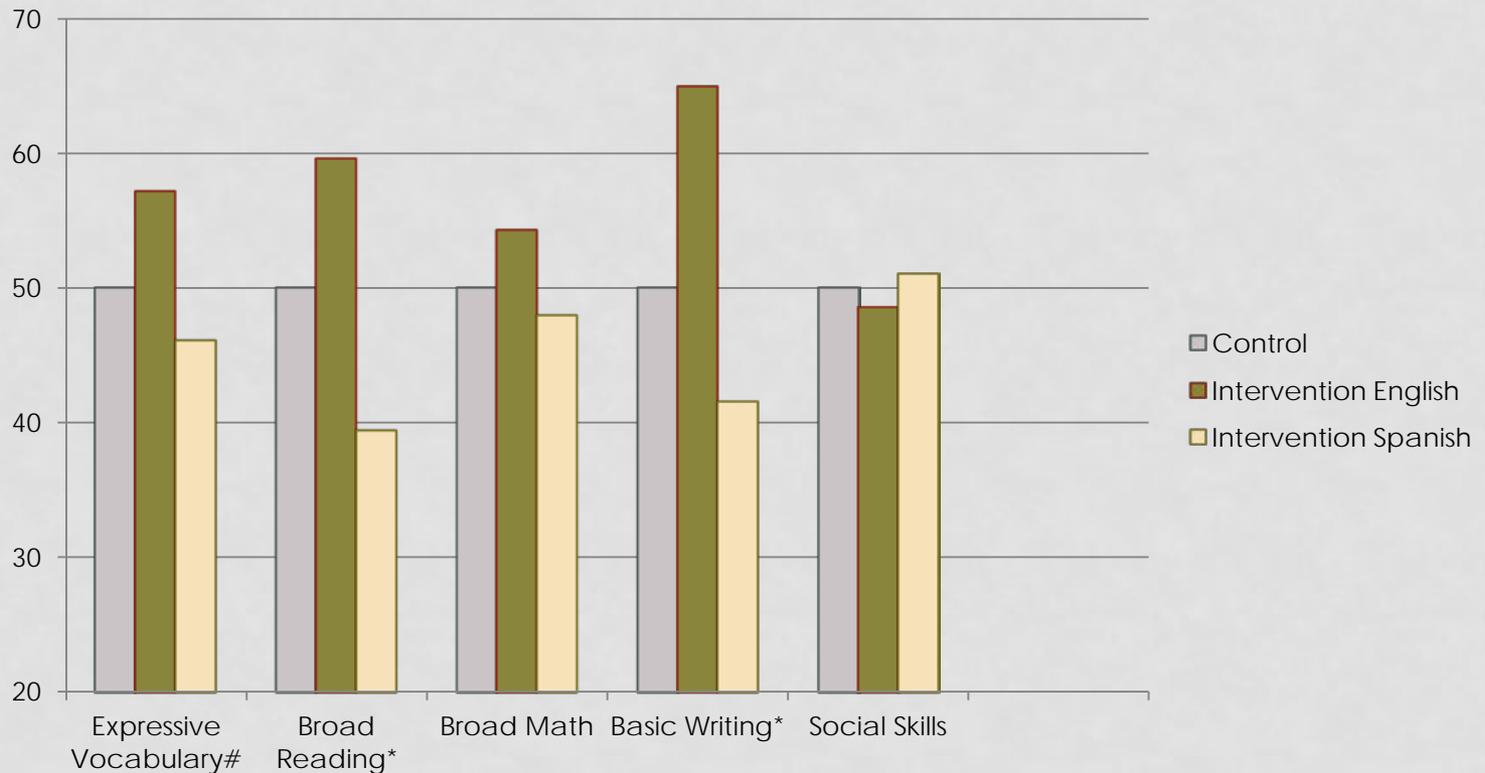
- What are the effects of attending the program through the end of 2nd grade with the same teacher each year?



* denotes $p < .05$

LANGUAGE

- What are the effects of attending the program through the end of 2nd grade by language at time of assessment?



denotes $p < .10$, * denotes $p < .05$

KEY TAKEAWAYS

- When controlling for selection bias, K-3 Plus has clear achievement boosting prospects
- These gains are not maintained through the school year for all students, but appear to be maintained for some students.
- Continued research and evaluation of the program can help determine whether adjustments to the program can improve effectiveness.
- We have additional data that could be used to support additional analyses on program effectiveness and funding/funding formulas in various contexts.

A SLIDE OF THANKS

- New Mexico Legislature (esp. Legislative Education Study Committee & Legislative Finance Committee)
- New Mexico Public Education Department
- Funders & Participating Districts
- University Partners at UNM & NMSU

QUESTIONS?

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