

Early Literacy Intervention Outcomes for Preschool Dual Language Learners (DLL)



The current study examines outcomes of DLL children who participated in the Bailet et al. (2009) (“parent”) study as they relate to native English speaking child participants. The DLL children received an unmodified program where they were given both the assessments and intervention in English only.

Hypotheses:

1. Children who are learning English as a second language will be more likely to be identified as ‘at-risk’ in the fall of their prekindergarten year.
2. There will be a significant, positive effect of the early literacy intervention on the emergent literacy skills of the DLL participants.
3. The at-risk DLL children will show similar gains in early literacy skills as the at-risk monolingual English-speaking children.

METHOD

Participants:

- 379 Pre-Kindergarten native English speaking children
- 55 Pre-Kindergarten Dual Language Learners (DLL)
 - 27 were native Spanish speakers
- DLL data was gathered from parent questionnaire
- Mean age for English speakers = 53.21 months
- Mean age for DLL = 53.63 months
- Gender (English speakers) = 61.5% Male
- Gender (DLL) = 54.5% Male

Measures:

- Get Ready to Read! (GRTR) (Whitehurst & Lonigan, 2003)
- Test of Preschool Early Literacy (TOPEL) (Lonigan, Wagner, & Torgesen, 2007); Print Knowledge (TOPEL PK) and Phonological Awareness (TOPEL PA) subtests
- Assessment of Language and Literacy (ALL) (Lombardino, Lieberman, Brown, 2005); Rhyming subtest (ALL RHY)

Procedure:

- Children who scored 8 or below on GRTR qualified for Nemours BrightStart! intervention.
- Preschools were randomly assigned to receive either immediate (Fall) or delayed (Spring) intervention for their at-risk children.
- Participants were assessed at three time intervals: Fall, Winter, or Spring. Children who were in the Delayed Intervention group served as a control group for the analyses at the winter time point.

Intervention:

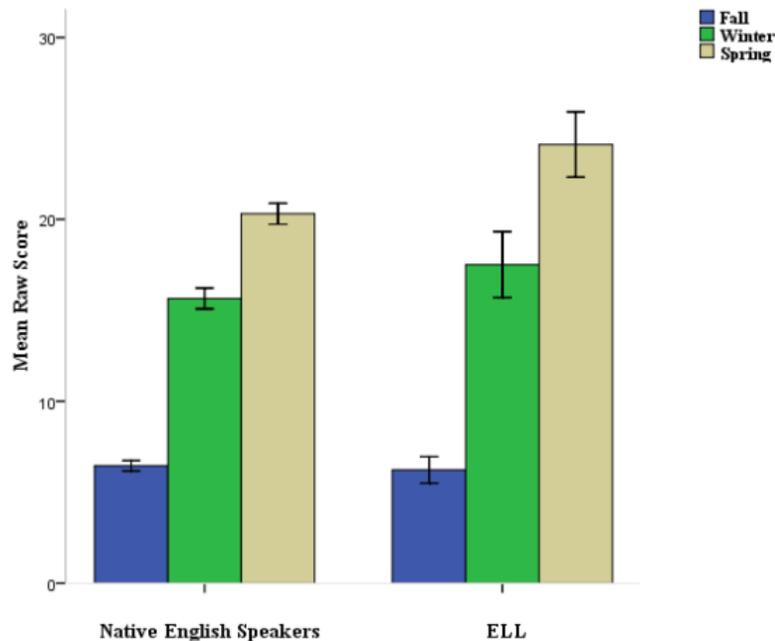
- Delivered by Nemours BrightStart! teachers hired and trained to implement the project
- Eighteen 30-minute lessons delivered over nine weeks
- Designed as a RTI Tier 2 intervention; groups consisted of no more than 4 children
- Lessons covered developmentally appropriate areas such as: syllable segmentation, letter identification, letter sounds, blending, elision, and rhyming

RESULTS

- **Hypothesis one:** A Pearson's Chi Square test revealed that a higher proportion of the DLL children were determined to be 'at-risk' for reading failure when compared to English only children ($\chi^2 = 27.65, p < .01$). Specifically, 16.5% of English speaking children qualified for the intervention and 28.5% of DLL children qualified.
- **Hypothesis two:** A significant positive effect of intervention group assignment (Immediate vs. Delayed) was demonstrated on ALL RHY for the DLL children, with the immediate intervention group performing better than the delayed intervention group ($F [1, 44] = 8.64, p < .01$).
- **Hypothesis three:** Repeated measures ANOVAs for each of the four dependent variables indicated that participants' improvement was only moderated by language status on one of the outcome variables – TOPEL PK ($F [1, 305] = 4.36, p < .05$) (See Figure 1). On this measure, DLL children made significantly greater gains in their early reading skills relative to native English-speaking children. TOPEL PA results approached statistical significance ($p = .08$).
- There was no significant impact of intervention group assignment on spring scores ($p > .05$). Both the Immediate and Delayed groups had similar means on their final reading assessments.

Figure 1. TOPEL Print Knowledge Scores by Time for English Speakers and DLL

Error bars represent +/- 1 standard error of the mean.



DISCUSSION

- The Nemours BrightStart! emergent literacy English-based intervention delivered in the present study has similar positive effects on early literacy skills for DLL children and native English speakers.
- At-risk DLL children not only showed gains similar to that of native English speakers on several early literacy measures, but actually surpassed them on the TOPEL Print Knowledge test, implying more than simply “catch-up growth”.
- There was no apparent “time of year” effect; instruction was equally effective whether given earlier or later in the pre-kindergarten year.
- Sample sizes between the two groups differed considerably, perhaps impacting the outcomes of the statistical analyses reported here; in particular, small DLL sample size may have masked treatment gains in variables beyond the gains found in ALL RHY.
- Results suggest that using an English-language screening tool likely over-identifies DLL children as being ‘at-risk’ for reading failure relative to native English speakers.
- Findings for DLL children may be language-specific; future research should assess a large sample of DLL children with various language backgrounds to determine whether gains reported herein differ based on native language.