BOISE PRE-K PROGRAM EVALUATION 2017

IDAHO POLICY INSTITUTE

BOISE STATE UNIVERSITY
PRE-KINDERGARTEN (PRE-K) CAN SUCCESSFULLY PREPARE CHILDREN TO ENTER KINDERGARTEN WITH CONFIDENCE, A READINESS TO LEARN, AND THE ABILITY TO POSITIVELY ENGAGE WITH THEIR PEERS. IN 2015, THE CITY OF BOISE PARTNERED WITH THE BOISE SCHOOL DISTRICT TO LAUNCH FREE PRE-K AT TWO ELEMENTARY SCHOOLS IN BOISE’S VISTA NEIGHBORHOOD. THE TWO COHORTS THAT HAVE MATRICULATED THROUGH THE BOISE PRE-K PROJECT SHOW EARLY INDICATION OF POSITIVE IMPACTS ON STUDENTS’ COGNITIVE AND SOCIAL SKILLS.

There has been much debate over the years regarding the investment of public funds in Pre-K. Many scholars, educators, and policy-makers have hailed Pre-K as a significant contributing factor in both preparing children for kindergarten and developing early cognitive skills. Evidence shows Pre-K education has been found to benefit individual students as well as their families and communities. The number of children in the United States (US) enrolled in public Pre-K education tripled from 1990 to 2005 and data reveals that in 2014, 4.7 million three- and four-year old children attended preschool. It is expected that roughly 60 percent of three through five-year-old children will attend public Pre-K programs or private preschools in 2017. Not surprisingly, more and more US states are adopting Pre-K programs and state spending on Pre-K programs continues to increase. In states without universal Pre-K, school districts and municipalities have attempted to implement their own programs.
PRE-KINDERGARTEN IN THE UNITED STATES

WHY PRE-KINDERGARTEN?
Education is a powerful and significant tool for eliminating poverty because it invests in sustainable human development by equipping people with the ability to have a skillset to engage in their local community and economy. Pre-K plays a vital role in engaging children in the formal educational process at a young age and instilling a positive outlook on the learning process. In their 2017 Community Assessment, United Way of Treasure Valley noted that “focus groups identified...the need for assistance in creating cultural and family values for education as a tool to eliminate poverty”. Pre-K prepares students to engage with education and cultivate an understanding for the transformative tool that knowledge can be. Pre-K education is a significant contributing factor to interrupting the intergenerational transmission of poverty.

COGNITIVE IMPACT
Exposing children to education at such a young age increases their cognitive development, encourages problem-solving skills and sparks critical thinking capabilities. The early years of a child’s life are critical for brain development and, in many ways, create the foundation for a person’s developmental potential. A number of rigorous studies of early education programs have found that, when a child is supported with one or two years of early childhood education, their early language, literacy and mathematic skills were improved. Thus, children require early learning opportunities that foster cognitive development to be better prepared for the kindergarten curriculum.

SOCIAL IMPACT
Pre-K provides children with a safe place to learn, develop, play with other students and interact with responsible role models. As simple as this may sound, the impacts can be rather profound. Pre-K can be a refuge for children without a safe or stable home life. When a child is able to feel safe, secure, and accepted, they have the opportunity to expand their horizons look beyond having their basic needs met.

Pre-K learning allows children to develop a solid foundation for their interpersonal and social skills that will be essential for their academic and professional careers. The content of quality Pre-K programs addresses literacy, critical thinking and mathematic capabilities, but programs also challenge children to learn how to share, resolve conflict, and deal with new situations. Allowing a child to learn in such an environment, empowers students to be prepared and confident to start kindergarten.

FISCAL IMPACT
There are significant positive, short-term and long-term, economic and social impacts for families and communities when parents are presented with the choice to place their child in Pre-K. When presented with an opportunity to place their children in preschool, single-parents, and parents who depend on two incomes, are empowered to enter or return to the workforce. Thus, the local economy benefits from injections of skilled labor and increased household spending and investment. Reports have shown that investment in Pre-K reduces crime rates, and therefore criminal

A principal at one of the Boise Pre-K Project schools states, “The Pre-K program has made a significant impact at [our school]. All of our kindergarteners became readers! Their teacher had to come up with new and challenging activities/lessons because they were far beyond their reading abilities compared to previous years.”
justice system costs, as well as public health care spending.\textsuperscript{15} Previous research has also revealed that investment in Pre-K is more cost effective and efficient than a later intervention into the education process of children.\textsuperscript{16} In fact, investment in Pre-K can act as a vital long-term education investment strategy: investing in Pre-K has proven to reduce high school drop-out rates and therefore reduce overall education spending.\textsuperscript{17}

**FAMILY IMPACT**

The family unit itself is able to benefit from a more stable household income that can allow parents to be financially prepared for the future. Moreover, parents with reduced financial stress can enjoy and be more engage in family life. Additionally, students that cycle through Pre-K programs are more likely to remain engaged in the learning process, eventually achieve employment, and create their own financially stable family unit that will benefit the next generation.\textsuperscript{18}

State investment in Pre-K education does not prescribe to families how to raise their children. The intention of allocating state funding to Pre-K education is to allow every parent, regardless of economic status, to make their own decision about how their child receives an early childhood education - whether it be at home, a private institution, or a state-funded program. Parents can also benefit from a sense of empowerment when they are able to make a choice regarding how to best prepare their child for kindergarten. Beth Oppenheimer, from the Idaho Association for the Education of Young Children and a member of the Idaho Early Education Steering committee, comments, “We are not suggesting that anything be mandated”\textsuperscript{19}, meaning that parents should be empowered to make their own choices and have options on the table that allow them to make decisions that best suits their family. The role of ‘choice’ has been shown to be an essential component to agency, civic participation and social engagement, benefiting both the family unit and the entire community.\textsuperscript{20}
A BRIEF HISTORY OF PRE-K

Today, 44 states and the District of Columbia fund Pre-K education. Support for preschool continues to be a nonpartisan issue with both Republican and Democratic governors increasing funding for pre-k programs in 2015-16. National priorities can be noted in the recent enacting of the Every Student Succeeds Act (ESSA) that encourages state level innovation and action and has increased funding for early childhood education via (1) Title I Funding, (2) Title II funding, and (3) Preschool Development Grants. Government funding for early childhood education includes federally-funded Head Start programs, federally-subsidized child care and Pre-K programs funded by the state, municipality or school district. Outside of the public sector, there are both for-profit and nonprofit providers that offer early childhood education options and some children are in home-based child care arrangements, supported by family and friends.

IDAHO

Idaho is one of only five states that do not invest state funds into preschool programs or require school districts to provide any Pre-K options. Through distribution of federal funds, the state of Idaho supports slots in Head Start. In 2016, 13 Idaho Head Start and Early Head Start programs served over 5,300 children through 80 program sites. A significant step forward occurred in 2015 when legislation authorized Pay for Success contracts in Idaho, allowing private funders to invest in scaling up social innovations, like early reading interventions, in the education sector. Across the United States, Idaho has the highest rate of preschool-age children absent from the classroom. The academic preparation of children entering kindergarten in Idaho has been slowly decreasing. Performance in higher grade levels is also of concern; 65 percent of fourth-graders are not proficient in reading, and 66 percent of eighth graders are not proficient in math.

“I teach dual language kindergarten,” said one teacher, “Students who have entered my classroom from the Pre-K program have had a high degree of success in that transition. They exhibit proper social and academic behaviors in the classroom setting and come to school with a high degree of enthusiasm and trust in their teachers. I am very grateful to have such a program at [my school].”

BOISE PRE-K PROJECT

Historically, Pre-K options available to parents in the Treasure Valley have been expensive, over-enrolled with lengthy waiting lists, and in locations that are challenging to reach with public transportation or do not sync well with parents’ working hours. These barriers to education are some of the reasons that 62 percent of 3 and 4 year olds in Ada County do not attend preschool. Lack of access and inconsistent preschool quality promote inequality among students beginning at a very early age. Indeed, this is reflected in the lack of school readiness in Ada County; only 67 percent of children entering kindergarten in Ada County are ready to read.

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*a* 22 State with Republican Governors, and 10 state with Democratic governors increased funding for pre-K programs in 2015-16. Nationwide, state funding for Pre-k increased by nearly $755 million (12%) from the 2014-15 fiscal year. See endnote 21.

*b* 3,816 children aged 3-5 years, and 1,463 children aged 0-3 years. See endnote 26.
In November 2015, a new Pre-K program was launched in Boise’s Vista neighborhood; an area that spans from the Boise Airport to Overland Road. The City of Boise seeks to strengthen this community through the city’s Energize Our Neighborhoods Initiative by “increasing economic activity, improving safety, providing additional services and creating more vibrant and connected neighborhoods.” An essential component to their efforts is to address gaps in education through the Boise Pre-K Project. The project, housed at Hawthorne and Whitney elementary schools, serves approximately 80 preschool students who are income-qualified for participation. Both schools are Title I (i.e., low income) schools with over 50% of the students qualifying for free or reduced cost lunch program. Students at both Hawthorne and Whitney, ages 3-5, receive high-quality preschool education for 1-2 years prior to entering kindergarten. The project’s focus is to address education quality in the Vista Neighborhood and help close the achievement gap the district for students entering kindergarten. As Dr. Don Coberly, Superintendent of the Boise School District, noted at the project’s launch, “Our previous experience showed that kids who participate in quality pre-k programs perform much better in kindergarten and in elementary schools, particularly in reading.” Boise Mayor Dave Bieter added, “We know high quality pre-kindergarten programs help children succeed and avoid trouble in all stages of their later lives . . .That makes [support of early childhood education] one of the best public policy choices we can make as a society.”

STATED GOALS OF THE BOISE PRE-K PROJECT ARE AS FOLLOWS:

>> Reduce achievement gaps for incoming Kindergartners.

>> Follow participants through 3rd grade to assess the investment’s impact.

>> Enhance neighborhood livability through education investments.

>> Use project results to spark discussions about early childhood investments.

STATED OUTCOMES OF THE BOISE PRE-K PROJECT ARE AS FOLLOWS:

>> Upon entering kindergarten, program participants will be at benchmark or above, as assessed by the Idaho Reading Indicator (IRI)

>> By 3rd grade, program participants will achieve a higher level of cognitive and social skills compared to peers without high-quality early childhood education.

EVALUATION OF VISTA PRE-K PROGRAM

For the purpose of evaluating the impact of the Vista Pre-K program on readiness for kindergarten, the student results from the nationally recognized Get Ready to Read (GRTR) exam, and the Idaho Reading Indicator (IRI) exam were used. The combined data from both exams enables an analysis of performance trends for the first cohort of Vista Pre-K students.

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1. Teachers of the Pre-K program are certified. Children participating in the Pre-K program attended daily 3 hour sessions with approximately 20 children in each session. Parent education and engagement is an essential component of the program. Previous studies have indicated that the quality of Pre-K is of importance when seeking positive outcomes: See endnote 14.

2. (1) The GRTR exam is a screening tool developed by some of the country’s top researchers and was “designed to show where a child is on the path to developing pre-reading skills”. The GRTR tool is a quick and easy tool that an educator administers at several intervals during a child’s time in Pre-K. The GRTR tool takes only 10-15 minutes to complete and consists of 25-questions that examines a child’s reading skillset, and highlights areas of strength and weakness to allow educators to aid them accordingly. The results of the exam are numerical, and a benchmark is used for the child, depending on their birth month, that will accompany the numeric score with a label of “below average”, “average” or “above average”. The varying benchmark controls for age (by month) variation among children for the same age (in years), and the length of their exposure to learning. The GRTR data used to evaluate the first Vista Pre-K cohort was gathered from the administration of the screening tool in Fall 2015, Winter 2015/16 and Spring 2016. (2) The Idaho Reading Indicator (IRI) is an early reading screening test that was enacted by the Idaho Legislature and “designed to ensure that all children in the State of Idaho will master the skills they need to become successful readers”. Idaho Statute 33-1615 requires that K-3 students in the state of Idaho be assessed via the IRI. The statute writes that, “state K-3 assessment test results shall be reviewed by school personnel for the purpose of providing necessary interventions to sustain or improve the student’s reading skills”. The IRI screening tool is useful for assessing students in K-3rd grade, and is mandatory for all students in the Fall and Spring (Winter assessment is optional). The screening tool is designed to gage a student’s ability in letter sound fluency (LNF), letter name fluency (LNF), and reading skills.
This impact evaluation tracked individual students of the first cohort of the Boise Pre-K Project through their multiple GRTR evaluations and into kindergarten where they were tested by the IRI screening tool three times throughout the school year. The data allows observations and analysis of trends and enables informed inferences as to the impacts of Pre-K education on student reading abilities and educational development.

The results show that students in the Vista Pre-K program performed better on the IRI throughout kindergarten than students who were not in the Pre-K program (see Table 1). The significance fades over the course of the year - note Fall IRI scores are the only ones to show a statistically significant difference. This ‘catching up’ is expected as the students who were not in the Vista Pre-K program are impacted by the teaching they receive in kindergarten.

**TABLE 1. COHORT 1 AVERAGE IRI SCORES (2016-2017)**

<table>
<thead>
<tr>
<th></th>
<th>VISTA Pre-K</th>
<th>NO VISTA Pre-K</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSF</td>
<td>13.35</td>
<td>6.27</td>
</tr>
<tr>
<td>LNF</td>
<td>26.91</td>
<td>15.91</td>
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<tr>
<td><strong>Winter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSF</td>
<td>31.63</td>
<td>25.07</td>
</tr>
<tr>
<td>LNF</td>
<td>36.67</td>
<td>32.78</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSF</td>
<td>45.21</td>
<td>40.28</td>
</tr>
<tr>
<td>LNF</td>
<td>46.79</td>
<td>40.88</td>
</tr>
</tbody>
</table>

Only the fall IRI scores show a statistically significant difference between the scores of Pre-K and non Pre-K students at Hawthorne and Whitney.

**KEY:**
- LSF = Letter Sound Fluency
- LNF = Letter Name Fluency

The Idaho State Board of Education sets a benchmark score for the IRI LNF screening that is administered in the Fall. In Fall 2016, over 86% of the first cohort of VISTA Pre-K students achieved at or above benchmark scores compared to 53% of their non-VISTA Pre-K peers.
One parent stated, “My son . . . has been in the Pre-K program for the last 2 years. Since the beginning of the program, he’s grown into a sweet young man. I’m confident [he] can enter into his kindergarten year fully prepared and socialized. At the beginning of preschool, he was super shy and not ready to leave home. As time went on, [he] made friends, learned how to communicate clearly (without anger and frustration) and groomed his conflict resolution skills. I’m grateful for the program.”
The trends in GRTR scores displayed by each of the first two Pre-K cohorts show the positive impact of the Vista Pre-K program. Administering the GRTR to Pre-K students may prepare students not only academically for the IRI testing, but also psychologically.
CONCLUSION

Although the Boise Pre-K Project is still in its formative years, early evidence shows a positive impact on the students enrolled in the first two cohorts. As the program commences its third year, City of Boise, Boise School District, and other project partners should continue to track the performance of students through standardized test scores and other uniformly collected performance-based measures (e.g., grades, graduation rates, etc.). The program should also consider tracking additional variables (i.e., demographics, English Language Learner status, etc.) and integrating qualitative components to the long-term program evaluation (e.g., surveying teachers, parents, and students). Ideally, the performance of students in the program would be compared to students of similar demographics who were not in high-quality Pre-K. Although not a randomized control trial, results of this quasi-experimental design would provide greater evidence as to the impact of the program.

“I feel very blessed to have had two children go through the Pre-K program. . . . Neither of my children could accurately say or recognize their ABC’s when they entered the program and had only socialized with each other, for the most part. By the time they graduated the program, they not only knew their ABC’s, but they associated sounds and how to spell words. Among all the great things taught in the program, [my children] learned how to sit still during story time and follow directions, make friends . . . and how to treat each other with love and kindness. I can confidently say that without this program, my children would not have been ready for kindergarten,” said another parent.
ENDNOTES


19. (B.Oppenheimer, personal communication, 14 August, 2017)


ENDNOTES

22 ibid.


25 In 2016, 3,010 children aged 3 and 4 were federally-funded Head Start enrollments, and 17 children aged 3 and 4 were state-funded Head Start enrollments. The National Institute for Early Education Research (NIEER) 2016 State of Preschool Yearbook. Pg. 66.


27 The Lee Pesky Learning Center is seeking support from the State Department of Education to support early literacy programs at the Pre-K level. Otherwise, not further advancement has been made in engaging with the Pay for Success model.


36 The educational background of children not enrolled in the Pre-K program is unknown. They could have had access to private, or other public learning environments.


38 In fall 2016, 64% of all kindergarteners in the Boise School District achieved benchmark on their IRI. At Whitney’s peer school, Whittier, 53% of kindergarteners were at benchmark while at Hawthorne’s peer school, Owyhee, just over 46% achieved benchmark.
The report was prepared by the Idaho Policy Institute at Boise State University
Greg Hill, Director — greghill@boisestate.edu

sps.boisestate.edu/mpi/

REPORT AUTHORS
VANESSA FRY, Assistant Director
SALLY SARGEANT-HU, Research Associate
LANTZ MCGINNIS-BROWN, Graduate Research Assistant