

## **Summary of the Early Reading First (ERF) Study in the Granite School District (GSD)**

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The following information is a summary of the ERF preschool evaluation study conducted in the GSD by the independent evaluator, Mark Innocenti, from Utah State University. Full evaluation and process reports are available on request.

### ***Background***

- The No Child Left Behind (NCLB) Act of 2001 created the Early Reading First (ERF) program to enhance teacher practices, instructional content, and classroom environments in preschools and to help ensure that young children start school with the skills needed for academic success. This discretionary grant program provided funding to preschools that particularly served children from low-income families so that the preschools could support age-appropriate development of children's language and literacy skills.
- A national evaluation of all ERF grant programs was conducted and a final report to congress is available on the Institute for Education Science website. (<http://ies.ed.gov/ncee/pdf/20074007.pdf>)
- The GSD applied for a competitive ERF discretionary grant and was funded by the U.S. Department of Education in fall 2005.
- GSD contracted with Utah State University (USU) beginning January 2006 to conduct an independent evaluation of the ERF implementation and impacts.

### ***Implementation***

- The goal of ERF was to implement an enhanced preschool program and compare it to the traditional preschool program already occurring.
- The enhanced program consisted of the use of an evidence-based curriculum, smaller teacher:child classroom ratios, longer school day, teachers with higher qualifications, ongoing coaching and professional development activities, and regular assessment of children to guide teacher activities. Parent involvement activities were included.
- USU conducted both an outcome evaluation on children's skills and classroom quality, and a process evaluation of implementation on program components.
- The research design was quasi-experimental. Federal requirements were that the Title 1 schools with the highest poverty levels be selected for the experimental ERF condition. Comparison schools were also Title 1 schools but at the next poverty level tier.
- Child evaluation occurred three times per year and focused, in accord with federal requirements, on language and pre-literacy skills. Trained evaluators not affiliated with the preschool program conducted these assessments. Classroom quality assessments, conducted by USU staff, also occurred three times during the academic year.

- Children were evaluated on the following assessment measures<sup>1</sup>
  - Peabody Picture Vocabulary Test (PPVT), a measure of children's receptive vocabulary (what they understand).
  - Expressive Vocabulary Test (EVT), a measure of children's expressive vocabulary (what they can say)
  - Phonological Awareness Literacy Screening (PALS)<sup>2</sup>, a measure of pre-academic skills including upper- lowercase letter recognition, letter sounds, and print word awareness.
- Classrooms were evaluated using the Early Language and Literacy Classroom Observation (ELLCO), an observational measure of the classroom literacy environment. The three domains of this measure are: Classroom Observation, Literacy Environment, and Literacy Activities.
- In all classrooms there were both 3- and 4-year old children.
  - Three year olds attended only two days per week.
- Phase 1 was a trial phase that lasted from January to June 2006 to establish the ERF program.
- Phases 2(school year 2006-07) and 3 (2007-08) followed all ERF requirements.
- For Phase 4 (2008-09) the GSD asked for and received a waiver that allowed them an evaluation of a more sustainable enhanced option.
  - The primary change was that the ERF preschool was delivered in a half day rather than full day session.

## **Findings**

In discussing findings the experimental group is referred to as the ERF preschool. The comparison is the standard preschool.

### *Phase 2*

- Number of students in analyses: 210
- Three year old children in the ERF preschool had a statistically significant improvement in all language skills compared to the children in the standard preschool.
- Children in the ERF preschool had a statistically significant improvement in all literacy skills compared to the children in the standard preschool.
- English Language Learner (ELL) children, at all ages, in the ERF preschool had a statistically significant improvement in all language skills compared to the ELL children in the standard preschool.
  - Four-year-old ELL children were scoring at posttest in the average range on both the PPVT and EVT.
- English Language Learner (ELL) children in the ERF preschool had a statistically significant improvement in all literacy skills compared to the ELL children in the standard preschool.

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<sup>1</sup> Measures were specified federally.

<sup>2</sup> PALS can and was only administered to 4-year old children.

- On the measure of classroom quality, the Literacy Environment and Literacy Activities Domains were statistically significant and favored the ERF preschool classrooms when compared to the standard preschool classrooms.
  - The Classroom Observation Domain result was not statistically significant between groups. However of the two subdomains within this domain, statistically significant results in favor of the ERF preschool were found for the Language, Literacy, and Curriculum subdomain but not for the General Classroom Environment domain.

### *Phase 3*

- Number of students in analyses: 368
- Children in the ERF preschool had a statistically significant improvement in all language skills compared to the children in the standard preschool.
- Children in the ERF preschool had a statistically significant improvement in all literacy skills compared to the children in the standard preschool.
- Four-year old English Language Learner (ELL) children in the ERF preschool had a statistically significant improvement in all language skills compared to the ELL children in the standard preschool.
  - Three-year old ELL children in the ERF preschool improved on their receptive language skills (PPVT) compared to the ELL children in the standard preschool but the result approached but did not reach statistical significance.
  - Four-year-old ELL children were scoring at posttest in the average range on both the PPVT and EVT.
- English Language Learner (ELL) children in the ERF preschool had a statistically significant improvement in all literacy skills compared to the ELL children in the standard preschool.
- On the measure of classroom quality, all ELLCO domain scores were statistically significant and favored the ERF preschool classrooms when compared to the standard preschool classrooms.
  - ERF classrooms began the school year with higher ELLCO scores. However, the ERF classrooms significantly improved their scores during the year relative to the standard preschool classrooms.

### *Phase 4 (intervention change)*

- Number of students in analyses: 385
- Children in the ERF preschool, all children and ELL children, had a statistically significant improvement in all literacy skills compared to the children in the standard preschool.
  - Impacts were strongest for ELL children.
- No statistically significant results were found between the ERF preschool and standard preschool on language measures for any of the analyses.
  - Four-year-old ELL children were scoring at posttest in the average range on both the PPVT for both groups and on the EVT for the ERF preschool group.

- Classroom quality results mirrored those of Phase 3. All ELLCO domain scores were statistically significant and favored the ERF preschool classrooms when compared to the standard preschool classrooms.
  - ERF classroom began the school year with higher ELLCO scores. However, the ERF classrooms significantly improved their scores during the year relative to the standard preschool classrooms.

### **Summary**

- The ERF preschool had strong positive effects on children's literacy skills. These effects were large and meaningful.
  - In all phases, children in the ERF preschool made statistically significant progress on literacy skills compared to those in the standard preschool.
  - Early literacy skills are critical to later reading skills.
- The ERF preschool had positive effects on children's language skills.
  - In phases 2 and 3, the ERF preschool made statistically significant progress on language skills compared to those in the standard preschool. Results were mixed for 4-year olds, with better outcomes occurring in phase 2.
  - Language findings were not replicated in phase 4.
  - All children made significant progress while in either GSD preschool program.
- The ERF preschool had strong, meaningful effects on English Language Learner children.
  - The ERF preschool made statistically significant progress on language and literacy skills for these children compared to the standard preschool in all study phases.
  - All ELL children made progress on language skills through participation in preschool programs, but the progress was greater in the ERF preschool.
  - All 4-year old ELL children at the end of the year (posttest) had language scores in the average range. These results are as good as those found in programs that focus specifically on ELL children.
- Teachers in the ERF preschool had higher quality classrooms.
  - ERF preschool classrooms had statistically significant higher scores on the measure of classroom quality than the standard preschool classrooms in all study phases.
  - In later study phases, ERF preschool teachers began the school year with higher quality scores but still increased these scores during the year. This demonstrates the continued effectiveness of the teacher training activities that occurred.