



 Waterford | **UPSTART**

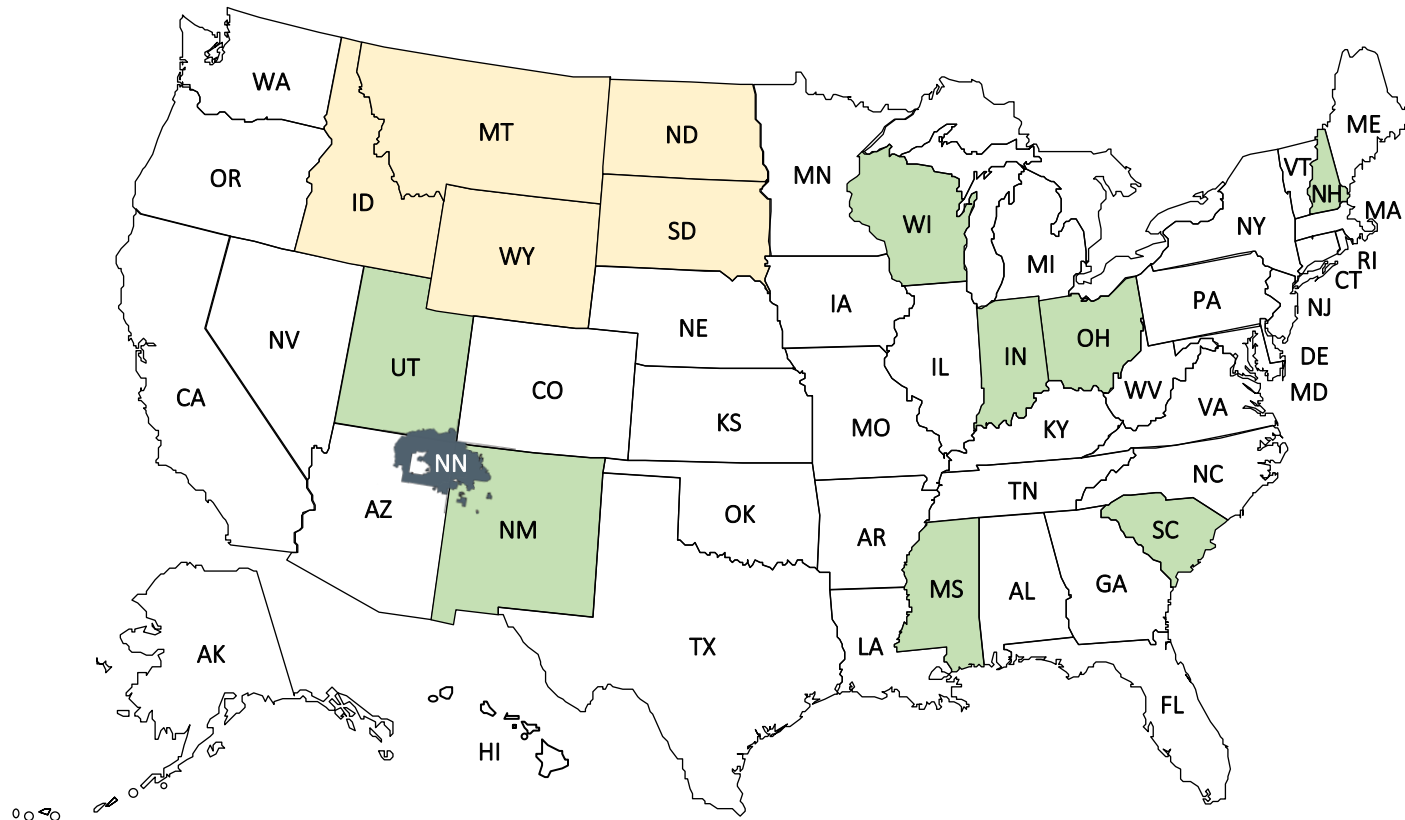
Kindergarten Readiness at Home



# Introduction

Waterford Upstart is an in-home, cost effective approach to kindergarten readiness that helps families and children develop skills needed for school success.

- The program has been **piloted in 29 states and Navajo Nation** and is currently being implemented through **public funding in 13 states**.



## Federally-Funded Programs

1. Idaho
2. Montana
3. North Dakota
4. South Dakota
5. Wyoming

## Publicly-Funded State Programs

1. Indiana
2. Mississippi
3. New Hampshire
4. New Mexico
5. Ohio
6. South Carolina
7. Utah
8. Wisconsin

# About Waterford Upstart

Waterford Upstart is **an in-home kindergarten readiness program** that was **created by the Utah State Legislature** in 2009. Under the program:

- Preschool-age children use **Waterford Upstart in the home for 15 minutes a day**, five days a week.
- Children receive a **personalized curriculum in reading, math and science**.
- **Each family receives coaching to ensure strong parental engagement**. Waterford Upstart forms a partnership with parents to ensure all children obtain the education necessary for success in school.
- **Computers and Internet service are provided** as part of the program if the home does not have it.
- **Waterford Upstart is aligned to Idaho Early Learning Guidelines**; Head Start Early Learning Outcomes Framework; CASEL Social and Emotional Learning Competencies; and endorsed by the Council of Administrators of Special Education.



# Federal Education Innovation and Research (EIR) Expansion Grant

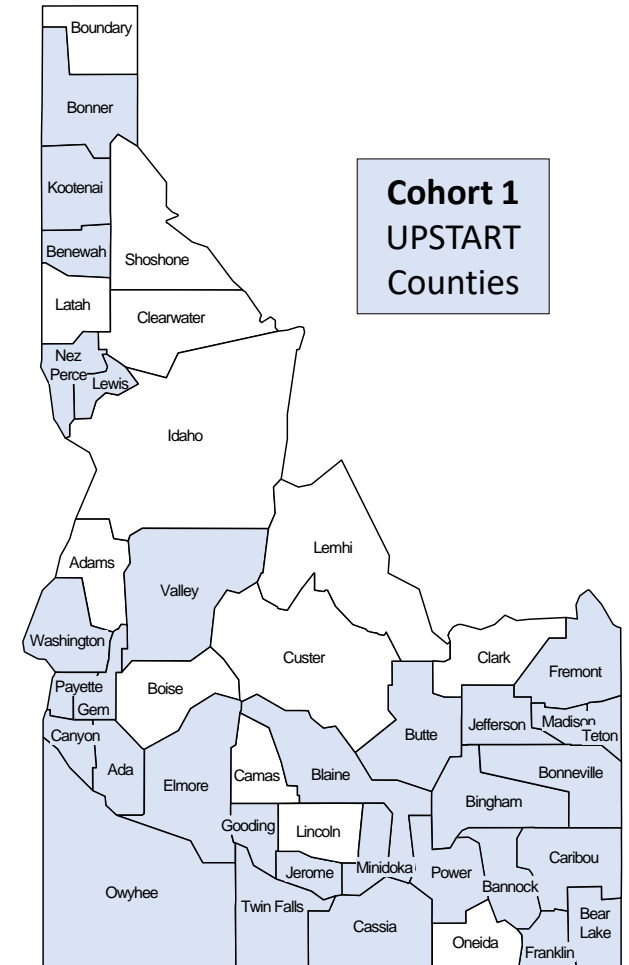
Waterford.org was awarded a federal EIR expansion grant in late 2018 that is being used to provide Waterford Upstart in Great Plains states that do not provide significant funding for early childhood education, including Idaho, Montana, North Dakota, South Dakota, and Wyoming.

- Waterford.org convened a **TASK Force with education stakeholders across the state** – including representatives from child development centers, Local Educational Agencies, and the Idaho State Department of Education – to introduce Waterford Upstart and seek guidance on program implementation.
- Under the grant, Waterford.org has provided Waterford Upstart to just over **1,000 children across Idaho over the span of two years** with the goal of at least 200 children during the 2019-2020 school year (**Cohort 1**) and the goal of at least 400 children during the 2020-2021 school year (**Cohort 2**).



# Idaho EIR Upstart Pilot – Cohort 1 (2019-2020)

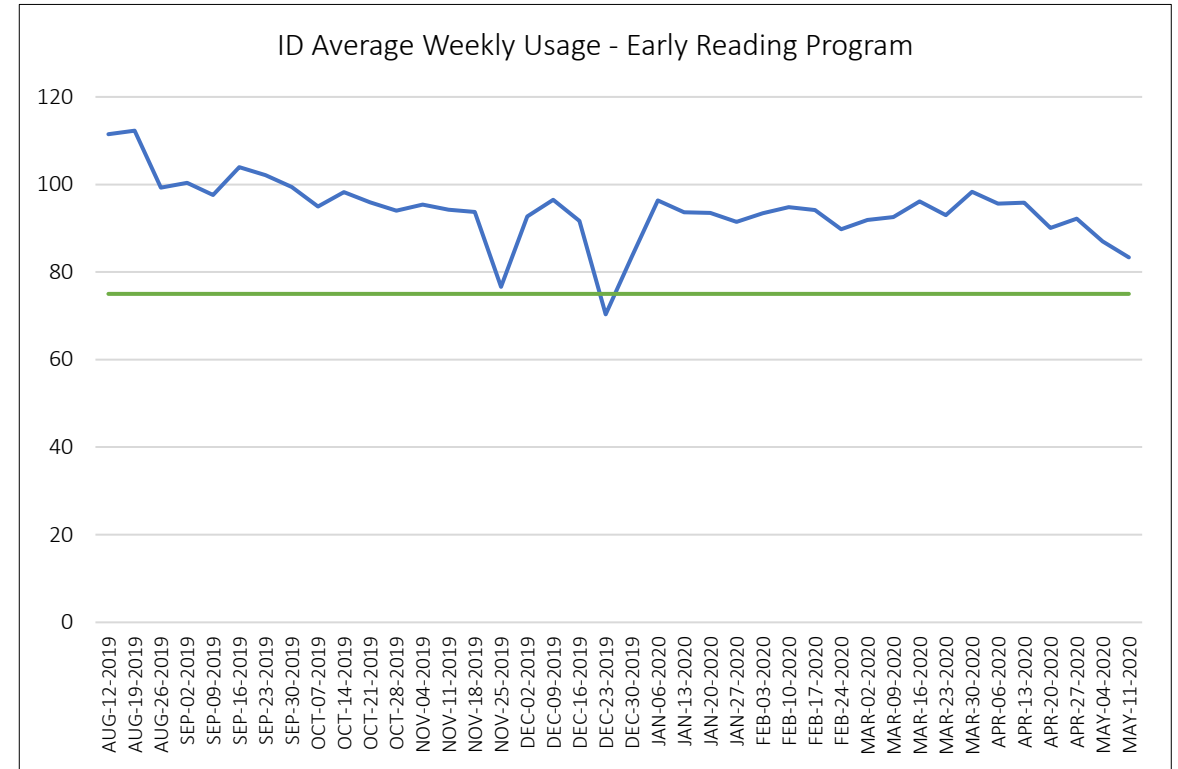
- Approximately **250 preschool-age children** participated in **Cohort 1** of the Idaho EIR Upstart pilot.
  - **91.27% rural** participants
  - **8.73% non-rural** participants
- Families began in-person trainings and initial student assessments in **August 2019**; the pilot concluded with online final student assessments and virtual graduations (because of the COVID-19 pandemic) for families in **June 2020**.
- Statewide, children from **72 different cities/towns** across **31 counties** used Waterford Upstart in the home under **Cohort 1** of the Idaho EIR Upstart pilot.



# Average Weekly Usage – Cohort 1 (2019-2020)

The following chart shows Idaho participants' average **reading usage** on a weekly basis, as shown by the blue line. The green line indicates the recommended usage criterion of 75 minutes per week.

- For **39 out of the 40 weeks**, average weekly usage exceeded the recommended usage requirement of 75 minutes per week, indicating **significant parental engagement** under the Idaho EIR Upstart pilot.

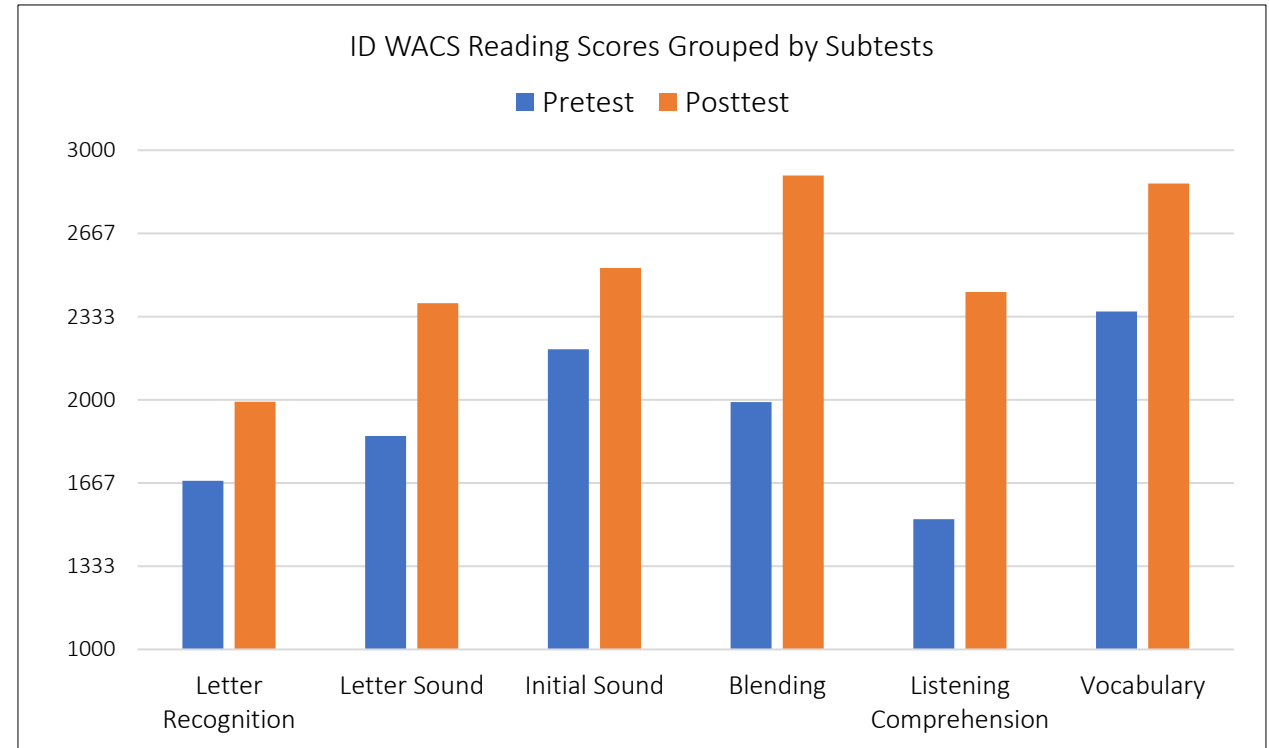


# Early Reading Program Outcomes – Cohort 1 (2019-2020)

**Waterford Assessment of Core Skills (WACS)** is a computerized adaptive test of early literacy for students in Pre-Kindergarten through second grade with initial content validity established against state and national standards. The following chart shows average results for **WACS pretest and posttest scores, grouped by subtests** for the program.

*Note that Waterford.org was not able to proctor in-person final assessments because of COVID-19; accordingly, these results only include students who scored within one standard deviation of their predicted overall end of year WACS scores.*

- **Children’s outcomes averaged at the “Kindergarten Intermediate” level**, where most children score mid-point during the Kindergarten year.
- **93.24% of children scored at “Kindergarten Beginning” or above**, demonstrating strong school readiness outcomes.
- **Children from low-income families** (under 100% of the federal poverty level) **outperformed their more affluent peers.**



# Early Reading Program Outcomes – Cohort 1 (2019-2020)

The following table provides results on additional assessed skills. It shows **average final WACS subtest grade equivalents** for the program.



Measured Skill	Grade Equivalent of Final WACS Score
Letter Recognition	Preschool Advanced*
Letter Sound	<b>Kindergarten Intermediate</b>
Initial Sound	<b>Kindergarten Intermediate</b>
Blending	<b>Kindergarten Advanced</b>
Listening Comprehension	<b>Kindergarten Intermediate</b>
Non Words	<b>Kindergarten Advanced</b>
Sight Words	<b>Kindergarten Advanced</b>
Real Words	<b>Kindergarten Intermediate</b>
Reading Comprehension	<b>Kindergarten Intermediate</b>
Vocabulary	<b>Kindergarten Advanced</b>



*\* Note that “Kindergarten Beginning” is highest possible achievement level for the “letter recognition” skill. Children’s outcomes averaged eight points below the highest level for this measured skill.*



# Parent Satisfaction – Cohort 1 (2019-2020)

Parents/guardians participating in the Idaho EIR Upstart pilot completed a comprehensive survey to provide feedback related to their, and their child's, experience in the program.

<b>% Agree</b>	<b>Survey Question</b>
<b>89% YES</b>	I like that the program expects our family to create a daily routine for using it.
<b>95% YES</b>	The program helped prepare my child for Kindergarten.
<b>81% YES</b>	The program prepared me to help my child in school next year.
<b>87% YES</b>	My child is now better able to work independently.
<b>85% YES</b>	The amount of contact from the coach (Family Education Liaison) was adequate.
<b>95% YES</b>	Did the coach give you what you needed to effectively support your child?
<b>99% YES</b>	The coach was knowledgeable about the program and software.
<b>94% YES</b>	In general, did your child enjoy using the Early Reading Program?
<b>96% YES</b>	Do you think the Early Reading Program was age appropriate?
<b>97% YES</b>	Do you feel the weekly Early Reading Program usage requirements were appropriate?
<b>98% YES</b>	Would you recommend Waterford UPSTART to a friend or colleague?

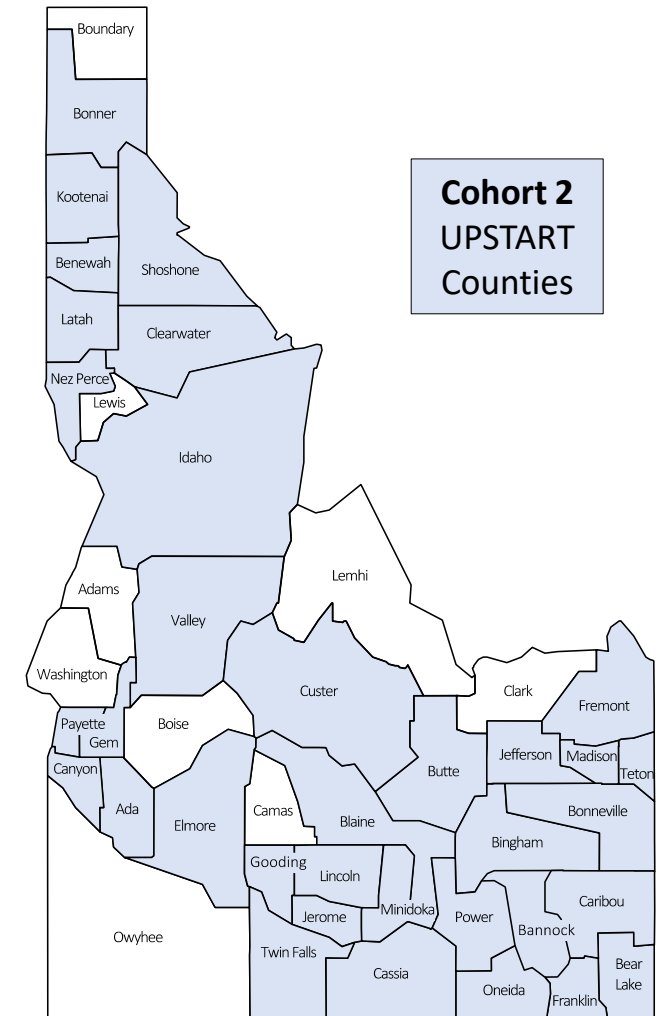
# Parent Satisfaction – Cohort 1 (2019-2020)

## Additional comments:

- *I am so impressed by this program! My daughter went from learning letters and letter sounds to reading simple books in just a few short months! I feel very confident sending her to Kindergarten this fall. We were part of a pilot program and I am hoping and praying this program comes to Idaho permanently so that my other kids can also participate!*
- *I absolutely love this program! I would like to enroll my other son when he's able to!*
- *Our coach was very friendly and encouraging. It was nice to get off the phone with her and then tell my son what a great job he was doing!*
- *We enjoyed reading the books on the program site because our library was closed due to Covid-19.*
- *We love this program! We hope my daughter can be enrolled in the future!*
- *The coach was always so nice and when I missed the calls, my daughter loved listening to the voicemails.*
- *I think it is a great program and easy for my child to follow and learn, I felt she learned a lot from the program.*

# Idaho EIR Upstart Pilot – Cohort 2 (2020-2021)

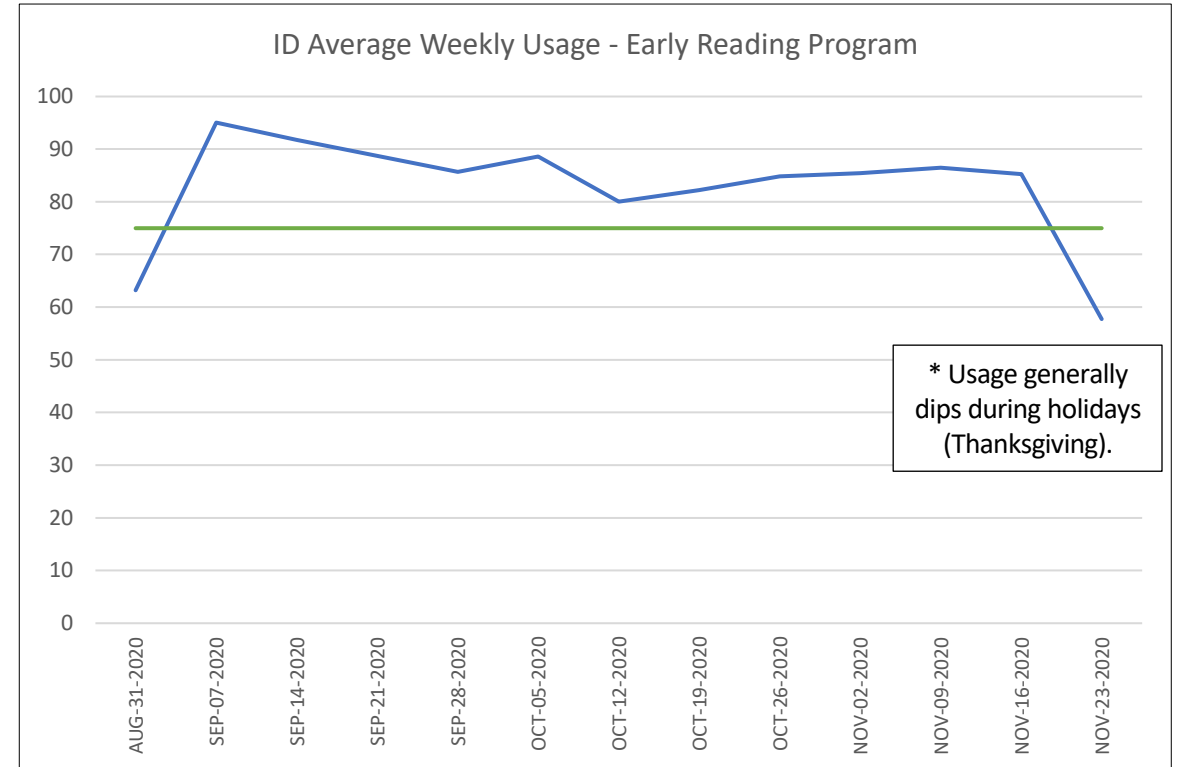
- Approximately **770 preschool-age children** participated in **Cohort 2** of the Idaho EIR Upstart pilot.
  - **58.80% rural** participants
  - **41.20% non-rural** participants
- Because of the COVID-19 pandemic, families began virtual trainings and initial student assessments in **August 2020**; the pilot will conclude with final student assessments and in-person or virtual graduations (as appropriate) for families in **June 2021**.
- Statewide, children from **107 different municipalities** across **35 counties** used Waterford Upstart in the home under **Cohort 2** of the Idaho EIR Upstart pilot.



# Average Weekly Usage – Cohort 2 (2020-2021)

The following chart shows Idaho participants' average **reading usage** on a weekly basis, as shown by the blue line. The green line indicates the recommended usage criterion of 75 minutes per week.

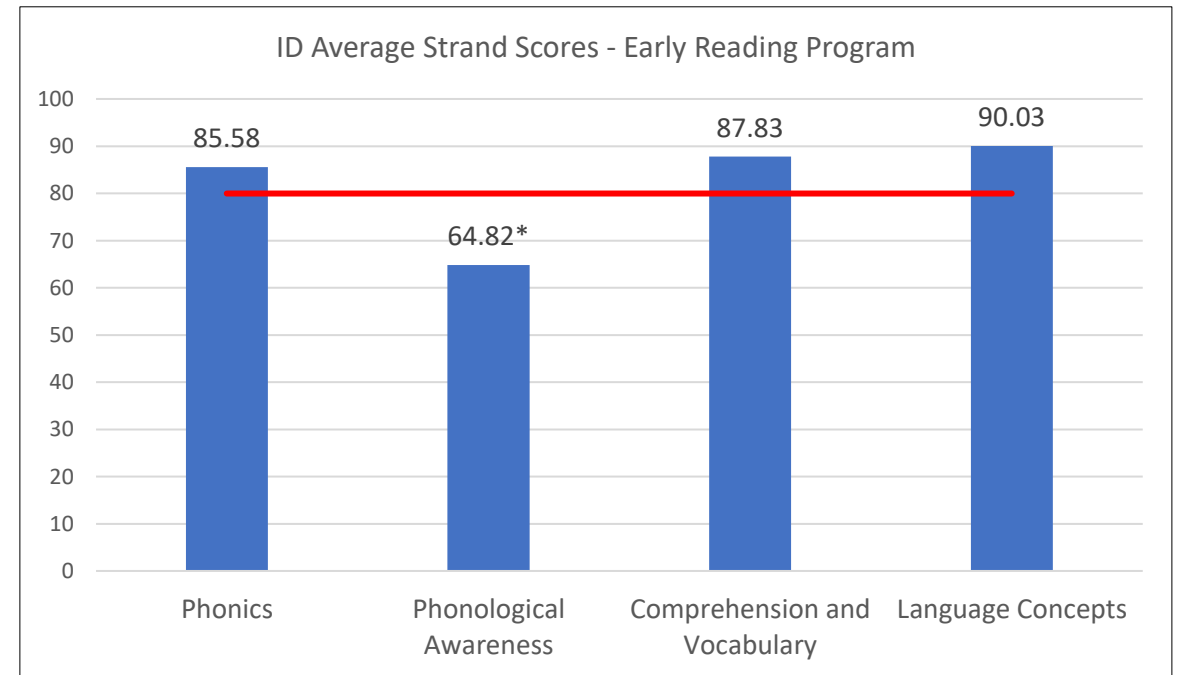
- For **11 out of the 13 weeks, average weekly usage exceeded the recommended usage requirement** of 75 minutes per week, indicating **significant parental engagement** under the Idaho EIR Upstart pilot.



# Early Reading Program Strand Scores – Cohort 2 (2020-2021)

**Reading strand scores** are scores for subskills as a percentage of 100. A **score of 80 or higher within the Waterford Early Reading Program represents mastery**, which is the goal of the cognitively based Waterford Upstart program. The sequencer, within the software, individualizes instruction to provide remediation until a child achieves mastery.

- The following shows the average score, organized by strand, for all students who scored on a given strand for reading. The red line represents the expected average score, 80. **Through the first 13 weeks of the Idaho EIR Upstart pilot, the average score for three of the four reading strands was above 80.**

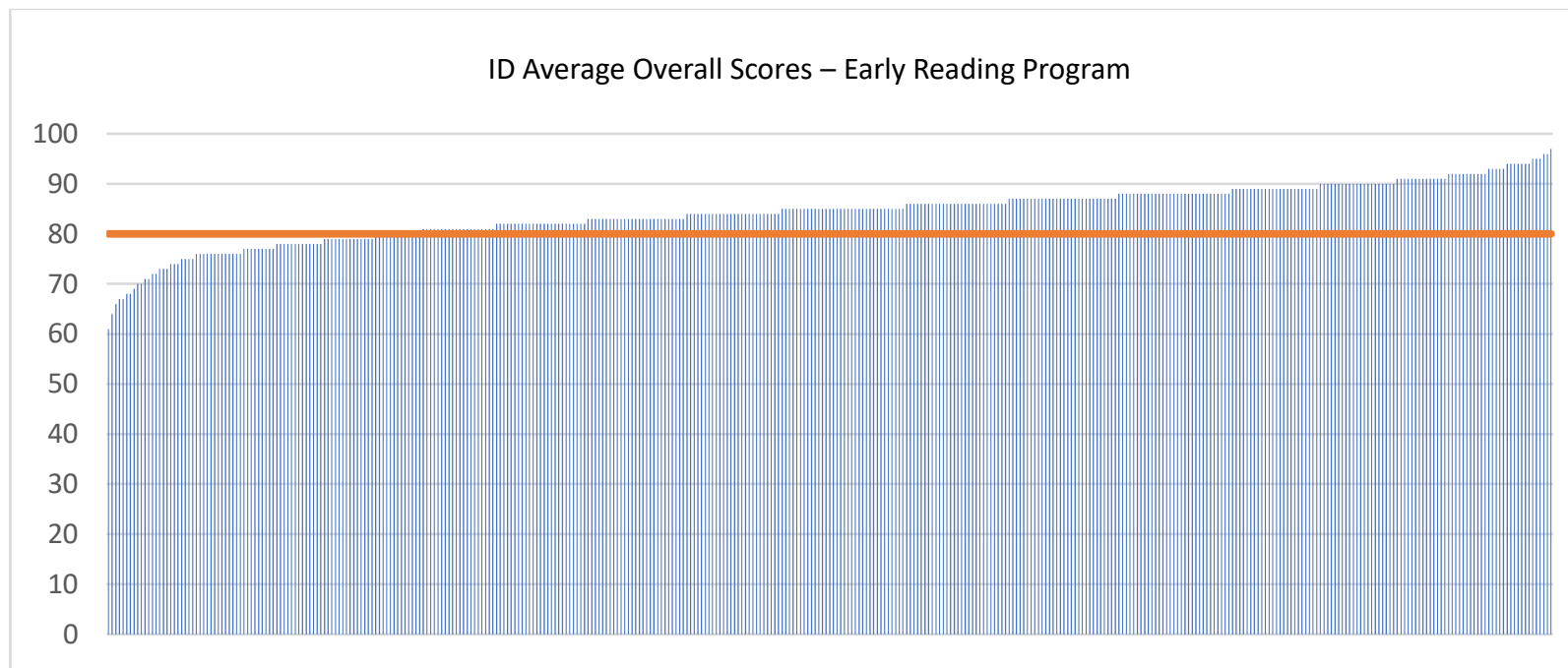


\* *Note: Phonological awareness is an individual's understanding of the sound structure of words (e.g., what rhymes with cat?). As such, it is a difficult skill to learn, aligned closely to age, with significant growth seen even in month variations. While Waterford Upstart helps students work on this skill through the curriculum and offline family activities, there is generally lower performance on this skill strand.*

# Early Reading Program Average Overall Scores – Cohort 2 (2020-2021)

The following chart depicts the average overall score per student for the **Waterford Early Reading Program**. The orange line emphasizes the expected average overall score, 80, which represents “mastery.” Each blue bar represents the score of an individual student. This chart highlights the achievement level of students.

- **81.52% of students had an overall reading score of 80 or higher**; the **average overall score was 84.25** through the first 13 weeks of the Idaho EIR Upstart pilot.



# Questions



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GRACIAS    DZIĘKI    CẢM ƠN    MERCI  
СПАСИБО    GRAZIE  
TAK    **THANK YOU**  
DÊKUJI    AITAH    ありがとうございます  
謝謝    OBRIGADO    TACK    DANKE  
HVALA    TACK    TEŞEKKÜRLER



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## Additional Background



# Adaptive and Sequenced Curriculum

- **Waterford Upstart** delivers **individualized instruction in reading, math, and science** that adapts to each child's learning trajectory.
  - 2,500+ lessons
  - 7,000+ activities
  - 360 digital books
  - 330 animated songs
  - More than 450 instructional hours
  - Progress reports for parents
- Waterford Early Learning instructional strands for literacy are **aligned with the five essential components of reading identified by the National Reading Panel.**



# Waterford Assessment of Core Skills (WACS)

- WACS is a **computerized adaptive assessment of early literacy** for students in pre-kindergarten through second grade.
  - Initial content validity for WACS was **established against state and national standards** for 11 subtests (letter recognition, blending, reading comprehension, etc.).
- To establish concurrent validity and predictive validity, **student performance on WACS was compared to performance on five commonly-used standardized tests** also measuring early reading skills:
  - Dynamic Indicators of Basic Early Literacy Skills (DIBELS),
  - **Idaho Reading Indicator (IRI)**,
  - Iowa Tests of Basic Skills (ITBS),
  - Stanford Achievement Test Series (SAT 10), and
  - Texas Primary Reading Indicator (TPRI).



# Parent Engagement

- **Waterford Upstart empowers parents in the education of their young children through a parent engagement curriculum developed over the program's 11 years of experience working with families.** The program is designed to support small, incremental changes in behavior, with growth mindset activities that provide clear examples of ideas for parents and caregivers that are easy to implement.
  - **Parent engagement activities are reinforced by live coaching from the Family Education Liaison** through weekly emails and personalized calls with parents to support program participation and fidelity, troubleshoot learning routines, and celebrate progress.
  - While the curriculum is in English, **families are supported in English and Spanish**, with translation services offered for additional languages, as needed.
  - In addition, **Mentor (Waterford Upstart's parent support app) provides weekly messages that invite, support, and guide parents to engage with their child's development** to produce stronger impacts on parental engagement and child outcomes.



# Program Overview

## 1. Waterford Upstart Registration

- Pre-registration through the Waterford Upstart website or by phone
- Program Registration
  - Participant information, including a variety of demographic information
  - Usage and willingness to commit
  - Agreements, including data-sharing
  - Qualify for computer and Internet



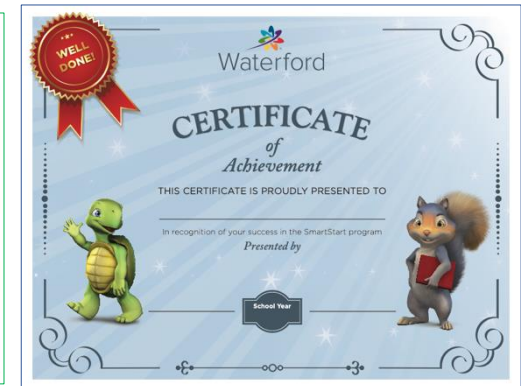
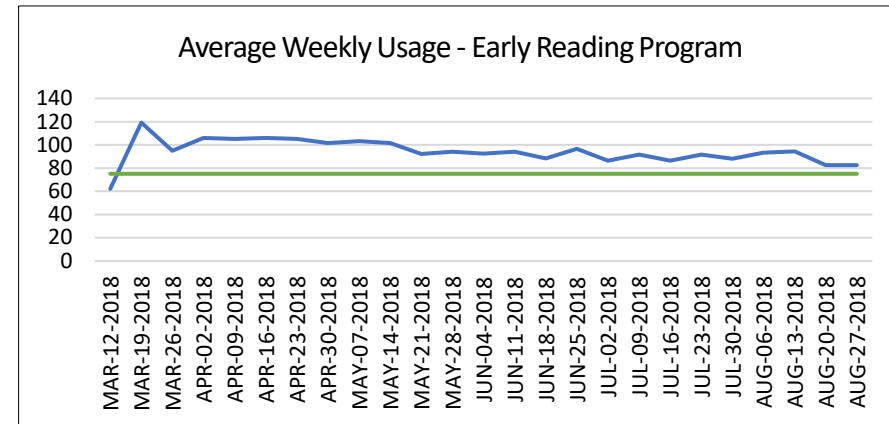
## 2. Parent Training and Student Assessment

- Initial WACS assessment is given
- Conduct parent training:
  - Build value in early education
  - Software overview
  - The all important 15/5 and establishing a routine
  - Participant agreement
- Distribute computer and Internet

# Program Overview

## 3. Usage Management & Parent Engagement

- Internet and technical support
- Welcome call
- Weekly e-mails and texts
- Usage contests and activities
- Weekly usage review and motivational support
- Monthly medals



## 4. Graduation and Final Assessment

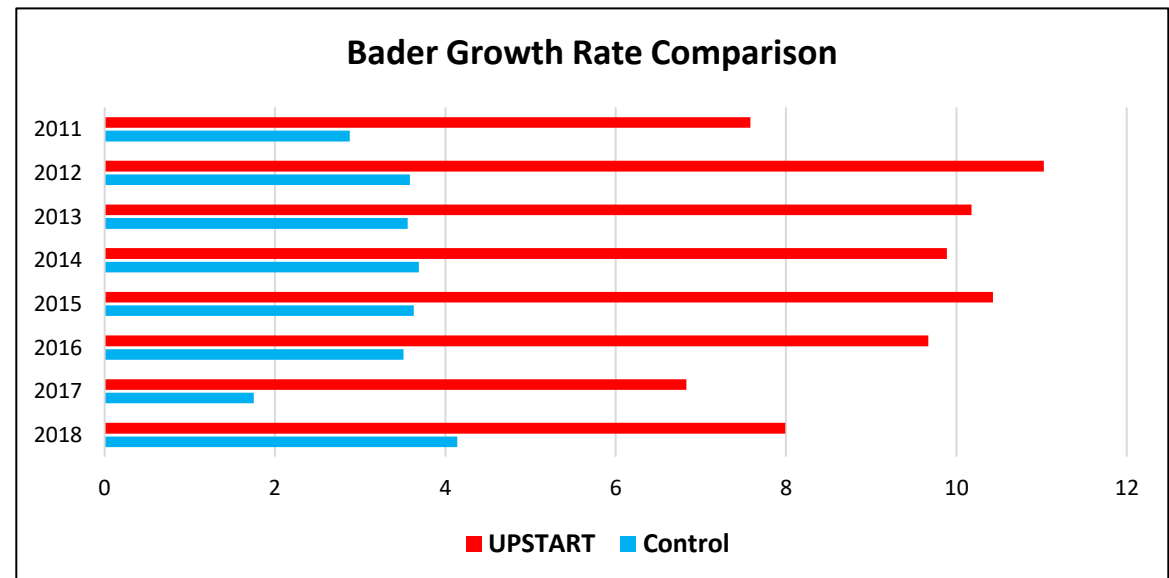
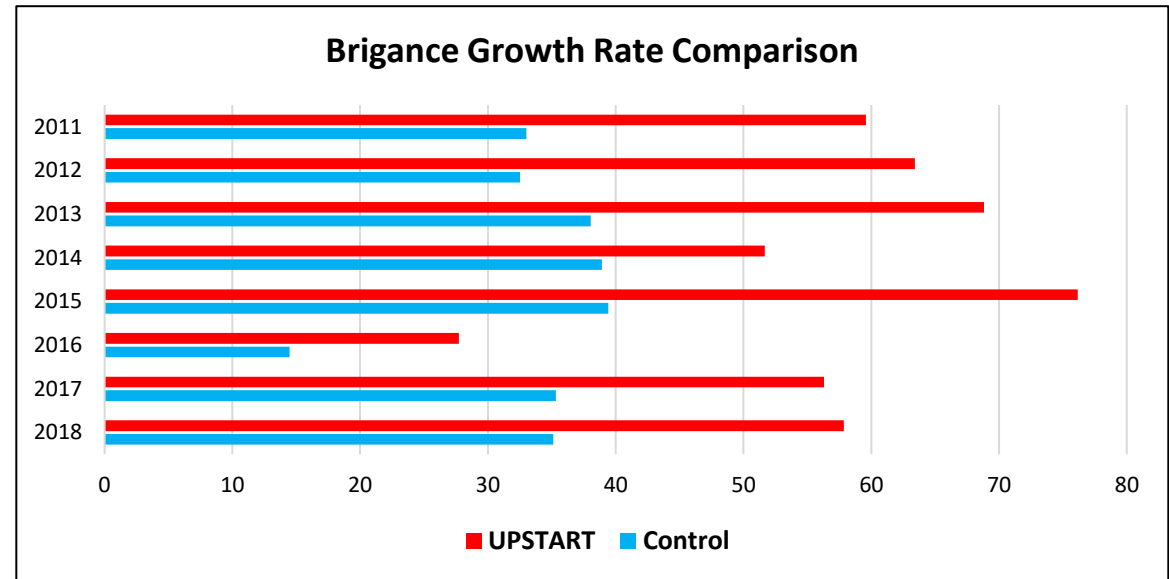
- Administer the final WACS assessment
- Distribute a Parent Satisfaction Survey
- Honor the accomplishments of all our participants

# Annual Evaluations (Utah Statute)

Third party evaluations show **Waterford Upstart children have significantly higher learning gains than children from control groups** – as measured over a number of years by the Brigance Inventory of Early Development and the Bader Reading and Language Inventory.

Note: Total potential scores were lower beginning in 2016 because the scale for the Brigance Inventory of Early Development changed.

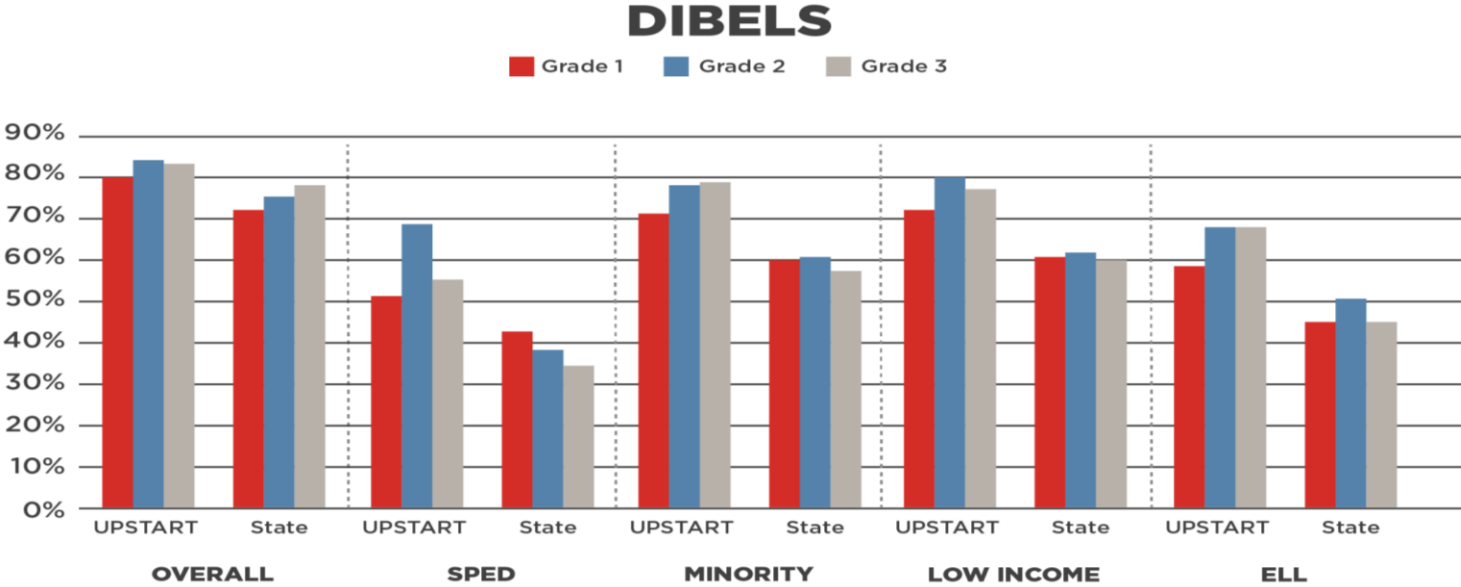
Note: Total potential scores were lower in 2017 and 2018 because the scale for the Bader Reading and Language Inventory changed.



# Longitudinal Results

In 2016, the **Utah State Board of Education** conducted a longitudinal evaluation of UPSTART outcomes in Utah that noted:

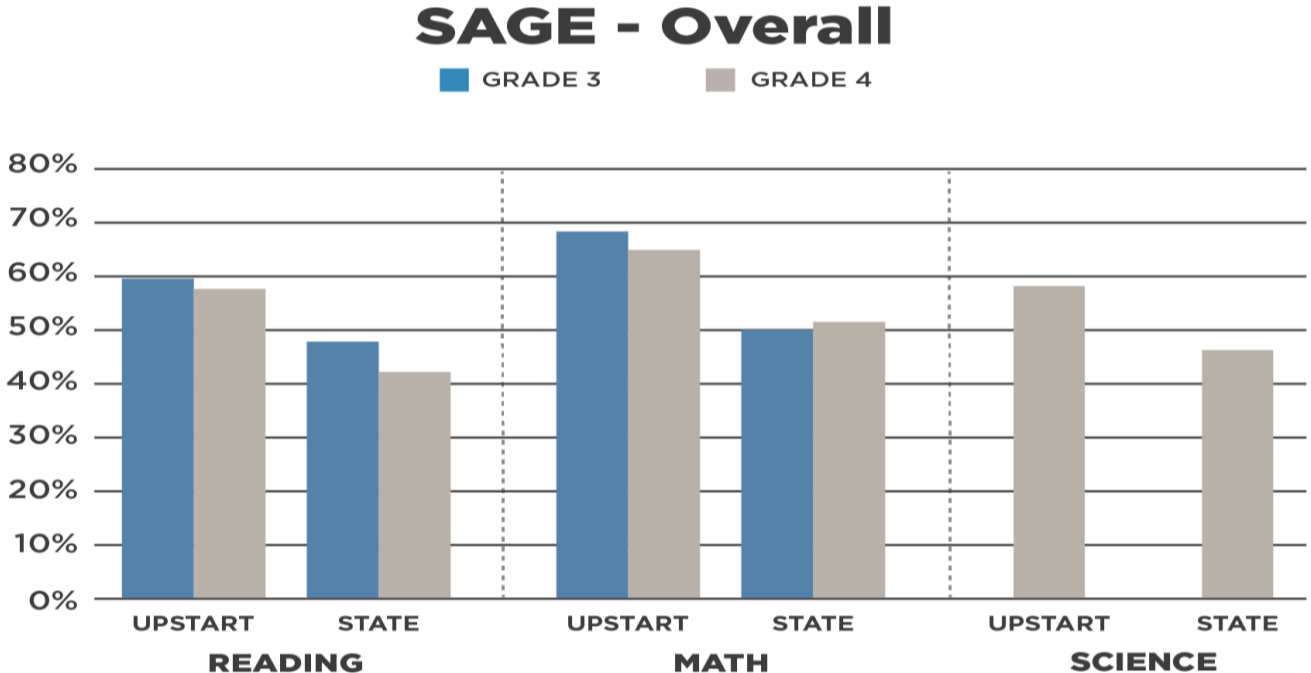
- **Upstart students continually outperform state averages compared to control group on state standardized tests in grades first through fourth** (the highest-grade participants had achieved at the time of the study).
- Significantly, these **gains were consistent across all subgroups**, including special education, minority, low-income, and English learner populations.



# Longitudinal Results

The longitudinal evaluation also noted:

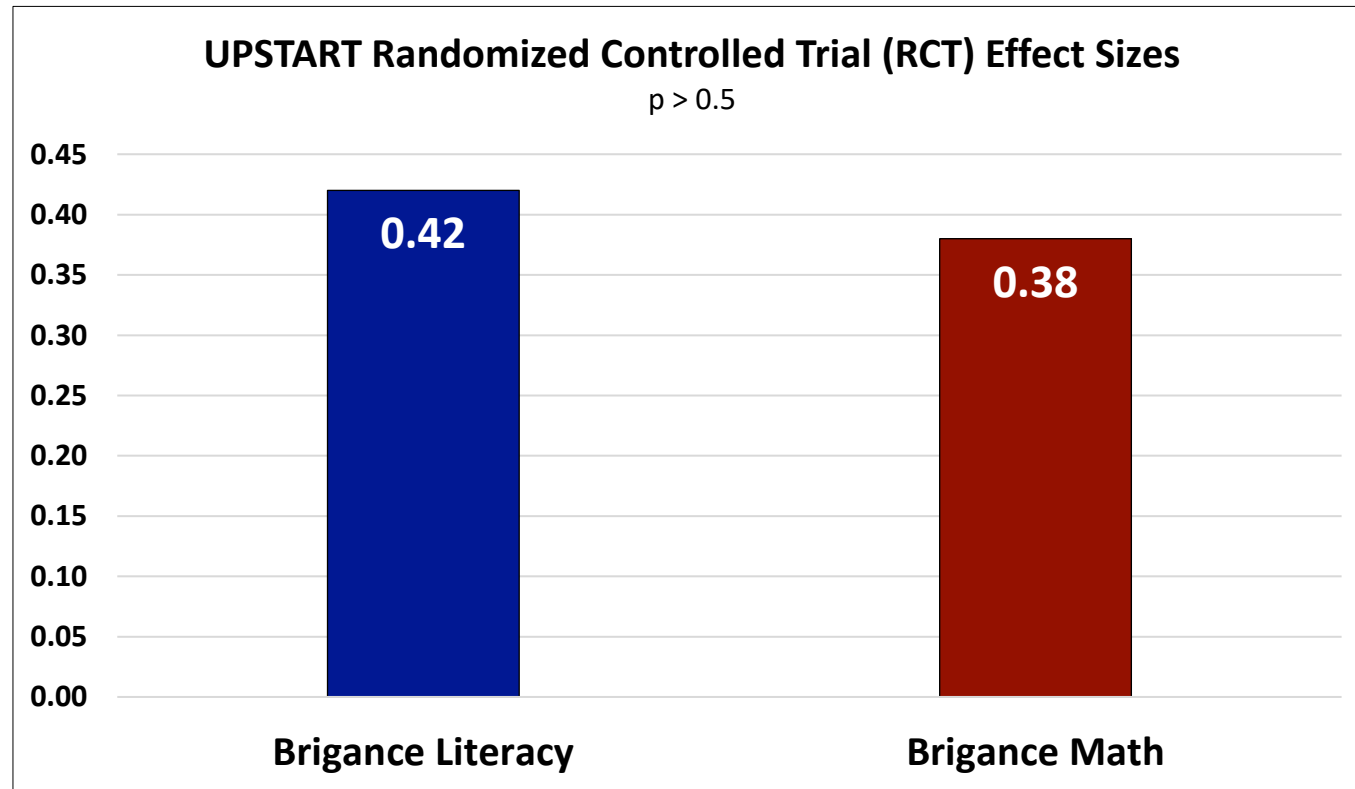
- “The **Upstart program shows continued success at helping preschool age children develop literacy skills and prepare for school.**”
- “These outcomes would have **specific benefits to at-risk children**, whose families struggle with poverty and other issues, and often lack the resources to help their children develop the literacy skills needed to succeed in school.”
- “The **strong program effects support wide-scale implementation** across at-risk preschool populations.”





# Randomized Controlled Trial (RCT) Effect Sizes

## Investing in Innovation (i3) Validation Grant U.S. Department of Education



**Effect sizes of 0.25 standard deviations or larger are substantively important**

*What Works Clearinghouse, Institute of Education Services (IES)*