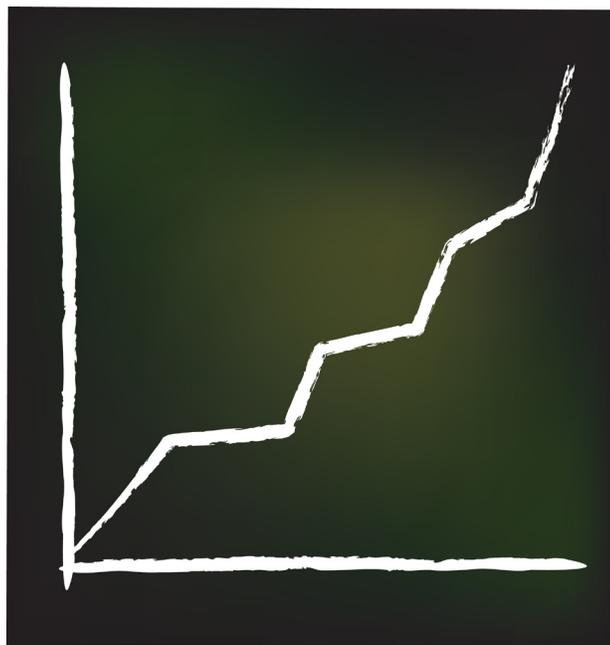


The Wisconsin Policy Research Institute

WPRI REPORT

The Economic Power of Early Childhood Education in Wisconsin

By Rob Grunewald and Don Bezruki



Wisconsin Policy Research Institute

P.O. Box 382 Hartland, WI 53029

www.wpri.org

wpri@wpri.org

WPRI Mission Statement

The Wisconsin Policy Research Institute Inc., established in 1987, is a nonpartisan, not-for-profit Institute working to engage and energize Wisconsinites and others in discussions and timely action on key public policy issues critical to the state's future, its growth and prosperity. The institute's research and public education activities are directed to identify and promote public policies in Wisconsin that are fair, accountable and cost effective.

Through original research and analysis and through public opinion polling, the institute's work will focus on such issue arenas as state and local government tax policy and spending and related program accountability, consequences and effectiveness. It will also focus on health care policy and service delivery; education; transportation and economic development; welfare and social services; and other issues currently or likely to significantly impact the quality of life and future of the state.

The institute is guided by a belief that competitive free markets, limited government, private initiative, and personal responsibility are essential to our democratic way of life.

Board of Directors

James Klauser, Chairman

David J. Lubar

David Baumgarten

Maureen Oster

Ave Bie

Timothy Sheehy

Catherine C. Dellin

Gerald Whitburn

Jon Hammes

Edward Zore

Thomas J. Howatt

George Lightbourn, President

The Economic Power of Early Childhood Education in Wisconsin

by Rob Grunewald and Don Bezruki

President's Notes

As states dig out from the recession, political and business leaders have turned their attention to reviving their economies. Nowhere is this truer than in Wisconsin, where the first act of business by Gov. Scott Walker and the Legislature was a series of moves to strengthen Wisconsin's economy. While most of their attention has been focused on reigniting the bustle on factory floors and replenishing Wisconsin's fledgling venture capital effort, they might just have overlooked a key economic development tool right under their noses: early childhood education.

The study you are holding maintains, "In the cold calculus of economic analysis, repeated studies have not only confirmed the long-term value of early childhood education, but its economic payback has been estimated as high as \$16 for every \$1." Serious economists have verified the payback from early childhood education, but they stipulate that the returns will be realized only if the early childhood programs are of a high quality.

We asked two experts to review where we stand in Wisconsin. Rob Grunewald is an economist with the Minneapolis Federal Reserve Board. He and his colleagues have done some of the most innovative research nationally on the economic impact of early childhood education. His co-author, Don Bezruki, a former director with the Wisconsin Legislative Audit Bureau, is an experienced observer of state government. We should pay attention to what they say.

They tell us that we have work to do. Perhaps most troubling is their finding that 65% of low-income children attend the lowest-rated two- star early childhood centers. Only 14% attend the higher-rated centers. I asked the authors to estimate what would happen if we moved half of those children from two-star centers to four- or five-star centers. They told me that one simple calculation drawing from existing research and experience suggests that moving half of the children attending two-star centers to five- star centers would have a significant impact. Moving those children would create about \$20 million in new costs, however doing so would generate a \$60 million *a year* return in future benefits. This is indicative of the substantial economic benefits Wisconsin can generate through wise investment in early childhood programs.

We hope this study will highlight this overlooked economic tool. Early childhood education should be a focal point for future economic development initiatives in Wisconsin.


George Lightbourn

Table of Contents

Executive Summary	2
Economic Development Potential of Investing in Early Childhood	3
The economic case for investing in young children	4
Labor force productivity begins early	4
Early childhood education programs: A high public return	4
More recent studies show children benefit from preschool	6
Near-term economic development benefits	7
Key ingredients for investing in early childhood education	8
How early education research applies to Wisconsin	9
Minnesota early education investments by business leaders	9
Wisconsin’s YoungStar-Initial Implementation	12
Steps to encourage parental use of ratings	16
Conclusions and Recommendations	19
Endnotes	21

Executive Summary

Early childhood education is one of the most cost-effective and potent economic development tools available. Investment in young children supports economic development by boosting the long-run productivity of the labor force and reducing public costs. In the cold calculus of economic analysis, repeated studies have not only confirmed the long-term value of early childhood education, but its economic payback has been estimated as high as \$16 for every \$1. Early childhood education programs can provide high rates of return when:

- They are of proven high quality.
- They reach children in greatest need, such as children in poverty.
- They reach children well before they start kindergarten.

The YoungStar program, launched in 2010, is Wisconsin's attempt to leverage existing state and federal funding for child care subsidies for low-income families to improve the quality of the state's thousands of child care providers and to help parents make better-informed, quality-based decisions when they select a child care provider for their children.

In 2010, Wisconsin paid over \$293 million to child care providers that enrolled children from low-income families through the Wisconsin Shares program. The Wisconsin Shares subsidies program began during Wisconsin's welfare reform in the 1990s to help parents on public assistance afford child care and join the work force. Beginning in July 2012, YoungStar will employ the financial carrot of subsidy increases for high-quality providers and the financial stick of reduced subsidy payments to low-quality providers. All child care providers will be measured against a detailed and thorough quality rating and improvement system whose results will be made available to parents in an easy-to-use five-star rating format, with one-star for substandard providers and five stars for the highest-quality providers. Perhaps YoungStar's biggest challenge is that 65% of Wisconsin Shares children attended low-ranked two- star providers in December 2011, while only 14% attended higher-quality four- and five- star providers.

Research in other states, especially recently in Minnesota, not only demonstrates the importance of early childhood education as an economic development tool, but also provides an early look at successful strategies and potential challenges. Funded by business leaders, Minnesota's pilot projects employed a market-based approach that provided information to parents on selecting high-quality early childhood providers and scholarships to low-income families to access them. The pilots indicate that with the right set of market incentives, parents and providers respond, which ultimately helps children arrive at kindergarten prepared

to succeed in school. Based on YoungStar's current status and the lessons learned from Minnesota and other states, we recommend that YoungStar:

- Implement strategies to significantly increase parental involvement;
- Evaluate the potential for significant quality improvement among existing providers to determine whether current incentives and penalties are most effectively structured;
- Significantly increase business community support and active participation;
- Streamline and reformulate governance and include input from economic development professionals.

Economic Development Potential of Investing in Early Childhood

Early childhood programs have the potential of being one of the most cost-effective economic development tools available to government. Investment in young children supports economic development by boosting the long-run productivity of the labor force and reducing public costs. A growing body of convincing, long-term research from a variety of sources has demonstrated that educating children before they reach kindergarten can have dramatic effects. Children who receive high-quality early childhood education earn more as adults, have less contact with the criminal justice system, and require fewer public expenditures for social services. While children and their families benefit from early childhood education, the majority of benefits accrue to society due to lower crime costs and less need for social intervention. The research also demonstrates that low-income, disadvantaged children benefit the most from high-quality early childhood education. Estimates of the economic payback of high-quality early childhood education programs have been reported as much as \$16 to \$1.¹

In 2010, Wisconsin launched YoungStar, a quality rating and improvement system (QRIS), for the state's child care providers. After years of focusing state oversight efforts of child care providers on basic health and safety regulations, and in recent years, on fraud prevention, Wisconsin now joins 25 other states with existing QRIS systems. YoungStar aims to rate the quality of care and education given by centers and licensed family providers, and provide technical assistance as well as financial carrots and sticks to spur improvement in quality.

With YoungStar, Wisconsin has the opportunity to improve the lives of the state's children, particularly those from disadvantaged backgrounds, and lay the foundation for Wisconsin's work force of the future. High-quality early childhood education is essential to preparing disadvantaged children to learn in school and eventually compete in the work force. Typically cited benefits of early childhood education include:

- Higher school readiness
- Improved social skills
- Lower use of special education classes
- Higher high school graduation rates
- Higher labor force participation
- Lower use of welfare
- Lower lifetime participation in crime
- Lower rates of out-of-wedlock births²

YoungStar begins with some significant advantages. The program has enjoyed bipartisan support; it was planned and authorized during the Doyle administration and implemented by the Walker administration. By December 2011, more than half of the state's child care providers had submitted applications for a YoungStar rating. The financial carrots and sticks intended to spur program improvements are scheduled to begin taking effect in July 2012. A second major advantage for YoungStar is that funding will come largely from already existing sources rather than requiring large amounts of new funds during difficult financial times. The financial carrots and sticks, as well as funding for technical assistance and program improvement grants, will come primarily from existing appropriations of state and federal funds for the Wisconsin Shares program, which provided over \$293 million in payments in 2010 for subsidized child care for low-income families.³

Despite these early advantages, the ultimate success of YoungStar is not assured but rather will depend on the skill with which it is implemented. Providing high-quality early education to Wisconsin's neediest children is based on two fundamental components—the availability of a sufficient number of high-quality providers, and parents choosing high-quality over low-quality providers when they place their children. A few of the many challenges the state's YoungStar administrators face include continuing to impress on policy-makers, the business community, and the public the economic development importance of early childhood education, overcoming resistance of providers to change and improve their programming for children, and encouraging and motivating parents to use the new rating system when selecting a child care provider for their children.

Because so many other states already have implemented a variety of QRIS systems, Wisconsin has an opportunity to learn from their experience. This paper will detail what researchers have learned recently in Minnesota, which is approaching the close of a multi-year pilot program combining a QRIS system with efforts to empower parents to use a market approach to spur improvement in available high-quality early childhood providers. Similarly, the body of independent research demonstrating economic development value and dollar leveraging of investment in early childhood education continues to grow. The ability of Wisconsin's YoungStar administrators to use this national research and information gleaned from the experiences of Minnesota and other states to guide and inform their implementation of YoungStar will be key

to YoungStar’s ultimate success. This paper will analyze the recent research as well as Minnesota’s experience to identify issues that may be relevant and instructive to Wisconsin’s successful implementation of YoungStar.

The economic case for investing in young children

Investment in human capital prior to kindergarten provides a high public return. Such investment—especially in at-risk children—can have a substantial impact on the success of children as students, workers, and citizens in a democratic society. That is, the most efficient means to boost the productivity of the work force 15 to 20 years down the road is to invest in today’s youngest children. According to James Heckman, Nobel laureate economist at the University of Chicago, “... on productivity grounds, it makes sense to invest in young children from disadvantaged environments. ... Early interventions that partially remediate the effects of adverse environments can reverse some of the harm of disadvantage and have a high economic return.”⁴

Economic research suggests that Wisconsin’s current and future investments in early childhood education can boost long-run labor force productivity, reduce costs to government and society, and produce near-term effects on local economic development. In this section we explore each of these three points and conclude with the ingredients of early childhood education programs consistent with achieving a high rate of return.

Labor force productivity begins early

Investments in human capital are key to increasing labor productivity, that is, the amount produced per hour worked. Strong labor productivity in turn supports economic growth. Countries that have highly skilled work forces have stronger economic growth relative to countries with lower-skilled workforces. In the United States, those states with a higher percentage of population with a college degree tend to have higher levels of per capita personal income.⁵

Looking forward, the growth in the working-age population is expected to slow as the baby boom generation retires. That is, on net the work force is expected to grow more slowly.⁶ Meanwhile, the types of jobs that require higher levels of education and training are expected to grow faster than jobs that require lower levels of education and training. Those jobs requiring more skills pay higher annual wages. For example, a job requiring at least a bachelor’s degree on average pays three times more

than a job that only requires on-the-job training.⁷

Preparing for tomorrow’s work force today requires effective schools and universities; however, the foundation for labor productivity begins well before children arrive at the kindergarten door. A child’s quality of life and the contributions that child makes to society as an adult can be traced to his or her first years of life. During these first few years of life, 700 new neural connections are formed every second.⁸ If this sensitive period includes support for growth in language, motor skills, adaptive abilities, and social-emotional functioning, the child is more likely to succeed in school and to later contribute to society.⁹ Conversely, without support during these early years, a child is more likely to drop out of school, depend on welfare benefits, and commit crime—thereby imposing significant costs on society.¹⁰

The early years not only have an impact on the degree to which children are ready to succeed in school, a substantial body of research demonstrates that early environments have a lifelong impact on health. As articulated by the National Scientific Council on the Developing Child at Harvard University, early experiences are built into the body (for better or worse) and significant adversity early in life can produce physiological disruptions that persist far into adulthood and lead to lifelong impairments in both physical and mental health.¹¹ For example, according to analysis of data collected in the Adverse Childhood Experiences study, adults who suffered multiple adverse experiences in childhood were three times more likely to suffer from heart disease as adults.¹² Adverse experiences include excessive stressful environments, such as growing up in poverty; exposure to violence, abuse, or neglect; a household member incarcerated or mentally ill; and parental separation or divorce.

Early childhood education programs: A high public return

In response to the science of early childhood, early childhood education programs seek to nurture healthy development from the earliest years. Programs that provide enriched experiences for children and involve parents provide benefits for all children, but they have the strongest impact on children from disadvantaged environments.

Four key longitudinal evaluations demonstrate that early interventions can have a positive impact on young children from disadvantaged environments that lasts well into adulthood. The studies used well-matched comparison groups and cost-benefit analysis to compare the estimated dollar value of benefits to the cost of the programs. Analyses of the Perry Preschool Program,¹³ the

Abecedarian Project,¹⁴ the Chicago Child-Parent Centers,¹⁵ and the Elmira Prenatal/Early Infancy Project¹⁶ showed annual rates of return, adjusted for inflation, ranging from 7% to just over 20%.¹⁷ The Perry Preschool Program and Chicago Child-Parent Centers provided preschool at ages 3 and 4, Abecedarian provided full-day care and education for children a few months old through age 4, and the Elmira Prenatal/Early Infancy Project provided home visits by a nurse to high-risk mothers during pregnancy until the child turned age 2.

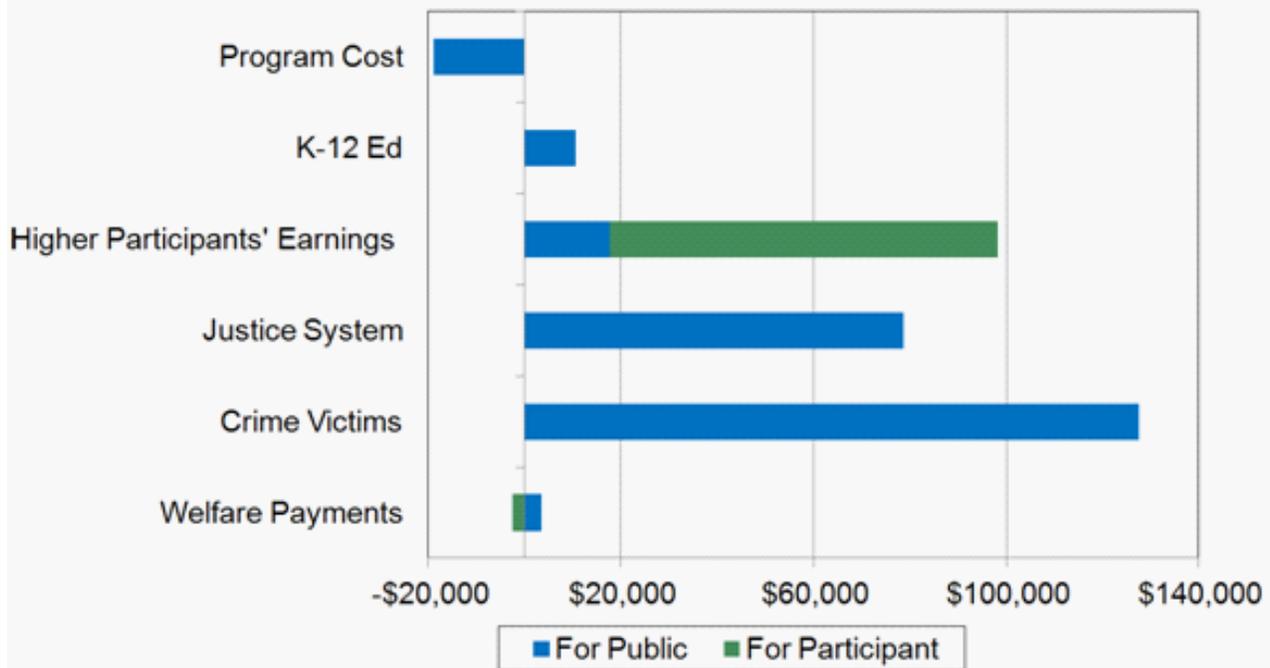
The benefits attributed to these early childhood education programs include reductions in special education and crime, and increases in tax revenue. According to a study by Wilder Research, investment in early childhood education can save K-12 public schools money by reducing special education costs and grade retention and improving classroom productivity. A cost-benefit analysis in Minnesota suggests that the monetary benefits accrued to the school system come close to covering the cost of providing preschool.¹⁸

Reductions in the cost of crime play a large role in boosting overall rates of return, particularly for the Perry Preschool Program (see Chart 1). Only the Abecedarian Project did not include cost reductions due to decreases in crime because differences in crime rates between the treatment and control groups were not statistically significant.¹⁹ In each study, the drop in crime led to reduced costs for incarceration, police protection, and courts. Furthermore, the costs to the victims of crime decreased, including loss of property and suffering. Added together across all four longitudinal studies, the savings in crime alone could justify increased investment in high-quality early childhood education.

In addition to the longitudinal studies, a meta-analysis by Washington State Institute for Public Policy creates an average composite of 53 early childhood education programs to compare the return on investment with other intervention programs for youth. The results for early childhood education for 3- and 4-year-old children, the Nurse Family Partnership, and home visiting programs for at-risk mothers and children compared favorably with other intervention program types reviewed by the authors, including several parole supervision programs for juvenile offenders.²⁰

Chart I

Perry Preschool Costs and Benefits over 62 Years



Source: Schweinhart, et al. (2005)

In addition to reductions in remedial education and crime costs, the longitudinal evaluations show that children who take part in early childhood education programs have higher earnings and pay more taxes once they reach working age. According to a cost-benefit analysis of the Perry Preschool study, a child who attended preschool will pay \$38,000 to \$75,000 more in taxes over his or her lifespan than a child who did not attend.²¹

Rates of return for the longitudinal early childhood education studies compare favorably with the US stock market, which on average earned between 5% and 7%, adjusted for inflation, over the past few decades. This suggests that disadvantaged youth are a better social investment than stock market equity.²² Finally, while children and their families benefit in the studies, the majority of benefits accrue to the rest of society.²³ That is, taxpayers receive proportionally more benefits than the participants in early childhood education programs.

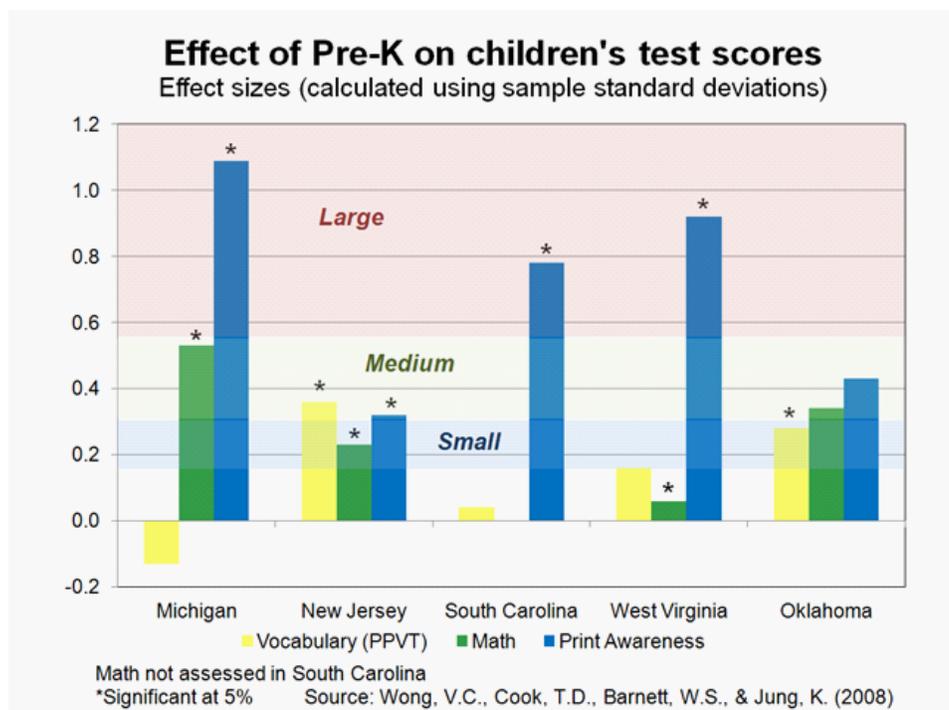
More recent studies show children benefit from preschool

While the long-term benefit-to-cost ratios are based on studies that started 20 to 40 years ago, recent evidence from state preschool assessments provides additional corroboration that early childhood education programs help children prepare for school. Recent studies conducted by the National Institute for Early Education Research use

a regression-discontinuity study design to address potential selection bias. This technique takes advantage of an eligibility cutoff that allows researchers to compare those who receive a treatment or program with those who would enroll in the treatment or program if they were eligible. Since state preschool programs use a stringent age cutoff for enrollment eligibility, researchers can compare children who are old enough to attend with children who are too young to enroll. The age cutoff date allows researchers to account for effects of age differences between the two groups and show the impact of attending preschool versus not attending.

A five-state study using the rigorous regression-discontinuity technique shows that children who attended a state preschool program at age 4 in five states (Michigan, New Jersey, Oklahoma, South Carolina, and West Virginia) showed overall gains in vocabulary, math, and print awareness (see Chart 2).²⁴ Using the same technique, an analysis of New Mexico's fourth year of offering preschool shows that vocabulary scores increased 24% of a standard deviation relative to the control group, math scores increased 37%, and early literacy increased 130%.²⁵ Similar gains are found in a study of Oklahoma's universal preschool program in Tulsa, with low-income children posting larger test score gains than higher-income children.²⁶

Chart 2



Two studies, one that examines child care in poor communities²⁷ and a second that includes a more diverse sample²⁸ both found that enrollment in center-based care was associated with positive cognitive outcomes for young children, particularly when child care providers had high levels of skill and education and child-teacher ratios were low. These positive effects were significant in both poor communities and more diverse communities even after other relevant factors such as family background and maternal education were controlled. However, an additional finding from these studies is an increase in children's physically aggressive behavior after participating in center-based care, particularly for children who spend large amounts of time in these care arrangements.²⁹

Near-term economic development benefits

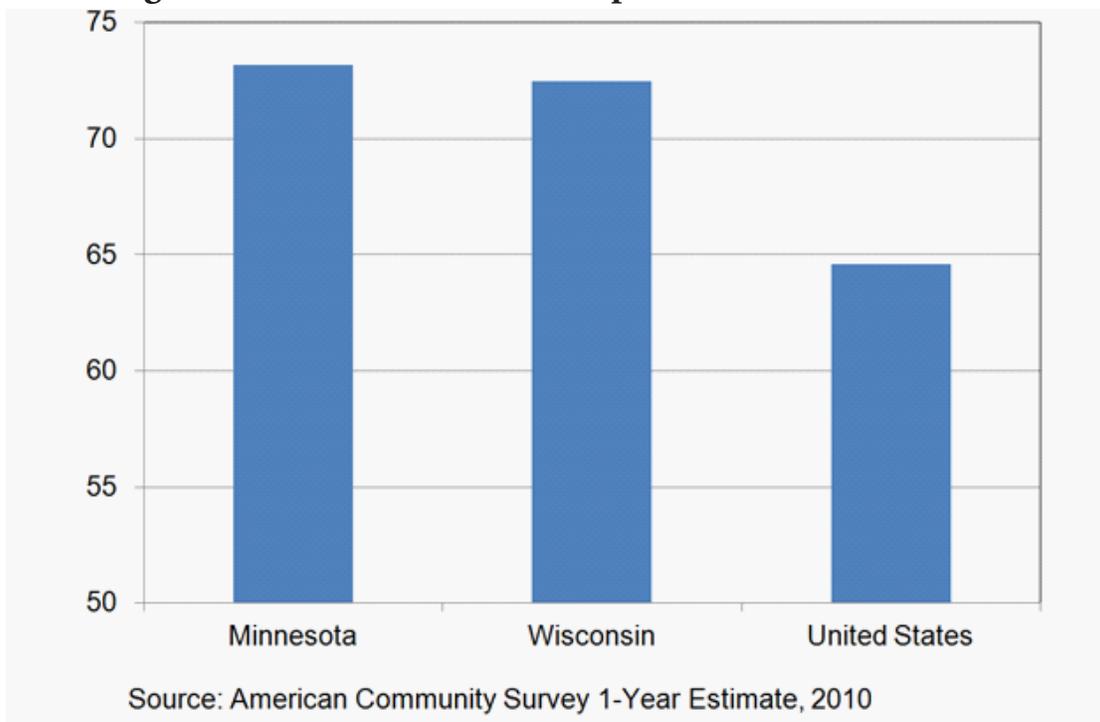
Much of the labor productivity gains and government cost reductions from early childhood education investments occur 10 to 20 years down the road; however, there are substantial economic development benefits that accrue in the near term.

First, a high-quality child care system helps parents enter the work force. Furthermore, once they find a job, parents are less likely to be absent or lose productivity if their child care arrangements are reliable. Karen Shellenback estimates that parent absenteeism and productivity reductions due to child care breakdowns cost US businesses more than \$3 billion annually.³⁰ A high-quality child care system can help mitigate these costs.

And many families with young children have all of their parents in the work force. In Wisconsin, about 73% of children under 6 have all of their parents in the work force (see Chart 3). This percentage is similar to neighboring Minnesota and higher than the national average.³¹ With so much of Wisconsin's future work force spending significant time in child care, the need for it to be high-quality child care is evident. That is, child care is a key component of economic development infrastructure alongside other important infrastructure, such as transportation and communication systems.

Chart 3

Most young kids have working parents Percentage of children under 6 with all parents in the work force, 2010



Second, the child care industry is a large employer and helps spur economic activity in construction and services. A 2002 study of the regulated child care industry in Milwaukee County showed the sector employed more than 7,200 workers and generated more than \$200 million in gross receipts, more than industries such as hotels and motels, advertising services, and engineering services.³²

Not only is the child care industry a large employer and revenue-generator in its own right, Mildred Warner shows that the child care industry has strong linkages to local economies. That is, child care workers tend to spend their earnings locally, and child care providers tend to buy services and materials from local businesses.³³

The economic impact multipliers calculated for the child care industry are equally strong or greater than for retail and tourism and other social infrastructure sectors such as hospitals, job training, elementary and secondary schools, and colleges and universities. While some of these sectors are targets for economic development policy, child care traditionally has not been. However, Warner notes that statewide surveys of economic developers in Wisconsin and New York found more than 80% believe child care should be part of economic development policy while 58% note that their communities face an inadequate supply of quality child care.³⁴

The economic case for investing in early childhood education, therefore, is not only found through benefits that accrue several years down the road, but increased jobs and income in the near term. Tim Bartik concludes in his book, *Investing in Kids: Early Childhood Programs and Local Economic Development*, that early childhood education investments provide local economic development benefits that significantly increase the near-term and long-run employment rates and wage rates of a state or local economy.³⁵

Key ingredients for investing in early childhood education

Research from neuroscience, developmental psychology, and economics all points to the same conclusion: High-quality early childhood education can help children prepare to succeed in school and life. However, not all early childhood education investments are equal; that is, key early childhood education program features are consistent with strong child outcomes. Based on research from neuroscience and developmental psychology and findings from preschool evaluations, key features include:

Quality

The training levels of staff via home visiting and center-based programs correlate with positive interactions between

staff and children/parents.³⁶ Relatively low ratios of children to teachers and research-backed curricula are also factors consistent with positive outcomes at center-based programs.

Parent involvement

The four longitudinal studies already mentioned include parent involvement, either through home visiting or connecting parents with activities at a center. Parents are their children's first and primary teachers. However, programs that focus exclusively on parents may not be as effective as a mix of parent-focused and center-based programs.³⁷

Starting early

Science shows that the prenatal period and infancy are particularly sensitive for brain development. As mentioned earlier, high-quality preschool beginning at age 3 shows a positive impact on school readiness, but for children with multiple risk factors, age 3 may be too late.

Evidence-based home visiting programs can help support vulnerable parents with infants and toddlers. One of the most frequently cited studies of a home visiting model is the Nurse Family Partnership in which registered nurses visit the homes of at-risk, first-time mothers of children prenatal to age 2. Randomly selected participants were compared with a control group in Elmira, N.Y., Memphis, and Denver. Effects found in two or more trials include improved prenatal health, fewer subsequent pregnancies, increased intervals between births, fewer childhood injuries, improved school readiness, and increased maternal employment.³⁸

Reaching at-risk children

On a per-child basis, reaching at-risk children will garner the highest return. While state-sponsored universal preschool programs show that all children, regardless of risk factors, demonstrate gains in school readiness measures, children from disadvantaged environments show the largest gains.

Bring to scale

Many children who can benefit most from early childhood education programs are not reached. First, there are many low-income children who could benefit from early childhood investments based on waiting lists for Head Start and/or child care subsidies. To qualify for Head Start, a 3- or 4- year-old child must live in a family below the poverty level; only about 50% of children eligible nationally are provided services through Head Start. To qualify for a child care subsidy, low-income parents must demonstrate they are either working, enrolled in an education program, or actively searching for a job. Many parents are on waiting lists for child care subsidies. Furthermore, surveys of child care arrangements show that many children in low-income families use informal family, friend, and neighbor arrangements and that these settings tend to be lower quality compared with center-based programs.³⁹

How early education research applies to Wisconsin

From long-term effects on work force productivity and crime reductions to near-term effects, such as reductions in special education and gains in employment and income, investments in early childhood education can yield a strong return on investment. Economist Robert Lynch applies the return-on-investment lens to Wisconsin by illustrating the impact of the state reaching all 3- and 4- year-old low-income children with a high-quality preschool program. He shows that annual government budget benefits would exceed costs within nine years and that by 2050, the ratio of government budget benefits to program costs would reach \$2.49.⁴⁰ On several measures, Wisconsin has the opportunity to boost economic performance and save taxpayers money by investing in early childhood education.

Minnesota early childhood education investments by business leaders

Minnesota business leaders, including CEOs and retired CEOs of prominent companies such as Cargill, Best Buy, and Ecolab, and the president of the University of Minnesota, came to the table as original board members of the Minnesota Early Learning Foundation (MELF). Founded in 2005 and sunset at the end of 2011, MELF invested private funds in innovative early childhood education programs. MELF's mission was to recommend cost-effective strategies for preparing children—particularly at-risk children—to succeed in school.⁴¹

MELF funded two flagship programs, the Parent Aware quality rating and improvement system and the St. Paul Early Childhood Scholarship Program, and about a dozen smaller initiatives in the Minneapolis-St. Paul area and two rural counties in southern Minnesota. Now Parent Aware is in the process of expanding statewide. While the St. Paul Early Childhood Scholarship Program concluded in September 2011, Minnesota is planning to offer scholarships through funds allocated by the legislature and funds received through a federal Race to the Top Early Learning Challenge grant.

As MELF funded and evaluated the pilot early childhood education programs, MELF made its ongoing findings and recommendations available to the Legislature and the governor. In 2011, MELF began working to implement its recommendations to reform Minnesota's existing early care and education system.⁴² Details of MELF's final results and recommendations are available at www.melf.us.

Led by the board's business perspective, MELF

emphasized the importance of efficiently working markets and customers empowered with information and resources. Applying these principles to the early childhood market, MELF considered how to improve the efficiency of the early childhood education market and how well families are served as customers. MELF's hypothesis was that with proper incentives, the early childhood education market could provide high-quality programs that reach at-risk children.

MELF's flagship programs—the Parent Aware quality rating and improvement system and the St. Paul Early Childhood Scholarship Program—advanced overall program quality and expanded access to at-risk children by improving the efficiency of the early childhood education market.

First, Parent Aware helps improve the flow of information to parents about the quality of early childhood education providers. This helps them better shop for providers. Parent Aware is a voluntary rating program that rates early childhood education providers that agree to participate with from one- to four- stars based on criteria that research indicates have a significant influence on children's school readiness.⁴³

Second, the Scholarship Program provides high value scholarships to low-income families with children ages 3 and 4 to expand access to the early childhood education market. The scholarship model also includes a parent mentor who visits the home to assist parents in connecting with the early childhood education provider of their choice and other community resources.

Both of these programs emphasize improving the early childhood education market's information flow, a key component of an efficient market. They also create incentives for parents to select high-quality programs for their children and for early childhood education providers to improve their quality and expand their number of spaces.

Parent Aware

Parent Aware measures and rates the quality of early childhood education providers and promotes quality improvement using a variety of resources. Parent Aware is completing its pilot phase in three locations in the Minneapolis-St. Paul area and in two rural counties in southern Minnesota. As Parent Aware moves to expand statewide, adjustments will be made based on lessons learned through the pilots; these descriptions are based on the pilots.

Parent Aware is unique compared with other state quality-rating and improvement systems because it places a primary emphasis on providing parents with information on the importance of quality and the characteristics of high-quality child care providers. MELF has supported outreach efforts to parents through an easy-to-use website, radio and Internet advertising, and media coverage. Most

other states focus primarily on program improvement, such as technical assistance and grants to assist the program in securing curriculum, materials, and teacher training. While Parent Aware also provides these supports, the focus on parent outreach—emphasizing the demand side of the market—makes the system unique.⁴⁴ Furthermore, while Parent Aware has made particular efforts to reach out to families that receive child care subsidies, the marketing efforts and program search tool are intended for all Minnesota families.

Parent Aware includes all rated public and private early childhood education providers on one website so that parents can easily shop across early childhood education programs: home- or center-based and offered by a for-profit, nonprofit, or government, such as federally funded Head Start and state and locally funded school-based preschool programs. Early childhood education providers volunteer to participate in Parent Aware and are rated on the following categories:

- Family partnerships
- Teaching materials and strategies
- Tracking learning
- Teacher training and education
- Child Safety

Early childhood education providers submit documentation and supporting materials for each area. They receive an on-site observation and are scored on research-based scales that measure environment, instructional practices, and interactions with children. Accredited child care centers, accredited family child care providers, school-based preschool, and Head Start programs are awarded a four- star rating automatically if they demonstrate current accreditation status, compliance with licensing, or compliance with applicable state or federal program performance standards. Since December 2007, 471 providers have received ratings; 28% of all eligible providers in the pilot areas were participating in Parent Aware as of June 2011.⁴⁵

Of the early childhood education providers that have volunteered to participate, 92% say that the Parent Aware program improved their quality. Participating early childhood education providers first receive materials on how to prepare for the rating process, suggesting that quality improvement can begin prior to the initial on-site assessment. Once in the program, early childhood education providers receive technical assistance from a quality coach and are eligible for grants to purchase curriculum and supplies and to attend professional development classes and seminars.

Ratings are posted on the Parent Aware website, www.parentawareratings.org. Parents can search for early childhood education providers by area and in a variety of languages, including English, Hmong, Spanish, and Somali. They can also call their local

child care resource and referral agency for assistance.

About 300 to 400 children attending Parent Aware providers, the majority in 4- star providers, were evaluated on language, literacy, math skills, and social competence using standardized assessments. From fall to spring, children made gains in language, literacy, math, social competence, and task persistence. However, teachers reported an increase in a measure of children's angry-aggressive behavior. These findings do not imply that Parent Aware is the cause of positive or negative changes in children's outcomes. It does imply, however, that among the providers participating in Parent Aware, children are making mostly positive gains in the developmental domains that are important for school readiness.⁴⁶

On Aug. 10, 2011, Minnesota Gov. Mark Dayton announced plans to expand Parent Aware statewide.⁴⁷ Parent Aware's expansion plans include a commitment from business leaders to form a new nonprofit organization, Parent Aware for School Readiness, to market the ratings to parents and providers and oversee an ongoing evaluation of the link between Parent Aware and school readiness outcomes. That is, private-sector, in-kind, and financial resources and leadership will work to ensure that Parent Aware remains directed toward reaching parents with information about selecting child care. During the pilot, about 40,000 unique visitors visited the Parent Aware ratings website and many used the ratings to better inform their shopping for early childhood education providers. Visitors spiked by about 300% when a brief advertising campaign using radio ads was conducted, indicating that ongoing marketing efforts could encourage website usage.⁴⁸

Parent Aware for School Readiness continues to be led by key Minnesota business and community leaders, including some former MELF board members, and it is privately funded.

St. Paul Early Childhood Scholarship Program

From January 2008 to September 2011, MELF conducted a pilot project based on an early childhood scholarship and parent mentor model proposed by Art Rolnick and Rob Grunewald. The proposal outlines a program where scholarships and parent mentors are provided to low-income families with young children. Parent mentoring starts with families with expectant mothers or infants, while scholarships become available when children turn 3. The scholarships can be used to enroll in a high-quality public or private early childhood education program for two years prior to kindergarten. The combination of parent mentoring and scholarships provides a continuum of support for early childhood development prenatal to kindergarten.⁴⁹

The St. Paul Early Childhood Scholarship Program served about 650 children and their families with parent mentoring and/or scholarships in two neighborhoods in St. Paul. Families below 185% of the federal poverty level (about \$40,000 for a family of four) were eligible to participate. The scholarships ranged in value from about \$5,000 annually for a half-day, school-year program, to \$13,000 annually for a full-day, year-round, center-based program. The cost of the pilot was about \$6 million, not including evaluation.

In December 2010, the three-year point of the pilot, the program evaluator noted that the scholarships were reaching especially poor children: 71% of the families had household incomes below the poverty level (about \$23,000 for a family of four⁵⁰). Prior to the availability of scholarships, only about one-third of children in the pilot program attended a licensed early childhood program with various levels of quality. After the availability of the scholarships, children were attending a variety of high-quality early childhood education providers, including nonprofit and for-profit child care and preschools, Head Start, family-based child care, and public school-based preschool programs. About three-quarters attended full-day programs; the rest attended half-day programs.⁵¹

The report also shows the number of high-quality providers in and near the pilot area increased more than 85%, from 22 providers to 41 over a three-year period, as existing providers improved their quality and a couple of new providers opened in the area. In order to enroll children with scholarships, providers needed to achieve at least a three- star rating on a four- star Parent Aware rating.

Not only did the number of high-quality providers increase, but parents considered the scholarship program to be user-friendly and had strong positive opinions about the parent mentors and scholarships. Over 80% of parents interviewed over the phone indicated that they talk with their child's teacher about behavior and accomplishments, classroom rules and expectations, and activities to develop skills at home.⁵² Parents also commented that they noticed how the early childhood education provider was preparing their children for kindergarten, including by helping them learn English and develop stronger social skills.

Child outcome data also provided promising results. Children participating in the pilot showed significant increases in language, literacy, and early math skills, with small to large effect recorded during each year of participation and across the two-year period. The evaluators noted that children's developmental trajectories were improved from what they would have been without participating in the scholarship program and attending a high-quality early childhood education program.⁵³ Children

also showed significant but modest improvements in social skills and task persistence, but there weren't significant improvements in scores on behavior problems (i.e., anger-aggression). Based on available data from norming samples, scholarship children were comparable to their peers in social-emotional skills.⁵⁴

A number of lessons have emerged from the Scholarship Program. As discovered in the pilot, recruiting low-income families can be challenging, particularly since these families tend to be highly mobile. On the ground, person-to-person recruitment and word of mouth were more effective than passive outreach efforts. However, once parents enrolled in the program, they noted that it was relatively easy to use and were enthusiastic about the scholarships, particularly when compared with child care subsidized and administered by the government.⁵⁵ Combining parent mentors with the resources to choose a high-quality provider for their child seemed to help engage parents in the education of their children.

On the provider side, more openings with high-quality providers have become available in part because the providers are paid at a higher rate than if they provided more typical child care. In addition, providers and families noted that the scholarship program required less paperwork, was easier to navigate, and made payments to early childhood education providers in a more timely fashion than the child care subsidy system. In a scholarship system, the focus is on the child's education, not on the employment status of parents. This difference, focusing on the child, not on the parent, combined with an easy-to-use, customer-driven model, seemed to have a positive impact on children and parents. Despite the system's focus on the child, a number of parents noted that the scholarship program also made it possible for them to obtain work and education opportunities.

Wisconsin's YoungStar— Initial Implementation

YoungStar began accepting applications for ranking from child care providers in late 2010 and will begin applying incentives and penalties to subsidy payments in July 2012. During this initial implementation phase, a number of YoungStar's strengths became evident, including bi-partisan support from the Legislature and the governor's office, and a well-developed, easy-to-understand quality rating system, the QRIS. However, YoungStar's challenges are large. The Department of Children and Families had completed rating most but not all providers as of December 2011, and the large majority of the providers rated received a substandard two- star rank. Fewer than 15% of Wisconsin Share children were enrolled with higher-ranked four- and five- star providers. In addition, research described previously on Minnesota's pilot project suggests a number of areas where Wisconsin may need to strengthen YoungStar, including parental involvement, participation by the state's business community, and governance.

YoungStar represents a key initiative in Wisconsin's efforts to assess and improve the quality of early childhood care and education for the state's neediest children. While 4-year-old kindergarten (4K) is available for all children in participating school districts⁵⁶ (86% of Wisconsin school districts are participating in 2011-2012), Head Start and Wisconsin Shares are intended for low-income families. Federal standards and regulations govern Head Start, while state regulation of Wisconsin Shares has heretofore largely focused on basic health and safety, and on fraud-prevention efforts. Participation in the YoungStar QRIS system is mandatory for all child care providers—including family providers and child care centers—that participate in the Wisconsin Shares subsidy program. In addition, it is anticipated that some child care providers that currently enroll only private-pay children and do not participate in Wisconsin Shares may voluntarily apply for a YoungStar rating as a marketing tool and may be attracted by the incentive payments to participate in Wisconsin Shares.

The Wisconsin Shares child care subsidy program is available to eligible working families earning less than 185% of federal poverty rates, about \$43,000 for a family of four. Payments are made by the state directly to providers and are based on locally determined average rates. Family co-pays are based on a percentage of income.

While data are less than clear because a child may participate in more than one program (such as 4K and child care), it is estimated that approximately 200,000 of Wisconsin's over 400,000 children under the age of 6 participate in state or federally regulated early childhood educational settings, including licensed or certified child care settings,

Head Start, 4K, Birth to 3, Special Education 3 to 5, and Home Visiting.⁵⁷ Of these children, approximately 54,000 a month are served through the Wisconsin Shares program.⁵⁸

The fundamental purpose of YoungStar is to make high-quality early childhood education available to children in the Wisconsin Shares program. The two essential components necessary to achieve that goal are adequate availability of high-quality child care providers, and sufficient education and information for parents to select high-quality providers over lower-quality providers. To achieve the first component, YoungStar will modify existing subsidy payments to reward high-quality providers and penalize low-quality providers. The intent is that the financial penalties, combined with the promise of financial rewards, will motivate low-quality providers to improve, typically through increased education for their staff and various other improvements in the quality of the programming they provide children. Detailed descriptions of quality indicators and what a provider must do to improve from one quality rank to another are included in the State's Quality Rating and Improvement System (QRIS) and are described for each provider. To achieve the second component of providing parents the tools to select high-quality providers over low-quality providers, YoungStar plans to rely primarily on its easy-to-understand five- star ranking system. All Wisconsin Shares providers will be rated and parents can use the stars to compare providers and make their placement decisions.

Using the QRIS, all child care providers will be evaluated and can receive points within each of four categories: educational qualifications, curriculum, professional practices, and health and wellness.

The number of points a child care provider earns determines the number of stars it receives. Providers that do not meet the state's basic health and safety regulations are assigned a single star and are not eligible for the Wisconsin Shares program. Providers that meet the state's basic health and safety regulations are then rated on the quality of their programs.

While YoungStar is still in its implementation stage, over 4,000 of the state's 7,800 child care providers had submitted materials to obtain a rating by December 2011. Of those, 2,473 had received ratings and 1,585 applications were pending. In addition, YoungStar staff had provided over 5,300 technical assistance visits to child care programs to provide one-on-one coaching, mentoring or guidance, and had conducted over 1,500 technical-rating visits.⁵⁹

Table 1
Point Categories

Categories for Earning Points	Possible Points Family providers	Possible Points Group providers/child care centers
Family Provider Qualifications/Education	0-14	
Group Teacher Qualifications/Education		0-9
Group Director Qualifications/Education		0-6
Learning Environment and Curriculum	0-14	0-13
Professional Practices (business practices, staff benefits, etc.)	0-7	0-7
Health and Wellness	0-5	0-5
Total	0-40 points	0-40 points

Table 2
Points Required for Star Ranks

*	**	***	****	*****
Not in regulatory compliance	0-10 points	11-22 points	23-32 points	33-40 points

Research on the experience in Minnesota and elsewhere identifies a number of program components critical to the long-term success of YoungStar and other programs designed to improve early childhood education. There are at least three areas with particular relevance to Wisconsin: active parental and provider involvement; significant business community involvement; and smoothly functioning governance.

Parental and Provider Involvement

Experience indicates that fundamental to the ultimate success of YoungStar and the QRIS systems of other states is active parental involvement—parents using their state’s quality rating system to choose a higher-quality child care provider over a lower-quality child care provider for their children. For example, Minnesota has even named its rating system the “Parent Aware” quality rating and improvement system. Second, in order to make choices, parents need a sufficient number of high-quality providers from which to choose.

Wisconsin’s approach has been based on the premise that the lure of higher reimbursement rates will convince child care providers to upgrade the quality of their programs and that the easy-to-use star rating system will then allow parents to identify and choose these higher-quality providers over lower-quality providers. In theory, the rating system will allow parents to act on their preference for high-quality programs to compare providers and move

their children from lower- to higher-quality settings. This market power exercised by the parents will, in turn, prompt providers to improve the quality of their services in order to maintain existing enrollments and attract new families. The incentive payments received by those that attain the higher star ratings will fund and sustain the costs associated with higher-quality programming.

While this theory underlies QRIS systems, it will require close monitoring and evaluation by YoungStar administrators to see how well it works in practice. Key questions will be whether the incentives for both parents and child care providers will be adequate to prompt significant, and in some cases, costly changes in the quality of educational programming offered by providers and in the choices made by parents.

One question YoungStar administrators will face is whether child care providers will believe the incentive payments will be sufficient to pay for the higher costs of the quality improvements needed to attain additional stars. The incentive payments, which do not take effect until July 2012, have already been modified to increase the size of the carrot for the highest-rated providers and to create a stick for the lower-rated providers. Originally, payments were only incentive based.

**Table 3
Original Incentive Payments**

Star Rating	*	**	***	****	*****
Proposed incentive	Not eligible	0%	+5%	+10%	+15%

**Table 4
Modified Incentives**

Star Rating	*	**	***	****	*****
Incentive July 1 to Dec. 31, 2012	Not eligible	-5%	0%	+5%	+10%
Incentive starting Jan. 1, 2013	Not eligible	-5%	0%	+5%	+25%

However, the incentives that will begin in July 2012 have been modified to include a stick as well as a carrot—both decreases and increases to the subsidy payments to child care providers for low-income families. In addition, the incentive for the highest-rated providers is scheduled to increase from 10% of the subsidy to 25% of the subsidy after the first six months.

The crucial importance of the ability of YoungStar to convince providers to improve their quality and increase their ranking is underscored by the dismal results of the rankings to date, which indicate that as of December 2011, over 78% of providers rated a substandard rank of only two-stars. Only 7.4% of providers received a four- or five- star rank. In contrast, in its initial projections for the program, the Department of Children and Families estimated that only 40% of providers would fall in the two-star category during 2011-2012 and as many as 21% would be in the four- and five-star categories.⁶⁰

Consistent with the low ranking of a majority of providers, the majority of Wisconsin Shares children enrolled with providers that had been ranked by December 2011 were enrolled with two- star providers, while only 13.7% were enrolled with higher quality four- and five- star providers.

It is not known, however, whether the new incentives and penalties will be sufficient to prompt a significant number of providers to make improvements to the quality of the programming and education they offer. As noted in the table, the majority of providers that have been rated as of December 2011 received only two-or three-stars, which means they will not receive any incentive payments and most will have their basic subsidy penalized.

For those in the four- and five- star categories, the effect of the incentives can vary dramatically, even from provider to provider with the same star rating, because of variations in the number of subsidized children a provider may have. For example, a provider with an enrollment of 75%

Table 5
Providers Rated as of December 2011⁶¹

Star Rating	*	**	***	****	*****	
Number of Providers	45	2,630	413	46	204	3,338
Percentage of Providers	1.3%	78.8%	12.4%	1.3%	6.1%	100%

Table 6
Wisconsin Shares Children Enrolled by Star Level—December 2011⁶²

Region	Children at 2* providers	Children at 3* providers	Children at 4* providers	Children at 5* providers	Total
Kenosha/ Racine	2,014	751	2	71	2,838
Milwaukee	10,203	1,763	0	1,874	13,840
Northeastern	2,062	1,544	0	822	4,428
Northern	1,495	687	0	138	2,230
Southern	2,862	1,373	103	1,118	5,456
Western	1,754	436	0	178	2,368
TOTAL Children	20,390	6,554	105	4,201	31,250
% of Children	65.2%	20.9%	.3%	13.4%	100%

subsidized children and 25% private-pay children will have a significantly greater boost in overall income from the incentive payments than a provider with an enrollment of only 10% subsidized children and 90% private-pay children. Second, estimating the effect of incentives and disincentives on the bottom line of providers is difficult because of the differences in size and cost structure between providers, and because subsidy rates have been frozen in recent years due to government budget constraints while provider costs will likely continue to increase.

Equally important to the question of the ultimate effectiveness of the incentives is the question of how difficult it will be for most two- star providers to make the changes necessary to improve their quality to a three- star rating. For example, YoungStar's QRIS rating system places significant emphasis on the educational qualifications of the provider in determining quality. However, it would appear that the lack of educational qualifications of many current two- star providers will be a major impediment to their ability to obtain a three- star rating.

Currently, a two- star provider needs only a limited educational background. Two- star providers are not required to complete high school but must complete two noncredit courses approved by the state—one is called The Introduction to the Child Care Profession and the second is a business basics course called Fundamentals of Family Child Care. In contrast, to obtain a three- star rating, a family care provider must meet a number of minimum educational requirements, including a high school diploma or high school equivalency; a Childhood Development Associate credential, which includes 120 hours of formal training and 480 hours of experience in a group setting; and further specialized credentials, such as for infants/toddlers, or 18 related credits.

A recent report on the implementation of YoungStar in Milwaukee County suggests how significant the gap is between the educational qualifications of two- star and three- star family care providers. These minimum qualifications for a three- star provider earn four points in the YoungStar QRIS system. In contrast, the study found that the average points currently earned by family care two- star providers was only 0.61.⁶³ Not only is the size of the qualifications gap significant, but the length of time that it may be required for a provider to obtain a high school equivalency, and attend classes to obtain the required number of advanced course credits, could also be significant as well as costly.

Nevertheless, incentive payments are only one factor

designed to influence provider decisions on whether to improve the quality of their educational programming for children and attain a higher star rating. The YoungStar quality rating system is based on the assumption that marketplace decisions by parents will compel providers to improve their quality or lose enrollment to higher- starred competitors. In other words, if parents use the YoungStar rating results to move their children from low-quality/low- starred providers to high-quality/high- starred providers, some providers will be forced to improve their quality in order to maintain their enrollments and stay in business.

What is unknown is the extent to which parents will use the YoungStar rating information to make their child care selection decisions. As found over the years in the Milwaukee private School Choice program, parents consider a number of factors in choosing providers for their children's educational programming. While quality is important, other factors likely play a role in child care selection decisions, such as distance from home to an available provider; familiarity with a provider, either directly or indirectly through friends and acquaintances; how comfortable and safe a parent perceives the environment at a provider; and the cost of care to the parent.

Steps to Encourage Parental Use of Ratings

Wisconsin's YoungStar administrators have taken a number of steps to maximize the use of the rating by parents. First, the ratings are easy to understand. The use of stars to denote quality, with an increasing number of stars to denote higher quality, is a well-ingrained concept, used with equal effect by teachers on children's homework and mass marketers touting high-quality hotels and restaurants. Second, the YoungStar ratings are widely distributed and easily available. The YoungStar website is easy to find within the Department of Children and Families website, and is easy to use and navigate. In addition, the department has undertaken statewide media campaigns, using a variety of types of media, even including ads on city buses, to publicize YoungStar. Finally, YoungStar ratings are structured so that parents can be assured that providers which receive a high rating show strength in each of the four categories in which providers are assessed (education and professional development, learning environment and curriculum, business and professional practices, and child health and wellness.)

While the steps taken by YoungStar administrators to maximize the use of the rating by parents are important, it should be noted that all of the financial incentives in YoungStar are targeted exclusively toward providers. Some

research suggests that in the absence of financial incentives, parents will often select a child care provider primarily based on location and cost.⁶⁴ Under most circumstances, co-pays for families in the Wisconsin Shares program are generally limited to a percentage of parents' income. However, for some high cost/high-quality providers, costs may exceed the state maximums and parents may be responsible for the additional costs. The frequency of such situations could increase as subsidy rates remain capped as government budgets remain constrained while provider costs increase. In addition, the Department of Children and Families has indicated that incentive payments are not intended to be used by providers to reduce parent co-pays, but rather to help fund quality improvements.⁶⁵

Several states have created financial incentives for parents to choose high-quality child care by providing child care tax credits. Louisiana is the only state to directly tie its tax credit program to the state's QRIS policy. Louisiana makes the credit available not only to parents, but also to businesses that support child care centers. In Minnesota, the MELF Scholarship Program priced scholarships at levels that almost always covered the tuition. Furthermore, parents' choices were limited to high-quality providers.

Business Community Involvement

Central to the planning, development and rollout of YoungStar has been the extensive collaboration between state government staff, the child care industry and various nonprofit associations representing providers and advocates, and the state's business community. All interested parties have spoken with remarkable unanimity about the importance of early childhood education for individual children and for the future of the state as a whole. Similarly, the experience of the Minnesota pilot program also demonstrates the crucial role that collaboration and in-depth involvement of the business community can play in the success of early childhood education programs. Based on the Minnesota experience, it appears that there may be even further opportunities for additional business community involvement in Wisconsin to ensure the long-term success of YoungStar and early childhood education efforts.

Participation by groups representing the child care industry and the business community has been strong throughout the development of the YoungStar program and continues to be so in its guidance and operation. A substantial part of YoungStar's administration and technical assistance to child care providers throughout the state is provided not by state government staff in Madison, but rather through a contract with a consortium of nonprofit organizations representing the child care industry and advocates. The

consortium consists of Celebrate the Children Foundation, the Supporting Families Together Association, and the Wisconsin Early Childhood Association. Together these groups operate YoungStar regional offices and provide the contact with child care providers as they apply for YoungStar and navigate the process of ratings, technical assistance, and program improvement grants.

Wisconsin's for-profit business community has also played an active role in the broad public discussions and efforts to advance early childhood education initiatives across the state in recent years. The importance of early childhood education has been a featured topic at various local and regional economic development conferences and summits throughout Wisconsin in recent years.⁶⁶

The business community, including the Partnership for Wisconsin's Economic Success, has also played an active role in the Governor's Early Childhood Advisory Council, whose members represent a broad spectrum of government officials, as well as education, community, and business leaders from throughout the state. The Advisory Council has a broad mandate to conduct statewide needs assessments; make recommendations concerning early learning standards, professional development and data collection; hold public hearings; and issue strategic reports.⁶⁷ The Advisory Council's 2011 draft report includes a recommendation to further strengthen ties with the business community by creating a public-private board to support early childhood efforts by leveraging resources and engaging communities to improve early childhood development. It is anticipated that the new board would link with an existing nonprofit entity and remain connected with the Advisory Council.⁶⁸

If such a public-private board were to be created, it could provide an opportunity to leverage private sector funding which could be used in a targeted fashion to augment government appropriations. Such efforts at targeted use of privately raised funds would appear consistent with a more active business community involvement stance as seen in the Minnesota experience. The State of Delaware has also taken advantage of public-private partnerships for funding QRIS efforts.⁶⁹

Governance

Early childhood education and programs have developed over the years in Wisconsin under a diffuse governance structure, with oversight and operational responsibilities spread over several state agencies. Further complicating uniform policy development is the multiple funding sources of the various agencies

and programs. Four separate state entities play a critical role in Wisconsin's early childhood education efforts.

While all of the various early childhood education programs listed in the table appear logically placed in their respective agencies, the size of their respective agencies makes optimal coordination of policy development, regulations, and funding decisions difficult. A December 2010 report of the Governor's Early Childhood Advisory Council noted the need for an overall system approach to early childhood education and statewide oversight and leadership of the state's early childhood system. Key to the state's efforts, the report noted, were improved data collection and measuring methods.⁷⁰

It is also noteworthy that while the value of early childhood education as an economic development tool is highly touted in research studies, in Wisconsin there is no official role for input by the state's economic development agency in policy development, funding, or oversight. Yet nationally, affiliates of the National Association of Manufacturers, US Chamber of Commerce, and National Association of Workforce Boards have supported investment in young children.⁷¹ Providing a role for economic development officials in YoungStar and other early childhood education initiatives would elevate early childhood education as a state economic development priority.

Table 7

Entity	Mission	Key early childhood education programs	Key funding sources
Department of Children and Families	Promote economic and social well-being of Wisconsin's children and families	<ol style="list-style-type: none"> 1. YoungStar 2. Wisconsin Shares 3. Childcare licensing and certification 4. Home visiting 5. Childcare quality improvement 	<ul style="list-style-type: none"> -Federal Child Care and Development Block Grant -Federal Temporary Assistance to Needy Families (TANF) -Federal Title IV-E -State General Purpose Revenue (GPR)
Department of Public Instruction	Ensure the opportunity of a high-quality education for every child in the state	<ol style="list-style-type: none"> 1. 4-year-old Kindergarten 2. Early Childhood Special Education (children ages 3-5) 3. Head Start state supplement 4. Childcare food program 	<ul style="list-style-type: none"> -State General Purpose Revenue (GPR) -Federal Individuals with Disabilities Act (IDEA), Part B -Local property tax revenue
Department of Health Services	Protect and promote the health and safety of the people of Wisconsin	Birth to 3 intervention program	-Federal Individuals with Disabilities Act (IDEA), Part C
Governor's Early Childhood Advisory Council	Conduct needs assessments, make recommendations concerning early learning standards, holds public hearings and issues reports		

Conclusions and Recommendations

Wisconsin officials have had considerable success in the initial implementation of the YoungStar QRIS system. More than half of the state's child care providers have submitted YoungStar applications. State officials have contracted with a consortium of nonprofit agencies to staff regional offices and provide application reviews, and rating and technical assistance to providers. Thousands of hours of training and technical assistance have already been provided to child care centers and family providers throughout the state.

Despite these positive first implementation steps, the reality that the vast majority of Wisconsin Shares children are currently enrolled with low-rated providers highlights how far the state is from its goal of providing high-quality early childhood education to its most needy children. While Wisconsin Shares children are typically cared for in a safe environment, the state is far from realizing the potential economic development benefits of widely available, high-quality early childhood education. The gap between today's reality and the goal of providing high-quality early childhood education is so significant, the state may need to move aggressively in making program changes to take advantage of research findings from Minnesota and elsewhere. These changes include:

- Implement strategies to significantly increase parental involvement;
- Evaluate the potential for significant quality improvement among existing providers to determine whether current incentives and penalties are most effectively structured;
- Significantly increase business community support and active participation;
- Streamline and reformulate governance and include input from economic development professionals.

Parental Involvement

YoungStar is more likely to succeed if parents take an active role in selecting high-quality instead of low-quality child care providers. Experience in the Minnesota pilot program demonstrates the positive impact that program outreach efforts—including direct contact and mentoring—can have on parents. Child care providers tend to respond when a parent asks about its rating or why a provider doesn't have a rating. In contrast, to date YoungStar has focused the vast majority of its program efforts on providers. To achieve a much more balanced approach, YoungStar will need to significantly increase its efforts to directly contact and actively engage parents in making better-informed decisions about child care providers. To develop new and effective approaches to better encourage parent participation, YoungStar needs to determine

whether co-pays at high-quality child care providers pose disincentives to parents, whether a portion of existing funding should be reallocated into scholarships or other financial assistance models directed to encourage families to select high-quality providers, and whether there are ways to combine already existing programs with new efforts to increase direct parent contact and education efforts.

Provider Incentives

YoungStar has focused the large majority of its efforts to improve the quality of child care providers throughout the state on its plan to increase subsidy payments to high-quality providers and decrease subsidies to low-quality providers. Absent from this policy, however, is sufficient and convincing data or evidence as to what the costs would be for the majority of the state's child care providers, which are rated at only two stars, to obtain the necessary education and make the other program changes necessary to improve their quality just to the middle three star rating, much less improve to a high-quality four- or five- star rating.

YoungStar will need to assess its current financial incentive system to determine the potential of its incentive/disincentive subsidy approach to actually move large numbers of providers to higher-quality ratings, and to determine whether to develop a scholarship program in which scholarships can be used at only high-quality programs and in which parents face a simplified application and reauthorization process.

Business Community Involvement

Active business community involvement is likely essential if YoungStar is to be successful as an economic development tool and actually provide high-quality early childhood education to the state's disadvantaged children. Experience in the Minnesota pilot program had clearly demonstrated the value of business community involvement in areas such as marketing, an area essential to improved parent awareness, and in scholarship funding.

YoungStar needs to capitalize on and expand current efforts in Wisconsin by members of the consortium to create additional and more meaningful ways for ongoing and direct participation of the business community both statewide and at the local, community level.

Governance

Numerous state agencies are involved, directly or indirectly, in Wisconsin's early childhood education efforts, through policy development, funding and regulatory oversight. Such diffuse participation is not surprising for diverse program efforts that have developed over time.

Curiously, however, while early childhood education is widely considered one of the more powerful economic development tools a state government can have, the state's economic development agency is not part of this broad mix of agencies.

To sharpen the focus of early childhood education, especially to improve its chances of having long-term success as an economic development tool, YoungStar will need to streamline its governance model and ensure participation of the state's economic development agency.

Endnotes

¹Jon Stellmacher and Dennis Winters. Business Interest in Early Childhood Investment. Governor's State Advisory Council on Early Childhood Education and Care. February 24, 2011

²Public Policy Forum. "YoungStar at One Year: An Analysis of Child Care Quality in Milwaukee County". January 2012

³Department of Children and Families. Wisconsin Shares Child Care Expenditures. http://dcf.wisconsin.gov/child_care/wishares/cceq.htm

⁴James J. Heckman and Dimitriy V. Masterov. "The Productivity Argument for Investing in Young Children." *Applied Economic Perspectives and Policy* 2007; 29 (3): 446-493..

⁵There is a strong correlation between the percentage of population with a college degree and per-capita income at the state level. Data from U.S. Census Bureau and Bureau of Economic Analysis.

⁶US Census Population Division. Population Projections. <http://www.census.gov/population/www/projections/>.

⁷US Bureau of Labor Statistics. Employment Projections Program. <http://www.bls.gov/emp/>.

⁸Center on the Developing Child at Harvard University. *In Brief: The Science of Early Childhood Development*.

⁹Martha F. Erickson and Karen Kurz-Riemer. *Infants Toddlers, and Families: A Framework for Support and Intervention*. New York: Guilford Press, 1999.

¹⁰Center on the Developing Child at Harvard University. "Excessive Stress Disrupts the Architecture of the Developing Brain." Working Paper No. 3, Summer 2005.

¹¹Center on the Developing Child at Harvard University. *The Foundations of Lifelong Health Are Built in Early Childhood*. July 2010.

¹²Maxia Dong, Wayne H. Giles, Vincent J. Felitti, Sharon R. Dube, Janice E. Williams, Daniel P. Chapman, Robert F. Anda. "Insights into causal pathways for ischemic heart disease: Adverse Childhood Experiences Study." *Circulation* 2004; 110:1761-1766.

¹³Lawrence J. Schweinhart, Jeanne Montie, Zongping Xiang, W. Steven Barnett, Clive R. Belfield, and Milagros

Nores. *Lifetime Effects: The HighScope Perry Preschool Study Through Age 40*. Ypsilanti, Mich.: High-Scope Press, 2005.

¹⁴Leonard N. Masse and W. Steven Barnett. *A Benefit-Cost Analysis of the Abecedarian Early Childhood Intervention*. New Brunswick, NJ: National Institute for Early Education Research, 2002.

¹⁵Arthur J. Reynolds, Judy A. Temple, Dylan L. Robertson, and Emily A. Mann. "Age 21 Cost-Benefit Analysis of the Title I Chicago Child-Parent Centers." *Educational Evaluation and Policy Analysis* 4(24), 267-303, 2002.

¹⁶Lynn A. Karoly, Peter W. Greenwood, Susan S. Everingham, Jill Houbé, M. Rebecca Kilburn, C. Peter Rydell, Matthew Sanders, and James Chiesa. *Investing in Our Children: What We Know and Don't Know About the Costs and Benefits of Early Childhood Interventions*. Santa Monica, Calif.: RAND Corporation, 1998.

¹⁷James J. Heckman, Rob Grunewald and Arthur J. Reynolds. "The Dollars and Cents of Investing Early: Cost-Benefit Analysis in Early Care and Education." *Zero to Three*, July 2006, Vol. 26, No. 6., pp10-17.

¹⁸Richard Chase, Brandon Coffee-Borden, Paul Anton, Christopher Moore, and Jennifer Valorose. The cost burden to Minnesota K-12 when children are unprepared for kindergarten. Wilder Research. December 2008.

¹⁹The lack of a crime effect is likely due to relatively low crime rates in the study area compared with other parts of the country. See Jean Burr and Rob Grunewald. "Lessons Learned: A Review of Early Childhood Development Studies," Federal Reserve Bank of Minneapolis, April 2006.

²⁰Washington State Public Policy Institute. "Meta-Analysis Benefits and Costs of Prevention and Early Intervention Programs for Youth." September 2004.

²¹Clive R. Belfield, Milagros Nores, and W. Steven Barnett *The HighScope Perry Pre-School Program: Cost-Benefit Analysis Using Data from the Age-40 Followup*. HighScope Educational Research Foundation, 2004. Values in 2010 dollars.

²²Heckman, Grunewald, and Reynolds.

²³Ibid.

²⁴Vivian C. Wong, Thomas D. Cook, W. Steven Barnett, and Kwanghee Jung. "An effectiveness-based evaluation of five state pre-kindergarten programs." *Journal of Policy*

²⁵Jason T. Hustedt, W. Steven Barnett, Kwanghee Jung, and Allison H. Friedman. *The New Mexico PreK Evaluation: Impacts From the Fourth Year (2008-2009) of New Mexico's State-Funded PreK Program*. National Institute for Early Education Research. November 2010.

²⁶William T. Gromley. *Small miracles in Tulsa: The effects of universal pre-K on cognitive development*. 2007. Retrieved January 3, 2011, from http://www.human-capitalrc.org/events/2007/hcconf_eed/gormley-slides.pdf.

²⁷Susanna Loeb, Bruce Fuller, Sharon Lynn Kagan, and Bedemi Carrol. "Child Care in Poor Communities: Early Learning Effects of Type, Quality, and Stability." *Child Development* 75(1), 2004, 47-65.

²⁸National Institute of Child Health and Human Development (NICHD) Early Child Care Research Network. "Child Outcomes When Child Care Center Classes Meet Recommended Standards for Quality." *American Journal of Public Health* 89(7), 1999. 1072-1077.

²⁹Burr and Grunewald.

³⁰Karen Shellenback. *Child Care & Parent Productivity: Making the Business Case*. Linking Economic Development & Child Care Research Project. Cornell University, December 2004.

³¹American Community Survey 3-Year Estimates, 2007-2009.

³²*The Economic Impact of Child Care in Milwaukee County*. Center for Economic Development, University of Wisconsin-Milwaukee. September 2002.

³³Mildred Warner. "Child Care Multipliers: Stimulus for the States." Linking Economic Development and Child Care Research Project. Cornell University, 2009.

³⁴*Ibid.*

³⁵Tim Bartik. *Investing in Kids: Early Childhood Programs and Local Economic Development*. W.E. Upjohn Institute for Employment Research. Kalamazoo, Mich., 2011.

³⁶Linda M. Espinosa. "High-Quality Preschool: Why We Need It and What It Looks Like," *Preschool Policy Matters*, National Institute for Early Education Research, No. 1, November 2002.

³⁷Burr and Grunewald.

³⁸Nurse Family Partnership. Web site: www.nurse-familypartnership.org (Accessed September 2011).

³⁹Melanie Brown-Lyons, Anne Robertson, and Jean Layzer. *Kith and Kin—Informal Child Care: Highlights From Recent Research*. National Center for Children in Poverty. 2001.

⁴⁰Assumes state pays for new preschool funding while federal government maintains effort by funding Head Start and special education. Program starts in 2007 by funding a cohort of 3-year-olds and funding all eligible 3- and 4-year-olds by 2008. Low-income defined as below 125 percent of 2012 federal poverty guidelines, or \$28,858 for a family of four. Robert G. Lynch. *Enriching Children, Enriching the Nation: Public Investment in High-Quality Prekindergarten*. Economic Policy Institute, 2007.

⁴¹Minnesota Early Learning Foundation website. www.melf.us Accessed October 19, 2011.

⁴²Minnesota Early Learning Foundation 2010 Annual Report. <http://www.melf.us/vertical/Sites/%7B3D4B6DDA-94F7-44A4-899D-3267CBEB798B%7D/uploads/%7BAB4AE26C-5FB7-4063-9B86-40A21A08E923%7D.PDF>. Accessed October 19, 2011.

⁴³Kathryn Tout, Rebecca Starr, Tabitha Isner, Jennifer Cleveland, Ladia Albertson-Junkans, Margaret Soli, and Katie Quinn. *Evaluation of Parent Aware: Minnesota's Quality Rating and Improvement System Pilot. Final Report Summary*. Child Trends, December, 2011.

⁴⁴*Ibid.*

⁴⁵*Ibid.*

⁴⁶*Ibid.*

⁴⁷"Governor Dayton's New Leadership for Early Childhood Learning." <http://mn.gov/governor/newsroom/pressreleasedetail.jsp?id=102-15048>. Accessed October 26, 2011.

⁴⁸Summary of MELF Research Findings, May 2011. http://www.melf.us/vertical/Sites/%7B3D4B6DDA-94F7-44A4-899D-3267CBEB798B%7D/uploads/MELF_Research_Summary_052011.pdf. Accessed October 28, 2011

⁴⁹Arthur J. Rolnick and Rob Grunewald. "A Proposal for Achieving High Returns on Early Childhood Development." Working paper, Federal Reserve Bank of Minneapolis, March 2006.

⁵⁰Based on 2012 federal poverty guidelines, <http://aspe.hhs.gov/poverty/12poverty.shtml>.

⁵¹Erika Gaylor, Donna Spiker, Cyndi Williamson, and Kate Ferguson. St. Paul Early Childhood Scholarship evaluation: Final evaluation report—2008-2011. Menlo Park, CA: SRI International, December 2011.

⁵²Ibid.

⁵³Ibid.

⁵⁴Ibid.

⁵⁵Ibid.

⁵⁶The Department of Public Instruction reported that 86% of Wisconsin School Districts participated in K-4 in 2011-2012.

⁵⁷Governor's Advisory Council on Early Childhood Education and Care, *Building Blocks for Wisconsin's Future: The Foundation for an Early Childhood System*, December, 2010.

⁵⁸Department of Children and Families. Wisconsin Shares Monthly Statistics. <http://dcf.wisconsin.gov/childcare/wishares/spfcs.htm>

⁵⁹Department of Children and Families. YoungStar Measures. November 2011. http://dcf.wi.gov/youngstar/pdf/ysmeasures_nov11.pdf

⁶⁰Department of Children and Families. "YoungStar FiveYear Plan Submitted to Wisconsin's Joint Committee on Finance". November 22, 2010.

⁶¹Department of Children and Families. YoungStar Statistics. <http://dcf.wi.gov/youngstar/statistics.htm>

⁶²Manning, Coral, Department of Children and Families. "Youngstar Data" email to Don Bezruki, Jan. 19, 2012.

⁶³Public Policy Forum, "YoungStar at One Year: An Analysis of Child Care Quality in Milwaukee County." January 2012.

⁶⁴Public Policy Forum, "Improving Child Care Quality by Rating Child Care Providers: Lessons Learned from Other States." Research Brief, vol. 9, number 8, December 2011

⁶⁵Department of Children and Families. YoungStar Frequently Asked Questions. www.dcf.wi.gov/youngstar/pdf/faq.pdf

⁶⁶<http://www.wisbiz4kids.com/events.htm>

⁶⁷Wisconsin Governor's Early Childhood Advisory Council. System Assessment Committee and System Design Task Force. July 8, 2010. http://dcf.wi.gov/ecac/pdf/8510_pp.pdf

⁶⁸Wisconsin Governor's Early Childhood Advisory Council. 2011 Draft Report http://dcf.wi.gov/ecac/pdf/121211_governors_report_draft.pdf

⁶⁹Public Policy Forum, "Improving Child Care Quality by Rating Child Care Providers: Lessons Learned from Other States." Research Brief, vol. 9, number 8, December 2011

⁷⁰Governor's Early Childhood Advisory Council. *Building Blocks for Wisconsin's Future: The Foundation for an Early Childhood System*. December, 2010.

⁷¹ReadyNation. <http://www.readynation.org/>. Accessed Feb.22, 2010.