

IES Grant

TITLE:	Examining the Efficacy of Friends on the Block: An Intensive Early Literacy Intervention for Elementary Students With Intellectual and Developmental Disability (Project Intensity)		
CENTER:	NCSEER	YEAR:	2020
PRINCIPAL INVESTIGATOR:	Allor, Jill	AWARDEE:	Southern Methodist University
PROGRAM:	Reading, Writing, and Language [Program Details]		
AWARD PERIOD:	5 years (07/01/2020 – 06/30/2025)	AWARD AMOUNT:	\$3,299,942
TYPE:	Efficacy	AWARD NUMBER:	R324A200151
DESCRIPTION:			

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Purpose: The purpose of Project Intensity is to conduct a randomized control trial (RCT) to evaluate the efficacy of a literacy intervention, *Friends on the Block*, designed to enhance reading and language outcomes for elementary students with intellectual and developmental disability (IDD).

Project Activities: The research team will recruit students in two cohorts and each cohort will participate in treatment for two academic years. Cohort One will also participate in follow-up testing for two years (i.e., 2023 and 2024, respectively). Project Teachers will provide the intervention across two academic years. Researchers will conduct midpoint testing 7 months after intervention begins and post-testing 12 months after the midpoint testing. Students in Cohort One will complete maintenance testing 12 and 24 months later. Researchers estimate that the students will receive the opportunity to participate in 250–275 intervention sessions across approximately 55 weeks of school. The counterfactual condition will be the BAU reading instruction provided by schools to students assigned to the control condition. Researchers will observe control instruction using monthly virtual observations and collect data with control teacher instructional logs to understand differences between intervention and control conditions.

Products: Products include information about the efficacy of FOTB and cost effectiveness of the intervention. The project will also result in a released final data set, peer-reviewed publications and presentations, as well as additional dissemination products that reach education stakeholders, such as practitioners and policymakers.

STRUCTURED ABSTRACT

Setting: The research will take place in elementary schools in Alabama and Texas.

Sample: The participants will include 240 children with IDD (for the purpose of this study, students with significant cognitive impairments and evidence of deficits in adaptive behavior).

Intervention: Students in the treatment condition will participate in an early literacy intervention, *Friends on the Block* (FOTB), which was developed through an IES Goal 2 Development grant (R324A130102). Unique features of the FOTB curriculum include (a) carefully designed books that combine text read by adults with text read by students, (b) texts with natural sentence structure and familiar settings to facilitate comprehension and links to oral language, (c) texts that provide intensive practice on target sets of high-frequency irregular (i.e., sight) and regular words, (d) extensive cumulative review in both text and lessons, (e) dialogic questions that link oral language to reading comprehension, (f) multiple books within each level to provide for cumulative review and mastery, and (g) initial focus on sight words while developing foundational phonological and alphabetic skills. FOTB includes a set of 56 books arranged in 12 levels, along with teacher guides and materials. Teacher guides provide detailed guidance on teaching the specific skills needed to read each book. Each level includes intervention-aligned assessments of target words for curriculum-based assessment. These can be repeated as often as needed, usually weekly, and are used to determine when to move to the next level of the curriculum. Students continue reading the books and participating in the accompanying lessons for one level until the words for that level are mastered. FOTB is intended to be implemented five days a week in 20- to 30-minute small group sessions.

Research Design and Methods: Researchers will conduct a randomized control trial involving elementary students across four years. Two cohorts of 120 students will be randomly assigned to the treatment condition or to the business-as-usual control condition. Students in the treatment condition will receive intervention for approximately 55 weeks spanning two academic years. **Control Condition:** Students in the business-as-usual control condition will participate in the typical reading intervention provided by school staff.

Key Measures: The student measures include a battery of word reading, reading comprehension, vocabulary, and other language measures (*Pre/Post Test of Target Words* and *Mastery Tests of Target Words*, DIBELS Next, MAZE CBM, *Wechsler Individual Achievement Tests-III*, *Peabody Picture Vocabulary Test-Fourth Ed*), and a measure of verbal and nonverbal intelligence (*Kaufman Brief Intelligence Test, 2nd Ed.*). Parents will complete a survey related to demographic information and the *Survey of Home Literacy Experiences*. Researchers will collect data from teachers on the duration, content, and quality of instruction in both conditions using the *Instructional Content Emphasis Instrument-Revised*. Researchers will use a fidelity of implementation checklist to evaluate whether Project Teachers delivered the literacy intervention as it is intended. Data on costs of the intervention will be collected, including direct costs and indirect (opportunity costs).

Data Analytic Strategy: Researchers will use multiple group structural equation modeling to determine the efficacy of FOTB at improving reading and language outcomes. A latent factor of each outcome at posttest will be regressed on the corresponding latent factor at pretest to reduce the effects of measurement error and increase power to detect condition differences. Effect sizes based on adjusted posttest latent means and posttest variances pooled from the treatment and control groups will be computed to describe the magnitude of treatment effects, consistent with WWC. Researchers will also conduct moderation analyses to understand whether student differences (e.g., language and IQ) and/or family differences (e.g., home literacy environment, parent education, SES) moderate outcomes. They will also determine if differences in outcomes between conditions is maintained after two years. A cost analysis will separate direct costs and indirect (opportunity) costs, isolate fixed and marginal costs, discount costs to arrive at estimates for a single year, assess total versus net costs, and include a sensitivity analysis to test assumptions and variable cost estimates. Researchers will estimate a cost-effectiveness ratio for key outcomes.

Related IES Projects: [Project Intensity: The Development of a Supplemental Literacy Program Designed to Provide Extensive Practice with Multiple-Criteria Text for Students with Intellectual Disabilities \(R324A130102\)](#); [Maximizing Literacy Learning among Children with Mild to Moderate Mental Retardation: Project Maximize \(H324K040011\)](#)

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