EDUCATION

THE UTAH STATE BOARD OF EDUCATION

Report to Legislative Committee

High Quality School Readiness Expansion Program Grant

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TITLE OF REPORT

STATUTORY REQUIREMENT

U.C.A. Section 53A-1b-208 requires the State Board of Education to submit an annual report to the Education Interim Committee on November 1. This is the first year to submit the report for the High Quality School Readiness Expansion Program grant.

EXECUTIVE SUMMARY

The High Quality School Readiness Expansion (HQSR-E) program provides preschool children with access to high quality preschool experiences to prepare them academically for success in school. The Utah State Board of Education contracted with the Evaluation and Training Institute (ETI) to conduct a multi-year evaluation of the High Quality School Readiness Expansion (HQSR-E) program that compares its effects on students' school readiness skills across three high quality preschool program models: public, private and home/computer-based. The first year report summary of findings is as follows:

Literacy Skill Development: Different literacy outcome results were found depending on the HQ preschool program model: students participating in the UPSTART Group had higher rates of growth on age equivalency scores for knowledge, which were used as a benchmark to determine if a child had early literacy skills that contribute to school readiness. In addition, students in the UPSTART Group were the only group with statistically higher literacy test scores than the control group.

Participation in Public and Private Preschool Groups did not make a positive impact on early literacy skills when compared to a control group of children, and, in certain instances, the control group had higher scores on measures of literacy skills than these program children.

A pilot study of children's social-emotional and math skills development was conducted to determine if the instruments used to measure these skills were sensitive to detecting differential effects between the program and control groups, and to determine if integrating these measures were logistically feasible.

Pilot Study findings:

Social Emotional Development (SED): In general, program groups had similar SED growth as the control group. The majority of children from all groups had developed the SED skills appropriate for their age, including relationships with adults, play and peer relationships, and prosocial skills, by the end of their preschool year.

Math Skill Development: Children in the control group had higher math test scores on average than children in the Public and Private Preschool Groups, but there were no statistical differences between the UPSTART group and control groups' average test scores.

HQSR-E also includes an early childhood educator training program component led by the Department of Workforce Service (DWS). The training program is designed to address the state's need for more qualified early child care

educators. ETI is also studying the impact of the teacher training program on training early child care educators and will report on the results once the programs are completed this in 2018.
In conclusion that the first year report provides information for literacy, math and social emotional development, but also has limitations to the sample size and research design that will need to be addressed as we proceed into the second year of evaluation. It is recommended to address the limitations that are within control and continue to analyze the data over the three years of the grant program in order to learn the effects of high quality preschool on student outcomes. Long term outcomes into third grade will also need to be analyzed to determine if the effects are sustained over time. In the future, more private programs are participating in the grant which will provide a larger population to draw a sample size from. The programs participating in the grant have a variety of differences including the preschool curricula, locations, staffing, resources and attendance which makes it difficult for comparison when grouping the various programs into one treatment group. The UPSTART group could have also attended a preK program (public or private) in addition to participating in UPSTART (home-based technology program). This evaluation does not look at individual programs but an analysis of other data the State School board has access to such as DIBELS and the new Kindergarten Entry and Exit Profile (KEEP) may provide a more detailed analysis on individual program effects on student outcomes.

BACKGROUND

The Utah State Legislature provided seven million dollars ($7,000,000) to the State Office of Education and one million ($1,000,000) to the Department of Workforce Services of TANF (Temporary Assistance for Needy Families) funds through the High Quality School Readiness Program Expansion bill, 53A-1b-105, to expand access to high quality school readiness programs for economically disadvantaged students, specifically students whose families qualify for free or reduced lunch. The State Office of Education collaborates with the Department of Workforce Services to administer the grant program for LEAs, private providers and the home-based technology provider, oversee the evaluation, and administer the early childhood teacher training and Intergenerational Poverty School Readiness Scholarship Program which are also included in the grant. Public and private providers that apply for the funds are deemed high quality through an application process. Once approved for funding, the programs recruit and enroll eligible students and are reimbursed through the grant for expenses to provide those students access to their program.

METHODOLOGY (if applicable)

The evaluation method was designed to study three discrete areas related to HQSR-E: the **Preschool Study** occurs yearly during the preschool program year (i.e. pre-Kindergarten), and shows the short-term impacts; the **Elementary School Study** occurs during students' 3rd grade year, and shows the HQSRE's

long-term impacts; and, the **Professional Development Study** occurs yearly as part of the DWS's training program, and documents their progress meeting workforce training needs. The Preschool Study will be used to determine the impacts of high quality ("HQ") preschool programs on students' readiness for kindergarten while the Elementary School Study focuses on the long-term impacts of participants through the third grade. In contrast, the Professional Development study measures the specific outputs, such as the number of participants who apply for the Child Development Associate (CDA) credential, which are produced by the program.

This report contains finding from the first year of the preschool study. The preschool study uses a pre-test/post-test quasi-experimental research to measure the social-emotional development, early literacy and math achievement of program students ("treatment") and non-program ("control") at two points in time (beginning and end of the school year). Figure 1 depicts the preschool study evaluation design.

Figure 1: Preschool Study Yearly Testing and Data Collection

	Summer/Fall	**Program**	**Summer**
Treatment Group	Pre-K Obs 1	**X**	Pre-K Obs 2
Control Group	Pre-K Obs 1		Pre-K Obs 2

The independent evaluator controlled for pre-existing group differences, such as demographic, socio-economic and baseline test scores, by using these variables as covariates in the statistical model. This is a standard statistical approach, and is used in research to determine if there are meaningful differences between treatment and control groups, while controlling for other factors that influence the outcomes under study. There is no way to have "identical" groups of treatment and control students, but there are statistical methods to control for these differences.

Limitations of the study are theoretical and design/methodological. The theoretical limitations are the comparison of a narrowly defined program model (UPSTART) and two program models that include a wide variety of differences across preschool curricula, attendance, locations, staffing, resources, and so on. The UPSTART group could have also attended a preK program (public or private) in addition to participating in UPSTART (home-based technology program). Another theoretical limitation is the types of preschool activities the control group engaged in during the pre-kindergarten year. Limitations in the research design and methods are the small sample size and issues with measurement for social emotional development (SED). The sample size for the private group was 45 which was below the required sample size threshold of 55. Only three private preschool programs qualified as high quality which constrained the number of students to draw from for the sample size. The last limitation is that the SED measuring tool had "ceiling effects" in

which students scored at the top of the scale at pre-test providing little room for growth at post-test.

FINDINGS (OR PERFORMANCE MEASURES)

Literacy development scores indicated that students participating in the UPSTART group have higher rates of growth in comparison to the public, private and control groups. All programs have similar SED growth as the control group and demonstrated the appropriate skills for their age by the end of the preschool year. The control group children had statistically stronger development in numeracy skills compared to the Public and Private Preschool groups on the math composite and on individual subscales. There were no statistically significant differences between the UPSTART group and the control group children in measures of math.

The first year findings indicate that the public and private programs have room for improvement. The results can be used to identify areas of need and target specific content. The results indicate a need for an emphasis in literacy and math instruction. Although programs can differ in items such as curricula, attendance, locations, staffing and resources they all have demonstrated the high quality elements listed in the legislation. Programs may consider conducting self-evaluations to determine strengths and weaknesses and then develop goals in relation to the results that ultimately impact students.

CONCLUSION (OR RECOMMENDATIONS)

The High-Quality School Readiness Expansion Program (HQSR-E) evaluation goal for Year 1 was to begin developing an understanding of how the program works across three high-quality preschool program implementation models: in public preschool settings, private preschool settings and through an at-home, computer administered software program (known as UPSTART: “Utah Preparing Students Today for a Rewarding Tomorrow”). It is important to note that the Year 1 findings are the beginning of the story and that the evaluation was designed to look at the program impacts across three years, using three cohorts of students. Where applicable, children’s outcome scores from each program model were compared to scores from children who were not in a high-quality preschool setting (“control group”). These findings were based on data collected from Cohort 1 students, during the 2016-2017 preschool year. It is recommended that the evaluation continue into the second year. The evaluator has developed a plan to address the limitations that can be controlled. The evaluator will work with private programs with strategies to reduce attrition. Last year only 3 private programs (6 sites) were deemed high quality. This year there are 5 private programs (25 sites) that have been deemed high quality. This will provide a larger population to obtain a sample size. The evaluator has also adjusted the scale response for the SED measurement tool in order to avoid ceiling effects. An analysis of KEEP scores each year (entry and exit) is also recommended to determine correlations between HQSRE programs and other programs. Kindergarten readiness is also demonstrated by performance in kindergarten to determine if students are

“ready to learn”. A comparison of exit KEEP scores in comparison to entry level skills can provide information to determine if “learning” occurred.

APPENDIX

ETI HQSRE Cohort 1 Results Memo