

UPSTART Program Evaluation

Year 6 Program Results

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Executive Summary

Utah Preparing Students Today for a Rewarding Tomorrow (UPSTART) is a home-based preschool program developed and provided by Waterford to prepare preschool children for school and future academic success. The Evaluation and Training Institute (ETI), the external evaluator of UPSTART since 2009, has prepared this report for the Utah State Office of Education (USOE) to document UPSTART's impact in its 6th year of implementation (Cohort 6/2014-2015 program year).

The evaluation of UPSTART's sixth cohort moved from using a nonequivalent control group seen in previous years to a pre-test/post-test design with a statistically matched control group to assess the program's impact on developing children's early literacy skills in preschool. Our research findings cover two areas, how the program was implemented and what types of impacts it had on children's literacy.

Program Implementation

Enrollment has increased across the state of Utah and UPSTART has reached families in both rural and urban areas. Half of the children enrolled in Year 6 lived in families with incomes less than 200% of the federal poverty level and the majority of the children were White (83%) and English speaking (92%). UPSTART enrollment increased from 1,577 children in Year 5 to 5,091 children in Year 6, an increase of over 300 percent.

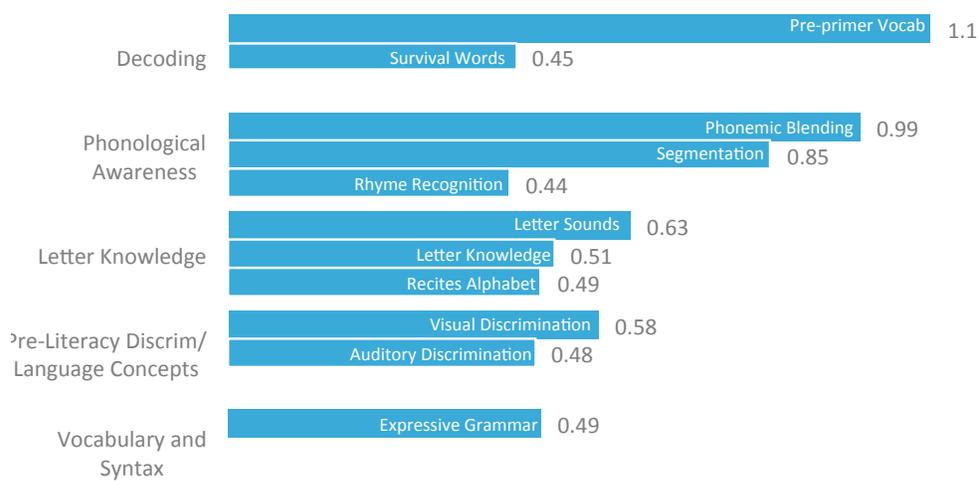
Findings about UPSTART usage are summarized below:

- The average level of UPSTART curriculum usage in Year 6 was 67 hours.
- The UPSTART graduation rate with Cohort 6 was 92%, slightly lower than the graduate rate of 94% in Cohort 5.
- UPSTART graduates had an average program use of 70 hours.
- UPSTART curriculum usage was significantly positively correlated with literacy skills measured by the Bader and Brigance post-tests.

Impacts on Literacy

Results from effect size and growth score analyses indicated that participation in UPSTART had a strong impact on children's emerging literacy skills. Children enrolled in UPSTART produced large effects (ES = .81) compared to control children on the Brigance composite, an instrument that measures decoding skills, letter knowledge, vocabulary and syntax, and pre-literacy discrimination. Similarly, UPSTART participants experienced large effects (ES = .95) on the Bader, an instrument assessing children's phonological awareness. Detailed findings by literacy construct are summarized below:

UPSTART had a medium to large impact on a majority of early literacy domains
Effect Size Estimates



UPSTART had a strong impact on children’s **word decoding** skills:

- Children participating in UPSTART had significantly higher post-test scores on decoding pre-primer words (large ES = 1.1) and reading survival sight words (medium ES = .45)
- UPSTART children had stronger growth scores on reading pre-primer vocabulary and survival sight words subtests compared to children who were not enrolled in the program.

Children’s **phonological awareness** abilities were significantly improved as a result of UPSTART:

- UPSTART students had significantly higher phonemic blending skills (large ES = .99), phoneme segmenting skills (large ES = .85), and facility with rhyme recognition (medium ES = .44)
- Compared to control children, students participating in UPSTART had significantly higher increases from the pre-test to the post-test on all three phonological awareness subscales.

Students who participated in UPSTART experienced a moderate improvement on their **letter knowledge** skills:

- UPSTART children had medium effects in their learning how to recite (ES = .49), identify (ES = .51), and sound out (ES = .63) letters of the alphabet.
- Compared to control students, UPSTART participants showed significantly stronger growth rates in learning how to pronounce letter sounds and identifying lowercase letters.

UPSTART participants showed a moderate impact on **pre-literacy discrimination and language concepts**:

- UPSTART had a medium effect on children's ability to discriminate between different shapes, letters, and words (ES = .58) as well as their ability to distinguish whether or not two words sounds the same (ES = .48).
- Children in UPSTART had stronger growth scores on their auditory discrimination of words when contrasted with children not enrolled in UPSTART.

Impact of the UPSTART program on children's **vocabulary and syntax skills** was mixed:

- The UPSTART program had a medium effect (ES = .49) on expressive grammar
- UPSTART did not have significant effects on receptive or expressive vocabulary.
- Children enrolled in UPSTART did not have significantly different growth rates on vocabulary and syntax subscales when compared to control children.

Recommendations

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.

Enrollment increased in the 2014-2015 program year, which resulted in more families benefitting from the computer-based instruction. However, slightly less C6 students were classified as graduates when compared to previous cohorts (92% vs 94% for C5, for example). In addition to a slight drop in graduation rates, average program usage dropped approximately 4 hours when compared to the previous year (C5 average use was 71 hours vs. 67 hours of average use for C6). While slight, these reductions need to be monitored to be sure it is not a trend due to the demands of increased enrollment.

Given the success at improving literacy test scores, we recommend that the state continue providing the UPSTART program to children. The strong program effects support wide-scale implementation across at-risk preschool populations. In addition, we recommend that the program vendor work with the evaluator and USOE staff to monitor program implementation carefully and to be sure that increased enrollment does not erode graduation or usage rates, two key areas for ensuring strong student literacy achievement and future program success.