RYAN A. BIZZARRO, CHAIRMAN

414 MAIN CAPITOL BUILDING P.O. BOX 202003 HARRISBURG, PENNSYLVANIA 17120-2003 (717) 772-2297 FAX: (717) 780-4767



HOUSE DEMOCRATIC POLICY COMMITTEE

WEBSITE: WWW.PAHOUSE.COM/POLICYCOMMITTEE

EMAIL: POLICY@PAHOUSE.NET

PO @PADEMPOLICY

HOUSE OF REPRESENTATIVES

COMMONWEALTH of PENNSYLVANIA

House Democratic Policy Committee Hearing

Childcare Access and Early Childhood Education Tuesday, August 17, 2021 | 10 a.m.

Representative Dianne Herrin

10:00 a.m. Betsy Billie, Executive Director

West Chester Area Day Care Center

10:20 a.m. Jonathan Ragonese, Parent Testifier

10:30 a.m. Carol Austin, Executive Director

First Up

Kimberly Early, Director of Public Policy and Advocacy

Pennsylvania Association for the Education of Young Children

11:00 a.m. Dr. Laura Crispin, Associate Professor, Department of Economics

Program Director, Undergraduate & Graduate Public Policy

Saint Joseph's University

11:15 a.m. Katy Personette Deputy Campaign Manager

Pennsylvania Budget and Policy Center

11:30 a.m. All Panelists

Policy Review: Where Do We Go From Here?

Q & A with Legislators

Submitted for the record:

Taryn Morrissey, Associate Professor

School of Public Affairs, American University

RYAN A. BIZZARRO, CHAIRMAN

414 MAIN CAPITOL BUILDING P.O. BOX 202003 HARRISBURG, PENNSYLVANIA 17120-2003 (717) 772-2297 FAX: (717) 780-4767



HOUSE DEMOCRATIC POLICY COMMITTEE

WEBSITE: WWW.PAHOUSE.COM/POLICYCOMMITTEE

EMAIL: POLICY@PAHOUSE.NET

PADEMPOLICY @PADEMPOLICY

Carol Austin, Executive Director, First Up

Testimony

Good morning and thank you for having me. My name is Carol Austin and I am Executive Director of First Up. First Up, previously known as the Delaware Valley Association for the Education of Young Children (DVAEYC) has championed the field of early childhood education for the last 50 plus years. We truly believe that every family deserves to have their child cared for and educated by a well-paid, well trained professional. Research very clearly shows us high quality early childhood education is not only a benefit to the children, but to all of us and society as a whole. For most families, both parents are participating in the workforce and so, most families need care for their young children. This basic truth was taken for granted as recently as 17 months ago, but then something happened...

Imagine if you would, May of 2020, a young single parent who happens to be an employee at your local grocery store. This mom/dad would not typically be described as a hero, but in the middle of a pandemic, we realized what essential truly meant. This mom/dad, probably scared for their own health has to venture out into the world with a scary mystery contagion and interact with large numbers of people daily. They worry about bringing this illness home to their two-year-old. They worry about their elderly parent who they haven't seen in over a month because they haven't figured out how to use Zoom yet. They cannot call out or take time off, because in the midst of a stay at home order, this person knows if they call out or try to take time off, they will be fired. They arrive at their childcare of choice to see a sign saying, "Closed permanently". What would happen next? Our essential worker would likely lose their job because they could not find care. If they are lucky, they would be able to take advantage of unemployment compensation, but the process would be hard and maybe even contested by their former employer. But once approved, they now have switched from providing income to our state for other essential services through tax revenue, to reducing the amount in our coffers. Their child statistically now has higher chances of being enrolled in special education when they reach the public school system, which is the most expensive level of education, typically at least partially paid for by local property taxes. If that child does not return to high quality early childhood education, they are also more likely to drop out of high school and become involved in the criminal justice system. Another cost to our state tax payers. There are so many longterm consequences of a child not being able to access high quality early childhood education; not just during the pandemic, but all of the time.

Early childhood education, pandemic or not, is the backbone of our economy and civil society. Although many working families discovered how difficult it is to work from home with a preschooler pulling on your pant leg, many of us have known that without a safe place to send our children during the work day, work is no longer an option. Without work, disposable income lessens and local businesses' bottom lines start to move from

black to red. In some cases, children who depended on meals from their local preschool may not eat as frequently. And in our worst case scenarios, children who would have learned to work out conflict and other relational issues in care, never master that skill and become the adults we read or hear about on the news, harming or even murdering their fellow man over silly things like scuffed sneakers.

The early childhood education field is in crisis. A recent survey conducted by the National Association for the Education of Young Children (NAEYC) reports that about 80% of childcare providers are experiencing staffing shortages. And of teachers and family childcare providers polled, 1/3 admitted they were considering leaving the field this year. While there has always been staffing issues in our field, this year is particularly bad. A more targeted survey, concentrating on the Southeastern part of the state, conducted by the childcare provider coalition "The Voice of ECE" had 94% of respondents reply that they were short of staffing, with 89 % saying that administrators were in classrooms regularly to try to maintain state required adult to child ratios. The Office of Child Development and Early Learning reports that approximately 800 childcare programs have closed since the pandemic began. There have been some new sites that have opened, but we are still seeing a net loss of sites around 250 providers. In Chester County, 16 childcare providers have closed their doors. Bear in mind that these closures happened in spite of support received from the CARES Act. According to NAEYC, 46% of programs would have closed without the Federal intervention. Still over 2/3 of childcare providers took on additional debt to keep their doors open, with 42% of all debt on people's personal credit cards.

Because we are still in strange place with less people returning to physical work places and older siblings at home, some families have not opted to return their children to care. We fear there will soon be such an explosion of demand for publicly funded early childhood education, that our current supply will be insufficient. Regarding resources available to working families, they can qualify for a few types of care in Pennsylvania: Childcare Works, HeadStart and PreK Counts.

Childcare Works, sometimes referred to as "subsidy" or CCW, is funded mostly through the Federal Childcare Development Block grant, with state dollars supplementing that investment. Families making up to 200% of the Federal poverty level who work or are in school can receive year round subsidized care and are responsible for making a copayment based on their income. Childcare providers receive a fixed amount for their children, but can qualify for an "add on" if they have moved through the Keystone Stars Quality Rating System. That system ranks childcare providers on a scale of 1-4 with 4 being the highest quality with the highest add on. I will note that currently our subsidy system is at capacity. There is a short waiting list for families looking for care, but as I mentioned earlier, we expect an explosion of need once K12 schools start and as people return to the workforce post pandemic. What do we mean by explosion? Currently only about 19% of eligible 3-5 year olds are being served. Only about 15% of eligible infants and toddlers are being served. And of the children in care, receiving

CCW subsidies, only about 40% of those children are in what we refer to as "high quality" Star 3 or 4. Sadly these state wide statistics are true for Chester county as well.

HeadStart, both Federal and state supplemental, are available for families making 100% of the poverty guideline. Families qualifying for this program are only given "school hour/school year" care, but might be able to use CCW funds to provide full day/full year care.

PreK Counts mimics HeadStart in many ways, but it is only funded by state dollars and families making up to 300% of the Poverty guideline are eligible. There is no copay, but like HeadStart it is only "school day/school year" hours. This can be combined with CCW to get full day/full year care.

If we look at HeadStart and PreK Counts together, we would need an additional 5,336 classrooms to serve the eligible 3-5 year old population statewide. Representative Herrin, your district has 71% of eligible children with no program to attend. And only half of the high quality PreK sites in your district receive public funding, meaning low-income families might not even have a chance of enrolling their child, even if there were an opening. Any legislator interested in the statics of their district can find them at https://www.papartnerships.org/resources-publications/mapping-tools/.

It should be noted that the reimbursement rate to providers for HeadStart and PreK Counts is substantially higher than the reimbursement rate for CCW. And even with recent raises in the CCW rates, they tend to be way below the actual cost of providing quality childcare. A recent report from Research for Action showed that childcare programs lose the most money providing care for infants and toddlers, with reimbursement rates between 30-40% less than what is needed. This is leading to more sites not serving that population.

Finding qualified staff is almost impossible when you are losing money by the very nature of your business, because there is no way you can pay them a livable wage. A recent research letter in Jama Pediatrics noted that 50% of early childhood professionals are experiencing at least one of the following:

- (1) received Supplemental Nutrition Assistance Program benefits (food);
- (2) did not have enough money to provide adequate shelter or housing for themselves or their family (housing);
- (3) did not pay the full amount of the gas, oil, or electricity bills (utilities);
- (4) did not have enough money to pay for health care and/or medicine for themselves or their family (health care);
- (5) currently worked at another (second) job for pay (income)

It should be noted that within the last month, more providers are finding themselves competing and losing staff to fast food and convenience chains which are paying as much as \$5 per hour more than programs teaching our youngest learners.

I am not naïve enough to think anyone in the room can waive a magic wand and fix this, but serious consideration must be given to the fact that childcare programs,

preschools, and nursery schools are all finding themselves without adequate staffing. Without staffing, they will either discontinue certain services or close altogether. If this happens when we can fully reopen the economy, we will see a crash in the labor market as families will not be able to go to work with their young children home alone. It is quite disheartening that of the 30 states that publicly fund high quality PreK, Pennsylvania ranks in the bottom half (18th) in our commitment to our children. We must invest in our children and those who care for and educate them if we expect our economy and society in general to thrive. I thank everyone for your time and I look forward to being a resource to tackle this important issue.



August 17, 2021

Good afternoon, Chairman Bizzarro, Representative Herrin and members of the House Democratic Policy Committee. Thank you for holding this public hearing and for the opportunity to provide testimony on families' access to early childhood care and education.

My name is Kimberly Early and I serve as the Director of Public Policy and Advocacy for the Pennsylvania Association for the Education of Young Children (PennAEYC). PennAEYC is the state affiliate of the National Association for the Education of Young Children (NAEYC). We are a part of a network that includes 52 affiliates and nearly 60,000 individual members nationwide. PennAEYC represents a membership of over 2,500 early childhood care and education professionals throughout Pennsylvania and has nine chapters throughout the Commonwealth. As a statewide, non-profit membership organization, our membership includes center-based teachers and directors, home-based providers, higher education faculty and students. Our mission is to be an effective voice for high-quality early childhood care and education and we do that through policy development, advocacy and professional development and supports for early childhood professionals. Our vision is that all Pennsylvania families will have access to highquality, affordable early childhood care and education opportunities for their children provided by a profession that is valued, well-compensated and supported. PennAEYC and First Up are part of the Start Strong PA and Pre-K for PA campaigns. Start Strong PA is a nonpartisan issue advocacy campaign that supports healthy child development, working families and the economy by increasing access to and improving the affordability of high-quality child care programs for Pennsylvania children and families. Pre-K for PA encourages Pennsylvania to invest additional funds in high-quality pre-k by making increased annual investments in the Pre-K Counts and Head Start Supplemental Assistance Program line items.

Child care provides critical development and enrichment opportunities for children of all backgrounds and is a vital building block of our state's economy. The COVID-19 pandemic has demonstrated how important child care is for our communities and has also shown us the hardships it has been struggling with for years. Those hardships have only been deepened by the pandemic. One-time federal and state relief funding for child care has come to Pennsylvania in the form of:

- \$106 million from the Coronavirus Aid, Relief, and Economic Security (CARES) Act, in addition to \$116 million appropriated by the Administration and General Assembly in discretionary CARES Act funds
- \$303 million from the Coronavirus Response and Relief Supplemental Appropriations Act (CRRSA) and
- Most recently \$1.2 billion from the American Rescue Plan (ARP) Act, which has not yet been allocated by the Wolf Administration.

Relief funding was and is intended to provide critical support to help stabilize the sector, however significant and sustainable investments continue to be needed to ensure high-quality child care is affordable and accessible for everyone.

The Start Strong PA campaign hosted 12 virtual provider and family forums in April and May and conducted a survey on how Pennsylvania should build a stronger child care system through the use of the ARP child care funds. Over 1,000 child care providers and families shared how they would stabilize, strengthen and secure PA's child care system. The policy recommendations we made for the \$1.2 billion in ARP funding are based on that input and included the following recommendations that can get immediate relief to providers and help families.

- 1. Provide payments to child care providers serving families receiving subsidy to be used exclusively for recruitment of new staff and retention of existing staff. Payments would be calibrated based on size/capacity of the child care program. This would address the current challenge of hiring and retaining staff, allowing more children to be served.
- 2. Eliminate copayments for families receiving subsidy. Use ARP funds to reimburse child care providers for loss of copayments. This would relieve families of a financial burden as they return to work post-pandemic and ensure providers receive stable payment.
- 3. Advertise the child care subsidy program, focusing on targeted geographic areas, to assist more families in getting back to work. Designate ARP funds to fund all child care subsidy slots so no family has to wait to receive services.
- 4. Pay subsidized child care providers based on enrollment and not attendance beginning July 1, 2021 through 2024, consistent with proposed child care subsidy regulations. Retroactively pay subsidized child care providers who have suffered losses due to underenrollment from September 1, 2020 through June 30, 2021, based on prepandemic enrollment and accounting for the difference between those losses and any pandemic payments made through federal stimulus funds. This would provide financial stability for child care providers while enrollment increases as parents return to work.
- 5. Fund an additional 3,000 high-quality, contracted infant/toddler slots to help more families get back to work.

While these were identified as the top five recommendations to address immediate concerns in the field and to help families get back to work there are a series of 15 remaining recommendations that focus on supporting families and/or providers and fixing the child care system for the long-term. I have provided the link to the recommendations and forums in my written testimony in the event you are interested in these - https://startstrongpa.org/take-action/provider-family-field-forums.

The National Association for the Education of Young Children's conducted a survey between June 17 and July 5, hearing from more than 7,500 respondents nationwide, 306 were Pennsylvania providers. The survey results nationwide indicate that 80 percent of respondents from child care centers report that they are experiencing a staffing shortage. Even with relief funds, 76 percent of child care centers who received relief funds, still experience staffing

shortages. Of the programs that experience staffing shortages, 50 percent are serving fewer children, which shows that the impact of staffing challenges are substantial. Compensation continues to be a challenge and solution to recruitment and retention problems, where 78 percent of survey respondents identify wages as the main recruitment challenge. Wages are so low that potential applicants are recognizing that they can make more money working just about anywhere else.

The Pennsylvania survey data from this report, tells a similar story. Of the 306 Pennsylvania respondents, 67 percent were child care centers and 20 percent were family child care homes. An overwhelming majority (79 percent) of child care center are experiencing staffing shortages right now. Of those experiencing staffing shortages, 60 percent of child care centers are serving fewer children. This is not a case of families not needing child care, as 41 percent of child care centers have a longer waitlist and 30 percent are unable to open classrooms. The majority (57 percent) of Pennsylvania providers are also finding it more difficult to recruit and retain qualified educators compared to prior to the pandemic. Wages have been identified by 78 percent of respondents as the main recruitment challenge. Pennsylvania providers are operating at an average enrollment rate of 62 percent of their licensed capacity with 56 percent of enrolled children attending on an average day.²

Staffing shortages, low wages and a broken market mean that substantial, sustainable public investments are needed for this essential sector to recover and rebuild. Despite the increasing understanding about the vital importance of high-quality child care to children, families, businesses, and the economy, the system has been deeply underfunded for many years. A result is children don't get what they need, families pay more for child care than for housing, and the workforce is paid so little that half live in families who depend on public assistance. Keep in mind that in Pennsylvania, the median wage in 2019 for child care workers was only \$10.69/hour and \$13.96 for preschool teachers.³ Early childhood educators earn low wages, even though we know that skilled, supported and knowledgeable early childhood educators are the cornerstone of quality, and that low compensation undermines quality. In addition, turnover of teachers has a negative impact on the children in care who need stable and positive relationships to thrive.

The pandemic has highlighted the dangerous and negative effects of an underfunded child care system in the United States. One of those effects is the system serving only a fraction of eligible children through child care subsidy, and still struggling to pay for the cost of quality and parents, especially women, dropping out of the labor market and struggling to return without child care. Pre-pandemic over 114,000 Pennsylvania children were enrolled in subsidized child care. These children and families depend on the publicly-supported child care infrastructure and represent a large share of the entry-wage labor force. Now, only 83,000 children are enrolled. While this is the case, there are more than 200,000 children under five years eligible for child

shared/downloads/PDFs/resources/blog/naeyc july 2021 survey progressperil final.pdf

https://www.naeyc.org/sites/default/files/globally-

² https://www.naeyc.org/sites/default/files/wysiwyg/user-74/naeyc state survey data august 2021.pdf

³https://cscce.berkeley.edu/workforce-index-2020/states/pennsylvania/

care subsidy in Pennsylvania, 81 percent of whom are unserved. There are more than 119,000 infants and toddlers eligible for child care subsidy with 85 percent unserved.⁴ Employer hiring will be stunted by the shortage of child care subsidy and supply of child care overall.

At the state level, it is critical that the Wolf Administration allocate the \$1.2 billion in federal child care funds as soon as possible. The longer they wait, the more teachers leave the field, the fewer classrooms will be operating and ultimately the more programs that will close, all negatively impacting families as they return to work.

At the federal level, we are urging Congress to make a substantial and sustainable investment in the early care and education system similar to what is included in the American Families and Jobs Plans. This would be a big step in the right direction as they provide funding to address child care affordability, quality and infrastructure and pre-k access and quality. Substantial resources are needed to enact much-needed policies to address the totality of the child care crisis – and to address the significant gaps that existed prior to it. Increases in annual appropriations and mandatory funding will help Pennsylvania make progress and target relief investments that align with the long-term needs of the child care sector.

Thank you very much for the opportunity to share what is happening in the child care sector and the impact on families and the economy. I am happy to answer any questions you may have now or in the future.

⁴https://papartnerships.maps.arcgis.com/apps/MapSeries/index.html?appid=25068de383324f58a3d474b5bc881f 3e#

Testimony of Dr. Laura M. Crispin¹
On Childcare and the Economy
Before the Pennsylvania House
Democratic Policy Committee
August 17, 2021

¹ Contact information: <u>lcrispin@sju.edu</u>; (610) 660-1594 (office).

Summary of Testimony

The Importance of Childcare and Early Childhood Education

- Provides a safe and healthy environment for children, which supports working parents
- Develops cognitive and non-cognitive skills
 - Improves school-readiness for kindergarten in reading and math (Magnuson et al., 2004); reduces achievement gaps (Blau, 2021);
 - o Longer-term effects may include higher educational attainment and labor market earnings (Duncan and Magnuson, 2013).

The Cost of Childcare in Pennsylvania

- The average annual cost of childcare for a pre-school aged child is \$9,773, which is approximately 14% of the median household income (EPI, 2021; St. Louis Fed, 2021).
- The average annual cost of childcare for an infant is \$11,842, which is approximately 17% of the median household income (EPI, 2021; St. Louis Fed, 2021).
- A two-child household would pay, on average, ~31% of the median household income for childcare per year.

The Market for Childcare

- Childcare shortages nationally and regionally stemming from two main supply-side issues: temporary and permanent closures of child care facilities; staffing shortages.
- Closures of child care facilities:
 - By June 2020, 85.5% of child care centers in Pennsylvania closed at some point during the pandemic and 125 child care centers closed permanently (Sirinides, 2020)
 - o By July 2020, 18% of child care centers remained closed (NAEYC, 2020)
 - By July 2021, one third of child care workers surveyed indicated that they considered leaving their child care center or closing their in-home center (NAEYC, 2021a)
- Staffing shortages:
 - In July 2021, 80% of child care workers surveyed indicated staffing shortages of one or more vacant positions (NAEYC, 2021a)
 - These vacant positions may be difficult to fill due to the relatively lower wages of child care workers.
 - In May 2020, in Pennsylvania, the mean hourly wage for childcare workers was \$11.57, with corresponding annual salary of \$24,070. (BLS, 2021)
 - The mean hourly wage for retail workers was \$14.22. (BLS, 2021)
- Closures and staffing shortages may result in child care centers closing classrooms, reducing enrollments, or closing permanently.

- o In Pennsylvania, 79% of child care centers are experiencing a labor shortage, leading to 30% being unable to open classrooms and 60% serving fewer children (NAEYC, 2021b).
- These factors will lead to a reduction in supply of childcare in the market, which may reduce available spots for children and/or increase the cost of child care.

The Effects of the Childcare Shortage on the Economy

- Labor market implications: workers will either reduce work hours ("intensive margin") or leave the labor market to care for children ("extensive margin"), which may impact mothers more than fathers; this may contribute to labor shortages overall.
 - o The December 2020 jobs report shows a net loss of 140,000 nationally, and that all of the jobs lost were women's jobs (National Women's Law Center, 2021).
 - The June 2021 Job Openings, Layoffs, and Turnover (JOLTS) report indicated a record 10.1 million job openings nationally, but only 6.7 million hires, suggesting a national labor shortage (BLS, 2021).
- Labor market effects on working parents: all working parents have been affected, but there have been significant gender differences
 - Early in the pandemic, mothers were more likely to take temporary leave from work due to childcare responsibilities (Heggeness, 2020)
 - Mothers took on more childcare responsibilities than fathers, which led many mothers to reduce work hours or leave the labor market (Zammaro and Prados, 2021)
 - Later in the pandemic, labor force participation rates did not recover as quickly for working parents, particularly for mothers, as for non-parents (Lofton et al., 2021).
 - The flow of workers from employment to exiting the labor force more than doubles during the pandemic and is largest for women with children (Albanesi and Kim, 2021).
 - Work flexibility is more important than remote work options for working mothers (Lofton et al., 2021).

Macro-level effects

 Persistent labor shortages may slow economic recovery, with lower productivity and a slow return to "normal" economic growth and full employment

Micro-level effects

- Long term unemployment or exit from the labor market may make re-entry difficult, and may cause disruptions in career growth and earnings
- o Because women (mothers) have been disproportionately impacted, this may increase the gender wage gap

References

Albanesi, S., & Kim, J. (2021). Effects of the COVID-19 Recession on the US Labor Market: Occupation, Family, and Gender. *Journal of Economic Perspectives*, *35*(3), 3-24.

Blau, D. M. (2021). The Effects of Universal Preschool on Child and Adult Outcomes: A Review of Recent Evidence from Europe with Implications for the United States. *Early Childhood Research Quarterly*, *55*, 52-63.

Bureau of Labor Statistics. 2021. Job Openings, Layoffs, and Turnover Report. https://www.bls.gov/news.release/jolts.nr0.htm

Bureau of Labor Statistics. 2021. May 2020 State Occupational Employment and Wage Estimates Pennsylvania. https://www.bls.gov/oes/current/oes_pa.htm#21-0000\

Duncan, G. J., & Magnuson, K. (2013). Investing in preschool programs. *Journal of economic perspectives*, 27(2), 109-32.

Economic Policy Institute. (2021). Childcare costs in the United States. https://www.epi.org/child-care-costs-in-the-united-states/#/PA

Heggeness, M. L. (2020). Estimating the immediate impact of the COVID-19 shock on parental attachment to the labor market and the double bind of mothers. *Review of Economics of the Household*, 18(4), 1053-1078.

Lofton, O., Petrosky-Nadeau, N., & Seitelman, L. (2021). Parents in a pandemic labor market. Federal Reserve Bank of San Francisco.

Magnuson, K. A., Meyers, M. K., Ruhm, C. J., & Waldfogel, J. (2004). Inequality in Preschool Education and School Readiness. American Educational Research Journal, 41(1), 115–157. https://doi.org/10.3102/00028312041001115

National Association for the Education of Young Children. (2020). Holding on until help comes. https://www.naeyc.org/pandemic-surveys

National Association for the Education of Young Children. (2021a). Progress and peril: child care at a crossroads. https://www.naeyc.org/pandemic-surveys

https://www.naeyc.org/pandemic-surveys

National Association for the Education of Young Children. (2021b). State survey data: child care at a time of progress and peril. https://www.naeyc.org/pandemic-surveys

National Women's Law Center. (2021). All of the jobs lost in December were women's jobs. https://nwlc.org/wp-content/uploads/2021/01/December-Jobs-Day.pdf

Shockley, K. M., Clark, M. A., Dodd, H., & King, E. B. (2020). Work-family strategies during COVID-19: Examining gender dynamics among dual-earner couples with young children. *Journal of Applied Psychology*.

Sirinides, P. (2020). *The Impact of COVID-19 on Pennsylvania Child Care*. Institute of State and Regional Affairs. Retrieved from https://doi.org/10.26207/dvdw-kc10

St. Louis Federal Reserve Bank. (2021). FRED data — Median Household Income. $\underline{\text{https://fred.stlouisfed.org/series/MEHOINUSPAA646N}}$

Zamarro, G., Prados, M.J. (2021) Gender differences in couples' division of childcare, work and mental health during COVID-19. *Review of Economics of the Household*, **19**, 11–40.

https://www.inquirer.com/news/childcare-shortage-wages-recovery-20210603.html

https://philadelphia.chalkbeat.org/2021/5/18/22440319/child-care-closures-philadelphia-pandemic.

Testimony

Child care and early childhood education² are important because they serve several basic, but critical functions. First, daycares provide a safe and healthy environment for children, providing a necessary support for working parents. Second, child care centers provide educational opportunities for children to develop their cognitive and non-cognitive skills. Studies have shown that attendance in early childhood education programs offered through daycare centers and preschools improve school-readiness in reading and math (Magnuson et. al, 2004) and reduce achievement gaps by improving outcomes for disadvantaged children (Blau, 2021), and may have longer-term effects such as higher educational attainment and higher earnings later in the labor market (Duncan and Magnuson, 2013). Therefore, investment in early childhood education is an investment in the skill and productivity of our future workforce.

Within the market for child care in the United States, a number of issues have arisen during, or been exacerbated by, the pandemic related to child care shortages. These shortages have received national attention, with recent articles in nearly every national and regional newspaper. As recent examples, see the Inquirer article that reported on child care shortages in Pennsylvania and the Chalkbeat Philadelphia article that reported on Philadelphia-specific shortages.³

These shortages stem largely from two supply-side factors: temporary and permanent closures due to Covid-19; and staffing shortages.

Regarding the first, most childcare centers closed in March 2020 due to Covid-19, and many were not able to reopen. A recent study found that 86% of child care centers in Pennsylvania closed at some point due to the pandemic and by June, 2020, 125 child care centers in the state had closed permanently (Sirinides, 2020). Recent reports by the National Association of the Education of Young Children (NAEYC, 2020; NAEYC, 2021a) found that by July 2020, 18% of child care centers had remained closed and as of July 2021, one third of child care workers surveyed were considering leaving their child care center or closing their in-home childcare center. This indicates that closures will be a considerable problem for child care access during the pandemic recovery period.

The child care shortage that is not due to closures is likely due to staffing shortages. The earlier referenced NAEYC report (NAEYC, 2021a) finds that 80% of child care workers surveyed report staffing shortages, with one or more vacant positions. It may be difficult for child care centers to fill these positions due to the relatively low wages of child care workers. According to the Bureau of Labor Statistics State Occupational Employment and Wage Estimates (2021), in Pennsylvania as of May 2020, the mean hourly wage of child care workers was \$11.57, with a

² I use the terms "child care", "preschool", and "early childhood education" interchangeably throughout, though there may be, in practice, variations in these child care settings.

³ https://www.inquirer.com/news/childcare-shortage-wages-recovery-20210603.html. https://philadelphia.chalkbeat.org/2021/5/18/22440319/child-care-closures-philadelphia-pandemic.

corresponding annual salary of \$24,070. For comparison, for retail sales occupations in Pennsylvania, the mean hourly wage was almost three dollars higher - \$14.22. When workers can transition to higher pay in other occupations, it is unlikely that child care centers will be able to attract the amount of workers needed to fill these vacant positions.

These labor shortages may result in many childcare centers closing classrooms, reducing the number of children enrolled, or closing altogether, further compounding the earlier mentioned issues related to access during the pandemic recovery. There is evidence that supports these predictions. In Pennsylvania, 79% of child care centers are experiencing a labor shortage, leading to 30% being unable to open classrooms and 60% serving fewer children (NAEYC, 2021b).

Combined, these factors will lead to a decrease in supply, and economic theory predicts that there may be fewer openings at child care facilities and that the price of child care may rise. It is important to note that child care is already very expensive. For instance, in Pennsylvania, the average annual cost of child care for one pre-school aged child is almost \$10,000 (EPI, 2021), or 14% of the median household income (St. Louis Fed, 2021). For an infant, the annual average cost in Pennsylvania is \$11,842, or 17% of the median household income (EPI, 2021; St. Louis Fed, 2021). Combined, a family with two children would be paying, on average, approximately 31% of the median household income per year for childcare.

The reduction in the supply of child care has had, and will continue to have, several effects on the economy, particularly with respect to the labor market. When spaces are limited, those without access to child care will either need to turn to informal options, which may be unlicensed, unregulated, and/or unreliable, or will need to leave the workforce or reduce their work hours to provide care for their child.

We have seen evidence of this throughout 2020 and into 2021. The December 2020 jobs report was particularly concerning in terms of labor force participation and unemployment. This report showed that nationally, there was a net loss of 140,000 jobs and all of these jobs lost were women's jobs (National Women's Law Center, 2021). The more recent jobs reports, though indicating economic recovery, have not shown the strong recovery that some predicted following the vaccine roll-out. In June 2021, the "JOLTS" report indicated there were a record 10.1 million job openings nationally, but only 6.7 million hires (BLS, 2021), suggesting significant labor shortages across the country, across industries and occupations.

One cause for these national labor shortages, particularly for women, is likely due to lack of access to or uncertainty about child care. Throughout the pandemic, researchers have studied working parents and the effect of child care closures on work, both at the extensive (decision to work) and intensive margins (hours of work), and have found that all working parents have been negatively impacted, but that there are significant gender differences. Studying the early phase of the pandemic, Heggeness (2020) found that mothers were more likely to take temporary leave from their job, largely due to childcare responsibilities. Zammaro & Prados (2021) found that

mothers took on more childcare responsibilities than fathers, and that this has led many mothers to reduce work hours or to leave the labor market altogether. Shockley et al (2021) also found a similarly gendered pattern in childcare responsibilities for dual earning couples. These findings indicate that the immediate effect of childcare closures was to pull many working mothers out of the labor market, although those who remained working also took on much of the childcare responsibilities, creating what has been coined a "double bind" – where working parents, particularly mothers, worked full time, while also parenting at-home children (Heggeness, 2020).

The labor market implications for child care closures were not isolated to the early stage, but continue to persist throughout the pandemic. For instance, Lofton at. al (2021) find that labor force participation rates for parents, and particularly mothers, is recovering slower than for non-parents. They also find that work flexibility – the opportunity to set one's own work hours – is the most critical to working mothers, and more important than the option of remote work. Relatedly, Albanesi and Kim (2021) find that the flow of workers from employment to exiting the labor force more than doubles during the pandemic, and is larger for women with children.

Finally, regarding the broader economic impact, without access to affordable, high quality childcare, parents, especially mothers, who have left the labor force may be unable to re-enter, which may lead to persistent labor shortages. This has macro-level effects on our economy, such as lower productivity and a slow return to "normal" economic growth and full employment. This also has micro-level implications for workers and their families. The longer a worker remains out of the labor force, the more difficult it may be to rejoin, and this may also cause disruptions in career growth and earnings. As women have been disproportionally impacted, this may also lead to an increase in the gender wage gap.

In conclusion, we cannot fully reopen the economy without access to high quality, affordable childcare. There is not an easy solution to this problem, so it is important for policy makers to consider a multi-faceted approach that can help on both the supply-side: childcare providers; and on the demand-side: working parents and their families.

Testimony to the House Democratic Policy Committee hearing on Child Care in Pennsylvania Written by Diana Polson and delivered by Katy Personette, Pennsylvania Budget and Policy Center August 17, 2021

Thank you for the opportunity to provide testimony today on the critical importance of state investment in our child care system.

At this point, we are all aware of the tremendous impact that high-quality child care and early childhood education have on a child's future school performance and success. Our children's' brains go through their most rapid development in the first three years of life and a child's environment plays a central role in this development. Kids who participate in quality early childhood education programs have shown higher cognitive abilities, academic achievement in reading and math, higher college attendance and less involvement in crime than those who did not have access to quality child care. Investments in quality child care programs will lead, down the road, to a stronger workforce and higher earnings, which will greatly benefit individuals who participated in these programs, and our state as a whole. One study estimates that for each dollar we spend in early care and education programs, the return to society will be \$17.

Despite these well-known benefits, Pennsylvania continues to underinvest in our children during the critical developmental stages before kindergarten, from ages zero to five. Pennsylvania serves only 19% of the over 200,000 children under age 5 living in families that are eligible for Pennsylvania's Child Care Works (CCW) subsidy program. And only about 41% of the children served are in high quality programs.³

Our child care crisis today is still aptly described by a phrase popularized by early childhood advocates in the 1990s:

"Parents can't afford to pay. Teachers can't afford to stay. There's got to be a better way."

Parents Can't Afford to Pay

The Economic Policy Institute recently released state data on the cost of child care across the United States.⁴ In Pennsylvania, the average cost of infant care is \$11,842 per year, which is \$987 per month for one child. The cost for a four-year-old in care is slightly less: \$9,773 per year or \$814 per month. These amounts are 79% and two-thirds, respectively, of the full-time, full-year earnings of a minimum wage earner in Pennsylvania, given our minimum wage of \$7.25 per hour.

While there is often a lot of discussion among families and in the media about the cost of sending your child to college, there is less conversation about the cost of child care. Yet in Pennsylvania, infant care costs just \$2,692 less a year than in-state tuition at a public four-year college—that is 82% of college

¹ Pennsylvania Child Care Association. "Early Care and Education Research." Accessed at: https://www.pacca.org/early_care_education_researc.php

² "The High/Scope Perry Preschool Study Through Age 40: Summary, Conclusions, and Frequently Asked Questions." Accessed at: https://nieer.org/wp-content/uploads/2014/09/specialsummary_rev2011_02_2.pdf
³ Pennsylvania Partnerships for Children. "Child Care Works in Pennsylvania, 2021." Accessed at: https://papartnerships.maps.arcgis.com/apps/MapSeries/index.html?appid=25068de383324f58a3d474b5bc881f3
e

⁴ Economic Policy Institute. "The Cost of Childcare in Pennsylvania." Accessed at: https://www.epi.org/child-care-costs-in-the-united-states/#/PA

costs. Infant care costs more than the average cost of housing for a year—8.1% more (\$11,842 compared to \$10,879 for housing). These costs make quality care impossible to access for low-wage workers in our state without public support for such care.

Take for example a minimum-wage worker earning \$7.25 per hour in Pennsylvania. They would have to work full time (40 hours a week) for nearly 10 months to be able to afford the average cost of infant care for one child.

That is 79% of their yearly earnings.

The U.S. Department of Health and Human Services has set the affordability limit for child care at 7% of one's income. That is, child care is considered affordable if it costs no more than 7% of a family's income. But 7% is a long way from 79%. Even a two-parent family with both parents earning the minimum wage puts child care wildly out of range—this family would need to spend 39% of its family income on child care. Add in the cost of care for another child and the expense is impossible.

Number of Months a Minimum Wage Worker Must Work in												der
to Afford Infant Care in Pennsylvania, in Orange												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Source: Pennsylvania Budget and Policy Center analysis of Economic Policy Institute data at https://www.epi.org/child-care-costs-in-the-united-states/#/PA

Lack of affordable and accessible child care is a barrier to employment for Pennsylvanians with young children. Even before the pandemic—two months before it began—Governor Wolf's Workforce Command Center in January 2020 identified access to quality child care as one of five main barriers to employment for Pennsylvania residents. The Command Center highlighted both access to and affordability of child care as barriers for job seekers. Fast forward a year and a half after our state has been ravaged by the pandemic—access to quality care has declined further, with fewer regulated providers (now 6,900 down from 8,000). Our state's job numbers remain higher than pre-pandemic times, in part because of the lack of access and affordability of care—many parents cannot return to the labor force.

Teachers can't afford to stay:

One of the main challenges to accessible and affordable care, identified by the Command Center and known to everyone close to the industry, is staffing—recruitment and retention—primarily related to low wages in the industry. In 2020, the median wage for child care workers in Pennsylvania was \$10.69 an hour, which is right around the federal poverty line for a family of 3 for a full-time, full-year worker. Pennsylvania early educators pay a penalty for working with younger children, despite clear evidence on

<u>e</u>

⁵ Keystone Economic Development and Workforce Command Center. "Annual Report: Keystone Economic Development and Workforce Command Center," January 2020. Accessed at: https://www.governor.pa.gov/wp-content/uploads/2020/01/20200127-Workforce-Command-Center-Annual-Report.pdf

⁶ Pennsylvania Partnerships for Children. "Child Care Works in Pennsylvania, 2021." Accessed at: https://papartnerships.maps.arcgis.com/apps/MapSeries/index.html?appid=25068de383324f58a3d474b5bc881f3

the critical importance of this developmental stage. In fact, early educators with a BA are paid 22% less than their colleagues in K-8 schools. ⁷ Such low pay, often with little access to benefits, has resulted since the 1980s in difficulty in retaining quality staff and in more highly educated educators leaving the industry—as documented in *Losing Ground in Early Childhood Education*, written by Keystone Research Center staff and published by the Economic Policy Institute in 2005. The child care workforce is also aging which will continue to fuel the child care crisis in future years if we don't ensure these are quality jobs.

There's got to be a better way!

The better way is stronger public investment in high quality child care, at both the federal and state level. The unprecedented federal emergency response to the COVID-19 crisis provides us with a tremendous opportunity to invest in an industry and workforce that serves as a backbone for our economy. We saw this clearly during COVID—when child care centers and schools shut down, many parents could not work and our economy ground to a halt.

Investment in quality child care will help kids and families in the short term and allow parents to go back to work. In the long-term, this investment will pay for itself, 17 times over. For the future of Pennsylvania, it is the smartest investment we could make.

⁷ Center for the Study of Child Care Employment. "Early Childhood Workforce Index 2020: Pennsylvania." Accessed at: https://cscce.berkeley.edu/workforce-index-2020/wp-content/uploads/sites/2/2020/11/2020-Index StateProfile Pennsylvania.pdf

Taryn Morrissey

Associate Professor, School of Public Affairs, American University

Statement for the Pennsylvania House Democratic Policy Committee

Hearing on Childcare & Early Childhood Education

August 17, 2021

Representative Herrin, Vice Chair Ciresi, and distinguished members of the House Democratic Policy Committee, thank you for the opportunity to provide testimony on this important topic.¹

My name is Taryn Morrissey, and I am an Associate Professor in the School of Public Affairs at American University in Washington, DC. My research focuses on early care and education policy.

My testimony focuses on three main points:

- 1. High-quality early care and education is hard to find, and unaffordable for many American families across the income spectrum.
- 2. Public underinvestment in early care and education perpetuates and widens economic inequality among children, parents, and early care and education workers.
- 3. The COVID-19 pandemic exacerbated these problems, but they have existed for decades.

The bottom line is that the lack of affordable, high-quality, reliable early care and education is a lost opportunity for supporting children's development, for supporting parents' employment, and for supporting economic growth and narrowing inequality. These issues are all the more important as our nation grapples with and recovers from the devastating and inequitable health, educational, and economic impacts of COVID-19.

The COVID-19 pandemic has made it painfully obvious how essential child care is for families, employers, and the economy. In March 2020, children's and parents' lives and routines changed overnight, with the closure of the vast majority of K-12 schools and child care programs. As child care programs re-opened, they typically faced higher costs for cleaning and PPE, with lower enrollment due to physical distancing and group size requirements. A survey in fall 2020 survey found that more than half of centers were losing money every day. Despite recent advances in vaccines, an estimated one-third of child care programs remained closed in April 2021 – with families of color disproportionately facing child care closures. Recruiting and retaining staff is very difficult; in July 2021, 4 in 5 centers reported being understaffed.

Most parents – including myself – require reliable, affordable child care to work, making child care an essential component of infrastructure akin to affordable, reliable transportation. Without in-person child care and school, working parents have struggled to meet their work and family demands. Those who cannot telework have faced the impossible decision to go to work for a needed paycheck or care for children. Some parents – mostly mothers – left the labor force all together, at a high cost to themselves and their families and to the broader economy. ^{4,5} If and when they re-enter the workforce, parents are likely to face barriers and wage penalties for taking the time with their children. ^{6,7}

But while the pandemic exacerbated the challenges in finding and affording high-quality child care, they are far from new. A 2018 survey found that 86% of parents reported that problems with child care hurt their efforts at work, and more than one-in-ten had been demoted,

¹ Selected text of this testimony represents a version of the testimony provided to the U.S. House of Representatives Committee on Education and Labor, Subcommittee on Early Childhood, Elementary, and Secondary Education, on February 6, 2020: https://edlabor.house.gov/download/taryn-morrisseytestimony

transferred, or fired due to a lack of infant/toddler child care.⁸ In 2018 alone, the U.S. lost an estimated \$57 billion from the lack of affordable, reliable, high-quality child care.⁹

Even before the pandemic, high-quality early care and education – or any licensed arrangement – was hard to find. A wealth of research shows that high-quality care and education during the early years – a unique time of rapid brain development ^{10,11} – promotes children's learning, and can narrow the socioeconomic, racial, and ethnic inequalities that emerge early, well before kindergarten or even preK. ^{12–14} Licensed child care settings that meet regulations are more likely to provide high-quality, stable care than less formal arrangements, ¹⁵ but about half of people in the United States – 57% of those in Pennsylvania – live in child care deserts. ^{16,2} Americans in low-income and rural communities are more likely to face low a supply of licensed care. ^{16–20} Moreover, those looking for infant care or care during nontraditional hours like nights or weekends are likely to find long waitlists or no regulated options at all. ^{21–24}

Child care is also expensive. The U.S. Department of Health and Human Services recommends that families' out of pocket child care costs not exceed 7% of income, but families below the poverty line spend roughly 30% of their incomes on child care. Even higher-income families spend between 8% and 18% of their incomes – about \$9,000 a year (before the pandemic) – on child care. Regulated settings and center care cost even more than informal arrangements. Infant care is particularly expensive. In Pennsylvania, the annual cost of infant care at a center in 2019 was \$11,560, or about one-fifth of household median income. And these costs have risen during the pandemic, as child care programs grapple with reduced enrollments and higher expensies due to health and safety measures.

It is not surprising, then, that children in high-income families are much more likely to attend preschool and center-based care, and higher-quality arrangements, than their middle- or lower-income peers. 31–33 We know that high-income families are spending more on their children during the early childhood years in particular, 34 and high-income families are increasingly choosing to enroll their children in center care at younger ages. 26,31 In 2011, only two-thirds of 4 year-olds in moderate-income families 3 attended center-based early care and education programs, compared to more than 80% of those in higher-income families. 4,26 As a result, too many children spend their days in mediocre or low-quality care, 15,35,36 or across a patchwork of arrangements, 37 a missed opportunity for promoting their school readiness and long-term educational, economic, and health outcomes. 38–44

Why is child care, especially high-quality care, so sparse and expensive? Because the quality of early care and education depends on the warmth and responsiveness of caregivers and on the strength and consistency of adult-child relationships, 10,45-48 economies of scale do not apply to child care in the same way as with other economic sectors, and most child care costs are directed to labor expenses. 49

² Child care deserts are communities in which there are more than 3 young children for every slot in a licensed child care program.

³ 200-400% of the Federal Poverty Level [FPL].

⁴ 400% FPL or higher.

Despite its expense for families, child care would actually cost more if child care workers received adequate wages. In 2019, the median hourly wage for child care workers was \$11.65, with the occupation at the 2nd percentile for annual wages.⁵⁰ Between 2014 and 2016, more than half (53%) of child care workers lived in families that participated in one or more of four public programs,⁵ compared to 21% in the general population.⁵¹ While the child care workforce does its best under difficult conditions, low pay and few benefits present barriers in attracting and retaining a skilled workforce. Teacher educational qualifications and stability are associated with the quality of early childhood settings, and in turn, a wide range of children's outcomes,^{52–56} but worker turnover is high. In 2012, 25% of child care centers had turnover rates of 20% or higher.¹⁵

The lack of affordable, high-quality child care affects the majority of American families with young children. In 2017-2018, most children in the United States under 6 years of age—57% in married-couple households and 68% of those in single-mother households—lived in homes in which all parents were employed.⁵⁷ Most of these parents as well as others enrolled in school and training programs rely on child care. In 2019, about 59% of children under age 5 not yet in kindergarten attended some type of regular child care arrangement.⁵⁸

The good news is we have effective policy solutions that help families find and afford high-quality early care and education. Child care subsidies, state pre-K programs, and Head Start increase children's enrollment in center care^{32,59–63} and when high-quality, support children's development.^{38,42,64–74} Programs that reduce parents' child care costs increase parents' labor force participation.⁷⁵ Studies also show that investments in child care have multiplier effects, meaning that each dollar invested generates local economic activity.^{76,77} Researchers estimate that increasing enrollment in early childhood education would yield economic benefits and reduce inequality.^{43,78} Further, early care and education is a large economic sector itself, generating an estimated \$47 billion in direct output and employing over 2 million Americans in 2019.⁷⁶

Despite recent investments, our public programs reach a small fraction of children who might benefit. In 2016-2017, 44% of four-year-olds and 16% of three-year-olds were enrolled in Head Start or public preschool programs 1, and only about 10% of infants and toddlers in poverty attended Early Head Start. In 2018, only 1 in 6 children eligible for child care subsidies received them. The 2014 reauthorization of the Child Care and Development Block Grant (CCDBG) and the emergency funds for child care included in the American Rescue Plan represent important steps forward. These recent increases in public funding are vital for rebuilding the supply of and increasing access to child care after the devasting impacts of the pandemic, but cannot make up for years of underinvestment.

More public investment is needed to help ease the cost burden for families and ensure that a trained, stable workforce has adequate compensation. Solutions need to be flexible enough to meet families' diverse needs and help address the supply gaps we see today, such as care during nonstandard hours and for children with special needs, ^{22,24,83} and to address the needs of families

⁵ The Earned Income Tax Credit (EITC), Medicaid or the Children's Health Insurance Program (CHIP), the Supplemental Nutrition Assistance Program (SNAP), or Temporary Assistance for Needy Families (TANF). ⁶ In 2017, 1.6 million 3 and 4 year olds were enrolled in a state pre-K program and 706,000 3 and 4 year olds were enrolled in Head Start.

across the income spectrum. Low-income families struggle with the economic burdens of child care, but middle-income families are also economically squeezed during the years in which their children are young. High child care costs come at a time when parents are at the lowest earning years of their careers, ⁸⁴ and when the financing mechanisms of grants and low-interest loans like those for college are unavailable. We provide universal public education for all in kindergarten through secondary school, but we ask the most of families when they have the least – at a period when developmental and educational supports are critical to future outcomes.

In closing, increased access to affordable, high-quality, reliable early care and education can promote children's development, support parents' employment, increase economic growth, and narrow inequality.

Thank you for the opportunity to submit testimony for this important hearing.

References

- 1. NAEYC. Survey: 56% of Open Child Care Centers Losing Money Each Day. Published 2020. Accessed August 13, 2021. https://www.naeyc.org/about-us/news/press-releases/pandemic-survey
- 2. Lee EK, Parolin Z. The Care Burden during COVID-19: A National Database of Child Care Closures in the United States. *Socius Sociol Res a Dyn World*. 2021;7:237802312110320. doi:10.1177/23780231211032028
- 3. NAEYC. SURVEY: Four in five child care centers in the U.S. are understaffed. Published 2021. Accessed August 13, 2021. https://www.naeyc.org/about-us/news/press-releases/survey-childcare-centers-understaffed
- 4. Madowitz M, Rowell A, Hamm K. Calculating the Hidden Cost of Interrupting a Career for Child Care. Center for American Progress; 2016. https://cdn.americanprogress.org/wp-content/uploads/2016/06/17091517/ChildCareCalculator-methodology.pdf
- Malik R, Morrissey TW. The COVID-19 Pandemic Is Forcing Millenial Mothers out of the Workforce. Center for American Progress; 2020. https://www.americanprogress.org/issues/earlychildhood/news/2020/08/12/489178/covid-19-pandemic-forcing-millennial-mothersworkforce/
- 6. Weisshaar K. From Opt Out to Blocked Out: The Challenges for Labor Market Re-entry after Family-Related Employment Lapses. *Am Sociol Rev.* 2018;83(1):34-60. doi:10.1177/0003122417752355
- 7. Waldfogel J. The Effect of Children on Women's Wages. *Am Sociol Rev.* 1997;62:209-217.
- 8. ReadyNation. *Want to Grow the Economy? Fix the Child Care Crisis.*; 2019. https://strongnation.s3.amazonaws.com/documents/602/83bb2275-ce07-4d74-bcee-ff6178daf6bd.pdf?1547054862&inline; filename=%22Want to Grow the Economy? Fix the Child Care Crisis.pdf%22
- 9. Belfield CR. *The Economic Impacts of Insufficient Child Care on Working Families*.; 2018. https://strongnation.s3.amazonaws.com/documents/522/3c5cdb46-eda2-4723-9e8e-f20511cc9f0f.pdf?1542205790&inline; filename=%22The Economic Impacts of Insufficient Child Care on Working Families.pdf%22
- 10. Committee on Integrating the Science of Early Childhood Development Youth, and Families B on C, Press NA. *From Neurons to Neighborhoods: The Science of Early Childhood Programs*. (Shonkoff JP, Phillips DA, eds.). Board on Children, Youth, and Families, National Academies of Science; 2000.
- 11. Shonkoff JP, Boyce WT, McEwen BS. Neuroscience, molecular biology and the childhood roots of health disparities. *J Am Med Assoc*. 2009;301(21):2252-2258. doi:10.1001/jama.2009.754
- 12. Reardon SF. The Widening Academic Achievement Gap Between the Rich and the Poor: New Evidence and Possible Explanations. In: Duncan GJ, Murnane R, eds. *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances*. Russell Sage Foundation; 2011.
- 13. Magnuson KA, Waldfogel J, Washbrook E. The development of SES gradients in skills during the school years: Evidence from the United Stats and England. In: Ermisch J, Janitti M, Smeeding T, eds. *From Parents to Children: The Intergenerational*

- Transmission of Advantage. Russell Sage; 2012.
- 14. Halle T, Forry N, Hair E, Perper K, Wandner L, Wessel J, Vick J. *Disparities in Early Learning and Development: Lessons from the Early Childhood Longitudinal Study Birth Cohort (ECLS-B)*.; 2009. http://www.childtrends.org/wp-content/uploads/2013/05/2009-52DisparitiesELExecSumm.pdf
- 15. NSECE Report. Measuring Predictors of Quality in Early Care and Education Settings in the National Survey of Early Care and Education. OPRE Fact Sheet; 2015.
- 16. Malik R, Hamm K, Schochet L, Novoa C, Workman S, Jessen-Howard S. *America's Child Care Deserts in 2018*. Center for American Progress; 2018. https://www.americanprogress.org/issues/early-childhood/reports/2018/12/06/461643/americas-child-care-deserts-2018/
- 17. Davis EE, Lee WF, Sojourner A. Family-centered measures of access to early care and education. *Early Child Res Q*. 2019;47(2):472-486. doi:10.1016/j.ecresq.2018.08.001
- 18. Malik R, Hamm K, Adamu M, Morrissey TW. *Child Care Deserts: A Geographic Analysis of Child Care Center Locations in Eight States*. Center for American Progress; 2016.
- 19. Temple JA. Rural Gaps in Participation in Early Childhood Education. *J Agric Appl Econ*. 2009;41(2):403-410. doi:10.1017/s107407080000287x
- 20. Swenson K. *Child Care Arrangements in Urban and Rural Areas*. U.S. Department of Health and Human Services; 2008. http://aspe.hhs.gov/hsp/08/cc-urban-rural/
- 21. Jessen-Howard S, Malik R, Workman S, Hamm K. *Understanding Infant and Toddler Child Care Deserts*. Center for American Progress; 2018. https://www.americanprogress.org/issues/early-childhood/reports/2018/10/31/460128/understanding-infant-toddler-child-care-deserts/
- 22. Henly JR, Lambert S. Nonstandard work and the child care needs of low-income parents. In: Bianchi SM, Casper LM, King RB, eds. *Workforce/Workplace Mismatch? Work, Family, Health, & Well-Being*. Lawrence Erlbaum Associates; 2005.
- 23. Carrillo D, Harknett K, Logan A, Luhr S, Schneider D. Instability of Work and Care: How Work Schedules Shape Child-Care Arrangements for Parents Working in the Service Sector. *Soc Serv Rev.* 2017;91(3):422-455. doi:10.1086/693750
- 24. Hepburn P. Parental Work Schedules and Child-Care Arrangements in Low-Income Families. *J Marriage Fam.* 2018;80(5):1187-1209. doi:10.1111/jomf.12505
- 25. Laughlin L. Who's Minding the Kids? Child Care Arrangements: Spring 2011. Vol 2009.; 2013.
- 26. Chaudry A, Morrissey TW, Weiland C, Yoshikawa H. *Cradle to Kindergarten: A New Plan to Combat Inequality*. Russell Sage Foundation; 2017.
- 27. Child Care Aware of America. The US and the High Price of Child Care.; 2019.
- 28. Team N. Early Care and Education Usage and Households Out-of-Pocket Costs: Tabulations from the National Survey of Early Care and Education (NSECE).; 2018. https://www.acf.hhs.gov/sites/default/files/opre/nsece_usage_and_cost_tabulations_toopre 04302018 508.pdf
- 29. Child Care Aware of America. The US and the High Price of Child Care: 2019. Published 2020. Accessed August 13, 2021. https://www.childcareaware.org/our-issues/research/the-us-and-the-high-price-of-child-care-2019/
- 30. Workman S, Jessen-Howard S. *The True Cost of Providing Safe Child Care During the Coronavirus Pandemic*. Center for American Progress; 2020.

- https://www.americanprogress.org/issues/early-childhood/reports/2020/09/03/489900/true-cost-providing-safe-child-care-coronavirus-pandemic/
- 31. Burgess K, Chien NC, Morrissey TW, Swenson K. *Trends in the Use of Early Care and Education*, 1995-2011.; 2014. http://aspe.hhs.gov/hsp/14/EarlyCareEducation/rb ece.pdf
- 32. Magnuson KA, Waldfogel J. Trends in Income-Related Gaps in Enrollment in Early Childhood Education: 1968 to 2013. *AERA Open*. 2016;2(2):1-13. doi:10.1177/2332858416648933
- 33. Chaudry A, Morrissey TW, Weiland C, Yoshikawa H. *Cradle to Kindergarten: A New Plan to Combat Inequality*. 2nd ed. Russell Sage Foundation; 2021.
- 34. Kornrich S, Furstenberg FF. Investing in Children: Changes in Parental Spending on Children, 1972—2007. *Demography*. 2013;50(1):1-23. doi:10.1007/S
- 35. Helburn SW, Howes C. Child care cost and quality. *Future Child*. 1996;6(2):62-82. http://www.ncbi.nlm.nih.gov/pubmed/18582984
- 36. Early Child Care Research Network N. Direct and indirect influences of child care quality on young children's development. *Psychol Sci.* 2002;13:199-206.
- 37. Morrissey TW. Familial Factors Associated With the Use of Multiple Child-Care Arrangements. *J Marriage Fam.* 2008;70(2):549-563.
- 38. Morrissey TW. The effects of early care and education on children's health. *Health Aff.* 2019;(April). https://www.healthaffairs.org/do/10.1377/hpb20190325.519221/full/
- 39. Heckman JJ. Policies to foster human capital. *Res Econ.* 2000;54(1):3-56. doi:10.1006/reec.1999.0225
- 40. Knudsen EI, Heckman JJ, Cameron JL, Shonkoff JP. Economic, neurobiological, and behavioral perspectives on building America's future workforce. (PNAS). 103(27; July 5):10155-10162. *Proc Natl Acad Sci.* 2006;103(27):10155-10162.
- 41. Campbell F, Conti G, Heckman JJ, Moon SH, Pinto R, Pungello EP, Pan Y. Early Childhood Investments Substantially Boost Adult Health. *Science* (80-). 2014;343(6178):1478-1485. http://science.sciencemag.org/content/343/6178/1478
- 42. Deming D. Early Childhood Intervention and Life-Cycle Skill Development: Evidence from Head Start. *Am Econ J Appl Econ*. 2009;1(3):111-134. doi:10.1257/app.1.3.111
- 43. Duncan GJ, Sojourner AJ. Can Intensive Early Childhood Intervention Programs Eliminate Income-Based Cognitive and Achievement Gaps? *J Hum Resour*. 2013;48(4):945-968.
- 44. Cannon JS, Kilburn RM, Karoly LA, Mattox T, Muchow AN, Buenaventura M. Investing Early. *RAND Heal Q*. 2018;7(4):6.
- 45. Zaslow M, Anderson R, Redd Z, Wessel J, Daneri P, Green K, Cavadel EW, Tarullo L, Burchinal M, Martinez-beck I, Issue T, For E. I. QUALITY THRESHOLDS, FEATURES, AND DOSAGE IN EARLY CARE AND EDUCATION:
 INTRODUCTION AND LITERATURE REVIEW. *Monogr Soc Res Child Dev*. 2016;81:7-27. doi:10.1111/mono.12236
- 46. Burchinal M, Hill NC, Votruba-drzal E, Miller P. QUALITY THRESHOLDS, FEATURES, AND DOSAGE IN EARLY CARE AND EDUCATION: SECONDARY DATA ANALYSES OF CHILD OUTCOMES. *Monogr Soc Res Child Dev*. 2016;81(321).
- 47. Votruba-Drzal E, Miller P. Reflections on Quality and Dosage of Preschool and Children'S Development. *Monogr Soc Res Child Dev.* 2016;81(2):100-113.

- doi:10.1111/mono.12244
- 48. Gordon RA, Fujimoto K, Kaestner R, Korenman S, Abner KS. An assessment of the validity of the ECERS-R with implications for measures of child care quality and relations to child development. *Dev Psychol.* 2013;49(1). doi:10.1037/a0027899
- 49. Workman S. Where Does Your Child Care Dollar Go? Understanding the True Cost of Quality Early Childhood Education. Center for American Progress; 2018.
- 50. McLean C, E Austin LJ, Marcy Whitebook E, Olson KL. *Early Childhood Workforce Index 2020*.; 2021. http://cscce.berkeley.edu/
- 51. Whitebook M, McLean C, Austin LJE, Edwards B. *Early Childhood Workforce Index* 2018.; 2018. http://cscce.berkeley.edu/%0Ahttp://cscce.berkeley.edu/%0Ahttp://cscce.berkeley.edu/file s/2018/06/Early-Childhood-Workforce-Index-2018.pdf
- 52. Manning M, Wong GTW, Fleming CM, Garvis S. Is Teacher Qualification Associated With the Quality of the Early Childhood Education and Care Environment? A Meta-Analytic Review. *Rev Educ Res.* 2019;89(3):003465431983754. doi:10.3102/0034654319837540
- 53. Markowitz AJ, Bassok D. *Teacher Turnover and Child Development in Head Start*. Working Paper; 2018.
- 54. Morrissey TW. Multiple Child-Care Arrangements and Young Children's Behavioral Outcomes. *Child Dev.* 2009;80(1):59-76.
- 55. Pilarz AR, Hill HD. Child-Care Instability and Behavior Problems: Does Parenting Stress Mediate the Relationship? *J Marriage Fam.* 2017;79(5):1353-1368. doi:10.1111/jomf.12420
- 56. Bratsch-Hines ME, Mokrova I, Vernon-Feagans L, Feagans LV, Cox M, Blair C, Burchinal P, Burton L, Crnic K, Crouter A, Garrett-Peters P, Greenberg M, Lanza S, Mills-Koonce R, Werner E, Willoughby M. Child care instability from 6 to 36 months and the social adjustment of children in prekindergarten. *Early Child Res Q*. Published online 2015. doi:10.1016/j.ecresq.2014.09.002
- 57. BLS. *Employment Characteristics of Families Summary*.; 2019. Accessed July 15, 2019. https://www.bls.gov/news.release/famee.nr0.htm
- 58. National Center for Education Statistics. *Early Childhood Program Participation Survey of the National Household Education Surveys Program (ECPP-NHES:2019).*; 2021. https://nces.ed.gov/pubs2020/2020075REV.pdf
- 59. Friedman-Krauss AH, Barnett WS, Garver KA, Hodges KS, Weisenfeld GG, DiCrecchio N. *The National Institute for Early Education Research: The State of Preschool 2018*.; 2018. http://nieer.org/wp-content/uploads/2019/04/YB2018_Full-ReportR2.pdf
- 60. Fitzpatrick MD. Preschoolers Enrolled and Mothers at Work? The Effects of Universal Prekindergarten. *J Labor Econ.* 2010;28(1):51-85. doi:10.1086/648666
- 61. Barnett S, Carolan M. Trends in State Funded Preschool in the United States: Findings from 10 Years of Policy Surveys. *Int J Child Care Educ Policy*. 2013;7(1):5-23. doi:10.1007/2288-6729-7-1-5
- 62. Gennetian LA, Crosby DA, Huston AC, Lowe ED. Can child care assistance in welfare and employment programs support the employment of low-income families? *J Policy Anal Manag.* 2004;23(4):723.
- 63. Johnson AD, Martin A, Ryan RM. Child-Care Subsidies and Child-Care Choices Over Time. *Child Dev.* 2014;85(5):1843-1851. doi:10.1111/cdev.12254

- 64. Gelber A, Isen A. Children's schooling and parents' behavior: Evidence from the Head Start Impact Study. *J Public Econ.* 2013;101:25-38. doi:10.1016/j.jpubeco.2013.02.005
- 65. Phillips DA, Gormley WT, Anderson S. The Effects of Tulsa's CAP Head Start Program on Middle-School Academic Outcomes and Progress. *Dev Psychol.* 2016;52(8):1247-1261. doi:10.1037/dev0000151
- 66. Weiland C, Yoshikawa H. Impacts of a prekindergarten program on children's mathematics, language, literacy, executive function, and emotional skills. *Child Dev.* 2013;84(6):2112-2130. doi:10.1111/cdev.12099
- 67. Zhai F, Brooks-Gunn J, Waldfogel J. Head Start's Impact Is Contingent on Alternative Type of Care in Comparison Group. *Dev Psychol*. 2014;50(12):2572-2586.
- 68. Morris PA, Connors M, Friedman-krauss A, Mccoy DC, Weiland C, Bloom H, Yoshikawa H. New Findings on Impact Variation From the Head Start Impact Study: Informing the Scale-Up of Early Childhood Programs. *AERA Open.* 2018;4(2):1-16. doi:10.1177/2332858418769287
- 69. Phillips DA, Lipsey MW, Dodge KA, Haskins R, Bassok D, Burchinal MR, Duncan GJ, Dynarski M, Magnuson KA, Weiland C. Puzzling it out: The current state of scientific knowledge on Pre-Kindergarten effects. In: *The Current State of Scientific Knowledge on Pre-Kindergarten Effects*. The Brookings Institution; 2017.
- 70. Yoshikawa H, Weiland C, Brooks-Gunn J, Burchinal MR, Espinosa LM, Gormley WT, Ludwig J, Magnuson KA, Phillips DA, Zaslow M, Brooks-Gunn J. *Investing in Our Future: The Evidence Base on Preschool Education Investing in Our Future: The Evidence Base on Preschool Education.* Society for Research in Child Development and the Foundation for Child Development; 2013. http://www.srcd.org/sites/default/files/documents/washington/mb_2013_10_16_investing_in_children.pdf
- 71. Ludwig J, Miller DL. Does Head Start Improve Children'S Life Chances? Evidence From a Regression Discontinuity Design*. *Q J Econ*. 2007;122(1):159-208.
- 72. Network NI of CH and HDECCR, Duncan GJ. Modeling the impacts of child care quality on children's preschool cognitive development. *Child Dev.* 2003;74(5):1454-1475. doi:10.1111/1467-8624.00617
- 73. Watamura SE, Phillips DA, Morrissey TW, McCartney K, Bub KL. Double Jeopardy: Poorer Social-Emotional Outcomes for Children in the NICHD SECCYD Experiencing Home and Child-Care Environments That Confer Risk. *Child Dev.* 2011;82(1). doi:10.1111/j.1467-8624.2010.01540.x
- 74. Barr A, Gibbs CR. Breaking the Cycle? Intergenerational Effects of an Anti-Poverty Program in Early Childhood *. Working Paper; 2017.
- 75. Morrissey TW. Child care and parent labor force participation: a review of the research literature. *Rev Econ Househ*. 2017;15(1). doi:10.1007/s11150-016-9331-3
- 76. Development C for E. *Child Care in State Economies 2019 Update.*; 2019. https://www.ced.org/childcareimpact
- 77. Warner ME. Overview: The regional economics of child care. *J Reg Anal Policy*. 2009;39(1):37-39.
- 78. Magnuson KA, Duncan GJ. Can Early Childhood Interventions Decrease Inequality of Economic Opportunity? *RSF Russell Sage Found J Soc Sci.* 2017;2(2):123-141. doi:10.7758/rsf.2016.2.2.05
- 79. Child Trends. Head Start. Child Trends Indicators. Published 2018. Accessed June 6,

- 2019. https://www.childtrends.org/indicators/head-start
- 80. Chien N. Factsheet Estimates of Child Care Eligibility & Receipt for Fiscal Year 2018. U.S. Department of Health and Human Services; 2021. https://aspe.hhs.gov/sites/default/files/2021-08/cy-2018-child-care-subsidy-eligibility.pdf
- 81. Morrissey TW. Biden administration's \$39 billion child care strategy: 5 questions answered. *The Conversation*. https://theconversation.com/biden-administrations-39-billion-child-care-strategy-5-questions-answered-159119. Published 2021.
- 82. Office of Child Care. FY 2017 Preliminary Data Table 1 Average Monthly Adjusted Number of Families and Children Served. Child Care Development Fund (CCDF) Reporting, Data. U.S. Department of Health and Human Services. Published 2019. https://www.acf.hhs.gov/occ/resource/fy-2017-preliminary-data-table-1
- 83. Novoa C. *The Child Care Crisis Disproportionately Affects Children With Disabilities*. Center for American Progress; 2020.
- 84. Traub A, Hiltonsmith R, Draut T. *The Parent Trap: The Economic Insecurity of Families with Young Children*. Demos; 2016.