

The First Generation of
the New Century:
Ready to Learn, Ready for Life

JUNE 1999

Sponsored by
The Michigan Child Care Task Force

Prepared for
The Michigan Ready to Learn Leadership Summit

Prepared by
Public Sector Consultants, Inc.

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the New Century:
Ready to Learn, Ready for Life

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Preface

The Ready to Learn Leadership Summit, a year in the making, convened top leadership from business, education, faith, government, health, labor, the media, and philanthropy to examine a proposal for a universal (available to all) and high-quality early-education system for all young Michigan children. Research was conducted—a good deal of it original—to provide participants with information from which to form a call to action for their individual sectors and also to enhance their collective commitment to the health and success of the first generation of the new century.

This document presents the following:

INTRODUCTION: KEY MESSAGES

Summarizes the messages delivered to the summit to stimulate dialogue and encourage a continuing course of action following the event.

BUILDING CHILDREN’S BRAINS

Presents findings from the research revolution that tells us how and when the brains of very young children are “wired” for life.

OPINION OF MICHIGAN PARENTS

Reports the findings of the benchmark survey of Michigan parents in regard to their young children’s education and child care.

EXPENDITURES FOR EARLY EDUCATION AND CARE IN MICHIGAN

Presents the first comprehensive documentation of Michigan’s investment in early childhood education and care, including total expenses and sources of funding and taking into account the value of uncompensated care provided by parents and relatives.

SEEKING A UNIVERSAL AND HIGH-QUALITY EARLY EDUCATION AND CARE SYSTEM: THE CHALLENGE

Identifies three essential features such a system must have and describes specific strategies to realize them. The strategies were shaped by community leaders at local forums throughout Michigan.

CLOSING THE MICHIGAN ECEC INVESTMENT GAP

Quantifies the cost difference between current expenditures on early education and care in Michigan and the cost of a proposed universal and high-quality early-learning system.

APPENDIX

Identifies the counties that participated in the Ready to Learn forums that preceded the summit.

SELECTED BIBLIOGRAPHY

Presents resources for readers interested in learning more about the importance of high-quality early education and child care.

Introduction: Key Messages

The Ready to Learn Leadership Summit: Why Now?

A CALL TO LEADERS TO ACT ON BEHALF OF YOUNG CHILDREN

This summit and the information presented here about young children may confirm ideas that summit participants, as leaders, already have thought about.

A NEW OPPORTUNITY

Michigan has a rare opportunity to benefit children, parents, and communities. Thanks to remarkable brain-science findings, we now know how parents and caregivers can help children realize their full potential. Statistics show what is at stake: Too many Michigan children

- enter kindergarten unlikely to succeed,
- drop out of school,
- use drugs, or
- commit serious crimes or suicide.

When we fail to help children develop properly, we pay a huge social price: crime, illiteracy, poor work skills, and costly prison and welfare systems. In the new century, we can stop most of these problems where they begin—in early childhood.

A CHILD'S BRAIN

Today, neuroscientists can observe the human brain in “real time.” Through positron emission tomography (PET) scans, they are able to observe a specific part of a brain as a person performs particular tasks (e.g., speaks, sees, hears), experiences emotions (e.g., happiness, fear), or reacts to another person (e.g., identifies whether the person is friendly or menacing).

Starting at birth, a child's brain develops in response to its experiences, literally building its neuronal networks in reaction to what happens around it. Within days, a newborn starts to build and dedicate brain networks, responding to

- the language s/he hears;
- his/her relationships with other people; and
- his/her “world view,” which is shaped by whether the child is loved or abused, cuddled or ignored.

The brain's self-construction continues through life, but the foundation is built in the very early years; it behooves society to make sure that the foundation is as well-built and strong as possible: the rest of one's life depends on it.

A THOUSAND-DAY RACE BEGINS 130,000 TIMES A YEAR

Michigan greets 130,000 newborns every year. For each child, starting on the day of birth, we have about 1,000 days—the critical developmental period—to “get it right” in certain crucial areas. If we lose this race, we might make up for the loss but only at great effort and expense.

For many children, the adults around them do not know there even is a race; thus, it may be won or lost without realizing it. When we fail in this race, we harm the individual child and our collective future.

Every newborn has certain windows of optimal development, time periods that are valuable opportunities for the adults in his/her life to brighten the child's future. These windows are open widest for a certain number of days following birth, after which the potential for learning begins to narrow significantly. For example, the ability to develop certain social skills, such as those listed below, can be severely curtailed after a certain number of days, when the window no longer is fully open.

- *Emotional control* provides the foundation for mature adult behavior. The optimal window is the first 700 days.
- *Social attachment* determines how well an infant will relate to people through his/her lifetime. The optimal window is the first 700 days.
- *Vocabulary development* strongly affects success in school, relationships, and the workplace. The optimal window is the first 1,000 days.

Other windows of opportunity and the number of days for which they are open the widest include the following:

- *Math and logic development.* The optimal window is the first 1,500 days.
- *Motor development.* The optimal window is the first 1,900 days.

We should not enter the race on, say, day 200 or 500; neuroscience tells us that we should begin on day one to ensure that each child develops a solid foundation. Even so, if, for some reason, the race is entered on day 30 or 100, the amazing agility of a baby's brain gives him/her a good chance to catch up. Conversely, it is unwise to start playing catch-up at, say, age five, with only 50 days left in the optimal window of opportunity for motor-skill development and the other windows already partially closed.

In Michigan, we need to be in this race on day one 130,000 times every year.

STRONG LEADERSHIP IS NEEDED

The Ready to Learn Leadership Summit occurred because of brain science. Neuroscientists have provided us with pictures of the brain that are causing thoughtful people to see childhood in a whole new way. Knowledge alone is not enough, however; much work lies ahead in applying this new knowledge. The summit aimed to engage top Michigan leaders in promoting the healthy development of young children. The summit's sponsors believe that the leaders who attended will take action because science has provided clear and concrete direction for resolving problems that previously seemed unsolvable.

We need leadership in two areas:

- Support for simple, immediate actions that will help us enter and win more of the 130,000 races that start each year

- Involvement in a long-term discussion about the tough political and economic issues we must address if we hope to assure that every child is winning the race by the time s/he enters kindergarten

SIMPLE STEPS TO SUCCESS

“Simple” is a relative term. We know that even small efforts on behalf of child development, while paying off handsomely, seem to test society’s resolve and resources. The following are examples of simple ways to get off to a sound start in the child-development race; all they need is the support of the state’s top leadership:

- Governor Engler champions the *Read, Educate and Develop Youth* (READY) program directed to ensuring that every child can read by the fourth grade. READY really is a parent education kit: It helps parents work with their children aged 0–3 to help them become successful readers later on. So far, it has been a struggle to find the resources to provide a READY kit (each costs about \$20) to every family that would benefit from it. Why not make this excellent learning kit available to *all* homes with newborns?
- Brain science could provide the basis for a public-awareness campaign that informs people about the importance of early childhood development. Michigan has benefited immensely from public-information campaigns in support of smoking cessation, alcohol-free driving, and tourism promotion. Why not the same kind of campaign for early childhood development?
- If more people in Michigan knew of the 1,000-day race that helps determine the future of every newborn, they could improve the lives of countless children. A unified, strategic partnership could improve the quality of parenting and caregiving among diverse groups of people and institutions. Why not create this partnership and focus public attention on winning the race?

Myriad other possibilities exist: For example, the state could promote incentives for businesses to support employees in their parenting roles, fund modest training programs that help early childhood educators increase their skills, or engage in ways to inform parents about early childhood programs.

TIME, PATIENCE, AND DIALOGUE

Child advocates like to point out that 20 or so of the wealthy modern democracies have an expensive system of universal early childhood education and care. Unfortunately, the United States is not among them. Nor has Michigan moved in this direction.

Americans (and Michigianians), unlike citizens of most other countries, are accustomed to a relatively low level of taxation and a relatively high level of individual and family freedom and independence. Yet the promise of being able to prepare every child to succeed by the time s/he enters kindergarten challenges us to invest more time, money, and leadership than we now do in our children’s early years. There are thousands of people in Michigan who are poised to begin a long-term, patient dialogue about how we can help every child win the 1,000-day race and start life likely to succeed.

Economists tell us that with a shift of about one percent of our gross domestic product, we can create a national early-learning environment for every child. Shifts of such size have occurred in our country a number of times, sometimes quite rapidly. The question is whether early

childhood learning presents a sufficient payoff to justify such a shift. Top Michigan leaders can spur a dialogue to examine this issue. The following tough questions merit attention:

- How do we make sure that every parent and caregiver has essential information on early education and care?
- How can we design financing strategies that support options for early education and care arrangements, so that parents can choose arrangements that meet their needs?
- How do we pay early childhood education and care providers enough money to attract, train, and retain those who will readily and effectively apply new knowledge in their work?

COSTING OUT AN EARLY CHILDHOOD LEARNING SYSTEM

What is the smart way to cost out an early childhood learning system? Most people agree that investment in children pays off in the long run. Some say the payoff begins in the shorter term, perhaps on day 1,001 of each child's life; surely, the payoff starts in elementary school. Others argue that the answer is not putting money into a new system but operating the current early childhood education and care structure more efficiently and/or, in the name of individual freedom, leaving families to run the child-development race alone.

Michigan (along with every other state) has yet to resolve the investment issues, because the people who best understand the bottom line have not yet become engaged in the debate. The Ready to Learn Summit launched a committed effort of Michigan leaders to tackle these tough questions on behalf of all children in the state. With such concerted commitment, meaningful answers are certain to be found.

PART 1

Building Children's Brains

by Joan Lessen-Firestone, Ph.D.

Many things can wait.
The child cannot.
Now is the time
His bones are being formed,
His blood is being made,
His mind is being developed.
To him, we cannot say *tomorrow*.
His name is *today*.

—Gabriella Mistral

Introduction

For countless generations, young children have cuddled in their parents' arms, grabbed and explored interesting objects, and bounced and crawled as soon as they were able. While such behaviors usually are tolerated and often encouraged, only recently have we begun to understand their critical importance in building children's brains. Almost 80 percent of our knowledge about the brain has been developed during the past five years through such modern technologies as positron emission tomography (PET) scans.

We now know that the "wiring" of a child's brain, unlike his/her skeletal system, is not determined before birth. The brain's wiring occurs in direct response to the environmental input the child receives after s/he is born. The brain of a child who has happily spent his/her first five years hearing and speaking English, playing the violin, and swimming in a lake will wire itself differently from that of child who contentedly spends those years learning Japanese and Russian, exploring the computer, and playing on swings and teeter-totters. More significant is the fact that these two children's brains will both look and perform very differently from that of a child who spent his/her first years in a stress-filled environment without much language, much stimulation, or much nurturing.

By the time children enter kindergarten, a great deal of the emotional and intellectual wiring of their brains has been set. Whether children are on a path leading to academic success and positive social behavior or to school failure and violence is determined largely by the manner in which this wiring has occurred. For the first time, we now understand how and why this happens.

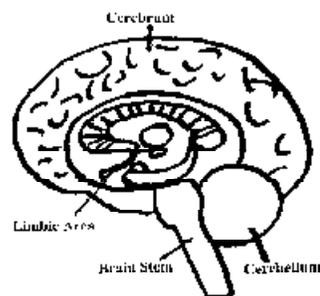
Four Major Parts

Understanding four major parts of the brain will help explain how it functions (see Figure 1).

BRAIN STEM

The *brain stem* is at the base of the brain and, since the brain develops from the bottom up, is the first part of the brain to become active. It serves two functions, both critical for survival. First, it controls such automatic functions as heartbeat and breathing, which, for the child to live, must operate from the moment of birth. Second, it is the area associated with "fight or flight." Whenever the child feels threatened or fearful, s/he will revert to functioning in this area of the brain and act quickly, without thought or planning, to survive.

FIGURE 1
Side View of the Human Brain



CEREBELLUM

Above the brain stem is the *cerebellum*, which is associated with movement. This densely packed area has many connections with the parts of the brain related to abstract thinking and mental focus. When young children do not move and exercise regularly, the connections are weaker than they otherwise would be, and thinking and focus suffer. *Vestibular* stimulation, such as swinging and spinning, particularly supports one's ability to focus.

LIMBIC

The *limbic* area, or emotional center, of the brain is next. This area of the brain works differently from the other areas in that it contains structures that secrete substances into the blood stream. These substances circulate throughout the body, affecting how we feel and act. This is the area of the brain that releases adrenaline when one is stressed.

CEREBRUM

The *cerebrum* is the highest part of the brain and deals with thought processes. At the top and front of the cerebrum, almost below the natural hairline, is the *frontal cortex*. This is the area in which abstract thought occurs. It is not fully developed until children are about eight years old. The other parts of the cerebrum, which are connected to sensory input, develop earlier. This explains young children's ability to deal with concrete objects they can see, feel, taste, and smell before they can think about abstract ideas that do not have a sensory connection.

The cerebrum is covered by the *cortex* (Latin for "bark"). New research indicates that the cortex varies in thickness among individuals, and the thickness of the cortex, rather than the size or weight of the entire brain, is related to how smart individuals are—that is, how quickly they can solve problems and learn new tasks. We now know that the experiences a child has determine the thickness of his/her cortex. We also know what types of experience thicken the cortex and what types do not.

Certainly, genetic inheritance plays a role in children's intelligence. But rather than set an absolute level of intelligence, heredity seems to set the *range* within which a child's intelligence is likely to fall. The environmental experiences a child receives determine the absolute level reached within this range. It currently is thought that the range of intelligence set by heredity encompasses about 40 I.Q. points. For example, a child may be born with a possible I.Q. range of 80–120. His/her experiences in the first years of life determine where in this range s/he ultimately will fall—and if, for example, high school will be a struggle or college a success.

Neurons

The important cells in the cortex are neurons (see Figure 2). All 100 billion neurons that an individual ever will possess are present in the brain at birth. Each first resembles a spindly young tree before it develops its elaborate system of branches and roots. Each is fairly isolated and does not communicate with other neurons through its branches (*dendrites*) or roots (*axons*). As infants begin to receive appropriate stimulation—stimulation that is sensory, novel, and challenging, such as the sight and sound of a new rattle—the neurons begin to branch out. When babies begin to realize that two objects are similar (“I can suck a breast, and I can suck a bottle”) or that two events are related (“When mommy comes in my room, I get picked up”),

neurons begin to communicate with one another. The more communication that occurs, the more branching that occurs, and the denser the forest of neurons becomes. Even though no new neurons are created, the cortex becomes thicker because of the extensive network of branches and roots that develop among the existing neurons when children receive appropriate stimulation.

BIRTH TO THREE: NEURONS BRANCH AND CONNECT

The development of neurons, and the attendant change in brain interconnectedness, does not happen with equal ease throughout one's life. It is during the first three years of life that brain growth occurs most quickly and easily: Multitudes of new connections are made every day. This is not surprising if we consider the external changes that occur from birth to three years.

During this first three years, normally developing children learn to speak, think, and perform sophisticated movements and build interpersonal relationships. There is no other three-year period in life during which we come close to matching the rate of these accomplishments. PET scans comparing the brains of healthy and neglected three-year-olds clearly show that this growth occurs as a function of the environment rather than heredity (see Figure 3).

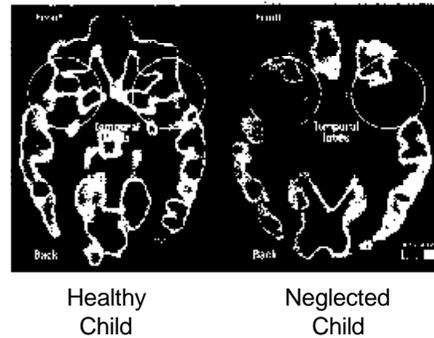
THREE TO NINE: CONNECTIONS CONSOLIDATE

After age three, it becomes somewhat more difficult for neural connections to be made, but until about age nine, when the hormones associated with puberty come into play, the brain still has good potential to grow and change. It is, in fact, during this time—from about three to nine—that the brain uses the most energy in its work (see Figure 4). The brain of a child in this age range daily uses twice as much glucose energy as it will at any other time in his/her life. Almost 50 percent of the calories that young children consume are used to support this intense brain activity, much of which has to do with consolidating the growth of neural pathways. In the first three

FIGURE 2
Complex Neuronal Fields

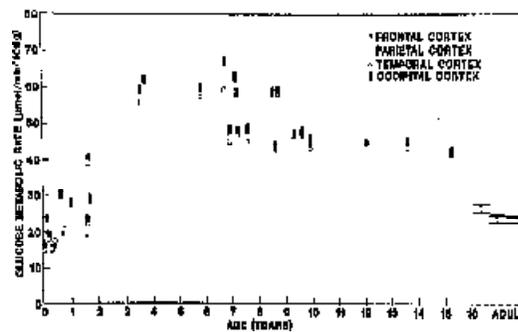


FIGURE 3
Effect of Extreme Deprivation



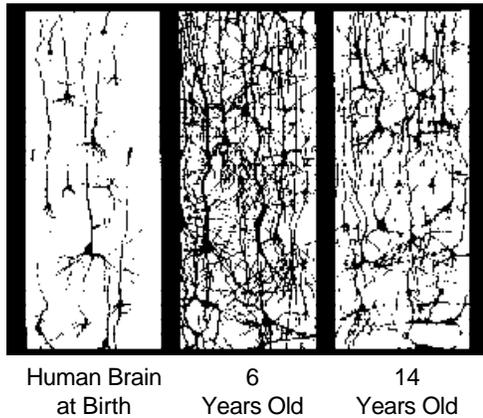
SOURCE: H.T. Chugani, Wayne State University.

FIGURE 4
Synaptic Activity



SOURCE: H.T. Chugani, Wayne State University.

FIGURE 5
Human Brain Development



SOURCE: H.T. Chugani, Wayne State University.

years, pathways proliferate wildly as each new experience and stimulus lead to the growth of new connections. The more connections that are made, the more possibilities that exist. Beginning about age three, the connections are pruned and refined—consolidated—with the result that only those that are well used and meaningfully connected to the child’s life remain (see Figure 5).

The Early Years Are Critical

After consolidation is complete, at around age nine or ten, the brain loses much of its plasticity, and changes in wiring become much harder to make. People who learn to speak a foreign language after age ten, for example, rarely will be mistaken for a native speaker of that language. During the first year of life, children make all sounds of every language and, in so doing, develop neural connections that allow these sounds to be perfectly made. But if the sounds are not reinforced by adults and used regularly by the child, the early connections will disappear during the period of consolidation. Even extensive practice during later life never will recreate these original connections.

The critical period for developing other skills is even shorter. Infants, for instance, occasionally are born with cataracts. It appears as if their eyes, visual nerves, and visual area of the cortex would function perfectly if only the cloudy coverings over the eyes were removed. If the cataracts are removed during the child’s first two years, s/he quickly gains visual abilities and soon is indistinguishable from any child born without cataracts. If the operation occurs after a child’s second birthday, however, it is useless—s/he will never regain the ability to see. The critical period for developing vision has passed, and the opportunity for the child to see has been lost forever.

Stress is Devastating

The remarkable growth and development of the neural cortex during the earliest years of life can occur only when a child feels emotionally secure in warm, stable relationships. When young children are stressed, fearful, or insecure, the limbic (emotional) area of the brain actually prevents learning from occurring.

Whenever a child feels stressed or frightened, a structure in the limbic system responds by secreting *cortisol* into the bloodstream. This circulates through the body and washes over the neural cortex, where it prevents neural connections from being formed and strengthened. Even if excellent opportunities for stimulation and learning are present in the environment, children who are stressed cannot take advantage of them to develop their brains. Unable to use the higher, thinking part of the brain, children revert to functioning in the lower area of the brain

stem and use the survival mechanisms of fight or flight to cope with their situation. It is only when the period of stress ends, and children again feel secure, that learning and higher-level thought processes can resume.

The relationship among fear, cortisol, and learning exists throughout life. Even adults with mature coping skills cannot learn or even think clearly when under too much stress. Infants, because they are dependent on others to fulfill their every need, are much more likely than individuals of any other age to frequently feel panic or fear.

If children live under stressful conditions for significant periods of time in their first two years, the results are disastrous. For it is during this time that the emotional center of the brain is being refined, and its entire developmental course is altered when it experiences frequent high levels of stress and the corresponding high levels of cortisol. Repeated exposure to a great deal of cortisol programs the child's brain to expect, like, and even seek situations that will lead to the release of cortisol. This happens in much the same way that children who live in a home where food is highly salted learn to prefer it that way. Children who become accustomed to high cortisol begin to live in the brain stem, rather than the thinking cortex, and view each interaction as one that threatens their survival. The teacher who is reaching out to them is not doing so to give a welcoming pat but an aggressive hit or shove. The child, without thinking, immediately responds by hitting the teacher first or running away. It is quite possible that the tremendous increase in seemingly random acts of violence in our society is related to the increased number of children responding to high levels of early stress and fear by living in their brain stems.

A Final Word

During the past several years our knowledge and understanding of brain growth and development has grown exponentially. We now know how to provide environmental stimulation that will create optimal neural wiring in the cortex and encourage the development of thoughtful, academically competent adults. We understand the critical connection between the quality of infants' emotional relationships and their later social behavior. And we realize that some windows of opportunity for affecting children's brain development are remarkably brief. Our challenge now is to act on this knowledge to ensure that every child born in Michigan reaches kindergarten with the intellectual and emotional foundation necessary to enable him/her to become a productive, contributing citizen.

PART 2

Opinion of Michigan Parents

by Public Sector Consultants, Inc.

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Executive Summary

In February 1999, Public Sector Consultants, Inc. (PSC), a Lansing public policy research firm, conducted a survey for the Michigan Child Care Task Force that focused on 800 Michigan parents with children under age five. The survey—the first comprehensive statewide poll on the early childhood education and care (ECEC) of children before they begin kindergarten—registered the collective voice of parents of young children. The survey asked parents in detail about their ECEC arrangements: where their children receive ECEC, from whom, for how many hours, at what times of the day, and at what cost. PSC also queried parents on the stability of their arrangements, indicators of ECEC quality, and the difficulties they would encounter if they had to find new arrangements.

The survey has a margin of error of plus or minus 3.5 percent, with a 95 percent confidence interval. This margin allows PSC to extrapolate the range of responses for the entire Michigan population of children under age five—approximately 653,000 in 1997.

The survey responses give Michigan residents a much better understanding than before of the various ways in which our state’s youngest children receive early learning and care. These findings offer a base line for the opportunity that we now have to invest wisely in our youngest children’s early development.

KEY FINDINGS

For the purpose of this survey, “early childhood education and care” means the time a child spends in (1) his/her own home with someone other than a parent; (2) another private home with someone other than a parent, regardless of whether the home is regulated by the state; and (3) child-care centers, Head Start, preschool, nursery school, school readiness, or enrichment programs. This definition is not intended to suggest that parents do not provide education and care for their children. In fact, we assume that they do.

Caregivers and Locations

- A slight majority (54 percent) of Michigan children under age five are cared for and educated solely by their parents. Forty-six percent—approximately 300,000—of Michigan children under age five receive some kind of early childhood education and care from someone other than a parent.
- The majority of children aged three and four receive some kind of ECEC from someone other than a parent. In other words, as children approach school age, more parents place them in an ECEC arrangement.
- Of those children receiving ECEC,
 - Almost 100,000 (32 percent) receive it in their own home from someone other than a parent;
 - Approximately 140,000 (47 percent) receive it in someone else’s home from someone other than a parent; and
 - Approximately 140,000 (47 percent) receive it in child-care centers, Head Start, preschool, nursery school, or school readiness or enrichment programs. (These

percentages total more than 100 because a significant number of parents have multiple ECEC arrangements—over and beyond the time the parents themselves spend with their child.)

- Two-thirds of parents surveyed who have an infant have the infant cared for in their own home, even if it is by someone other than a parent.
- Of those children receiving ECEC from a nonparent in the child's own home, 23 percent get it from a sibling, 51 percent from a grandparent or other relative, and 53 percent from a nonrelative. (Again, the percentages total more than 100 because many parents have more than one caregiver for their child.)

Hours in Education and Care

- Children who receive ECEC tend to do so for a significant number of hours each week. On average, children in early childhood education and care receive 40 hours of it a week. One-quarter of children receiving ECEC do so for more than 50 hours a week, two-thirds for more than 30 hours.

Cost of Education and Care

- Parents who pay for ECEC spend approximately \$100 a week, on average. This finding is consistent with federal surveys on consumer expenditures.

Multiple Arrangements and Nontraditional Hours

- ECEC arrangements often are unstable. In the six months preceding the survey, 27 percent of children in ECEC had their arrangements changed. This means that 75,000 to 85,000 young children lose their teacher or caregiver every half year.
- Even when “normal” work hours are broadly conceived, many children require ECEC at other times. Of those children receiving ECEC, almost one-quarter need it at times other than Monday through Friday between 5:30 A.M. and 7 P.M.
- The patchwork structure of early childhood education and care means that young children in the same family often are in different arrangements. Almost 40 percent of parents with more than one child under age five have different ECEC arrangements for different children.

Caregiver Training and ECEC Activities

- Slightly more than half of parents say that their child (1) always is cared for by trained teachers and caregivers, (2) always is read to by a teacher or caregiver, and (3) is involved daily in activities that include creative time.

Problems Finding New Arrangements

- Parents were asked if they would encounter problems if they had to change their ECEC arrangements tomorrow; of those to whom the situation applied, parents say they would have a major problem with finding the following:
 - Education and care at the same or lower cost (cited as a major problem by 45 percent)
 - Education and care of the same or better quality (44 percent)
 - Education and care when children are ill (42 percent)

- Education and care for children with a special need, such as a disability or chronic illness (35 percent)
- Education and care arrangements where the teacher or caregiver will be there at least one year (27 percent)
- Education and care for infants or siblings (20 percent)

Parents Caring for Children Other than Their Own

- Roughly one-quarter (26 percent) of all parents report caring for another child in addition to their own.

Variations in Care Arrangements by Age of Child

(Percentages add to more than 100 because of multiple arrangements.)

- All children aged 0–4:

- 54 percent with parents only
- 15 percent with nonparent in child’s own home
- 22 percent with nonparent in another home
- 21 percent in child-care center or education program

- Under age one:

- 60 percent with parents only
- 22 percent with nonparent in child’s own home
- 27 percent with nonparent in another home
- 9 percent in child-care center or education program

- Ages 1–2:

- 60 percent with parents only
- 13 percent with nonparent in child’s own home
- 23 percent with nonparent in another home
- 18 percent in child-care center or education program

- Ages 3–4:

- 52 percent with parents only
- 12 percent with nonparent in child’s own home
- 18 percent with nonparent in another home
- 29 percent in child-care center or education program

Variations by Region

- The percentage of respondents reporting that their child receives only parent care ranges from a low of roughly 50 percent in the western, central, and Thumb regions to a high of 70 percent in southern and northern Michigan.
- The percentage of children who changed care arrangements in the six months preceding the survey ranges from a low of roughly 20 percent (in the City of Detroit, central Michigan, and the Thumb) to a high of 47 percent in northern Michigan.
- The percentage of respondents who report caring for a child other than their own ranges from about 15 percent in metro Detroit and southern Michigan to a high of 54 percent in the City of Detroit.

Variations by Race

- More Caucasian than African-American respondents report that their child is cared for only by his/her parents (57 percent and 41 percent, respectively).
- Of children cared for in private homes other than their own, significantly more African Americans than Caucasians are cared for by a relative.
- Significantly more African-American than Caucasian children receive ECEC in child care centers and other education programs.
- More than twice as many African-American respondents as Caucasian (57 percent and 22 percent, respectively) care for another child while they care for their own.

Variations by Education

- Of respondents with a high school diploma or less, 70 percent report that their child is cared for only by his/her parents; among respondents who have at least some college education, the figure is 44 percent.

CONCLUSIONS

The survey findings invite several important conclusions. Any efforts to strengthen early learning and development must not lose sight of these essential facts.

- Almost half (46 percent) of Michigan children aged under five are receiving some ECEC from someone other than a parent. The other 54 percent are cared for solely by their parents.
- Many of the Michigan families who are receiving early childhood education and care from someone other than a parent are juggling multiple arrangements. Many parents rely on more than one caregiver, even within the same setting. If parents have more than one child aged under five, they frequently (40 percent of the time) must have separate arrangements.
- Stable relationships between caregivers/teachers and young children are hard to maintain. More than a quarter of children in ECEC changed arrangements in the six months preceding the survey. Moreover, parents foresee major problems if they have to find new arrangements. Doubtless, one difficulty stems from the fact that almost one-quarter of children in ECEC need it at nontraditional hours.

- Children in ECEC are there for a significant amount of time—an average of 40 hours a week. Two-thirds are in education and care for at least 30 hours a week.

All Michigan parents face innumerable pressures in their efforts to raise children. These findings begin to illustrate the complex and fragile network of relationships and opportunities to learn and grow that form our current patchwork of early childhood education and care. By offering a base line of parents' collective voice, the survey results open the door for a healthy discussion of improvements that will help all young children enter kindergarten ready to continue learning.

Map of Regions



Methodology

Completing a survey of parents with children under age five presented several methodological challenges. To determine the population for sampling, PSC first had to identify residences in Michigan. According to the 1990 U.S. Census, Michigan's 9,295,297 people compose 3,424,122 households.¹ Second, PSC had to narrow this list of residences down to those households containing a family.² The 1990 Census reported that there were 2,458,481 families in Michigan, meaning 72 percent of Michigan households contain a family. Third, PSC had to narrow the list of families to only those with children under age five (26 percent of all families, or 628,529 families). When these figures are multiplied, PSC finds that 18 percent of Michigan households contain a family having at least one child under age five.

When these calculations were completed, PSC could draw a sample and begin the survey. In many cases, public-opinion and survey research is conducted via a procedure called "random digit dialing" (RDD), by which a computer randomly generates telephone numbers for interviewers to call. Because the numbers are randomly generated, the interviewer does not know, until the call is completed, whether the telephone number is a business, residence, out of service, or unassigned.

In a typical public-opinion survey, it is not unusual to dial 7,000 to 10,000 telephone numbers to reach 800 residents over the age of 18, giving a success rate of roughly 10 percent. Since only 18 percent of such 800 Michigan households would contain a family with a child under age five, an RDD sample would generate an eligible family in only 2 percent of all telephone calls. Completing 800 interviews—a typical interview size for Michigan with the ability to produce numerous cross tabulations of data—therefore would require at least 50,000 telephone calls, or more than five times as many as a typical RDD survey of the general Michigan public. Therefore, because of the expense, using only "blind" telephone calls to random Michigan telephone numbers was out of the question.

Another common public-opinion methodology is to draw a sample from a list of known members of the population—in this case, telephone numbers generated from public or commercial databases. These "listed" samples often allow greater flexibility in selection than is the case with RDD samples. For this survey, PSC located a commercial database that identifies—through birth records, buying habits, and other information cross-referenced to address and telephone information—parents with children under age five. In this sample, approximately 60 percent of the telephone numbers could be assumed valid—an incidence much higher than would be case with an RDD sample.

¹According to the U.S. Census, "A household includes all the persons who occupy a housing unit. A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. . . . The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements."

²According to the U.S. Census, "A family consists of a householder and one or more other persons living in the same household who are related to the householder by birth, marriage, or adoption. All persons in a household who are related to the householder are regarded as members of his or her family. A household can contain only one family for purposes of census tabulations. Not all households contain families since a household may comprise a group of unrelated persons or one person living alone." Family types include "married couple family," "male householder, no wife present," and "female householder, no husband present."

However, purchased samples do not necessarily include unlisted telephone numbers, and the normal movement of people in and out of residences would render a substantial number of the sample invalid. Furthermore, even if the sample was accurate, the data are based on multiple sources updated at different times. Parents may no longer have a child under age five; s/he now may be aged five or six. To address these sampling problems, PSC divided the child-care sample into two groups.

- The first group consisted of 400 interviews conducted using RDD. Since telephone numbers were randomly selected and every family had an equal chance of being included in the sample,³ this sample would build the most accurate and representative picture of Michigan's parents.
- To hold costs down, the second 400 interviews were conducted using a listed sample. Any difference in demographic characteristics between the listed sample and the demographics of Michigan's families as reported by the 1990 U.S. Census could be corrected using the RDD sample.

All telephone interviews were completed by Western Wats, a professional public-opinion research firm. The same survey instrument was used for both samples; all respondents were asked the same screening questions to ensure they were eligible for the survey. RDD calls were made from February 28 to March 14, 1999; listed calls were made March 3–7, 1999. For both samples, interviewers conducted calls at times throughout the day to ensure that parents with nontraditional work schedules were included. Callbacks were made to telephone numbers of families that were eligible but unable to complete the survey at that time.

PSC analyzed the two samples on demographic characteristics. As expected, the RDD sample reflects the actual demographic characteristics of Michigan families as reported in the 1990 census. Also, as expected, the listed sample had some substantial variations: Compared to Michigan demographics, City of Detroit residents are underrepresented and metro Detroit residents are overrepresented. More respondents in the listed sample reported higher incomes than in the RDD sample; this also was expected given that the listed sample relies heavily on economic transactions to match addresses to demographic characteristics.

Before correcting the listed sample's demographics, PSC also compared the results of the two samples to determine whether the answers differ in a statistically significant way. In most cases, using generally accepted tests and methods, there is no statistical difference between the answers from the two samples. Therefore, PSC combined the two samples, analyzed the demographic characteristics of the combined sample, and applied weighting to make the combined sample reasonably approximate demographic data from the census and the RDD-only sample.

A sample of 800 from a population of approximately 630,000 Michigan families with children under age five yields an accuracy rate of plus or minus 3.5 percent with 95 percent confidence. In other words, 95 of 100 samples will be accurate within 3.5 percent of the actual result we would get if we surveyed all Michigan families. The sampling error is slightly greater within subgroups, depending on the size of the subgroup. Public Sector Consultants believes that this poll accurately reflects public opinion at the time of the survey.

³Some families may have more than one telephone number and, therefore, have more than one opportunity to be selected for the survey. However, since there are millions of telephone numbers in Michigan, a family with more than one telephone line has only the most negligible additional chance of being selected (e.g., three in two million) compared to a family with only one telephone line (one in two million).

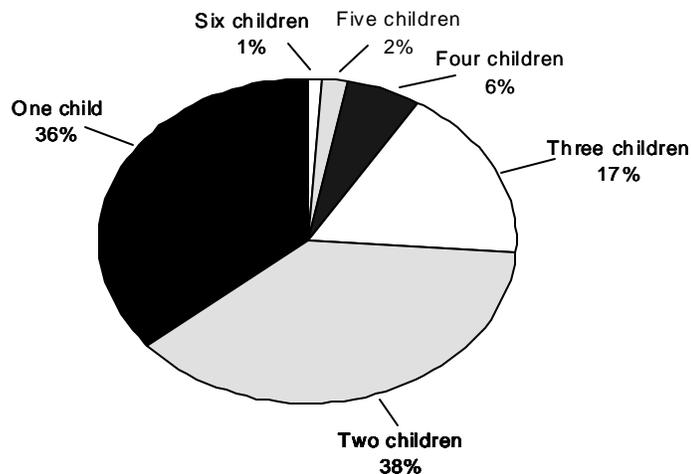
Number and Age of Children Receiving Early Childhood Education and Care

The first series of questions in the survey (1) identified the number and ages of all children aged under 18 that live with the respondent and (2) randomly selected one of the children under the age of five as the focus of the survey questions. The majority of survey questions, therefore, are based on this “survey child”—the one randomly selected child—regardless of how many children under age five the respondent may have identified. Only question 16 asks about all of the respondent’s children under age five, including the survey child.

QUESTION 1: To begin, please tell me how many children under age 18 live with you and each of their ages. [SURVEYOR RANDOMLY SELECTS ONE CHILD UNDER AGE FIVE FOR USE IN THE SURVEY.] In what month and year was [THIS __-YEAR-OLD] born?

EXHIBIT 1

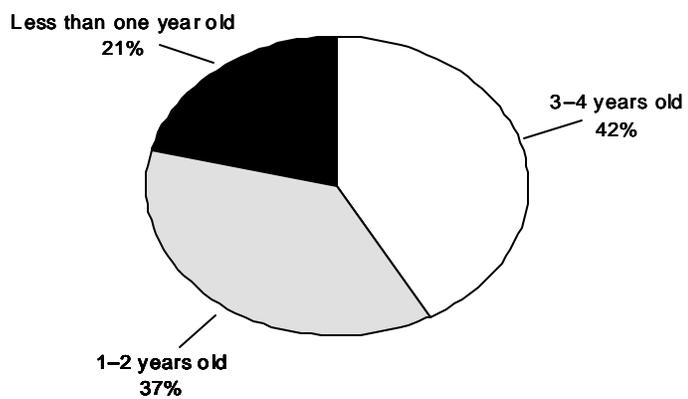
Number of Children under Age 18, Percentage of Respondent Households



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

EXHIBIT 2

Age of Survey child, Percentage of Total



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

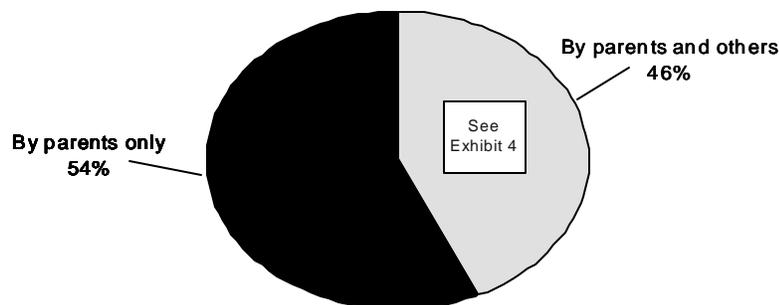
NOTE: The "survey child" is the randomly selected child aged under five in the respondent's household.

Childhood Education and Care: Caregivers, Locations, Hours

NOTE: For ease of reading, ECEC and “care” are used as shorthand for “early childhood education and care.”

Survey questions 2–11 asked respondents to identify the survey child’s early education and care (ECEC) arrangements and number of hours spent in ECEC. The following present the summary information for these questions; detail may be found in subsequent sections. Following the exhibits, which display the answers to the questions, are further data extrapolated from cross tabulating the responses by various demographics (e.g., region of residence, age of child).

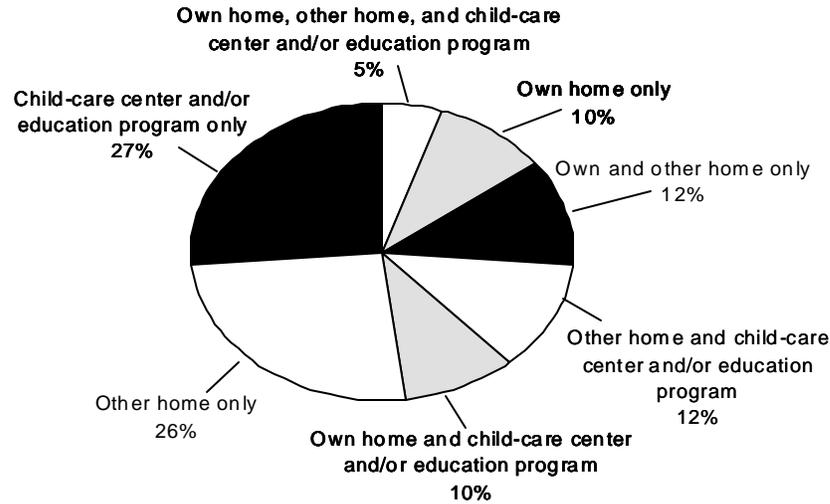
EXHIBIT 3
Education/Care Arrangements, Survey Children



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

- Almost half (46 percent) of survey children receive some education and care from someone other than a parent.
- The majority of survey children, regardless of age, receive care only from their parents (or guardian). Of children aged two and younger, 60 percent are cared for only by their parents; of children aged three and four, 52 percent are cared for only by their parents.
- More Caucasian than African-American respondents report that their survey child is cared for only by his/her parents (57 percent and 41 percent, respectively) or only in someone else’s home (13 percent and 3 percent, respectively).
- More African-American than Caucasian respondents report that their survey child is cared for only in child-care centers (27 percent and 10 percent, respectively) or in multiple locations (27 percent and 16 percent, respectively).
- Regionally, the percentage of respondents reporting that their child receives only parent care ranges from a low of roughly 50 percent in the western, central, and Thumb regions to a high of 70 percent in southern and northern Michigan. The percentage of respondents

EXHIBIT 4
Location of Nonparent Education/Care



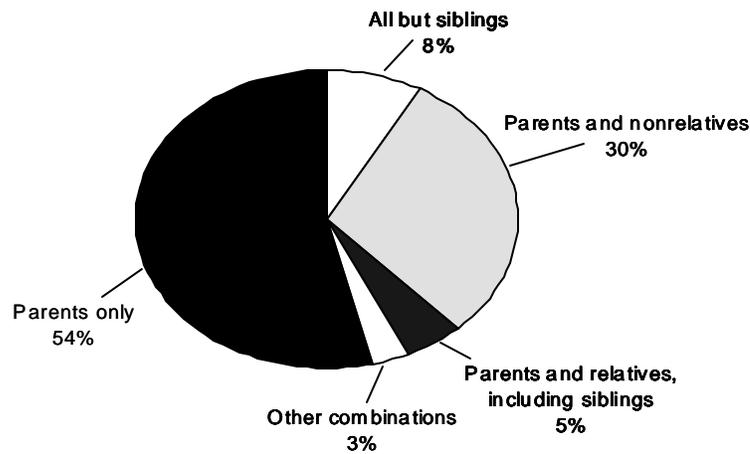
SOURCE: Survey, Public Sector Consultants, Inc., 1999.

Own home = Child receives education/care in his/her own home.

Other home = Child receives education/care in another private home.

NOTE: This exhibit pertains only to the 46 percent of the survey children who receive nonparent as well as parent education/care (see Exhibit 3).

EXHIBIT 5
Education/Care Providers, Survey Children



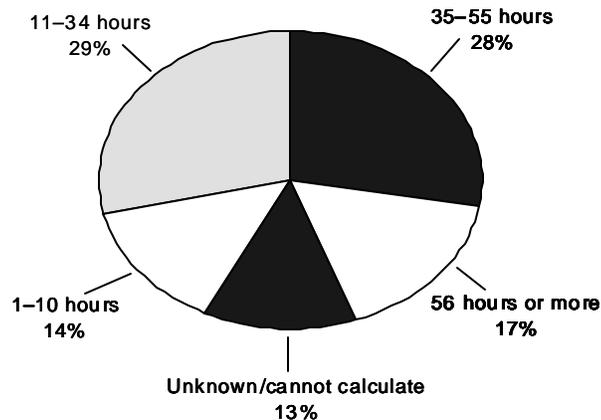
SOURCE: Survey, Public Sector Consultants, Inc., 1999.

- using a combination of care locations ranges from less than 10 percent in southern and northern Michigan to 29 percent in the City of Detroit.
- Of respondents with a high school diploma or less, 70 percent report that their child is cared for only by his/her parents; among respondents who have at least some college education, the figure is 44 percent.

- With one exception, care location does not vary with the child's age. The exception is the child who receives care only in a child-care center or education program. The percentage of respondents reporting that their child receives only such care increases from 2 percent of children aged under one year to 19 percent of children aged three or four.

Respondents whose survey child is cared for by parents and nonparents were asked to identify the typical monthly total number of hours in each care location. The following details the number of hours for these children (46 percent of the total sample).

EXHIBIT 6
Hours per Week in Child Education/Care, Survey Children



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

- The plurality of survey children who receive care for less than 34 hours/week (37 percent) receive it in a child-care center or education program. The plurality receiving care for 35–55 hours/week (39 percent) receive it in someone else's home. The majority of children receiving care for 56 or more hours/week (79 percent) receive it in a combination of locations.
- The plurality receiving care only in other homes (48 percent) are reported to spend 35–55 hours/week in care.
- The plurality (39 percent) receiving care at more than one location receive care 56 or more hours/week.
- There is substantial variation by region in the total hours of care.
 - More City of Detroit children (30 percent) than others are in the highest use category of care (56 or more hours/week). Receiving the next highest number of care hours (35–55 hours/week) are metro Detroit children (received by 34 percent) and Thumb youngsters (received by 31 percent).
 - The plurality of residents in western and central Michigan are equally divided between 11–34 and 35–55 hours/week of care. A majority of respondents in southern (53 percent) and northern Michigan (50 percent) report that their children receive 11–34 hours/week of care.

- By education, equal shares of respondents with less than a high school diploma report that their child receives care 35–55 hours/week and 56 hours/week or more (35 percent and 34 percent, respectively). Equal shares of respondents with some college or a college degree report that their child receives care 11–34 and 35–55 hours/week, while the plurality (36 percent) of respondents with a high school diploma report that their child receives care 11–34 hours/week.
- The plurality (34 percent) of children aged 1–2 receive care 35–55 hours/week, while the plurality (35 percent) of 3–4 year olds receive care 11–34 hours/week. Equal shares of children under age one receive care 11–34 and 35–55 hours/week (24 percent and 25 percent, respectively).

Education and Care by Nonparents

QUESTION 2: Does anyone other than your ___-year-old's parents or guardians care for him/her?

Please refer back to Exhibit 3.

- Among Caucasian respondents, the majority (54 percent) report that their child is cared for only by parents; among African-American respondents, the majority (61 percent) report that their child is cared for by parents and others.
- By region, in metro Detroit, southern, and northern Michigan, the majorities report that their child is cared for only by parents, while in the Thumb, the majority reports that their child is cared for by parents and others. In the other regions, respondents are equally divided between the two categories.
- Among respondents with incomplete high school or a high school education, the majorities (62 percent and 70 percent, respectively) report that care is given by parents and others. Among respondents with at least some college education, the majority (58 percent) report that their child is cared for only by parents.
- The majority (57 percent) of children aged two or younger receive care only from their parents.

IMPORTANT NOTE

Survey questions 3–24 were asked only of respondents who had indicated that nonparents—people other than the parent/spouse/guardian—provide care for the survey child. This was the case with 46 percent of the total sample (that is, 370 of the 800 people surveyed). As noted in the next several sections of this report, the answers to the survey questions therefore reflect a proportion of this 46 percent—not a proportion of the total sample of 800 people.

For example, 47 percent of the people who were asked QUESTION 6 reported that the survey child receives education or care in someone else’s home. Therefore, 22 percent of all children receive care in an other-home setting (47 percent x 46 percent = 21.6 percent)

NONPARENT EDUCATION/CARE IN CHILD’S OWN HOME

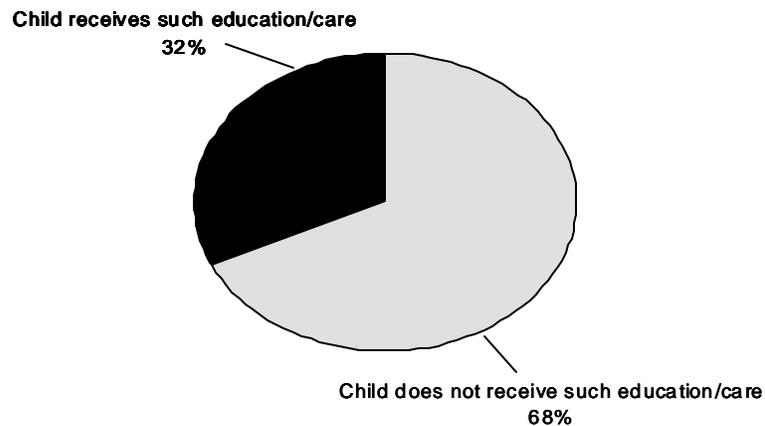
NOTE: The data presented in this section reflect the responses of only the 46 percent of the sample who indicated that nonparents—people other than the parent/spouse/guardian—provide care for the survey child.

Own-Home, Nonparent Education/Care

QUESTION 3: During a typical week in the last month, did your ___-year-old receive education or care in your home but provided by someone other than yourself, another parent, or a guardian?

EXHIBIT 7

Nonparent, Own-Home Education/Care, Survey Children



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

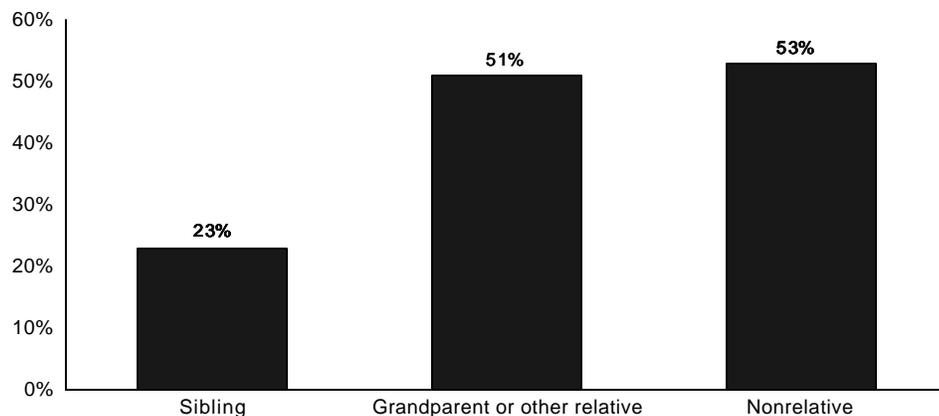
- More Caucasian than African-American respondents (34 percent and 22 percent, respectively) report their child receiving nonparent care in their own home.
- The percentage of children receiving nonparent care in their own home ranges from a low in the southern and Thumb regions (24 percent and 26 percent, respectively) to a high of 50 percent in the northern region.
- As the total number of child-care hours increases, so does the portion of children reported to be receiving own-home, nonparent care.

- Among children receiving 1–10 hours of care, 25 percent receive own-home, nonparent care.
 - Among children receiving 11–34 hours of care, the figure is 30 percent.
 - Among children receiving 35–55 hours of care, the figure is 29 percent.
 - Among children receiving 56 or more hours of care, the figure is 62 percent.
- More infants than older children receive own-home, nonparent care.
- Among children under age one, 47 percent receive own-home, nonparent care.
 - Among children aged 1–2, the figure is 29 percent.
 - Among children aged 3–4, the figure is 27 percent.

Own-Home Education/Care by Siblings, Relatives, and Others

QUESTION 4: Who else provided the care?

EXHIBIT 8
Own-Home, Nonparent Education/Care Providers, Survey Children



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

NOTE: Respondents could choose more than one option.

The following pertains to children receiving own-home care by nonparents:

- The percentage receiving sibling care ranges from roughly 10 percent in metro Detroit and central Michigan to roughly one-third in western and northern Michigan.
- One-third (35 percent) of children of respondents with a high school diploma or less receive sibling care. Of children of respondents with at least some college education, 10 percent receive such care.
- The percentage receiving sibling care decreases with age.
 - Among children aged less than one year, 33 percent receive sibling care at home.
 - Among children aged 1–2, the figure is 21 percent.
 - Among children aged 3–4, the figure is 16 percent.

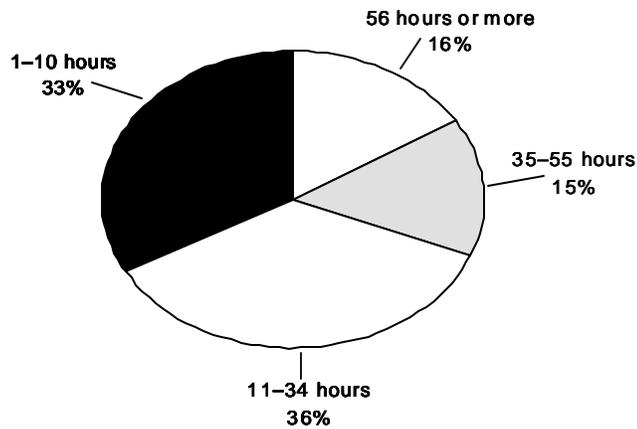
- Age appears to have no bearing on whether a child is cared for by a nonrelative. Roughly 50 percent of each of the three age groups (aged under one, aged 2–3, aged 3–4) receives care from a nonrelative.
- More African-American than Caucasian respondents (73 percent and 49 percent, respectively) report that their child receives care from a relative.

Hours Spent in Nonparent, Own-Home Education/Care

QUESTION 5: During a typical week in the last month, how many hours did your ___-year-old receive care in your own home? Again, only include the time that this child spent with someone other than a parent or guardian.

EXHIBIT 9

Own-Home, Nonparent Education/Care Received by Survey Children, Hours per Week



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

NONPARENT EDUCATION/CARE IN OTHER PRIVATE HOMES

NOTE: The data presented in this section reflect the responses of only the 46 percent of the sample who indicated that nonparents—people other than the parent/spouse/guardian—provide care for the survey child.

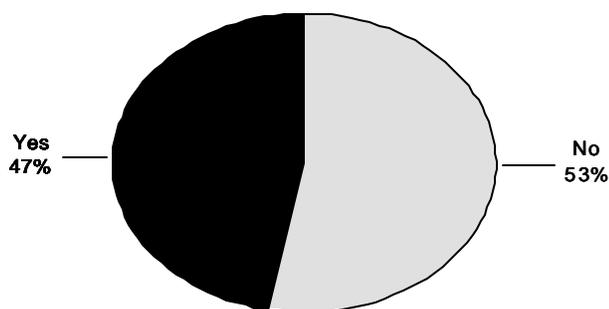
Education/Care Received in Another Home

QUESTION 6: During a typical week in the last month, did your ___-year-old receive education or care in someone else's private home?

- Statistically equal percentages of Caucasian and African-American respondents (49 percent and 41 percent, respectively) report that their child receives other-home.
- By region, only one-third of the respondents in northern Michigan report that their child receives other-home care. More than half of the respondents in the City of Detroit (55 percent), southern (56 percent), or central Michigan (51 percent) report the same.
- The percentage of respondents whose child receives other-home care decreases with the child's age.
 - Among children aged under one year, 60 percent receive other-home care.

EXHIBIT 10

Q: Does Your Child Typically Receive Care in Someone Else's Private Home?



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

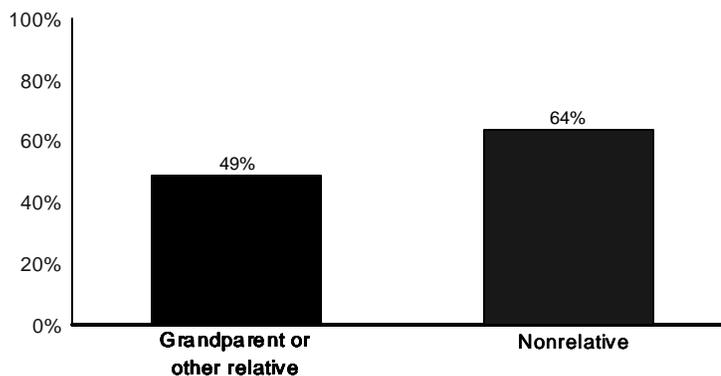
- Among children aged 1–2, the figure is 50 percent.
- Among children aged 3–4, the figure is 40 percent.

Other-Home Education/Care with Relatives or Others

QUESTION 7: Who else provided the care?

EXHIBIT 11

Other-Home, Nonparent Education/Care Providers, Survey Children



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

NOTE: Respondents could choose more than one option.

The following pertains to children receiving other-home care:

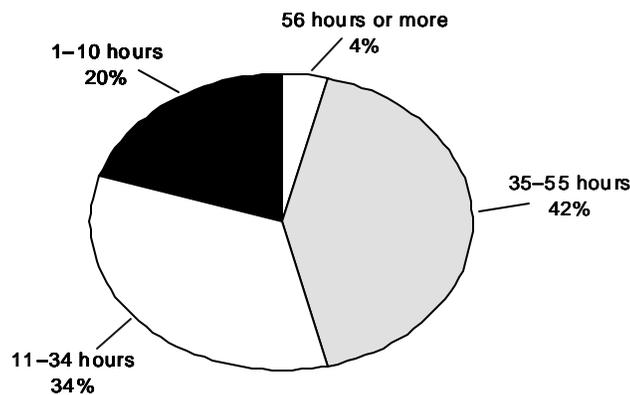
- A majority, regardless of age, receive care from a nonrelative.
- More African-Americans than Caucasians (76 percent and 44 percent, respectively) report that their child is cared for by a relative.
- More Caucasians than African-Americans (69 percent and 30 percent, respectively) report that their child is cared for by a nonrelative.

- Care by relatives ranges from 28 percent of residents of the central region to 88 percent in northern Michigan. In all regions except the City of Detroit, the percentage of care provided by nonrelatives exceeds 50 percent. In Detroit, only one-third of the children receive care with nonrelatives.
- The percentage of children receiving care from relatives decreases as the respondent's level of education rises. Of respondents with less than a high school education, 54 percent report that their child receives care from relatives; of respondents with a college degree or more, the figure is 37 percent.
- Conversely, the percentage of children receiving care from nonrelatives increases as the respondent's education increases. Of respondents with less than a high school education, 46 percent report that their child receives care from a nonrelative; of respondents with a college degree or more, the figure is 76 percent.

Hours Spent in Other-Home Education/Care

QUESTION 8: During a typical week in the last month, how many hours did your ___-year-old receive care in someone else's private home?

EXHIBIT 12
Other-Home Education/Care, Survey Children, Hours per Week



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

- Of Caucasian respondents, a statistically similar percentage report that their child receives other-home care 11-34 and 35-55 hours/week (35 percent and 43 percent, respectively). Of African-American respondents, a statistically similar percentage report the their children spend 1-10 and 35-55 hours/week (43 percent in each case) in other-home care.
- While the plurality of children under age one (45 percent) spend 11-34 hours/week in other-home care, the majority of children age 1-2 spend 35-55 hours/week in such care. Nearly equal percentages of children ages three and four spend 1-10, 11-34, and 35-55 hours in care (31 percent, 31 percent, and 38 percent, respectively).
 - Of children aged under one year, the plurality—45 percent—spend 11-34 hours/week in care in another private home.
 - Of children aged 1-2, the majority spend 35-55 hours/week in such care.

- Among children aged 3–4, roughly one-third receives such care in each of the hour ranges: 31 percent spend 1–10 hours/week, 31 percent spend 11–34 hours/week, and 38 percent spend 35–55 hours/week.

EDUCATION/CARE OUTSIDE OF A PRIVATE HOME

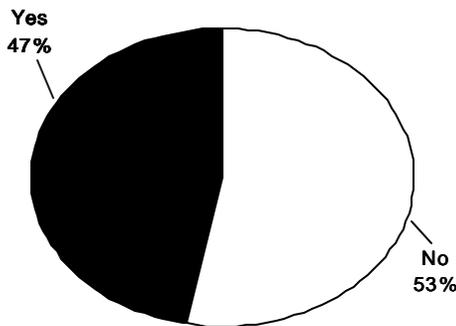
NOTE: The data presented in this section reflect the responses of only the 46 percent of the sample who indicated that nonparents—people other than the parent/spouse/guardian—provide care for the survey child.

QUESTION 9: During a typical week in the last month, did your ___-year-old receive education or care in a daycare center, nursery school, or other early-childhood program that is not located in someone’s private home?

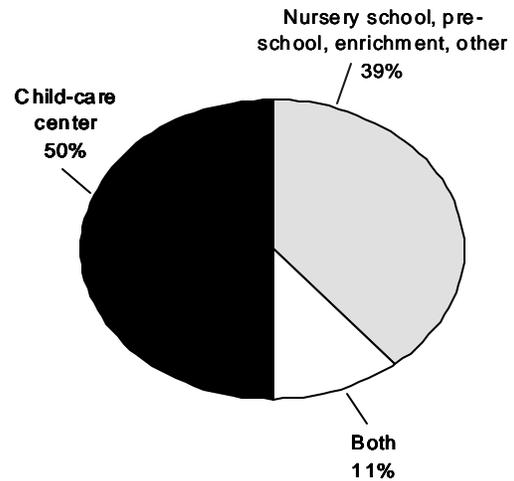
EXHIBIT 13

Education/Care Received in Child-Care Centers and Education Programs, Survey Children

Q: Does Your Child Typically Receive Care . . . Not Located in a Private Home?



Location Cited by 47 Percent Responding "Yes"



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

QUESTION 10: What was the location?

Location of Education/Care Outside of a Private Home

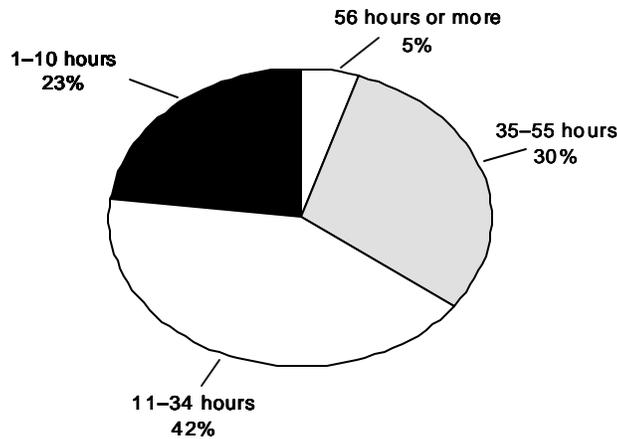
- More African-American than Caucasian respondents (69 percent and 44 percent, respectively) report that their child receives ECEC in a child-care center or education program.
- Regionally, the percentage of children receiving such care falls into one of two categories: 50–60 percent (City of Detroit, metro Detroit, and the Thumb) or 30–40 percent (southern, western, central, and northern Michigan).

- As the age of the child increases, so does the extent of ECEC in a child-care center or education program.
 - Among children aged less than one year, 19 percent receive such care.
 - Among children aged 1–2, the figure is 40 percent.
 - Among children aged 3–4, the figure is 64 percent.
- Among Caucasian respondents, nearly equal proportions report that their child receives care in a child-care center (45 percent each) versus a preschool or enrichment program (40 percent). Among African-American respondents, 63 percent report that their child receives care in a child-care center.
- In four regions, the majority report using a child-care center: City of Detroit (65 percent) central Michigan (54 percent), the Thumb (55 percent), and northern Michigan (67 percent). In metro Detroit and southern and western Michigan, the percentage of respondents who report using a child-care center is about the same as those who report they have their child in a preschool or enrichment program.

Hours Spent in Child-Care Centers and Education Programs

QUESTION 11: During a typical week in the last month, how many hours did your ___-year-old receive care in these programs?

EXHIBIT 14
Hours per Week in Child-Care Center or Education Program, Survey Children



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

ALL NONPARENT EDUCATION/CARE ARRANGEMENTS

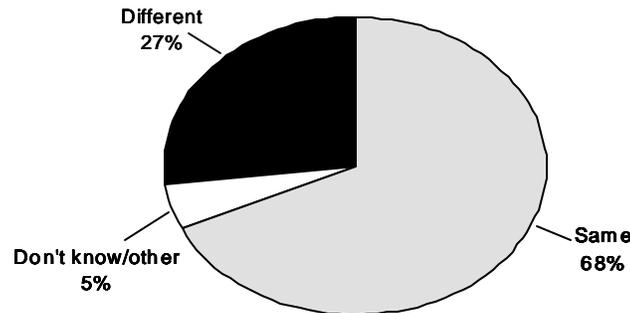
NOTE: The data presented in this section reflect the responses of only the 46 percent of the sample who indicated that nonparents—people other than the parent/spouse/guardian—provide care for the survey child.

Arrangements Today Compared to Six Months Previous

QUESTION 12: When you think about all of these arrangements your ___-year-old has today, are they the same or different from the arrangements you had six months ago?

EXHIBIT 15

Q: Are Your Survey Child's Care Arrangements the Same Now as Six Months Ago?



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

- Regardless of whether the survey child receives ECEC in his/her own home, another home, or a child-care center or education program, one-third of the respondents report that the arrangement they had at the time of the survey is different from that of six months previous.
- Regionally, the percentage of children who change care arrangements ranges from a low of roughly 20 percent (in the City of Detroit, central Michigan, and the Thumb) to a high of 47 percent (in northern Michigan).

Special Hours

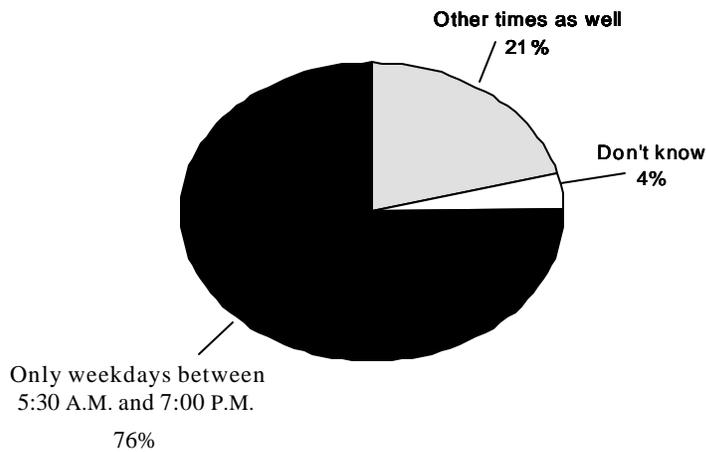
QUESTION 13: During a typical week in the last month, did your ___-year-old need education or care only between 5:30 in the morning and 7 at night, Monday through Friday?

QUESTION 14: During a typical week in the last month, did your child need education or care on weekdays from 7 in the evening until midnight? On weekdays from midnight until 5:30 the following morning? At any time during the weekend, from Friday night through Monday morning?

Questions 13 and 14 were asked only of the 370 respondents reporting nonparent care. Of these, 76 (21 percent) indicated that their child requires care at times other than 5:30 A.M. to 7:00 P.M. Question 14, therefore, was asked of these 76 parents, and in theory, all 76 should have answered "yes" to at least one part of the question, since they had indicated in responding to question 13 that their child needs care at one of these times. However, 42 of the 76 answered "no" to all three parts—which negates their response to question 13.

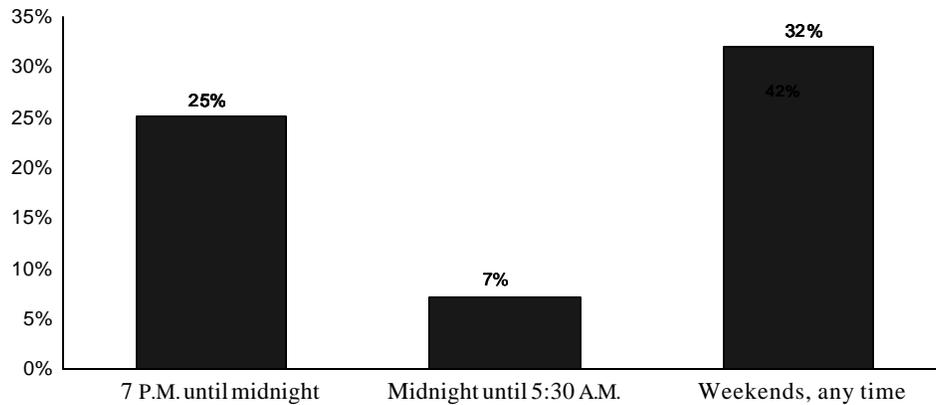
Perhaps they misunderstood question 13. Perhaps they have children who need overnight care,

EXHIBIT 16
Hours and Days During Which Childhood Education/Care Is Needed



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

EXHIBIT 17
Percentage of Survey Children Needing Education/Care During Nontraditional Times



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

NOTE: Respondents could choose more than one option.

and, therefore, answered the first two parts of question 14 “no” because neither range included all of the times that their child needs care (instead of answering “yes” to both, to show both late-evening and early-morning care needs). Or perhaps there was interviewer error.

In PSC’s opinion, any analysis based on the responses to these questions should be treated with care, with the most weight going to the answers to question 13, the initial question about care hours.

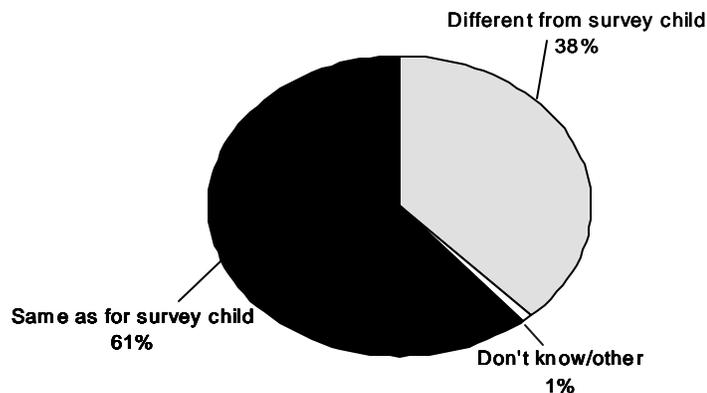
QUESTION 15: Does your ___-year-old ever receive child care for more than 24 hours in a row?

- The percentage of children needing care at “nontraditional” times (times other than weekdays between 5:30 A.M. and 7 P.M.) drops as the total hours in care rises.
 - Of children in care 1–10 hours/week, 35 percent need care at nontraditional times.
 - Of children in care 56 hours/week or more, the figure is only 10 percent.
- The percentage of children needing care at nontraditional times decreases as the age of the child increases.
 - Among children aged under one year, 32 need care during nontraditional hours.
 - Among children aged 1–2, the figure is 21 percent.
 - Among children aged 3–4, the figure is 15 percent.
- Of children needing care during nontraditional hours, the percentage needing 7 P.M.–midnight care increases with the age of the child.
 - Among children aged under one year, 9 percent need care from 7 P.M. to midnight.
 - Among children aged 1–2, the figure is 26 percent.
 - Among children aged 3–4, the figure is 40 percent.
- Of children needing care during nontraditional hours, the percentage needing 7 P.M.–midnight care varies with the type of care:
 - Of children receiving own-home care, 37 percent need 7 P.M.–midnight care.
 - Of children receiving other-home care, the figure is 24 percent.
 - Of children receiving ECEC in a child-care center or education program, the figure is 48 percent.

Sibling Education/Care Arrangements

QUESTION 15: You mentioned that you have other children under age five. Do these other children have **exactly** the same education and care arrangements as your __-year-old? [Asked only if respondent had identified more than one child under age five question 1.]

EXHIBIT 18
Education/Care Arrangements for Other Children in Survey Child’s Family



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

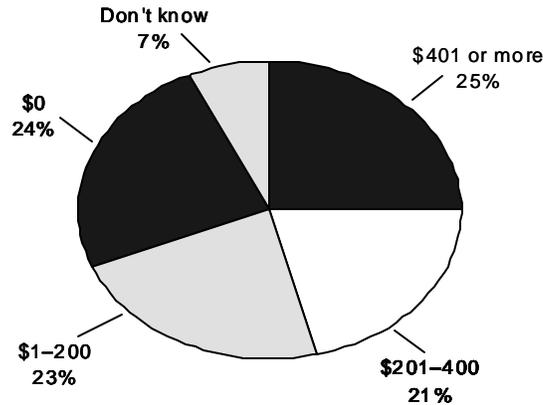
- Among respondents whose survey child receives only own- or other-home care (63 percent and 64 percent, respectively), a majority report that their other children have the same care arrangement.
- As the total amount of time the child spends in care rises, the percentage of respondents who report that their other children have the same care also rises.
 - For survey children receiving care 1–10 hours/week, 36 percent of respondents report that the child’s siblings receive the same type of care.
 - In families of children receiving care 11–34 hours/week, the figure is 50 percent.
 - In families of children receiving care 35 hours/week or more, the figure is 73 percent.

COST OF NONPARENT EDUCATION/CARE ARRANGEMENTS

NOTE: The data presented in this section reflect the responses of only the 46 percent of the sample who indicated that nonparents—people other than the parent/spouse/guardian—provide care for the survey child.

QUESTION 17: Child care and education are paid for in many ways—sometimes with money from yourself or someone else and sometimes by doing or giving something in exchange. Sometimes it’s even free. (a) During the last month, how much did **all** of the education and care arrangements for your ___-year-old cost? Please include amounts paid for by yourself as well as by someone else on your behalf. (b) To help pay for the cost of child care, did you do something for or give something to someone without receiving money in return? For example, you may have an arrangement with a neighbor whereby you watch each other’s children every other day.

EXHIBIT 19
Monthly Cost of Survey Child’s Education/Care

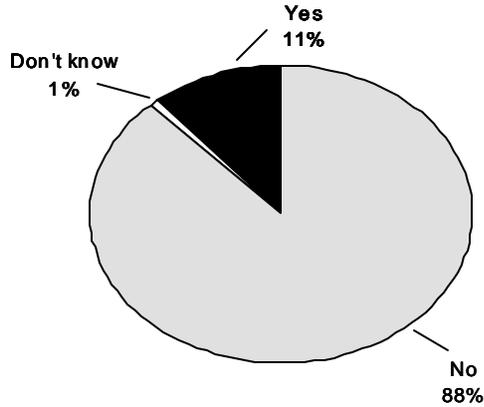


SOURCE: Survey, Public Sector Consultants, Inc., 1999.

- The average cost of care reported in this survey is \$229/month. Multiple other sources report that the average care payment approaches \$400/month. Given this data, PSC has concerns about the reliability of this finding; perhaps a substantial portion of the parents who responded \$0/month did not want to answer the question (and, therefore, should have been included in the “Don’t know/refused/other” category).

EXHIBIT 20

Q: Do you exchange a service/good for your child's education/care?

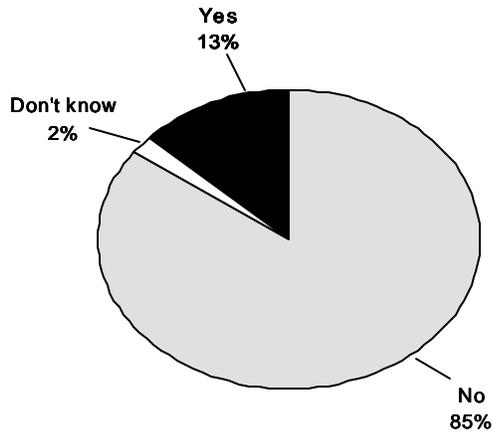


SOURCE: Survey, Public Sector Consultants, Inc., 1999.

QUESTION 18: Is the amount of money you are charged for education or care programs determined by how much money you earn?

EXHIBIT 21

Q: Is the amount you are charged for education/care programs determined by your earnings?



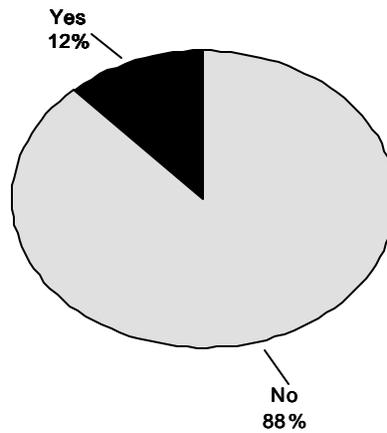
SOURCE: Survey, Public Sector Consultants, Inc., 1999.

QUESTION 19: Some people receive assistance from a government agency, their employer, or someone outside their household, such as a friend or relative, to help pay for education and care. Does anyone else pay for all or part of the cost of your ___-year-old's education or care?

QUESTION 20: Who or what agency helps pay for child care?

EXHIBIT 22

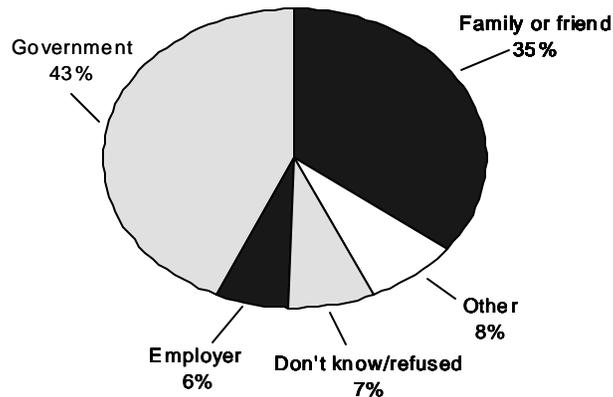
Q: Do you receive help in paying for child care/education?



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

EXHIBIT 23

Q: Who or what agency helps pay for your child's education/care?



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

QUESTION 21: During an average month, how much money do you receive from these other sources to pay for child care?

- The average assistance received is \$310/month. However, only a small number (40) of people were eligible to answer this question; of these, 11 (27 percent) received no payment last month and 7 (18 percent) responded "Don't know" or refused to answer. PSC cautions readers to use care in interpreting or projecting these numbers.

PERCEPTION OF QUALITY OF NONPARENT EDUCATION/CARE ARRANGEMENTS

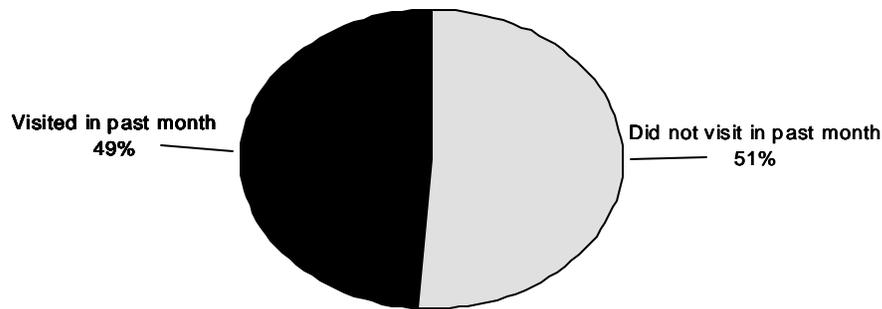
NOTE: The data presented in this section reflect the responses of only the 46 percent of the sample who indicated that nonparents—people other than the parent/spouse/guardian—provide care for the survey child.

Visiting Child's Education/Care Setting(s)

QUESTION 22: Within the last month, did you visit your ___-year-old while he or she was being cared for—other than when you were picking up or dropping him or her off?

EXHIBIT 24

Percentage of Respondents Who Visit Survey Child in Education/Care Setting at Times Other than Pick Up or Drop Off



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

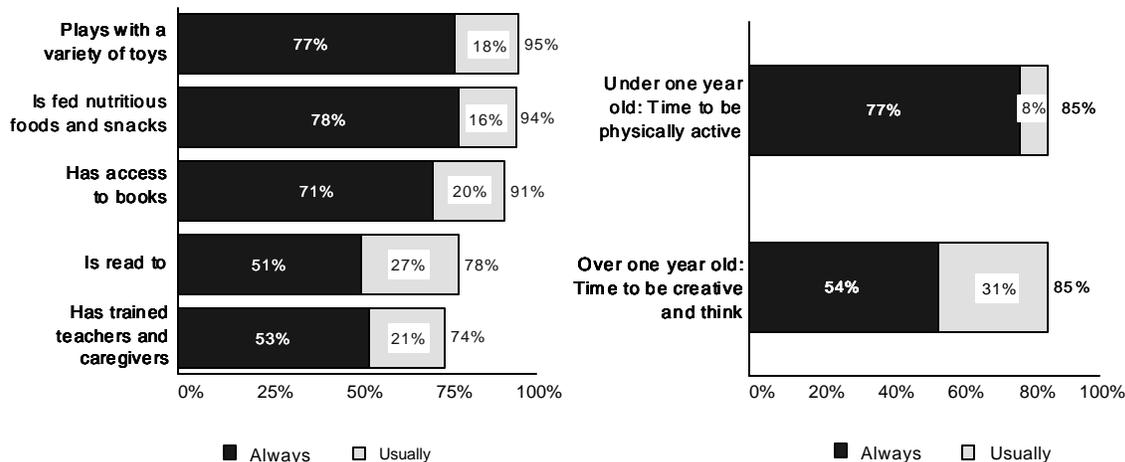
- Of respondents whose children receive ECEC in a child-care center or education program, 59 percent report visiting their child other than when they pick up or drop off him/her. Of respondents whose children receive other-home care, only 41 percent report the same.
- The percentage of respondents who report visiting their child while in care increases as the total amount of time the child is in care increases.
 - For children receiving 1–10 hours of care, 31 percent of respondents report having visited their child in his/her child-care venue.
 - For children receiving 11–34 hours of care, the figure is 45 percent.
 - For children receiving 35–55 hours of care, the figure is 55 percent.
 - For children receiving 56 or more hours of care, the figure is 65 percent.
- While a majority of respondents of children in age groups 1–2 and 3–4 report visiting their child while in care (the figures are 53 percent and 56 percent, respectively), only 24 percent of respondents of children under age one report the same.

Education/Care Activities

QUESTION 23: I will now read you a list of statements about activities that may occur each day while your ___-year-old is receiving education or care. After I read each item, please tell me whether you believe it always occurs, usually occurs, sometimes occurs, or never occurs during a typical day while your child is in care.

EXHIBIT 25

Activities that Respondent Believes Occur in Survey Child's Education/Care Setting



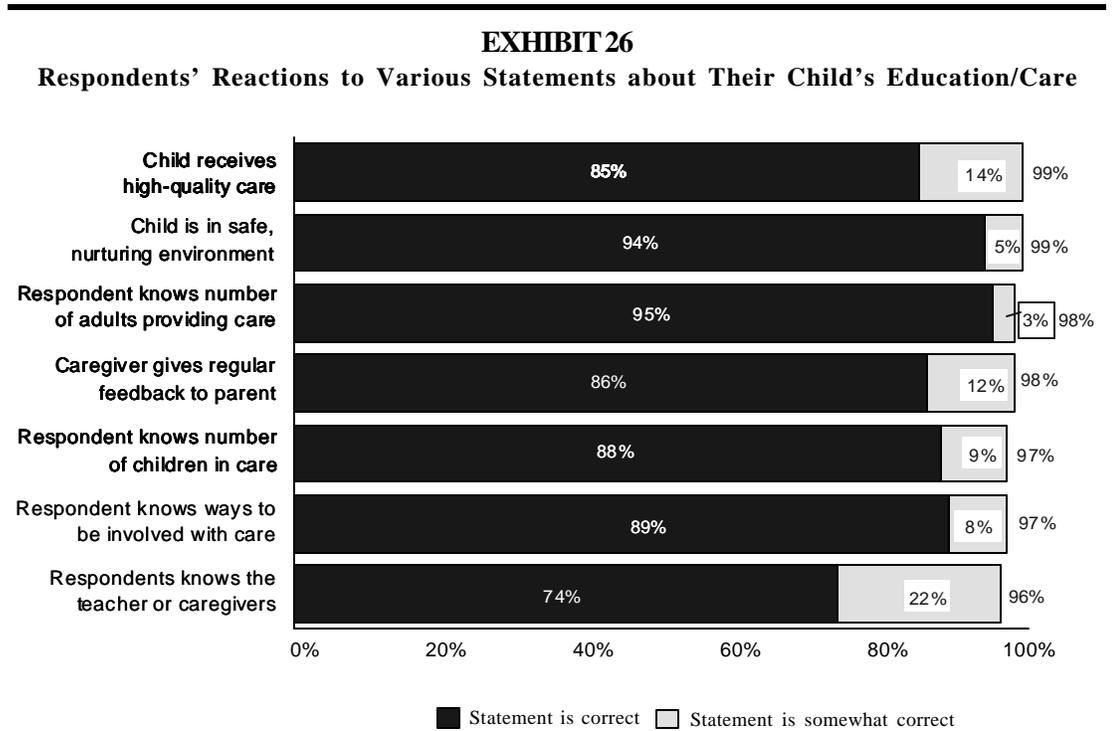
SOURCE: Survey, Public Sector Consultants, Inc., 1999.

- The percentage of respondents who say their child “always” or “usually” is read to while in care increases as the age of the child increases.
 - For children aged under one year, 56 percent of respondents report that their child always or usually is read to.
 - For children aged 1–2, the figure is 75 percent.
 - For children aged 3–4, the figure is 88 percent.
- When analyzed by the survey child’s nonparent-care location, the percentage of respondents who report that their child always/usually is read to varies from 67 percent in own-home settings to 71 percent in other-home settings and 92 percent in child-care centers and education programs.
- More Caucasian than African-American respondents (81 percent and 59 percent, respectively) report that their child always/usually is read to while in care.
- As the total hours of care increase, the percentage of respondents who report that their child always/usually is read to decreases.
 - For children receiving 1–10 hours of care, 95 percent of respondents report that they believe their child always/usually is read to.
 - For children receiving 11–34 hours of care, the figure is 74 percent.
 - For children receiving 35–55 hours of care, the figure is 77 percent.
 - For children receiving 56 or more hours of care, the figure is 68 percent.
- As the respondent’s education level increases, the percentage reporting that their child always/usually is read to also increases.

- Among respondents with less than a high school education, 39 percent report that their child always/usually is read to.
 - Among respondents with a high school diploma, the figure is 78 percent.
 - Among respondents with some college or more, the figure is 86 percent.
- More Caucasian than African-American respondents (90 percent and 62 percent, respectively) report that their child always/usually has creative time and thinking time each day.

Various Aspects of Education/Care

QUESTION 24: I will now read you a list of statements about your ___-year-old’s care arrangements. Please tell me whether the statement is correct, somewhat correct, somewhat incorrect, or incorrect.



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

- At least 90 percent of respondents, regardless of the location, report as “correct” or “somewhat correct” the statement that they know all of their child’s teachers/caregivers and what training each has. The percentage who deem the statement “correct” ranges from 56 percent of those whose children receive ECEC in child-care centers and education programs to 81 percent of those whose children receive own-home care.

Problems Making New Education/Care Arrangements

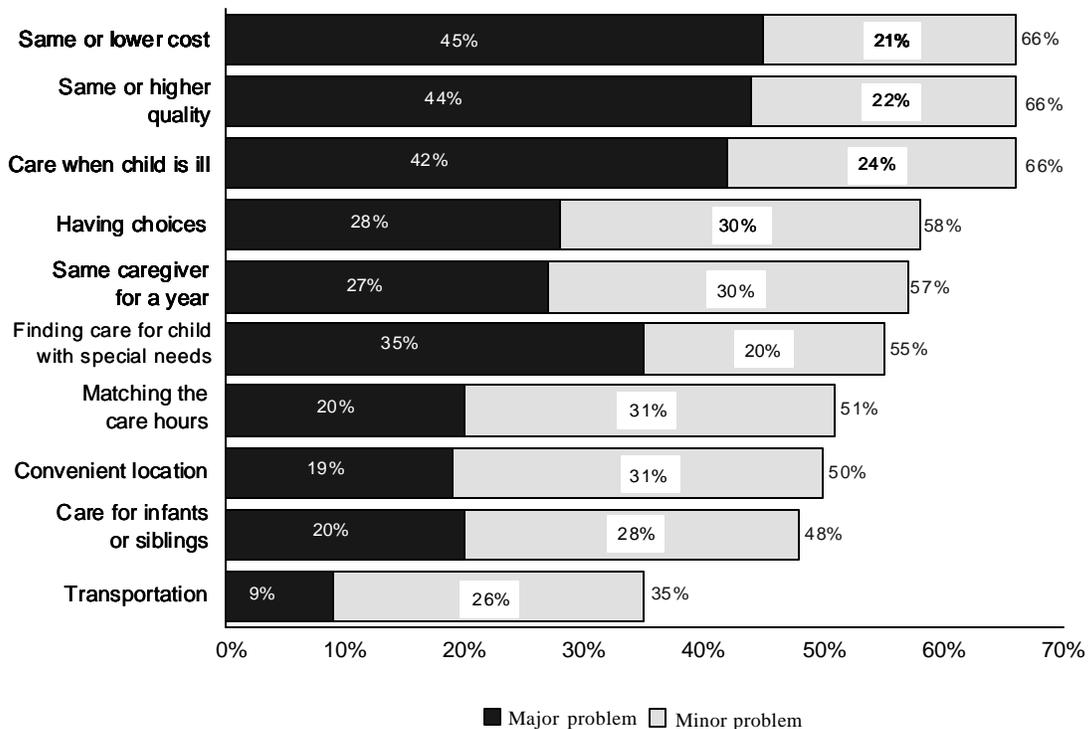
IMPORTANT NOTE

Survey questions 25–37 were asked of all respondents.

QUESTION 25: Sometimes people encounter difficulties, or barriers, in arranging education and care. Suppose your ___-year-old’s current education and care arrangements were **no longer available** and **must be permanently changed**. If you tried to make new arrangements, please tell me whether the following items would be a major problem, minor problem, or no problem at all. If any question does not apply to your situation, please say so.

EXHIBIT 27

Perceived Problems in Making New Education/Care Arrangements



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

- Regionally, the incidence of a transportation problem ranges from 23 percent of respondents in western Michigan to 42 percent in southern Michigan and the City of Detroit.
- The extent to which location convenience would a problem does not seem to be tied to the amount of time a respondent’s child is in care.

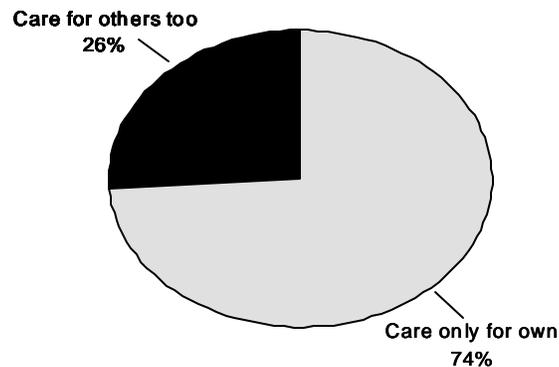
- For respondents with children in care 1–10 hours/week, relocating care would be a problem for 60 percent.
 - For respondents with children in care 11–34 hours/week, the figure is 54 percent.
 - For respondents with children in care 35–55 hours/week, the figure is 71 percent.
 - For respondents with children in care 56 hours/week or more, the figure is 66 percent.
- Regionally, a perceived problem in finding conveniently located new care varies from a low of 36 percent of Thumb respondents to a high of 50 percent in southern, central, and northern Michigan.
 - More African-American than Caucasian respondents (37 percent and 21 percent, respectively) report that finding new care for children with a special need—such as a disability or a chronic illness—would be a problem.
 - A majority of all respondents, regardless of education, are concerned about finding new care of the same or higher quality—54 percent of respondents with a high school diploma or less, 62 percent of respondents with some college, and 68 percent of respondents with a college degree or more.
 - The percentage of respondents who report that it would be a problem to find a new caregiver who would be with the child at least a year ranges from one-third in the City of Detroit to two-thirds in southern Michigan. Roughly half the residents in all other regions also report this as a problem.
 - Roughly half of respondents in every region, with two exceptions, report that having enough care arrangements from which to choose is a problem. The exceptions are southern Michigan (where 66 percent see this as a problem) and northern Michigan (42 percent). However, the percentage who say it would be a “major” problem ranges from 18 percent in northern Michigan to 40 percent in the southern region.

Caring for Other Children

QUESTION 26: While you care for your own ___-year-old, do you regularly care for other people's children as well?

EXHIBIT 28

Caring for Other Children as Well as One's Own



SOURCE: Survey, Public Sector Consultants, Inc., 1999.

- Roughly one-quarter of all respondents report caring for another child, regardless of the number of hours the survey child is in care each week or the age of the survey child.
- The percentage of respondents who report caring for another child at the same time they care for their own decreases as the respondent's level of education increases.
 - Of respondents with less than a high school diploma, 42 percent care for another's child(ren) in addition to their own.
 - Of respondents with a high school degree or some college, the figure is 26 percent.
 - Of respondents with at least a college degree, the figure is 12 percent.
- Regionally, the percentage of respondents who report caring for another child ranges from about 15 percent in metro Detroit and southern Michigan to a high of 54 percent in the City of Detroit.
- More than twice as many African-American respondents than Caucasian (57 percent and 22 percent, respectively) care for another child while they care for their own.

Survey Instrument and Percentage Responses

Hello, I'm calling from Public Sector Consultants, a Lansing consulting company. We are conducting a survey to get background information on early childhood education and child care in Michigan. This survey is not being conducted for any candidate or political party. Public Sector Consultants is using the survey to help evaluate ways to strengthen Michigan's early childhood education and child care system.

Do any children under age 5 live with you?

Yes [CONTINUE]
No [TERMINATE: Thank you for your time.]

May I speak with the person who most often arranges child care for the child/children?

Yes [CONTINUE]
No [INTERVIEWER: Is there a time I may call this person back?]

[REPEAT INTRODUCTION IF RESPONDENT IS NOT THE ONE WHO ANSWERED THE PHONE, THEN CONTINUE BELOW]

Before we begin, let me tell you that this interview is completely voluntary. If we come to any question that you don't want to answer, just let me know and we'll go on to the next question. Let me also assure you that all your responses will be confidential. Neither you nor your children will be identified in any way.

1) To begin, please tell me . . .

a) How many children under age 18 live with you and each of their ages?

1 child	36%
2 children	39%
3 children	17%
4 children	6%
5 children	2%
6 children	1%

[RANDOMLY SELECT ONE CHILD UNDER AGE 5 FOR USE IN THE SURVEY. USE **CHILD’S AGE** IN PLACE OF NAME OR GENDER THROUGHOUT SURVEY IN REFERENCE TO THE CHILD (“YOUR 3-YEAR-OLD” OR “YOUR 3-MONTH OLD”).]

b) In what month and year was your [CHILD’S AGE] born? [IF RESPONDENT HESITATES, PROMPT, “Knowing your child’s birthday will help us group your responses with other parents who have children of that age. It will also help me refer to your child throughout the survey by age rather than his or her name.”]

Less than 1 yr old	21%
1–2 years old	37%
3–4 years old	42%

I will now read you a list of questions to help me understand **from whom** and **where** your [CHILD’S AGE] receives early childhood education and child care. **For this survey, the phrase “early childhood education and child care” means that your child spends some or all of his or her day with someone other than a parent or guardian.** This includes the time your [CHILD’S AGE] spends in Head Start, day care, school readiness, preschool/pre-kindergarten, or enrichment programs.

2) Does anyone other than your [CHILD’S AGE]’s parents or guardians care for him or her?

Yes [CONTINUE]	46%
No [SKIP TO QUESTION 25]	54%
Don’t know/refused/other [SKIP TO QUESTION 25]	0%

3) During a typical week in the last month, did your [CHILD’S AGE] receive education or care **in your home** but provided by someone other than yourself, another parent, or a guardian?

Yes [CONTINUE]	32%
No [SKIP TO QUESTION 6]	68%
Don’t know/refused/other [SKIP TO QUESTION 6]	0%

- 4) Who else provided the care? Was it provided . . .
- a) By your [CHILD'S AGE]'s brother or sister?
- Yes 23%
- No 77%
- Don't know/refused/other 0%
- b) By your [CHILD'S AGE]'s grandparent or other relative?
- Yes 51%
- No 49%
- Don't know/refused/other 0%
- c) By someone not related to your [CHILD'S AGE] at all?
- Yes 53%
- No 47%
- Don't know/refused/other 0%
- 5) During a typical week in the last month, how many hours did your [CHILD'S AGE] receive care in your own home? Again, only include the time that your [CHILD'S AGE] spent with someone **other** than a parent or guardian.
- 1-10 31%
- 11-34 33%
- 35-55 14%
- 56 or more 15%
- Don't know/refused/other 7%
- 6) During a typical week in the last month, did your [CHILD'S AGE] receive education or care in **someone else's** private home?
- Yes [CONTINUE] 47%
- No [SKIP TO QUESTION 9] 53%
- Don't know/refused/other [SKIP TO QUESTION 9] 0%
- 7) Who else provided the care? Was it provided . . .
- a) By your [CHILD'S AGE]'s grandparent or other relative?
- Yes 49%
- No 51%
- Don't know/refused/other 0%

b) By someone not related to your [CHILD'S AGE] at all?

Yes 64%
No 36%
Don't know/refused/other 0%

8) During a typical week in the last month, how many hours did your [CHILD'S AGE] receive care in someone else's private home?

1-10 20%
11-34 34%
35-55 42%
56 or more 4%
Don't know/refused/other 1%

9) During a typical week in the last month, did your [CHILD'S AGE] receive education or care in a day care center, nursery school, or other early childhood program that is **not** located in someone's private home?

Yes [CONTINUE] 47%
No [SKIP TO QUESTION 12] 53%
Don't know/refused/other [SKIP TO QUESTION 12] 0%

10) Was the location . . .

a day care or child care center, or 50%
a half-day nursery school, pre-school, school readiness, parent cooperative,
Head Start, or early childhood enrichment program, or 39%
both? 11%
Don't know/refused/other (volunteered) 1%

11) During a typical week in the last month, how many hours did your [CHILD'S AGE] receive care in these programs?

1-10 23%
11-34 42%
35-55 30%
56 or more 5%
Don't know/refused/other 0%

I will now ask you a series of questions about **all** of the education and care arrangements for your [CHILD'S AGE]. As you answer these questions, please keep in mind **all** of the arrangements you use to provide your [CHILD'S AGE] with education and care, regardless of whether they are offered in your home, someone else's home, or a day care or nursery school.

12) [IF THE CHILD IS MORE THAN 6 MONTHS OLD, CONTINUE. OTHERWISE, SKIP TO NEXT QUESTION] When you think about all of these arrangements your [CHILD'S AGE] has today, are they the same or different from the arrangements you had 6 months ago?

Yes/existing arrangements are the same 68%
 No/existing arrangements are different 27%
 Don't know/refused/other 5%

13) During a typical week in the last month, did your [CHILD'S AGE] need education or care only between 5:30 in the morning and 7 at night, Monday through Friday?

Yes [SKIP TO QUESTION 16] 76%
 No [CONTINUE] 21%
 Don't know/refused/other [SKIP TO QUESTION 16] 4%

14) During a typical week in the last month, did your child need education or care. . .

a) On weekdays from 7 in the evening until midnight?

Yes 25%
 No 73%
 Don't know/refused/other 2%

b) On weekdays from midnight until 5:30 the following morning?

Yes 7%
 No 93%
 Don't know/refused/other 0%

c) At any time during the weekend, from Friday night through Monday morning?

Yes 32%
 No 68%
 Don't know/refused/other 0%

15) Does your [CHILD'S AGE] ever receive child care for more than 24 hours in a row?

Yes 4%
 No 96%
 Don't know/refused/other 1%

16) [ASK ONLY IF RESPONDENT IDENTIFIED MORE THAN ONE CHILD UNDER AGE 5 IN QUESTION 1. OTHERWISE, SKIP TO NEXT QUESTION] You mentioned that you have other children under age 5. Do these other children have **exactly** the same education and care arrangements as your [CHILD’S AGE]?

Yes 61%
 No 38%
 Don’t know/refused/other 0%

The next few questions have to do with how much education and child care costs.

17) Child care and education are paid for in many ways—sometimes with money from yourself or someone else and sometimes by doing or giving something in exchange. Sometimes it’s even free.

a) During the last month, how much did **all** of the education and care arrangements **for your** [CHILD’S AGE] cost? Please include amounts paid for by yourself as well as by someone else on your behalf.

0 24%
 \$1–200 23%
 \$201–400 21%
 \$401 or more 25%
 Don’t know/refused/other 7%

b) To help pay for the cost of child care, did you do something or give something to someone without receiving money in return? For example, you may have an arrangement with a neighbor whereby you watch each other’s children every other day. [IF THE ANSWER TO QUESTION 17A IS DON’T KNOW SKIP TO QUESTION 22 UPON COMPLETION. FOR ALL OTHER ANSWERS TO QUESTION 17A CONTINUE TO NEXT QUESTION.]

Yes 11%
 No 88%
 Don’t know/refused/other 1%

18) Is the amount of money you are charged for education or care programs determined by how much money you earn?

Yes 13%
 No 85%
 Don’t know/refused/other 2%

19) Some people receive assistance from a government agency, their employer, or someone outside their household such as a friend or relative to help pay for education and care. Does anyone else pay for all or part of the cost of your [CHILD'S AGE]'s education or care?

Yes [CONTINUE TO NEXT QUESTION] 12%
 No [SKIP TO QUESTION 22] 88%
 Don't know/refused/other [SKIP TO QUESTION 22] 0%

20) Who or what agency helps pay for child care? [INTERVIEWER READ OPTIONS; ROTATE; ALLOW FOR MULTIPLE ANSWERS]

Government, such as social services or the Family Independence Agency
 [OTHER ACCEPTABLE RESPONSES INCLUDE FIA, DSS, the state,
 Department of Social Services, the county, welfare, and Head Start] 43%
 Your employer 6%
 Your [CHILD'S AGE]'s noncustodial parent or guardian 0%
 A member of your family, your parents, or your friends 35%
 Other [VOLUNTEERED] 8%
 Don't know [VOLUNTEERED] 6%
 Refused/other [VOLUNTEERED] 1%

21) During an average month, how much money do you receive from these other sources to pay for child care?

\$0 30%
 \$1-200 30%
 \$201-400 10%
 \$401 or more 13%
 Don't know/refused/other 17%

The next few questions have to do with the **kind of education and care** your [CHILD'S AGE] receives.

22) [ASK ONLY IF RESPONDENT'S ANSWER TO QUESTION 6 = 1 OR QUESTION 9 = 1, OTHERWISE SKIP TO NEXT QUESTION] Within the last month, did you visit your [CHILD'S AGE] while he or she was being cared for—other than when you were picking up or dropping him or her off?

Yes 49%
 No 51%
 Don't know/refused/other 0%

23) I will now read you a list of statements about activities that may occur each day while your [CHILD’S AGE] is receiving education or care. After I read each item, please tell me whether you believe it always occurs, usually occurs, sometimes occurs, or never occurs during a typical day while your child is in care.

	Always	Usually	Some	Never	Don’t Know (vol.)	Refused (vol.)
a) My child is cared for by trained teachers and caregivers	53%	21%	6%	18%	2%	0%
b) My child is read to by a teacher or caregiver	52%	26%	15%	5%	3%	0%
c) My child has access to books that are right for his/her age	71%	20%	4%	3%	2%	0%
d) My child plays with a variety of toys that are right for his/her age	77%	18%	3%	2%	0%	0%
e) My child is fed nutritious foods and snacks	78%	16%	3%	2%	1%	0%
f) [ASK ONLY IF CHILD IS LESS THAN ONE YEAR OLD] My child’s daily activities include times to be physically active.	77%	8%	5%	9%	0%	0%
g) [ASK ONLY IF CHILD IS ONE YEAR OR OLDER] My child’s daily activities include creative time—such as art or music—as well as time for thinking and building—such as working with puzzles, building blocks, or LEGOs.	54%	31%	12%	3%	0%	0%

24) I will now read you a list of statements about your [CHILD'S AGE]'s care arrangements. Please tell me whether the statement is correct, somewhat correct, somewhat incorrect, or incorrect. [ROTATE]

	Correct	Somewhat correct	Somewhat incorrect	Incorrect	Don't know (vol.)	Refused/other (vol.)
a) I know all of my child's teachers and caregivers and what training they have	74%	22%	3%	1%	0%	0%
b) I know how many other children are typically in care with my child	88%	9%	1%	1%	0%	0%
c) I know the number of adults who typically care for my child	95%	3%	1%	0%	1%	0%
d) I know about specific ways for me to be involved with my child's education and care	89%	8%	2%	0%	0%	0%
e) My child is receiving high-quality education and care	85%	14%	0%	0%	0%	0%
f) My child is in a safe, nurturing education and care environment	94%	5%	0%	1%	0%	0%
g) My child's teacher or caregiver gives me regular feedback on how my child is doing	86%	12%	2%	1%	0%	0%

25) Sometimes people encounter difficulties, or barriers, in arranging education and care. Suppose your [CHILD'S AGE]'s current education and care arrangements were **no longer available** and **must be permanently changed**. If you tried to make **new** arrangements, please tell me whether the following items would be a major problem, minor problem, or no problem at all. If any question does not apply to your situation, please say so. [ROTATE]

	Major problem	Minor problem	No problem incorrect	Does not apply	Don't know (vol.)	Refused/ other (vol.)
a) Transportation between your home, the care location, and/or your workplace	8%	24%	58%	9%	0%	0%
b) Finding care in a location convenient to your home and/or workplace	17%	28%	46%	8%	1%	0%
c) Matching the facility's or caregiver's hours with your schedule	18%	28%	45%	8%	1%	0%
d) Finding care for children with special needs, such as a disability or chronic illness	14%	9%	19%	57%	1%	0%
e) Finding care for infants or siblings	16%	21%	40%	22%	1%	0%
f) Finding care of the same or better quality than the care you have now	40%	19%	31%	9%	1%	0%
g) Finding care of the same or lower cost than the care you have now	40%	19%	30%	11%	1%	0%
h) Finding a new care arrangement where the teacher or caregiver would be there for at least one year	22%	25%	37%	12%	4%	0%
i) Finding education and care arrangements that will care for your [CHILD'S AGE] when he or she is ill	37%	21%	31%	9%	1%	0%
j) Finding enough new care arrangements to choose from	25%	27%	38%	8%	2%	0%

Thank you. To complete the survey, I have a few **demographic questions**.

26) While you care for your own [CHILD'S AGE], do you regularly care for other people's children as well?

Yes	26%
No	74%

27) In what year were you born?

<25	20%
25-34	48%
35-44	27%
45-54	3%
55-64	1%
Refused.....	2%

28) What county do you live in?

29) What is your zip code?

City of Detroit	10%
Metro Detroit	31%
Southern.....	6%
Western	20%
Central.....	9%
Thumb	14%
Northern	10%

30) What is the highest level of education you have completed? [READ CATEGORIES]

Grade school or less (grades 1-7)	0%
Some high school.....	17%
Graduated from high school.....	31%
Vocational technical school	8%
Some college	24%
College graduate	12%
Postgraduate study or degree	6%
Don't know (VOLUNTEERED).....	0%
Refused/other(VOLUNTEERED).....	2%

31) Would you mind telling me if you are Caucasian, African-American, Hispanic, Native American, Asian-American, Arab-American, or some other ethnic group?

Caucasian	81%
African-American	10%
Hispanic	3%
Native American.....	1%
Asian-American.....	1%
Arab-American.....	0%
Other ethnic group.....	1%
Refused.....	3%

32) Are you currently married?

Yes	80%
No	20%
Refused/other	0%

33) How many other people age 18 or older live with you in your home?

1	77%
2	13%
3	1%
4	1%
5	1%
Don't know/refused/other	8%

34) Are you currently employed outside the home or enrolled in school?

Yes [CONTINUE]	61%
No [SKIP TO QUESTION 36]	39%
Don't know/refused/other [SKIP TO QUESTION 36]	1%

35) During a typical week in the last month, about how many hours did you work and/or attend class?

0	3%
1-10	3%
11-35	25%
35-55.....	52%
56 or more	13%
Don't know/refused/other	4%

36) Which of the following groups best describes your household's total income last year?

Less than \$15,000	10%
\$15,000 to \$34,999	21%
\$35,000 to \$49,999	17%
\$50,000 to \$74,999	20%
\$75,000 or more	10%
Refused (VOLUNTEERED)	22%

37) [INTERVIEWER: CODE GENDER BY OBSERVATION. *Male* = 1, *Female* =2]

Male	20%
Female	80%

Thank you for completing this survey.

PART 3

*Expenditures for Early Education
and Care in Michigan*

by Public Sector Consultants, Inc.

Executive Summary

INTRODUCTION

There are various estimates of the expenditures on early childhood education and care. Public Sector Consultants (PSC) conducted an independent analysis, using primary data from Michigan as well as extrapolations from national sources, to describe the major categories and current levels of expenditures on early childhood education and care (ECEC) in our state. The analysis is comprehensive, including not only public expenditures on ECEC but also those of the private sector and parents. In addition, PSC addresses the economic and societal benefits of giving children high-quality ECEC—higher income, higher educational achievement, lower crime rates, and less reliance of social services, to name a few.

The expenditure analysis serves two purposes. First, by presenting the current sources and levels of ECEC investment, it provides a starting point for the long-term dialogue about financing a high-quality ECEC system. Second, it provides a basis for estimating the investment that may be needed to work toward a universal and high-quality early learning system in Michigan.

CURRENT SPENDING

Michigan currently spends approximately \$1.56 billion annually on early childhood education and care. This figure includes all cash expenditures by individuals, businesses, and state and federal government for

- arrangements and facilities providing ECEC,
- education programs such as Even Start,
- paid leave for parents of newborns, and
- state oversight of the quality of registered and licensed facilities providing ECEC.

The \$1.56 billion also includes the portion of “tax expenditures” directly attributable to ECEC, notably the federal Dependent Child Care Tax Credit and the federal Child Tax Credit. (NOTE: Including tax expenditures necessitated adjusting the estimates of cash expenditures on ECEC in order to avoid double counting.)

The estimates include the value of uncompensated child care provided by parents and relatives: \$1.09 billion and \$397 million, respectively. These figures represent the replacement value of the care (i.e., what it would cost a family to pay for equivalent ECEC time) not the opportunity cost of providing the care (i.e., what a parent could have earned in the time spent providing child care).

Taken together, annual cash and non-cash expenditures on ECEC in Michigan total \$3.05 billion, or 1.2 percent of total state personal income.

Individuals and Families

Payments by Michigan families to caregivers, teachers, and programs providing ECEC services account for the largest single cash expenditure: \$741 million. Public Sector Consultants estimates that families recouped \$71 million of this amount from the federal Dependent Child

Care Tax Credit. Net of tax credits, however, family payments of \$670 million for ECEC account for 43 percent of total cash expenditures for ECEC.

Business

PSC estimates that businesses in Michigan spend about \$100 million annually on ECEC. Paid parent leave accounts for \$36 million of this amount, with on-site child care and subsidies for off-site ECEC payments comprising the remainder.

State Government

The State of Michigan is slated to spend about \$122 million on ECEC in fiscal year 1999–2000, mostly in the form of matching spending required by federal programs (\$43 million) and the Michigan Department of Education’s school readiness programs (\$72 million). In addition, the Michigan Department of Consumer and Industry Services spends nearly \$8 million overseeing the quality of licensed and registered ECEC programs.

Federal Government

Taking into account both direct expenditures and tax expenditures, in FY 1999–2000 the federal government will spend \$655 million on ECEC in Michigan (42 percent of total ECEC cash expenditures in Michigan), nearly as much as the total spent by individual families. Most of this money comes from Head Start (\$183 million) and spending in the Temporary Assistance to Needy Families (TANF) program (\$294 million).

K–12 School Districts

Michigan’s K–12 school districts provide “in-kind” (non-cash) contributions (space and utilities) worth about \$10.3 million a year to ECEC programs.

Who Spends How Much for Early Childhood Education and Care?

While the majority of families with working mothers pay for their preschoolers’ ECEC, the likelihood that a particular family will purchase ECEC and the amount it will spend varies by the type of ECEC, family type, and family income. For purposes of this report, “early childhood education and care” means any arrangement other than care by a parent (or guardian), including education programs such as Head Start. Care provided by parents is referred to as “parent care.”

The most recent federal data on ECEC expenditures come from the 1993 Survey of Income and Program Participation conducted by the U.S. Census Bureau. Where appropriate, we use terms defined by the Census Bureau, including the following:

- *Family members or relatives* Mothers, fathers, siblings, grandparents, and other relatives
- *Organized child care facility or organized facility* Daycare center, nursery school, or preschool
- *Family daycare provider* Nonrelative who cares for one or more unrelated children in his/her home

- *In-home babysitter* Nonrelative who provides care in the child's home

UNITED STATES

The Census Bureau's 1993 Survey of Income and Program Participation found that 56 percent of U.S. families with employed mothers paid for ECEC for their preschool children. Not surprisingly, the overwhelming majority (80 percent) of child-care centers and education programs, private homes, or in-home caregivers required cash payments, while five of six arrangements with a relative involved no charge.

U.S. families with mothers working full time were more likely to purchase ECEC than were those with mothers working part time (63 percent and 41 percent, respectively). Families with higher income were more likely than those with lower income to purchase ECEC. As shown in Exhibit 1, in 1993 nearly 70 percent of U.S. families with monthly income of \$4,500 or more purchased ECEC, while about 40 percent of families with income of less than \$1,200 did so. The average weekly cost per family for all preschool-aged children was \$79 for families that purchased ECEC. Families with two or more preschoolers paid about \$110 a week for ECEC (11 percent of family income), while families with one child paid \$66 per week (7 percent of family income).

EXHIBIT 1
Average Weekly Child-Care Expenditures for Preschoolers and Percentage of Income Spent on Care, by Poverty Status and Family Income, United States, 1993

	Percentage Paying for Care	Average Weekly Cost of Care	Percentage of Monthly Family Income Spent on Child Care
Poverty status			
Below federal threshold	37%	\$49.56	17.7%
Above federal threshold	58	76.03	7.3
Monthly family income			
Less than \$1,200	39	47.29	25.1
\$1,200–2,999	49	60.16	12.0
\$3,000–4,499	57	73.10	8.5
\$4,500 or more	69	91.13	5.7
TOTAL	56%	\$74.15	7.5%

SOURCE: *Survey of Income and Program Participation*, Bureau of the Census, U.S. Department of Commerce, 1995.

NOTE: The federal poverty threshold for a family of three in 1993 was annual income of about \$11,500.

Low-income families spend a much larger share of their income for ECEC than do higher income families. In 1993, U.S. families with monthly income under \$1,200 reported spending \$47 weekly on ECEC (25 percent of their income). Families with monthly income of \$4,500 or more spent \$91 per week (less than 6 percent of their income).

In-home babysitters were the most expensive type of care (\$68 weekly), followed by organized child-care facilities (\$64), family daycare providers (\$57), and relatives (\$42). The cost per child for preschoolers did not vary greatly by age, ranging from \$66 a week for infants (younger than one year) to \$56 for three-year-olds.

The cost of ECEC outstripped inflation from 1986 to 1993, growing from \$64 to \$79 per family per week in constant 1993 dollars. This figure, while limited to families with children under age six, includes services for all children in those families under age 15. PSC estimates 1998 costs for ECEC for children under age five to be \$95 per week per family in 1998 dollars.

MICHIGAN

Exhibit 2 presents PSC's estimate of expenditures on ECEC in Michigan, taking into account not only cash purchases by families but also expenditures (including tax expenditures) by government, benefits provided by companies, and the value of uncompensated child care provided by parents and other relatives. Total expenditures on ECEC in Michigan are estimated at about \$3 billion, with \$1.56 billion in direct expenditures and nearly \$1.49 billion for child care provided by parents and relatives.

EXHIBIT 2 Summary of Michigan Child Care Expenditures, 1997–1999

	Amount (millions)	Percentage of Total Cost
Individuals and families		
Gross cost	\$741.8	
Net of dependent child care credit	670.8	23.0%
Cost of replacing parental care	1,090.0	35.8
Cost of replacing care provided by relatives	397.0	13.0
Business		
Child-care benefits	65.0	2.1
Family leave	36.0	1.2
State government	121.8	4.0
Federal government		
Direct expenditures ^a	572.0	18.8
Dependent child-care credit	71.0	2.3
Child tax credit	14.6	0.5
K–12 school districts	10.3	0.3
Direct expenditures	1,561.5	51.2
Cost of replacing parent and relative care	1,487.0	48.8
TOTAL	\$3,048.5	100.0%
Addendum: Opportunity cost, ^b nonworking spouses	\$5,100.0	

SOURCE: Public Sector Consultants, Inc.

^aThe direct expenditures are all expenditures minus cost of replacing parent care (\$1,090 million) and that provided by relatives (\$397 million); they amount to \$1,561.5 million, which is 51.2 percent of the total cost.

^bOpportunity cost is the amount parents could have earned in the time spent providing child care.

NOTE: These estimates are derived from the best available data, but they are for different years. The direct cost to families and individuals and the dependent child-care credit are for 1997. The cost of replacing care provided by relatives, K–12 school districts, and expenditures by business are for 1998. The child tax credit estimate is for 1999. State government and federal government direct expenditures are for fiscal year 1999–2000.

Direct Family Expenditures

One source of information on ECEC expenditures in Michigan is the 1992 Census of Services prepared by the U.S. Census Bureau. (The report is issued every five years; the 1997 report will be available later this year). The report presents receipts for taxable child care, tax-exempt child care, and ECEC providers reporting no employees (includes family daycare providers and in-home babysitters).

Receipts for ECEC in 1992 totaled \$326 million. Assuming that they increased at the same rate from 1992 to 1997 as from 1987 to 1992 (93.6 percent), the estimate for 1997 is \$632 million.

A second, and probably more reliable, source of information on child-care expenditures is the Survey of Consumer Expenditures, prepared by the U.S. Bureau of Labor Statistics. Although state data are not available, PSC used figures for the Midwest region as a proxy for expenditures in Michigan. (Per capita income in Michigan and in the Midwest region are about the same, and available data from the Detroit metropolitan area support the notion that expenditures in Michigan will closely track those of the Midwest region.) In 1997 average family expenditures for ECEC were about \$206 monthly, which translates to total expenditures on ECEC in Michigan of \$742 million annually. For purposes of this analysis, PSC assumes that the Survey of Consumer Expenditures data provides the most accurate estimate of spending on ECEC.

Value of Parent Care

In approximately 218,000 Michigan families with children under age six (40 percent of the estimated 545,000 families with preschoolers), at least one parent is not employed and is the primary ECEC provider. At gender-adjusted median-income levels, these families forgo annual income of \$5.1 billion, assuming full-time employment. While a good starting point for discussion, this figure does not necessarily represent an accurate value for parent care.

According to the 1999 PSC survey, 54 percent of Michigan families with children under age five report that parents are the exclusive caregivers. Staggered work schedules, part-time employment, or being able to care for children at work means that in many families in which both parents work, the parents still are the exclusive caregivers of their young children. The 54-percent figure closely tracks federal statistics that show that 58 percent of mothers with preschoolers work and three-quarters of these mothers place their children in ECEC.

Not all forgone income represents an opportunity cost to parents, since those on assistance would lose part or all of their benefits were they to work full time.

The dollar cost of parent care is greater than the cost of ECEC in child-care centers and education programs because (1) the child/caregiver ratio is lower in parent care than in centers and programs, and (2) center and program caregivers earn, on average, less than the median wage. Assuming weekly ECEC costs of \$95, PSC estimates the substitution value of parent care at \$1.09 billion annually.

Value of ECEC by Relatives

PSC estimates that preschoolers in 70,000 Michigan families are cared for primarily by their nonparent relatives, two-thirds of whom are grandparents. Because a sizeable number of these grandparents are retired, it is difficult to assign an opportunity cost to this care. Assuming a weekly per family ECEC cost of \$95, however, PSC estimates the total value of ECEC by relatives at approximately \$397 million annually.

Value of Company-Sponsored ECEC

Approximately 4 percent of Michigan employees work for companies that offer company-sponsored ECEC.

- About half the companies make direct payments to child-care centers and education programs chosen by parents, while the other half sponsor on- or off-site programs.

- Large companies (100 or more employees) are more likely than smaller firms (7 percent and 2 percent, respectively) to offer ECEC benefits.
- Company-sponsored ECEC benefits are offered to about the same proportion of full- and part-time employees.
- Many more professional/technical workers than blue-collar/service workers (15 percent and one percent, respectively) receive company-sponsored ECEC benefits.

PSC estimates that 13,000 Michigan families participate in company-sponsored ECEC programs. Assuming an average ECEC cost of \$95 per week per family, the total cost of such programs is approximately \$65 million annually.

Value of Company-Sponsored Parent Leave

About 4 percent of Michigan employees work for companies that offer paid parent leave following the birth of a child. Assuming an average of three months' leave for each working parent, PSC estimates the annual value of these benefits to be approximately \$36 million.

Direct State ECEC Expenditures

The governor's recommended funding for the major state-funded programs that provide support and regulation for ECEC programs for FY 1999–2000 is as follows:

- Early Childhood Program (Michigan Department of Education): *\$60 million*. These are school-readiness funds allocated to school districts on a need-based formula.
- Early Childhood Program for Nonpublic School Children (Michigan Department of Education): *\$12 million*. These are funds awarded to agencies on a competitive basis, with low family income being first among several criteria used to award grants.
- State maintenance-of-effort and matching funds: *\$43 million*. This is direct state spending mandated by federal programs to ensure continuation of federal payments.
- Regulation (Michigan Department of Consumer and Industry Services): *\$8 million*. This is money spent to ensure that child-care and education-program facilities meet state standards.

Direct Federal ECEC Expenditures in Michigan

PSC estimates that Michigan will receive \$572 million in federal funding in FY 1999–2000 for ECEC programs, including the following:

- Head Start: *\$183 million*
- Even Start: *\$6 million*
- Child Care Development Fund (CCDF): *\$89 million*
- Direct Temporary Assistance to Needy Families (TANF), child-care services component: *\$193 million*
- Anticipated TANF transfer to the CCDF: *\$101 million*

VALUE OF EARNED INCOME-TAX CREDIT (EITC)

The EITC is a federal tax credit for people who work and receive income. The purpose of the credit is to supplement the income of the working poor and help offset their Social Security taxes. The credit is based on income and the number of children under age 18.

An individual or family with one child is eligible for a credit (to a maximum of \$2,271) if the household's earned income does not exceed \$25,760; a household with two or more children is eligible if income does not exceed \$29,290 (maximum credit is \$3,756). The credit is most advantageous to households earning \$9,400–12,300.

The credit can reduce federal taxes owed or is refunded if the credit exceeds the federal income-tax liability. While the EITC is not directly related to ECEC, the amount of the credit depends in part on the number of children in a household, and the credit increases the ability of the working poor to pay for ECEC.

For the 1996 tax year (latest data available), 564,631 Michigan households qualified for the credit, which totaled \$778.1 million. Of this amount, \$626 million was refunded to taxpayers, and the remainder offset claimants' tax liability.

About 32 percent of Michigan's 2.5 million children aged 18 or younger are under age six. If we assume that this same age distribution holds for households claiming the EITC, we can estimate that the EITC yields about \$250 million annually to help households pay for ECEC for children aged five or younger. Since people below the federal poverty level spend about 18 percent of their income on ECEC, PSC assumes that about \$45 million of the EITC is spent on ECEC. Because PSC further assumes that this amount already is included in the estimate of cash expenditures by individuals and families, it is not included as a separate figure in PSC's estimate of ECEC expenditures.

Value of Dependent Child Care Tax Credit

This credit is available to federal income-tax payers for up to 30 percent of a limited amount of employment-related dependent-care expenses for families with children aged 13 or younger. (Unlike the EITC, this credit is nonrefundable; that is, it is not refunded to the taxpayer if the amount of the credit exceeds the taxpayer's federal income-tax liability.) Eligible expenses are limited to \$2,400 for one qualifying dependent and \$4,800 for two or more. The amount of the credit depends on a taxpayer's adjusted gross income (AGI). A taxpayer with AGI of \$10,000 or less is allowed a credit equal to 30 percent of qualified work-related expenses. The percentage is reduced one percent for each additional \$2,000 of AGI above \$10,000. The credit is 20 percent for taxpayers with AGI of more than \$28,000. The maximum credit is \$720 for one qualifying dependent and \$1,440 for two or more. For the 1996 tax year (latest data available), 174,639 Michigan households qualified for the credit, which totaled \$71 million.

In estimating ECEC expenditures, PSC treats the cost of this credit as a reduction in the cost of these services for families and individuals. This is because the credit is based directly on the cost of ECEC and therefore reduces the net cost of these services. For example, as discussed above, PSC has estimated the ECEC cost to families at about \$740 million annually. The child-care tax credit reduces the cost to families by \$71 million and increases the cost to the federal government by an equal amount, but it does not change the *total* cost of ECEC.

Value of Child Tax Credit

Effective for the 1998 tax year is a new \$400 federal income-tax credit for taxpayers with children under age 17. The credit is reduced \$50 for each \$1,000 that taxpayers' modified AGI exceeds \$110,000 for joint filers or \$55,000 for married persons filing separately. The credit for one or two children cannot exceed the tax liability. For the 1999 tax year, the credit will be increased to \$500.

The Congressional Budget Office estimates that the child tax credit will reduce FY 1998–99 federal income-tax revenue by \$16 billion. Adjusting this figure by the percentage of children 16 and younger living in Michigan (3.6 percent) produces an estimated total credit of \$575 million. PSC attributes 33.7 percent of this figure, or \$194 million, to children under age five; the attribution is based on the age distribution of Michigan’s 2.35 million children aged 16 or younger. Only a small portion of this amount, however, will be spent on ECEC; on average, families spend about 7.5 percent of their income on ECEC, yielding an estimated \$14.6 million (7.5 percent of \$194 million) from the tax credit that will be spent on ECEC.

Value of In-Kind Contributions by K–12 School Districts

There are 1,463 registered ECEC programs located in schools. As a rule, school districts contribute space for these programs at no charge. At an estimated annual cost of \$7,000 per program, the total value of this K–12 in-kind contribution is \$10.3 million.

Value of Court-Ordered Child Support

Noncustodial parents paid \$1.17 billion in court-ordered child support in 1998. Assuming pro-rata distribution of these funds by age group, money intended for the support of preschoolers was \$364 million. To the extent that this money is spent on ECEC, this figure largely duplicates funds counted elsewhere.

Economic Benefits of High-Quality ECEC

A number of studies have attempted to quantify the economic and social benefits of a high-quality ECEC program. One of the most comprehensive is the High/Scope Perry Preschool Project. This study evaluated the progress over almost three decades of 123 low-income, African-American children from Ypsilanti, Michigan. The youngsters were randomly divided into a “program” group, who participated in a high-quality ECEC program, and a “no-program” group, who did not participate in preschool programming. Researchers assessed the status of the two groups annually from age 3 to 11 and then again at ages 14, 15, 19, and 27 on variables representing certain characteristics, abilities, attitudes, and types of performance. The study finds that when these individuals were aged 27, in 1992, those in the program group had higher income, a higher level of schooling, higher literacy, less reliance on social services, and less involvement with crime than those in the no-program group.

These positive outcomes and others enumerated in the report have economic values that benefit society. The study concludes that compared with the preschool programs’ cost, these benefits make the programs a worthwhile investment for taxpayers as well as society. Over the lifetime of the participants, the study calculates that the preschool programs return to the public an estimated \$7.16 for every dollar invested.

Another approach to calculating the value of high-quality ECEC programs to society is to estimate the additional lifetime income that would be earned by the children who received ECEC. The High/Scope study found that at age 27 (in 1992), the average annual earnings of the program group participants were about 20 percent higher than those in the no-program group (\$13,328 compared with \$11,186). On the basis of this finding, it is possible to estimate the additional lifetime earnings (assuming a working life of 40 years) of the program group. To make this calculation, PSC made three adjustments to the 1992 income numbers.

1. Income increases as the age of workers increases, up to age 55; then it declines until age 65. For example, Census Bureau data show that the average median income of full-time workers aged 35–44 is 9.5 percent higher than that of workers aged 25–34. PSC adjusted the income numbers to reflect age-group changes in median income.
2. PSC increased the income figures each year to reflect productivity increases. In recent years, Michigan personal income has increased 4.0–4.5 percent annually. This reflects inflation of 2.5–3.0 percent and increased productivity of 1.5–2.0 percent. PSC assumes that productivity would increase at an annual rate of 1.5 percent. Our estimate is in 1997 (“real” dollars), therefore, no inflation adjustment was needed. Only real, or productivity-based, increases make workers better off; cost-of-living increases offset higher prices and leave workers no better off.
3. PSC updated the 1992 income estimates to 1997. From 1992 to 1997, Michigan per capita income increased 26 percent. PSC assumes that the average income of program and no-program groups increased at the same rate.

On the basis of these calculations, a person in the program group would earn \$146,523 more (in 1997 dollars) over 40 years than would a person in the no-program group. To calculate the total benefit to the Michigan economy, PSC multiplied this figure by the number of children aged five and younger who live in families with income of 200 percent or less of the poverty level (311,505 youngsters). This yields an estimate of \$45.6 billion of additional income, or \$1.14 billion annually.

PSC also calculated the amount of state and local tax revenue that would be generated by this additional income. In 1997 Michigan state and local tax revenue amounted to 15.5 percent of personal income. Assuming that this share had remained constant over the analysis period, state and local governments would have collected an additional \$7.1 billion (in 1997 dollars), or \$176.9 million annually. There also would be substantial savings to state and local government from reduced crime and welfare benefits and increased efficiency of the education process. (Some of these cost savings per program participant are calculated in the High/Scope report, but they have not been translated to total savings for Michigan state and local governments.)

Conclusion

This first comprehensive study of current ECEC expenditures in Michigan reveals that public and private investment in children before kindergarten lags well behind investment made for school-age children, despite research findings that demonstrate the critical importance of early brain development. Combined public and private investment in Michigan children before kindergarten is about \$2,200⁴ a year per child. Public investment per school-age child is about \$7,200—more than three times the preschool figure.

⁴The spending-per-child before kindergarten figure of \$2,200 (rounded up from \$2,150) was calculated by dividing direct expenditures of \$1.56 billion by the number of children age five and one-half (the approximate age that children begin kindergarten) or younger. As there are no census estimates of the number of children age five and one-half or younger in the state, our figure (726,087 children) was calculated by averaging U.S. Census Bureau estimates of the number of children age four or younger (657,085) and the number of children age five or younger (795,089) residing in Michigan as of July 1, 1998. Direct expenditures rather than total expenditures were used for calculating expenditures per child because the purpose is to compare actual dollars spent on children in school (K-12) with actual dollars spent on preschool children.

PART 4

Seeking a Universal and High-Quality Early Education and Care System: The Challenge

by the System Subcommittee of the
Ready to Learn Summit Planning Committee

Introduction

A committee of Michigan early childhood education and care experts undertook a difficult task not yet tried in most other states. Members applied brain-science research findings to early childhood education and care (ECEC) and recommend that a universal (available to all children) and high-quality ECEC system must have the following three components:

- Parent involvement and support
- High-quality caregivers, teachers, and settings
- Community responsibility

This description of such a system has two purposes. First, it serves as a starting point for the Ready to Learn Leadership Summit and the subsequent dialogue about what Michigan's early-learning system can become. Second, it makes it possible to estimate—by presenting specific strategies to expand parent involvement, increase nonparent caregiver/teacher availability and quality, and spur community leadership on ECEC—the investment necessary to create a universal and high-quality early learning system. The description follows here, augmented by comments summarizing the views of several hundred people who participated in 19 community forums across the state prior to the Ready to Learn Leadership Summit on June 11, 1999.

A Universal and High-Quality ECEC System

OVERALL GOAL

The overall goal is universal, high-quality early childhood education and care that aims for every child always to be with or closely supervised by a competent, caring adult and recognizes that parents, ideally, are the most important teachers and caregivers.

GIVENS

- Brains of young children develop in response to their surroundings (i.e., their environment).
- Adults who care for young children are the most important part of their environment.
- To achieve healthy intellectual, social, and emotional development, young children must form stable, loving relationships with parents and other caregivers.
- Neglect, abuse, and exposure to toxic substances diminish children's development.
- Children benefit greatly from love and respect, good nutrition and health care, and opportunities to play and explore; their development is seriously impeded if they do not receive such benefits.
- Longitudinal studies show that children who enter kindergarten properly prepared, through positive early education and care experiences, have a far greater chance than they otherwise would of doing well in school, graduating, and being prepared to enter the workforce; moreover, they are less likely than they otherwise would be to need special education, welfare, corrections, or other remedial services.

- All sectors of society are influenced by the quality of early childhood education and care in the state, and all sectors are able to influence the quality of the earliest years of children's development.
- The goals of Michigan, including the state legislature and administration, include developing physically, emotionally, and intellectually healthy children, having all children ready to learn when they begin kindergarten, developing a competent workforce, and reducing crime and the need for welfare.

RECOMMENDATION

Michigan should commit to developing a universal, high-quality system of early childhood education and care, with costs and benefits shared by private and public sectors, that has as its measure of success the extent to which all children enter kindergarten ready to learn and succeed.

Assumptions Underlying High-Quality ECEC

- Parents are their children's first and most important teachers.
- Children develop their brain in response to their environment; this begins before birth.
- Early childhood education and care are family centered and community based.
- Parents must have education and care services options available that will meet a variety of needs, including full- and part-time programs, care during nontraditional working hours, care for temporarily ill youngsters, services for children of all ages, and special-needs ECEC for children who require it.
- Developing universal, high-quality ECEC requires partnerships among businesses, charitable foundations, communities, the education profession, faith-based organizations, government, media, parents and the ECEC community.

The discussion that follows is presented in three parts that parallel the subcommittee's premise that a high-quality ECEC system for all children must comprise the following:

- Parent involvement in and support of ECEC
- Quality-assurance standards and professional development
- Community responsibility

Parent Involvement in and Support of ECEC

Research shows that the more involved parents are in their child's ECEC, the greater the benefit to the child.

OPTIONS

Parents need two important options to increase their involvement in their children's ECEC.

- Paid leave for at least six months if they choose to stay at home with their newborn during his/her first year. A further option is to stay home for an additional six months, without pay but with job security and benefits.
- The opportunity to have access to and choose the type of care that best meets their children's needs. The various types of care are at-home parent care, at-home nonparent care, care by a relative, nonrelative care in another's private home, and care in a child-care center or education program.

ADVOCACY

Because "children are everyone's responsibility," all sectors of the community—e.g., educators and caregivers, providers, community and government leaders, citizens, and especially parents—should advocate for all children to have the best chance possible to succeed. We must identify and address barriers that inhibit good outcomes for children.

PARENT AND PUBLIC AWARENESS CAMPAIGN

Parents must have the information and skills necessary to advocate for their children effectively and make good choices. There already are local and statewide initiatives to foster parent involvement in their child's ECEC, but parent use of them needs to be expanded, and workplace policies should support parents' active involvement in such programs and all other aspects of their children's education and care.

An ECEC public-awareness campaign is needed to (1) target hard-to-reach parents (e.g., those with no or limited skill in speaking English or those with low literacy), (2) encourage all parents to take advantage of the parent-support and parenting-education programs that should exist in every community, and (3) promote such important child-development actions as reading to one's children.

COMMUNITY FORUM COMMENTS

Several hundred people attended 19 community forums in various locations around the state (see the appendix) in preparation for the Ready to Learn Leadership Summit. The prevailing opinions expressed at these forums about parent involvement in their child's ECEC are summarized and paraphrased below.

- Paid parent leave is desirable but idealistic, and widespread parent leave probably is not realistic. To enable small businesses to grant paid leave, incentives such as tax breaks are necessary.
- Although many large companies are making a concerted effort to adopt "family-friendly" policies, the business community in general needs education in this regard, specifically pertaining to brain-science research findings. Family-friendly policies most frequently cited as desirable are flexibility in scheduling, working from home, job sharing, on-site child care, and parent-education programs offered at breaks and lunchtime. The way to convince business of the value of family-friendly policies is to show cost benefit (e.g., less use of sick time, greater workforce stability).

- Educating, in a positive way, all parents about everything related to ECEC is essential. People are not doing the job of parenting wrong, but parenting is a challenge for everyone, and there is a lot people don't know. Among the strategies mentioned are the following:
 - Teach human brain development, as it relates to early experiences, as part of middle- and high-school curricula.
 - Include parenting education in faith-based premarital counseling and as part of the video review required for obtaining a marriage license.
 - Link every family with a specific school from the moment of a child's birth, and use the school as a conduit for education and outreach to families.
 - Include in parenting education information about caregiving, nutrition, immunization, language development, anger management, discipline, and all important aspects of human development.
 - Provide materials that are simple, easy-to-read, practical, culturally appropriate, and attractive. Use public service announcements and videos to deliver information on parenting. Make the information available through libraries, malls, doctor's offices, buses, and grocery stores. Give special help to parents who need assistance with reading.
 - Enable parents to learn about ECEC through support groups, children's play groups, and other types of experiences.
 - Train physicians for the big role they can play in parent education, especially during prenatal and well-baby visits.
 - Make available to all parents early brain-development and parenting information through all "touch points": doctor's offices; clinics; schools; such popular retail stores as Kmart, Wal-Mart, Target, and Meijer; the workplace; and "on the sides of buses."
 - Make children's books easily available and accessible to parents.
 - Establish an 800 number for people to call regarding parenting ideas, problems, and services (care should be taken to avoid confusion with 800 numbers that pertain to abuse and neglect reporting and crisis counseling).
- The following are specific ways to accomplish outreach to all parents:
 - Make a connection with parents during their hospital stay when their babies are born. Although there is too little time during the stay for a parent to learn about nutrition, bathing, playing, talking, and other caregiving essentials, the connection with the family should be made.
 - Follow the hospital connection with regular home visits; many communities have visiting programs for newborns, but many of these programs are too short.
 - Make available transportation to connect families to education, health care, and community programs; public (e.g., education, city/county) and private (e.g., Head Start) transportation could be coordinated through centralized dispatch.
- Parents need affordable early education and child care. Strategies to accomplish this include
 - parent support groups, with incentives for participating, and
 - a public-awareness campaign (including long-term advertising in all media markets about valuing young children) to educate the entire community about the importance of a child's first years.

- A strong advocacy network for parents, supported with adequate resources, should be established. Among other actions, the network should
 - advocate for incentives, such as tax breaks, to create work-based child care at the business site or in partnership with nearby businesses;
 - encourage employers to offer child care as a pre-tax fringe benefit;
 - seek state reimbursement to teen parents for child care;
 - promote more affordable “drop-in” care; and
 - require the Family Independence Agency to evaluate the availability of high-quality ECEC as parents who are receiving agency assistance prepare for and enter the workforce.
-

Quality-Assurance Standards and Professional Development

A high-quality ECEC system necessitates establishing (1) licensing standards for all facilities, programs, and individual providers and monitoring conformance with the standards and (2) a system for professional development of people in ECEC; both should be based on findings from ECEC and brain research. For facilities, there should be frequent inspections, health and safety code requirements, equipment and curriculum requirements, and accreditation. For ECEC personnel, there should be ongoing curriculum training, pre-service and in-service requirements, evaluation, and accreditation.

Appropriate, accessible education opportunities for everyone involved in ECEC (parents, caregivers, early childhood program administrators, and educators) are central to a successful and high-quality ECEC system; the system must provide continuing professional development and “best-practices” training.

Recognition is an integral part of professional development; people who are involved in ECEC and meet certain standards and requirements should receive a wage comparable to other professionals with similar education and training. Moreover, there should be financial incentives linked to continued training, education, and accreditation. Every effort should be made to attract people to and retain them in ECEC, but it must be recognized this can occur only with reasonable compensation and benefits.

QUALITY-ASSURANCE STANDARDS

- A high-quality ECEC system must include strong quality assurance. Standards should be developed—incorporating findings from research on ECEC quality and brain science—for application to the following:
 - ECEC provided by all adults other than parents and also for agencies that employ and refer in-home caregivers
 - Health, safety, and nutrition; maximum group size; adult/child ratios; staff education and professional development; caregiver/child interactions; parent education and communication; community service links; parent involvement; program and curriculum; and physical environment

The system should be staffed at a level enabling every ECEC program to be visited annually and monitored by regulatory staff for compliance with quality-assurance standards.

A tiered ECEC ranking system, consisting of 3-4 levels, should be established. Caregivers/facilities would apply for the level of quality assurance at which they wish to be ranked.

- Level 1** Basic Health and Safety (meets fundamental health and safety standards)
- Level 2** Limited Attainment of Quality (meets certain minimum quality-assurance standards)
- Level 3** Quality Program of Distinction (meets certain additional quality-assurance standards)
- Level 4** Distinction with Accreditation (meets full complement of quality-assurance standards and achieves accreditation)

The ECEC quality-assurance system should publish annually a public document listing the quality level achieved by every regulated ECEC program.

PROFESSIONAL DEVELOPMENT

Education for everyone involved in ECEC is central to the success of the system. In a high-quality system, education opportunities will be

- available in every community,
- part of a statewide career ladder for ECEC professionals,
- part of a professional-development system that includes both pre-service and continuing-education requirements,
- part of a credit-articulation system that crosses degrees and credit-awarding institutions,
- provided to parents (through educational materials) at key points in their children's lives (i.e., birth, toddler, three years),
- offered with financial incentives (e.g., low-interest loans, tiered reimbursement, and so on) to participating programs and individuals, and
- promoted by communities working in partnership with early childhood and parent networks.

COMMUNITY FORUM COMMENTS

The prevailing opinions about quality-assurance standards and professional development expressed at the 19 forums are summarized and paraphrased below.

- ECEC teachers and caregivers are not paid enough. Compensation levels must be high enough to attract and retain providers.
- Training for professional nonparent caregivers is essential and should be accomplished through a statewide system and required on a continuous basis at hours convenient to providers. Training also should be available for relatives, grandparents, and informal caregivers.
- To create a high-quality ECEC system, it is essential to license providers, monitor them regularly, enforce standards, and assist them in making system improvements based on new knowledge.

- There is a need for special care arrangements (e.g., during nontraditional hours, for infants, for special-needs children, for ill children). It will be necessary in many cases to subsidize start-up costs of such arrangements.

Community Responsibility

Children are the responsibility of everyone—including the community as a whole. A high-quality ECEC system that ensures that every child will be ready to learn will engage all sectors of the community that can affect a child’s life. It will be founded on community-based planning and actions to monitor and improve the degree to which children are healthy, safe, ready to learn, and able to succeed. It will have high-level state leadership that focuses attention on young children and their families and supports communities as they become engaged in ascertaining their residents’ ECEC needs and working to build a high-quality early-learning system.

COMMUNITY-BASED PLANNING

Communities should plan and carry out local initiatives that connect families, ECEC providers, and local, state, and national resources.

LINKS

A comprehensive, universal ECEC system will have links with other resources and systems that support children and their families and help make children ready to learn. This will be accomplished through the efforts of a wide variety of local public- and private-sector leaders, who forge links with other resources and systems, such as North Carolina’s “Smart Start” system.

EVALUATION AND RESEARCH

The success of an ECEC system will be guaranteed by creating formal “feedback” loops. Feedback is essential in assessing the overall status of young children in communities and statewide; it can be used to evaluate ECEC programs and professionals’ effectiveness and also to identify areas that need to be improved or changed.

Researchers must continually explore ways to improve the ECEC system and provide direction on best practices. The findings, when communicated, will improve communities’ understanding of the connection between high-quality ECEC and investment in the ECEC system and how they affect how children turn out.

STATEWIDE INFRASTRUCTURE

A high-quality ECEC system will include state leadership that can support and leverage resources for community-based ECEC planning and action.

FINANCING

A high-quality ECEC system will be financed by collaborative approaches that bring all funders (including parents, employers, and government) together to implement, evaluate, and work toward improvements.

COMMUNITY FORUM COMMENTS

The prevailing opinions about community responsibility expressed at the 19 forums are summarized and paraphrased below.

- A whole new government system for ECEC planning and action is not necessary. It is preferable to build on what we have, e.g., human services coordinating councils or Early On groups.
- Another option is a private- or nonprofit-sector “neutral entity” that would coordinate and provide flexible local community ECEC funding.
- There currently is no “web” among all services, connecting people to programs and programs to one another.
- Community ECEC planning is critical. It should focus on preventing problems for families and children, assess current services and initiatives, identify problems facing children aged 0–5, and identify gaps in services and funding to meet ECEC needs.
- A statewide systems approach is needed. The state’s roles should be to support local innovation and also to work with the federal government to influence federal regulations, programs, and funding that affect communities in regard to ECEC.
- Each community should determine what it should do within a framework of state goals.
- Communities should involve businesses in shaping local ECEC; the State Chamber of Commerce could be used as the statewide communications network in regard to ECEC involvement by businesses.
- Communication in communities is important and should focus on what is working, useful, and new.
- Through one source, new ECEC information, such as new models, should regularly be made available to communities.
- State agencies should coordinate all early childhood initiatives.
- State funding for such services as Maternal and Infant Support and Healthy Focus must be stabilized.
- To finance ECEC, local millages may be passed, a state tax imposed, or local and state tax or other incentives made available to encourage businesses to share the cost of on-site ECEC.

PART 5

Closing the Michigan ECEC Investment Gap

by Public Sector Consultants, Inc.

Introduction

A bold step has been taken in Michigan: The Ready to Learn Leadership Summit Planning Committee has created a picture of a universal and high-quality early childhood education and care (ECEC) system. Employing the knowledge and perspective of parents, other caregivers/teachers, and community leaders statewide, the committee gave the picture sufficient detail to enable Public Sector Consultants (PSC) to quantify the investment needed to make the system a reality. The strategies listed here may not be complete or even appropriate for every Michigan community, since many localities have moved forward and are poised to increase their efforts to prepare young children for success.

The purpose of this analysis is to provide a starting point for dialogue about promising strategies to close the gap between what we now invest in ECEC in Michigan and what we must invest to achieve universal (available to all children) and high-quality ECEC.

Strategy Costs

PAID PARENT LEAVE

Although proposals for paid parent leave after the birth of a child vary widely, most childhood experts agree that the first six months are a critical time for children to develop attachments to their parents. Public Sector Consultants estimates the cost of six months' paid parent leave at \$1.49 billion, given the following assumptions:

- 130,000 children are born annually in Michigan.
- Parent leave will be available to either parent but not both simultaneously. PSC assumes that of those taking leave, two-thirds will be women and one-third men.
- 65 percent of mothers of newborns now in the workforce are employed full time, with median weekly earnings of \$456.
- 35 percent of employed mothers of newborns work part time. Assuming an average workweek of 20 hours, the median weekly income of these women is \$278.
- 96 percent of fathers of newborns work full time, with median weekly earnings of \$598.

PARENT EDUCATION

Parents, regardless of education or income level, often need answers to important questions about how best to care for their preschoolers. Strategies to increase parenting skills have been implemented on a small scale with a great deal of success.

- The Michigan Department of Education's Read, Educate and Develop Youth (READY) program kits are intended to ensure that children can read by the fourth grade. READY really is for parents: It helps them work with their children aged 0–3 to help them later become successful readers.

- Some communities offer visits by an infant-health specialist to the home of every family with a newborn. Visits begin before a child's birth and may continue until s/he enters kindergarten. The goal of such programs is to offer parenting information and assistance.

It would cost an estimated \$3.7 million annually to produce and distribute 250,000 READY kits. When all current parents of preschoolers have received a kit, the cost of the effort will be cut approximately in half as the number of kits produced is reduced to match the annual number of births.

Pilot home-visit programs show that the number of visits required to establish an effective relationship varies greatly, depending on parent income and education. Some parents may need weekly visits, while others may get the same benefit from 6–12 visits a year.

The cost of a system of universal home visits is estimated at \$347 million, with average annual participation by 60 percent of Michigan's 535,000 families with preschoolers. This model assumes that the number of home visits will vary from 12 to 48 a year, depending on a family assessment; this yields a demand for approximately 9,300 parent educators, who would average four home visits a day. This model further assumes a caseload of 30 families per parent educator, slightly higher than is the case in the Michigan pilot programs. PSC expects, however, that as the programs move from serving only the at-risk population to serving the full population, caseloads can rise without a sacrifice in quality of service. PSC further assumes average compensation of \$14.40 an hour, including benefits, and an amount equal to 25 percent of this figure for administration and overhead.

PUBLIC-AWARENESS CAMPAIGN

Successfully implementing a universal, high-quality ECEC system will require a strong public-awareness campaign. Such a campaign should have the intensity and duration necessary to ensure that parents and others understand and appreciate the importance of nurturing and stimulation during a child's early years.

In recent years, public attitudes toward AIDS prevention, drunk driving, smoking, and drug use have been molded through public awareness campaigns. These campaigns have in common that they are (1) long-term efforts and (2) delivered through a variety of media. At the height of Michigan's campaign to increase awareness regarding AIDS prevention—which had the advantage of occurring simultaneously with a federally funded campaign and the creation of community groups to shape local prevention efforts—state government spent approximately \$1 million a year. Currently, Michigan spends about \$5 million on anti-smoking education.

PSC estimates the cost of an effective campaign focusing on ECEC at approximately \$3 million. This campaign can be highly targeted: Data are available on where parents of preschoolers live and shop. It is possible that contributed time and public-service announcements can be obtained, which could reduce the campaign's cost.

In addition, such organizations as Michigan's 4C network are an important source of public information. Local/regional 4C offices offer referrals for child care and family services, training related to child care and child development, community services coordination, consultation and technical assistance, and advocacy on children's issues. The 4C network currently is represented in 15 counties in Michigan; to expand the network to all 83 would require an annual budget of \$7.7 million.

WORKPLACE INITIATIVES

A number of workplace policies are shown to benefit employers and employees alike by reducing employee stress and anxiety, turnover, and recruitment and training costs while improving morale and productivity. Such policies include

- job sharing, time off when children are ill, or other time-adjustment policies,
- on-site child care and/or subsidies for high-quality off-site care, and
- employer-provided information on child care.

Financial incentives for employers will speed adoption of these policies. Although numerous possible tax-incentive strategies are possible, PSC believes that one realistic strategy is to offer a refundable single business tax (SBT) credit that is of sufficient size to be more than just token compensation for the expenses incurred in putting into place one or more of the policies listed immediately above.

PSC estimates the cost of financial incentives to business at approximately \$102 million, assuming

- a credit of 8.5 percent of a company's SBT liability;
- approximately 730,000 parents of preschoolers are employed full-time;
- companies adopting these policies would lose an average of 10 workdays per year per employee;
- the strategy would be designed to compensate companies for 25 percent of their anticipated loss; and
- approximately half of Michigan employers would participate.

Workplace initiatives also should include establishing a resource/referral system that will give companies information on low- or no-cost ways to institute "family-friendly" policies and educate employers on the importance of proper child brain development and early learning. Since current experience shows the cost of such initiatives to be about \$3 per employee per year, PSC estimates the total cost of a resource/referral system at \$2 million a year.

HIGH-QUALITY ECEC

According to a longitudinal study released in 1999 by the National Institute of Child Health and Human Development (NICHD), there is a strong correlation between the quality of child care and the intellectual and emotional development of preschoolers. The study finds that the following are related to high-quality care:

- Better mother-child relationships
- Reduced probability of insecure mother-child attachment among infants of mothers with low sensitivity to their child
- Fewer reports of problem behavior in children
- Higher cognitive performance by children
- Higher language ability in children
- Higher level of school readiness

Conversely, the study finds that the following are related to lower-quality care:

- Less harmonious mother-child relationships
- A higher probability of insecure mother-child attachment among children whose mothers have low sensitivity to their child
- More problem behavior, lower cognitive and language ability, and lower school readiness scores

As the number of parents entering the workforce rises, parents are experiencing increasing difficulty in finding acceptable ECEC arrangements. Numerous studies indicate that the current ECEC system is flawed by several problems.

FLAWS IN THE CURRENT SYSTEM

Unstable Arrangements

In a March 1999 PSC survey, 27 percent of respondents whose children receive ECEC from people other than their parents reported that the arrangements had changed in the previous six months. In addition, 37 percent of these parents reported that they have more than one ECEC arrangement. For example, the child may spend part of the week with a grandparent, part with an in-home caregiver, and part in a child-care center or education program. Such arrangements can be unstable and contribute to parent and child stress.

High Cost

For the past decade, child-care costs have risen at about twice the inflation rate. At an average per child cost for full-time care of \$98 per week, a mother of two preschoolers who is employed at the median wage spends about 40 percent of her take-home pay on child care. For parents with less earning potential, the cost of child care is a serious barrier to employment. Even when lower-cost care is available, it is likely to be of questionable quality: The NICHD study shows a correlation between cost and quality of child-care arrangements.

High Child/Caregiver Ratios

Michigan currently allows a child/caregiver ratio of 4 to 1 for children through 2½ years, and 10 to 1 for children from 2½ to six. These ratios are too high to ensure high-quality care.

Substandard Staff Qualifications

Currently, pre-service training is required only for the directors of child-care centers, who have little contact with the children in their programs. To assure that all adults providing ECEC are competent to do so, Michigan needs to institute both pre-service and continuing education requirements for ECEC providers.

Low Wages

According to U. S. Bureau of Labor Statistics data, preschool teachers were paid an average of \$9.09/hour in 1997 compared to \$19.85/hour for a kindergarten teacher. Child-care workers and family child-care providers fare even worse, with average income of \$7.03 and \$4.69 an hour, respectively.

High Staff Turnover

Family daycare providers in Michigan currently suffer annual turnover of 40 percent, while turnover in child-care centers and education programs is 18–22 percent. Anecdotal evidence

suggests that children in child-care centers and education programs may have a new teacher three times within a year, making the establishment of relationships difficult.

ADDRESSING THE FLAWS

A universal, high-quality ECEC system will address the flaws listed above.

- First, the system would be large enough to accommodate all children who now receive education and care from people other than their parents. Parents would arrange care with grandparents or other relatives or friends only if they believe such an arrangement to be of most benefit for the child, not because it is the only option available or affordable. There would be some overcapacity built into the system, to accommodate the “friction” associated with parents moving and seeking new arrangements, employee turnover, and so on.
- Second, the system would be of very high quality, featuring appropriate child/caregiver ratios and highly qualified staff whose pay is commensurate with their qualifications.
- Third, the system would be affordable, implying increased subsidies from the government and/or employers.

PSC estimates the annual cost of a universal, high-quality early education and care system in Michigan at \$2.23 billion, assuming the following:

- Participation by 46 percent of Michigan’s 700,000 preschoolers. According to the PSC survey, 54 percent of preschoolers currently receive ECEC exclusively from their parents. The universal system would replace most or all other education and care arrangements.
- Average participation of 40 hours a week. Although a number of employed parents work part time and therefore require less than full-time ECEC arrangements, the PSC survey shows that children receiving nonparent ECEC spend an average of 40 hours per week in such arrangements.
- Low child/caregiver ratios. Most child-development experts consider a ratio of 3:1 appropriate for children aged under 3 and 8:1 appropriate for children aged 3–6.
- Adequate compensation. PSC assumes two caregiver levels: Teachers, comprising one-third of the caregivers, would be highly trained (holding at least a bachelor’s degree) and paid an average of \$12/hour plus benefits equal to 25 percent of their pay. Teacher aides, comprising two-thirds of the caregivers, also would be trained, and they would be paid \$10/hour plus benefits equal to 25 percent of their pay.
- Continuing education. All caregivers would receive 45 hours of training annually at a cost of \$15/hour.
- Overcapacity of 10 percent.

FACILITY OVERSIGHT

The Michigan Department of Consumer and Industry Services’s 92 full-time child-care consultants currently have an average caseload of 233 facilities. PSC estimates that effective oversight of organized and family-daycare facilities necessitates an average caseload of no more than 100 facilities, which suggests \$17 million is needed annually for facility oversight.

COMMUNITY RESPONSIBILITY

The work to build a high-quality ECEC system must be carried out in communities, with strong, organized support from a state-level partnership of business, labor, government, philanthropic, academic, media, faith, and political leadership. Communities are the primary designers and implementers of the strategies that combine to form a high-quality early learning system. They are the locus of commitment and innovation, but they need funding and technical assistance to enable them to focus on all children and bring all key players and all resources to the table. The attendance and enthusiasm exhibited in the 19 Ready to Learn community forums held prior to the leadership summit clearly demonstrate statewide commitment to moving forward in individual communities on strategies to build a proper ECEC system.

Michigan is fortunate to have building blocks in place for the essential community activity needed to build a high-quality ECEC system. These include

- the “multi-purpose collaborative bodies” now in place in counties to better coordinate health and human services,
- the community-health assessment and improvement activity in every county, which organizes regular, community-wide assessments of residents’ health and quality of life, and
- other community-wide efforts to improve the future of all residents.

COMMUNITY PLANNING AND ACTION

By definition, community planning and action is a local activity, which means communities tailor their assessments and actions to fit their own needs and priorities.

To stimulate statewide local planning and action focused on early learning, a state-level partnership is needed to “catalyze” a public-private approach and establish a broad framework in which the system can develop and flourish. Specifically needed to support the framework are funding, technical assistance, and assurance of long-term commitment for long-term quality improvement.

The state-level partnership would comprise funders and members of the sectors represented at the Ready to Learn Leadership Summit; the group would design collaborative approaches to finance, implement, and evaluate strategies to create a high-quality ECEC system. One option is legislation that establishes a private, nonprofit entity charged with setting goals for Michigan children aged 0–5; local partnerships would work toward these goals. Key charges to the state partnership would be to (1) leverage financing across sectors and funders to provide flexible dollars for local innovation and education and (2) evaluate local progress in reaching goals. Just encouraging collaboration is not enough; the partnership should make possible sufficient flexible funding to truly improve the quality of early education and care.

State agencies with responsibility for various parts of the ECEC system are among the key partners and must fully participate if there is to be success in better using the large categorical funding that supports many services for Michigan families.

If a per capita approach is used to fund community planning and action statewide, and the minimum awarded to a county is \$40,000 and the maximum \$100,000, the annual cost of community planning and action in Michigan’s 83 counties is \$4.1 million. Counties would use the funds to

- bring together at the county level the same sectors that are participating in the state-level partnership, using established collaborations and perhaps expanding them to assure broad involvement;
- assess the status of ECEC in the county's communities, looking at services offered, service gaps, and assets available and needed to improve the former and address the latter;
- set objectives and propose strategies to reach them; and
- identify the additional funding and technical assistance needed for five years out.

Each county would develop a community plan that the state-level partnership would review to identify strategies that it should financially support to improve quality and expand local ECEC. The community plans will help state-level players understand the local assets, gaps, and strategies that communities identify and pursue; this in turn will help inform the state-level strategic considerations needed for long-term improvement.

To understand fully the effect of implementing a universal and high-quality ECEC system, it will be essential to regularly evaluate progress over a very long time. Evaluation properly is driven by different goals at different times.

- Examples of goal evaluation at years one and two:
 - How many counties have begun planning?
 - How many have submitted plans?
 - How many plans have been approved?
- Examples of goal evaluation at year five:
 - How many families are receiving READY kits?
 - What is the immunization rate of young children?
 - How many new education and care spaces have been created that meet quality-assurance standards?
- Examples of goal evaluation at year ten:
 - What is the incarceration rate of individuals aged 16–25?
 - How do special-education expenditures compare to 1999?

PSC estimates that a state-level ECEC partnership will cost \$2 million annually. This figure includes operating costs (director, staff, infrastructure), a revolving fund from which to make innovation and education grants to communities working toward the universal high-quality ECEC system, and evaluation. The state would fund most of the entity's operating expenses, and staff would be responsible for leveraging state dollars among private donors in order to replenish the revolving fund.

Closing the Gap

Michigan currently spends approximately \$1.55 billion on early education and care, including spending by individuals, government, and businesses. PSC estimates the cost of a universal and high-quality ECEC system to be \$4.41 billion annually; the gap between what now is spent in Michigan for ECEC and what is needed for a high-quality system is \$2.86 billion. Put another way, for every \$100 of their income, Michigianians currently spend 60 cents on ECEC; under the proposed universal system, this spending would rise to \$1.74 for every \$100 of income.

Taking into account the value of uncompensated ECEC provided by parents and relatives, PSC estimates current spending at \$3.0 billion, while the cost of the universal system rises to \$5.9 billion. In absolute terms, the spending gap of \$2.86 billion remains, but in percentage terms, the required spending increase falls from 184 percent to 94 percent.

PAID PARENT LEAVE

Approximately 2 percent of Michigan companies now offer paid leave either to new mothers, new fathers, or both. PSC estimates the cost of these benefits at approximately \$36 million. The funding gap is \$1.46 billion.

PARENT EDUCATION

Parent-education programs are not widespread, and they are funded mostly by foundations. Total spending on such programs probably does not exceed \$5 million. Therefore, to fully implement parent education will require additional spending of \$345 million.

WORKPLACE INITIATIVES

The State of Michigan currently offers no financial incentives for companies to introduce family-friendly policies, and very few companies have undertaken informational initiatives. PSC sees a gap of 100 percent, or \$104 million.

PUBLIC AWARENESS

Currently, the \$2.3 million budget of Michigan's 4C network represents the state's only organized public-awareness effort in regard to the value of high-quality ECEC. PSC estimates that if the 4C network is to be expanded and a comprehensive media effort launched, there is a funding gap of \$7.9 million.

QUALITY EDUCATION AND CARE

The cost of a universally available, high-quality ECEC system based on organized programs and services must be matched against aggregate spending on early education and care by individuals, government, and business as well as the value of uncompensated child care offered by grandparents and other relatives. By subtracting current spending, PSC does not suggest that adopting a universal system would prohibit care by nonparent relatives or replace such effective programs as Head Start; rather, PSC simply is taking steps to avoid double counting. PSC estimates actual expenditures on education and care plus the value of uncompensated child care by relatives at \$1.90 billion; the gap is \$932 million.

FACILITY OVERSIGHT

Given the Michigan Department of Consumer and Industry Services's current budget of \$7.9 million for monitoring the quality of education and child care facilities, PSC estimates the spending gap is \$9.1 million.

COMMUNITY AND STATE RESPONSIBILITY

There currently is no spending on functions that specifically target early education and care. To fund the initiatives outlined in this analysis will require filling a gap of \$6.1 million.

APPENDIX: Counties Participating in Ready to Learn Forums



SOURCE: Public Sector Consultants, Inc.

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