

EARLY EDUCATION: FROM SCIENCE TO PRATICE

HEARING
OF THE
COMMITTEE ON HEALTH, EDUCATION,
LABOR, AND PENSIONS
UNITED STATES SENATE
ONE HUNDRED SEVENTH CONGRESS
FIRST SESSION
ON

EXAMINING EARLY EDUCATION ISSUES, FOCUSING ON QUALITY EDUCATIONAL PROGRAMS, PARENT INVOLVEMENT IN EARLY CHILDHOOD DEVELOPMENT, AND SEPARATION OF EDUCATION FOR CHILDREN WITH SPECIAL NEEDS

FEBRUARY 12, 2002

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EARLY EDUCATION: FROM SCIENCE TO PRACTICE

TUESDAY, FEBRUARY 12, 2002

U.S. SENATE,
COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS,
Washington, DC.

The committee met, pursuant to notice, at 9:32 a.m., in room SD-430, Dirksen Senate Office Building, Hon. Edward M. Kennedy (chairman of the committee) presiding.

Present: Senators Kennedy, Dodd, Jeffords, Murray, Gregg, Bond, and DeWine.

OPENING STATEMENT OF SENATOR KENNEDY

The CHAIRMAN. The committee will come to order.

It is just after 9:30, and I know that my colleagues are on their way, but we do have a series of votes, unfortunately, at 10:30, three votes, which I regret, and I apologize to our witnesses. People ask about the changes in the U.S. Senate, and this is one of the more unfortunate aspects of it, because it interrupts the flow of the hearing and I think presents additional interference with our guests and witnesses, many of whom have come a long way to share their experience with us on a matter of enormous importance.

So I apologize to everyone.

We have as well this morning a variety of very urgent hearings, with the budget hearing, the Enron hearings—I do not think any of the other hearings are as important as what is happening here, quite frankly. But nonetheless, a number of our colleagues are on those committees.

This is a subject matter which is of enormous interest to all the members of our committee on both sides of the aisle. I would mention my good friend, Senator Dodd, who has done an outstanding job in the area of children and has chaired the Children's Caucus; and Paul Wellstone, who has been tireless on this issue in working with us; and many of our colleagues on both sides. Senator Gregg has been very strongly interested in it; Senator Bond as Governor was active and involved in this cause. You can just go across the spectrum.

Our first panel will bring us the best in terms of the science, what we know. It is now incontrovertible about what we know about the child and his or her ability to make progress.

Then, we will hear from some of those who have been most active and involved in developing programs.

I think we have some of the best that we could have before us today. There are many others whose advice and counsel we will seek. But we know that in 1989, the Nation made a commitment about children being ready to learn when they go to school, and we have the opportunity to make a difference, and we are interested in how we can best achieve that.

I would also like to mention that Senator Harkin wanted to attend today's hearing on this very important issue, but unfortunately could not because of his responsibilities as manager of the farm bill which is currently being considered on the Senate floor.

I will put my full statement in the record as well as the statement of Senator Enzi and turn to Senator DeWine for any brief comments he may wish to make.

[The prepared statement of Senator Kennedy follows:]

PREPARED STATEMENT OF SENATOR KENNEDY

Today's hearing continues the dialogue on what we need to do to ensure that our youngest children reach school ready to learn. We have before us today, the nation's leading experts in the science of early childhood development, as well as state and national leaders who have successfully used that science to establish successful state and local programs for children from birth to age five.

Last month we, were honored to have the First Lady appear before this committee to stress the importance of nurturing children's learning and skills during the critical years between the crib and the classroom. Last week, President Bush announced that early education is one of his top domestic agenda items. And it's a top priority for this Committee, too.

In 1989, at the National Education Summit, then President George Bush and the nation's governors established eight national goals to reform the nation's education system. The first goal was that by the year 2000, all children should start school ready to learn.

It is now thirteen years later and we still have a long way to go to meet this goal for our children. Our youngest children still have many unmet needs and our nation's early education system remains largely fragmented, underfunded and poorly staffed.

Today, even more than in 1989, the science is crystal clear. Over the past decade, experts from many disciplines and perspectives have echoed the same conclusion—that what we do for our children in their earliest formative years, sets the foundation in school and in life.

With this scientific consensus, Congress has a new opportunity—and a growing responsibility—to improve the quality of education for the nation's youngest children.

There is much to be done. As elementary and secondary education has been a priority over the last two years, we must now devote the same energy to early education. We were successful in working in a bipartisan manner to achieve significant reforms in the Elementary and Secondary Education Act. In the same bipartisan spirit, we must move on to the next frontier in education—pre-school.

It is time to close the gap between what we know and what we do. The science of early development, especially brain development,

has advanced significantly. We know that human development is on a course set long before birth. We also know that the environments that children are in influence that course. Today we will examine the research on early childhood development and hear from experts in the science of early childhood development. Then we will examine state initiatives that bridge the gap between what the science tells us and what we do to ensure our children arrive at our schools ready to learn.

Some states and communities have begun to address this challenge. They have formed strong partnerships at the state and local level to weave the current patchwork of early education and care programs into a high quality, unified system of early education services for all children in America, especially for those at greatest risk of academic failure.

We must do more to improve the existing federal efforts and to improve the quality of these programs. We must coordinate the current array of federal programs more effectively, from Early Head Start, to Head Start, to the Child Care and Development Block Grant to Title I.

To improve the chances for children to succeed in school, we must also focus our investments on developing well-trained, highly skilled teachers who have the knowledge and financial resources to create stimulating care environments that help all children to develop and prepare for school.

This could be the most important issue before this Committee this year. And we look forward to hearing from our distinguished witnesses.

[The prepared statement of Senator Enzi follows:]

PREPARED STATEMENT OF SENATOR ENZI

Thank you Mr. Chairman. I appreciate this opportunity to discuss the vital issue of early childhood education. I would like to thank all of our panelists for their testimony before the Committee.

We all agree that making sure our nation's children are ready to learn when they reach the schoolhouse door is a top priority. In fact, research indicates that the early years are crucial for brain development, and that there is a direct correlation between the amount of stimulation young children receive in their early years and their success in learning and intellectual growth as they mature. I was surprised to discover, however, that there is still a great deal of disagreement between experts in the field about the best way, or time, to start helping young children learn.

In light of this fact, I would encourage this committee to work to develop solutions that are flexible enough to take into account differing ideas about what makes a quality early education program, as well as the unique needs of small, predominantly rural states like Wyoming. As we continue to examine the issue of early childhood education we must keep in mind that it is the responsibility of the individual states to set the standards that will help to ensure that children enter school ready to read and learn. In fact, the Wyoming Department of Education recently formed the Early Childhood Standards Task Force to create early learning standards for school readiness that will assist parents, early childhood educators, and other child care providers in designing learn-

ing experiences and curriculum to help young children prepare for success in school. As federal legislators we must clear away any obstacles and unnecessary red tape that would slow or stop the implementation of these standards that so many people in Wyoming are working so hard to develop.

I would also like to take this opportunity to commend First Lady Laura Bush for her commitment to the issue of early childhood education. The success of the White House Summit on Early Childhood Cognitive Development, which brought together hundreds of educators (including Wyoming's Superintendent of Public Instruction, Judy Catchpole), researchers, librarians, business leaders and federal officials to help us better understand the issues surrounding early childhood learning, is a credit to this Administration. Two important early education initiatives, which will directly impact the work of this Committee, were announced at this summit. First, the formation of a joint task force, headed by the Departments of Education and Health and Human Services, that will work to determine the best ways to ensure young children enter school ready to learn. This goal will be accomplished by studying research-based strategies on reading and math readiness and recommending how they can be widely implemented in federally funded preschool programs. Second, Secretary of Education, Rod Paige, announced a plan to overhaul the Head Start program, which currently serves 880,000 poor children. This proposal, which I wholeheartedly support, will shift the focus of the federal government's major preschool effort to emphasize literacy and pre-reading skills for the first time. I am confident that this shift in the focus of the Head Start program will bring our nation's children closer to reaching President Bush's goal of ensuring that all children can read before the end of the third grade.

Mr. Chairman, I look forward to hearing the testimony of all of our panelists. I know that their expertise in the field of early childhood education will bring us closer to understanding what our states can do to ensure that no child is left behind, just as President Bush requested.

OPENING STATEMENT OF SENATOR DEWINE

Senator DEWINE. Mr. Chairman, I will make it very brief and ask that my statement be made a part of the record and just thank you for holding this hearing on something that we all know is so very, very important in early childhood development.

The CHAIRMAN. Thank you.

[The prepared statement of Senator DeWine follows:]

PREPARED STATEMENT OF SENATOR DEWINE

Thank you Chairman Kennedy and Ranking Member Gregg for holding this important hearing today. All of us here know that our children are the most vulnerable members of our population and yet our most valuable resources. As the parents of eight and grandparents of six, soon to be seven, my wife Fran and I know the responsibility, time, and dedication it takes to ensure that children, especially very young children, receive proper care.

The first five years of a child's life are a time of momentous change. Research shows that a child's brain size doubles between birth and age three. I remember my own children during this time, and it seemed like every day they were learning and doing something for the first time—walking, crawling, or learning another new word.

Kids are like sponges, particularly at this early stage of life. That's why education is such an important part of our children's lives, not just when they reach kindergarten, but really from the day they are born.

Early learning programs play a pivotal role in preparing our children for kindergarten and beyond. First Lady Laura Bush has taken an important leadership role in this issue with her "Ready to Read, Ready to Learn" initiative, which has helped put early learning into the national spotlight. For example, when she testified before this Committee just a few short weeks ago, she discussed a marked discrepancy that exists in our country. She explained that when children enter their kindergarten classrooms on the first day of school, they are not all starting from the same point. In other words, some children are much more advanced than others.

Research shows that children who attend quality early childcare programs when they were three or four years-old score better on math, language, and social skills tests in early elementary school than children who attended poor quality childcare programs. In short, children in early learning programs with high quality teachers—teachers with an associate's degree or a bachelor's degree—do substantially better.

Although states have dramatically increased spending on pre-primary initiatives, this funding is only sufficient to provide services to a small number of eligible children.

Right now, these programs are reaching children mostly three or four years of age. We also need to reach those children younger than three years-old—those children whose brains are in a period of rapid growth which significantly impacts language development and gross motor skills.

When we examine the number and recent expansion of pre-primary education programs, it becomes difficult to differentiate between early education and child care settings because so often, they are intertwined. With 75% of children less than five years of age in some kind of regular child care arrangement, we need to determine where to target early learning initiatives.

I am eager to hear from the panel as to how they view the relationship between childcare and early learning, especially in respect to the science behind the practice. These are all very complex issues. We need to find a balance between establishing quality pre-primary education programs and ensuring that we reach as many children as possible.

Again, I thank Chairman Kennedy for holding this hearing, and I look forward to working with my colleagues on this vital issue.

The CHAIRMAN. It is a privilege to welcome our first witness, Dr. Jack Shonkoff. Jack is dean of the Heller School of Social Policy at Brandeis and served as chair of the Committee on Integrating the Science of Early Childhood Development for the Institute of Medi-

cine and the National Research Council of the National Academy of Sciences. He co-edited the final report, "From Neurons to Neighborhoods: The Science of Early Childhood Development."

Ed Zigler has been at this committee probably more times than I have over 40 years, and we are always glad to have him. He is the grandfather of the Head Start program, and we recognize his contributions and expertise. He has just been a tireless advocate for children and children's needs, has written extensively and has been a valued advisor to all of us on this committee. We always welcome and learn from Dr. Zigler.

And Dorothy Strickland, we thank you very much for being here. She is a former classroom teacher, reading consultant, early learning disabilities specialist, and is past president of the National Reading Association and was been very much involved in the Summit that Ms. Bush held and was a leader in many of those discussions. We look forward to her comments as well.

Welcome, Senator Gregg. Senator DeWine and I restricted ourselves to one-minute comments and put our statements in the record. I do not want to suggest anything, but if you would like to be recognized at this time—I have already said how interested you are and what leadership you are providing.

[Laughter.]

Senator GREGG. I would love to have you speak for me. I will put my statement in the record also.

[The prepared statement of Senator Gregg follows:]

PREPARED STATEMENT OF SENATOR GREGG

In 1989, President George Bush challenged our nation and our nation's Governors to do two things: First, to develop a strategy to improve our educational system and thereby the academic performance of our nation's students and second, to work toward the goal that all children would enter school ready to learn.

Well, the first part of the challenge was realized thanks to the hard work and dedication of our current President, George W. Bush, who challenged those of us in this body to put partisanship aside, roll up our sleeves, and get to work on behalf of the children. And we did just that.

With the passing of the ESEA Reauthorization, we have taken significant, if not monumental steps to improve the education of our K-12 students.

The second part of the challenge, that all children would enter school ready to learn, remains, and has now become the focus of our attention.

I am hopeful that we can embark upon achieving this goal with the same passion, commitment, and willingness to put politics aside as we did the first.

It is clear to all of us who have examined the data on brain development that learning takes place well before a child steps foot inside the kindergarten classroom. The care, attention, education and nurture that a child receives prior to school sets the foundation for his or her formal education.

In fact, much of this learning takes place not in the classroom, but at home. Parental interactions and involvement can have a

profound influence on the social and cognitive development of preschool age children.

Sights, sounds, touches—these are the things that early learning is made of. That is what the science tells us. Yet the challenge today is how to translate that into effective and responsive governmental policy. One that recognizes and respects the fact that parents are choosing from a wide variety of options, ranging from at-home care, to family care, to formal preschool. These options are varied, but they are all designed to attain the same goal—that children be able to enter school ready to learn.

Three weeks ago we heard from the First Lady about the importance of literacy development. Not from flash cards, but from healthy, consistent and responsive adult-child interactions.

Today we will continue to dialogue on these important issues. We will learn what science has to tell us about how young children learn and under what circumstances are they able to learn and thrive. We will examine the importance of quality interactions with children, both in the home, and outside of the home, and will hear first hand from practitioners who are involved in providing enriched early opportunities for children and helping parents learn more effectively how to be their child's first and most important teacher.

Mr. Chairman, I thank you for holding this hearing today and look forward to a dialogue on this important issue.

The CHAIRMAN. And I see that Senator Bond has arrived. We also said good things about you, Senator Bond—

Senator BOND. Gee, I should have gotten here earlier.

[Laughter.]

The CHAIRMAN. We are going to have three votes at 10:45, and as a result, we each took about 45 seconds to welcome our witnesses. I indicated that you have been a strong leader on this issue, particularly when you were Governor, and we welcome your involvement.

If you want to say a brief word, we will be glad to hear it.

OPENING STATEMENT OF SENATOR BOND

Senator BOND. Thank you, Mr. Chairman.

I will take the suggestion of brevity very seriously. We are delighted to have our good friends, Dr. Zigler and others, with whom we have worked for many years, but I am extremely pleased today that Sharon Rhodes will be speaking about Parents as Teachers. I have been working with her since 1985, when we started the program statewide in Missouri. She is currently director of program development. She has helped develop onsite technical assistance. She has worked in cooperation with neuroscientists at Washington University to make the scientific determinations which prove what we have seen from our own nonscientific observation about the importance.

She has a long history with the Bush Center in Child Development and Social Policy at Yale University and serves as an adjunct instructor at the National Academy of the School of the 21st Century.

She will be able to tell you why we are so enthusiastic in Missouri about Parents as Teachers.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much. We look forward to her testimony.

Dr. Shonkoff, we will hear from you now.

I would ask the witnesses to do their best in 5 or 6 minutes. These are enormously important presentations and are the heart of this whole effort, so we do not want to shortchange you, but to the extent you can help us, we would appreciate it.

STATEMENTS OF DR. JACK P. SHONKOFF, DEAN, HELLER SCHOOL, BRANDEIS UNIVERSITY, WALTHAM, MA; EDWARD ZIGLER, STERLING PROFESSOR OF PSYCHOLOGY, YALE UNIVERSITY, NEW HAVEN, CT; AND DOROTHY S. STRICKLAND, STATE OF NEW JERSEY PROFESSOR OF READING, GRADUATE SCHOOL OF EDUCATION, RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY, NEW BRUNSWICK, NJ

Dr. SHONKOFF. Thank you, Senator. I am out to prove that an academic can speak in less than 6 minutes.

My name is Jack Shonkoff, and I am dean of the Heller School for Social Policy and Management at Brandeis University, and I am a board-certified pediatrician.

Recently, I had the privilege of serving as chair of the National Research Council and Institute of Medicine committee that produced the widely disseminated report entitled, "From Neurons to Neighborhoods: The Science of Early Childhood Development."

I would like to begin by thanking Senator Kennedy, Senator Gregg, Senators Bond and DeWine, and the other distinguished members of this committee who are not able to join us for focusing the Nation's attention on our youngest children.

I am going to speak to you this morning not as an advocate but as the chair of a committee of scientists whose analysis, conclusions and recommendations were subjected to the rigorous review of the National Academy of Sciences. In the spirit of brevity, I offer four conclusions from the NRC/IOM report.

No. 1, molecular biologists at the forefront of the Human Genome Project and prominent behavioral scientists all agree that each of us is the product of both a unique genetic endowment and the influence of our personal life experiences.

No. 2, human relationships are the active ingredients of environmental influence on child development. The well-being of young children is influenced most significantly by their parents but also by the other important people in their lives, who increasingly include nonfamily members who provide early care and education.

No. 3, the development of intelligence, emotions, and social skills is highly interrelated. How children feel is as important as how they think, and how they are treated is as important as what they are taught, particularly with respect to their readiness for the challenges of school.

No. 4, early childhood interventions can have significant positive impacts, but programs that work are rarely simple, inexpensive, or easy to implement. Poorly designed services delivered by inadequately trained providers are unlikely to produce measurable benefits.

In contrast, knowledge-based interventions that are funded sufficiently and delivered effectively are a wise public investment.

Policies that dismiss or ignore the science of early childhood development miss an opportunity to address the roots of many important national concerns. Consider the following questions: How can the recently enacted No Child Left Behind Act of 2001 call for stronger performance standards and financial incentives to attract and retain talented teachers while we tolerate inadequate training and poor compensation for the providers of early care and education throughout the very important preschool years?

Why do we measure the success of welfare reform primarily in terms of labor force participation when large numbers of working mothers with young children are still living in poverty and extensive research shows that poverty, particularly in the first 5 years, is a very strong predictor of academic difficulties and failure to complete high school?

How can we reconcile our concern about violent crime with the fact that we have effective treatments for young children who have been victimized by family violence and yet most of these emotionally traumatized youngsters receive not professional mental health services?

Half a century of considerable public investment in early childhood research has generated a rich science base. However, the gap between what we know and what we do is unacceptably wide. Consider the following examples of how we could narrow that gap.

If we really want to enhance children's readiness for school, we must pay as much attention to their emotional health as we do to their cognitive skills. Early literacy is clearly very important, but knowing the alphabet on your first day of school is not enough if you can't sit still or control your temper in the classroom.

If we really want to promote the nurturing and stable relationships that are necessary for the healthy development of all young children, then we must address two compelling needs of equal importance. First, we must find a way to provide paid family leave to support parents who wish to stay at home with their babies; and second, we must assure affordable and decent-quality care and education for the infants, toddlers, and preschool children of parents who return to work.

If we really want to secure the Nation's economic and political future, we must invest in better training and compensation for those who provide early care and education for children beginning at birth and up to the entry into school. And we must build community-based systems that ensure full access to programs that work, and equally important, we must rethink the delivery of interventions that do not work.

The committee of scientists who produced "From Neurons to Neighborhoods" concluded that the time has come to stop blaming parents, communities, business, and government and begin a new public dialogue based on rethinking the balance between individual and shared responsibility for our Nation's youngest children.

Those who call for greater individual accountability and those who advocate for a more active Government role are both right. Those who support increased public investments in early childhood services have an obligation to measure whether they work and how

much they cost. Those who oppose Government intervention must acknowledge the clear and incontrovertible scientific evidence that well-implemented services based on sound knowledge can make a significant difference for vulnerable children and that marked inequalities in access to effective programs result in a highly uneven playing field for America's young children well before they ever begin school.

I thank you very much for the opportunity to speak with you this morning, and I would be happy to answer any questions that you might have.

The CHAIRMAN. Thank you very much, Dr. Shonkoff.
[The prepared statement of Dr. Shonkoff follows:]

PREPARED STATEMENT OF JACK P. SHONKOFF, M.D.

My name is Jack Shonkoff. I am the Dean of the Heller School for Social Policy and Management and Gingold Professor of Human Development and Social Policy at Brandeis University. I am also a Board-certified pediatrician with two decades of practical experience in the delivery of health care and early childhood intervention services who had the privilege of serving as Chair of the National Research Council and Institute of Medicine Committee that produced the recently released report entitled, *From Neurons to Neighborhoods: The Science of Early Childhood Development*.

I would like to begin by thanking Senator Kennedy and this distinguished Committee for focusing the nation's attention on the health and development of our youngest children. I also would like to acknowledge the support of The First Lady, Laura Bush, who testified before this Committee three weeks ago, and underscore the importance of a bipartisan approach to this critical national interest.

I speak with you this morning, not as an advocate or provider of services, but as the chair of a committee of scientists who conducted a critical analysis of current knowledge about early childhood development, and whose conclusions and recommendations were subjected to the rigorous review of the National Academy of Sciences. The unimpeachable integrity of this distinguished institution and the credibility of its endorsement should not be underestimated.

In the spirit of brevity, I offer four core conclusions from the NRC/IOM report. These are not based on my personal opinion. This is cutting-edge science.

1. Human development is determined by both nature and nurture. Molecular biologists at the forefront of the Human Genome Project and leading behavioral scientists agree that each of us is the product of both a unique genetic endowment and the influence of our personal life experiences. For young children, beginning at birth, the question is not whether early experience matters, but rather how early experiences shape individual development.

2. The essential features of the environment that influence children's development are their relationships with the most important people in their lives. When these relationships provide love, stability, security, responsive interaction, and encouragement of exploration and learning, children thrive. When these relationships are unstable, neglectful, abusive, or disrupted by significant life stresses such as economic hardship, substance abuse, or serious mental illness, the consequences can be severe and long lasting. Children's early development is influenced most significantly by the health and wellbeing of their parents. It is also affected by the quality of their relationships with the other important people in their lives, who increasingly include non-family providers of early care and education. Together these relationships define the cultural context within which core values are transmitted from one generation to the next.

3. The early emergence of intelligence, emotional regulation, and social skills are highly inter-related and the development of competence in each is closely intertwined with the others. Starting from birth, children are remarkably inquisitive explorers who experience a range of powerful emotions. Before their first birthday, they can feel the exhilaration of mastering a challenging task as well as the deep and lasting sadness that builds in response to trauma, loss, or early personal rejection. As their brains mature, their ability to master new skills grows and these emerging learning abilities are linked closely to their capacity to regulate their feelings and control their own behavior.

4. Early childhood programs that deliver carefully designed services by well-trained staff can have significant positive impacts on young children with a wide

range of developmental difficulties, but interventions that work are rarely simple, inexpensive, or easy to implement. There are no magic bullets or quick fixes for addressing the complexities of human development. Poorly designed interventions delivered by inadequately trained providers are unlikely to produce significant benefits. In contrast, state-of-the-art services that are funded sufficiently are a wise public investment that is likely to return both short-term developmental dividends and long-term human capital gains.

Stated simply, although the politics of early childhood are complicated, the needs of young children are relatively straightforward and the messages from the scientific community are clear:

- All aspects of human development are influenced by both the genes we inherit and the environment in which we live.
- Human relationships are the “active ingredients” of environmental influence on child development.
- How children feel is as important as how they think, particularly as it affects their readiness to meet the challenges of school.
- Developmental pathways can be influenced positively by effective parenting and supportive environments, and early problems can be treated effectively, but the success of early childhood intervention services depends on the quality of their implementation and the knowledge and skills of those who provide them.

When our public policies dismiss or ignore the science of early childhood development, we miss an opportunity to address the underlying roots of many important national concerns. Let me offer a few examples:

- How can the recently enacted No Child Left Behind Act of 2001 emphasize the need for stronger performance standards and financial incentives to attract bright and highly motivated teachers, while we simultaneously tolerate large percentages of inadequately trained and poorly compensated providers of early child care and education who have an important influence on the foundations of school readiness?
- Why do we measure the success of welfare reform primarily in terms of labor force participation when large numbers of working mothers with young children are still living under the poverty level, and recent research indicates that poverty in the first five years may be a stronger predictor of not completing high school than is poverty in middle childhood or adolescence?
- How can we reconcile our national concern about reducing violent crime with the fact that we know how to treat very young children who have been abused or exposed to family violence, yet most of these emotionally traumatized children receive little or no professional mental health services?
- Why do we focus public debate on the relative merits of alternative investment options for the Social Security trust fund and not also address the compelling question of how best to invest in the young children whose future productivity will be essential to the continued viability of the Social Security system “as we know it?”

Over the past few decades, there have been marked changes in the nature, schedule, and amount of work engaged in by parents of young children, and greater difficulty balancing workplace and family responsibilities for parents at all income levels. At the same time, growing numbers of young children are spending considerable time in child care settings of highly variable quality, some of which pose real threats to their health and development. In 1999, the National Household Education Survey reported that 61 percent of children under age 4 were in regularly scheduled child care, including 44 percent of infants under 1 year.

The knowledge needed for informed policies to promote the well-being of all our nation’s children has been gained from nearly half a century of considerable public investment in early childhood research. Although the science is growing at an increasingly rapid pace, the gap between what we know and what we do is unacceptably wide. Let me offer a few examples of what could be done to narrow that gap.

If we really want to enhance children’s readiness for school, then we must pay as much attention to the development of their social and emotional competence as we do to their cognitive and linguistic abilities. The current emphasis on early literacy, which should be supported, will not achieve its full impact if early childhood professionals are not prepared to help the many young children whose learning is compromised by limited attention, aggressive behavior, anxiety, depression, or difficulty making or sustaining relationships. Knowing the alphabet on your first day of school is not enough if you can’t sit still or control your temper in the classroom.

If we really want to support families and enhance child well-being, then we must promote healthy relationships between young children and the adults who raise them. If we really want to strengthen those relationships, then we must find a way to create more viable choices for working mothers—by developing politically and economically feasible mechanisms to provide both paid parental leave for those who

wish to stay at home with their young children and affordable, quality care and early education for the children of those who return to work.

If we really want to reduce disparities in school readiness based on social class, then we must promote real partnerships among federal, state, and local governments to create more unified and effective systems of services, from birth to school entry. Current early childhood programs were established in a piecemeal fashion over time—and their variable quality and persistent fragmentation result in a confusing array of services for families, marked inefficiencies in the use of public and private resources, a difficult environment for assuring accountability and assessing impacts, and significant inequalities in access to programs that are most effective, leading to a highly uneven playing field for America’s youngest children well before they begin school.

If we really want to secure the economic and political future of our nation, then we must enhance the value of our investments in early childhood programs by increasing the knowledge, skills, and compensation of those who provide these services. An education agenda that neglects the professional development of those who influence the foundation that is built in the first 5 years of life ignores the science of learning, and assures that many children will be left behind before they have a chance to start.

Most children successfully master the challenges of growing up in a wide range of circumstances. A significant number do not. Most of those who experience difficulties along the way are helped to get back on track by the skilled guidance of their parents and other adults who care for them. A highly vulnerable subgroup exhibits serious and persistent problems that require specialized intervention.

The NRC/IOM report, *From Neurons to Neighborhoods*, calls for “a new national dialogue focused on rethinking the meaning of both shared responsibility for children and strategic investment in their future.” In its concluding thoughts, the report states:

The time has come to stop blaming parents, communities, business, and government—and to shape a shared agenda to ensure both a rewarding childhood and a promising future for all children.

There is a compelling need for more constructive dialogue between those who support massive public investments in early childhood services and those who question their cost and ask whether they really make a difference. Both perspectives have merit. Advocates of earlier and more intervention have an obligation to measure their impacts and costs. Skeptics, in turn, must acknowledge the massive scientific evidence that early childhood development is influenced by the environments in which children live. (National Research Council and Institute of Medicine, 2000. pp. 414–15)

I applaud the efforts of this Committee, under your leadership, Senator Kennedy, to focus the nation’s attention on our youngest children and their families, and I welcome the opportunity to answer any questions that you may have. Thank you.

The CHAIRMAN. Dr. Zigler?

Mr. ZIGLER. Good morning. It is an honor to be invited back to the Senate before this particularly August committee and to share my expertise with all of you.

I am the Sterling Professor of Psychology at Yale University. I also head the Psychology Section of the Yale Child Study Center and direct the Bush Center in Child Development and Social Policy. I have authored 32 books and over 600 scientific papers, the majority dealing with topics pertinent to children’s development and learning.

In the area of social policy, I have worked with every administration, Republican and Democrat, since Lyndon Johnson. I served in Washington during the Nixon Administration as the first director of what is now the Administration on Children, Youth, and Families, and as chief of the United States Children’s Bureau.

I was one of the planners of our Nation’s Head Start Program and a recent spinoff as well, Early Head Start. Over Head Start’s 36 years, I have become known as both its best friend and its most vocal critic. Of late, there have been criticisms that Head Start is

not doing a very good job teaching literacy to its young students. I will offer my suggestions on that point in a moment.

First, let me state that I concur that the ability to read is absolutely essential for an individual to have a successful life. I therefore applaud President and Mrs. Bush for the impetus they have provided to assure that every child in America will be a successful reader.

However, as someone who has studied the growth and development of children for almost 50 years now, it is my responsibility to point out that reading is just one aspect of cognitive development and that cognitive development is just one aspect of human development.

Cognitive skills are of course very important, but they are so intertwined with the physical, social, and emotional systems that it is myopic, if not futile, to dwell on the intellect and exclude its partners. This is one of the many good points that my colleague, Jack Shonkoff, made before you just minutes ago.

Think about what goes into literacy. Yes, it involves mastery of the alphabet, phonemes, and other basic word skills. But a prerequisite to achieving mastery is good physical health. The child who is frequently absent from school because of illness, or who has vision or hearing problems, will have a difficult time learning to read. So will children who suffer emotional troubles such as depression, attention deficits, or posttraumatic stress disorder.

And think about motivation. A child's curiosity and belief that he or she can succeed are just as important to reading as knowing the alphabet. Phonemic instruction by the most qualified teacher will do little for a child who suffers from hunger, abuse, or a sense of inferiority.

I am urging that we broaden our approach to literacy by focusing on the whole child. We must also broaden our understanding of when and where literacy begins. I was delighted with the First Lady's forum with you recently in which she went back to her role as a parent in teaching words and language to her own children.

I have heard a lot of preschool teacher-bashing lately, but in reality, literacy begins much earlier than age 4, as Mrs. Bush pointed out to you. It begins with the thousands of loving interactions with parents after an infant is born. It begins as a child develops a sense of self-worth by realizing that his or her accomplishments, whether they be learning to roll over or to recite the alphabet, are important to significant others. It begins with sitting in a safe lap, hearing a familiar bedtime story. Eventually, the child will want to emulate the parent and read, too. Reading, then, begins with meeting the child's physical, social, and emotional needs, followed by exposure to more formal literacy skills.

This broader view was recently endorsed in the wonderful new book, "From Neurons to Neighborhoods," with one of its authors to my right, where the finest child development thinkers in this country pointed out the importance of emotional and motivational factors in human development.

This statement in this important book in my view corrected a shortcoming of my field for the past 50 years—namely, an emphasis on cognitive development to the exclusion of personality and

motives, which are so central to the burgeoning new discipline of emotional intelligence.

The President is correct in his recent championing of the child's character. Piece by piece, then, the President is discovering the whole children—recognition that has been one of the great strengths of our Nation's Head Start program.

Head Start is an early education program, but it is also a physical and mental health program. It is dedicated to involving the parents who, after all, will have a greater influence on the child's learning than any other source.

The new Early Head Start program in fact emphasizes parent-child interactions—the very place where literacy begins. Senator Kennedy realized the importance of the years zero to 3 some time ago, and I commend him for making Early Head Start a reality in this country. Since then, Senator Kennedy and other members of this august committee, it has grown from 17 sites to over 600 sites.

You have all heard recent reports that children are graduating from Head Start with few pre-reading skills. Yet a sizeable literature shows that they are more ready for school, and even the recent FACES evaluation of Head Start shows good progress, including literacy, in kindergarten.

Do I believe that Head Start should do more to promote literacy? Most definitely. The new performance standards are moving the program toward more defined curricula with specific goals for literacy and related skills.

But Head Start needs the resources to carry out these plans. If we want well-trained teachers who can implement sound educational programs that send children on their way to reading, we simply have to pay them more than poverty-level wages. And if we want to draw more low-income parents into their children's learning, we need to expand Early Head Start.

I am very much afraid that the budget request of the President for Head Start is disappointing to me and certainly does not meet Dr. Shonkoff's urging that you need decent salaries and high-quality programs to achieve ends, particularly with poor children.

Shoring up the quality of Head Start can have an impact far beyond its target population. Head Start is a model program whose success in promoting school readiness has fed the movement toward universal preschool. Head Start quality standards are beginning to filter to child care settings, and the child care settings in this Nation are one of the huge problems and certainly the tragedy of America's children for the past 30 years. A lot of research has shown that most child care in this Nation is poor to mediocre. Yet millions of infants and toddlers—the very ages when literacy begins—are spending their days in such places.

In sum, if we want a nation of readers, we have to look beyond teaching phonics. We have to look at the whole child, the parents, and at all of the people and experiences that make up the child's early learning environment.

Thank you.

The CHAIRMAN. Thank you very much, Dr. Zigler.
[The prepared statement of Mr. Zigler follows:]

PREPARED STATEMENT OF EDWARD ZIGLER

It is an honor to be invited back to the Senate, and to share my expertise with this committee. I am the Sterling Professor of Psychology at Yale University. I also head the Psychology Section of the Yale Child Study Center and direct the Bush Center in Child Development and Social Policy. I have authored some 30 books and over 600 scholarly papers, the majority dealing with topics pertinent to children's development and learning. In the area of social policy, I have worked with every administration, both Republican and Democrat, since Lyndon Johnson. I served in Washington during the Nixon Administration as the first director of what is now the Administration on Children, Youth and Families, and as Chief of the United States Children's Bureau. I was one of the planners of our nation's Head Start program and a recent spin off, Early Head Start. Over the program's 36 years, I have become known as both its best friend and its most vocal critic.

Of late there have been criticisms that Head Start is not doing a very good job teaching literacy to its young students. I will offer my suggestions on that point in a moment. First, let me state that I concur that the ability to read is absolutely essential for an individual to have a successful life. I therefore applaud President and Mrs. Bush for the impetus they have provided to assure that every child in America will be a successful reader. However, as someone who has studied the growth and development of children for some 45 years, it is my responsibility to point out that reading is just one aspect of cognitive development, and that cognitive development is just one aspect of human development. Cognitive skills are of course very important, but they are so intertwined with the physical, social, and emotional systems that it is myopic, if not futile, to dwell on the intellect and exclude its partners.

Think about what goes into literacy. Yes, it involves mastery of the alphabet, phonemes, and other basic word skills. But a prerequisite to achieving mastery is good physical health. The child who is frequently absent from school because of illness, or who has vision or hearing problems, will have a difficult time learning to read. So will children who suffer emotional troubles such as depression, attention deficits, or post traumatic stress disorder. And think about motivation. A child's curiosity and belief that he or she can succeed are just as important to reading as knowing the alphabet. Phonemic instruction by the most qualified teacher will do little for a child who suffers from hunger, abuse, or a sense of inferiority.

I am urging that we broaden our approach to literacy by focusing on the whole child. We must also broaden our understanding of when and where literacy begins. I've heard a lot of preschool-teacher bashing lately, but in reality, literacy begins much earlier than age four. It begins with the thousands of loving interactions with parents after an infant is born. It begins as a child develops a sense of self-worth by realizing that his or her accomplishments, whether they be learning to roll over or to recite the alphabet, are important to significant others. It begins with sitting in a safe lap, hearing a familiar bedtime story. Eventually the child will want to emulate the parent and read too. Reading, then, begins with meeting the child's physical, social, and emotional needs, followed by exposure to more formal literacy skills.

This broader view was recently endorsed in the wonderful new book, *From Neurons to Neighborhoods*, where the finest child development thinkers in the country pointed out the importance of emotional and motivational factors in human development. This statement corrected a short-coming of my field for the past 50 years—namely an emphasis on cognitive development to the exclusion of personality and motives, which are so central to the burgeoning new discipline of emotional intelligence. The President is correct in his recent championing of the child's character. Piece by piece, then, the President is discovering the whole child—recognition that has been one of the great strengths of our nation's Head Start program.

Head Start is an early education program, but it is also a physical and mental health program. It is dedicated to involving the parents, who, after all, will have a greater influence on the child's learning than any other source. The new Early Head Start program in fact emphasizes parent-child interactions, the very place where literacy begins. Senator Kennedy realized the importance of the years zero to three some time ago and was the one who made Early Head Start a reality. Since then, it has grown from 17 sites to over 600.

You have all heard recent reports that children are graduating from Head Start with few prereading skills. Yet a sizeable literature shows that they are ready for school, and even the recent FACES evaluation of Head Start shows good progress, including literacy, in kindergarten. Do I believe that Head Start should do more to promote literacy? Most definitely. The new performance standards are moving the program toward more defined curricula with specific goals for literacy and related

skills. But Head Start needs the resources to carry out these plans. If we want well-trained teachers who can implement sound educational programs that send children on their way to reading, we simply have to pay them more than poverty level wages. And if we want to draw more low-income parents into their children's learning, we need to expand Early Head Start.

Shoring up the quality of Head Start can have an impact far beyond its target population. Head Start is a model program whose success in promoting school readiness has fed the movement toward universal preschool. Head Start quality standards are beginning to filter to child care settings. A lot of research has shown that most child care in this nation is poor to mediocre. Yet millions of infants and toddlers—the very ages when literacy begins—are spending their days in such places.

In sum, if we want a nation of readers, we have to look beyond teaching phonics. We have to look at the whole child, the parents, and at all of the people and experiences that make up the child's early learning environment.

The CHAIRMAN. Ms. Strickland?

Ms. STRICKLAND. I am Dorothy Strickland, and I am the State of New Jersey Professor of Reading at Rutgers University. I would like to thank the committee for this opportunity to share some of the current thinking about the importance of parent involvement in early childhood development. It is an honor to be here.

I will concentrate my remarks on the development of language and literacy since this is where most of my work has been focused. I am a teacher-educator, and I have done a fair amount of research over the years. My primary contribution to the field has been as a translator of research to practice. I have been a classroom teacher and a learning disabilities specialist. I am also a mother and a grandmother. So I bring many perspectives to the table.

Although I focus my remarks today on parents, virtually everything I have to say also applies to child caregivers, whether they are grandparents or child care workers in home care or preschool settings. These individuals are often with young children for most of their working hours, and of course, caregivers frequently act in familial ways with the children in their charge.

I have organized my remarks around three major points. First, I will list what the research says, and then I will give the implications for parents and caregivers as they relate to those points.

I would like to say up front that I agree whole-heartedly that language and literacy development should never, ever be stressed at the expense of other domains of children's development.

Point one is that literacy learning starts early and persists throughout life. That has already been said this morning as well. Learning to read and write is an ongoing process from infancy. Contrary to popular belief, it does not simply start at kindergarten or first grade. From the earliest years, everything that adults do to support children's language and literacy really, really counts, and that is a message that we need to get out.

The research indicates that although oral language is foundational to literacy development, the two really do develop concurrently. What children learn from listening and talking contributes to their ability to read and write, and vice versa. Phonological awareness and phonics, which has already been mentioned, begins early, and rhyming games and chants begin right on a parent's knee.

Children who fall behind in oral language and literacy development are less likely to be successful beginning readers, and their

achievement tends to lag behind throughout the grades; it tends to persist.

It is not enough to simply teach early literacy skills in isolation. I think that is a common criticism and fear among many early childhood caregivers and is definitely something that should be reckoned with. The research tells us that teaching children to apply the skills in meaningful situations has a significantly greater affect on their ability to read.

The implication, of course, is that parents need to know that the child's capacity for learning is not determined at birth, and there is really a great deal that they can do about it. They should be aware that there are many informal and enjoyable ways that language and literacy skills can be developed in the home—and in fact, these are the only ways that they should be developed. They should provide opportunities for children to use what they know about language and literacy in order to help them transfer what they know to new situations. Mindless rote memorization is not the way to teach young children.

Point two is that oral language is the foundation for literacy development. So when we talk about language and literacy with a very young child, we are really talking largely about oral language. Oral language provides children with a sense of words and sentences, builds sensitivity to the sound system so that children can acquire phonological awareness and phonics, and it is the means by which children demonstrate their understandings of the meaning of words and written materials.

Research indicates that children reared in homes where parents provide rich language and literacy support do better in school than those who do not. Language-poor families are likely to use fewer different words in their everyday conversation, and the language environment is often more controlling and punitive. This is a big concern of many of us.

Exposure to less common, more sophisticated vocabulary, sometimes called "rare words," at home relates directly to children's vocabulary acquisition.

There is a strong relationship between vocabulary development and reading achievement. We know that good readers combine a variety of strategies to read words and that even when children have excellent decoding skills, they frequently meet words for which the pronunciation is not easily predictable. My point here is that meaning is very important, that children bring more than just phonics to the code and their understanding of the code to a text; that understanding vocabulary concepts is very important to get meaning from the text.

The implications have to do with things that you have heard many times before—take time to listen and respond to children; talk to and with children, not simply at them; engage children in extended conversations, explain things to kids, and do not be afraid to use sophisticated language with children.

Point three is that children's experiences with the world and with print greatly influence their ability to comprehend what they read. True reading—and I emphasize "true" reading—involves understanding. There is no real reading unless there is understand.

What children bring to a text, whether oral or written, influences the understandings they take away. The more limited a child's background experience, the less likely this child will be a skilled reader. So that background knowledge about the world is very, very important. For poor kids and minority kids, this is something that is often either misunderstood or ignored, that to be a good reader, they really need to have a wide variety of experiences. It is not just a question of sitting them down and drilling them on the alphabet. And also important, of course, is their background knowledge about print and books.

The implications of course are that parents and caregivers need to keep in mind that interesting concepts and vocabulary do not emerge from a vacuum. We know a lot more today about not simply maintaining kids, but providing interesting content for them to talk about and think about—trips to local points of interest, talking to kids about what they see and with them about what they see, raising questions of children and responding to their questions, providing time for reading and talking about what is read, an increased use of informational books in the early years is very important—something that, again, we did not realize how important it was—not just story books and Mother Goose rhymes, which are also very important, but informational text—and providing time for children to “pretend read,” that is, to go back and reenact the read-aloud experience on their own.

In a setting like this, one cannot help but think of the famous questions: “What did you know, and when did you know it?” I have offered what I think are among the most important things that we know about parent involvement in early childhood language and literacy development.

I can tell you that we have known these things for some time. They are not really brand new. Perhaps the key question that you might ask of me today is: “What are you doing about it?”

There are some important efforts in place, most notably some of the Even Start programs and Family Literacy programs that are involved with Head Start, but I do not think that we have really touched the surface of what the potential is for spreading this information and really acting on it. And most critically, we have not really reached the moms and dads who stay at home, that stay-at-home population; nor have we reached very well family day care providers. Perhaps we need to find more creative and innovative ways to meet and to address the needs of these people. Certainly, the media might be of help; links with existing child care providers and support agencies might also be of help.

Finally, we need to explore innovative ways of using technology. We have to explore innovative ways to reach what is a relatively amorphous population, provide incentives for participation, support for professional development and better compensation for child care workers to ensure quality in the outreach programs that we do provide.

Thank you very much.

[The prepared statement of Ms. Strickland follows:]

PREPARED STATEMENT OF DOROTHY S. STRICKLAND

Thank you for this opportunity to share some of the current thinking about the importance of parent involvement in early childhood development. I will concentrate my remarks on the development of language and literacy, since this is where most of my work has been focused.

I am a teacher educator. Though I have done a fair amount of research over the years, my primary contribution to the field has been as translator of research to practice.

I have been a classroom teacher and learning disabilities specialist. I am also a mother and grandmother. So, I bring many perspectives to the table.

Though I focus my remarks today on parents, virtually everything I have to say also applies to child caregivers, whether they are grandparents or childcare workers in home care or preschool settings. These individuals are often with young children for most of their waking hours and, of course, caregivers frequently act in familial ways with the children in their charge. I have organized my comments around three major points:

POINT 1. LITERACY LEARNING STARTS EARLY AND PERSISTS THROUGHOUT LIFE

Learning to read and write is an ongoing process from infancy. Contrary to popular belief, it does not suddenly begin in kindergarten or first grade. From the earliest years, everything that adults do to support children's language and literacy really counts.

Research indicates that:

Although oral language is foundational to literacy development, the two also develop concurrently. What children learn from listening and talking contributes to their ability to read and write and vice versa. For example, young children's phonological awareness (ability to identify and make oral rhymes, identify and work with syllables in spoken words, and the ability to hear, identify, and manipulate the individual sounds—phonemes—in spoken words) is an important indicator of their potential success in learning to read. Phonological awareness begins early with rhyming games and chants, often on a parent's knee.

Children who fall behind in oral language and literacy development are less likely to be successful beginning readers; and their achievement lag is likely to persist throughout the primary grades and beyond. (Juel)

It is not enough to simply teach early literacy skills in isolation. Teaching children to apply the skills they learn has a significantly greater effect on their ability to read. (Report of the National Reading Panel)

Implications:

Parents and caregivers need to—

- Know that a child's capacity for learning is not determined at birth and there is a great deal they as parents and caregivers can do about it. (Zero to Three)
- Be aware that there are many informal and enjoyable ways that language and literacy skills can be developed in the home.
- Provide opportunities for children to use what they know about language and literacy in order to help them transfer what they know to new situations.

POINT 2. ORAL LANGUAGE IS THE FOUNDATION FOR LITERACY DEVELOPMENT

Oral language provides children with a sense of words and sentences; builds sensitivity to the sound system so that children can acquire phonological awareness and phonics; and it is the means by which children demonstrate their understandings of the meanings of words and written materials.

Research indicates that:

Children reared in families where parents provide rich language and literacy support do better in school than those who do not. Language-poor families are likely to use fewer different words in their everyday conversations and the language environment is more likely to be controlling and punitive. (Hart & Risely)

Exposure to less common, more sophisticated vocabulary (rare words) at home relates directly to children's vocabulary acquisition. Rare words are those that go beyond the typical 8,500 most common words in the English language. (Dickinson & Tabors)

There is a strong relationship between vocabulary development and reading achievement. We know that good readers combine a variety of strategies to read words; and that even when children have excellent decoding skills, they frequently meet words for which the pronunciation is not easily predictable. Children, who ac-

quire strong vocabularies, increase their ability to make use of what a word might be along with what they know about phonics. (Nagy, Clay)

Implications:

- Parents and other caregivers should—
- Take time to listen and respond to children.
 - Talk to and with children not at them.
 - Engage children in extended conversations about events, storybooks, and a variety of other print media.
 - Explain things to children.
 - Use sophisticated and unusual words in their everyday talk with children, when it is appropriate to the conversation.

POINT 3. CHILDREN'S EXPERIENCES WITH THE WORLD AND WITH PRINT GREATLY INFLUENCE THEIR ABILITY TO COMPREHEND WHAT THEY READ

True reading involves understanding. What children bring to a text, whether oral or written, influences the understandings they take away.

Research indicates that:

The more limited a child's experiences the more likely he or she will have difficulty with reading. There are two kinds of experiences that are highly influential to literacy development. Both can and should be provided in the home:

- Background knowledge about the world
- Background knowledge about print and books (Rand/OERI Report)

Implications:

- Parents and caregivers need to—
- Keep in mind that interesting concepts and vocabulary do not emerge from a vacuum. Parents should help provide interesting content to think and talk about.
 - Involve children in trips to local points of interest and talk with them about what they see and do.
 - Establish a habit of raising and responding to children's questions about things that occur in the home environment or at trips to local points of interest.
 - Provide time for reading to children and talking with them about what is read.
 - Share a variety of types of literature, including lots of informational books.
- Books stimulate conversations about ideas and concepts beyond everyday experiences.
- Make books accessible for children to return to on their own to "pretend read"—a child's personal reenactment of the read-aloud experience.

In a setting like this, one cannot help but think of the famous questions: "What did you know?" and "When did you know it?" I have offered what I think are among the most important things that we know about parent involvement in early childhood language and literacy development. I can tell you that we have known these things for some time. Perhaps the key question of me today is "What are you doing about it?"

There are some important efforts in place, most notably some of the Even Start programs and the Family Literacy programs that are involved with Head Start. I do not think that we have touched the surface, however, in terms of reaching the vast number of parents who need this information, particularly those who choose to stay at home with their children and those who are caregivers in family day care settings. My concern is that too few children are benefiting from what we already know. Reaching stay-at-home parents and family day care providers, perhaps through the media or through links with existing child care providers, may be the new frontier of support for early childhood development.

The CHAIRMAN. Thank you very much.

We have been joined by Senator Dodd and Senator Jeffords. I mentioned that Senator Dodd was chairman of our Children's Caucus, and this has been a primary issue of his interest and concern and leadership.

Senator Jeffords has been a voice in terms of the preschool learning experience and held extensive hearings on this for a long period of time and has been a very important leader on our committee on this.

Senator Murray has been passionate about it as well.

So we have a lot of members here. I mentioned that we will be interrupted at 10:45 with three votes, which is going to interfere with both this panel and our second panel, which we apologize for. But if you are all good enough to remain through the course of the afternoon today, we are going to have a good working session with all of you and our staffs to go through both the recommendations this morning as well as ideas and suggestions, so that will be very important and helpful to our committee as well as to other staffs who have been interested in these issues. Senator Voinovich, Senator Stevens, and many others are interested and will be included.

I know Senator Dodd has to leave, so I will yield my time to him at this time.

Senator DODD. Thank you, Mr. Chairman.

You are right, and there are also other hearings going on on a variety of subject matter, so it is a little confusing, but many of you have appeared before Congress before—Ed, a dear friend for so many years, I would like a nickel for every time you have appeared before congressional committees over the last 35 or 40 years. It is a pleasure to welcome you here again, as well as Dr. Shonkoff and Dr. Strickland.

Thank you, Mr. Chairman. This is an extremely important set of issues, and I certainly want to commend the First Lady as well for expressing a real interest in this subject matter.

I think the title of the hearing, "From Science to Practice," is important. For me in a sense, there is no real debate about the science. I hope that debate is over with. We are no longer arguing about the science of this. Apparently, there are some who want to continue the debate, but as far as I am concerned, that debate is over with. The question now is whether or not we have the will as a people and as a Congress to do what is clear, it seems to me, and that is whether or not we are willing to commit the resources necessary and understand the reality of what occurs across the country.

I know that for many of you in the audience and our witnesses, these numbers are routine, but I repeat them often because I do not think enough people really understand them. Seventy-eight percent of mothers with school-age children are working today—78 percent of women with school-age children are in the work force today. Sixty-five percent of mothers with children under the age of 5 are in the work force, and more than 50 percent of women with infants are in the work force. And the numbers are growing.

That is the reality. That is the hard reality. And those numbers are not going away. In fact, every indication, of course, is that they are continuing to move up.

So the issue is—and I think it is obviously very important what happens with parents as first teachers and the like; that is very, very important—but the critical issue is going to be whether or not we have the intestinal fortitude to provide the resources, the training, and the backing for those people who watch and care for our children, many of them infants—as many as 6 million infants that I know of are in child care settings, and when you start adding toddlers, that number goes up to 14.5 million every day—how well-trained are those people? What is happening in those centers and

family day care homes? What is happening in terms of how these children are being cared for?

So for me, that is the critical issue, whether or not in a Head Start setting—and you can even talk about children in school, pre-K programs for 2 to 3 hours, after school programs—when you start adding these numbers, again, it seems to me that we have a tremendous amount to do.

And again, I am preaching to the choir on some of these issues, but we have to expect that a child care worker must also be able to teach. On average, you are paying \$15,000 to \$16,000 a year for a child care worker; it is double that amount in almost every school district in America for a teacher. So you are getting these people to come, but they leave very quickly. You cannot get them to stay. Or, if you have something less than a consistent child care setting, where you have an aunt, an uncle, a brother, a sister, there is no consistency to that at all in many ways for children. With parents who are earning \$75,000 a year or more, there are huge numbers of their children who are in center-based child care programs. And for the poorer families, of course, there are not.

So I am hopeful that we can concentrate to a large extent on the reality, and that is who is caring for children every, single day and how many of them are in a nonfamilial setting so that you have the opportunity to see to it they will get the skills to be ready to learn.

We introduced last spring, as the chairman knows, the FOCUS Act, which is based on the North Carolina T.E.A.C.H. program. Given the resources, States would be able to improve compensation and/or benefits for child care workers based on their level of training, education, and experience. Child care workers would be eligible for scholarships so that they can further their education and training, combining their scholarships with Pell Grants necessary to get an associate or bachelor's degree in early childhood education.

Mr. Chairman, I really appreciate your giving me a minute to talk about this, and again, I know that many in the audience understand it, but as we look at the welfare reform reauthorization bill, and as the economy is cratering a bit, what happens is that unemployment rates go up, the ranks of the unemployed increase, the difficulty of people finding jobs, being out there looking for jobs, and of course, what happens to their children who do not have the advantages of having a parent home every day to go through the routine of providing the kind of basic educational needs that we would like to see them get.

With that, I thank you.

The CHAIRMAN. Thank you very much, Senator Dodd.

Senator DeWine, you are recognized.

Senator DEWINE. For questions, Mr. Chairman?

The CHAIRMAN. Yes.

Senator DEWINE. I thought Senator Dodd was making an opening statement. I thought we were still on opening statements.

Thank you very much.

We get into a battle sometimes in this country over—it becomes a political or an ideological battle, I guess—over the issue of stay-at-home parents versus working parents, and I think Senator Dodd

has expressed it very well as he always does, and we take the numbers where we find them today, and a large number of women are in fact working, men are working, both parents are working, and there is no one home with the child, so the child is in a day care setting.

I was interested, though, in the testimony of all three of you, really, which in essence seems to say we need to put these political battles aside, and we need to accept the reality, and we need to understand that the stay-at-home mom may need some assistance that we don't think about. I was kind of intrigued by that as well as the comment, of course, that we have to bolster what we are doing with child care.

Let me start with the stay-at-home parent. Several of you alluded to that but did not really explain what your specific recommendations are, and I wonder if you could go into that a little bit.

I guess the assumption is that, intuitively, a stay-at-home mom does not really need any help.

Dr. Zigler?

Mr. ZIGLER. Repeat the last point, Senator.

Senator DEWINE. Intuitively, I think many people think that the stay-at-home mother or father with the child is going to be okay, and that we as a society do not need to worry about giving any extra assistance there. Your point also, I think, was that we need to deal with parental leave.

Mr. ZIGLER. Yes, that is one. First of all, Senator, you are right. One of the sadnesses in observing the social scene for quite a while has been this divisiveness that I have witnessed between this notion of working women, which Senator Dodd has so ably pointed out the numbers on, and stay-at-home moms. There should have never been any fight. Working women love their children just as much as stay-at-home moms love theirs. There is no fight between these two groups. They both have great needs that are not being met.

Senator DEWINE. And—excuse me—the fight is not between the groups. Sometimes the fight is with politicians; we sort of get involved in this a little bit.

Mr. ZIGLER. Unfortunately, if you read Betty Friedan's "The Second Shift," she chastises her own movement for causing this divisiveness. So I am always glad to blame politicians. I think that scholars and thinkers have to take some of the blame. But a great deal should be done for parents who stay at home. First of all, these figures that Senator Dodd gave—one of the most dramatic changes in my lifetime demographically is the one Senator Dodd just alluded to, that today, something on the order of 55 percent of women with babies under the age of one are in the out-of-home work force.

Where are those babies? The fact is that they are often in infant and toddler child care. We have the four-State study which indicates that 40 percent of that care for infants and toddlers is so poor in quality as to compromise not only the growth and development of children, but to place their health and safety at risk.

So for stay-at-home moms, they should have Social Security rights, which they have been arguing for for many years; they do

important work, which is unfortunately not considered work. It is very hard work being a stay-at-home mom, raising children. We should make it possible for all women, whether they are working or staying at home, to stay with their own children for at least those first 6 months of life. As the national commission that I headed recommended some 20 years ago, and which Senator Dodd picked up on and gave us the unpaid Family and Medical Leave Act, which I commend him for—but we have to move forward to paid leave. I recommend for your attention the bill that he has to help the States move in that direction, as does Lynn Woolsey on the House side.

So stay-at-home moms need help with parenting as well. That is why I am delighted to see Parents as Teachers represented on your second panel, which Senator Bond so ably put in place in Missouri when he was Governor there, and I cannot commend him too highly for that move, which we can now find in some 2,800 communities in this country.

So the kind of parent help that that organization gives to stay-at-home moms is one of the supports we can give. Family support of all types—something that has happened in this country which is not very well-known has its headquarters in Chicago, in the Family Forum—there is a new family support movement going on, helping stay-at-home moms and working moms get the services that they need out of the community—brokering services, not providing them—more of that sort of thing, and informational and referral systems to help moms get good child care, or stay-at-home moms. In my Schools of the 21st Century, we have an information and referral system for all mothers that helps them in this complex society. I mean, how many people even know about CHIP, which I think was a great victory for the children of this country? Now the problem is to get people to enroll.

So there is a role for all of these kinds of activities.

Senator DEWINE. Dr. Strickland?

Ms. STRICKLAND. I would only add that the National Center for Family Literacy has been documenting some of these best practices, and there are some very fine programs that exist where there is outreach to parents who are at home. So that using the existing structures to do this is a very good thing, but it is very difficult sometimes to find these people, and I think more emphasis needs to be there to let people know what the services are and to help provide them on parents' own terms.

Senator DEWINE. Dr. Shonkoff.

Dr. SHONKOFF. I really appreciate your question because I think it is tremendously important, and you are right—as Senator Dodd said, the science is not that complicated, but the politics is enormously complicated. I think one huge mistake would be to somehow think that because we have so much science right now, we can make raising children a science. It is not a science, it is an art, but it certainly could be informed by a lot of science.

So to directly respond to your question, Senator DeWine, on the one hand, I think we need to find ways to get as much information in an understandable way as we can to parents in this country so that they can feel confident raising their children and have access to this information.

I think we also desperately need to find some way to really give parents of young children a choice, particularly mothers, about whether and when to go back to work. For many families, there is no choice about going back to work because they have to have the income in order to get by. If there were a way to have some economic support to stay home, more mothers might stay home.

The flip side of that is that when people go back to work, whether they have to or because they choose to, the science just kind of drowns you in information, but the quality of the environment the kids are in really makes a difference. Dr. Strickland was very eloquent on that, and Dr. Zigler has been for a long, long time. That is where the quality of these environments, which cost money, really matters. And I particularly appreciated Dr. Strickland's comments about the fact that early literacy starts in infancy with reading to children, and the nature of the language environment. And also, I am not a mental health person—it is interesting—I came through this “Neurons to Neighborhoods” experience as a real advocate for more attention to social and emotional development and mental health, not because I came in with that perspective, but just the science made you a believer in that.

So it is not just the language and the literacy that is important in these nonfamily environments, but it is the ability to understand and manage behavior. We have an explosion in the use of psychopharmacology in young kids in this country. I was in the pediatric world for a good number of years, and the prescriptions for stimulants for attention deficit disorder and for antidepressants in 2- and 3-year-olds is exploding in this country, and part of it is because nobody knows how to deal with behavior, and there are not resources and services to take care of it. All these kids were in child care settings where they are sometimes being thrown out. You know, there is no mandatory child care, so kids are getting expelled from these settings because the people who work there do not know how to handle them.

So this costs money for sure, and it is very complicated, but we have so much knowledge to tell us how to do it, and we could be doing a lot better

Senator DEWINE. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Dr. Shonkoff, let us continue that thought. What is it that we have learned from the science that is so important both in terms of parents and people who are interested in early learning that we have seen in zero to 5, particularly in the early grades? And I will ask Dr. Zigler that question as well.

Dr. Shonkoff?

Dr. SHONKOFF. I will actually try to summarize mountains of science in a few simple points. One of the things that we have learned, and we have learned it very well, is how important these early relationships are to promoting learning, to promoting healthy social and emotional development. So we know a lot about what helps a child be a good learner, and it has to do with these stable, nurturing relationships, ideally with parents, and very important with other people who are not members of the family.

We have also learned from the brain research, and I think this is where we have to burst some myths. The brain research has taught us a lot about how learning gets incorporated into the brain. It tells us very little about how to produce super brains. It tells us a lot about how we can hurt brains. So the public grabs onto some of these gimmicks. For example, Mozart tapes were big for a while, and there is no science about that. People are peddling expensive educational toys for kids. The science, from the behavioral science to the brain science, tells us that the best way to promote learning and healthy brain development is to have people who care for and love kids take care of them, nurture them, provide opportunities to learn, reinforce their learning, and provide a rich language environment.

We have a huge amount of science that tells us what happens to brains when the environment is not appropriate. A lot of this is from animal studies, because we do not have studies where we carve up tissues in human brains and look at what happens, but the things that get into the press about how stimulation produces more synapses and more connections between cells and all that.

Actually, Bill Greenow, who has done a lot of that research in mice and rats, was on our panel, and he educated us as to what that research was all about. It is something really important for the committee to understand. The animal studies that show that if you are in “stimulating” environments, you have more dense connections among your brain cells, and you learn better—that is true, but the difference between putting rats in complicated cages and putting them in simple cages is that in the complicated cages, they had a lot of colors and toys to play with, and the rats in those cages learned mazes better, and when you looked inside their brain tissue, they had richer connections in their brain cells. And the rats in simple, empty cages did not learn the mazes as well, and they had less connections in their brain cells.

But that is not a stimulation experiment. That is a deprivation experiment, because a busy, complicated cage for a rat is not a complex environment. The complex environment for a rat is living in a sewer, the rat’s natural environment.

So Bill Greenow has said that a lot of people took his experiments and said now we know how to provide stimulation and produce better brains. Wrong. What we learned from that was that if you are in a deprived environment, you do not learn as well, and your brain does not develop as well. So we have very hard science that depriving environments that provide very little stimulation and very little opportunity for learning result in not only poorer learning ability but result in brains that look different, with fewer connections.

We have a huge amount of research on how poor nutrition influences brain development in a negative way, and we have a lot of research on how chronic stress influences the development of the nervous system and produces the kind of short fuse for flying off the handle when you are stressed. These results are from animals. They are also not irreversible; they can be changed.

So the brain research, Senator Kennedy, has shown us so much about the negative impacts of deprivation on brains. It is not a formula for people with a lot of money to go out and figure out how

to produce super brains. The brain research has not told us that at all. But we know a lot about how to prevent brains from being hurt. We know a lot about how to optimize learning; and yet we are allowing many children in this country to spend large parts of every day in environments with very little stimulation and very little language exposure. The hard science tells us that that is not good for their development, it is not good for their brains. It also tells us that if you put them in better environments, you can reverse that and they can do well.

The CHAIRMAN. Dr. Zigler, did you want to add anything to that? I am running out of time, but I would also be interested in how you translate that information into either guidance and advice to parents or those who are interested in trying to help and assist from a policy point of view.

Mr. ZIGLER. I will try to do both very quickly, Senator. There is only one thing that I would like to add to the very fine summation of Dr. Shonkoff. One thing about becoming an old codger is that you get to see a wide swatch of history, scientific and social. And probably over the last 25 or 30 years, the most important science—and it really has revealed things that we did not know 50 years ago or even 40 years ago; it is only about 30 years old, I would guess—is in regard to the importance of those very early years, zero to 3.

I should point out to you that the brain research has caused a huge debate—I would refer you to the book, “The Myth of the First Three Years.” I am finishing a book on early childhood learning. Senator Dodd invited me to testify before his subcommittee on the implications of that brain development work 3 or 4 years ago when it was very hot in Newsweek and Time magazines.

Sitting behind me is a later panelist, Rob Reiner, who has done so much to inform the Nation with his TV special and a variety of other activities about the importance of these years. We really did not know the infant’s capacities at all 30 years ago. The world was supposed to be nothing but a buzzing beehive. They are really super learners. I refer you to the wonderful book, “The Scientist in the Crib,” which is exactly what you have in this very young child.

One of the good things that “From Neurons to Neighborhoods” did was to put this brain work into perspective. I do not agree with every word in it, but most of it I do agree with; it is a good summation on balance.

The first 3 years of life are really very important, and one of the things I implore you is that unfortunately, this country over the entire course of my life has had a love affair with IQs, intelligence, cognitive development, and people forget that—when you think of the brain, you immediately think of intelligence, cognition—but the brain mediates everything—emotions, motivation, every aspect of the child.

Discovering the first 3 years has been a gigantic breakthrough. One of the most important implications that you yourself are the hero of, Senator Kennedy—following through with that information early on, before it was as well-known as it is today, and giving the impetus—and many other members of this panel helped as well—making Early Head Start in this country a reality. There has been no huge Federal program for zero to 3 or State program. They are the forgotten years. But they are not forgotten any longer. I think

that getting in there even earlier, as early as possible, with parents, as Parents as Teachers and other programs of that sort do, is the way to go.

Let me give you one warning, however. I remember back in the 1960's when we were all looking for magic periods. Think about Head Start. What is it that we expect? It is a one-year program. Unfortunately, people still think in terms of a model that we had in the 1960's when we started Head Start, which I remind you was a 6- or 8-week program. We were going to change kids in 6 or 8 weeks—an impossibility.

So we have this notion of an inoculation, and my warning to you for policymaking and lawmaking is do not fall into that magic period crap. Human development is well-known, and the way to think about it is that they are all magic periods—zero to 3, the foundation years, are tremendously important; the preschool period following is equally important. This continues. Just because you give the child the environmental nutrients the child needs from zero to 3 does not mean he is home free. You do not tell a parent, "You will be a terrific parent if you are a great parent for the first 3 years of the child's life." You are a parent, as all parents know, forever; and there are different needs forever.

So the kid goes through a series of stages which Piaget told us about—and unfortunately, he too emphasized cognition rather than the whole child. But he is right about these stages. You can see them with your own eyes. Children need certain environmental nutrients at each one of these stages, and if we want our children to be all they can be, you have to think about childhood certainly for the—your transition program was the right way to go. It has got to be done better throughout this country. Head Start children have got to be followed up in those first 3 years of school with a program. If you want those children to be able to read, as this administration has championed, by the end of third grade, you have to have the kind of insight that Dr. Strickland has provided about what is necessary at that period.

So think of the whole child, not just the brain, as a cognitive instrument. Think of each of these levels. Now, the things that we really need to work on—and I know you are all working on this, or many of you are working on it, because I am in discussions with you—is that birth to 5 period, but do not become encapsulated in that. Make sure that following the first 5 years, 3 or 4 years after that; you never give up on a child right on through adolescence, because there are still dramatic changes.

So that is the big picture.

The CHAIRMAN. That is very helpful.

Dr. Strickland, I thank you. My times is expired, and I am going to recognize Senator Bond.

Senator BOND. Mr. Chairman, thank you.

It is fascinating to hear the discussion of these experts and to learn from them all of the things that we are continuing to develop. This to me has been, as Dr. Zigler was kind enough to say, a long-time area of interest to me. I found out when my son was born in 1981 how true it is—the first 3 years of life are the greatest learning experience. I learned more in his first 3 years than I have

learned in the previous 20. It was the pioneering work that you and others have done that helped us learn with our son.

Dr. Strickland, I really appreciate what you said about do not use baby talk; share complex thoughts with your children. It is amazing how fast those little tabula rasas pick it up.

I do not know whether it was thermo-psychodynamics or whatever, but I know there is some really whiz-bang science going on that is above the comprehension level of most of us, or at least above my level.

I really think it is important for us as policymakers to continue to encourage the scientific exploration, but not to overthink it. When you look at all of the science going on, there are so many complicated things, but there are some very simple points. Early childhood learning is extremely important. Half of the child's learning intelligence develops by the age of 3. You get it right then, or you have a real problem later on. And it is not just education. We sold Parents as Teachers in Missouri as a total child welfare program. It even reduces child abuse because it teaches parents how to be constructive in responding to the frustrations. And if you have a 2-year-old who does not frustrate you out of your mind, either you are not normal or the kid is not normal. You need to have the guidance on how to do it.

No. 3, parents' involvement is critical involvement. We believe—and Sharon Rhodes will talk about it more—that that is the secret. If you establish that practice in the early 3 years, it will continue throughout, and a lot of teachers, secondary school teachers and administrators, in Missouri that I have talked to say that as far as they are concerned, it is not the fact that Parents as Teachers gives children a start at the beginning—it is the fact that the parents get sucked into taking responsibility for their children's education that makes a difference in middle school and even high school years.

Finally, there is so much knowledge that is being developed—you all are learning it; the neuroscience and all that great stuff—but every day, our parent educators who go out with children in Missouri are finding new ways that come from the parents themselves, and it is probably the most exciting area—just practical applications of simple things, simple games, that can be done. It truly is a developing area.

I do not have any specific questions for any of you, but if any of you have any comments on it, I would be delighted to hear them.

Are there any comments?

Dr. Zigler?

Mr. ZIGLER. You are right, as usual. There are really four major determinants. I have come to the conclusion that you can take that huge ecological model of my colleague, Yuri Bronfenbrenner and reduce it. What are the real determinants in determining the growth trajectory of children? There are really only four—there are some after that, like the media—but the big four to me, in my own investigation of this question, the first and by far the most important is the one that you have emphasized, Senator Bond, namely, that child's family. So working with the family is absolutely critical.

The second is health care. If the kid is not healthy, everything else is moot. If you cannot keep the child alive for the first year of life, everything else is moot.

The third important system is the educational system. And again, Senator Kennedy with President Bush has taken the lead in the recent Leave No Child Behind bill, and that is the system that is at the forefront of domestic policy today—education. That is the third system.

But the fourth system and the one that keeps peeking up at these hearings, we have never given the importance of its merits, and that is child care. That is where most children are in their first 5 years of life.

Let me give you one final thought. For all the years that I have been involved with child care, which is a long time, it keeps getting defined as a service. It is a service so that mothers and fathers can go to work. That is true, but it is not the way to look at child care. The way to look at child care is that it is an environment. It is an environment that the child experiences often for that full 5 years before he hits school, and it is the quality of those experiences, the quality of that child care, that determines a child's school readiness, which in turn influences everything in school after that.

So those are the big four—the family is by far the most important; health; education; and child care.

Dr. SHONKOFF. Senator Bond, I would like to pick up on Dr. Zigler's last point and get right to one of the most important things you said, which was how much parents learn and what a challenge it is in those first few years of life and how, if you have a 2-year-old and you are not pushed to the limits, you are missing something or there is something wrong with the child.

This is where I think the rubber hits the road in terms of what we have to do in bringing this science to practice, because we have—and Senator Dodd gave the numbers—almost half the kids in this country in their infancy are spending a lot of their time in the care of people other than their parents during the day. And as you pointed out very eloquently, that is a very challenging situation even when you have one child, no less being responsible for a whole group of children, and it is particularly a challenge if you do not have a lot of understanding and education and skills about how to deal with young children. That is where the real dangers are in our country.

All families use whatever resources they have to help their kids get ahead, and we spend a lot of time talking on both sides of the aisle about making sure nobody is left behind. Well, there are a lot of children, particularly very young children, in child care settings that are really causing them to be very much left behind because they are not providing the kind of language stimulation, management of their behavior, and other things. This is where I think the responsibility that we all share is not—I have gotten well beyond talking about optimizing development. I do not know what that is. But I do know what protecting children is all about, and I do know what the minimum requirements are for a decent nurturing and learning-promoting environment, and we have too many children in environments that are below that level, particularly with the very

young children where it is most expensive and where the shortage is most acute in terms of well-trained people.

A lot of folks have trouble understanding when we get below age 3. A lot of people say, "I understand education for 4-year-olds, but I do not understand education for one- or 2-year-olds." And maybe "education" is not the right word, but certainly learning and development is what is going on. This is where we desperately need a shared public commitment of resources to make sure that no young child in this country spends lots of hours every day in an environment that is clearly detrimental to his or her health and well-being.

Ms. STRICKLAND. May I just add—and this is the final word, I hope—often the public seems to think that the people who work with young children simply need the minimum amount of background and skills, and that as long as they are kind, loving, caring people, that is enough.

Based on what you have heard today and certainly what you already knew, this is a very complicated process, working with young children, and the knowledge base is strong. Moving science to practice is not an easy thing or a trivial thing.

We need to attract the best and the brightest to work with our young children. As a teacher-educator, those are the people that I want to see out there with children every day. So we need to elevate this whole profession of people who work with young children.

Thank you.

Senator BOND. Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. My own belief, just following on from what you said, once we get started with the best and brightest going to work with young children, I do not think they will ever give it up, because they are going to be able to see the greatest impact—a profound impact which they might not be able to get when they are teaching at another grade level. I would think this would give them enormous satisfaction and enrichment in terms of their own lives if we can ever get focused in on those. That is at least my hope.

Senator Jeffords?

Senator JEFFORDS. Yes, I think it is time to start talking about what we do and where do we get the resources and what kinds of resources are necessary.

To state what all of you know, every other industrialized Nation, after the studies of the 1980's and 1990's, made their 3- and 4-year-olds part of their public school system.

I have been trying to, and have had some success in getting some assistance to families through the Tax Code, but it seems to me that if we do not provide the resources for the kind of quality that is necessary for these young people, we are just not going to make any progress.

I would note that 40 percent of our fourth-graders cannot read at the third grade level. I do not think anybody has done a study to determine whether that is the same 40 percent that does not get any early learning, but I would imagine there would probably be a significant correlation if we did so.

So my question to you is just for verification. Relative to the rest of the world, have other nations had responses which have justified

making their school systems available to the 3- and 4-year-olds? Has that been a positive thing?

Mr. ZIGLER. The countries that have gone to that are France, Italy, Belgium, and we have their data. The French data is available through the French-American Institute that I rely on, and they have shown some benefits. They do not even think about it. We are still testing. I agree with my colleague, Jack—I think that when we put a program in place, we want to be accountable, and we have to show its benefits. This has been true of Head Start, and it should be true of all of our efforts. We only have so much money.

In those countries, it is so accepted that they cannot understand us at all, or why they need data. When I ask them where are the outcomes, where is the efficacy data, and so forth, they say they cannot think of not doing it because the teachers themselves—it is just like in this country—when a child has gone to Head Start, we are still arguing whether it works or does not work—but kindergarten teachers say they can tell that a child has gone to Head Start. So it has become part of their culture and their society.

The same is true in this country, Senator Jeffords, of schooling. We do not have to prove that first grade is worth doing or sixth grade is worth doing. We have all come to the place in our own society where we say of course children have to be educated; it is just part of the culture. It is not part of our culture, because no matter where you look, whether it is leave for women, whether it is family support systems, children's allowances are in Canada, in England, in a lot of Europe. They support children, they support families. And this is not just the liberal social democracies like Denmark and Sweden—it is everywhere. The fact is we are the only country besides Australia—we once had New Zealand and South Africa, but they joined the rest of the world—we are the only industrialized country besides Australia that does not have paid leave so that when a woman has a baby, she can stay home with the child for those first few months.

There is total agreement that we do not want children in child care for those first 6 months, because for all the processes of bonding and learning about this child and so on that are necessary, the mother must be at home.

So these other countries are just way ahead of us in terms of family support, training, rearing and education of their children—even though we are richer than they are.

Dr. SHONKOFF. Another point in response to your question, Senator Jeffords, is that aside from the experiences of other countries, in this country, we have 40 years' worth of longitudinal research on the impact of early childhood programs, and although we argue back and forth about the significance of how many differences in IQ points and how many differences on scores on standardized tests, the one finding that comes up over and over and over again in almost every longitudinal study we have done is that children who are in good-quality preschool programs have less repetition of grades in school later on and less need for special education. That is what the scientists call the most robust finding we have.

So we have evidence from many different kinds of studies that when children get into good programs early on, regardless of what happens on their standardized tests, they need less special edu-

cation, and they repeat grades less in school, and that is clearly an indication of what the tradeoff is.

We just committed to a huge investment in K to 12 education in this country. It seems to me that not putting a comparable investment up front before kids begin kindergarten is going to really jeopardize how much we can expect from that K to 12 investment.

Senator JEFFORDS. You are giving me all the answers I wanted, and I have a little trepidation to move forward, but going on to Head Start, my understanding is that we have been successful in socialization and getting young people to be able to communicate and so on, but there is really little educational element to the Head Start programs as they exist to give us the kind of 3- and 4-year-old education they need. Is there any truth to that?

Mr. ZIGLER. Senator Jeffords, I have been studying Head Start since its inception, and I think I know that data as well as anybody. The fact is this thing that I keep hearing, that it is a social program, is simply not true.

The fact of the matter is that if you look at the recent FACES data, if you look at the review by Steve Barnett from Rutgers and the evidence that Dr. Shonkoff just gave you concerning special education and being in the right grade for age, Head Start is all of these things. Head Start gets children ready for school. We have the FACES data to show that. Look at the follow-up. The kids who are not as good as they should be when they leave Head Start, when they get to kindergarten are prepared; they catch up very, very quickly.

So I have criticized Head Start when it needs criticism, but I think it is getting a bum rap here.

Now, after having said that, I know that a lot of people think I am an advocate for children, but I pride myself on being a scientist and on taking the data and trying to utilize it in policy construction. So when I look at Head Start, I wrote a chapter in the early days of Head Start in which I said Head Start is not a program but an evolving process, and it should always be an evolving process as we learn new things.

One of my students, Deborah Stipak, who is dean of the school of education at Stanford, has done wonderful work on curricula in this eighth period, and she finds Head Start somewhat wanting. Her argument—and I think Dr. Strickland said it here eloquently—is there more that we can do in Head Start? Yes. Do I believe Head Start will do it? Yes, I believe they will, because the hallmark of Head Start that we built in from the beginning is that as new knowledge is forthcoming, we evolve the program so it incorporates our best thinking.

So it is much too early to say that Head Start does not help. It can do better, but I think it is doing a decent job today and one that can become better with more attention to the literacy and education preparation effort.

Dr. SHONKOFF. If I could just add something to that, one of the things that I have learned from economists is that more important than what something costs is what value you get for your investment; and that sometimes you can invest a little in programs and get nothing for them, and it is a waste of money, and it may be a little more expensive, but you get much more for that.

Getting back to the issue we talked about of not segmenting development into cognition and emotional development, for many of these programs—and Head Start will be a good example—we have to set them up for realistic expectations based on what it is the are prepared to do.

We had a research roundtable on Head Start at the Board of Children, Youth, and Families of the National Academy of Sciences that I participated in and that ran over 2 years, and one of the things that kept coming up was the problems that Head Start deals with that it does not have the resources to respond to. And that is where we really get into the issue of some of the serious mental health problems and the consequences of the violence and substance abuse that Head Start has no capacity to deal with and desperately needs assistance in the mental health area, for example.

So what happens is that sometimes you have a program that is doing a lot of good things—it is getting good health care, it is providing good social services and generically providing good educational experiences—but for the kids whose need are much beyond that, the resources are not there and the expertise is not there, and we see the consequences of kids coming out of the program who are not doing well.

The issue is to match the expertise with the kinds of problems people are asked to deal with, and that is where we have all this new knowledge and not enough people trained to provide it, particularly in the area of kids who are in big trouble. Many of these kids are in situations where their families cannot advocate for them to get better services, so they are the failures.

Senator JEFFORDS. Thank you.

I know my time is up, but may we have the right to ask additional questions by mail or whatever?

The CHAIRMAN. Absolutely, absolutely.

As I mentioned, this panel and our second panel will be working through the afternoon with our staffs and other members of the Senate staff as well who have indicated an interest, which will be very, very helpful to us, and other members of the Senate staff as well who have indicated an interest. So we are going to be drawing on them continuously, and we are very grateful to them.

[The prepared statement of Senator Jeffords follows:]

PREPARED STATEMENT OF SENATOR JEFFORDS

Thank you Mr. Chairman. Recent Administration estimates reveal that up to 75% of children under the age of 5 in this country are in out-of-home child care arrangements. And, as more mothers of young children enter the workforce, we need a system that links the children in child care to affordable, accessible, high-quality early care and education.

The evidence overwhelmingly demonstrates that the quality of early child care and education has a significant effect on children's health and development and their readiness for school. Quality early care and education: improves the academic success and educational attainment of children; lowers placement rates for children in special education; lowers dropout rates; and improves attendance at 4-year colleges.

Benefits of quality early care and education not only accrue to the child and the family, but to society as well. Studies reveal that quality early care and education: reduces crime; reduces substance abuse and drug related offenses; and increases work productivity, as parents have fewer child-care-related absences from work.

Shortly after these studies came out, all industrialized nations, but unfortunately not the United States, made the education of toddlers and pre-schoolers a mandatory part of their public education system, and paid for it.

Quality child care is available in the United States to young parents, but in many cases, it costs more than ten thousand dollars per year. This is almost twice the cost of going to many public colleges. And unfortunately, too many child care facilities in this country have inadequate educational components.

Currently, families must work through a maze of programs and an array of funding streams to learn about or gain access to quality early care and education programs. And, what we don't need is another narrowly tailored program which only addresses the needs of a few and only provides few dollars.

What we need is a seamless system of education: a system that lays the foundation upon which all of our children can learn. In particular, we need a high-quality, school readiness component that: connects our children in child care with high-quality early care and education; adequately trains, compensates, recruits, and retains early childhood teachers and providers; and links early care and education to existing programs, such as the Child Care Development Block Grant, TANF, IDEA, ESEA, Higher Ed, and other various early care and education programs.

The Federal government also needs to recognize what the science has already proven: that starting from birth, children rapidly develop the foundation for learning, or as our esteemed panelist Dr. Shonkoff calls, "an indelible blueprint" for learning; and that early child development can be seriously compromised by physical, social, and emotional impairments.

Therefore, we need to support our youngest children, particularly those children ages zero through three, where positive physical, social, and emotional development is crucial to school readiness.

We have the best researchers and institutions of higher learning in the world, and we need to help our states and local communities connect with the experts so that parents, providers, and teachers have the best tools available to address the very special needs of these youngest children.

We also need to make high-quality early care and education more affordable to all working families. Therefore, I intend to offer parents a refundable tax credit for the costs of attending high-quality, accredited care. This tax credit will not only provide working families with the opportunity to place their children in higher quality care, but would provide incentive to providers to seek accreditation, and thus raise the standards for care.

I am pleased that the President in his State of the Union Address stated that early education is a priority, but I challenge him to work with those of us in Congress who have been working on these issues for decades to develop a comprehensive school readiness system, and to support a school readiness system with enough

resources to actually make it work. We all must recognize that the foundation for learning begins in the earliest years of life, and that a failure to nurture development in these earliest years is a lost opportunity forever.

I want to thank our panelists for coming today, and the Chairman for convening this hearing and shining the spotlight on this vital concern.

The CHAIRMAN. Senator Murray?

Senator MURRAY. Thank you very much, Mr. Chairman. Thank you for holding this hearing, and thank you for an excellent discussion on the critical issues that we face in early childhood education.

Before I came to the Senate, I was a parent educator and a preschool teacher, and I know first-hand the difference it makes in a classroom. I can pick those kids out who are going to be successful or not, and it often has to do with the parent and what the family is doing as well.

One of the concerns I have is that we so often think of early childhood education—and you kind of addressed this, Dr. Shonkoff—as teaching the kid the alphabet, and if you can, he is successful; if you cannot, kick him out—which is a horrendous approach to early childhood education. It is so much more than just learning basic skills. Definitely, early reading is critical. But I had children in my classroom who could never learn the letter “A” because they were more worried about whether their dad was going to beat up their mom. I had kids who had chronic ear infections who never went to the doctor because they had no health care. How do you teach them the sound of “A”?

So it is the whole child that we have to deal with, and I am concerned when I see the President’s budget with a less than inflationary increase for Head Start, because I know that unless you work with the Head Start teachers and have them recognize these things and be trained to do what we need them to do, it is not going to pan out for the kids. And I know that you need parents who are capable of recognizing these issues as well. We all have to work together, and I think that shortchanging the Head Start budget or saying that it fails if we do not teach every kid the alphabet before the age of 3 is really a wrongheaded approach.

If you want to comment on that, I would be glad to hear from you.

Dr. SHONKOFF. I completely agree with you. I think the issue here is to set programs up for success and figure out what it takes and recognize that this is one a one-size-fits-all model.

We politicize the accountability issue and the evaluation issue in a way that is holding this field back, because for so long, what evaluation meant was should we invest in early childhood or not. If we could change that political context to say that we are going to do evaluation to answer the question of whether it is worth investing, but to figure out how to get the best value for our investments, then we can focus evaluations on what is working and also focus on what is not working and figure out how we can learn from that and do things differently.

That really requires a change in the political environment around early childhood. Maybe we are almost there; it would be great to be there, because we are far beyond the point where we

should asking does any of this matter, or do these early years really matter. So I really appreciate your comments.

Senator MURRAY. Ms. Strickland?

Ms. STRICKLAND. So often when we talk about early childhood education, and we focus on early literacy, we reduce early literacy to learning the alphabet or learning the sounds that letters represent. I think that that has brought a lot of resistance on the part of early childhood people who worry a great deal about “skill drill” kinds of efforts in early childhood—and they are right to worry about that.

We need to broaden the conversation and broaden the scope of what we mean when we talk about early literacy. We are talking a great deal about knowledge about the world, content; we are talking about language development, concept development. Yes, print is a very important part of this, because you are not going to learn how to read without significant print in the environment and experiences with print. But if we could just broaden that range of understanding about what is meant by “early childhood literacy,” I think that would help to bridge what I see is kind of a contentious atmosphere right now around these issues. People worry for good reason about subjecting children to experiences that really could be harmful and certainly would not enhance their cognitive development.

Senator MURRAY. Dr. Zigler, I appreciated your comments about women staying home with their young children. I think that in the push to reform welfare, we have sent an unfortunate message that staying at home with your kids is not contributing to our society in a good way. I worried very much as we did the 1996 welfare reform law about the work requirements imposed on parents and essentially saying to them that unless you are working, you are not a participant in our society. I agree with you that being home with your child is one of the most important things we can do. Now, obviously, there are a lot of people who cannot be home with their children, but I appreciate your work on family and medical leave to help more people do that. I would love to see a point where we were as good as some of our European allies in really promoting moms’ and dads’ ability to play a larger role in their children’s lives when they are young, but I think we are a long way from changing that at this point. But I do think we have to send better messages about valuing parents who stay home.

Mr. ZIGLER. Senator Murray, to go back to the remarks that you made earlier, I agree with every, single one of them. I was not familiar with your own background, unfortunately, but it is clear to me now that the Senate is indeed fortunate to have somebody with your particular experiences, because you have lived what scientists like us study, and you bring a wisdom to these issues that I think your colleagues can utilize. So I appreciate that a great deal.

Senator MURRAY. Thank you very much.

I look forward to working with all of you and with you, Mr. Chairman, as we move forward and make sure that every child is able to learn.

Thank you.

The CHAIRMAN. I thank our panelists very much for your enormously helpful testimony and comments. We are very grateful for your continuing help to this committee.

I will introduce our next panel, and then we are going to have a recess. We have three votes, one of which is underway, and then we will reconvene in about half an hour.

I will introduce the panel now. We welcome Rob Reiner from California, who is the founder of the I Am Your Child Foundation, an advocacy group for children ages zero to 3. Mr. Reiner chairs the California Children and Families State Commission. I am grateful for his commitment to children and look forward to hearing about the innovative approaches California is taking to address the early learning needs of young children. Rob has been a good personal friend and a friend, I know, to a number of us on this committee.

Elisabeth Schaefer is Administrator for Early Learning Services with the Massachusetts Department of Education. She supervises the distribution of early childhood funds to public schools, Head Start, private child care, and preschool programs. We welcome her and look forward to hearing her testimony.

We also welcome Susan Russell, who is regarded as the primary architect of the North Carolina T.E.A.C.H. Program and the Child Care Wages Project, two of the premier components of the North Carolina Smart Start Program begun under then Governor Jim Hunt. Dr. Russell is currently executive director of child care services. We applaud her innovation in the development of the T.E.A.C.H. Early Childhood Program, which is a model program that offers scholarships for the training and development of early education providers.

Sharon Rhodes is Director of Program Development and Evaluation for the Parents as Teachers National Center in St. Louis, MO. Ms. Rhodes has been a major developer of the Parents as Teachers onsite technical assistance system and is currently directing the development of program standards to promote quality programming. Ms. Rhodes is working closely with neuroscientists from Washington University in St. Louis and coordinated the development of the Parents as Teachers "Born to Learn" neuroscience-enhanced curriculum.

We thank all of you very much for being here and for your help to our committee. When we reconvene, the committee will hear from all of you.

I am enormously grateful that we had on the earlier panel the science, which is so compelling and overwhelming; we have on this panel those who have been working at the State level and have been very much on the front lines of what is working out there. They will give us the benefit of their judgment as to what is working out there in the local communities and make recommendations to us as to what role we might be able to play to help in advancing the efforts which they have been nobly leading in our country.

Important progress has been made in a lot of other States—Ohio has had initiatives; Kentucky is moving along; I understand Oklahoma has a program—the list goes on. So we are interested, and we are drawing from all of these experiences in the States and talking with the legislators who have worked on those programs in

the States as well to benefit from their experience, because they have a wealth of experience to help our committee. I am grateful for their willingness as well to help in the course of this afternoon.

Now the committee will be in recess, and Senator Bond will chair in about half an hour.

[Recess.]

Senator BOND. [presiding]. Ladies and gentlemen, if you could take your seats, we will ask the members of the second panel to come forward.

Again, on behalf of my colleagues, I offer sincere apologies to the second panel. This is a tremendously important panel, and as usual, the Senate vote schedule has messed us up. This is the Senate corollary to Murphy's law—if it is possible for a Senate schedule to mess up important things, it will happen, there is no question about that.

But the good news is that there is enough interest in this, and I think staff will be here and will be meeting with you later this afternoon—and do not tell anybody, but the real secret is that they are the ones who make things move around here anyhow. But Senator Kennedy and I and others will do our best to make sure that we keep our colleagues fully informed.

I will invite Rob Reiner to offer his testimony now, and let me assure all witnesses that your full statements will be made a matter of record, and we would ask that you make your opening statements in 5 minutes. Depending on whether other colleagues are able to go on, we will be able to go for about 45 minutes prior to the policy conference meeting.

With that, Rob, welcome.

STATEMENTS OF ROB REINER, FOUNDER, I AM YOUR CHILD FOUNDATION, HOLLYWOOD, CA; ELISABETH SCHAEFER, ADMINISTRATOR, EARLY LEARNING SERVICES, MASSACHUSETTS DEPARTMENT OF EDUCATION, MALDEN, MA; SUSAN D. RUSSELL, EXECUTIVE DIRECTOR, CHILD CARE SERVICES, UNIVERSITY OF NORTH CAROLINA CHAPEL HILL, RALEIGH, NC; AND SHARON RHODES, DIRECTOR, PROGRAM DEVELOPMENT AND EVALUATION, PARENTS AS TEACHERS NATIONAL CENTER, ST. LOUIS, MO

Mr. REINER. Thank you, Mr. Chairman.

I am honored to be here this morning to describe the progress we have made in promoting school readiness in California and to reflect on the lessons learned there and in other States.

Today I will make the case that Congress has an historic opportunity to do the right thing for children by investing wisely in the most neglected period of life—the critical years from the prenatal stage to school entry.

As our Nation focuses with a new sense of urgency on education reform, it is time that we acknowledge and act upon one simple truth. If we truly want to improve our students' school performance, we must change the educational structure in America. We must build a seamless education system that begins before birth and ends at 12th grade.

Let me begin with a little background on how I became so passionate about this issue. In 1997, after conducting my own exten-

sive research with scholars, business leaders, Government officials and philanthropists, I founded the I Am Your Child Foundation, a national, nonprofit, nonpartisan organization dedicated to focusing national attention on the urgent need for quality early childhood development programs. In collaboration with hundreds of national, State and local groups, we launched the I Am Your Child Campaign to promote broader public awareness of and investment in the early years.

The following year, in my home State of California, I authored Proposition 10, the California Children and Families Act, to build a comprehensive system of early childhood development for our State's youngest children. Over the last 5 years, I have traveled across America, working with the Federal and State leaders on similar efforts in other States. Working together, we have accomplished a great deal in these last 5 years, forging strong bipartisan support, identifying some new resources, strengthening programs, and measuring results.

But we still have a very long way to go. Today we stand ready to enter a new phase that should redefine the national debate on education reform.

I listened with great interest to the First Lady's testimony before this committee last month and to the President's comments during his State of the Union Address about the need to enhance preschool programs and teacher training to achieve real progress in early literacy. I could not agree more.

I have also spoken with Senator Kennedy about his early education proposal to improve the quality of early learning programs and to build a more coherent, comprehensive system. I also could not agree more. We have an unprecedented opportunity, starting today, to work together to bring about real change, to build a continuum of care for our Nation's youngest children, and to enact meaningful education reform that reflects a true understanding of how our children learn.

In the last few years, science has confirmed what many parents, teachers, and caregivers have instinctively known—experiences in the early years have a profound effect on the way children learn, grow, and develop. These early experiences establish the foundation for children's future success in school, in the work force, and in life. Researchers have demonstrated that secure and loving attachments and the right kind of developmental experiences instill in children the social, emotional, and cognitive abilities they need.

Unfortunately, while the research and good common sense dictate that public support for the early years is critical to school readiness, this is simply not where we are making our public investments.

Today, America's system of early childhood education represents a haphazard, underfunded, incoherent approach that does not meet the needs of this vast majority of our Nation's youngest children.

Congress recently enacted extremely important education reform legislation that will make a difference in establishing strong standards, promoting quality teaching, and expanding the resources devoted to low-performing schools. However, although this is much-needed legislation that will strengthen our schools, it did not go far enough.

Our current K through 12 elementary and secondary education system, designed over 100 years ago, is outdated and incomplete. Based on what science has shown us about how a child develops and learns, any educational reform that begins at kindergarten is simply too late. We must include early care and education as part of an overall education system so that every child has the tools that he or she needs to start school ready to succeed. Quite simply, the key to educational performance begins with healthy development before birth and continues with quality early care and education beginning the day a child is born. These early opportunities must not be left to chance. They must be embedded into our health care, social services, and education systems.

Only if we focus on healthy development, early learning, and safe and nurturing environments can all of our children realize their full potential. The absence of these essential building blocks can be devastating. Consider what we know. We know that low-birth-weight, pre-term infants are especially at risk for poor health and developmental delays.

We know that the roots of academic difficulty are often established well before a child's first day of school. It is a national disgrace that about one-third of the Nation's kindergartners are not ready to learn as judged by the real experts—their teachers.

We know that children who fall behind before entering school have a far more difficult time catching up.

We know that children who live with family and community violence in their early years suffer a multitude of damaging consequences that can last a lifetime and make learning all the more difficult.

Fortunately, we also know what works to help kids start school ready to succeed. Programs whose principles are consistent with what we know about health development and early learning have proven to be extraordinarily effective. Appropriate prenatal care is an early learning program for two generations; it helps expectant mothers deliver healthy children. Well-designed home visiting programs for parents and their infants can help improve birth weights and reduce premature delivery and child abuse.

Effective parenting programs can help parents promote children's learning and social skills. High-quality child care and preschool programs can reduce the need for special education, improve children's language and math skills in elementary school, and generate lasting benefits that produce significant cost savings in special education, welfare, and crime.

What we have learned in the past two decades about how young children learn and develop is truly extraordinary. The science is right on the money, but unfortunately, the money is not on the science. The gap is simply too large between what we know and what we do.

In California, we are building an innovative Statewide system that I believe will serve as a model for this Nation. In November of 1998, California voters passed Proposition 10, which dedicates approximately \$650 million a year toward building a comprehensive early childhood development system. The initiative created the California Children and Families Commission, the Statewide leadership agency which I am proud to chair that oversees its imple-

mentation. The initiative also created 58 local commissions to provide the local guidance and decisionmaking on how the funding is directed in each county.

In a State as vast and diverse as California, this structure enables each local community to determine the best possible use of funds for its own children and families.

Although the initiative provides local control from our urban centers to our rural outreaches, there is one overarching guiding principle of Proposition 10—to create a coherent, comprehensive school readiness system to ensure that every child is ready to succeed from the first day of kindergarten.

Our commissions have spent the last 2 years designing and building these programs. This year, we will see the launch of school readiness centers throughout California, focusing first on raising achievement in our lowest-performing schools. Our school readiness centers, which are required to partner with neighboring schools, will open their doors on or near elementary school campuses across the State to provide every family access to prenatal care, quality child care, and preschool education, parent education, health care, and early literacy programs at one easy-to-access site.

We realized early on with Proposition 10 that many programs for young children throughout California are needed to meet the demands of the Nation's most populous State. And although the initiative has raised hundreds of millions of dollars, our funding is insufficient to address every early childhood issue in our State. However, what our new revenue can do is help create a unifying system, a system that links existing services like Head Start, Early Head Start, and Healthy Families to new programs offering parent education and child care—and embed all these family services into our existing education system.

Instead of using Proposition 10 to fund a series of programs in their own “silos,” our goal is to glue our programs together so that families can have access to convenient and affordable supports to help their children grow, learn, and succeed.

Our State's diverse families are responding enthusiastically. As part of our parenting education component for school readiness, last November we launched a “Kit for New Parents,” designed to serve as a parents' “instruction manual,” which includes educational videos on early bonding and attachment, health and nutrition, child care, early literacy, discipline and safety, as well as a “Parent Guide” listing available services in each community for parents of newborns.

In the first 2 months, we have distributed more than 55,000 kits. Also, as part of our overall school readiness efforts, thousands of families have benefited from our mobile vans that bring books to underserved neighborhoods and from home visitation programs that bring public health nurses to support and teach new mothers. We also have funded programs that address retention and compensation of child care providers as well as training programs that help child care providers become better teachers.

I am sorry—I will conclude in 1 minute.

With our school readiness centers, we are going to make early childhood services an integrated part of our elementary schools and create one system of education for our children. Our ultimate goal

in California is to stop funding K through 12 and early childhood as two separate and distinct systems, and instead merge them into one seamless educational path for children.

Recently, the California legislature charged Proposition 10 with developing the school readiness component of the State's overall master plan for education. Never before had the State's education planning framework even included an early childhood component. We are not merely writing a separate chapter on early learning but creating, as I have said, a seamless education system from the prenatal period to 12th grade.

Of course, California is not alone. Massachusetts, Georgia, North Carolina, Ohio, Connecticut, and New York among others are beginning to piece together coherent, comprehensive systems guided by science to benefit our youngest children.

But the truth is there is much, much more to be done. In an era of grave State budget challenges, the Federal Government must invest more and must focus funding where help is needed most. Quite simply, every child in America deserves the same chance to succeed, and well-placed Federal dollars in the early years are the only means to ensure that every child gets that chance.

Every State including California is heavily dependent on Federal initiatives. From Head Start, the SCHIP program, Medicaid, the Child Care Development Block Grants, and Family and Medical Leave, our early childhood development programs are largely built on a Federal foundation. Congress must keep these programs strong, especially now, as States face large deficits.

But Congress must do more. Federal legislation should provide incentives to the States to bring quality early childhood services into the education system and to develop and expand our best programs to best serve our children.

As our Nation focuses on how to improve our education system to better service our children and to ensure long-term competitiveness as a Nation, we need to advance a bold new approach. I congratulate the committee for the courage to change the nature of the debate, and I issue this challenge. Any new Federal education initiative must be guided by one essential question: Will it address a robust, comprehensive vision of how children learn?

Early childhood development is the key to improving America's schools and to the long-term strength of our Nation. The science has told us in no uncertain terms that the early years of a child's life will set the trajectory of school performance and life performance.

We should stop talking about tinkering with K through 12 and start rebuilding the framework for P through 12, from the prenatal period to high school graduation.

Senator BOND. Thank you, Rob. I have got to give the other three panelists an opportunity to talk—

Mr. REINER. You got the point.

Senator BOND. Amen to what you said. I appreciate it. I am sorry that we are running out of time, and I do want to give the other three witnesses an opportunity to testify, and unfortunately, I agree with everything you said.

Mr. REINER. Thank you.

[The prepared statement of Mr. Reiner follows:]

PREPARED STATEMENT OF ROB REINER

Thank you Mr. Chairman and members of the Committee. I am honored to be here this morning to describe the progress we have made in promoting school readiness in California and to reflect on the lessons learned there and in other states. Today, I will make the case that Congress has an historic opportunity to do the right thing for children by investing wisely in the most neglected period of life: the critical years from the prenatal stage to school-entry. As our nation focuses with a new sense of urgency on education reform, it is time we acknowledge and act upon one simple truth. If we truly want to improve our student's school performance, we must change the educational structure in America. We must build a seamless education system that begins before birth and ends at 12th grade.

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Congress recently enacted extremely important education reform legislation that will make a difference in establishing strong standards, promoting quality teaching, and expanding the resources devoted to low-performing schools. However, although this is much needed legislation that will strengthen our schools, it did not go far enough. Our current K–12 elementary and secondary education system, designed over 100 years ago, is outdated and incomplete. Based on what science has shown us about how a child develops and learns, any educational reform that begins at kindergarten is simply too late.

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The absence of these essential building blocks can be devastating. Consider what we know: We know that low birth-weight, preterm infants are especially at risk for

poor health and developmental delays. We know that the roots of academic difficulty are often established well before a child's first day of school. It is a national disgrace that about one-third of the nation's kindergartners are not ready to learn, as judged by the real experts, their teachers. We know that children who fall behind before entering school have a far more difficult time catching up. We know that children who live with family and community violence in their early years suffer a multitude of damaging consequences that can last a lifetime and make learning all the more difficult.

Fortunately, we also know what works to help kids start school ready to succeed. Programs whose principles are consistent with what we know about healthy development and early learning have proven to be extraordinarily effective. Appropriate prenatal care is an early learning program for two generations: it helps expectant mothers deliver healthy children. Well-designed home visiting programs for parents and their infants can help improve birth-weights and reduce premature delivery and child abuse. Effective parenting programs can help parents promote children's learning and social skills. High quality child care and preschool programs can reduce the need for special education, improve children's language and math skills in elementary school, and generate lasting benefits that produce significant cost savings in special education, welfare, and crime.

What we have learned in the past two decades about how young children learn and develop is truly extraordinary. The science is right on the money, but unfortunately the money is not on the science. The gap is simply too large between what we know and what we do.

In California, we are building an innovative statewide system that I believe will serve as a model for the nation. In November 1998, California voters passed Proposition 10, which dedicates approximately \$650 million a year toward building a comprehensive early childhood development system. The initiative created the California Children and Families Commission, the statewide leadership agency, which I am proud to chair, that oversees its implementation. The initiative also created 58 local commissions to provide the local guidance and decision-making on how the funding is directed in each county. In a state as vast and diverse as California, this structure enables each local community to determine the best possible use of funds for its own children and families.

Although the initiative provides local control, from our urban centers to our rural outreaches there is one overarching guiding principle of Proposition 10: to create a coherent, comprehensive school readiness system to ensure that every child is ready to succeed from the first day of kindergarten. Our commissions have spent the last two years designing and building these programs. This year we will see the launch of school readiness centers across California, focusing first on raising achievement in our lowest performing schools. Our school readiness centers, which are required to partner with neighboring schools, will open their doors on or near elementary school campuses across our state to provide every family access to pre-natal care, quality child care and preschool education, parent education, health care and early literacy programs at one easy-to-access site.

We realized early on with Proposition 10 that many programs for young children throughout California are needed to meet the demands of the nation's most populous state. And, although the initiative has raised hundreds of millions of dollars, our funding is insufficient to address every early childhood issue in our state. However, what our new revenue can do is help create a unifying system—a system that links existing services like Head Start, Early Head Start and Healthy Families to new programs offering parent education and child care—and embed all these family services into our existing education system. Instead of using Proposition 10 to fund a series of programs in their own "silos," our goal is to glue our programs together so that families can have access to convenient and affordable supports to help their children learn, grow, and succeed.

And our state's diverse families are responding enthusiastically. As part of our parenting education component for school readiness, last November we launched a Kit for New Parents, designed to serve as a "parents' instruction manual," which includes educational videos on early bonding and attachment, health and nutrition, child care, early literacy, discipline, and safety, as well as a "Parent Guide" listing available services in each community for parents of newborns. In the first two months alone we have distributed more than 55,000 kits. Also, as part of our overall school readiness efforts, thousands of families have benefited from our mobile vans that bring books to underserved neighborhoods and from home visitation programs that bring public health nurses to support and teach new mothers. We also have funded programs that address retention and compensation of child care providers, as well as training programs that help child care providers become better teachers.

With our school readiness centers we are going to make early childhood services an integrated part of our elementary schools and create one system of education for our children. Our ultimate goal in California is to stop funding K–12 and early childhood as two separate and distinct systems, and instead merge them into one seamless educational path for children. Recently the California Legislature charged Proposition 10 with developing the school readiness component of the state’s overall Master Plan for Education. Never before had the state’s education planning framework even included an early childhood component. We are not merely writing a separate chapter on early learning, but creating, as I have said, a seamless education system from the prenatal period to 12th grade.

Of course, California is not alone. Massachusetts, Georgia, North Carolina, Ohio, Connecticut, and New York, among others, are beginning to piece together coherent, comprehensive systems, guided by science, to benefit our youngest children. But the truth is there is still so much more to be done. In an era of grave state budget challenges, the federal government must invest more and must focus funding where help is needed most. Quite simply, every child in America deserves the same chance to succeed, and well-placed federal dollars in the early years are the only means to ensure that every child gets that chance.

Every state, including California, is heavily dependent on federal initiatives. From Head Start and SCHIP, to Medicaid, the Child Care Block Grants and Family and Medical Leave, our early childhood development programs are largely built on a federal foundation. Congress must keep these programs strong, especially now as states face large deficits. But Congress must do more. Federal legislation should provide incentives to the states to bring quality early childhood services into the education system and to develop and expand our best programs to best serve our children.

As our nation focuses on how to improve our education system to better serve our children, and to ensure our long-term competitiveness as a nation, we need to advance a bold new approach. I congratulate the Committee for the courage to change the nature of the debate and I issue this challenge: any new federal early education initiative must be guided by one essential question: will it address a robust, comprehensive vision of how children learn? Early childhood development is the key to improving America’s schools and to the long-term strength of our nation. The science has told us, in no uncertain terms, that the early years of a child’s life will set the trajectory of school performance and life performance. We should stop talking about tinkering with K–12 and start rebuilding the framework for P–12, from the prenatal period to high school graduation. We must have the courage as a society to close the gap between what we know and what we do. Thank you for inviting me to join you today.

Mr. REINER. Ms. Schaefer?

Ms. SCHAEFER. Mr. Chairman and members of the committee, I am pleased to be here today to talk with you about ways in which we can take what is known about children’s development and use this information as the basis for practice.

In this report, I am going to address two major points. I am going to describe four initiatives that have made a difference, and then I am going to demonstrate the need for continued support.

First, building on State initiatives and eliminating separate education for children with special needs. Come back in time with me to a time 15 years ago. You probably know of a situation like this from your personal experience. Four-year-old Rose was diagnosed with autism. Her parents had concerns about her social development but were not prepared for this diagnosis. The only alternative offered by the school system for Rose was a substantially separate classroom for children with autism. Intuitively, the parents knew that this was not the right program for Rose, but because few options were available and services were fragmented, the parents took the recommended program. They looked at child care and Head Start programs but could not find one that had the need supports that they could add to their programs.

Things are very different now. We do not have many substantially separate programs for children with disabilities in Massachu-

setts anymore. Most preschool children with disabilities receive services in inclusive programs today because of the integration of early childhood special education programs with the State pre-kindergarten programs.

This was a very important initiative and has made a great difference in the lives of young children. This initiative led to improved teacher training, flexible funding to support inclusion, and the availability of services to children with disabilities in child care programs. The availability of these services in the community can make a significant difference for a young child like Rose.

Second is the need for the development of a system of early care and education. The success of our efforts in joining early childhood and early childhood special education led us to wonder about the potential of further collaboration. Our State Early Childhood Advisory Council studied the potential of a collaborative model and found that local early childhood councils could be effective in planning across public and private programs if they were allowed the flexibility to function based on different community resources and needs.

As a result of the focus on collaboration, Community Partnerships for Children were first funded in 1993 at a \$6 million level. The strength of this community involvement is evident in the accomplishments of the Community Partnership program during the next 8 years. Current funding is now at \$96.6 million, and the program serves 22,450 children.

In addition to providing access and affordability to early care and education programs, the Community Partnership Initiative also improved and supported program quality through accreditation and professional development. One of the significant outcomes of the program has been the large increase in the number of Massachusetts programs accredited by the National Association for the Education of Young Children from 66 programs in 1993 to 806 programs today. In addition, of the 1,500 family child care providers that participate in the Community Partnership program, 608 are either accredited by the National Association of Family Child Care or have a child development associate credential or an associate's or bachelor's degree in early childhood education. The program has also supported the pooling of funds to provide training resources and to fund college courses for teachers.

Community Partnerships has also supported families through parent/child literacy activities and adult education classes for parents to support them in getting their high school diploma. In several instances, programs have added a mental health component, because children were being expelled from early childhood programs due to behavioral problems. Mental health services allow children to stay in their child care program while solutions are identified and implemented.

Imagine what it would be like to have a 3-year-old with so much anger that he gets expelled from an early childhood program. Imagine—and you do not have to go very far in your imagination, because this is happening all around us. And then imagine what it would be like for that child to be able to stay in preschool and have mental health services implemented in the program and then go on

to have a successful kindergarten experience. There have been many cases like this.

What made this program work for that angry 3-year-old who was able to go on to kindergarten? First, the Community Partnership program gave local communities the responsibility to take care of their children. Second, the model allowed for accessing mental health support during children's most formative years. Third, the model helped parents feel comfortable utilizing the services. And forty, a very important element of the Community Partnerships approach is that it has emphasized the development of relationships between program providers and parents and specialists.

For further details about the Community Partnership program, refer to the Massachusetts section of the State Initiatives Report by the Center for Law and Social Policy.

The next issue is high quality at an affordable cost. A cost quality study conducted by Wellesley College Center for Research and Women and Abt Associates indicated that on a seven-point scale, Massachusetts programs rated a 4.94, with 5 being good. While this finding made us feel confident that we were really moving the system in the right direction, we clearly need to address ways that the system can ensure that all programs successfully prepare children for school.

Work still needs to be done to improve curriculum and to improve children's language and reasoning skills. In order to reach a good benchmark, programs need to provide a wide range of materials such as toys, art and science materials, and puzzles. But even more important, programs need professionally trained teachers to help children use the materials creatively and to incorporate children's interest in language and reasoning skills.

Our research clearly shows the need to focus on teacher qualifications, since teacher qualifications are strongly related to quality outcomes for children. The study also found inequities in the centers serving predominantly low-income families. Only 10 percent of the classroom staff serving low-income families have a 2-year college degree or more. This compares to 61 percent of the staff at centers serving moderate to high-income families.

Another problems that we have identified is the high rate of turnover of teachers. Clearly, this is due to the very low salaries that most early childhood teachers receive. Higher quality early care and education costs significantly more than lower quality early care and education.

The next issue is curriculum that builds on the foundation for successful school experiences. In keeping with the collaborative spirit that has evolved in Massachusetts, the legislature, recognizing the power of collaborative efforts, commissioned the preparation of early childhood program standards. And the commissioner of education and the State board of education perceived the need to link these standards to the Massachusetts curriculum frameworks so that they could become part of the curriculum continuum for education from pre-K to grade 12. The preparation of the early childhood standards involved collaboration from many sources and has resulted in a draft publication which I am happy to submit to you with my written testimony.

Senator BOND. It will be accepted as offered. Thank you.

Ms. SCHAEFER. Thank you.

Next, on the demonstration of the need for increased resources and development of State system for early care and education, the first recommendation is that the Federal Government should support States and communities in developing systems of early care and education. These systems should support the development of children from birth until they enter school, and they should be flexible.

This recommendation assumes that all current grant programs will be continued and expanded to serve more children. We found in Massachusetts that building on Head Start, child care in public school systems was vital in bringing people together by adding new funds to support the collaboration. New funding for existing programs adds flexibility and increases quality.

On preparation and remuneration of teachers, ideally, it would be wonderful if the Federal Government could fund high-quality early childhood programs for all children birth to 5. Realistically, I am urging that the Federal Government fund the current need for teacher training and preparation. This would go a tremendous way toward improving the quality of the education that children receive in their most formative years. We really need support for early childhood teachers getting their degrees, and we need to increase compensation and training so that when they go forward, they stay in the field.

In conclusion, we share a common goal. We want to be able to take what is known about the science of development and create quality early care and education programs for every child.

I would like to end with the words of Ibsen: "A community is like a ship; everyone ought to be prepared to take the helm."

It is this idea on with the Community Partnerships for Children has been built on, and it is this idea that has formed the foundation for the success of the Community Partnerships efforts. Communities and States need the support of the Federal Government in order to expand these initiatives which have already achieved significant outcomes.

Thank you.

Senator BOND. Thank you very much, Ms. Schaefer.

The Community Partnership and particularly the early childhood special education and mental health remind me of a visit I made last month to Lee's Summit, MO, just east of Kansas City, where they have a significant program like that. We would like to make sure that we provide them and other districts around the State that are working in similar programs with your experience. I find that very exciting, and I am very happy to learn about the Community Partnership.

[The prepared statement of Ms. Schaefer follows:]

PREPARED STATEMENT OF ELISABETH SCHAEFER

Mr. Chairman, and Members of the Committee: I am pleased to be here today to discuss strategies for getting from science to practice, from neurons to neighborhoods.

I would like to set the context for my remarks with a quote from Ibsen: "A community is like a ship; everyone ought to be prepared to take the helm."

In Massachusetts we have been successful in working with other agencies and groups to share the responsibility for taking the helm. Those of us in the early child-

hood community have a history of working within the confines of our programs to serve specific groups of children. We are currently working to move outside our boundaries to create a system of early care and education.

Our first attempt to create a system of early care and education in Massachusetts began within the Department of Education. When I came to Massachusetts to be the Director of Early Childhood Special Education in 1986 Massachusetts had been serving young children with disabilities for 10 years. At that time public schools did not have any funding for preschool children without disabilities and the classes were exclusively for children with disabilities. Schools did use Head Start programs and a handful of private programs for inclusion but eighty percent of the three- and four-year-old children with disabilities in the Commonwealth were educated in separate programs exclusively for children with disabilities. We knew that research supported inclusive programs and that children with disabilities would benefit by being placed in programs with their peers. We knew that their peers without disabilities were attending private preschools and child care programs. We worked to convince special education directors to place the children in community preschools and child care centers and a handful did, but most of the others felt that since they were responsible for implementing special education legislation they should keep the children in the public schools.

A wonderful opportunity presented itself when new funds became available with the passage of PL 99-457 the Education of the Handicapped Amendment of 1986 and at the same time Massachusetts funded a state pre-K program. The Department decided to coordinate the two programs and have them both focus on inclusion. We realized we needed special education and regular education working together. We combined early childhood and early childhood special education programs into one unit within the Department. We also combined program standards, teacher certification standards and funding.

While we initiated the joint program to promote the inclusion of young children with disabilities we found the quality of the programs improved for all children. Teacher expertise improved as they learned about early childhood and special education. And we now feel that we are operating programs that give children the opportunities to learn from each other. Currently in MA more than 80% of the three and four year old children with disabilities are in inclusive programs with their peers.

The development of a system took another step forward in 1990. The Early Childhood Advisory Council to the State Board of Education conducted a study that found that the existing local early childhood councils could be effective in planning across public school, Head Start and child care programs if they were allowed to function in different ways in communities based on differing resources and needs. In 1992, the Council, along with Early Learning staff, developed a proposal to the Legislature to expand the state-funded preschool program based on a more collaborative model to provide high quality, comprehensive early care and education that would support the state's Education Reform initiative that went into effect in 1993. The Governor and the Legislature awarded an additional \$6 million to the existing \$6.9 million program in fiscal year 93 for the proposed Community Partnerships for Children program (CPC). In 1996 the Massachusetts Legislature studied the program and began to grow it to the current program funded with \$96.6 million this year and will serve 22,450 children.

The basic problems and facts that the CPC model was designed to address were identified by many researchers as well as the observations of people familiar with the Massachusetts system. Ten years ago the existing situation was this:

- Early care and education was a fragmented and duplicative system;
- Head Start, private preschool and child care, public school preschools and family child care providers already existed, providing similar services, although they differed in philosophical history, funding, eligibility criteria and cost, etc.;
- Every piece of the system was under-funded, significantly affecting program quality and equal access to high quality programs for children from different socioeconomic backgrounds; and
- Parents found early care and education programs primarily through relatives, friends, pediatricians and other local contacts.

The model that developed into the CPC program addressed these facts. The Department of Education funds grants to communities to develop local systems of early care and education for preschool-age children and their families. Each community or group of communities forms a local CPC council to conduct a needs assessment, plan for services that address the five CPC objectives in a way that is responsive to local needs and existing resources, and to oversee the ongoing program.

Each council selects a lead agency to manage the funds. Lead agencies may be public school districts, Head Start programs or licensed child care agencies. Cur-

rently there are 15 child care agencies, 33 Head Start agencies and 120 public school districts that serve as lead agencies. The 168 CPC councils oversee the local early care and education systems in 335 out of the 351 cities and towns in Massachusetts.

A goal of the CPC program is to involve those providing programs and services, along with family and community members, in designing and improving a local system of early care and education. Councils must include representatives of each sector of the early childhood community (Head Start, child care and public schools), parents, and members from the religious, medical, senior citizen and business communities, and representatives of other services or programs for children and families. Together, there are roughly 4,000 council members across the state involved in developing and improving local early care and education programs.

Each CPC is unique, varying according to community resources and needs as well as incorporating the creativity of council members and staff. Even so, each community must plan to meet the following objectives. The Department of Education convenes an interagency team to read and rate council proposals in years when additional funding is allocated by the Legislature.

CPC OBJECTIVES

1. Support children of working families in accessible and affordable early care and education programs:

- $\frac{1}{3}$ of the children have to be in full day, full year programs.
- The community must provide options for families and scholarships for services with sliding fee scale.
- The community may create/renovate space.

2. Improve and support program quality through accreditation and professional development:

- Require programs seek national accreditation.
- Encourage college courses and career counseling.

3. Work collaboratively with many programs and services to develop a local system of early care and education:

- Joint outreach and screening.
- Coordinate staff development across programs.

4. Provide comprehensive services based on community and family needs:

- Health and mental health services.
- Family education and family literacy programs.

5. Conduct outreach to the community to identify families that could benefit from the program.

One concrete example of how Community Partnerships works to integrate services is in the area of mental health services. Several councils have added a mental health component to their programs as they identified children being expelled from early childhood programs due to behavioral problems. Mental health services allow children to stay in the context of their early childhood program while solutions are identified and implemented.

One example occurred in a small town in the middle of the state. An early childhood program in a public school asked a mental health consultant who was contracted by the CPC to observe a child who the teachers were having difficulty understanding. The staff was also having a difficult time communicating with the parents. The family initially felt that the problems at the program must be the result of something happening to the child at the program. The child's teachers were becoming increasingly frustrated with the lack of support from home and the challenge of safely containing the child in the program. The consultant observed the child and met with the teachers to discuss the observations and met with Mom to assess her sense of the child's experience in the program. The program wanted to provide the Mom with an outside view of the program and how the program was dealing with the child's social/emotional challenges. The Mom told the consultant that the child's Dad had recently left the state and his leaving seemed to trigger the child acting out at home.

The consultant observed twice in the classroom. Each time she was able to describe key behaviors she had observed in the child which helped staff think about how they were responding to the child how to reframe the teacher's response to achieve better results for the child. For example the consultant suggested that the traditional "time out" model that had worked well in the past was not working with this child. It appeared to be causing the child's troubling behavior to escalate. The consultant suggested that staff reframe "time out" as "time in". That if the child needed to take time away from the group that an adult would be with him to sup-

port him, and to reinforce the idea that his teachers were there to help him, no matter how challenging his behavior became.

Learning to accommodate a child with a high level of emotional need was a challenge to the program staff. Everyone experienced much stress as they struggled to overcome old habits and disciplinary patterns but they allowed the child to experience his emotions and search for creative ways to build the child's self esteem while holding clear limits and still challenging him cognitively. Program staff learned ways to talk to the other children about strong emotions and how they could all work with their feelings when they felt too big. The program stretched the limits of the classroom boundaries to include support from administrative staff when they needed to remove the child from the classroom. They also used an area near the guinea pigs in the next classroom as a good place to go to calm down. The teachers also helped the child develop a relationship with the janitor and together they built a bird condominium which now graces the entrance to the early childhood program.

Staff also received training on how to better understand what happens to children developmentally and psychologically when they are overcome with strong emotions. They also learned ways to problem-solve with all children and to teach strategies children could use to calm down.

The consultant also helped the program staff build a better relationship with the Mom. Staff are in close e-mail contact with the Mom and tell her how the child does each day in school and she keeps them updated on progress at home. The teachers have recommended to the Mom that the child is evaluated for special education and the Mom was open to the possibility. The child is now seeing a therapist regularly.

So, what are the elements of the CPC model that made it work in this example? First, CPC gives local communities the ability to take responsibility for children in their community. The concept of local responsibility resulted in the local CPC council members hiring a consultant to work with programs and families as mental health needs were identified. Recognizing this shared sense of responsibility, the consultant involved the teachers in the child's class, teachers in another classroom, the parents and even the custodian. The action steps taken with this particular child may have looked much different if the responsibility remained with a larger decision making body. With larger entities, rules and regulations for process and decision making guide how to respond any situation, limiting the flexibility needed to respond to individual needs. The local council members have the ability and flexibility to look at each individual situation, assess the circumstances and decide how much or how little is needed to best serve the child.

The second element focuses on the idea of looking at needs through a bigger lens. The consultant knew that this was not just a matter of addressing the child's needs in the classroom. She responded to the teachers' needs around adapting the environment and teaching strategies when the child needed it. She knew that a communication system needed to be established between home and school. She knew that additional training for staff needed to be developed to better understand children's development and behaviors within the context of stress and crisis. Looking at needs through this larger context ensures that all responsible individuals are prepared and ready to respond to a child's needs.

The third element highlights the importance of sharing resources and connecting families to those needed services. This consultant had been hired by another CPC council to assist in responding to mental health needs in a neighboring community. The neighboring CPC shared their resources (i.e., the consultant) with this local CPC. The Council hired the consultant. The consultant and the program teachers connected the mother to special education, another support to the child and the family. The CPC council also provided the mother with resources to local therapeutic services. If local agencies and service providers were not working together, service provision to this child would have been fragmented and potentially ineffective. Combining the resources of a local community ensures that the appropriate services will be identified and a seamless delivery of services will be provided.

But the last, and highly important element, is that this local approach makes way for the development of relationships. The council establishes relationships with programs. It is this relationship that made it possible for the program to open their doors and ask for help. The consultant helped to build the relationship between the teachers and the mother so that there would be a union, where all parties were working together in the interest of the child. The relationships made it possible for the teacher to approach the mother about having the child evaluated for special education services. It is the relationships that make this model work . . . trust that everyone is working together to take the helm and ensure that the needs of every child are met.

This is one example of how Community Partnerships helps to build a system of early care and education around existing programs. Community Partnerships has

also brought resources to the early childhood community that have allowed programs to make significant strides in improving quality. One of the objectives of the program is to build quality across the system of early care and education. As a result Massachusetts has gone from having 66 programs accredited by the National Association for the Education of Young Children in 1993, when Community Partnerships for Children started to 806 programs today. Massachusetts has led the country in the number of accredited programs for the last four years. Family child care programs are also working to improve program quality. Of the 1,574 family child care providers that participate in CPC, 608 are either accredited by the National Association of Family Child Care or have Child Development Associate Certification or have an Associate's or Bachelor's degree in early childhood education.

Creating a community that supports the development of quality programs has decreased the fragmentation of services. Many councils have directors' groups that meet regularly for support and service coordination.

Providing local communities with a role in supporting the development of young children has resulted in communities contributing 45 cents in in-kind contributions for every dollar of state funding received according to a study conducted by Tufts University in 1996. These in-kind contributions were defined as services, materials or space contributed by CPC partners to meet CPC goals that were not reimbursed by the grant. Some examples include the value of transportation services, or administrative support donated by a partner agency.

In 2000, the Department of Education contracted with the Wellesley College Center for Research on Women and Abt Associates to conduct a study of the cost and quality of early care and education in Massachusetts. The study is being implemented over several years and each year focuses on a different sector of the early care and education system. The report on the first year focused on center-based, full-day full-year programs for preschool children. Subsequent reports will focus on public school preschool programs, family child care programs and center-based full-day full-year programs for infants and toddlers. The study will not assess the cost and quality of Head Start programs in Massachusetts since there is a national evaluation currently assessing Head Start that includes Massachusetts sites.

The first study found that full-time early care and education for preschool children in Massachusetts is, on average high quality. Researchers used the Early Childhood Rating Scale (ECERS), a 7-point scale with a 5 being the "good" benchmark of care. A "5" is associated with later school success in young children. Massachusetts programs are on average a 4.94. While this finding made us confident we are moving the system in the right direction other findings identified issues we need to address if we are to develop a system that will prepare all children for school.

We found that Massachusetts' classrooms need to improve in the following ways:

- We need to improve the curriculum, since only 35% of the programs reached the "good" benchmark for language and reasoning and only 24% rated 5 or better on the activities subscale. To reach the good benchmark staff must integrate language and reasoning skills into all areas of the program. To reach a good benchmark on activities they need to provide a wide range of toys, art and science materials and puzzles and they must facilitate creative use of the materials and incorporate children's interests into the curriculum activities.
- Teacher qualifications are related to quality outcomes for children. The study found inequities in centers serving predominantly low-income families. Only 10% of classrooms serving low-income families have a two-year college degree or more, compared with 61% of staff at centers serving moderate to high-income families.
- Quality was also related to the amount of time teachers spent with children versus teacher assistants. Higher quality was associated with teachers spending more time with children than assistant teachers.
- The average turnover rate for teachers is 26%, with 41% of the teachers leaving their jobs and leaving the field entirely.
- The cost of raising the quality of the programs from a 3 (adequate) to 5 (good) would require a 27% increase in the cost, although simply increasing funding would not achieve higher quality automatically.

We have begun to address the issue of curriculum with the development of Early Childhood Program Standards that include health, safety and education components. The curriculum guidelines included in these standards are built around the Massachusetts Curriculum Frameworks so that the preschool curriculum articulates with the kindergarten curriculum.

CHALLENGES TO THE SYSTEM

Financing quality improvements to the system is complicated by the fact that 60% of the funding for the system is paid by parents. This fact is often ignored by policy

makers who typically try to address funding issues with increases in the subsidy rates. Subsidies cover such a small portion of the system that they cannot finance major system improvements, not finance improvements where or in the way they are most needed. The major funders of the system, parents, are already struggling to pay the current cost of care.

RECOMMENDATIONS

Based on our work with the Community Partnerships program over the years and an analysis of the results of the Cost and Quality Study in Massachusetts, the following recommendations can be formulated:

- Support early childhood teachers getting degrees. One primary key to high quality programs and good outcomes for children is teachers' educational level. In order to implement the kind of language-rich environment and a curriculum that enriches children's cognitive and social/emotional development, teachers need a college education with a focus on early childhood education and child development. Given the current circumstances, this will require a reasonable time to achieve. Massachusetts' new standards require that early care and education teachers will be required to have Associates degrees seven years from the effective date of the standards and Bachelor's degrees within fourteen years of the approval date. Funding to make this possible through a variety of routes will be essential.

- As expectations for teachers' rise, training opportunities and compensation need to become comparable to those available to public school teachers. It is clear that the amount of funding needed to accomplish this cannot come from parents and significant federal, state and/or local investments will be needed soon and over the long term.

- Flexibility must be built into funding to accommodate these differences and allow states to build on their own array of programs to achieve key benchmarks of access and quality. Just as local programs develop at different rates and have different needs and resources available, so do states have very different existing resources and populations.

- Target programs for moderate-income families and infants and toddlers. Several studies show they have the least access to high quality care.

- Continue to build on existing early childhood initiatives such as section 619 and Part C of IDEA, TANF, CCDF, and Head Start. Each of these programs has strengths and contributes to the overall system of early care and education. We should be proactive in coordinating these programs.

CONCLUSION

Putting local Community Partnerships Councils "at the helm" has been essential to the growth and improvement of quality in early care and education programs in Massachusetts. It is community members who care the most and reap the benefits from the progress and success of early childhood initiatives. Parents feel most comfortable contacting a local knowledgeable person or organization about their child care needs and other needs they might have for parenting education and family support. Using early childhood programs is about trust. The local flavor and flexibility afforded to CPC councils has promoted creativity in the way various services are implemented. The focus on collaboration has developed networks both within communities and between communities. Although it has taken several years, CPC's are starting to see themselves as part of a larger system and often take advantage of the larger network of programs to solve problems that come up in their own programs as well as share ideas with others about their successful initiatives. It is the local flavor and flexibility of the program that engages people in building a system out of fragmentation and in overcoming barriers of all kinds. The design of the CPC program works on several levels at once, from the individual to the program level to the statewide network. This is a primary strength of any program that really works and that can sustain itself into the future.

Senator BOND. Ms. Russell?

Ms. RUSSELL. Senator Bond, I appreciate the opportunity to talk with you. My name is Sue Russell, and I am executive director of Child Care Services Association in Chapel Hill, NC.

We have heard earlier today from experts who tell us that the education, compensation and retention of the work force are critical to making positive gains for our children. Yet today and every day in North Carolina, about 35 child care teachers will leave their

child programs, representing an annual turnover rate of 31 percent. They leave because they are paid less than store clerks or parking lot attendants. Their median wage is \$7.50 an hour.

These teachers are women, mostly with children themselves, who want to keep educating and caring for our young children, but must move to other jobs to support their own families. They have little formal education past high school, but a significant majority want to take college courses to learn more. In the last 3 years, about one-third of these women relied on one or more forms of public assistance, and 27 percent of them have no health insurance from any source.

All this paints a bleak picture of the educational success of our children.

But in some parts of our country, the picture is even worse, and it could have been worse in North Carolina. In fact, thanks to some major Statewide initiatives, we are seeing incremental gains in our State.

To address the issues I just described, Child Care Services Association began the T.E.A.C.H. Early Childhood Project in North Carolina in 1990. We designed a comprehensive scholarship that helped teachers take courses toward an associate's degree in early childhood education.

T.E.A.C.H. scholarships typically go beyond help with tuition and books to include travel stipends and paid release time, allowing recipients to attend classes or study. Their sponsoring child care programs are asked to help support part of the costs. When a teacher completes a required number of credit hours, usually 9 to 15, she is eligible for a bonus or a raise. In return for this incentive, she must agree to remain in her sponsoring center for another year. Family child care providers and directors are also eligible for scholarships. Participants can renew their scholarship each year for as long as it takes them to earn their degree, which may be 5 to 6 years because they are working full-time.

We began with private funds from foundations, United Way, and corporations to start in pilot communities. In 1993, North Carolina also initiated Smart Start, a comprehensive early childhood initiative. This effort provides local communities with significant resources to help ensure that children come to school healthy and ready to succeed.

It was recognized early on that to be successful at the local level, we needed to work on improving the education, compensation, and retention of the early childhood work force Statewide. So to build that critical piece of our infrastructure for quality, the T.E.A.C.H. Early Childhood Project received \$1 million from our State legislature. This year, our T.E.A.C.H. budget is \$3 million, using a combination of State, CCDBG, foundation, and corporate funds. In our first year, 21 scholarships were awarded; last year, we provided over 4,900 scholarships, reaching child care providers in all 100 counties.

The results have been remarkable. Child care teachers, directors, and family child care providers on T.E.A.C.H. scholarships last year alone completed over 21,000 credit hours, saw their earnings increase, and left their programs at a rate of less than 10 percent per year. Now that scholarships have become universally available,

we have seen steady growth in demand, and our community college system has had to respond with more classes, more accessible times, modalities and locations for instruction, and even more colleges with associate degree programs.

But we also realized that scholarships are not enough. Some child care teachers already have degrees. Those on T.E.A.C.H. scholarships would also expect to earn more money once they earned their degrees. We knew we had to find a way to improve child care earnings without forcing already struggling parents to pay more for child care.

So in 1994, we began the Child Care WAGES Project. This effort provides graduated supplements paid directly to participants and tied to their level of education. Supplements are paid ever 6 months as long as the individual remains in her child care program.

Again, results have been impressive. Last year, over 8,600 child care providers participated. Supplement amounts ranged from \$200 to \$4,000 annually. Because supplement amounts increase as one gets more education, WAGES participants are motivated to go back to school. And only 18 percent of participants left their programs last year, a remarkably low percentage given that this is the best-educated sector of our work force and would therefore have the most other options. This year's \$7.7 million for WAGES comes from Smart Start and CCDBG.

We also realized that health insurance continues to be an issue facing the work force. So in 1998, we began the T.E.A.C.H. Early Childhood Health Insurance Program. Funded exclusively with funds from CCDBG, this initiative reimburses eligible child care programs for one-third of the cost of health insurance for their teachers. About 2,500 child care teachers, directors, and family child care providers benefited from the program last year. After 1 year on the program, participating center turnover rates dropped by 10 percentage points, again making progress toward the goal of a better-educated, compensated and retained work force.

Response by the work force has been extremely positive. Through and incentive approach, we are directly helping with the cost of education, better compensation, and benefits. And we have seen Statewide impact. In 1993, turnover rates in our State were 42 percent a year. Now, they are down to 31 percent. In 1998, 62 percent of teachers had some college course work or a degree; 3 years later, it has increased to 82 percent. In those same 3 years, we have also seen the percent of teachers with no insurance drop from 30 percent to 27. We are learning that these initiatives can make a difference but that change will be incremental and takes a long time.

T.E.A.C.H. Early Childhood Projects are now operating in 19 States, housed in various Statewide nonprofit organizations. With foundation help, Child Care Services has created the T.E.A.C.H. Early Childhood Technical Assistance Center to help States begin and grow successful, results-focused projects. This year alone, T.E.A.C.H. projects expect to award over 18,000 scholarships. Nationwide, funding for these projects is patched together, with 14 States using multiple sources of funds. But the majority of funds comes from CCDBG or TANF transfer funds, with 16 of 19 States benefiting from those dollars.

I have made presentations about T.E.A.C.H. in 36 States. In every State, the issues are the same—increasing and/or high turnover rates, low teacher compensation, and low and/or declining teacher educational qualifications. The biggest barrier that States face when deciding what to do is the lack of resources. Many States are faced with long waiting lists for child care assistance, and families are struggling without child care. So focusing on quality improvements, particularly those focused on the work force, may seem overwhelming. Yet research tells us that good outcomes for young children in child care are tied directly to the education, compensation, and retention of their teachers.

My question is how can we afford not to address these issues. Targeted and increased Federal resources can make the difference our children, families, and Nation need.

Thank you.

Senator BOND. Thank you very much, Ms. Russell. You certainly have addressed an overwhelming problem, and we look forward to learning more about how you have expanded it into other States.

[The prepared statement of Ms. Russell follows:]

PREPARED STATEMENT OF SUE RUSSELL

Senator Kennedy, Senator Gregg and members of the Committee, I appreciate the opportunity to talk with you. We have heard today from experts that tell us that the education, compensation and retention of the workforce is key to making positive gains for children. Yet today and every day in North Carolina about 35 child care teachers will leave their child care programs, representing an annual turnover rate of 31%. They leave because they are paid less than store clerks or parking lot attendants; their median wage is \$7.50 an hour. These teachers are women, mostly with children themselves, who want to keep educating and caring for our young children, but must move to other jobs to support their own families. They have little formal education past high school but want to take college courses to learn. In the last three years about one-third of these women relied on one or more forms of public assistance. And 27% have no health insurance from any source. All of this paints a bleak picture for the educational success of our children.

But in some parts of our country the picture is even worse, and it could have been worse in North Carolina. In fact, thanks to some major statewide initiatives, we are seeing incremental gains in our state. To address the issues I just described, Child Care Services Association began the T.E.A.C.H. Early Childhood® Project in North Carolina in 1990. We designed a comprehensive scholarship. Our initial scholarship helped teachers take courses toward an associate degree in early childhood education. T.E.A.C.H. scholarships typically go beyond help with tuition and books, to include travel stipends and paid release time, allowing them to attend classes or study. Their sponsoring child care programs are asked to help support part of the costs. When a teacher completes a required number of credit hours, usually 9–15, she is eligible for a bonus or a raise. In return for this incentive, she must agree to remain in her sponsoring center for another year. Family child care providers and directors are also eligible for scholarships. Participants can renew their scholarship each year for as long as it takes them to earn their degrees, which may be 5–6 years because they are working full time.

When we began in North Carolina, we used private funds from foundations, United Way and corporations to fund the Project in pilot communities. In 1993, North Carolina also initiated a comprehensive early childhood initiative, called Smart Start. This effort provides local communities with significant resources to help ensure that children come to school healthy and ready to succeed. It was recognized early on that to be successful at the local level, we needed to work on improving the education, compensation and retention of the early childhood workforce. So, to build that critical piece of our infrastructure for quality, the T.E.A.C.H. Early Childhood® Project received \$1 million from our state legislature. This year, our T.E.A.C.H. budget is \$3 million, using a combination of state, CCDBG, foundation and corporate funds. In our first year, 21 scholarships were awarded; last year we provided over 4,900 scholarships, reaching child care providers in every county.

The results have been remarkable. Child care teachers, directors and family child care providers on T.E.A.C.H. scholarships, last year alone, completed over 21,000 credit hours, saw their earnings increase and left their programs at a rate of less than 10% per year. Now that scholarships have become universally available, we have seen steady growth in demand and our community college system has had to respond with more classes, more accessible times, modalities and locations for instruction and even more colleges with associate degree programs.

But we also realized that scholarships are not enough. Some child care teachers already had degrees. Those on T.E.A.C.H. scholarships would also expect to earn more money once they earned their degrees. We knew we had to find a way to improve child care earnings without forcing already struggling parents to pay more for child care. So in 1994 we began the Child Care WAGE\$® Project. This effort provides graduated supplements paid directly to participants and tied to their level of education. Supplements are paid every six months as long as the individual remains in her child care program. Again, results have been impressive. Last year, over 8,600 child care providers participated. Supplement amounts ranged from \$200 to \$4,000 annually. Because supplement amounts increase as one gets more education, WAGE\$ participants are motivated to go back to school. And only 18% of participants left their programs last year, a remarkably low percentage given that this is the best educated sector of our workforce and would therefore have the most other options. Funding for WAGE\$ comes from Smart Start (state funds) and CCDBG.

We also realized that health insurance continues to be an issue facing the workforce. So in 1998 we began the T.E.A.C.H. Early Childhood® Health Insurance Program. Funded exclusively with funds from CCDBG, this initiative reimburses eligible child care programs for one-third of the cost of their health insurance for their teachers. To be eligible the center or family child care home must have all teachers with two or four year degrees in early childhood education, or must be willing to sponsor some of their staff on T.E.A.C.H. Early Childhood® scholarships to earn degrees. About 2,500 child care teachers, directors and family child care providers benefited from the program last year. After one year on the program, turnover rates dropped by 10 percentage points, again making progress toward the goal of a better educated, compensated and retained workforce.

Response by the workforce has been extremely positive. Through an incentive approach, we are directly helping with the cost of education, better compensation and benefits. And we have seen statewide impact. In 1993, turnover rates in our state were 42% a year, now down to 31%. In 1998 62% of teachers had some college coursework or a degree; three years later it has increased to 82%. In those same three years we have also seen the percent of teachers with no insurance drop from 30% to 27%. We are learning that these initiatives can make a difference but that change will be incremental and takes a long time.

T.E.A.C.H. Early Childhood® Projects are now operating in 19 states, housed in various statewide nonprofit organizations. With foundation help, Child Care Services has created the T.E.A.C.H. Early Childhood® Technical Assistance Center, to help states begin and grow successful, results-focused projects. This year alone T.E.A.C.H. Projects expect to award over 18,000 scholarships to be used at one of 447 different universities or community colleges. Nationwide, funding for these Projects is patched together, with 14 states using multiple sources of funds and 16 out of 19 states using CCDBG or TANF transfer funds to support their efforts. Child Care WAGE\$® Projects are also being replicated.

I have made presentations about T.E.A.C.H. in 36 states. In every state the issues are the same, increasing and/or high turnover rates, low teacher compensation and low and/or declining teacher educational qualifications. The biggest barrier states face when deciding what to do is the lack of resources. Many states are faced with long waiting lists for child care assistance and families are struggling without child care, so focusing on quality improvements, particularly those focused on the workforce, may seem overwhelming. Yet research tells us that good outcomes for young children in child care are tied directly to the education, compensation and retention of their teachers. My question is how can we afford not to address these issues? Targeted and increased federal resources can make the difference our children, families and nation need.

Senator BOND. Now, a long-time, very good friend, Sharon Rhodes.

Welcome, Sharon.

Ms. RHODES. Thank you, Senator Bond.

It is indeed an honor to be here today representing Parents as Teachers National Center. While I am a director of Parents as

Teachers National Center, I am also, like many of you, a parent and a grandparent.

Thank you for the invitation to appear before the committee today to present on the importance of parental involvement in children's learning from the earliest years on and how the Parents as Teachers program helps parents give their children the very best possible start in life.

It has been my privilege to have been involved in the Parents as Teachers program since 1985, when it was implemented Statewide in Missouri, thanks to the vision and leadership of then Governor, now Senator, Kit Bond.

Parents as Teachers has since then expanded to more than 2,800 sites in all 50 States, in U.S. Territories, as well as overseas. I want to take this opportunity to acknowledge Senator Bond's long-term commitment to families and children.

As we well know, there are no prerequisites and no admission exams required to become a parent. Good or bad, right or wrong, many parents are on their own, and to complicate matters, babies do not come with directions. Yet we expect parents to have the knowledge and the tools necessary to prepare their children to enter kindergarten ready to learn and to succeed in school.

We have heard from Dr. Zigler this morning, who has been an invaluable resource to Parents as Teachers over the years, and we have also heard from our distinguished panel today about the importance of capitalizing on windows of learning opportunities in the early years of life. We can no longer afford to think of education as beginning in preschool or kindergarten. Therefore, we must encourage and support parental involvement in children's learning from birth on because, as Mrs. Bush told this committee in January, it is during those critical years between the crib and the classroom that a child's education really begins.

The value to schools and communities of fostering parental involvement starting from birth is that it establishes a pattern for parental involvement and continues when the child starts school and then beyond.

What better place to foster parental involvement than in the parents' own home? Home visiting programs such as Parents as Teachers play a critical role, because as we all know, parents are their children's first and most influential teachers. Parents as Teachers trains parent educators to bring research-based information grounded in child development and neuroscience to parents in a way that makes sense to them. Our goal is not to turn parents into neuroscientists, but to translate the neuroscience findings into concrete What, When, How, and Why suggestions that parents can use.

It is vital that parents know how to recognize and then to capitalize on teachable moments using simple, everyday activities such as feeding time, a game of peekaboo, or a trip to the grocery store—all opportunities to develop their child's basic skills. Research bears out how parents converse with their children and formulate questions around these early, everyday activities, that this lays the foundation for their child's literacy skills and later reading success.

Senator Kennedy has publicly stated that it is essential to plant the seeds of success to improve literacy, the gateway of learning, and we at Parents as Teachers could not agree more.

It is so exciting to see parents realize that they have what it takes to impact their child's learning. Recently, I accompanied a parent educator on a visit to a family living in a Yonkers housing project. The father was present but did not appear to be engaged in the visit at all. There were four or five children all bouncing around this tiny apartment, which made for a tense and distracting environment.

At the end of what I would say was a challenging home visit, the father looked up and spoke to us for the very first time and said: "Do you mean all I have to do is play with my kids to help their brains grow?" What a great step forward for that family.

Senator Gregg told this committee last month that the education and nurturing a child receives prior to school sets the foundation for his or her formal education. We do have a lot of good information for parents and early childhood professionals. Now we have to put it to work.

In sum, our experience with Parents as Teachers confirms that when parents are involved in their child's learning from early on, they stay involved. Therefore, we urge Congress to include parental involvement as a critical component of all early childhood initiatives.

We also believe that any comprehensive education reform must include a home visitation program like Parents as Teachers for all children during the early years beginning at birth.

I want to thank you once again for inviting us to share our experiences in involving parents in their children's early learning through the Parents as Teachers program.

Thank you.

[The prepared statement of Ms. Rhodes follows:]

PREPARED STATEMENT OF SHARON F. RHODES

Mr. Chairman and Members of the Committee: It is indeed a privilege to be here representing the Parents As Teachers National Center, which serves more than 2,800 Parents as Teachers (PAT) sites in all 50 states and several other countries. I am Sharon Rhodes, Director of Program Development and Evaluation at the Parents as Teachers National Center. Thank you for your invitation to appear before the committee today to present on the importance of parental involvement in children's learning from the earliest years, and on Parents as Teachers, which is a parent support and education program founded on the principle that parents are the most important determinants of their children's success in school and in life. I have been involved in Parents as Teachers since 1985, when it was implemented statewide in Missouri, thanks to the vision and leadership of then Governor, now Senator, Kit Bond. In addition to my statement today, I have provided a written statement for the record.

Parents as Teachers National Center recognizes that the first years of life are a time of tremendous growth and learning. Research has clearly demonstrated this. We also recognize that the quality of a child's environment in these early years has a strong influence on that child's later development and success in school and life. Our experience has demonstrated the effectiveness of helping to engage families early in their child's development. Further, thirty years of research show that greater family involvement in children's learning is a critical link in the child's development of academic skills, including reading and writing. Parents as Teachers and other family support and parent education programs that emphasize the earliest years of life can be part of a broader effort to foster widespread parent involvement in their children's learning and education.

The Parents as Teachers Program

Parents as Teachers is a parent education and support program that helps parents give their child the best possible start in life. The program is designed to enhance child development and school achievement through parent education accessible to all families, beginning even before the child's birth. Acknowledging that all parents deserve support in laying a strong foundation for their child's success. Parents as Teachers is designed for the voluntary participation of all families. It is a universal success program, appropriate for and welcoming of families from all walks of life.

The work of Parents as Teachers is grounded in these guiding principles:

- The early years of a child's life are critical for optimal development and provide the foundation for success in school and in life; children are born to learn!
- Parents are their children's first and most influential teachers. Parents are the experts on their own children by virtue of the special knowledge and insight that comes from everyday family experiences and the attachment parents and their children share.
- All families have strengths, and all parents want to be good parents.
- Established and emerging research should be the foundation of parent education and family support curricula, training, materials and services.
- All young children and their families deserve the same opportunities to succeed, regardless of any demographic, geographic or economic considerations.

Among home visiting programs, Parents as Teachers is alone in offering a universal access model. For example, in Missouri and Kansas, PAT is available to all families with children in the appropriate age range. Recognizing that all families can benefit from support. Parents as Teachers families come in all configurations, from all socio-economic levels, and from both rural and urban communities. This universal access reduces the stigma that other programs addressing only high-risk families may carry. However, universal access does not mean that one size fits all. Parents as Teachers has been adapted to meet the needs of diverse families in different ways.

Parents as Teachers brings research-based information (grounded in both child development and neuroscience) to parents in a user-friendly format to help them understand how they can impact their child's development, starting prenatally. The Parents as Teachers Curriculum offers a holistic approach, covering 4 domains development (cognitive, motor, social-emotional, and language), emphasizes increasing parents' knowledge of child development, and focuses on sharing parent-child activities that will foster that development and enrich parent-child interaction.

The Parents as Teachers Born to Learn™ Curriculum, developed in collaboration with neuroscientists from the Washington University School of Medicine in St. Louis and the University of Chicago Medical School, distinguishes Parents As Teachers from other parent support programs. The Born to Learn™ Curriculum, is infused with neuroscience-based information for parents about their child's brain growth and development, translated into concrete "when", "what", "how" and "why" suggestions to enhance their children's learning and development. The goal is not to turn parents into neuroscientists; using the Born to Learn™ Curriculum, parent educators provide parents with the tools to use science in everyday ways. For example, language learning, which neuroscience research has shown begins in the first few months of life, is encouraged by sharing with parents the value of "parentese" and face-to-face talking with their infants. The value of play is underscored by connecting it with how the brain develops. For example, repetitive games and games that stimulate several senses are encouraged because they build and strengthen connections among brain calls.

The Curriculum also provides flexibility as to how the information is presented. Detailed personal visit plans are offered in weekly bi-weekly and monthly formats to accommodate individual family and program needs. The parent materials are developed at two reading levels to meet the literacy needs of a variety of families. Curriculum and parent materials are now being made available in Spanish as well as English. The curriculum begins prenatally and is organized around children's developmental stages.

The Born to Learn™ Curriculum is the heart of Parents as Teachers. In addition to core Parents as Teachers programs, many other early childhood programs use the Born to Learn™ Curriculum and training to supplement their services to families. These programs, which include Even Start, Head Start, Family Resource Centers, child care centers, and Healthy Families America, have a variety of target areas: early literacy, child abuse prevention, health care, parent education; and early childhood development, and yet the Born to Learn™ Curriculum is effective for each.

The Parents as Teachers model in its delivery has four components: 1) personal visits, 2) group meetings, 3) developmental, health, vision, and hearing screenings, and 4) a resource and referral network.

Personal Visits

To most families enrolled in Parents as Teachers, the personal visit stands out as the major service delivery component. Personal visits support parents in their parenting role in order to promote optimal child development and positive parent-child interaction. The Parents as Teachers National Center recommends personal visits be conducted at least monthly. (Families with greater needs might receive weekly or bi-weekly visits.)

A trained, certified Parents as Teachers parent educator conducts the personal visit. A typical visit begins with the parent educator's preparation, as she reviews the personal visit plan in the Curriculum, collects the handouts to share with the parent, and assembles materials for the parent-child activity. As she plans the visit, she remembers interests, concerns or needs the parents have expressed, as well as observations she has made of the child's development. Using these, she can make this truly a personal visit, individualized for the family she will be seeing.

The personal visit typically lasts an hour, and is usually held in the family's home. The parent educator, parents or primary care providers, and child make themselves comfortable on the floor, the child's play space. Sometimes other people join in the visit, such as child care providers, grandparents, adult relatives or other children. Anyone living in the home or involved in the care of the child is a welcome participant. The parent educator begins by checking in with the parents.

What new things has the child done since the last visit? How did the child and parent like the follow-up activity the parent educator suggested at the last visit? She will also pay attention to the child, talking to him, including him, in the conversation, and making observations about his development. Throughout the visit the parent educator will be sensitive to the comments and concerns of the parents. While talking to the parents, the parent educator will incorporate discussion points on topics included in this visit plan. She may present a parent handout and focus the discussion by referring to it. She may show a short video segment that illustrates an aspect of brain development. The provision of information is conversational, and is woven into the interaction between parent, child and parent educator. Most often the parent educator will use an observation of the child to provide the context for the information and make it relevant to the parents.

The parent educator will also engage the parents and child in an activity that is based on the information presented in the plan. This provides for meaningful interaction between the parents and child, and gives the parents an opportunity to observe their child's development. What the parent and child will also remember, however, is that it was fun. The parent educator suggests a follow-up activity that extends the learning through the time between personal visits.

A literacy activity is an important part of each visit. The parent educator brings a book, often related to the parent-child activity, for the parent to read to the child. Book exploration skills are taught, including telling a story based on the pictures in the book, so that parents of varying literacy levels can successfully read to their child. Rhymes and songs are a part of many visit plans, and parent handouts support the development of the child's phonological awareness.

At the end of the visit the parent educator checks for any last questions or concerns the parents might have. She summarizes the visit by reviewing a significant developmental characteristic she was able to observe, reflecting on a strength she observed in the parents, and reminding the parents of the follow-up activity she has given them to do.

Programs typically offer visits in the evenings and on Saturdays to accommodate the schedules of working parents.

Group Meetings

A Parents as Teachers parent group meeting is an opportunity to enhance parents' knowledge of child development and parenting issues through group experiences. Group meetings provide opportunities for parents to broaden their knowledge, learn from each other, observe their children with other children, and learn and practice parenting skills. Topics may include early brain development, fostering the child's interest in books, choosing developmentally appropriate toys, to name a few.

Developmental and Health Screening

Parents as Teachers provides periodic screening for early identification of developmental delays or health problems. Research-based screening instruments are used and parent educators receive training in their administration. Screening provides regular review of each child's developmental progress, identifies strengths and abili-

ties as well as areas of concern that require referral for follow-up services, and increases the parents understanding of his or her child's development.

Resource and Referral Network

Families may have needs for services that are outside the scope of Parents as Teachers. Parent educators help families identify interests and needs, connect with needed resources, and overcome barriers to accessing services. Referrals to pediatricians, child diagnostic or therapy programs that are indicated as a result of screening are prime examples of this service. Other examples include helping families provide for basic needs such as housing or utilities, connecting families to child care, and making sure that adequate medical care is accessible and affordable for the family. Each local Parents as Teachers program develops a resource network within its own community that it can use to locate services for families. Each Parents as Teachers program also has a Community Council made up of representatives from local agencies, and that also provides links to service providers in the community.

Success of the Parents as Teachers Program

Parents as Teachers began with four pilot sites in 1981, was implemented statewide in Missouri in 1985, and currently has more than 2,800 sites in 50 states as well as foreign countries and U.S. territories. The Parents as Teachers National Center has trained and certified over 10,000 parent educators. Several hundred thousand families have participated in Parents as Teachers. Nationwide, Parents as Teachers is successfully blended with many existing programs for families of young children. These existing programs for families of young children often have a home visitation component delivered by family service workers or family educators, but without a research-based child development curriculum. They incorporate the Parents as Teachers model to add parent education through home visiting or to enhance the quality of their services to families. The tremendous growth of Parents as Teachers can be attributed to the adaptability of the program, research-based curriculum and training, flexibility of the program, universal access approach, relatively low cost of implementation, and documentation of program effectiveness.

PAT has a long history of independent evaluations demonstrating positive outcomes for young children and their families. The evaluations have focused on three main areas: (1) child development; (2) parent knowledge, attitudes, and behavior; and (3) parent-child interaction.

Child Development

Results of the evaluations show that Parents as Teachers prepares children to enter kindergarten ready to succeed. Parents as Teachers children are more likely to be on-track developmentally and to have developmental delays identified early and remediated. An evaluation of the statewide implementation of the Parents as Teachers program in Missouri found that more than one half of the children with observed developmental delays overcame them by age three. Parents as Teachers children at age 3 are significantly more advanced in language, social development, and problem solving and other cognitive abilities than comparison children. The positive impact on Parents as Teachers children carries over into the elementary school years. Parents as Teachers children score higher on kindergarten readiness tests and on standardized measures of reading, math and language in first through fourth grades.

Parent Knowledge, Attitudes, and Behavior

Parents as Teachers parents gain knowledge of child development, good parenting practices, and confidence in their parenting skills. They show increased understanding of how to promote optimal child development. Parents as Teachers parents are also more involved in their child's schooling and support their children's learning in the home. In a follow-up evaluation with families that participated in the Parents as Teachers pilot programs, a significantly higher proportion of Parents as Teachers parents initiated contacts with teachers and took an active role in their child's schooling. For example, 63% of Parents as Teachers parents compared with 37% of parents who had not participated in Parents as Teachers requested parent-teacher conferences. In a follow-up evaluation with families that participated in Parents as Teachers when it was first implemented statewide in Missouri, family members of almost 95% of Parents as Teachers children attended special events in their schools and classrooms and almost two-thirds of the children had family members work as volunteers in their children's school. Teachers reported that 75% of Parents as Teachers parents always assisted with home activities related to schoolwork, and another 20% sometimes provided such assistance.

Parent-Child Interaction

Parents as Teachers parents are more likely to read aloud, promote literacy and numeracy, and interact positively with their children.

These outcomes can be attributed to the quality of the parent educator-parent relationship, level of parental engagement, flexibility to tailor information to meet family needs, strengths-based model, and the research-based curriculum and training.

We are submitting for the record a brief summary of evaluations of the Parents as Teachers program (see Appendix A).

Parents as Teachers and Parental Involvement

Parents as Teachers believes that changes in children's outcomes are fostered through changes in parents' knowledge, attitudes and behaviors. Supporting and educating parents to become involved in their child's development and learning results in lasting impacts on the children.

We use the term parental involvement to refer to parents' participation in their child's learning and education. This involvement potentially begins at birth, or even prenatally, and is certainly well under way in the first three years of life. One value of fostering parental involvement starting from birth is that this sets parents' expectations about their continuing role in the child's education once he or she starts school. When parents are involved early, they stay involved, and this involvement improves children's performance in school.

Parents as Teachers contributes to increased parental involvement on both a day-to-day basis and at a broader level. During the course of the personal visits, parent educator's foster and support parental involvement as they:

- help parents learn to observe their child and read their child's cues.
- help parents understand typical development, including brain development.
- help parents know what developmental milestones to expect next and empower them to act when they have concerns about their child's development.
- affirm parents' skills and strengths and encourage parental involvement.
- emphasize the child's emerging literacy skills by bringing books to every visit from infancy on and showing parents how to read to their child.
- show parents how to capitalize on opportunities to enhance their child's learning and development by using everyday resources and contexts.
- help parents recognize teachable moments and how to use them with their child.

More broadly, Parents as Teachers enhances parental involvement in that it:

- helps parents be in a position to make better and more informed choices for their child's care
- empowers families to advocate for their child
- builds parental feelings of competence and confidence
- enhances the parent-child relationship
- increases the child's school readiness
- helps parents learn to access services and supports for their child

The Parents as Teachers National Center recognizes that in addition to parents, there are frequently many other adults that influence children's lives in the earliest years—relatives, care providers, early childhood teachers, and other caregivers. It is particularly important that those working with children at this critical time also recognize the importance of parental involvement.

How Parents Become Involved in Parents as Teachers and How They Remain Involved

Parents are recruited for Parents as Teachers primarily through partnerships in the communities where the program is located; in many cases with the schools. Missouri is a case in point. There is a Parents as Teachers site in every school district in Missouri. This partnership with the schools in Missouri and other states creates a home-school connection many years before the children actually start school. In essence, Missouri schools are setting the expectation that the parental involvement that begins with the Parents as Teachers program will continue once the children start school. Studies show that school practices that encourage parents to participate in their children's education are more important than family characteristics like parental education, family size, marital status, socioeconomic level, or student grade level in determining whether parents get involved. Partnering with Parents as Teachers is one such practice.

Parents remain involved because Parents as Teachers can be individualized to meet the differing needs of families, and is adaptable to communities and special populations, including teen parents, families of children with special needs, and families living on Indian reservations. An example of the program's adaptability is

the current initiative to translate Parents as Teachers curriculum materials into Spanish to meet the needs of the many Spanish speaking families in Parents as Teachers. What we like to say is that while Parents as Teachers is a national model, it's a local program. The program's adaptability makes a difference for families.

Conclusion

Since learning starts right from birth, it is important to begin working with parents at that time or just before it. Research demonstrates, and our experience with Parents as Teachers confirms that when parents are involved in their child's learning from early on, they stay involved, and that this on-going involvement improves children's performance in school. The Parents as Teachers National Center recommends that every parent in America have access to parent education and family support that highlights for them the critical importance of being involved in their child's learning as early as possible.

The 8th National Education Goal of the Educate America Act recognizes the critical role of parents and the importance of parental involvement in children's education once they are in school. The Parents as Teachers National Center recommends that Congress also increase support for programs and policies that emphasize parents and parental involvement as key components of all early childhood initiatives. We also recommend that any comprehensive education reform must include a home visitation program such as Parents as Teachers for all children in those early years prior to kindergarten entry.

Appendix A: Parents as Teachers Evaluation Highlights

Program evaluation has been integral in the evolution of the PAT program since its inception. The first evaluation of PAT was funded through a contract from the Missouri Department of Elementary and Secondary Education. Subsequent studies have been supported by the State of Missouri and other states, independent school districts, and private foundations. A few studies have been carried out by individual researchers, independent evaluations continue to confirm the positive impact of PAT on parents and children.

Parent and Family Outcomes

PAT parents are more involved in their children's schooling—parental involvement is key to a child's success in school.

PAT parents are more confident in their parenting skills and knowledge.

PAT parents read more to their children.

Child Outcomes

PAT children at age 3 are significantly more advanced in language, problem solving and other cognitive abilities, and social development than comparison children.

The positive impact on PAT children carries into elementary school.

PAT children score higher on kindergarten, readiness tests and on standardized measures of reading, math and language in first through fourth grades.

Missouri PAT Pilot Project: Outcomes at Age Three and in Early Elementary School

75 project families were randomly selected from the 380 first-time parents who had participated in PAT for three years. The pilot project families and a matched comparison group represented Missouri's urban, rural and suburban communities. Posttest assessments of children's abilities and parents' knowledge and perceptions showed that PAT children at age three were significantly more advanced in language, problem-solving and other intellectual abilities, and social development than comparison children. PAT parents were more knowledgeable about child-rearing practices and child development. Participating parents were more likely to regard their school district as responsive to their children's needs than were parents of comparison group children, 63% of PAT parents rated their district as "very responsive," versus 29% of comparison group parents.

(Pfannenstiel, J., and Seltzer, D., Evaluation Report; New Parents as Teachers Project Overland Park, KS: Research & Training Associates, 1986 Pfannenstiel, J., and Seltzer, D., New Parents as Teachers; Evaluation of an Early Parent Education Program, *Early Childhood Research Quarterly*, 4, 1-18, 1989.)

A follow-up evaluation of the pilot program was undertaken to determine if gains made during participation in PAT would have a lasting effect on the children and their parents. PAT children scored significantly higher on standardized measures of reading and math at the end of first grade than did comparison children. A significantly higher proportion of PAT parents initiated contacts with teachers and took an active role in their child's schooling. For example, 63% of parents of PAT children versus 37% of parents of comparison children requested parent-teacher conferences.

Thus, PAT parents continue to play an active role in their child's education into elementary school.

(Pfannenstiel, J., *New Parents as Teachers Project: A Follow-Up Investigation*. Overland Park, KS: Research & Training Associates, 1989.)

Statewide Implementation of PAT in Missouri: Outcomes at Age Three and in Early Elementary School

The "Second Wave" study examined how well the PAT model program would transfer statewide. This study determined the impact of PAT on 400 randomly-selected families enrolled in 37 diverse school districts across Missouri. At age three, PAT children performed significantly above the national norms on a measure of school-related achievement, despite the fact that the Second Wave sample was over-represented on all traditional characteristics of risk. More than one-half of the children with observed developmental delays overcame them by age three. There were only two documented cases of abuse and neglect among the 400 families over a three year period—significantly fewer than the state average. Parent knowledge of child development and parenting practices significantly increased for all types of families.

(Pfannenstiel, J., Lambson, T., and Yarnell, V., *Second Wave Study of the Parents as Teachers Program*, Overland Park, KS: Research & Training Associates, 1991.)

A follow-up of the Second Wave study assessed the longer-term impacts of program participation. This study focused on the first- and second-grade school experiences and performance of the Second Wave PAT children, and PAT parents, involvement in their children's learning and schooling. PAT children were rated by their teachers as performing at high levels of proficiency in all areas assessed. When compared to their grade-level peers, 91% of PAT children were rated by their teachers as equal to or better than average. Overall, the relative level of achievement children demonstrated at age three on completion of the PAT program was maintained at the end of the first/second grade. PAT parents demonstrated high levels of school involvement, which they frequently initiated, and supported their children's learning in the home.

(Pfannenstiel, J., Lambson, T., and Yarnell, V., *The Parents as Teachers Program: Longitudinal follow-up to the second wave study*. Overland Park, KS; Research & Training Associates, 1996.)

Evaluations of PAT Child Outcomes: Kindergarten Readiness and Beyond

The Missouri School Entry Assessment Project is a comprehensive early childhood assessment effort designed to gather information about what young children who enter Missouri's public kindergartens know and can do and to relate this information to their pre-kindergarten school experiences. Findings from the 1998 school readiness assessment project involving 3,500 kindergarteners in Missouri show that Parents as Teachers achieves its goal of preparing children for success in school. Among children whose care and education were solely home-based, those whose families participated in PAT scored significantly higher on the School Entry Profile. However, the highest performing children were those who participated in PAT combined with preschool, center-based child care, or both. Children from high-poverty schools scored above average in all areas of development when they entered kindergarten with a combination of PAT and any other pre-kindergarten experience (preschool, center-based care, and/or home-based care).

(Barr, S. and Pfannenstiel, J., *Missouri School Entry Assessment Project Summary*. Presentation made at the 8th International Born to Learn Conference, St. Louis, MO, June, 1999.)

Parkway School District, a large metropolitan school district in St. Louis County, Missouri, demonstrated the long-term positive impact of PAT on school achievement. Third graders who had received PAT services with screening services from birth to age three scored significantly higher on standardized measures of achievement than their non-participating counterparts. PAT children had a national percentile rank of 81, while non-participating students had a rank of 63 on the Stanford Achievement Test. PAT graduates were less likely to receive remedial reading assistance or to be held back a grade in school. In fourth grade, PAT graduates still scored significantly higher overall and on all Stanford Achievement subjects (reading, math, language, science, social studies) than did non-PAT fourth-graders.

(Coates, D., *Early childhood evaluation, Missouri: A Report to the Parkway Board of Education*, 1994; Coates, D. *Memo on one-year update on Stanford scores of students—early childhood evaluation study group; Parents as Teachers program leads to elementary school success*, Parkway School District News, Spring, 1997.)

A series of studies of PAT program participation and school readiness were conducted in the Binghamton, New York, School District, beginning in 1992. A pilot study focused on a sample of poor, high-needs children. Pre-kindergarten assessments showed that compared to matched comparisons, PAT children had better language skills and were twice as likely to be reading-ready by kindergarten.

(Drazen, S. and Haust, M., Raising reading readiness in low-income children by parent education, Paper presented at the annual meeting of the American Psychological Association, August, 1993.)

A second study compared the school readiness of children who participated in PAT with all kindergartners in the Binghamton School District, PAT children showed better school readiness at the start of kindergarten, higher reading and math readiness at the end of kindergarten, higher kindergarten grades, and fewer remedial education placements in first grade.

(Drazen, S. and Haust, M., The effects of the Parents and Children Together (PACT) Program on school achievement. Binghamton, NY: Community Resource Center, 1995.)

A longitudinal follow-up of these same Binghamton children found that PAT children continued to perform better than non-PAT children on standardized tests of reading and math achievement in second grade. Compared to non-PAT children, PAT children required half the rate of remedial and special education placements in third grade.

(Drazen, S. and Haust, M., Lasting academic gains from an early home visitation program. Paper presented at the annual meeting of the American Psychological Association, August, 1996.)

In this North Carolina study, children who participated in PAT were tracked into kindergarten. A study of the long-term educational impact of the Rutherford County Schools PAT program compared families who participated in PAT for three years to families who either received no services or who received a quarterly newsletter during the first year of their child's life. Upon entry to kindergarten, PAT children scored significantly higher than children from the comparison groups on measures of language and self-help/social skills.

(Coleman, M., Rowland, B. & Hutchins, B., Parents as Teachers: Policy implications for early school intervention, Paper presented at the 1997 annual meeting of the National Council on Family Relations, Crystal City, VA, November, 1987; Parents as Teachers: Kindergarten screening final report. Rutherford County, VA: Rutherford County Schools, May 1998.)

Immediate Child and Parent Outcomes

In a series of studies, SRI International examined the impact of PAT with high needs families in California. The pilot evaluation looked at the effects of PAT on predominantly Hispanic families in Salinas, California, 67 of whom were randomly assigned to PAT and 46 to a control group. Assessments of parent and child outcomes at or near the children's first birthdays showed a consistent pattern of positive outcomes for parents and children. PAT parents had more knowledge of infant development and consistently scored higher on measures of parenting behavior and attitudes. Although not statistically significant, PAT children scored consistently higher on developmental measures showing physical, self-help, social and academic/cognitive skills.

(Wagner, M. and McElroy, M., Home, the first classroom: a pilot evaluation of the northern California Parents as Teachers project. Menlo Park, CA, SRI International, 1992.)

A second SRI study focused on the parents and three-year old children of PAT "graduates" in National City, California. These families were predominantly Hispanic, unemployed, with low education levels. PAT children scored higher than comparison children on developmental measures of physical, self-help, social, cognitive, and communication skills. PAT parents showed significant increases in parenting knowledge, attitudes, and behaviors. PAT participation was the only factor significantly related to child development outcomes.

(Wagner, M. Evaluation of the National City Parent As Teachers Program, Menlo Park, CA; SRI International, 1993.)

Evaluations of the Effectiveness of the Born to Learn™ Curriculum

Parents as Teachers' new Born to Learn™ Curriculum was field-tested with families in St. Louis and Chicago for whom parenting is a special challenge. The project demonstrated that neuroscience information could be successfully incorporated into the Parents as Teachers educational intervention program, and could produce mean-

ingful changes in the knowledge, attitudes, and behaviors of parents for whom parenting typically is a greater challenge.

(McGilly, K., Winter, M., & Strube, M. (2000), Linking neuroscience and education to improve parenting of young children. St. Louis, MO: Parents as Teachers National Center, Inc., McGilly, K. (2000) Chicago Born to Learn™ Neuroscience Project: Final report to Robert R. McCormick Tribune Foundation. St. Louis, MO; Parents as Teachers National Center, Inc.)

A multi-site evaluation by SRI International was recently conducted with 667 low-income families in three metropolitan areas. Families with infants up to 8 months of age were randomly assigned to either a treatment group receiving PAT services or a no-treatment control group. Outcomes from the first two years of this evaluation were reported in summer 2001. The results indicated that participation in PAT is as effective for the lowest-income families as for those with more moderate incomes. Of particular note were the positive effects on parenting behavior and the impacts on language- and literacy-promoting behaviors for families with very low income. In families with very low income, those who participated in PAT were more likely to read aloud to their child and to tell stories, say nursery rhymes, and sing with their child.

(Wagner M. and Spiker, D., Multisite Parents as Teachers Evaluation: Experiences and Outcomes for Children and Families, 2001.)

Senator BOND. Thank you very much, Sharon.

Unfortunately, we are going to have very little time for question and answers—I am going to have to leave in just a few minutes—but there will be a session beginning at 3:30, I understand, a roundtable discussion, that I hope as many of you as possible can attend.

On behalf of the Parents as Teachers organization, I would like to extend an invitation to any of you to visit us in Missouri. In the last 6 or 7 years, I have visited 90 Parents as Teachers sites, and talked to the parents and seen what is going on, and as I said earlier in my comments from the dais, I have learned a great deal, and we appreciate very much the good work that is going on in all of these areas.

I mentioned to Rob Reiner that it is unfortunate that we agree on everything, because this place thrives on controversy, and one of the worst things you can do is having something that everybody agrees on. If there is not a fight, it does not get covered, and I do not see anybody picking any fights today, but I certainly hope that the caliber of the testimony and the information that you have provided will stir all of us to some effective action.

I just wanted to bring out a couple of things from Sharon Rhodes' testimony. In your written testimony, you refer to Parents as Teachers as the "universal access model." Would you explain to us what you mean by "universal access" and what the implications of this approach are?

Ms. RHODES. One of the things that Parents as Teachers is predicated on is that all families deserve and can benefit from support. I think that Senator Bond, who was a part of the program, and our current Governor Holden can both attest to that, that families today oftentimes do not live in the communities in which they grew up, so when they look at what is going on in their home and with their parenting skills, we really believe that when a baby cries in the middle of the night, no matter what socioeconomic determinations that family may have, that they can all benefit from support.

When we talk about universal access, we also want to note that it is offered to all families especially in the State of Missouri, and today we are serving about 47 percent of the age-eligible population

in that State. However, as I said, we have a number of programs outside the State of Missouri. Many of those programs due to funding restrictions, are targeted programs, so we are finding that we are a program that works, when we say universal access, with all families, no matter where they live—rural, urban—and no matter what their family demographics and situation might be.

But I also want to point out that when we say “universal access,” it does not really necessarily apply that one size fits all. We have developed curricula and we have developed training that supports working with families of all configurations. We have specific training and materials for working with teen parents; we work with the Bureau of Indian Affairs on 30 or so sites around the country; we work with parents of children with special needs. So we are universal access in the respect that we are open to all families. We have developed materials that would support that development.

Senator BOND. One of the challenges, obviously, is that this is offered to every school district in Missouri, and every parent is eligible, yet only 47 percent apply. Some of that is due to a lack of funds, and some of it is failure to communicate. Do you see any particular population that is not getting in there? A lot of people think that the very successful two-wage-earner professional family may not need the services of Parents as Teachers. Do you serve them as well as those in the lowest socioeconomic category?

Ms. RHODES. I think that is probably one of the best features about Parents as Teachers is the fact that it helps to reduce the stigma of a particular program. In other words, if we see that the doctor down the street is engaged in this program, we also want to be engaged in the program.

Typically, the funding restriction is what is causing us to serve only 47 percent of the age-eligible population. Many of our school districts do have waiting lists and are trying to get involved in the home visits. When the parents are anxious to become part of the Parents as Teachers program, we do extend group meetings for them and written materials; it is just the lack of people that we have who are trained to go into the homes. We have heard much about the importance of training here this morning.

One of the areas, though, that we are really struggling with is the inner city. Certainly in the urban communities, we are through the school systems, but oftentimes we feel that we really need to be working in concert with the local WIC clinics where we are finding parents who are particularly in need of services that may not be working with the school systems. Oftentimes, our parents have a preconceived notion of schools as not being a place where they can feel welcome. So we reach out into the community and go to the local clinics and to the health care professionals in the community to help recruit those families. But those families are oftentimes the families that are the most challenging to recruit.

Senator BOND. Rob, do you have any idea what percentage of children in California you have been able to reach so far with your Proposition 10 efforts?

Mr. REINER. We do not know exactly. We have a number of different kinds of programs. The Kit for New Parents that I alluded to reaches all 500,000 children who are born in California. It is free

to the parent or caregiver of every child born in California. So that is a program that reaches all the children.

The school readiness initiative that I also alluded to is targeted at the lowest-performing schools. Because we have limited funds, we cannot really provide school readiness centers for every child. So there are different programs that reach different numbers of children.

Senator BOND. Ms. Schaefer, the funding has really gone up for Community Partnership programs, now to almost \$100 million. What portion of the eligible population are you able to reach?

Ms. SCHAEFER. It is 22,000 out of about 70,000, so it is not a lot, but we see ourselves are part of the overall system, the eligible system—Head Start, what services they provide; what child care centers provide; what public schools provide. So if you look at that percentage, it is probably more like 70 percent of the preschool population is getting services.

Senator BOND. Ms. Russell, with all of the work that you have done through Child Care Services and getting more people into it, which is a problem that Ms. Rhodes described, what is your success rate or your service rate in North Carolina? What percentage of your target population are you able to service?

Ms. RUSSELL. We are targeting the early childhood work force, so in any given year, we have at least one teacher in almost 40 percent of the centers on scholarship to go back to school. So it is a fairly good rate given the work force.

Senator BOND. I mean, going downstream to the actual services, do you know—

Ms. RUSSELL. In terms of reaching children?

Senator BOND. We recognize that the lack of teachers is one of the limiting factors, so where are you in terms of the percentage of service?

Ms. RUSSELL. In terms of where we are with reaching children, in our Smart Start and T.E.A.C.H. and comprehensive initiatives in early childhood in North Carolina, I would say that in any given year we are reaching in various ways, as Rob said in California, in various ways. Most of the children in our State who are under 5, some get multiple services, they are in early childhood programs, they get home visiting, they get all sorts of developmental screenings, and other children get limited services depending on our ability to fund those.

We are a long way from having the resources to intensively reach all children, and that is the issue, that we can do a little bit, but we cannot do enough.

Senator BOND. Well, I think that is the problem, number one, designing good programs, making sure we have the teachers and the parent educators there, and bringing the children into the program. That is one area—Rob, with your skills—where we need help.

I have found in talking with a lot of parent educators around the State that the very best sales force we have for early childhood education is the parents of those who are in the program. If the program is working, we ask them to please reach out to your friends, your coworkers, your neighbors, and tell them that the program is good, because as we said earlier, many people in some in-

stances, in some groups, do not trust the school system, and they want to hear from somebody who is benefiting from the program.

That is just one of the many challenges that we face. I very much appreciate your participation today. We hope that you can participate in the 3:30 workshop.

The record will be open for 7 days to supplement, and I know that we have a number of questions that I was not able to get through, so we will submit questions in writing and would ask that you respond to those. And for those who are interested in this whole important area, if you have any really brilliant thoughts that have not been expressed today, I hope that you will submit them for the record to the committee, because this is a vitally important area, and this record should be a most important one.

Mr. REINER. I just want to add one thing in terms of the services and the percentage of children receiving services. To my knowledge, there is nobody in the K through 12 system who does not get education. We all agree on that. There is a fraction of the children ages zero to 5 who get early childhood services, but 100 percent of all children get K through 12 offered to them. So that is the context in which you have to think of this, that we need the children from zero to 5 to be getting the same kind of full access to services that children K through 12 get.

Senator BOND. Thank you very much for those comments.

Ladies and gentlemen, thank you for your participation.

The hearing is adjourned.

[Additional material follows.]

ADDITIONAL MATERIAL

CHILD CARE SERVICES ASSOCIATION,
CHAPEL HILL, NC,
February 12, 2002.

Hon. CHRISTOPHER J. DODD,
U.S. Senate,
Washington, D.C. 20515.

DEAR SENATOR BOND: I am responding further to your question about who our efforts were reaching and whether we were reaching parents and children sufficiently to make a difference.

Because my testimony focused on the early childhood workforce and efforts to improve the education, compensation and retention of that workforce as a strategy to improve quality for children, I did not fully understand nor adequately answer your question of me at the time of the hearing.

The answer to your question is that we are not reaching a sufficient number of children in North Carolina with high quality early childhood education experiences. This is demonstrated by the fact that we have over 20,000 children of low income parents on waiting lists for child care assistance. Research tells us that while these parents wait for help, their children are often shuttled between various make-shift child care arrangements, most of which are not of high quality.

We also know that the quality of licensed child care is not adequate in our state to make the difference for these children. In fact, in some of our counties not a single teacher working in child care has a two or four year degree in any subject, let alone early childhood education or child development. Overall, less than one-quarter of the workforce has a two or four year degree. Turnover rates, while dropping, are still 31% per year. This means that almost one-third of the infants, toddlers and preschoolers face the loss of their teachers each year. For infants and toddlers, this is particularly alarming, as it is critical that they build trusting relationships with adults to support their positive brain development. We have a long way to go to boost the system of early childhood care and education to a level that ensures uniform access and uniform high quality. Thank you.

SUE RUSSELL,
Executive Director.

[Whereupon, at 12:54 p.m., the committee was adjourned.]

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