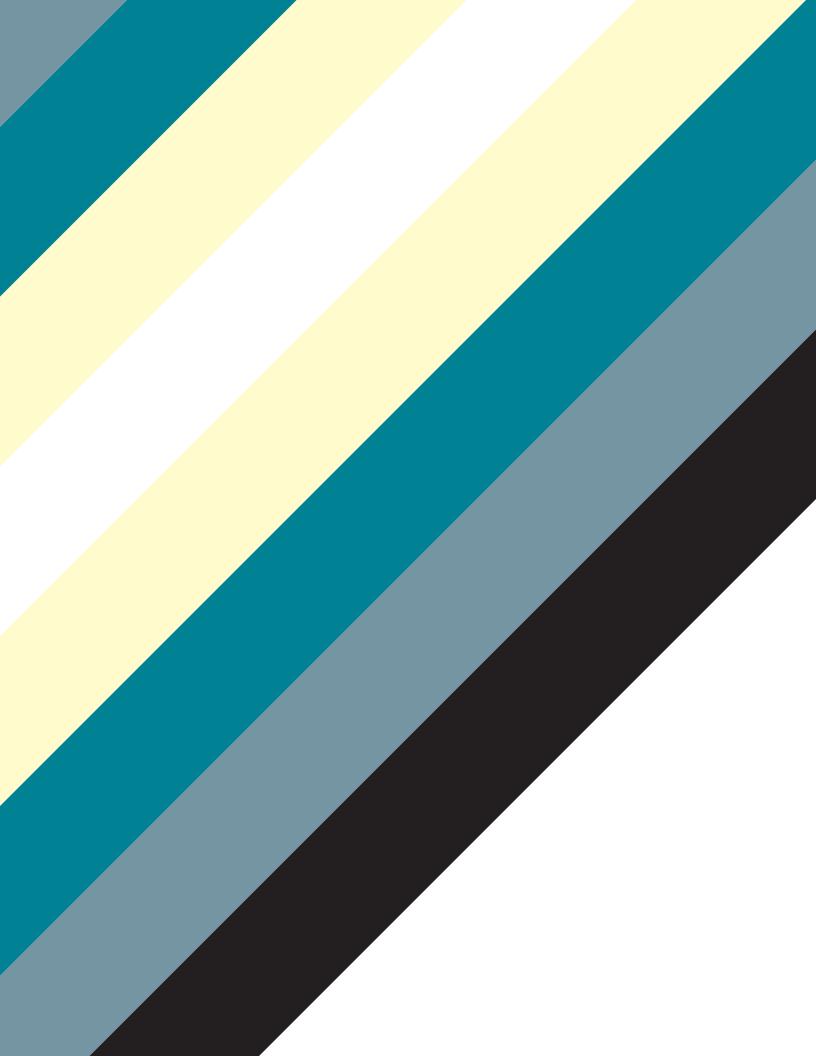


Building an Equitable School System for All Students and Educators

Section 4

The Need for Universal Preschool



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#### The Pre-K Team

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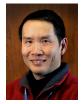
Jody Jenstad is a preschool teacher at Northland Community Schools. She graduated from Bemidji State University in 2014 with a B.S. in pre-primary and elementary education. She was an ECFE/preschool paraprofessional for over 12 years before earning her degree. Jody lives in Walker, Minnesota with her two boys. She enjoys traveling to Texas and gardening for the Walker City Rock Garden.

**Jessica Row** is a preschool teacher in the Fridley Public School District. She holds a B.A. from the University of North Dakota, Grand Forks in early childhood and elementary education. Currently, she is pursuing a M.A. in K-12 education with an emphasis in International Baccalaureate from Bethel University. Jessica serves as the Fridley Community Center's representative on the union board at Fridley. In her spare time, she loves to travel, fish, cook, spend time with family and friends, and craft during the summer.



Marty Scofield is an adult basic education teacher with the Minnesota Department of

Corrections at the Minnesota Correctional Facility in Lino Lakes. He holds a B.A. from Concordia College, Moorhead in Spanish education and holds an adult English as a second language (ESL) certificate from Hamline University. Marty is a member of the Diversity & Recruitment Committee with the Minnesota Department of Corrections. In addition, he currently serves on the Education Minnesota Governing Board. In his free time, Marty enjoys traveling, spending time with friends and family, and playing outdoor hockey.



Kay Langer is an early childhood educator in Rosemount-Apple Valley-Eagan Public Schools. She is currently teaching four year olds. She holds a B.E.S. in early childhood education and a M.Ed. in teaching and learning from St. Mary's University, Winona. She is currently pursuing a certificate in early childhood leadership through the Saul Zaentz Early Education Initiative at Harvard Graduate School of Education. Kay is very passionate about researching the best practices for early learning and high quality environments for the youngest learners. She advocates for play as the foundation for learning. Kay is a member/ writer of the district's four-year-old curriculum committee. She co-chaired the Elevating and Celebrating Excellence in Teachers and Teaching held in October 2018 at the Minnesota Children's Museum. At this convening, Kay and a colleague, presented on connecting standards with play and learning in a preschool environment. They will also present at the upcoming Minnesota Association for Family and Early Education conference in April 2019. Kay enjoys being the early childhood worksite representative for the local union and spending time with her two sons as well as reading, gardening, scrapbooking, biking, researching (especially about play), and taking classes to further her learning.

#### Introduction

Given that the brain is more malleable prior to age 5 than in later years, early childhood education can enhance cognitive, social, and emotional skills that will prepare children for later learning.

In 2016, the Educator Policy Innovation Center (EPIC) produced a report on the need for universal preschool for all Minnesota 4-year-olds (Educator Policy Innovation Center, 2016). Since that time, academic research has deepened our understanding of the potential benefits of statewide preschool, and has offered some warnings about the dangers of providing inequitable preschool experiences for different demographics of students as well as of offering preschool education programs that fall short of best practices.

Providing universal access to high-quality pre-K should be a priority if Minnesota is serious about closing opportunity gaps.

One thing has not changed since 2016, though. Minnesota still dramatically lags behind other states both in funding high-quality preschool for 4-year-olds and in participation in these programs. Providing universal access to high-quality pre-K should be a priority if Minnesota is serious about closing opportunity gaps. A \$500-600 million investment each legislative session would fully fund voluntary, half-day pre-K. This type of investment in high-quality programs would reap between \$1 billion to \$3 billion in reward over time, according to multiple studies.

### Why is Preschool Important for Children?

There is little question about the value of providing high-quality preschool education for children. There is a great deal of question about the value of providing less than high quality preschool for children. And, while Minnesota needs to make monumental strides toward far greater access to preschool education, we offer a serious caution about aiming just to get more kids into programs without paying serious attention to the quality of those programs.

Camilli et al., (2010) published a critically important meta-analysis of the extant literature on the benefits of preschool education. Their findings created the underpinnings for subsequent research on the benefits of preschool:

Consistent with the accrued research base on the effects of preschool education, significant effects were found in this study for children who attend a preschool program prior to entering kindergarten. Although the largest effect sizes were observed for cognitive outcomes, a preschool education was also found to impact children's social skills and school progress. Specific aspects of the treatments that positively correlated with gains included teacher-directed instruction and small-group instruction. (Camilli et al., 2010, p. 580)

Given that the brain is more malleable prior to age 5 than in later years, early childhood education can enhance cognitive, social, and emotional skills that will prepare children for later learning (Bartik, 2014). Nobel prize-winning economist James J. Heckman and Dimitriy Masterov have stated: "A large body of empirical work at the interface of neuroscience and social science has established that fundamental cognitive and non-cognitive skills are produced in the early years of childhood, long before children start kindergarten [...]. Later remediation of early deficits is costly, and often prohibitively so" (Heckman & Masterov, 2007).

When researchers examined the short- and long-term benefits of high-quality preschool, they found substantial benefits:

- Up to a 30% reduction in the achievement and opportunity gaps
- · Cognitive and social emotional benefits
- · Higher reading and math performance
- · Improved achievement in kindergarten and first grade for English language learners
- · Higher high school graduation rates
- Lower rates of teen pregnancy
- · Higher lifetime income levels, and accompanying higher tax base
- More stable family lives

One of the driving factors in the push for expansion of high-quality preschool programs nationwide is that our understanding of brain development is far more advanced than it was when the K-12 school system was designed. We now know that the first five years of life are the years during which most brain development occurs:

The foundations of brain architecture, and subsequent lifelong developmental potential, are laid down in a child's early years through a process that is exquisitely sensitive to external influence. Early experiences in the home, in other care settings, and in communities interact with genes to shape the developing nature and quality of the brain's architecture. The growth and then environmentally-based pruning of neuronal systems in the first years support a range of early skills, including cognitive (early language, literacy, math), social (theory of mind, empathy, prosocial), persistence, attention, and self-regulation and executive function skills (the voluntary control of attention and behavior). Later skills—in schooling and employment—build cumulatively upon these early skills. (Yoshikawa et al., 2013)

We know now what we did not know decades ago: Earlier-age educational interventions provide more child development benefits than once supposed.

Investment in high-quality preschool more than pays for itself in the long run. Cost-benefit analyses have been conducted on a number of programs with the consistent result that investments in high-quality preschool yield large economic benefits for the communities in which those programs operate. In fact, the cost benefits for investment in preschool education are much greater than investments made later in the life of the child.

Another driving factor in the push for expansion of high-quality preschool has to do with cost-benefit analyses. Much work has been done on the ecomonic impact of high-quality preschool, and that evidence points out that communities actually benefit from a high return on their investment. Investment in high-quality preschool more than pays for itself in the long run. Cost-benefit analyses have been conducted on a number of programs with the consistent result that investments in high-quality preschool yield large economic benefits for the communities in which those programs operate. In fact, the cost benefits for investment in preschool education are much greater than investments made later in the life of the child. As Heckman pointed out, "the economic return from early interventions is high, and the return from later interventions is lower. Remedial programs in the adolescent and young adult years are much more costly in producing the same level of skill attainment in adulthood" (Heckman, 2006).

As Bartik argued, before we look at specific cost-benefit ratios, it is important to understand a few points about what the numbers mean. Legislators and other stakeholders often seek simple ratios to use when advocating for the expansion of preschool programming. But it is not quite as simple as saying that there is, for example, a 7-to-1 or a 12-to-1 ratio of cost savings for all preschool programs.

Two factors must be taken into consideration before ratios make sense. First, we need to understand that the cost savings multiply over time as preschool participants age. It makes a difference whether we are asking how much communities save relative to their investments when the participants are 10 years old or when they are 40. When participants are 10, communities have saved some dollars because there are, for example, lower remediation and special education needs. When participants are 40, however, communities will have saved much more because in addition to the savings realized during the formal education process, they are also realizing savings due to decreases in criminality, dependence on social services and substance abuse services, and they have realized higher tax revenue due to increases in wages.

#### It is quite apparent that preschool programs that reflect best practices for benchmarks of high-quality do in fact lead to significant economic benefits.

Second, we need to understand that not all preschool programs provide an equally enriching experience for their students, and the quality of the program matters a great deal if we are looking for a greater cost-benefit ratio. As Barnett and Masse (2007) and Heckman (2011) have stated, the quality of the programming has everything to do with its cost benefit (Barnett W. & Masse, 2007). Intensive, well-designed programs "have generated benefits 10 times greater than their costs whereas poorly designed programs may not even return their costs" (Heckman J. J., 2011). We must remember the pitfalls of large-scale, low-quality preschool programs, such as Tennessee's Voluntary Preschool program, which is yielding no measurable benefit. It is simply not honest to say that any universal, voluntary preschool program will lead to dramatic economic savings for Minnesota. It is quite apparent that preschool programs that reflect best practices for benchmarks of high-quality do in fact lead to significant economic benefits. Essential components of high-quality preschool programs are discussed later in this paper, but it is important to note here that great economic benefits to the public are realized only when we look at high-quality programs.

In addition to the money saved by investing in interventions earlier rather than later in a child's life, communities with high-quality preschool programs reap further economic rewards. Communities that invest in high-quality preschool realize higher tax revenues, and lower costs related to crime, welfare dependance, and substance abuse. However, we need to understand that not all preschool programs provide an equally enriching experience for their students, and the quality of the program matters a great deal if we are looking for a greater cost-benefit ratio: "A large body of data from economics, biology, and psychology

shows that educational equity is more than a social justice imperative; it is an economic imperative that has far-reaching implications for the nation. Taking a hard look at the economic value of efforts to create human capital helps people see where best to invest their resources in education to achieve its ideal—equalizing opportunity to build greater and enduring value for all" (Heckman J. J., 2011).

For more information on the benefits of high-quality preschool, see *The Best Start for Students: Why Minnesota Needs Universal pre-K* (Educator Policy Innovation Center, 2016), "Meta-Analysis of the Effects of Early Education Interventions on Cognitive and Social Development," (Camilli et al., 2010), "Why Preschool is Critical to Closing the Achievement Gap" (Frede & Barnett, 2011), and *Investing in our Future: The Evidence Base on Preschool Education* (Yoshikawa et al., 2013).

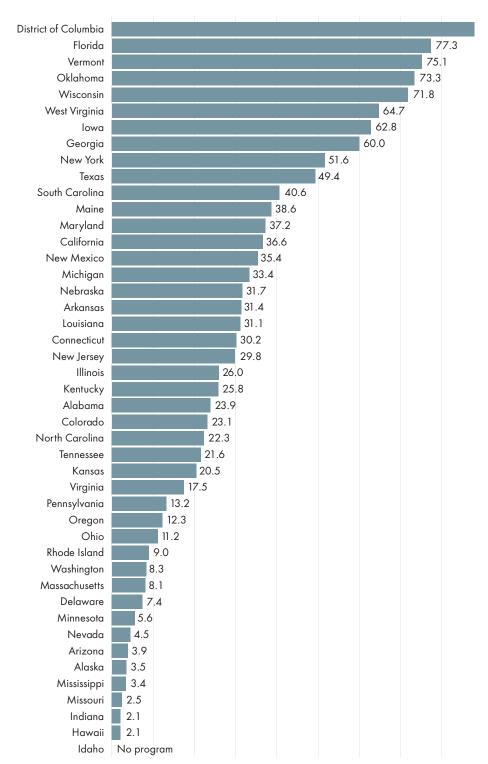
### A National Review of Preschool Offerings

The National Institute for Early Education Research (NIEER) publishes a summary of each state's work to create better access to state-funded preschool education. NIEER's *The State of Preschool 2017* reported the states' overall spending on preschool, each states' per-pupil spending on preschool, the percent of 3-year-olds and 4-year-olds served, and the number of high-quality characteristics of preschool programming that each state commits to in their programming.

NIEER has been tracking this data since 2002, and they note that despite the overwhelming evidence that high-quality preschool is critical for young children, progress at the state level "has been uneven" (National Institute for Early Education Research, 2018, p. 5). Four states "served a smaller percentage of 4-year-olds in 2017 than they did in 2002. And 19 states, including seven with no state-funded preschool program, enroll less than 10 percent of 4-year-olds in state funded preschool" (National Institute for Early Education Research, 2018, p. 5). Minnesota ranks 37th among all states in terms of the percent of 4-year-olds enrolled in state-funded preschool. That includes six states that offer no such programming at all.

#### GRAPH 4.1: NATIONAL FIGURES ON PRESCHOOL ENROLLMENT

Percent of 4-year-olds enrolled in state preschool



Graph reproduced from National Institute for Early Education Research, 2018.

In addition, between 2002-2018, states increased their overall spending on state-funded preschool, but actually decreased their per-pupil spending: "In 2002, states spent an average of \$3,458 per child, the equivalent of \$5,395 in 2017 dollars. In 2017, average state preschool spending per child was \$5,008, a substantial decrease in real dollars (National Institute for Early Education Research, 2018, p. 6). A decrease in per-pupil funding is significant, because that dollar amount is tied directly to program quality, and program quality has everything to do with the potential benefits of any given program for its students and for its communities. Inequity in terms of state spending per pupil has grown dramatically over this time period, with one state, New Jersey, spending "more than \$12,000 per child, and seven states [spending] at least \$7,000 per child [...]. At the same time, seven states now spend less than \$3,000 per child" (National Institute for Early Education Research, 2018, p. 122).

It is critical to note that a given state's per-pupil funding amount is only a powerful an indicator of progress if the number of children being served is high. There are states with broad reach but low-quality programs, and there are states with a very small reach but higher-quality programs.

## We have "better evidence for the effectiveness of early childhood education than for almost any other educational intervention" (Bartik, 2014).

An overview of states' efforts at meeting the needs of young learners without spending sufficient money to do that equitably or well should be put into the appropriate context. Some opponents of expanding state-funded preschool will attempt to block expansion of existing programs, the development of new ones, or the improvement of existing programs, claiming that the costs are simply too high. And the costs are high.

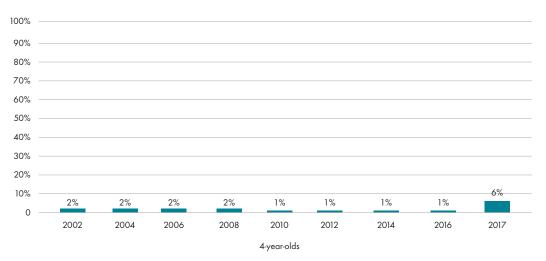
But there are two critical considerations to keep in mind. First, we now know more about brain development and how early the achievement gap can be measured. Second, we know that investment in early education leads to cost savings in the long run.

Given what we now know about the importance of the first five years of life for lifelong development and given the cost-benefit data available, it is both ethically and fiscally irresponsible not to radically alter our public school system to reflect this knowledge. In fact, given how dynamic brain development is in these early years and given the exponentially higher costs of later interventions, one could argue that is is more damaging to fail to provide high quality and age-appropriate education to our youngest learners than it would be to stop offering sixth grade. We have "better evidence for the effectiveness of early childhood education than for almost any other educational intervention" (Bartik, 2014).

# Minnesota's Path to Universal Prekindergarten

Minnesota's progress has been slow, and its progress has largely been made by expanding reach without regard to quality, consistency, or equity. The percentage of 4-year-olds enrolled in our state's state-funded preschool programs has risen from 1% in 2002 to 6% in 2017 (National Institute for Early Education Research, 2018, p. 105), and is marginally higher now. The jump from 1-2% of 4-year-olds who were accessing state-funded preschool from 2002 through 2016 to 6% in 2017 reflects the jump in access made possible by the voluntary preschool program that Gov. Mark Dayton signed into law in 2016. In the 2016-2017 school year, Minnesota's voluntary preschool program enrolled 4,603 students, and currently, in the 2018-2019 school year, it enrolls 7,106 children (Minnesota Department of Education, Voluntary, 2018). These programs are offered in 128 school districts and charter schools at 233 sites across the state (Minnesota Department of Education, Voluntary, 2018). As of 2017, Minnesota ranked 37th in the nation in the percentage of 4-year-olds who were enrolled in state-funded preschool. Over that same time span, our state's per-pupil funding dropped from \$9,298 in 2002 to \$6,296 in 2017 (National Institute for Early Education Research, 2018, p. 106).

GRAPH 4.2: PERCENT OF MN STATE POPULATION ENROLLED IN MN VOLUNTARY PRESCHOOL



Graph produced with data from (National Institute for Early Education Research, 2018, p. 105).

\$10,000 \$9 298 \$8,747 \$9,000 \$8,376 \$8,347 \$8,203 \$8,003 \$8,000 \$7,498 \$7,446 \$7,000 \$6,296 \$6,000 \$5,000 \$4,000 \$3,000 \$2,000 \$1,000

GRAPH 4.3: MN STATE SPENDING PER CHILD ENROLLED IN VOLUNTARY PRESCHOOL

0

2002

2004

2006

Graph reproduced with data from (National Institute for Early Education Research, 2018, p. 106).

2012

2014

2016

2017

Not included in the numbers cited in Graphs 4.2 and 4.3 are the students served by or the dollars spent on Minnesota's Early Learning Scholarship program, a voucher-styled program that provides scholarships to eligible families who can then use that money at any child care program that receives a 3-star or 4-star Parent Aware rating.

2010

2008

Minnesota's state-funded early learning programs lag far behind most other states and even further behind evidence-based best practices. Minnesota enrolls 7,106 4-year-olds in voluntary preschool and offers early learning scholarships to 12,101 more to attend a great variety of child care programs, some of which are high-quality, some of which are not. In Minnesota, currently 161,000 children live in poverty, in households with a combined income of \$24,339 or less for a family of four, and 64,971 of those children are under the age of 6 (National Center for Children in Poverty, 2018). If we consider the category of low-income families, which are defined as those with a total income of less than \$48,678 for a family of four, the numbers grow larger. In Minnesota, 400,203 children, 32% of our state's children, live in low-income families, and 145,595 of those are under the age of 6 (National Center for Children in Poverty, 2018). Minnesota is home to roughly 76,000 4-year-olds. We have state-funded preschool opportunities, even if we include the early learning scholarships, which can be used for widely varying types of programs, for 19,207 of them.

# The Importance of Quality for All Preschool Students

Stakeholders interested in barring states' attempts at moving toward universal preschool programs available to all children often point to research that finds that some state-funded programs fail to yield the hoped-for results. As discussed in EPIC's 2016 paper on universal preschool, this kind of maneuvering might be politically advantageous for some adults, but it is neither honest nor in the best interest of children (Educator Policy Innovation Center, 2016). There are state-funded preschool programs that fail to meet quality benchmarks, and those programs fail to deliver the results shown to be possible with higher-quality programming.

A common example of this problem is Tennessee's state-funded preschool program. Two studies have now shown Tennessee's preschool program to be ineffective, such that researchers cannot identify substantial benefits to the group of students who had access to the program when they are compared to those who did not. An early study of Tennessee's program caused one writer in the *Wall Street Journal* to declare the program's outcomes to be "devastating for advocates of the expansion of state preschool programs" (Lipsey, 2013). But, as W. Steven Barnett of the National Institute for Early Education Research has explained, if your program isn't very good, you can't expect it to have long-term impact on kids. What Tennessee's program should teach us isn't that we should not heed the research that shows the potential benefits of preschool for all of our children; it's that we should heed the warnings offered by programs that have cut corners in an effort to keep costs down. Compromising quality by failing to put quality benchmarks and standards in place system wide or by underfunding a program leads very quickly to a system that fails (Educator Policy Innovation Center, 2016).

Minnesota's early learning scholarships fail to meet commonly adopted and research-based benchmarks for high-quality programming. Scholarships can be used at any center that has a high rating on Minnesota's Parent Aware system. The Parent Aware system identifies some "best practices," though they in no way align with best practices identified by the nation's most successful preschool programs. And even among those practices that are identified in the Parent Aware system, a center can get the highest possible rating, a 4-star rating, by just meeting some of those "best practices." For example, one of the best practices identified in the Parent Aware system is that a center "responds to unique cultural customs and needs of children and families." That's not a requirement for a 4-star rating. It is an option. We know that culturally relevant practice cannot be optional if Minnesota wants to close opportunity gaps, yet the current Parent Aware system does not require it. Another is that the center "has highly-qualified and trained leadership staff, teachers, and providers." Again, that's not a requirement.

Prekindergarten-12 learners have a right to be taught by a licensed teacher. Minnesota's licensed teachers must undertake cultural competency training or in some other way demonstrate cultural competency development at every level of licensure renewal, without exception.

Minnesota's young learners have learning needs that are more complex and nuanced than at any other stage of their lives. Prekindergarten-12 learners have a right to be taught by a licensed teacher. Minnesota's licensed teachers must undertake cultural competency training or in some other way demonstrate cultural competency development at every level of licensure renewal, without exception. Minnesota teachers are required by law to participate in teacher development and evaluation programs, they must abide by statewide curricular standards that are regularly re-evaluated, and they must communicate with parents and families about the progress of the students in their classes. These high standards reflect the quality needed to undertake a pre-K program that will yield the return on investment outlined by economists.

Our early learning scholarships are available by application to families that qualify based on income. Ostensibly, this is a way to target the young learners who most need the assistance. However, targeting individual families based on income is not a way to reach the learners who most need the help. As Barnett explained,

One fundamental problem with targeting children based on family income is that family income is constantly changing. This requires programs to shoot at a moving target, which they frequently miss. According to the Census Bureau, over a 3-month period more than 40 percent of children are poor for two or more months, but less than 6 percent are poor every month. The federal Head Start program, which provides preschool to children in poverty, offers a clear example. At least 90 percent must be poor at program entry, but when they leave, less than half of the children are poor. The problem with this is not so much that nonpoor children are served, though it does reduce this supposed advantage over preschool for all, but that so few children who fall into poverty are reached by targeted programs. (Barnett W. S., 2015)

Another critical problem with targeted scholarships is that children from middle-income families really do need high-quality preschool in order to thrive. A national study that observed "the quality of teaching in preschool classrooms found that only a quarter of children from middle-income families attended good preschool programs that might be expected to significantly improve their learning" (Barnett W. S., 2015). As Yoshikawa explained, "Folks have had a lot of questions about the value of universal preschool. Both Boston and Tulsa show substantial benefits for kids from middle-class families. Children from low-income backgrounds benefit more...but it's not that poor kids benefit and middle-class students don't" (Shaw, 2014).

# Pouring money into early learning scholarships instead of investing in a universal preschool program ignores what we know yields the most profound results for children.

Minnesota's early learning scholarship program has grown from reaching 4,583 4-year-olds in 2015 to reaching 12,101 students in 2017 (Minnesota Department of Education, Early learning, 2018). As the law stands now, Minnesota is set to continue to pour more money into early learning scholarships, while at the same time putting no new money into our voluntary preschool program, which can serve all students in a district in ways that are far better steeped in best practices. According to the House Education Finance Committee's February 2018 forecast, the amount spent on scholarships by the 2020-2021 school year will grow to \$141,418,000. Minnesota is spending money on young learners. We are simply refusing to spend that money on a preschool program that can offer equitable, high-quality education that is both age-appropriate and delivered by teachers who are as qualified to teach as their K-12 counterparts. Pouring money into early learning scholarships instead of investing in a universal preschool program ignores what we know yields the most profound results for children.

Proponents of early learning scholarships often depict these expenditures as a compromise. They think scholarship dollars that target those most in need are a good compromise if the state cannot afford universal preschool. If Minnesota is serious about finding a compromise between investing immediately in high-quality preschool for all 4-year-olds whose families want it and something bigger, then invest in high-quality preschool programs that are open to all 4-year-olds in neighborhoods with the highest concentrations of poverty. This way, we still target the learners who are most in need, we stop pretending we can target the individual families one at a time based on a single shapshot of family income, and we can hold those programs to the same levels of accountability and high standards as our K-12 programs are held to.

## Quality Benchmarks are Important for Preschool Students

Preschool for 4-year-olds offers a solid first step to addressing the achievement and opportunity gaps head-on. Offering programs that meet high standards to all Minnesota 4-year-olds will give children the chance to start their academic careers in safe, engaging learning environments with trained, effective educators to guide their learning, to provide them the chance to experience education in a positive way and to build on that success in kindergarten and beyond. But if Minnesota is not serious about quality, it cannot expect to yield the benefits that have been realized in other places. A quality universal system must include:

- · Licensed early childhood teachers.
- Programs run as public school offerings.
- Curriculum that is age-appropriate and aligned with the Minnesota Early Childhood Indicators of Progress.
- Class size capped at 20 and student/staff ratios capped at 10:1.
- · Vision, hearing, and health screening and referral.
- · Family outreach and wrap-around services.
- Administrators and paraprofessionals trained in age-appropriate, play-based education for early learners.

# The Importance of Licensed Early Childhood Teachers

One of the most critical characteristics of high-quality preschool is a requirement that instruction is undertaken by highly-qualified, licensed, early childhood teachers. Research has pointed to strong teacher qualifications as being one of the defining characteristics of high-quality preschool programming. Oklahoma's preschool program, for example, stands apart from that state's Head Start program in quality and in outcomes due in large part to its insistence on strong teacher qualifications. Given what we now know about how critical these years are in terms of children's brain development, it is nonsensical to assert that we should provide lesser-prepared teachers for them.

Early childhood is a unique period for social, cognitive, and emotional development. Successful educators who have the rigorous academic and clinical background are, therefore, better equipped with necessary tools. They have access to pedagogical resources, they are steeped in the latest research, and they belong to networks that allow them to stay updated as new research evolves.

The historical, vastly inequitable treatment of teachers of our youngest learners, many of whom are women of color, must be addressed.

Education Minnesota supports a long-term plan to develop an on-ramp program that allows the people already doing some form of preschool education to attain full licensure while continuing to earn a living.

The issue of full teacher licensure for preschool teaching is complex. Right now, there are thousands of people in Minnesota teaching preschool learners, and they do so on razor-thin margins, earning about half of the salary, on average, of local K-12 teachers. The historical, vastly inequitable treatment of teachers of our youngest learners, many of whom are women of color, must be addressed. Education Minnesota supports a long-term plan to develop an on-ramp program that allows the people already doing some form of preschool education to attain full licensure while continuing to earn a living. The development of that on-ramping program must include representatives from the workforce already working with our 3-year-olds and 4-year-olds, appropriate teacher preparation providers, and other stakeholders.

### A Universal Prekindergarten Program Must be Run as a Public School Offering

One element that can ensure quality, and that can provide a mechanism for accountability related to that goal, is centralized oversight. In some states, as well as among the programs on which Minnesota's early learning scholarships are used, preschool programs are run through a variety of entities. This arrangement almost guarantees that standards throughout the state will vary wildly. A program that has statewide coordinated governance and a centralized system is the most logical way to set and maintain high standards (Best & Cohen, 2013). Public schools are already set up to offer ongoing professional development so that teachers can stay informed and up to date on best practices in this complex and everevolving field.

### All Educators Must Use Curriculum That is Age-Appropriate and Aligned with the Minnesota Early Childhood Indicators of Progress

A unique pedagogy is required for effective early childhood education. Minnesota has adopted and implemented Early Childhood Indicators of Progress, standards that align with those of the K-12 system, and these should be the cornerstone of the state's preschool system. Program design should be based on the fundamental understanding that play is essential for children's health and well-being, and that a great deal of learning happens in purposefully directed play. Minnesota's standards are based on widely-accepted developmental expectations for children of approximately 4 years of age and receive high rankings nationally.

We know that high-quality preschool programs depend in large part on the high qualifications of the professionals who teach in them.

Lacey Smith teaches kindergarten in Grand Marais, Minnesota. She described how young learners' play is structured around academic standards: "The standard might be to memorize coins. And a room might have a little farm stand play area, and the kids go around and put a pear, or maybe some grapes into their baskets, and they go to the cash register that has coins, and they count their coins. It's an authentic reason to use the money; they are identifying money; they are counting it. It is play, but it is specifically structured play that targets their academic or social and emotional growth based on what we know is happening for them developmentally" (Smith, L., Personal Communication, October 15, 2015). We know that high-quality preschool programs depend in large part on the high qualifications of the professionals who teach in them.

### Prekindergarten Class Sizes Must be Capped at 20 with Student-to-Staff Ratios Capped at 10:1

Class sizes and student/teacher ratios must fall within recommended guidelines. National standards set a class size limit of 20 students, and a student-to-staff ratio of 10:1 (Barnett & Carolan, 2013). In its national quality standards checklist, NIEER also requires a maximum class size of 20 or fewer and student-to-staff ratios of 10:1 or better (National Institute for Early Education Research, 2018).

### Quality, Universal Prekindergarten Must Include Family Outreach Services and Vision, Hearing, and Health Screening and Referral

One of the many reasons kindergarten teachers lament the lack of high-quality preschool is that student needs are not identified until they are already far behind their peers. Having family outreach services that include vision, hearing, and health screenings, as well as the opportunity to identify special education needs earlier, will allow districts to build better relationships with families and to identify barriers to learning earlier, making it far more likely that the children can show up for kindergarten ready to learn.

### Quality, Universal Prekindergarten Must Include Administrators and Education Support Professionals Trained in Age-Appropriate, Play-Based Education for Early Learners

Both administrators and paraprofessionals working with preschool programs need to have the skills and understanding to effectively support early childhood education. The most effective preschool programs also provide classroom observation linked to coaching and professional development for teachers (Barnett & Carolan, 2013; Best & Cohen, 2013). We recommend that a requirement for all administrators at the point of licensure renewal is training on age-appropriate, play-based education for early learners.

#### Conclusion

We recognize that developing a preschool system that serves all of our young learners according to research-based best practices will take time, money, and a collaborative commitment from stakeholders. A real investment of \$500-600 million would allow for Minnesota to offer voluntary half-day pre-K to every Minnesota child. Robust conversation and problem solving is needed to address the issues raised here and others, including transportation concerns, district, and private center collaboration, appropriate professional development, the amount of time young learners are in preschool, and the appropriate infrastructure needed for high-quality preschool. Let us stop ignoring the problem and stop giving heed to those whose primary interest is private profit. Let us instead take what we know about the vast inequities that hold too many of our students back and commit ourselves to developing a system that can allow all of our young learners to thrive.

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