

***Findings from evaluations of professional
development models: Supporting high
quality early childhood education curricula
in subsidized child care centers***

Child Care Policy Research Consortium

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Solving problems, guiding decisions – worldwide



Study rationale

- **Study funded by Child Care Bureau and the Office for Planning, Research and Evaluation (OPRE) within ACF**
- **Federal government concerned with how child care subsidy policies and quality improvement efforts could improve outcomes for children**
- **Miami-Dade School Readiness Coalition concerned with findings of poor language development of 4-year-old subsidized children (lowest third nationally)**

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- SRC = county's fiscal agent for CCDF subsidy & quality improvement funds
- One of four experiments
- SRC paid for intervention, HHS contract paid for the evaluation
- Quality \$ constitute 4% of subsidy funding set aside (with state matching funds) for improving child care quality.
- SRC selected the 3 curricula through a panel review process

- Child Care and Development Fund (CCDF) administered by Child Care Bureau, provides subsidies for child care for children of low-income working parents, whose eligibility is determined by states within broad federal guidelines.

Research questions for study

- **Does training in and ongoing support for child care teachers implementing high-quality language and literacy curricula lead to:**
 1. **High-fidelity implementation of curricula**
 2. **Positive effects on instructional behavior, interactions and classroom environment**
- **What kinds of professional development are needed to produce these intermediate outcomes?**
- **Do the curricula have meaningful effects on children's language and emergent literacy skills**

Study design

- **Random assignment of 162 centers to three language and literacy curricula (n=36 each) or to an “as is” control group (n=54)**
- **One four-year-old classroom in each center**
- **Intervention teachers received training over two years:**
 - **Initial group training (2-3 days)—late fall of 1st year**
 - **Bimonthly visit from coach/mentor trained to support one of the curricula**
 - **Additional group training in fall of 2nd year**

Study classrooms at baseline

- **Staff**

- Relatively inexperienced: average of 3 years
- Education: 41% HS only, 16% some college
- Primary language: 56% primarily Spanish-speaking, % bilingual

- **Classrooms**

- Enrollment of around 20 children/classroom with 1 teacher and aide
- **Low level of quality—of instruction, interactions, availability of developmentally appropriate and stimulating materials**
- Most classrooms homogenous in terms of child language: half all Spanish-speaking and a third all English-speaking children
- Most children from low-income families

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Spanish-speaking—some bilingual; English-speaking—monolingual; Other languages: include Haitian Kreyol

In 2001 > ½ of county's residents were born outside the US. County demographics:

57% Hispanic

24% Non-Hispanic White

19% Non-Hispanic Black

Intervention curricula

- **All three based on most recent research on what predicts reading success**
- **All focused on development of language and literacy skills**
- **Differed in instructional approach, materials provided, use of technology, intensity and cost**

Intervention curricula (2)

- **Ready, Set, Leap (RSL)** is a comprehensive program, using interactive electronic technology.
- **Building Early Language and Literacy (BELL)** is an add-on literacy component with two daily 15-minute lessons.
- **Breakthrough to Literacy (BTL)** is a comprehensive program, using interactive computer software to provide individualized literacy activities for children.

Implementation findings

- **Most centers in all three groups implemented the curricula with fidelity**
- **Effective coaching model**
 - **High intensity:** Frequency of visits
 - **Clear focus:** visits structured, focused intentionally on target curriculum
 - **Structured plans/activities to follow**
 - **Differentiation/Individualization:** Coaching tailored to individual teachers' needs; continuum of teacher development

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- In classrooms with at least one Spanish-speaking child, there was at least one staff member who spoke Spanish.
- Number of children in attendance averaged 15, and average observed ratio was 1:10.
- More than half of the teachers spoke Spanish as their first language; 28% spoke only Spanish in the classroom (46-49% “preferred” Spanish).
- More than one-quarter (28%) had no education beyond high school.
- More than half reported having an AA or BA degree, almost always from institutions outside the US.

Intermediate outcomes

- **By late spring 2004, six months after the initial training, all three interventions produced significant impacts on teacher behavior and interactions with children.**
- **By Spring 2005, after 18 months of training, these impacts increased in all but one area.**

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Impacts on teachers & classroom environment (OMLIT observations)

Construct	Spring 2004	Spring 2005
	Effect size	Effect size
Support for Oral Language	.59***	.61***
Support for Phonological Awareness	ns	.49**
Support for Print Knowledge	.53**	.74***
Support for Print Motivation	.58***	.43**
Literacy Resources	ns	.28*
Literacy Activities	.39*	.80***



Impacts on teachers

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- **Nearly eliminated relationship of education to behavior shown at baseline: Suggestion that training can be a “substitute” for education**
- **All 3 curricula were English-language curricula; Spanish-speaking teachers showed largest impacts on classroom behavior**

Impacts on classrooms

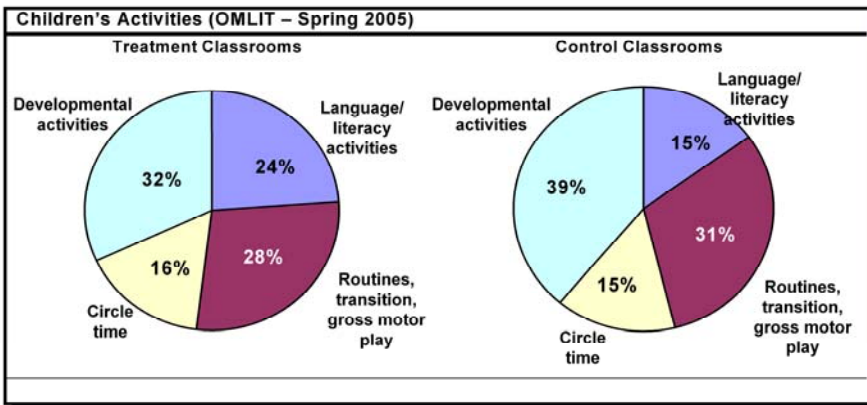
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- **By end of second year, the interventions had increased by 64% the amount of literacy-related activity in the treatment classrooms**
- **The increase in literacy-related activity did not come at the expense of any other single developmentally important activity**

Impacts on classroom activities



Impacts on child outcomes

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The Knowledge Gap



- **On all 4 measures of language/literacy, control group scored below national norms**
- **Children in 2 of the interventions had significant impacts on all four measures of emergent literacy**
- **Largest impact on Phonological Awareness-- interventions halved the gap and children outperformed norming sample**

Impacts on child outcomes (2)



Measure	Treatment 1 (RSL)	Treatment 2 (BELL)	Treatment 3 (BTL)
	Effect size	Effect size	Effect size
Definitional vocabulary	.28*	ns	.31**
Phonological awareness	.35**	ns	.44***
Print knowledge	.65 ***	ns	.60 ***
Early literacy index	.51 ***	ns	.54***



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- Impacts on children's language and literacy skills analyzed in three-level hierarchical linear models: children (level 1) nested in classrooms (level 2) and classrooms nested in randomization blocks (level 3)
- Treatment impacts were estimated in models that controlled for child's age, sex and home language, class-level mean LAP-D scores measured in Fall 2004, block variables (dominant language of teacher/size of center)

Conclusions

- Results suggest that when “counterfactual” represents low quality → well-designed, focused curricula accompanied by high-quality professional development* can have **meaningful effects**
- * **High quality PD** = ongoing, job-embedded, focused on curriculum or standards; involves professional community and specific recommendations for teachers’ own classrooms

Significance of impacts on children

- **The impacts brought children close to or above the national norms on three of the four child outcomes**
- **The impacts represent between four and nine months of developmental growth**

For more details on the report

- The press release about the report is now available at the ACF page on the HHS website:
<http://www.acf.hhs.gov>
- The press release contains a link to the full report