

“One telling criterion of the worth of a society—a criterion that stands the test of history—is the concern of one generation for the next. A nation’s child and family policy is the measure of that concern.”

--Brofenbrenner & Weiss



The Economics of Early Care and Education in Maine

Early care and education is a term used to describe three of the most familiar programs for infants, toddlers, and preschoolers in Maine --- (1) child care, (2) Head Start and Early Head Start, and (3) the public school Four Year Old Program (Pre-K). To focus on early care and education in Maine means having to consider several complex issues:

Early care and education as an *economic development* issue that encompasses the productivity of the current workforce, as well as investment in the skills of Maine’s future workforce.

The *quality* of early care and education programs which most often pertains to the education and training of the teachers and providers.

The *availability and accessibility* of early care and education programs which means looking at whether licensed and regulated programs are available throughout the state to young children who need them including children of working parents, children at greatest risk, and children with special needs.

The *affordability* of programs, especially child care for working parents, which involves how much parents can afford to pay and how much Maine government or businesses are willing and able to subsidize early care and education programs.

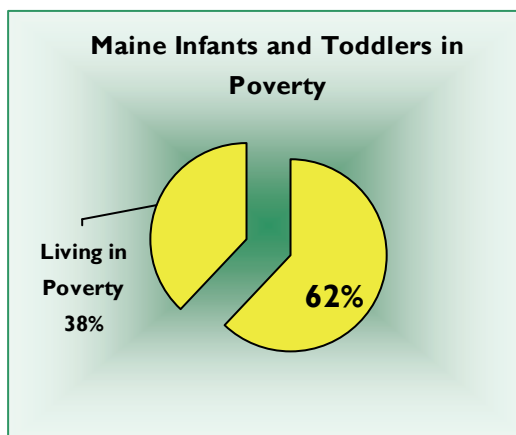
Consideration of early care and education also involves balancing political will, parent choice,

and the scientific evidence about child development. In many respects, considering the early care and education system as a public priority mirrors the earliest discussions about the public school system or health care system.

The following uses excerpts from research and data reports to illustrate some of the challenges inherent in developing a quality early care and education system in Maine.

Basic Demographics of Young Children who Need Early Care and Education

- There are more than 70,700 children less than 5 years of age in Maine, nearly 24% of all Maine’s children under age 18. Approximately 13,500 are infants less than one year of age; close to 28,000 are toddlers between the ages of one and three years.





- It is estimated that 65% have working parents; approximately 46,000 very young children who need quality child care.
- Nearly 37% of all children under age six in Maine live in poverty defined as below 200% of the poverty level; 38% of children under age 3 live in poverty.
- If they are low income, data suggests nearly 81% of Maine infants need someone to care for them while their parents are working.
- It is not clear from the data how many children from birth to age 3 have documented special needs and how many of these children are being served in inclusive child care programs in Maine. According to the most recent Kids Count report of the Maine Children's Alliance (2007) 18.1% of regularly enrolled school children, ages 3-21, in Maine had identified disabilities and

received special education services in 2005. A total of 4,806 children ages 3 through 5 had documented disabilities and received special education and/or related services through US DOE Part B funding in Maine.

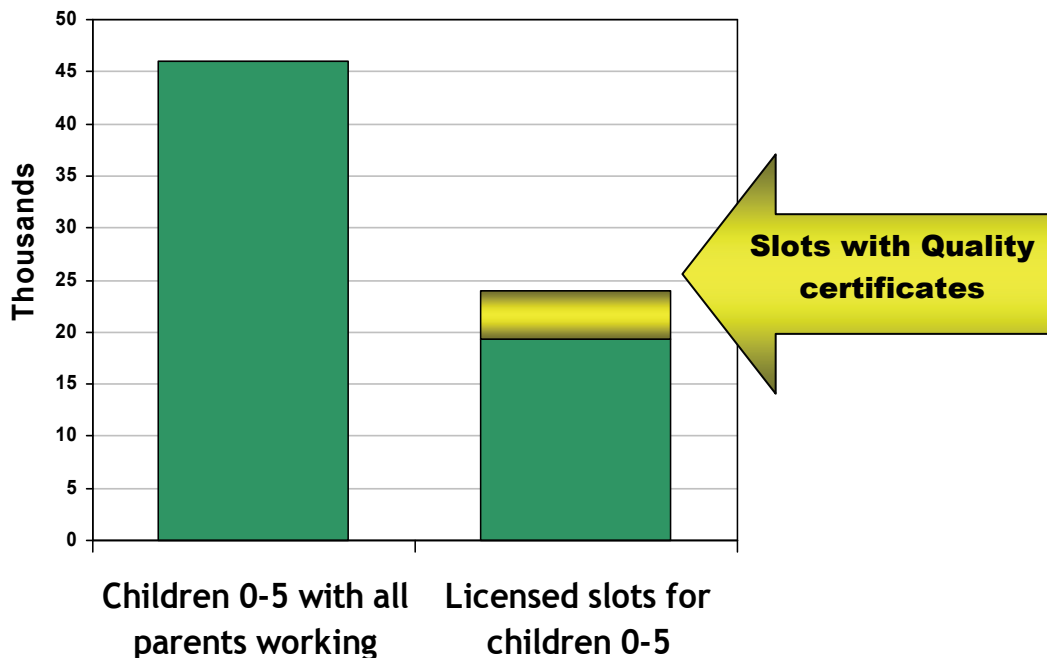
On average 25% of children enrolled in Head Start have a diagnosed special need such as speech/language impairments, non-categorical/developmental delay, and/or emotional/behavioral disorder.

Availability of Child Care for Maine's Infants and Toddlers

Of the roughly 46,000 children, birth to age 5, who need child care while their parents work, there are only 28,400 licensed spaces available to them—leaving 40% of Maine's youngest children unserved by formal child care programs.

Of the approximately 8,800 infants estimated to need child care, only 1,650 infants are served.

Shortage of Quality Care for Children 0-5 in Maine





More infants (27%) than any other age group wait for licensed child care. About 5,000 young Maine children are on the waiting list that we know; 1,000 of whom are infants.

There is no exact data to determine the proportion of Maine’s children with working parents who are being cared for in “informal child care” by family, friends, and neighbors. However, an analysis of Maine’s child care subsidy program indicates that about 12% of income eligible children in that program are being care for by family, friends, or neighbors.

Slightly less than half of all infants and young toddlers in licensed child care (48%) attend centers with the remaining infants and young toddlers attending family child care (52%). By contrast, nearly 70 percent of preschool-aged children attend centers, with only about 30 percent attending family child care homes.

Consequently, only 5% of children in center-based care are infants even though infants make up 19% Maine children five and younger. This presents a problem for working parents of infants. In the centers surveyed (55% of population) only 800 of the estimated 8,700 infants of working parents are in licensed child care centers.

Of the children attending child care in Maine, infants are the most likely group to be in care full time, 30 hours or more. Over 70 percent of infants and toddlers attending child care spend more than 30 hours a week in care. By contrast, only about 55 percent of preschool-aged children attend care full-time. And, as expected less than half all school-aged children attending child care spend more than 30 hours a week in child care.

Affordability of Maine Child Care Programs

Quality care and education costs! It is a labor intensive industry, often with overhead costs such as benefits, mortgages, and utilities. To many Maine families, child care expenses have

become the second most significant family expense following the mortgage or rent.

Maine parents can pay as much as \$10,400 for an infant in full time center based care. At least 50% of child care providers charge \$8,320 or less for 52 weeks of infant care in centers.

For that amount of money, the child could attend the University of Maine at Orono--college tuition at UMO is approximately \$7,464.

<u>Family of Three (Working Parent, Two Children)</u>	
Livable Wage to Meet Basic Needs	\$37,759
-Infant Child Care	\$ 8,320
<u>-Preschool Child Care</u>	<u>\$ 6,609</u>
40% of income for child care	\$22,830

Child care government subsidies reach only 32% of low income Maine children eligible for assistance paying for child care. According to ME Department of Health and Human Services, roughly 17% of eligible children are served with the federal Child Care Development Fund (CCDF) subsidy and 16% get help directly through the Temporary Assistance for Needy Families (TANF) program. Some child care programs offer fee discounts but generally the providers themselves subsidize the fees to parents with their own low salaries. Some tax credits are available to working parents.

Unlike the federal poverty level and the minimum wage, the basic need approach is more realistic and a direct measure of families’ economic self-sufficiency. In the livable wage budget for a family of three in Maine, with one working parent and two children in child care, the required annual income to meet basic needs is \$37,759, three-quarters of Maine’s median income. If the second child is a four year old, child care (\$6,609) could take almost 38% of the livable wage.



According to Maine’s Network of Child Care Resource Development Centers, in February 2006 the average cost for full-time infant child care in a center was \$7,802—more than 20% of this family of three’s income.

Quality of Child Care Programs in Maine

Maine child care quality certificates and national accreditation are issued to Maine programs based on established standards of care that measure a number of factors including teacher/provider education and training, child/caregiver relationships, and the overall quality of the environment.

About 22.5% of Maine’s licensed capacity (28,400) have a Maine Quality Certificate—about 6400 child care spaces.

Approximately 67% of Maine’s family child care homes and 33% of the child care centers have had NO quality determination or have not achieved quality standards.

As of January 2007, Maine had 49 NAFCC accredited Family Child Care Providers and 76 NAEYC accredited child care centers—a total of 125 programs. (Out of 778 child care centers and 1,650 homes.)

The 2004 Maine Cost/Quality studies showed that 70% of preschool classrooms were rated “less than good” (706 classrooms). In a separate study, 70% of the family child care homes did not meet the “good” benchmark, either. The good news is that nearly 25% of the centers scored five or greater which is good to excellent care.

If low income, the child is nearly twice as likely to be in a center that is not of high quality (45%

compared to 23%). The disparity is not quite as great in family child care homes (39% compared to 27%).

Almost 80% of classrooms were rated as less than Good quality on the Learning Activities scale (54% minimal and 26% inadequate). These classrooms do not provide the variety of activities that would give children the opportunity to explore and learn about their environment, such as fine motor materials, art, music, sand & water play, and dramatic play.



The majority (82%) of Maine’s full-day preschool classrooms appear to be doing a good job of providing a varied and flexible structure to the day, staff are involved appropriately and modifications are made as needed so that children with special needs can participate.

Overall quality in Maine’s family child care homes as evidenced by this study is poor. Some met Excellent in Language-Reasoning (14%), Adult Needs (8%) and Social Development (1%). But a total of 70% ranked less than Good of which as many as 14% were inadequate.

Family Child Care Providers scored overwhelmingly Good in meeting Adult Needs (70%) which is a measure of the quality of the relationship between providers and parents, the provider’s balance between personal and caregiving responsibilities, and opportunities for professional growth. (8% were Excellent)

Maine Child Care Workforce

Child Care is the Fourth Largest Industry in Maine closest in size to the Agriculture and Fishing sectors. Licensed child care facilities generate \$180.6 million annual in gross receipts-



-\$114.7 million from child care centers and \$56.7 million from family child care home revenues, added to \$9.2 million in federal funding.

The child care industry employs 8,824 Maine residents. This includes child care teaching staff (8,282) as well as staff support for meals, cleaning and maintenance, and administration (542).

Even though Maine is in the top 12 in the nation in child care salaries, the child care workforce is lowly paid, has few benefits, and is under educated. More than 25% of them leave the job every year--a disrupting factor for very young children who need consistent caregivers in their lives. Maine's average child care teacher salary is \$18,862. Family Child Care Providers have an average annual income of \$26,836.

As a workforce, child care providers rank number 596 out of 647 detailed occupations, according to the Maine Department of Labor (Mean hourly wage of \$9.42). That means that 595 other Maine occupations are paid more than child care workers, such as Manicurists and Pedicurists (\$9.72) or Animal Trainers (\$15.55).

Education and Training: Like the rest of the nation, the majority of Maine child care teachers and family child care providers do not have a four year college degree. According to the July 2006 Maine Child Care Workforce Climate and Market Rate Report, 31% of teachers have a Bachelor's degree; 22% have a two-year Associate's degree; and 50% have only a high school diploma. About 64% of the family child care workforce has only attained a high school diploma or GED; only 12% have a Bachelor's degree and 23% have a two-year Associate's degree.

Research Findings for Quality Early Care and Education

Studies of early care and education program methods and longitudinal studies of children's behavior and achievements have set the stage for significant investments in early childhood programs. Several renowned studies have guided the development of quality early care and education for more than forty years. They followed graduates of early learning programs through adulthood and documented significant savings in the area of remedial education, school drop outs, welfare and crime. They include:

- The High/Scope Perry Preschool Study
- Early Learning/Early Success—The Abecedarian Study
- The Chicago Child-Parent Center Study
- The Children of the Child Care Cost, Quality, and Outcomes Study.
- Into Adulthood: A Study of the Effects of Head Start

More of the Perry Preschool group than children not in the group:

- Had Median annual earnings more than \$5,000 higher: \$20,800 vs. \$15,300.
- Were employed: 76% vs. 62%.
- Owned their homes: 37% vs. 28%.
- Graduated from regular high school particularly females: 65% vs. 45%. 82% of the females graduated from high school, 32% did not. Fewer females had to repeat a grade.
- Outperformed the non-program group on school achievement tests between ages 9 and 14, and on literacy tests at ages 19 and 27.

Young adults in the Abecedarian Study:

- Had significantly higher mental test scores from toddler age through age 21 than did children without the program.
- Had enhanced language skills and consistently higher reading achievement scores.
- About 35% of the young adults in the Abecedarian group had either graduated



from or were at the time of the assessment attending a four-year college or university, compared to about 14% in the non-program group.

- Showed higher scores in reading achievement and math.
- Were significantly more likely still to be in school at age 21--40% of the Abecedarian program group compared with 20% of the non-program group.
- Were, on average, two years older (19 years) when their first child was born compared with those in non-program group (17 years).
- Employment rates were higher (65%) for the Abecedarian group than the non-program group (50%)

Findings of the Children of the Cost, Quality, and Outcomes Study:

- Children who attended child care with higher quality classroom practices had better language and math skills from the preschool years into elementary school.
- Children with closer teacher-child relationships in child care had better classroom social and thinking skills, language ability, and math skills from the preschool years into elementary school.
- Better child care quality was more strongly related to better math skills and fewer problem behaviors from the preschool years through second grade for children whose mothers have less education.
- The second grade findings provide evidence for the long-term effects of child care experiences on children's abilities four years later, after considering the effects of subsequent educational experiences between child care and second grade.
- Children who attended higher quality child care had better cognitive and social skills in the second grade, even after taking into account kindergarten and second grade

classroom experiences.

- Children who experienced more positive classroom climates in child care had better relationships with peers in second grade.

A Study of the Effects of Head Start found evidence of important effects on school success and crime, especially for females at one study site after adjusting for background differences:

- Only about one-fourth as many Head Start female participants (19%) as non participants (5%) failed to obtain a high school or GED diploma.
- Only one third as many (5% versus 15%) were arrested for crimes.

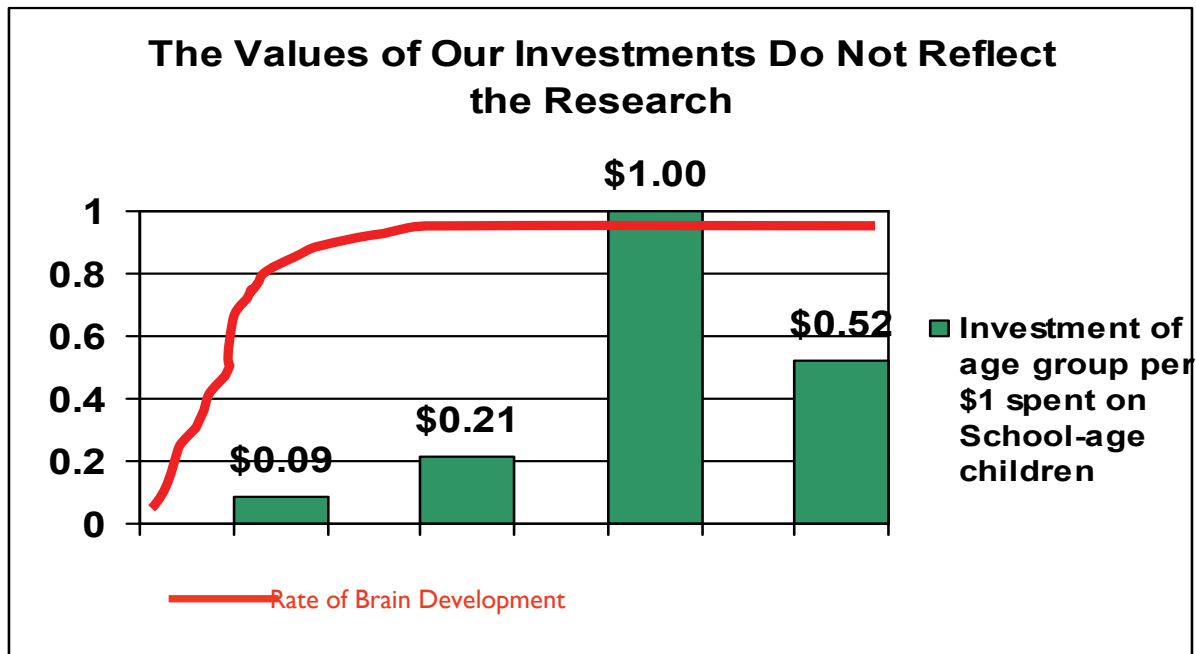
Cost Benefit Analyses

The cost-benefit analyses conducted on the Perry Preschool, Abecedarian Project, Chicago Child-Parent Centers and the Elmira Prenatal/ Early Infancy Project range from \$3.00 to almost \$9.00 for every dollar invested. Adjusted for inflation, the internal rates of return on these programs range from about 7% to above 16% annually.

A benefit-cost analysis was conducted of the Perry Preschool Program when the participants reached age 27 and again at age 40 by estimating the monetary value of the program and its effects in constant dollars discounted annually at 3%. In 2001 dollars per study participant, the average cost of the program, used in the cost-benefit analysis, was \$14,716 per participant..

The economic benefits to the public, as taxpayers and as potential crime victims, were \$105,324 per participant, a cost-benefit ratio of 7.16 to 1.

- Brought in by increased taxes paid by preschool-program participants because they had higher earnings.
- Saved in schooling, due primarily to reduced need for special education services, and



- o despite increased college costs for preschool-program participants.
- o Reduced welfare costs.
- o Saved by the potential victims of crimes never committed, based on the typical in-court and out-of-court settlements for such crimes and in reduced justice system costs.

The 40-year summary report of the Perry Preschool Study showed that the long-term benefits continued into adulthood, changing the total benefit cost-ratio to \$17.00 for \$1.00 invested. Benefits to the general public, alone, are almost \$13.00 to every \$1.00 spent.

States’ Investments in Early Learning

The study, EARLY LEARNING LEFT OUT, looked at the public investments in the education and development of children in three age groups: early learning years (birth to 5), school-aged years (6-18), and college-aged years (19-23). Using state, federal, and school district spending in 12 states across the country, Voices for America’s Children and the Iowa child and Family Policy Center worked with state organizations to develop a better understanding of overall public investments in young children.

Nearly 90% of a child’s core brain structure is formed by age three but less than 4% of public investments on education and development have occurred by that time.

On a per child basis, public investments in education and development are more than seven times greater during the school-aged years (\$5,410 per child) than during the early learning years (\$740 per child).

Every dollar society invests in the education and development of a school-aged child, society invests only 13.7 cents in that child during the earliest learning years—a major investment gap. The under-investment in young children also appears to be greatest for the very earliest and most formative years of life (the infant and toddler years-0-2).

State investments in education and development in the earliest learning years constitute a very small percentage of overall public expenditures, in many states less than 1%.

While the largest share of the funding for education and development during the earliest



years comes from federal programs for child care and Head Start, the funding for school-age children comes from predominately state and local sources of funding.

Head Start and Early Head Start in Maine

Head Start is a comprehensive early childhood development program for children, ages 3-5, whose family income is at, or below the poverty level. Head Start is also Maine's largest provider of early care and education to children with disabilities and special needs. Comprehensive Head Start services include education, health, nutrition, and social skills. Traditionally Head Start is a part-day, part-year program, operating for 3 1/2 hours to 6 hours per day for 32 weeks a year. Most Head Start programs throughout Maine now offer "wrap around services" which combines Head Start services with child care services to offer full-day, full-year programs to families.

- Head Start and Early Head Start services can be delivered in four ways: home visitation by a paraprofessional, classroom based services, in family child care homes, and a combination program that blends home visits with 2-3 days of classroom based services.
- There are 11 Head Start and Early Head Start grantees in Maine, serving at least 3,871 children annually.
- Maine serves 78% of the eligible 3 and four year olds in Head Start.

There are 6,719 infants and toddlers eligible for Early Head Start. The State currently only has the capacity to serve 561. Only 8% of eligible families can be served by Early Head Start annually.

- In the 2006 program year, 87% of Head Start children entering kindergarten demonstrated developmental skills higher than the Federal measured outcomes standards.
- In the 2006 program year, 22% of Head Start children with identified special needs

entered kindergarten having exited the early intervention system.

- All of Maine's Head Start and Early Head Start programs are designated programs of quality by Maine DHHS standards, as a result of successful compliance reviews from the Federal Monitoring of Head Start system.

Maine's Four Year Old Programs (Pre K)

Public Pre K Programs are administered by local public school systems and regulated by the Department of Education (DOE). They are free, voluntary programs, offered to provide equity and access to an early childhood education experience to Maine families. They serve children who are three and four years old. Programs are funded and directed at the state level and can be offered in a school or a community program setting. Schools must go through an approval process with the Department of Education before a public preschool program is opened. A public pre-k can be school based or located in a community program.

- Funded through the school funding formula, serving children four years old by October 15.
- Serves 17% of Maine's four year olds in 110 different locations, including children with disabilities and English language learners.
- Local schools enter a planning process with other area early childhood programs. Together they identify local community needs, resources, the impact of program implementation, and program location and structure. Local school committees approve the concept and a school district submits an application for approval to the Department of Education.
- 35% of current programs operate in partnership models, partnering with Head Start and Child Care programs.
- A public pre-k program can be part day or full day, school-based or located in a community program. The biggest challenge is balancing the development of early education for children with the needs of working families.



GLOSSARY OF CHILD CARE PROGRAMS

Child Care Centers: Facilities licensed as a child care center serve more than three children under the age of 13 and are not a place of residence. The average child care center in Maine cares for 35 children. Centers often have a more structured schedule and children are grouped according to age. Child Care Centers usually follow regular work hours and may be closed for holidays. Staff in a center must be at least 18 years of age and a Center Director must have experience and/or an educational background in Early Care and Education. Thirty (30) hours of yearly minimum training is required for all teaching staff.

Family Child Care Homes means child care provided in an individual's own residence. The licensed family child care provider cares for 3 to 12 children between the ages of six weeks and 13 years, depending on the age mix and if there is additional help. Before getting a license to care for children, providers must take the "Getting Started in Family Child Care" course which is offered through regional Child Care Resource Development Centers. Twelve (12) hours of yearly minimum training requirements, including CPR and First Aid, must be maintained.

In-Home Care is provided in a child's home by a caregiver hired by the parents, sometimes called a nanny or au pair. This type of care is not regulated by the state. Parents often seek the help of professional au pair services to locate in-home providers from the US or abroad to assist them in background checks, qualifications, and references. Regional Resource Development Centers generally do not provide referrals.

Legal Unregulated Child Care: Family, friend and neighbor caregivers are considered "legal-unregulated" if they care for only one or two children in their home. Before receiving a child care subsidy voucher these providers must pass background checks, unless they are paid for by TANF, in which no background check is required. Trust ME is a program of the Department of Health and Human Services, which performs background checks on legal unlicensed providers and maintains a database that is available to parents to verify the background of their unregulated provider.

ENDNOTES

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