

Expanding High Quality Preschool in Flagstaff

A REQUEST TO SUPPORT A PILOT SOLUTION



ADVANCING WORLD-CLASS EDUCATION

Participating Organizations in this Report

- AZ Community Foundation of Flagstaff
- City of Flagstaff
- Coconino Community College
- Coconino County
- Coconino County Supt. of Schools
- Expect More Arizona
- First Things First
- Flagstaff Unified School District
- Greater Flagstaff Chamber of Commerce
- NACOG Head Start
- Northern Arizona University
- The NARBHA Institute
- The Wharton Foundation
- United Way of Northern Arizona

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EXECUTIVE SUMMARY

Too few children in Flagstaff have access to high-quality preschool. This condition is unsatisfactory and an obstacle for advancing world-class education for every child in Flagstaff.

Expanded high-quality preschool in Flagstaff, will almost certainly produce benefits that exceed its costs, with measurable benefits of increased school readiness, higher academic achievement in primary, secondary and post-secondary grades for our children. This will translate into a higher educated workforce with greater potential for individual and community prosperity.

We seek to begin a community conversation focused on piloting a collectively-funded project that will:

- Provide high-quality, full-day, year-round preschool as defined by Quality First
 - In preschool sites that are rated at four- or five-stars on the Quality Improvement Rating System
 - To achieve this, each classroom would need at least:
 - One certified lead teacher, or one working toward certification
 - One assistant teacher
 - A maximum of 18 students allowing for a ratio under 10:1
 - Student progress monitoring using Teaching Strategies-GOLD
- Initially be available to all four-year-old children in the FUSD boundary area who live in households with income between 130 and 200 percent of the federal poverty level (FPL)
- Begin serving students in January, 2020
- Measure improvements in student achievement over time using a continuous improvement model
- Provide family engagement and supports that build positive parenting skills

Potential partners could include:

























INVESTMENT

A 3-year pilot program that provides free, full-day, high-quality preschool to four-year-old children from families between 130 and 200 percent of the federal poverty level with coordinated multi-generational family supports, utilizing the wide range of services provided by Quality First, and incorporating rigorous data collection could cost up to \$2 million and serve a population of children who are often left behind.

We suggest a three-year implementation schedule starting July 1, 2019 (FY20) with planning and coordination, followed by seating the first classes of students in January, 2020. This is intended to serve as an illustration for one way this expansion project could be implemented. Convening local experts to determine the most appropriate structure and timeline would be a next step in this community conversation.

High Quality Preschool Programs can:



- School readiness
- Educational attainment
- Labor force earnings
- Health



- **Poverty**
- Crime
- Welfare costs

Figure 1: (DiDomenico, 2017.)



BACKGROUND

Flagstaff has many exceptional programs and organizations across our city and its surrounding communities. However, we often work in silos in a way that produces mixed results. Data show this lack of infrastructure creates opportunity gaps and disparities that prevent some of our kids from reaching their full potential.

This is why the partners of LAUNCH Flagstaff have gathered since 2013 to find proven strategies that can raise the bar and create a culture of world-class education for every child, from cradle through career.

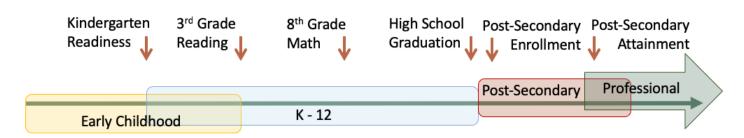


Figure 2: The Cradle through Career Continuum of LAUNCH Flagstaff.

The cradle through career continuum spans from a child's birth through their retirement later in life. Along the continuum, certain milestones are recognized as important building blocks necessary for a child to grow into a civically engaged contributing member of our community. Experiences from cradle through career are a mix of formal academic education with extra-curricular opportunities a child experiences through their family and community. In fact, for a child in the K-12 system, at least 52 percent of their waking time is spent outside of a classroom during the school year. This is why the partners of LAUNCH Flagstaff recognize that the education of our children is not the sole responsibility of our teachers. We accept our responsibility to provide community-based programs and supports that are strategically aligned with the preschool through college (P-20) institutions in Flagstaff.

One of the earliest benchmarks in the cradle through career continuum is school readiness. In the greater Flagstaff area, the time from birth to age five is void of any coordinated infrastructure that can reliably support children and their families during this most important phase of child development. If we are to achieve our goal of establishing Flagstaff as a place where every child experiences a world-class education, a primary focus on early childhood education and development is foundational to our collective effort.

This understanding prompted several members of the LAUNCH Flagstaff partnership to begin an initial discussion on the feasibility and benefits of investing in an expansion of high-quality preschool options available to four-year old children of low-income families. Our initial findings and recommendations are presented in this report.

Although there have been no cost-benefit analyses on high-quality preschool in Flagstaff or elsewhere in Arizona, in this report we utilize key findings of cost-benefit analyses of similar programs to illustrate likely benefits of expanding access to high-quality preschool in Flagstaff. This information includes analysis by the Washington State Institute for Public Policy (WSIPP), as well as a publication on the economics of early childhood investments from the Executive Office of the President of the United States, and a feasibility study for expanding preschool in Tempe, Arizona.

DATA

Children who participate in high-quality preschool programs experience enhanced health, social-emotional, and cognitive outcomes compared to those who do not (U.S. Department of Education, 2015).

These children also score higher on standardized tests and display fewer behavior problems. These improvements in children's development have the potential to decrease the need for special education placements and remedial education, which in turn serves to decrease public school costs and expenditures (Executive Office of the President, 2014).



Figure 3: (U.S. Department of Education, 2015.)

Children who attend high-quality preschool programs are more likely to graduate from high school, attend college, and experience success in their careers than those who have not attended high-quality preschool programs (U.S. Department of Education, 2015).

This growth is especially powerful for children from low-income families and those at risk for academic failure. The need for children to be in stimulating learning environments from a very early age is evidenced by data that show early exposure to quality communication are highly important to future educational success.



Figure 4: (Friedman-Krauss, et. al., 2018.)

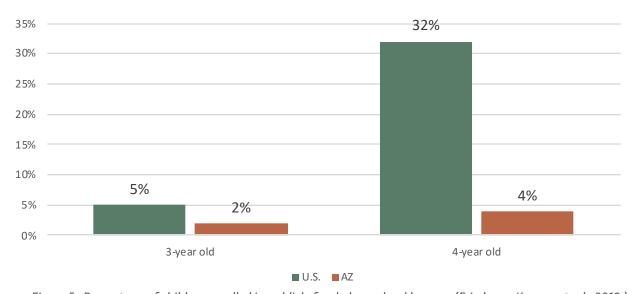


Figure 5: Percentage of children enrolled in publicly funded preschool by age. (Friedman-Krauss, et. al., 2018.)

EARLY CHILDHOOD IN FLAGSTAFF

Flagstaff, Arizona is located at the intersection of I-17 and I-40, and with an estimated population of 71,975 (2017) it is the largest city in Northern Arizona. The city is also the regional center and county seat for Coconino County, the second largest county by area in the 48 contiguous states.

The Greater Flagstaff Area community contains the City of Flagstaff and the Census Designated Places (CDPs) of Fort Valley, Doney Park, Mountainnaire, Kachina Village, Winona and Bellemont. (See Figure 6).

For the purposes of this report, we use the boundary area of the Flagstaff Unified School District (FUSD), which in addition to those communities already mentioned, also contains the communities of Munds Park, Leupp, Gray Mountain, Tolani

Lake, Happy Jack, and Mormon Lake, among others. (See Figure 7).

Roughly 5,281 children under five-years old live within the FUSD boundary (ACS 2012-2016 5-yr). Of this number, 2,641 or 50 percent are three- and four-year-olds who are living in the boundary area.

The Flagstaff Unified School District is the single largest public-school system serving the majority of school-aged children in the Greater Flagstaff area. 42.6 percent of children in the FUSD qualify for free or reduced-price school lunch.* Of the enrolled Kindergarten students for school year 2018-19, 372 are on free/reduced lunch, which is 54.8 percent of the enrolled student population.

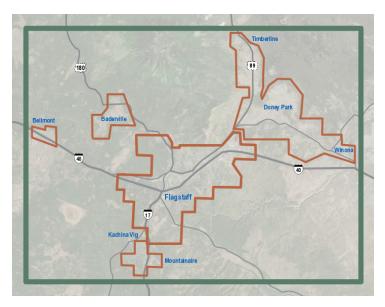


Figure 6: Greater Flagstaff Area

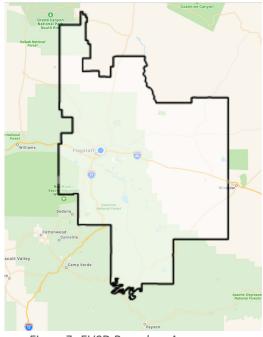


Figure 7: FUSD Boundary Area

READING READINESS

Currently, about half of all five-year old children in Flagstaff are not reaching reading benchmarks compared to national norms (FUSD, 2018). The initial assessment of kindergarten students on their Letter Naming Fluency (LNF), and Letter Sound Fluency (LSF) demonstrates that half of our five-year old children are not as prepared to read as their peers. (See Figure 8).

Of these students, those who did not attend preschool were more likely to score below the LNF and LSF target benchmarks on the LNF versus students who did attend preschool. (See Figure 9).

^{*} Free/Reduced priced lunch qualifications: annual earnings less than \$32,630/\$46,435 for a family of four (FUSD, 2018).

LETTER NAMING FLUENCY (LNF)

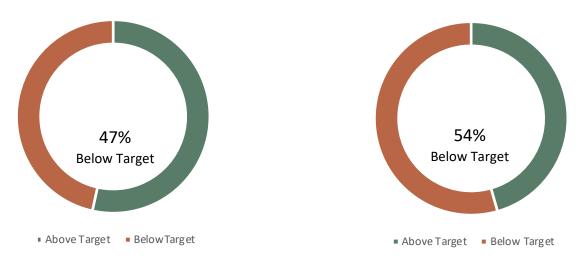


Figure 8: AIMSWeb Literacy Benchmark Data of Kindergarten Students in Fall 2017 (FUSD, 2018). See Appendix A for data table

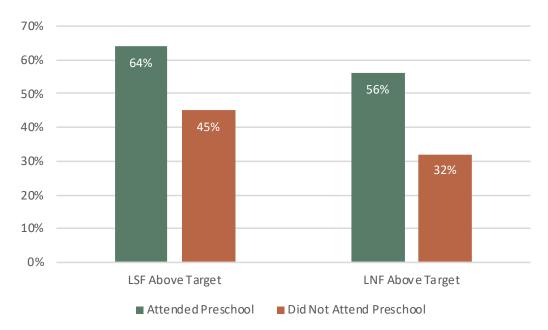


Figure 9: Analysis of AIMSWeb and Kindergarten Registration Data of Kindergarten Students in Fall 2017 (FUSD, 2018). See Appendix A for data table

Reading readiness matters because a child's ability to read is fundamental to success in school and life. However, "a child's brain is not pre-wired for reading" (Read On Arizona, 2018).

Developing foundational reading skills requires families, parents and caregivers to engage in quality communication and singing especially between the ages of birth through five when a child's brain is developing most rapidly. According to the National Campaign for Grade Level Reading, many children of low-income families do not develop the basic language skills that support reading success because of variations child rearing skills associated with social, economic and educational backgrounds (*The 30 Million Word Gap*).

Two of LAUNCH Flagstaff's benchmarks of progress are school readiness and reading proficiency in the third-grade. Reading readiness is fundamental for school readiness. Reading is foundational for the type of learning required for becoming an engaged citizen. Research shows that third-grade reading proficiency is a predictor of success in high school, graduation from high school, and attendance in post-secondary training and education. Yet, our local data show that we continually fail to fully support all children in preparing them for success in life.

THE ACHIEVEMENT GAP STARTS AT BIRTH

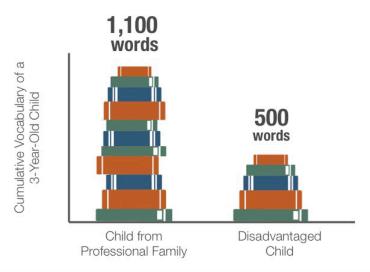


Figure 10: (Heckman, J. 2017.)





Percent of 3rd grade students in Flagstaff who are proficient in reading at grade level

Figure 11: (Arizona Education Progress Meter, 2018.)

EXPANDING HIGH-QUALITY PRESCHOOL IN FLAGSTAFF

In 2006, Arizona voters passed a citizens' initiative that funds high-quality early childhood development and health. This created a new state board known as First Things First (FTF). Quality First is one of FTF's signature programs and was established in response to the effort to improve quality and promote school readiness (First Things First, 2011). Quality First is a voluntary Quality Improvement and Rating System (QIRS) for providers of center-based or home-based early care and education. The Quality First Rating Scale, which measure quality on a five-star scale, incorporates evidence-based predictors that lead to positive child outcomes.

Preschool in Flagstaff is provided through the public-school system, private centers (nonprofit and for-profit), and some family child-care homes. The pre-Kindergarten landscape in Flagstaff and Arizona lacks any systemic coordination that might help families understand the fundamentals of child development and recognize learning opportunities for their preschooler. This disproportionally impacts low-income families that lack the supports available to families of means.

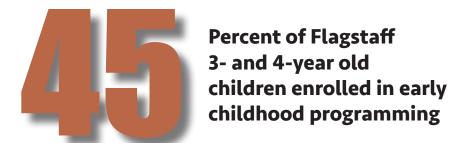


Figure 12: (First Things First, 2018.)

In 2012, a collaborative effort between FUSD and the Northern Arizona Council of Governments (NACOG) along with several other stakeholders produced a Kindergarten Transition Plan. NACOG is the primary service provider of the federal Head Start preschool program. The intention was to provide a resource for coordinating the transition from a preschool or child care setting into Kindergarten, as well as engage families earlier in preparing their child for school. The Kindergarten Transition Plan was not widely adopted, but still remains a viable resource in the community.

Students with special needs are typically eligible to attend district-based preschools free-of-charge. Adding this special education and Head Start programs to the percentage in Figure 5 (4%), we estimate 20 percent of four-year-olds are enrolled in a subsidized preschool across Arizona. (Friedman-Krausss, et. al., 2018.)



Figure 13: Flagstaff early childhood program capacity. (First Things First, 2018.)

In Flagstaff, there are few opportunities for publicly funded early childhood programs in the area. As evidenced by the state and local data, Flagstaff's children are underserved. In fact, when considering all of the capacity of both preschools and child care providers, First Things First reports that in the Flagstaff area there are two point six children for each space of existing capacity.

The partners of LAUNCH Flagstaff believe that our children deserve better.

For the purposes of this report and our recommendations, we consider the following conditions.

Quality First provides a limited number of scholarships to tuition-funded centers reaching a four- or five-star rating on the QIRS. In the Coconino Region, Quality First also awards scholarships to centers with three stars. There are a total of 12 centers that have earned a three-, four-, or five-star rating in the FUSD boundary area. A total of 78 scholarships have been distributed to these centers as of December 2018. According to First Things First, there is currently a waiting list of providers desiring to enroll in Quality First, but a lack of state resources restricts the program's ability to expand (First Things First, 2018).

Quality First Scholarships in Flagstaff

In the Flagstaff Unified School District for the school year 2018-19, there are 10 schools with preschool classes, with 218 three- or four-year-old students. Of these, 40 percent (88) are in special education, with costs fully subsidized by state or federal funds. An additional 60 students are on partial or full scholarship through federal grants (44) or Quality First scholarships (16). The remaining 70 students are covered by family tuition fees (FUSD, 2018).

FUSD Title I and Preschool Development Grants

NACOG Head Start, a federally funded preschool program, supports 272 children (ages three-five) in the Greater Flagstaff area from four high-quality sites:

- Clark Homes
- Cogdill
- Ponderosa
- Siler

NACOG Head Start offers full-day programming in multiple classrooms in the Flagstaff area and continues to grow this option annually. Early Head Start serves children from birth to three-years of age.

The program accepts children up through 130 percent FPL with acceptions made for those over that threshold on a case by case basis (NACOG, 2019).



Percent of FPL or below is the qualifying income level for Head Start

These funding sources together cannot completely serve the number of students in need of financial support.

For the purpose of this report and our recommendation, we focus on four-year old children in families below 200 percent of the FPL and above 130 percent of the FPL with the intention of expanding exsiting subsidized programs where possible in addition to adding new capacity for children falling in the gap.

Our Rationale for Taking This Focus:

- The high cost of living in the Flagstaff area prevents many families above the FPL from affording high-quality preschool.
- The increasing minimum wage in Flagstaff and Arizona are pushing some families above the FPL and reducing their eligibility for some subsidized preschool.
- While many three-year-old children will benefit from full-day preschool, our initial focus on four-year-old children allows for a more manageable pilot as a starting point.

Given that there is currently no additional capacity in existing subsidized preschool, we calculated the number of four-year-old children below 200 percent of the FPL who are not in preschool. Since not every family wishes to enroll their child in preschool, we estimate a "take-up rate" of 60 percent based on other community estimates. For example, Tempe, Arizona used a 60 percent take-up rate in estimating the initial enrollment in their Tempe PRE program. Their actual results nearly matched that estimate. In order to best identify the children falling in the gap between Head Start and private tuition-based preschool, we calculated the number of these 4-year-olds who live in households between 150-200 percent of the FPL. (130% FPL is not an available data point.)

| 4-year-olds below 200% FPL & not in preschool | , , | . , | 4-y.o. between 150-200% FPL seeking preschool | Classrooms needed |
|---|-----|-----|---|-------------------|
| 234 | 0 | 140 | 84 | 5 |

Table 1: Analysis of U.S. Census ACS 2012-2016 5-year - FUSD Boundary Area, MapLIT. Retrieved: December 7, 2018. https://geo.azmaq.gov/maps/readonaz/ See Appendix B for data table and calculations

From these calculations, the Flagstaff community would need to subsidize preschool for over 80 additional four-year-old children between 150% and 200% of FPL. At a class size of 18 students, this would require five additional classrooms dedicated to this preschool expansion project. Five classrooms would hold a total of 90 students, and with over 100 other students below 150% FPL, we believe that these five classrooms would be filled. We also recognize that to achieve access for all 4-year-old children below 200% of FPL, we would ultimately need at least 8 classrooms to meet this demand. This would be a consideration for future expansion beyond the pilot. We assume an operational partnership with the Flagstaff Unified School District and NACOG Head Start for maximizing the use of existing resources and bolstering existing programs.

FAMILY ENGAGEMENT AND SUPPORTS

Families are a child's first and most influential teacher. Therefore, engaging every family in the educational life of his or her child is a necessity for the success of any Flagstaff preschool expansion project.

Fundamental to the family supports needed are information related to appropriate child development, discipline and family literacy. Support for accessing child and family enrichment opportunities would also be appropriate. Those opportunities might include: Adult education; Child recreation; Science, Technology, Engineering and Mathematics (STEM) exploration; and Arts and Cultural exploration.

Leveraging collaborative relationships with cross-sector community partners will also be necessary to support the success of families, their children and the preschool expansion project. Families may need help connecting to resources for meeting basic needs, such as financial stability, physical health, mental health, and special education.

We know that by providing expanded access to preschool, adult family members of eligible children will have greater availability and flexibility for working during the day. We propose that the expanded preschool day align with the current FUSD elementary school day, which does not amount to a full eight-hour workday. In order to maximize this work opportunity for families, the Flagstaff preschool expansion project would also need to support childcare outside of preschool.

ESTIMATED INVESTMENT AND PROPOSED OPERATION SCHEDULE

| Fiscal Year | Description | Budget |
|-------------|--|-----------|
| FY20 | Remodel, outfit two classrooms Jul-Dec 2019; | \$133,559 |
| FY20 | Open & operate two preschool classes Jan - Jun 2020; Remodel, outfit two additional classrooms Jan-Jun 2020 | \$280,410 |
| FY21 | Operate four preschool classes Jul 2020 - May 2021; Remodel, outfit one additional classroom | \$794,231 |
| FY22 | Operate five preschool classes Jul 2021 - May 2022 | \$851,613 |

Table 2: Estimated Flagstaff preschool expansion project budget summary. See Appendix C for budget detail and notes.

RETURN ON INVESTMENT



Figure 14: (Executive Office of the President, 2015.)

Without a Flagstaff-specific economic impact report available, it is difficult to quantify a specific Return on Investment (ROI); however, we believe the range of \$8.60-\$16.00 per dollar invested is an appropriate estimate (Executive Office of the President, 2014).

Approximately half of the ROI comes from increased earnings for children later on in adulthood (US Department of Education, 2015).

Additionally, expanding free preschool would

produce benefits to the local Flagstaff economy that are not included in these cost-benefit analyses. For example, expanded preschool will increase the availability of parents and caregivers to work during the preschool day, improving local economic conditions. Long term net economic growth in Flagstaff can be expected through a more educated workforce with a higher income potential, and the creation of additional teaching positions, administrative positions and construction jobs necessary for updating classrooms.

EXAMPLE: TEMPE, AZ

The City of Tempe provides a relevant example of what might be done in a partnership between educators and local governments. This section contains selected excerpts from the Tempe PRE Year One Implementation Report (Harder + Company, 2018).

After a study found that nearly two-thirds of the City of Tempe's children were performing below the widely held expectations for reading and language in kindergarten, the City of Tempe Human Service department proposed a plan to improve the kindergarten readiness of children in the city by expanding access to high quality preschool for children in low income households. To this end, the Tempe City Council invested a total of approximately \$6 million (\$3 million per year) into the implementation of a high-quality preschool program, Tempe PRE (Preschool Resource Expansion).



Tempe PRE is a two-year pilot program launched in 2017 to increase access to high quality preschool at no cost for 3- and 4-year old children living in Tempe, Arizona who are at or below 200% of the Federal Poverty Level. Estimated year one cost estimates for implementation of Tempe PRE were a little over \$3 million. The City of Tempe leveraged the City Council's two year financial support into an additional \$2.1 million in philanthropic and community support. (Tempe PRE Recap, 2018)

Tempe PRE was offered at schools in the Tempe Elementary and Kyrene school districts during year one of the pilot. Within

these two districts, Tempe PRE was implemented in 15 classrooms to a total of 259 children beginning in August 2017. An additional five Tempe PRE classrooms were opened in January 2018, for a total of 20 classrooms. All classrooms were rated in the Quality First QIRS with all sites meeting or exceeding the Quality First Baseline Scale Score.

Tempe PRE also included a family engagement component that used a Positive Parenting Program in addition to other family outreach efforts. Childcare was also coordinated for parts of the day outside of the Tempe PRE class time to better enable parents to work a full day.

The evaluation team examined changes in the degree to which students met widely held developmental expectations in each domain across year one of participation in Tempe PRE by determining



Figure 15: (City of Tempe, 2018.)

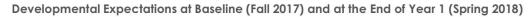
the direction in which each child's developmental level changed from the beginning to the end of program year one.

As anticipated, at preschool entry, Tempe PRE students are typically below or meeting their expected developmental level in all domains. The developmental domains in which the most children fell below widely held expectations at preschool entry are the social-emotional (76%), literacy (70%), and cognitive (64%) domains. At the end of program year one, most children shifted from performing below their expected developmental level to meeting or exceeding developmental expectations in all domains. Most prominently, the percentage of children meeting or exceeding social-emotional and literacy developmental expectations increased between baseline and the end of year 1, suggesting that social-emotional and literacy skills may be particularly sensitive to time spent in preschool.

Exploration of the child and familial factors related to children's development in each of the six developmental domains showed that children's age and familial income were most often related to changes in children's developmental levels across the first year of the Tempe PRE program.

Development in Year 1





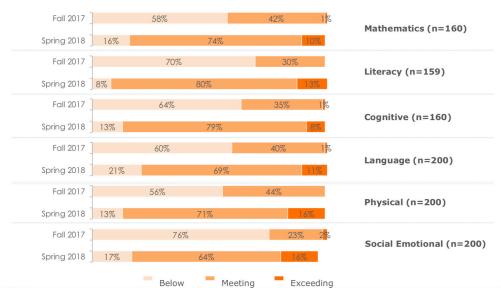


Figure 16: (City of Tempe, 2018.)

- Younger children (age 3) improved their expected developmental level in the social-emotional domain more often than older children.
- Younger children (age 3) also improved their expected developmental level in the language domain more often than older children.
- Familial income is related to significant improvements in children's expected developmental levels in the mathematics domain.

Teachers in the Tempe PRE program participated in trainings, received one-on-one coaching, and engaged in professional development (PD). On average, teachers attended a total of nine training sessions during the first year of Tempe PRE. Trainings offered included the foundational High Scope Curriculum training; specialized High Scope trainings focused on interaction strategies, problem solving, and becoming an intentional teacher; TSG training; social emotional development-focused Arizona Early Learning Standards training.

Teachers reported that their primary areas of concern during their first year of Tempe PRE were the qualifications of their instructional assistants and communication between the institutions participating in Tempe PRE. Specifically, teachers cited a need for more coordination and clear lines of communication between teachers, Tempe PRE staff, and school districts.

Sites will continue to collect data during subsequent years of this pilot program, and the evaluation team will continue to investigate whether the goals of the program are met. With additional data, the evaluation team will be able to conduct more in-depth analyses focused on examining student and teacher progress, growth, and development across time.



Figure 17: (City of Tempe, 2018.)

CONCLUSION

Expanded high-quality preschool in Flagstaff, will almost certainly produce benefits that exceed its costs, with measurable benefits of increased school readiness, higher academic achievement in primary, secondary and post-secondary grades for our children. This will translate into a higher educated workforce with greater potential for individual and community prosperity.

In Flagstaff, there are few opportunities for publicly funded early childhood programs in the area. In fact, data show that there are nearly three children for every seat of existing capacity in all early childhood programing in the Flagstaff area.

The partners of LAUNCH Flagstaff believe that our children deserve better.

We recommend that Flagstaff begins a discussion to pilot a collectively-funded project that will:

- Provide high-quality, full-day, year-round preschool as defined by Quality First
 - In preschool sites that are rated at four- or five-stars on the Quality Improvement Rating System
 - To achieve this, each classroom would need at least:
 - One certified lead teacher, or one working toward certification
 - One assistant teacher
 - A maximum of 18 students allowing for a ratio under 10:1
 - Student progress monitoring using Teaching Strategies-GOLD
- Initially be available to all four-year-old children in the FUSD boundary area who live in households with income between 130 and 200 percent of the federal poverty level (FPL)
- Begin serving students in January 2020
- Measure improvements in student achievement over time using a continuous improvement model
- Provide family engagement and supports that build positive parenting skills

For a program like the one illustrated above, we estimate (after initial start-up investment) an annual operating cost of around \$800,000 in support of up to 90 four-year-old children in qualifying households.

Based on estimates from existing data and experiences in similar communities, we calculate the potential return on this investment to be up to \$16 for each community dollar invested. This means that for each annual investment in the Flagstaff preschool expansion project, approximatly \$12 million dollars would be returned to our community.

Expanding free preschool would produce benefits to the local Flagstaff economy starting with the increased availability for parents and cargivers to work during the preschool day. There are synergies to this investment with other community efforts for enhancing child and family wellbeing that help promote their sustainability.

As a next step, LAUNCH Flagstaff recommends that local experts convene to determine the most appropriate structure and timeline toward building an early childhood infrastructure that ensures a world-class education for every child in the greater Flagstaff area.



REFERENCES

- City of Tempe (2018). Tempe PRE Year 1 Recap. Power Point Presentation. Tempe, AZ.
- Community Research, Evaluation, and Development (CRED), John and Doris Norton School of Family and Consumer Sciences, College of Agriculture and Life Sciences, University of Arizona.. (2018). *Coconino Regional Partnership Council 2018 Needs and Assets Report*. Tucson, AZ. First Things First Coconino Regional Partnership Council.
- DiDomenico, Ann Lynn. 2017. Expanding High-Quality Preschool in Tempe: Highlights of a Pay for Success Feasibility Study. Tempe, AZ. Institute for Child Success.
- Executive Office of the President of the United States. (2014). *The economics of early childhood invest-ments*. https://www.whitehouse.gov/sites/default/files/docs/early_childhood_report1.pdf
- First Things First.(2011). *Measuring Quality in Early Childhood Education*. Retrieved from http://www.azftf.gov/WhoWeAre/Board/Documents/Policy_Brief_Q2.pdf (April 1012)
- Flagstaff Unified School District. (2018). AIMSWeb and enrollment data. Flagstaff, AZ
- Friedman-Krauss, Allison, W. Steven Barnett, G.G. Weisenfeld, Richard Kasmin, Nichole DiCreccio, Michelle Horowitz. 2018. *The State of Preschool 2017: State Preschool Yearbook*. New Brunswick, NJ. National Institute for Early Education Research, Graduate School of Education at Rutgers, The State University of New Jersey.
- Harder + Company Community Research (2018). *Tempe PRE Year One Implementation Report*. Tempe, AZ. City of Tempe.
- MapLIT (2018) U.S. Census, American Community Survey 2012-2016 5-year estimates, FUSD Boundary Area; Retrieved December 7, 2018 from https://geo.azmag.gov/maps/readonaz/. Read On Arizona
- NACOG Head Start (2019). Enrollment data. Flagstaff, AZ
- Read On Arizona (2018). National Campaign for Grade Level Reading. Retrieved from http://readonarizona.org/resources/national-campaign-grade-level-reading/
- Read On Arizona (2018). Early Literacy Guide for Families. Phoenix, AZ.
- The Campaign for Grade-Level Reading, *The 30 Million Word Gap: The Role of Parent-Child Verbal Interaction in Language and Literacy Development*. Retrieved from https://gradelevelreading.net/wp-content/uploads/2013/05/GLR-Issue-brief-on-oral-language-research.pdf
- Washington State Institute for Public Policy. (2014). *Early Childhood Education for Low-Income Students: A Review of the Evidence and Benefit-Cost Analysis*. WSIPP. http://www.wsipp.wa.gov/ReportFile/1547/Wsipp_Early-Childhood-Education-for-Low-Income-Students-A-Review-of-the-Evidence-and-Benefit-Cost-Analysis_Full-Report.pdf

APPENDIX A

| 2017-18 AIMSWeb Test Data | Letter Naming Fluency | | Letter Sound Fluency | |
|---|-----------------------|-----|----------------------|-----|
| | Total | % | Total | % |
| Students measured: All | 750 | | 750 | |
| Students below target | 408 | 54% | 349 | 47% |
| | | | | |
| Students measured: with preschool history information | 452 | | 451 | |
| Students below target: Did not attend preschool | 61 | 68% | 49 | 55% |
| Students below target: Attended preschool | 160 | 44% | 129 | 36% |
| Students above target: Did not attend preschool | 29 | 32% | 40 | 45% |
| Students above target: Attended preschool | 202 | 56% | 233 | 64% |

Table 1: Analysis of AIMSWeb Literacy Benchmark Data and Kindergarten Registration Data of Kindergarten Students in Fall 2017 (FUSD, 2018).

APPENDIX B

| DATA FOR CALCULATIONS | |
|---|-------|
| Population Under 5 | 5,281 |
| Population 3-5-Years-Old | 2,641 |
| Population 4-Years-Old | 1,056 |
| % of Population below 200% Federal Poverty Level (FPL) | 38.0% |
| | |
| Population Under 5 below 200% Federal Poverty Level | 2,007 |
| Population 3-5 Years-Old below 200% Federal Poverty Level Population 4-Years-Old below 200% Federal Poverty Level | 1,003 |
| ropulation 4- rears-Old below 200% rederal roverty Level | 401 |
| % of Population between 150% and 200% FPL | 8% |
| Population 4-Years-Old between 150% and 200% FPL | 84 |
| % of Population below 150% FPL | 29.1% |
| Population Under 5 below 150% FPL | 1,568 |
| Population 3-5 Years-Old below 150% FPL | 768 |
| Quality First Scholarships | 78 |
| NACOG Head Start 3-5 Year-Old Capacity | 272 |
| FUSD Title I and PDG Grants | 44 |
| FUSD Special Education Financial Sponsorship | 88 |
| | |
| CALCULATIONS | - 10 |
| Population 3-5 years-old below 150% FPL | 768 |
| (subtract) Scholarships for 3-5 yr-olds below 150% FPL | 394 |
| Net Unserved 3-5 year-olds below 150% FPL | 374 |
| (multiply) % of Population 4-years-old | 0.4 |
| Net Unserved 4 year-olds below 150% FPL | 150 |
| (add) Population 4-yr-old between 150% and 200% FPL | 84 |
| Net Unserved 4-year-olds below 200% FPL | 234 |
| (multiply) Estimated Uptake Percentage (60%) | 0.6 |
| Net New Publicly Funded Preschool Seats Needed | 140 |

Table 1: Data and Calculations Used to Determine Number of New Publicly Funded Preschool Seats for Flagstaff. MapLIT U.S. Census (2018); First Things First (2018); FUSD, (2019) Head Start (2019).

APPENDIX C

| Expanding | g High-Quality Preschool Options in FlagstaffPer Cl | assroom Cost Estimate | | FY21 | | |
|-------------------------|---|-----------------------|---------------|-------------------|-------------------|------------|
| Line Item Costs | | FY2 | FY20 | | FY22 | |
| | | July-Dec, 2019 | Jan-Jun, 2020 | Jul 2020-Jun 2021 | Jul 2021-Jun 2022 | |
| | # of Classrooms in Operation | (start-up phase) 0 | 2 | 4 | 5 | |
| Operation | al Costs per Classroom | | | | | |
| | Preschool Teacher, ECE Certificated | | \$29,429 | \$59,847 | \$62,181 | |
| | Preschool Paraprofessional | | \$16,009 | \$32,017 | \$33,266 | |
| | Instructional Materials | \$4,000 | \$4,000 | \$1,800 | \$1,800 | |
| | Furniture & Equipment | \$3,500 | \$3,500 | \$500 | \$500 | |
| | Technology | \$2,400 | \$2,400 | \$500 | \$500 | |
| Start Up C | osts per Classroom | | | | | |
| | Classroom, Bathroom & Playground Remodel | \$40,000 | \$40,000 | \$26,000 | \$6,000 | |
| Profession | nal Development & Assessment per Classroom | | | | | |
| | Teacher/Parapro Trainings & Travel | | \$4,000 | \$4,000 | \$4,000 | |
| | Teaching Strategies Gold | | \$198 | \$198 | \$198 | |
| | Quality First | | \$10,900 | \$10,900 | \$10,900 | |
| | DHS Licensing Fee | | \$2,000 | \$2,000 | \$2,000 | |
| TOTAL CO | STS per Classroom | \$49,900 | \$112,436 | \$137,762 | \$121,345 | |
| Administr | rative Support | | | | | |
| | .5 FTE Program Coordinator | \$28,729 | | \$29,878 | \$31,043 | |
| | Teaching Strategies Gold Training | \$5,030 | | \$5,030 | \$5,030 | |
| TOTAL CO | STS for Program-wide Support | \$33,759 | | \$34,908 | \$36,073 | |
| amily Eng | gagement and Supports | | | | | |
| | Outside of Preschool Childcare Subsidy | | \$48,600 | \$194,400 | \$194,400 | |
| | Parent and Family Engagement | | \$6,938 | \$13,875 | | |
| TOTAL CO | STS Outside of Preschool Time | | \$55,538 | \$208,275 | \$208,816 | |
| OTAL INV | /ESTMENT by Time Period | \$133,559 | \$280,410 | \$794,231 | \$851,613 | |
| | NUAL INVESTMENTS | | \$413,969 | \$794,231 | \$851,613 | |
| TOTAL 3-YEAR INVESTMENT | | | | | | \$2,059,81 |

NOTES

- All costs reflected are for one class with a maximum of 18 students.
- Remodel and playground costs may be reduced if multiple classrooms are set up at a site.

Operational Costs

- Preschool Teacher, ECE Certificated: Based on average FUSD school year teacher contract = \$44,000 school year contract + ERE & Benefits \$15,847 = \$59,847.
- Preschool Paraprofessional: Based on estimated parapro hourly rate of \$15/hour x 7.5 hours/day x 185 days (school year + 5 training days) = \$20,812 + ERE & Benefits \$11,205 = \$32,017
- Instructional Materials: Start up year would include purchase of books, age-appropriate toys and activities.
- Furniture & Equipment: Start up year would include purchase of preschool tables, chairs, shelving, etc.
- Technology: Start up year would include purchase of teacher computer, printer and iPADs for teacher and parapro.

Start Up Costs

• Classroom, Bathroom & Playground Remodel: Start up year would include any required classroom updates, bathroom installation or remodel to meet lower height requirements, and playground update or installation to ensure a dedicated, fenced outdoor space for use only by preschool or kindergarten ages. Cost estimates range from \$25,000 to \$40,000. Followup years include annual replacement of softfall (rubber mulch).

Professional Development & Assessment

- Teacher/Parapro Trainings: Early childhood trainings through ADE, First Things First, etc. includes registration fees and travel.
- Teaching Strategies Gold: Annual per pupil cost is \$10.95; two-day training for all staff is \$5,030.
- Licensing Fees: Quality First fees estimated. DHS licensing fees may be reduced dependent upon the location.

Administrative Support

- .5 FTE Program Coordinator: Based on 1/2 time, 11 month Community Education Coordinator hourly rate of \$24.71 x 4 hours x 241 contract days = \$23,820 + ERE \$4909 = \$28,729 (No Benefits). This individual would oversee room remodels and setup to meet Quality First requirements, materials purchases and setup, etc. for all classrooms.
- 1.0 FTE Program Coordinator: If full-time coordinator is needed in future years, costs would be as follows: 11 month Community Education Coordinator hourly rate of \$24.71 x 8 hours x 241 contract days = \$47,640 + ERE & Benefits \$16,577 = \$64,217

Family Engagement and Supports

- Outside of Preschool Subsidy: Based on 3 hours per day at \$5 per hour x 18 students = \$48,600 per class x 180 school days.
- Parent and Family Engagment: Based on \$15/hour x 5 hours /day x 185 days = \$13,875 (No benefits)



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