# **Stimulus Evidence-Building Brief**



**Colorado Evaluation & Action Lab** 

UNIVERSITY OF DENVER

A strategic research partner for government agencies and a bridge to the research community

September 2023

► Early Literacy: Imagination Library of Colorado



#### **AUTHORS:**

Allie Kallmann Wegner, MA, M.Ed.

Staff Researcher, Colorado Evaluation and Action Lab

Kristin Klopfenstein, PhD

Director, Colorado Evaluation and Action Lab



This brief represents evaluation work funded and managed outside of the Colorado Evaluation and Action Lab's Early Childhood Evaluation Hub. Findings from this aligned evaluation do not necessarily reflect the contribution of stimulus funding.



## **Overview**

The Colorado Department of Early Childhood (CDEC) used federal and state stimulus funding to support five existing programs within an <a href="Early Literacy & Family Engagement">Early Literacy & Family Engagement</a> strategy. These programs support <a href="CDEC's strategic goal">CDEC's strategic goal</a> #3 to recognize the crucial role families play in creating supportive and inclusive environments for early childhood development and give them the skills and knowledge they need to raise healthy, happy children despite tough times and challenges that come their way. The Imagination Library of Colorado (ILCO) provides books to children birth to age five at no cost to families, including tips to support reading and early literacy interactions between families and children. The program is part of an international network, Dolly Parton's Imagination Library (DPIL).



Having books shipped directly to children makes them feel special and creates a special bond between children and books.

- Participating Family

ILCO started partnering with the Colorado Evaluation and Action Lab (Colorado Lab) in 2022 to evaluate the program. The evaluation focuses on estimating the causal impact of the program using a matched comparison design. The evaluation leverages historical data from parts of the state that have been participating in ILCO since before the pandemic, so it does not reflect changes in kindergarten readiness that is due specifically to stimulus funding. CDEC also partnered with the Colorado Lab to coordinate the evaluation of stimulus-funded activities, which includes reporting out on findings from these ongoing ILCO evaluation efforts to synthesize findings across stimulus evaluation activities.

Information about Bright by Text, one of the other five Early Literacy & Family Engagement programs, can be found in this **February 2022 evaluation report**.



### What We Will Learn by the End of the Evaluation

 The impact of participating in ILCO on the kindergarten readiness scores of participating children compared to demographically similar children attending the same school district who did not participate in the program.

This brief represents early insights from the initial phases of ILCO evaluation work. Final evaluation findings will be communicated in June 2025.

## **Evidence-Based Decision-Making**

Evidence-Based Decision-Making (EBDM) recognizes that research evidence is not the only contributing factor to policy and budget decisions. EBDM is the intersection of the best available research evidence, community needs and implementation context, and decision-makers' expertise. Actionable insights across these domains are highlighted in the box below, with supporting evidence and additional information detailed for each in the sections that follow.





### **Actionable Insights**

- National research on book distribution programs indicates some association with child outcomes.
- ILCO books reach tens of thousands of Colorado families each month, and stimulus funding has greatly expanded the program's reach in underserved communities.
- Family feedback is strongly positive and indicates the program is meeting its implementation goals.
- Data collected for Colorado's READ Act are aligned with ILCO's north star outcome of increased literacy skills at kindergarten entry.
- ILCO's activities are focused on the early years and align with the ages served by CDEC.

#### **Best Available Research Evidence**

Data in this section come from ILCO and DPIL program materials and the published literature.

National research on book distribution programs indicates some association with child outcomes. Although there has not been any outcomes research in Colorado, previous studies in other locations have found positive differences at kindergarten entry for participating children in language and literacy outcomes broadly, and in specific skills including letter identification, rhyming, beginning sound awareness, letter sounds, spelling, concepts about print, and expressive and receptive vocabulary. However, other studies have found null effects of book distribution programs. Importantly, few studies have used the kind of matching design that will be used for the ILCO evaluation to isolate the causal effect of ILCO on kindergarten readiness. The associations observed between DPIL participation and kindergarten readiness in these other

studies are likely, at least in part, due to the types of families that participate in the program. For example, when DPIL recruitment happens primarily in libraries, only families who already value books—as indicated by visiting the local library—are included, so it is not surprising that children's literacy outcomes are higher than average for this group.

This has been a blessing to me and my daughter. I have read a lot to her since she was born and she has a big love for books and I know it's because we started at a young age and this awesome program has made it more possible!

- Participating Family

### **Community Needs & Implementation Context**

Data in this section come from ILCO and Dollywood Foundation internal records, program materials, and state standards.

ILCO reaches tens of thousands of families each month across Colorado, and stimulus funding has greatly expanded the program's reach in underserved communities.

- In August 2023, 55,081 books were mailed across all affiliates and funding sources, with a net increase in enrollment with 996 children "graduating" (aging out) and 4,860 new enrollees in August alone.
- As of August 1, 2023, 361,108 books have been mailed this year, including 5,777 with both Spanish and English content.
- As of August 2023, over 17% of eligible children are receiving monthly Imagination Library books, up from 10% in December 2022, prior to receiving stimulus funds.

ILCO also operates in the Migrant Education Program (MEP). As of August 2023, there are 128 active children and nine graduates, and MEP regional directors distributed an additional 552 books to families over Summer 2023.

Stimulus funds provided by CDEC have supported the expansion of ILCO into underserved rural communities and Head Start programs (Figure 1). Year 1 funding supported the enrollment of 1,715 additional children and distribution of 20,580 books. Year 2 funding supported the enrollment of 2,207 additional children in rural communities and 610 children in Head Start programs within Denver, Adams, and Arapahoe counties, with a total distribution of 33,804 books.

Imagination Library of Colorado Affiliate Map - funding by OEC/CDEC Sedgwick Larimer 5305/17,736 Weld 4836/21,588 Moffat 290/656 Logan 432/1,713 Phillips 141/270 Routt 619/1100 Boulde Rio Blanco 113/319 Yuma 156/173 Washington # of children enrolled/ # of eligible children as of 7/31/23 Kit Carson 58/372 OEC Year 1 - rural Park 136/643 Mesa CDEC Year 2 - rural CDEC Year 2 - Head Start Cheyenne 29/216 El Paso 5953/49,962 Gunnison 247/744 Lincoln 100/270 69/720 As of July 31, 2023 there are 57,012 children enrolled Kiowa 30/112 Fremont 297/2,366 rowley 47/174 Pueblo 2517/8,400 Other notes: Denver: 5609/41,000 Saguache 9/327 San Miguel 127/330 Bent 105/209 Otero 381/914 Migrant Education Program: 128 enrolled Dolores 47/82 Huerfano 140/259 lio Grande Montezu 607/1,567 La Plata Las Animas 89/711 Date: 7/31/2023 116/177

Figure 1. ILCO affiliate map

Additionally, \$350,000 from the Governor's Emergency Education Relief (GEER) fund has reached 42 communities across the state in all but two counties who have opted out.

Family feedback is strongly positive and indicates the program is meeting its implementation goals. In Fall 2022, 14 affiliates across 19 Colorado counties distributed a parent satisfaction survey

to families enrolled in the program, receiving 2,084 responses. Results of the survey indicated that the program is meeting its implementation goals of increasing reading in the home:

- 86% of respondents said they are reading more often to their child.
- 87% said there is significant benefit to their child participating in the program.
- 93% said that their child brings books to others and asks to be read to more often.

The goals of ILCO are aligned with Colorado's standards for children's learning, growth, and development. Research on other book distribution programs has found positive associations with many of the types of language and literacy skills described in Colorado's <a href="Early Learning and Development">Early Learning and Development</a> Guidelines and <a href="Academic Standards">Academic Standards</a>. Associations do not necessarily indicate causation but suggest that a causal relationship may exist.

Data collected for Colorado's READ Act are aligned with ILCO's north star outcome of increased literacy skills at kindergarten entry. Per Colorado's READ Act, literacy skills are assessed for all children at kindergarten entry and in grades 1-3. This allows early identification of students with significant reading deficiencies. Research on other book distribution programs have found positive associations with many of the types of language and literacy skills described in Colorado's <a href="minimum reading competencies">minimum reading competencies</a> for kindergarten, including rhyming, beginning sound awareness, concepts about print, letter recognition, expressive language, and receptive language.

### **Decision-Maker Expertise**

Data in this section come from the published literature and initial evaluation work conducted by the Colorado Lab.

**ILCO's activities are focused on the early years and align with the ages served by CDEC**. While the evaluation will use assessment data provided by K-12 school districts, the program activities themselves are specifically focused on children birth to age 5 and their families. ILCO program staff and CDEC have noted that this age range is more closely aligned with CDEC's services and expertise than that of the Colorado Department of Education (CDE) where ILCO currently lives.

There are future opportunities to expand Spanish-language reach. Program staff have shared that DPIL is piloting Spanish language-only participation in other states. If Colorado is able to offer a full set of books in Spanish, this may expand ILCO's reach to families who primarily speak and/or read in Spanish. Research shows that the home literacy environment in multilingual households predicts growth in same-language early literacy skills. Although these literacy skills do not directly translate across languages in the early years, bilingualism is positively associated with the kinds of executive functioning skills that support later literacy skills. In other words, creating a high-quality home literacy environment in Spanish may lead to stronger literacy skills in English over the longer term.

School district partners for the evaluation will intentionally come from a combination of rural and urban areas. Rural and urban areas face different challenges in recruiting and reaching young children. To best reflect these differences, program staff identified the parts of the state with the longest participation in ILCO with a specific emphasis on geographic diversity.

Because of the statewide emphasis on early literacy through the READ Act, it may be possible and meaningful to examine ILCO's longer-term effects. ILCO program staff, local affiliates, school districts, and CDE have all expressed interest in understanding whether ILCO participation may have longer-term effects on children's literacy skills. As the READ Act requires statewide assessments from K-3 at least once per year and data infrastructure will be created through the current study, future studies may be able to examine ILCO's impact on literacy skills through third grade.