Overview: Child Care and Education Stephanie Jacobson and Marguerite Barratt

Why Focus on Child Care and Education?

Almost one-half of Michigan children under the age of five receive some kind of early childhood education and care from someone other than a parent [36]. Relatives care for more than half of these children. Some are in informal and unlicensed care and some are in regulated family child care and child care centers.

Public focus on the experiences of children in their child care settings has heightened in response to a growing awareness that these early experiences are critical for the future success of children. In short, child care is no longer about babysitting children so parents can work. Rather, child care is "about giving kids the environment that best promotes their development" [24].

Thus, child care settings can function as early classrooms, and child care providers can serve as educators. Several intervention studies of early childhood care have shown that intentionally providing educational experiences to children early in their development has lasting impacts.

A Michigan example is the High/Scope Perry Preschool Project which randomly assigned half of 123 at-risk preschool children to receive a specific high quality preschool program [42, 43]. Follow-up data to age 27 indicate differences in the areas of graduation rates, arrest rates, income, employment rates, and marriage length [42] that favor the children in the program. Similarly promising results have been found by the Abecedarian Project in North Carolina [39], which is highlighted later in this report.

After-school care is also currently high on the public agenda. With too many children regularly coming home to empty houses, there is wide support for government-funded after-school programming to provide children with safe places and enriching activities. Educators also have noted the potential for extending learning in the hours after school is dismissed [25]. The issues surrounding after-school care are discussed in greater depth later in this report.

Child Care in Michigan

- In the state of Michigan, of children whose parents work, approximately 50% under the age of six and 75% between the ages of six and twelve are cared for by relatives. This leaves about 430,000 children in Michigan needing non-family care, 260,000 under the age of six, and another 170,000 between the ages of six and twelve [46].
- There are about 4,800 licensed child care centers and 15,800 licensed/ registered family child care providers in Michigan. Together, these providers are able to serve approximately 80% of the children who need care [46].
- The Family Independence Agency (FIA) supplements the costs of care for low-income families. Licensed care is funded, but FIA actually spends most of its child care money on informal care provided in a relative's home and care in the child's home provided by a relative or non-relative [10].
- The average cost of full time child care in Michigan is currently \$5,005 per year [46]. Nationally, average costs range from \$3,000 to \$8,000

Child care is no longer about babysitting children so parents can work. Rather, child care is about giving kids the environment that best promotes their development.

The average cost of full time child care in Michigan is currently \$5,005 per year. per year for one child in an urban child care center, making it unaffordable for many low-income families [41].

- An estimated \$3 billion is spent annually on early childhood education and care in Michigan. State and federal expenditures account for about \$1.56 billion, and nearly \$1.49 billion is provided directly by the parents and relatives of children needing care [36].
- The median wage for Michigan child care professionals is \$6.85 per hour [36].

Why is Quality Care Important?

For children

A growing body of research evidence indicates that quality of child care is strongly related to the course of child development. Specifically, child care of higher quality has been shown to benefit children in the following ways:

- Social skills. Children ages 1 to 4 have been shown to have better relationships with teachers and greater social competence with peers [21]. Further, children are happier, showing more positive emotions [15], and have been shown to have fewer behavior problems at age three [34].
- Language and communication skills. 12-month-olds have higher levels of language development and communication skills [6]. Two- and three-year-olds have higher language comprehension scores [34].
- Cognitive skills. 12-month-old infants have higher levels of cognitive development [6]. Two- and three-year-olds have greater school readiness, that is, greater knowledge of colors, letter identification, numbers, comparisons, and shapes [34]. First-graders make greater academic progress [19].
- Long-term effects. Positive long-term effects include higher graduation rates, employment rates and income levels, and lower arrest rates at age 27 [42].

For families

Quality child care providers not only enhance the educational achievement of children, but trusted providers also may work with parents to increase their level of knowledge about their own child's development [24].

Furthermore, families with dependable child care are more likely to have stable employment experiences. Disturbances in child care can cause parents to miss work or leave their jobs [45]. Brandon [5], who combined the results of several large surveys, found that about half of parents reported that an absence of child care had reduced their job performance. Brandon also found that 30 percent of parents were "very worried" and 15 percent were "somewhat worried" about having adequate child care when they went to work.

For the public

Finally, there is clear evidence that funds invested in quality child care are well spent. Schweinhart conducted a cost-benefit analysis in Michigan in conjunction with the High/Scope Perry Preschool Project. This study, briefly described above, offered a high quality part-day preschool program to 58 at-risk children and made home visits to their families. The average total cost of services per participant was \$12,356 for services that lasted one or two years [42].

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Families with dependable child care are more likely to have stable employment experiences. The net benefits to the public were calculated to be \$76,077 per participant. These savings resulted from:

- Reduced special education costs
- Increases in tax revenues due to higher incomes
- Reduced welfare costs
- Reduced costs to the criminal justice system
- Reduced court costs for would-be crime victims

Thus, for every dollar spent on the High/Scope Perry Preschool Project, an estimated \$7.16 was returned to the public [42].

In 1998, Karoly and colleagues [22] reconsidered these figures, this time leaving out the savings of potential crime victims. Their estimates were more conservative, but the savings per participant were still estimated at over \$25,000, which **is more than a two dollar return for every dollar invested** in the program. Thus, even conservative estimates confirm the cost effectiveness of investing in quality early child care for children who are at risk.

What Constitutes Quality Child Care?

Unfortunately, most children are receiving poor quality care, according to several national studies. A recent study shows that only 10% to 12% of child care programs for children ages 6, 15, and 24 months met four standards (ratio, group size, teacher training, and college education) for quality programs outlined by the American Public Health Association (APHA) and the American Academy of Pediatrics (AAP). Only 34% of classes for 3 year olds met the standards, and for 6 and 15 month olds, almost 20% of the centers failed to meet *any* of the standards [32, 34].

Another national study found that only 9% of children in family day care homes or in the care of relatives were receiving quality care, with quality care defined as care that was growth enhancing [12]. The low quality of family child care is, in part, due to many family day care homes that are unknown to regulators [54].

The growing consensus in the research is that there are three critical components of quality child care programs [54]:

- Trained child care providers, that is, those who have relevant formal education as well as specific early childhood education training [20]
- Low child-to-adult ratios
- Small group sizes

The National Association for the Education of Young Children (NAEYC) has adopted the ratio and group size recommendations shown in Figure 1. NAEYC accredits child care centers that meet their group size and ratio recommendations as well as program quality standards; only 3.2% of Michigan child care centers are accredited by NAEYC.

The APHA/AAP standards have a more specific focus on issues of children's health and safety in child care programs [2]. These ratios and group sizes are more stringent than those developed by NAEYC (also see Figure 1).

The third component of quality child care, provider training, now is being regulated by some states as well. Basic degrees are required for caregivers in some states. For example, Wisconsin requires providers to have at least a high school education and 40-contact-hours of a course in child development or early childhood education. National recommendations (NAEYC, APHA/AAP and Head Start), as well as some states, recommend continuing education for child care teachers each year.

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Michigan standards

Michigan currently has no educational requirements in place for child care teachers, or family care providers, although it does require directors of programs to have 60 college semester hours, with at least 12 of those hours in child development or early education.

Michigan's standards for child-to-adult ratios for center child care and family child care providers are included in Figure 2. They are less stringent than NAEYC, AAP, and APHA standards (compare to Figure 1).

How is Child Care Quality Assessed?

The structural characteristics mentioned above are important because they set the stage for the interactions between children and caregivers. In child care centers with lower child-to-adult ratios, providers are more likely to provide warm and sensitive caregiving [21]. Teacher training also has been shown to improve caregiving interactions between children and their child care providers [20]. For example, child care teachers have been shown to be less harsh when they have at least an associates' degree, and to be even more sensitive when they have a bachelors' degree in early childhood education. Child care teachers with a Child Development Associate (CDA) certificate have also been shown to initiate more positive interactions with children than those without.

One widely used assessment of child care quality specifically for infants and toddlers is called the Infant/Toddler Environment Rating Scale [14]. This scale assesses several dimensions of center-based care including:

- Physical environment
- Daily routine
- Caregivers' balance of listening and talking with children
- Learning activities
- Child interactions with caregiver and peers
- Program schedule and structure
- Provisions for staff and parents

Age	Child to Staff Ratio	Maximum Group Size
NAEYC Recommenda	ations	•
Infants (0-12 mos.)	4:1	8
Toddlers (12-24 mos.)	5:1	12
2 year olds	6:1	12
2-1/2 year olds	7:1	14
3-5 year olds	10:1	20
APA and APHA Reco	ommendations	
0.04	3:1	6
0-24 mos.	0.1	0
0-24 mos. 2 - 2-1/2 year olds	4:1	8
		-
2 - 2-1/2 year olds	4:1	8

Figure 1. NAEYC, APA and APHA Recommendations

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In child care centers with lower child-to-adult ratios, providers are more likely to provide warm and sensitive caregiving. From among these, the interactions between caregivers and children are perhaps the most crucial. Children's learning in child care settings takes place in the context of relationships as caregivers support learning through play.

Affordability and Availability

Child care supply and demand rests on an ongoing balancing of quality with affordability and availability. Any change in one of these factors affects the other two.

Availability

There are pronounced shortages of certain types of care in Michigan [46]. These include:

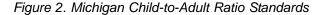
- Infant care
- Care for children with special needs
- Care in the evening or at odd hours
- After-school care

Too many children—more than 10 percent between the ages of 8 and 10 and more than 30 percent between the ages of 11 and 12—are in self-care, that is, caring for themselves alone at home on a regular basis. Furthermore, national figures indicate that one percent of preschool-aged children also are regularly left alone [17].

Affordability

The burden of child care costs is particularly pronounced for low-income families. One national study found that children living near poverty actually receive lower quality child care than children in poverty, presumably because they do not qualify for child care subsidies [31].

Age Range	Ratio	
Center-Based Care		
Infants (up to 30 months)	4:1	
2-1/2 to 3 years	10:1	
4 to 5 years	12:1	
6 to 12 years	20:1	
13 to 17 years	30:1	
Mixed age group	Ratio for youngest child in group	
Family Child Care Providers		
All ages	6:1 (Includes family members under 7 years old; no more than 4 children under 30 months and no more than 2 of those children can be under 18 months)	



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It is also true that families eligible for child care assistance often do not receive any actual assistance. In Michigan, more than 4 of 10 children eligible for FIA child care assistance are not receiving any. In other words, of 163,000 children who are FIA-eligible for child care assistance, only 86,000 are receiving subsidies [46].

A new study reports that as mothers are moving from welfare to work, their children are moving into low-quality care settings [11]. The same study, based on research conducted in California, Connecticut, and Florida, reports that child care subsidies are only used by between 13% (Connecticut) and 50% (Florida) of eligible mothers, and that subsidies encourage the utilization of unlicensed care.

What Are the Policy Options?

Several policy considerations exist for improving child care quality and making it more supportive of children's development. Five sample strategies are listed below.

1. Funding

FIA's budget for child development and care services is approximately \$600 million in fiscal year 2000. The bulk of FIA funds are spent on funding for families needing assistance, and the biggest portion of this money is spent on relative care, followed by aide care (a relative or nonrelative taking care of the child in the child's home) and center child care.

Approximately 2% of FIA's budget for child development and care is spent on improving child care quality in Michigan. This money is allocated to child care provider training, child day care resource and referral services, and child day care licensing staff support [10].

A compilation of several large surveys has indicated that the public widely supports using public funds for the expansion of early care and education [5]. Some states, including Michigan, use surplus Temporary Assistance to Needy Families (TANF) funds to help families pay for child care. Another promising state initiative is California's Proposition 10, which raises \$750 million per year via cigarette taxes to give to local communities for early childhood services [8]. Public money could subsidize parent fees, staff wages, center operation costs, and equipment.

2. Licensing and regulation

A growing concern in Michigan is that there are only approximately 100 licensing staff to review the almost 21,000 programs, resulting in a caseload of approximately 200 programs per worker [46]. This means that programs may be visited less than once a year, threatening the quality of licensed care in the state. One strategy used by the U.S. Department of Defense to improve child care quality has been quarterly unannounced inspections [49], and some states require regular unannounced visits.

Research shows that child care centers in states with more stringent quality standards do provide better quality care [20]. Most states currently have minimal standards, and the recent trend has been for states to increase these standards. Some state regulations include a tiered system where better quality programs are publicly acknowledged.

3. Curriculum

Improvements in the quality of Head Start have been partly driven by the adoption of the national Head Start Performance Standards and by the expectation that each program will adopt a curriculum to guide implementation of the Performance Standards. Similarly, the Michigan School

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Michigan authors have written two exemplary texts on early childhood curriculum. The High/Scope Educational Research Foundation has published its approach to early childhood education in *Educating Young Children* [18]. Another excellent text on the topic, *Developmentally Appropriate Curriculum: Best Practices in Early Childhood Education*, was written by early childhood scholars at Michigan State University [23].

4. Training and education

One hundred years ago, a college degree was not required for teaching school, but those days are in the distant past. Research consistently indicates that better educated child care staff provide better care [20].

Michigan does not require even a high school education to work as a child care provider, although it does use public funds from quality improvement money to pay for 15-hour basic and advanced training courses for child care staff. Some states have created a central registry to keep track of the training and education of child care providers (e.g., Wisconsin). Other states support the movement towards Child Development Associates credentials for child care staff (e.g., Florida), and some states (e.g. Oklahoma) require continuing education for child care staff [9].

5. Technical assistance

There is also potential for the quality of child care to be improved by technical assistance in the form of educational materials and consultations. For example, the state of Texas provides a monthly magazine for each licensed child care facility. In Michigan, videos and booklets can be obtained from regional licensing offices and regional resource and referral offices (Michigan Coordinated Child Care Council). Technical assistance is rarely available in the form of consultants who can advise child care programs, mentors who can guide new child care providers, and support groups for directors and staff, yet these options have the potential to improve quality.

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