

# Withdrawal/Redaction Sheet

## Clinton Library

DOCUMENT NO. AND TYPE	SUBJECT/TITLE	DATE	RESTRICTION
001. fax	Ellen Galinsky to Cathy Mays re: Individuals Meeting with Reed on 1/10/97 (partial) (1 page)	01/07/97	P6/b(6)

**COLLECTION:**

Clinton Presidential Records  
 Domestic Policy Council  
 Bruce Reed (Subject File)  
 OA/Box Number: 21291

**FOLDER TITLE:**

Child Care-Zero to Three [1]

rs37

### RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

- P1 National Security Classified Information [(a)(1) of the PRA]
- P2 Relating to the appointment to Federal office [(a)(2) of the PRA]
- P3 Release would violate a Federal statute [(a)(3) of the PRA]
- P4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
- P5 Release would disclose confidential advice between the President and his advisors, or between such advisors [(a)(5) of the PRA]
- P6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

PRM. Personal record misfile defined in accordance with 44 U.S.C. 2201(3).

RR. Document will be reviewed upon request.

Freedom of Information Act - [5 U.S.C. 552(b)]

- b(1) National security classified information [(b)(1) of the FOIA]
- b(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
- b(3) Release would violate a Federal statute [(b)(3) of the FOIA]
- b(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
- b(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
- b(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
- b(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
- b(9) Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

# Withdrawal/Redaction Marker

## Clinton Library

DOCUMENT NO. AND TYPE	SUBJECT/TITLE	DATE	RESTRICTION
001. fax	Ellen Galinsky to Cathy Mays re: Individuals Meeting with Reed on 1/10/97 (partial) (1 page)	01/07/97	P6/b(6)

**This marker identifies the original location of the withdrawn item listed above.  
For a complete list of items withdrawn from this folder, see the  
Withdrawal/Redaction Sheet at the front of the folder.**

**COLLECTION:**

Clinton Presidential Records  
Domestic Policy Council  
Bruce Reed (Subject File)  
OA/Box Number: 21201

**FOLDER TITLE:**

Child Care-Zero to Three [1]

rx37

### RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

- P1 National Security Classified Information [(a)(1) of the PRA]
- P2 Relating to the appointment to Federal office [(a)(2) of the PRA]
- P3 Release would violate a Federal statute [(a)(3) of the PRA]
- P4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
- P5 Release would disclose confidential advice between the President and his advisors, or between such advisors [(a)(5) of the PRA]
- P6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

PRM, Personal record misfile defined in accordance with 44 U.S.C. 2201(3).

RR. Document will be reviewed upon request.

Freedom of Information Act - [5 U.S.C. 552(b)]

- b(1) National security classified information [(b)(1) of the FOIA]
- b(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
- b(3) Release would violate a Federal statute [(b)(3) of the FOIA]
- b(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
- b(5) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(5) of the FOIA]
- b(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
- b(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
- b(9) Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

**FAMILIES AND WORK INSTITUTE**

330 Seventh Avenue, 14th floor  
New York, New York 10001

File:  
5<sup>30</sup> Zero to Th  
Room 100

Rand cost/benefit analysis, Apr '97  
ABC - Tom Hanks, 3<sup>rd</sup> week of April - scientific + celeb.  
Romeo, Voronovich (Apr 27) near, Gault Panel  
5-part GMA, DATE  
NBC, 5 part in Feb.

**Fax Cover Sheet**

JANUARY 7, 1997

*Nicau Rabney* Nat. Conf - biphenyls, science, Corpuses

**TO CATHY MAYS**  
Office of Bruce Reed  
The White House  
Washington, DC  
(202) 456-5595

**FAX (202) 456-5557 CODE 473**

*Mortality starts day 1*  
*SOTU - mention early child development*  
*- here for SOTU? & if with (they can help) find answer*

**FROM ELLEN GALINSKY**  
via Barbara Norcia

*Karin Permanetter, David Lawrence*

**PHONE (212) 465-2044 X204**  
**FAX (212) 465-8637**

*Give away books*

*Elvis*

*TALK, ROCK, + READ*

Number of pages including cover sheet: 1 page(s) total

**Message** Per your conversation with Ellen today, here are the names, affiliations, birthdates and social security numbers of those attending the meeting with Bruce Reed this Friday, January 10 at 10:30 AM. *5:30 pm.*

Name & Affiliation	Birthdate	Social Security Number
Ellen Galinsky Families and Work Institute	4/24/42	[REDACTED]
Ellen Gilbert International Creative Management Inc. (ICM)	5/15/50	[REDACTED]
Michael Levine Carnegie Corporation of New York	10/7/57	[REDACTED] etc.
Michele Singer Reiner Castle Rock Entertainment	3/3/55	[REDACTED]
Robert Reiner Castle Rock Entertainment	3/6/47	[REDACTED]

We understand the meeting will be held in the Old Executive Office Building, room 216.

*Barbara*



INTERNATIONAL CREATIVE MANAGEMENT, INC.

FAX COVER SHEET

TO: Kathy- Bruce Reed

FROM: Ellen Gilbert

FAX NUMBER: 202/456-5557

DATE: January 8, 1997

PAGES BEING SENT, INCLUDING COVER SHEET: 6

PLEASE TELEPHONE (310) 550- 4203 IF YOU DO NOT RECEIVE ALL PAGES

\*\*\*\*\*

MESSAGE:

PRIVACY NOTICE

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL OR EXEMPT FROM DISCLOSURE UNDER APPLICABLE FEDERAL OR STATE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US AT THE BELOW ADDRESS REGULAR U.S. MAIL.

# "I Am Your Child"

## Early Childhood Public Engagement Campaign Description

### Funders

AT&T Foundation  
 The California Wellness Foundation  
 Carnegie Corporation of New York  
 The Commonwealth Fund  
 The Charles A. Dana Foundation, Inc.  
 The Harris Foundation  
 The Teresa & H. John Heinz III  
 Foundation  
 IBM Corporation  
 Johnson & Johnson  
 W.K. Kellogg Foundation  
 John D. & Catherine T. MacArthur  
 Foundation  
 A.L. Mailman Family Foundation, Inc.  
 Robert R. McCormick Tribune  
 Foundation  
 The Travelers Foundation

Prominent entertainers, media, foundations, corporations, and child development experts have established an unprecedented public awareness and engagement campaign to focus on new and compelling evidence about the importance of the first three years of life. The campaign is designed to promote family involvement in young children's healthy development and school readiness, to mobilize communities to act on behalf of young children and their families, and to build the capacity of early childhood organizations to help families nurture their children. The campaign will also create an enduring collection of educational resources for parents, early childhood practitioners, and policymakers.

This effort builds on research evidence presented in *Starting Points*, the seminal 1994 report by Carnegie Corporation of New York that documents the substantial body of literature on young children's emotional, social, physical, intellectual, and brain development. It concludes that "how children function from the preschool years all the way through adolescence, and even adulthood, hinges in large part on their experiences before the age of three."

The report points out that our nation has inadvertently neglected these crucial years and that this neglect has led to a variety of troubling conditions that should be improved. Nationwide, many families with very young children do not have health insurance, child poverty rates are alarming, child abuse rates are high, and a substantial number of infants and toddlers are in potentially harmful child care situations. Families of all income levels are under stress. Parents worry about the amount of time they can spend with their families and about the safety and future prospects of their children.

The goals of the campaign are to help reverse these troubling trends by:

- raising public awareness about the importance of the first three years of life;
- connecting families with young children to the information, resources and services they need;
- creating coalitions among national organizations and state and local community efforts to improve conditions for young children and their families; and
- making quality resources and services more widely available to families with young children.

Campaign founders represent an unusual collaboration that includes entertainment talent, spearheaded by Rob Reiner and Michele Singer Reiner, and by Ellen Gilbert from International Creative Management (ICM) and a broad range of experts from the early childhood field—including child development, early childhood care and education, parent education and family support, and children's health, coordinated by Ellen Galinsky and Nina Sazer O'Donnell of the Families and Work Institute. The campaign is supported by over a dozen foundations including the AT&T Foundation, Carnegie Corporation of New York, and the Teresa and H. John Heinz III Family Foundation.

## National Media

Called "I Am Your Child," **An Hour-Long ABC Prime Time Special** is being produced by Rob Reiner, Michele Singer Reiner and their production team. It is scheduled to air during the week of April 21, 1997. It will feature music, comedy and a documentary created by New Screen Concepts about a community that has mobilized on behalf of young children and their families. The program will be hosted by Tom Hanks, and will feature Robin Williams, Arnold Schwarzenegger, Whitney Houston, Walter Cronkite, Billy Crystal, Carl Reiner, Mel Brooks, and other stars who are donating their time and talents. *Good Morning America* will feature the campaign continuously during the week of the prime time special, as will many local ABC affiliates.

ABC will produce footage to feed to ABC affiliates across the country to use as a wrap-around for local stories about their community's issues and solutions. The TV special will also include information about a toll-free number for viewers to call to obtain fulfillment material.

**Newsweek Special Edition.** *Newsweek* magazine will publish a special edition that will coincide with the show's airing. It will include a national status report on young children and their families, along with practical information about parenting. This edition will include a special distribution to members of Congress and state legislatures, business leaders and other policy makers.

**Public Service Announcements (PSAs).** Two broadcast public service announcements (PSAs) will be produced for television, radio and print media by The Advertising Council. The PSAs will focus on the importance of family involvement in early childhood development and school readiness. They will contain a toll-free number introduced on the TV special that viewers can call for fulfillment material. United Airlines has also agreed to run the PSAs on in-flight entertainment.

**Toll-Free Number and Written Fulfillment Material.** The prime time television special and the PSAs will include a toll-free number that viewers can call to obtain written fulfillment material or to learn about local parenting information, resources and services. This material will include tips on how families can promote young children's school readiness and healthy development. Space will be available on this material for state and local organizations to add their own logos, toll-free numbers, or resources. Fulfillment material will also be disseminated by national organizations, businesses, state and local coalitions and will be available in public libraries throughout the country.

**A Video for New Parents** will focus on the importance of early relationships between babies and their primary caregivers, with information on how families can encourage children's healthy development. The video will be distributed free of charge through hospitals, video stores, clinics, child care centers, schools, employers, non-profits, and early childhood state and community mobilization efforts. The Marriott Corporation will show the video on its hotel television channel.

**A CD-ROM And On-Line Information** will address the burning questions that parents have about their children, beginning in the prenatal period and extending through the first three years of life. An on-line information service, available to all Internet users, will provide practical parenting information and linkages to resources.

**A World Wide Web Site** is facilitating widespread communication about campaign activities. The Web site enables national, state and local campaign leaders to find colleagues in their geographic or content interest area; to share information about their activities and to share ideas with each other.

#### Other Collaborators

The Advertising Council,  
Inc.

Benton Foundation

Coalition for America's  
Children

Evolutionary Publishing,  
Inc.

National Governors'  
Association

New Screen Concepts  
tcn

ZERO TO THREE:

National Center for  
Infants, Toddlers and  
Families

**A Conference on Brain Development** was held in June 1996 in Chicago to present key findings from leading researchers who are investigating prenatal and early childhood brain development. Panels of early childhood experts, the media, business and public policy leaders responded to the findings by discussing their implications. A report from this conference, *Rethinking the Brain*, will be available in February 1997.

## Public Policy

The campaign is stimulating bipartisan dialogue about federal, state and local policy goals. To ensure that all young children get a decent start, the campaign has identified four key areas that constitute vital starting points for our nation. These areas are: the promotion of responsible, informed parenthood; the creation of comprehensive preventive health care for mothers and young children; the wider availability of high-quality child care and early education; and the expansion of proven state and community-based approaches to reverse current patterns of neglect. Research on the long-term economic benefits of effective policies and programs is being conducted by Rand Corporation. A series of cost-benefit analyses will be released in Spring 1997 to coincide with the campaign's launch.

**National "summit" meeting.** Campaign leaders are in discussion with the President, cabinet officials, and a bipartisan group of members of Congress and governors about the design of a national conference on the status of young children in America. The conference will develop strategies to propel coordinated national, state, and local responses.

**The National Governors' Association** will include a campaign briefing for the nation's governors at its February 1997 meeting. A bipartisan task force of governors led by Bob Miller (Nevada) and George Voinovich (Ohio) will study federal and state policy options to strengthen programs and supports for families with young children.

**The National Conference of State Legislatures** is developing a leadership group of state legislators who will promote legislative action based on new evidence on brain research and the healthy development of young children. Campaign leaders will provide a briefing at the organization's national meeting in August 1997.

## Outreach to National Organizations

**Work with National Organizations.** National organizations are using their newsletters, journals, and other communications vehicles to publicize the campaign and inform their members about early childhood brain development. They will also encourage their members to participate

in state and local coalition activities. In addition, over three dozen national organizations have begun to make specific plans for participation in the campaign. Examples include:

- The American Library Association will develop information packages and present displays in libraries around the country for families with young children;
- The American Academy of Pediatrics is using the campaign to disseminate information about brain development to its members and to promote state and federal policies that ensure health care coverage for all families with young children;
- The American Public Welfare Association is disseminating campaign information through its extensive network of state and local offices;
- The Coalition of America's Children, a consortium of 350 national and local organizations, will help families connect to health care, family support, child care, and volunteer opportunities in their own communities.

**Linkages to Business Leaders.** A business symposium will be conducted in collaboration with the Committee for Economic Development in April 1997. This event will focus attention on what companies are doing to support new and expectant parents. The symposium is designed to stimulate additional strategies to engage the business community in the campaign. A report on innovative business strategies will be produced for the symposium and will be widely disseminated.

#### Expert Advisory Board

Judy Langford Carter, MA,  
Former Executive  
Director of Family  
Resource Coalition;

Jerlean Daniel, Ph.D.,  
Past President, National  
Association for the  
Education of Young  
Children;

Emily Fenichel, MSW,  
Associate Director of  
**ZERO TO THREE**

Deborah A. Phillips, Ph.D.,  
Director, Board on  
Children and Families

Barry Zuckerman, MD,  
Chairman, Department  
of Pediatrics, Boston  
University School of  
Medicine

## State and Community Action

**State and Local Campaign Coalitions** of business leaders, child advocates, and parents in thirty-six states are forming partnerships to strengthen programs and policies. Additional coalitions are continuing to form.

A small **Expert Advisory Board** has been selected to ensure that the content of this campaign is guided by accurate scientific knowledge. Expert Advisors represent national organizations reflecting the major domains specified in the *Starting Points* report: health, parent education and family support, early childhood education and care, and child development.

For further information please contact Families and Work Institute:

Ellen Galinsky, Project Director: (212) 465-2044, E-mail: emgalinsky@aol.com

Nina Sazer O'Donnell, Project Manager: (919) 477-7137, E-mail: nsoatfwi@aol.com

January 9, 1997

MEMORANDUM TO BRUCE REED

FROM: ELIZABETH DRYE & JEANINE SMARTT

SUBJECT: REINER MEETING BACKGROUND

As you know, on December 12, 1996, Rob Reiner briefed White House staff and senior agency officials on the Early Childhood Public Engagement Campaign to raise awareness about the importance of the first three years of life.

Attached please find the following:

- 1) List of Meeting Participants
- 2) Copy of Memorandum to POTUS
- 3) 1 pager National Event Proposal
- 4) A Sample of Federal Efforts in Early Childhood Intervention

**Early Childhood Public Engagement Campaign  
White House Briefing Participants**

December 12, 1996

**DEPARTMENT OF JUSTICE**

Reggie Robinson

**DEPARTMENT OF AGRICULTURE**

Cheryl Tates-Macias

**DEPARTMENT OF COMMERCE**

Jeffrey Hunker

**DEPARTMENT OF LABOR**

Virginia Apuzzo

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

Joan Lombardi

Michael Kharfen

**DEPARTMENT OF EDUCATION**

Secretary of Education Richard Riley

Terry Peterson

**OFFICE OF NATIONAL DRUG POLICY**

Ricia McMahon

**SMALL BUSINESS ADMINISTRATION**

Kimberlee Cornett

**OFFICE OF PERSONNEL MANAGEMENT**

Janice LaChance

**NATIONAL ECONOMIC COUNCIL**

Gene Sperling

**WHITE HOUSE CABINET AFFAIRS**

Ann McGuire

**WHITE HOUSE INTERGOVERNMENTAL AFFAIRS**

John Emerson

Emily Bromberg

WHITE HOUSE OFFICE OF COMMUNICATIONS  
Don Baer

OFFICE OF THE VICE PRESIDENT  
Elaine Kamarck  
Nancy Hoit  
Ginny Terzano

WHITE HOUSE PUBLIC LIAISON  
Doris Matsui

OFFICE OF THE FIRST LADY  
Nicole Rabner

DOMESTIC POLICY COUNCIL  
Carol Rasco  
Mike Cohen  
Elizabeth Drye  
Jeanine Smartt  
Deb Fine

FAMILIES AND WORK INSTITUTE  
Ellen Galinsky

CASTLE ROCK ENTERTAINMENT  
Robert Reiner  
Michele Singer Reiner

CARNEGIE CORPORATION OF NEW YORK  
Michael Levine  
Vivien Stewart

TERESA & H. JOHN HEINZ III FAMILY FOUNDATION  
Jeffrey Lewis

INTERNATIONAL CREATIVE MANAGEMENT INC. (ICM)  
Ellen Gilbert

POVUS. RET

December 16, 1996

MEMORANDUM FROM THE PRESIDENT

FROM: Carol Rasco

SUBJECT: Rob Reiner's Early Childhood Public Engagement Campaign

Rob Reiner is spearheading a national Early Childhood Public Engagement Campaign to raise awareness about the importance of the first three years of life and improve children's futures. He will launch the Campaign the week of April 21, 1996 with a one-hour ABC prime time special. Mr. Reiner would like you to host a White House event that week. He spoke to you about the campaign earlier this year and thought you agreed to participate.

I am working with Don Baer, John Emerson, the Vice President's staff and others to consider this request. On Thursday, Mr. Reiner briefed White House staff and senior agency officials on the initiative and potential White House and agency involvement. Several organizations involved in the project -- the Carnegie Corporation, the Families and Work Institute, the Teresa & H. John Heinz III Family Foundation, and International Creative Management Inc. -- also attended.

The Early Childhood Campaign builds on the Carnegie Corporation's 1994 report, *Starting Points*, that documents how children's experiences from ages 0-3 determine in large part their functioning through adolescence and adulthood. The Campaign seeks to:

- raise public awareness about years 0-3;
- connect families to resources and services;
- link federal, state and local efforts to improve services;
- promote citizen engagement; and
- increase the public will to make quality services more widely available to families with young children.

ABC's special will be followed by a week of media events. The week of April 21: Good Morning America will feature the Campaign daily; *Newsweek* will issue a special edition; and the Campaign will issue a video for new parents, run PSAs, set up a toll-free information number, and launch a web page. Mr. Reiner has obtained a number of corporate commitments (e.g. United Airlines will run PSAs for a month this spring), and the National Governor's Association is gearing up to participate.

The Campaign provides a tremendous opportunity for you, the Vice President, the First Lady, and Tipper Gore to advance the nation's commitment to children generally and to promote

specific policy goals (e.g. school readiness). I would like to provide Mr. Reiner with a decision about your involvement in a potential April White House event by early January. I will continue to work with other White House offices and Scheduling to reach a decision, and will continue to coordinate federal agencies' involvement in the Campaign.

cc: The Vice President  
The First Lady  
Mrs. Gore

## NATIONAL EVENT

**CONCEPT:** The children born on the day of the ABC Television Special, *I Am Your Child*, will be three years old in the year 2000. To promote their healthy development and school readiness, our nation's leaders will on that day draw "a line in the sand" and commit themselves to ensuring that all children born in 1997 and from thereafter will have good beginnings.

**POLICY FOCUS:** In order to ensure that all children born in 1997 and from thereafter have good beginnings, we need to focus on improving services and supports for young families. Three areas for policy concern include:

- parenting education and family support;
- health care for pregnant women, infants, and toddlers; and
- infant/toddler child care.

**KICK OFF EVENT:** We envision an event such as a national conference to kick off this campaign.

**ATTENDEES:** President Bill Clinton and First Lady Hillary Clinton, Vice President Al Gore and Tipper Gore, Governors, members of the Cabinet, members of Congress, business leaders, foundation leaders, early childhood experts, and campaign leaders.

**AGENDA:** This event could serve as a model for similar events in state capitols and communities around the country. It will feature some of the new brain research and cost/benefit information that make an investment in young children a national imperative. It will also feature communities and states that have mobilized on behalf of young children and their families. During the meeting, the President, various federal departments, and the business community will announce initiatives that address this issue. The event will be capped by the premiere of the ABC Special, *I Am Your Child*.

**BACKGROUND MATERIALS:** Cost/benefit analysis report on effective parenting and service programs, Report from the Conference on the Brain Development of Young Children, report on what states and communities are doing to meet the needs of young children, and background briefing papers on parenting education/family support, health care for pregnant women, infants and toddlers, and infant/toddler child care.

## **Early Childhood Public Engagement Campaign Description**

Prominent entertainers, national media experts, leading foundations and early childhood organizations and experts are collaborating on an unprecedented public awareness and engagement campaign to focus on the importance of the first three years of life and on what families and communities can do to promote young children's healthy development and school readiness. This campaign is designed to help and to inform families, to build the capacity of the fields that serve young children and their families, and to bring about change through a powerful mix of public education and community mobilization activities. Our intention is to establish an enduring collection of resources to help families nurture their children.

The campaign builds on *Starting Points*, the seminal 1994 report by the Carnegie Corporation of New York that documents the substantial body of literature on young children's emotional, social, physical, intellectual, and brain development. It concludes that "how children function from the preschool years all the way through adolescence, and even adulthood, hinges in large part on their experiences before the age of three."

Campaign founders represent an unusual collaboration that includes entertainment talent, spearheaded by Rob Reiner and Michele Singer Reiner, and by Ellen Gilbert from International Creative Management (ICM) and a broad range of experts from the early childhood field—including child development, early childhood care and education, parent education and family support, and children's health, coordinated by Ellen Galinsky and Nina Sazer O'Donnell of the Families and Work Institute. Our work together is designed to tie a media call for action with actual action at the national, state, and community levels. The core campaign is supported by the AT&T Foundation, the Carnegie Corporation of New York, and the Teresa and H. John Heinz III Family Foundation. Other funders include the Commonwealth Fund, the Charles A. Dana Foundation, the Harris Foundation, IBM, Johnson & Johnson, the W.K. Kellogg Foundation, the A.L. Mailman Family Foundation and the Robert McCormick Tribune Foundation.

The goals of the campaign are to:

- raise public awareness about the importance of the first three years of life;
- connect families with young children to the information, resources and services they need;
- create connections among national organizations and state and local efforts to improve services for young children and their families;
- promote citizen engagement; and
- increase the public will to make quality resources and services more widely available to families with young children.

The campaign is organized to integrate four levels of activity: National Media; Public Policy; Outreach to National Organizations; and State and Community Action. Highlights of each activity area are summarized below.

### **NATIONAL MEDIA**

**An Hour-Long ABC Prime Time Special** is being produced by Rob Reiner, Michele Singer Reiner and their team. Called "I Am Your Child", it is scheduled to air during the week of April 21, 1997. It will feature music, comedy and a documentary created by New Screen Concepts about a community that has mobilized on behalf of young children and their families. Performers will

local campaign leaders to find colleagues in their geographic or content interest area; to share information about their activities and to share ideas with each other. Check the Families and Work Institute Web Site at <http://www.familiesandwork.org> after January 1997 for the Campaign's home page address.

**A Conference on Brain Development** was held in June 1996 in Chicago, with funding from the Carnegie Corporation of New York, the Charles A. Dana Foundation, the Harris Foundation and the Robert R. McCormick Tribune Foundation, and coordinated by Families and Work Institute. This invitational conference shared key findings from leading researchers who are investigating prenatal and early childhood brain development. Panels of early childhood experts, the media, business and public policy leaders responded to the findings by discussing their implications. The press was invited to this conference, which served as an introduction to the larger media campaign. A report on the conference will be available from Families and Work Institute in February 1997.

## **PUBLIC POLICY**

**The White House.** Campaign leaders are in discussion with members of the Domestic Policy Council regarding the involvement of Federal agencies and the White House in the campaign.

**The National Governors' Association (NGA).** Campaign leaders are in discussion with Governor Bob Miller of Nevada, the incoming chair of NGA, about the role NGA will take in working on the campaign.

**State and Local Campaign Coalitions** are being encouraged to use the opportunities presented by the campaign to clarify and advance state and local early childhood policy agendas. Some technical assistance is being provided to assist coalitions in these efforts.

## **OUTREACH TO NATIONAL ORGANIZATIONS**

**Work with National Organizations.** Campaign coordinators began the campaign by interviewing over 150 leaders from diverse early childhood organizations. A survey was distributed to many others to ascertain ways they could join the campaign and further its messages. Many national organizations have begun to make specific plans for how they will participate. For example:

The American Library Association plans to create tip sheets and present displays for families with young children around the country;

The American Academy of Pediatrics is considering distribution of a special edition of the Brain Development of Young Children Report to its members;

The National Association of Police Chiefs has offered to link its state and local members with campaign coalitions as part of this organization's *Prevent Crime-Invest in Kids Campaign*; and

The American Association of Family and Consumer Sciences is encouraging its members to get involved in the work of state and local campaign coalitions, is developing early childhood service learning projects, will highlight brain development information in its journal and will create an early childhood public engagement and information track at their next annual conference.

**DRAFT**

**THE EARLIEST INTERVENTIONS  
A SAMPLE OF FEDERAL EFFORTS**

*The following are a sample of programs and resources throughout the federal government focused on our nation's youngest children. Over the next few months this document will be expanded to include more activities and more information.*

**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**

The **Early Head Start** grants expand the proven benefits of early childhood development to low income families with children under three and to pregnant women. Combined with last year's grants, Early Head Start now totals 142 programs across the country. Using the Head Start model, these programs enhance children's cognitive, social, emotional and physical development; assist parents in fulfilling their parental roles; and help parents move toward self-sufficiency.

The **Healthy Tomorrows Partnership for Children** program began in 1989 as a collaborative venture between the Maternal and Child Health Bureau and the American Academy of Pediatrics. Its purpose is to stimulate innovative programs that prevent disease and disability and promote health and access to health care services for children nationwide. Funded projects include a range of activities such as intervention and care coordination services for children with special health needs and expanded perinatal care and parent education services.

The **Child Care and Development Fund** brings together, for the first time, four Federal child care subsidy programs and allows States to design a comprehensive, integrated service delivery system to meet the needs of low-income working families. Additionally, the Child Care and Development Fund sets aside a minimum of four percent of Federal and State funds to improve the quality and availability of healthy and safe child care for all families

The **Healthy Child Care America Campaign** is a joint effort of the Child Care Bureau and the Maternal and Child Health Bureau to promote the healthy development of children. The Campaign seeks to enhance health education for child care workers and parents, support programs' efforts to create healthy environments for children, and better link programs with community health resources. The Action Step Strategy Sheets, Resources, and Examples provide possible strategies that communities can use to implement particular action steps. The strategies can be used by child care providers, health providers, families, child care regulators, policymakers, and businesses.

## DEPARTMENT OF EDUCATION

The **Even Start Family Literacy Program** is a family-focused program providing participating families with an integrated program of early childhood education, adult literacy and basic skills instruction, and parenting education. There are 576 local Even Start programs operating in every state. Even Start is an integral component of Title I, the single largest federal program supporting K-12 education.

**Ready to-Learn Television** provides for the development, production, and distribution of educational and instructional video programming for preschool and elementary children and their parents in order to facilitate the achievement of the National Education Goals. Support materials are produced for young children, their parents, child care workers, and Head Start providers to increase the effective use of the programming. There was \$7 million was made available in FY 1997.

In the **Program for Infants and Toddlers with Disabilities** States may make early intervention services available to eligible infants and toddlers (birth through two years). Under the Individuals with Disabilities Act (IDEA) states must provide special education services to eligible preschool children (ages 3-5). Individual Family Service Plans are developed to support children and meet their needs while supporting and building on the individual strengths of the family. Support groups for parents such as Parent-to-Parent are available, as well as parent training.

The **Goals 2000: Educate America Act** calls for parents to be involved in the development of state and local Goals 2000 plans. In addition, Title IV of Goals 2000 calls for the implementation of Parent Resource Centers in every state by the year 1998. The Centers provide parents with training, information, and support in learning about the National Education Goals and how to help their children -- from preschool through high school -- achieve high standards. The activities of the centers include (1) coordinating with existing programs that support parents in helping their children be ready for school and be able to reach high standards; (2) developing resource materials and providing information about high quality programs to families, schools, school districts and others through conferences, workshops and dissemination of materials; and (3) supporting a variety of promising models of family involvement programs, including Parents as Teachers and Home Instruction for Preschool Youngsters.

## U.S. DEPARTMENT OF JUSTICE

The **Prenatal and Early Childhood Nurse Home Visitation Program** seeks to improve the health and social functioning of low-income, first-time mothers and their babies through nurse home visits in the first two years of a child's life. This effort relies on a highly-regarded and well-tested home visiting model. The Executive Office for Weed and Seed and the Office of Juvenile Justice and Delinquency prevention joined with HHS's Administration for Children and Families to support this project.

Through **Safe Kids/Safe Streets**, Office of Justice Programs' agencies are collaborating to support efforts to reduce juvenile delinquency exploiting what we know about the connection between child abuse/neglect and the subsequent development of violent and delinquent behavior. This effort will work to break the cycle of child and adolescent abuse and neglect. It seeks, thereby, to substantially reduce child maltreatment and fatalities, and ultimately to improve outcomes for children and families.

#### **U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT**

The **Early Childhood Development Program** helps to provide quality child care opportunities for families living in public housing communities. The program helps to establish childhood development services to facilitate the employability of the parents or guardians who are residing in public housing, and to provide early childhood development services to families who are homeless or at risk of becoming homeless.

The **Office of Lead Based Paint and Poisoning** has as central to its mission the reduction of childhood lead poisoning. Of the 64 million dwelling units that contain lead-based paint, 4 million have lead-based hazards and are currently occupied by young children. The HUD program, combined with other local, state and federal funds, targets those houses where lead poisoning rates are highest and where private financing is not feasible.

#### **U.S. DEPARTMENT OF AGRICULTURE**

The **Food Stamp Program** currently reaches over 13 million children--more than half of all participants--each month. Over 80 percent of all food stamps--\$18 billion in 1996--benefit families with children. Over 85 percent of eligible children are served by the program--and nearly 95 percent of those under age 5. Food Stamp benefits enable low-income families to obtain a better diet by increasing their food purchasing power.

The **Special Supplemental Nutrition Program for Women, Infants and Children (WIC)** provides a targeted package of nutritious food, nutrition education, and referrals to health and social services to low-income childbearing women and children from birth to age 5. About 70 percent of all eligible low-income children under 5 participate. Virtually all eligible children participate as infants--in fact, approximately 45 percent of all infants born in the U.S. receive WIC benefits. WIC has been demonstrated to improve children's nutritional status, immunization rates, and cognitive development. Children also benefit from their mothers' prenatal WIC participation, which has been shown to reduce infant deaths, low birthweight, and premature births.

## U.S. DEPARTMENT OF LABOR

The **Working Women Count Initiative** has surveyed over 250,000 working women to find out how they feel about their jobs -- what they liked, what they didn't like, and what they would change. Overwhelmingly, they indicated they needed help in balancing work and family. These findings provided support for future activities which included, sponsoring community child care forums and publishing *Care Around the Clock: Developing Child Care Resources Before 9 and After 4*. Since May, 1995 more than 10,000 copies of this publication have been distributed to parents.

## U.S. GENERAL SERVICES ADMINISTRATION

### **Federally Funded Child Care**

Child Care for Federal Employees is a high priority of the Administration. Presently nearly 800 child care centers operate under the auspices of the Federal government throughout the United States and at military installations around the world, making the nation's largest employer also its largest supporter of worksite child care programs. The centers care for the children of both government and non-government employees, many from the age of six weeks.

## U.S. OFFICE OF PERSONNEL MANAGEMENT

**Family-Friendly Leave Policies for Federal Employees** support employees' family responsibilities and enhance the commitment and productivity of the workforce. In particular **The Family and Medical Leave Act** entitles covered Federal employees up to a total of 12 administrative workweeks of unpaid leave during any 12-month period for (a) the birth of a son or daughter or care of the newborn; (b) the placement of a son or daughter with the employee for adoption or foster care; # the care of a spouse, son, daughter, or parent with a serious health condition; and (d) a serious health condition of the employee that makes him/her unable to perform the duties of their job.



UNITED STATES SENATE  
WASHINGTON, D. C. 20510

JOHN KERRY  
MASSACHUSETTS

Jen, Nicole, Ek -  
~~Angela, Steve?~~  
~~Steve, Angela~~  
~~Steve, Angela~~  
-BR

October 31, 1997

Bruce N. Reed  
Assistant to the President for Domestic Policy  
1600 Pennsylvania Avenue, NW  
Washington, D.C. 20500

Dear Bruce:

I've enclosed the bipartisan Kerry-Bond Early Childhood Development bill we introduced last week. I ask that you give serious consideration to including funding for its provisions in the Administration's FY99 budget request. Please let me know if you would like any additional information.

Sincerely,

John F. Kerry

Enclosures



UNITED STATES SENATE  
WASHINGTON, D. C. 20510

JOHN KERRY  
MASSACHUSETTS

October 31, 1997

*Bowles*

Erskine Bowles  
Chief of Staff to the President  
1600 Pennsylvania Avenue, NW  
Washington, D.C. 20500

Dear Erskine:

I've enclosed the bipartisan Kerry-Bond Early Childhood Development bill we introduced last week. I ask that you give serious consideration to including funding for its provisions in the Administration's FY99 budget request. Please let me know if you would like any additional information.

Sincerely,



John F. Kerry

Enclosures

---

## **Clinton Presidential Records Digital Records Marker**

---

This is not a presidential record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

This marker identifies the place of a publication.

---

Publications have not been scanned in their entirety for the purpose of digitization. To see the full publication please search online or visit the Clinton Presidential Library's Research Room.

105TH CONGRESS  
1ST SESSION

# S. 1309

To provide for the health, education, and welfare of children under 6 years of age.

---

## IN THE SENATE OF THE UNITED STATES

OCTOBER 22, 1997

Mr. KERRY (for himself, Mr. BOND, Mr. ROCKEFELLER, Mr. CHAPPEE, Mr. KENNEDY, Mr. HOLLINGS, Ms. LANDRIEU, Mr. WELLSTONE, Ms. MOSELEY-BRAUN, Mrs. BOXER, Mr. TORICCELLI, and Mr. JOHNSON) introduced the following bill; which was read twice and referred to the Committee on Labor and Human Resources

---

## A BILL

To provide for the health, education, and welfare of children under 6 years of age.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) **SHORT TITLE.**—This Act may be cited as the  
5 “Early Childhood Development Act of 1997”.

6 (b) **TABLE OF CONTENTS.**—The table of contents of  
7 this Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Findings.

# United States Senate

WASHINGTON, DC 20510

## THE EARLY CHILDHOOD DEVELOPMENT ACT (S.1309)

The bipartisan "Early Childhood Development Act of 1997," introduced by Senator John F. Kerry (D-MA) and Christopher S. Bond (R-MO) would help empower local communities to provide essential support in the lives of our youngest at-risk children and their families so that children begin school ready to learn. Early intervention can reduce later destructive behavior such as school dropout, drug use, and crime. The legislation would minimize government bureaucracy and maximize local initiatives by providing additional funding to communities to expand the thousands of successful efforts such as those sponsored by the United Way, Boys and Girls Clubs, and other state initiatives such as "Success By Six" in Massachusetts and Vermont, the "Parents as Teachers" program in Missouri, "Smart Start" in North Carolina, "Healthy Families" in Indiana, and the "Early Childhood Initiative" in Pittsburgh, Pennsylvania. Our nation's highest priority should be to ensure that children begin school ready to learn. This legislation would take a significant step towards that goal by:

- **Enhancing private, local, and state early successful support programs for young children by providing resources to expand and/or initiate successful efforts for at-risk children from birth to age six.** Funds would be provided to States to make grants to local collaboratives. States would fund parent education and home visiting classes and have great flexibility to decide whether to also support quality child care, helping schools stay open later for early childhood development activities, or health services for young children. Communities would be required to document their unmet needs and how they would use the funds to improve outcomes for young children. States would contribute 10-15 percent of the funds and the private sector would also make a contribution. The federal funds would be used to supplement, not replace, state and local activities for young children.
- **Empower individuals to access quality early child care for infants and toddlers in working families.** Additional resources would be provided for the successful Child Care and Development Block Grant for at-risk infants, toddlers, and pre-schoolers.
- **Increase funding for the Early Head Start program.** This program, which provides comprehensive child development and family support services to infants and toddlers, would be expanded.

**Co-Sponsors:** John F. Kerry (D-MA), Christopher Bond (R-MO), U.S. Senators John D. Rockefeller (D-WV), John H. Chafee (R-RI), Edward M. Kennedy (D-MA), Ernest F. Hollings (D-SC), Mary Landrieu (D-LA), Paul Wellstone (D-MN), Carol Moseley-Braun (D-IL), Barbara Boxer (D-CA), and Robert G. Torricelli (D-NJ).

**Endorsements:** Governor Howard Dean (VT), Governor Roy Romer (CO), Association of Jewish Family & Children's Agencies, Boys and Girls Clubs of America, Dr. T. Berry Brazelton, Catholic Charities USA, Children's Defense Fund, Child Welfare League of America, Coalition on Human Needs, Harvard Center for Children's Health, Jewish Council for Public Affairs, National Association for the Education of Young Children, National Black Child Development Institute, Inc., National Council of Churches of Christ in the USA, Parents as Teachers National Center Inc., Religious Action Center and Rob Reiner of the *I Am Your Child* Campaign.

06/11/97 11:37

Rouse/Tenk/Nickle -  
FYI, in case you  
haven't seen.

**Congress of the United States**  
**House of Representatives**

Washington, DC 20515

May 12, 1997

Elmer  
CARRY -  
I still need  
to meet w/ them.  
BR

The Honorable Bill Clinton  
The White House  
1600 Pennsylvania Ave., NW  
Washington, D.C. 20500

Dear Mr. President,

We applaud you for making education a top priority during the recent budget negotiations, and share your belief that investment in education is absolutely critical to the future success of both our young people and the entire nation. As details to the budget agreement are being finalized, we are writing to urge you to increase the investment in children during their first years of life.

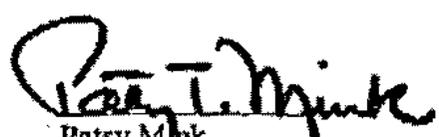
As you know from the recent *White House Conference on Early Childhood Development and Learning*, new scientific evidence proves that experiences during the earliest years of life -- before children reach school age -- are critical to their cognitive, physical and emotional development. It is vital that children are given the nurture and support that they need in their earliest years to prepare them for the challenges of school and later life.

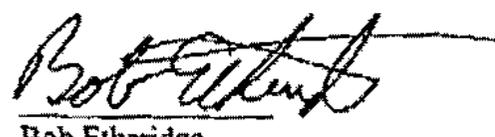
Since the most recent adjusted CBO estimates have revealed an additional \$225 billion over the next five years, we believe that a portion of this money must be set aside for additional investments in our nation's very youngest children. A minimum of \$5 billion, 2% percent of this total, should be set aside to supplement State and local investments in children from birth through five years of age. This set aside should not include the America Reads initiative or the Head Start program, and should be an additional initiative.

If we are willing to allocate \$37 billion in incremental spending to expand Pell Grants and provide tax deductions for higher education, then we must give children the tools and support early on to help them to be able to take advantage of these advanced educational opportunities later in life. We urge you to set aside a minimum of \$5 billion within the context of a five-year balanced budget for new investments in children during their first years of life.

Sincerely,

  
Tim Roemer  
Member of Congress

  
Patsy Mink  
Member of Congress

  
Bob Etheridge  
Member of Congress

Myrtle Meek

Carrie Meek

Bill Pasorell Jr

Reubin Hingjones

Leona Tauscher

Jim Coris

Robert A. Underwood

David Lorie

Cliff Kangel

Rosa L. Delano

Ron Kind

Hayl Daggert

Jim Moore

Arthur

Paul Fattl

Vie Fzin

Jim Mc Brown

Mike Mc Intyre

Charles Romeo-Baucher

Delbert Tabernau

Sander Levin

W. Debbie Stabenow

Lynn Rivers

John J. Adams

Bob Clement

Vinny DeLuca

Neil Abernethy

Pete Stark

John Duggan

Bob Weyand

Bill Clay

Frank Hays

Pete Stark

John M. C. Green

Bill

Sam

Tom Barrett

John Ray

Bill

Elizabeth Duce

John Sprain

Paul Beckman

Tom Allen

John

Cal Dady

Bob Filmer

Bill Russell Jr

Estevan Torres

# Congress of the United States

Washington, DC 20515

July 11, 1997

The Honorable Bill Clinton  
The White House  
1600 Pennsylvania Ave., NW  
Washington, D.C. 20500

Blocker  
Huls  
Reest

Dear Mr. President,

We applaud you for making education a top priority during the recent budget negotiations, and share your belief that investment in education is absolutely critical to the future success of both our young people and the entire nation. As details to the budget agreement are being finalized, we are writing to urge you to increase the investment in children during their first years of life.

As you know from the recent *White House Conference on Early Childhood Development and Learning*, new scientific evidence proves that experiences during the earliest years of life -- before children reach school age -- are critical to their cognitive, physical and emotional development. It is vital that children are given the nurture and support that they need in their earliest years to prepare them for the challenges of school and later life.

Since the most recent adjusted CBO estimates have revealed an additional \$225 billion over the next five years, we believe that a portion of this money must be set aside for additional investments in our nation's very youngest children. A minimum of \$5 billion, 2% percent of this total, should be set aside to supplement State and local investments in children from birth through five years of age. This set aside should not include the America Reads initiative or the Head Start program, and should be an additional initiative.

If we are willing to allocate \$37 billion in incremental spending to expand Pell Grants and provide tax deductions for higher education, then we must give children the tools and support early on to help them to be able to take advantage of these advanced educational opportunities later in life. We urge you to set aside a minimum of \$5 billion within the context of a five-year balanced budget for new investments in children during their first years of life.

Sincerely,

  
Tim Roemer  
Member of Congress

  
Patsy Mink  
Member of Congress

  
Bob Etheridge  
Member of Congress

07/14/97 14:55

*Lynn Rivers*  
Lynn Rivers, M.C.

*John LaFalce*  
John LaFalce, M.C.

*Bob Clement*  
Bob Clement, M.C.

*Vic Snyder*  
Vic Snyder, M.C.

*Neil Abernethy*  
Neil Abernethy, M.C.

*Pete Stark*  
Pete Stark, M.C.

*Lloyd Doggett*  
Lloyd Doggett, M.C.

*Bob Weygand*  
Bob Weygand, M.C.

*Bill Clay*  
Bill Clay, M.C.

*Paul McHale*  
Paul McHale, M.C.

*Pete Stark*  
Pete Stark, M.C.

*Donna M. Christian-Green*  
Donna M. Christian-Green, M.C.

*Bernie Sanders*  
Bernie Sanders, M.C.

*Sam Farr*  
Sam Farr, M.C.

*Tom Barrett*  
Tom Barrett, M.C.

*Silvestre Reyes*  
Silvestre Reyes, M.C.

*Bobby Rush*  
Bobby Rush, M.C.

*Elizabeth Furse*  
Elizabeth Furse, M.C.

*John Spratt*  
John Spratt, M.C.

*Jesse Jackson, Jr.*  
Jesse Jackson, Jr., M.C.

*Tom Allen*  
Tom Allen, M.C.

*James Brown*

07/14/97 14:55

6

*Marky Meehan*

Marky Meehan, M.C.

*Carrie Meek*

Carrie Meek, M.C.

*Bill Pascrell*

Bill Pascrell, M.C.

*Ruben Hincjosa*

Ruben Hincjosa, M.C.

*Ellen Tauscher*

Ellen Tauscher, M.C.

*Jim Davis*

Jim Davis, M.C.

*Robert A. Underwood*

Robert Underwood, M.C.

*David Price*

David Price, M.C.

*Charlie Faenger*

Charlie Faenger, M.C.

*Rosa L. DeLauro*

Rosa DeLauro, M.C.

*Lloyd Doggett*

Lloyd Doggett, M.C.

*Jim Moran*

Jim Moran, M.C.

*Nick Lampson*

Nick Lampson, M.C.

*Chaka Fattah*

Chaka Fattah, M.C.

*Nic Fazio*

Nic Fazio, M.C.

*James McGovern*

James McGovern, M.C.

*Mike McIntyre*

Mike McIntyre, M.C.

*Carlos Romo-Barcelo*

Carlos Romo-Barcelo, M.C.

*Sabbie Stearns*

Sabbie Stearns, M.C.

*Janler Levin*

Janler Levin, M.C.

TIM ROEMER  
30 DISTRICT, INDIANA

COMMITTEE ON ECONOMIC AND  
EDUCATIONAL OPPORTUNITIES

COMMITTEE ON SCIENCE

**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515-1403**

WASHINGTON OFFICE:  
407 CANNON HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515-1403  
(202) 225-3915

DISTRICT OFFICE:  
217 NORTH MAIN STREET  
SOUTH BEND, IN 46601  
(219) 289-3301

CALL TOLL FREE  
1-800-439-3518

July 28, 1997

Bruce Reed  
Assistant to the President for Domestic Policy  
The White House  
1600 Pennsylvania Avenue, NW  
Washington, DC 20500

Dear Bruce,

I would like to take the opportunity to follow-up on last week's meeting with Democratic House Members on early childhood and education initiatives. It was a very productive meeting and I appreciate you taking the time to join us. I hope that we can use it as a springboard for more formal meetings between the Administration and the Caucus to develop substantive policy recommendations for early childhood education and childcare initiatives. I would think another meeting in late September or early October would be helpful.

I applaud the Administration's successful efforts to increase the access and affordability of higher education. The reauthorization of the Higher Education Act this fall will further provide us with opportunities to improve programs and services for students and their families. However, the success of the higher education system is dependent on a strong elementary and secondary educational system, and I would like the Administration to take the lead on proposals and initiatives that address these concerns.

As I mentioned at our meeting, the Democratic Caucus Education Task Force met over a dozen times this spring to develop a comprehensive education initiative. There were multiple innovative and creative proposals on the table, many of which focused on improving the quality and access of key programs that improve school readiness, childcare, and educational achievement. I would like to take this opportunity to briefly outline our Caucus discussions on early childhood initiatives so that we can continue to have fruitful discussions with the Administration.

This outline is not exhaustive, nor is it necessarily an endorsement by myself or the Caucus. Many of these ideas come from conversations our Members have had with constituents, and I think it is clear from our meeting that Members feel very strongly about improving the efficacy of early childhood programs such as Head Start, the development of community-based literacy efforts, funding for school infrastructure, and the improvement of teacher training programs.

## **Early Childhood Education**

We applaud the Administration's efforts to increase funding for and enrollment in the Head Start program. We hope to leverage this additional funding to not only increase enrollment, but also to improve the quality of Head Start. The pending reauthorization of Head Start presents us with an opportunity to strengthen several components of this program. Specifically, the educational aspects of Head Start must be enhanced; the training of Head Start teachers and providers must be improved; and the linkages between the K-12 system and Head Start must be established and strengthened.

We are also concerned about the efficient delivery and coordination of services by the multiple federal agencies involved in Head Start. We must deliver services where they will be routinely and consistently accessed. Again, the reauthorization process provides us with the opportunity to develop programs that provide one-stop delivery of child care, nutrition, health care, education, and job training programs, similar to One-Stop Career Centers. There is also strong support for Early Head Start, which is a program that focuses on the 0-3 age group, and the Even Start Family Literacy Program, which addresses family literacy.

The Administration, through the White House Conference on Early Childhood and the President's Volunteer Summit, has done a tremendous job of bringing these critical issues to the forefront of the nation's consciousness. We must follow through now in implementing these initiatives.

## **School Infrastructure**

While funding for school construction was dropped in the budget negotiations, it is clear that this issue remains a key concern for many of our Members. Proposals range from a \$5 billion fund to be allocated by formula, to the establishment of state infrastructure banks or other revolving loan funds that enable localities to access capital. Educational reform cannot work unless our children are in a safe, warm and clean learning environment.

## **Accountable and Effective Schools**

Successful schools rely on the leadership and involvement of teachers, administrators, parents, students, and elected officials. In Congress and within the Caucus, there are strong views on improving the accountability and performance of schools. However, as the Administration is more than aware, the development and adoption of academic standards and standardized testing remains controversial. I welcome a continuing discussion of these issues.

Of course, the quality of our nation's teachers is key to student success, and the reauthorization of Title V in the Higher Education Act presents another opportunity to strengthen teacher training programs. Again, I look forward to working with the Administration on increasing the number of talented youth who dedicate themselves to a teaching career, as well as developing a cohesive plan for improving the quality of teacher training programs.

Bruce, I look forward to continuing discussions with the Administration on early childhood, childcare, and education proposals. I would appreciate it if you could designate a contact within the White House with whom I could coordinate discussions and meetings.

Sincerely,



Tim Roemer  
Member of Congress

- cc: Rep. Davis  
Rep. Etheridge  
Rep. Fazio  
Rep. Ford  
Rep. Hoyer  
Rep. Kind  
Rep. McCarthy  
Rep. McIntyre  
Rep. Moran  
Rep. Pascrell  
Rep. Snyder  
Rep. Tauscher  
Rep. Weygand  
Michael Cohen, The White House  
Andy Blocker, The White House

*Bruce -  
I look forward to  
working with you on this.  
I hope we can put  
a bill together soon!*



THE WHITE HOUSE

WASHINGTON

April 22, 1997

MEMORANDUM TO INTERESTED PARTIES

FROM: MIKE McCURRY *MM*

SUBJECT: Early Childhood Conference

Listed below please find the print, television and radio press outreach conducted by the Office of Media Affairs surrounding the White House Conference on Early Childhood Development. Additionally, we assigned cabinet members specific media markets to contact about their involvement in the conference. We would particularly like to thank Kris Balderston and Cabinet Affairs for their assistance. The satellite conferences they coordinated with regional administrators produced outstanding regional coverage. Attached please find news clips and a report detailing satellite hits resulting from the conference. Thank you.

Print

- \* Conference notification and information was provided to more than 400 reporters across the country and 240 specialty publications, including African American, Hispanic, religious, education press and women's magazines. Pitched stories with conference participants, satellite sites, and supporters of children's health care plan to these regional and specialty press reporters.
- \* Mailing to top 250 editorial boards in addition to specialty publications across the country.
- \* Expanded pool opportunities on site to ensure that at least 50 reporters, representing more than 75 media outlets nationwide, had access to conference coverage.
- \* Stories have resulted so far in the following publications or news services: Knight Ridder, Newhouse, New York Times, USA Today, Washington Times, Washington Post, St. Petersburg Times, Richmond Times Dispatch, Raleigh News and Observer, Boston Globe, and Los Angeles Times. In addition, stories are expected in the following magazines: Parents, Redbook, Newsweek, and Better Homes and Gardens.

Radio

- \* Pitched conference panelists, cabinet secretaries and Administration officials on 10 nationally syndicated shows and to more than 40 stations in media markets across the country.
- \* Coordinated interviews on WCBS (New York), American Urban Radio Network, National Public Radio, Children's Broadcasting Corporation, KCBS and KGO (San Francisco), KOMO (Seattle), KABC (Los Angeles), WBUR, WBZ (Boston), WBBM (Chicago), WJR (Detroit), as

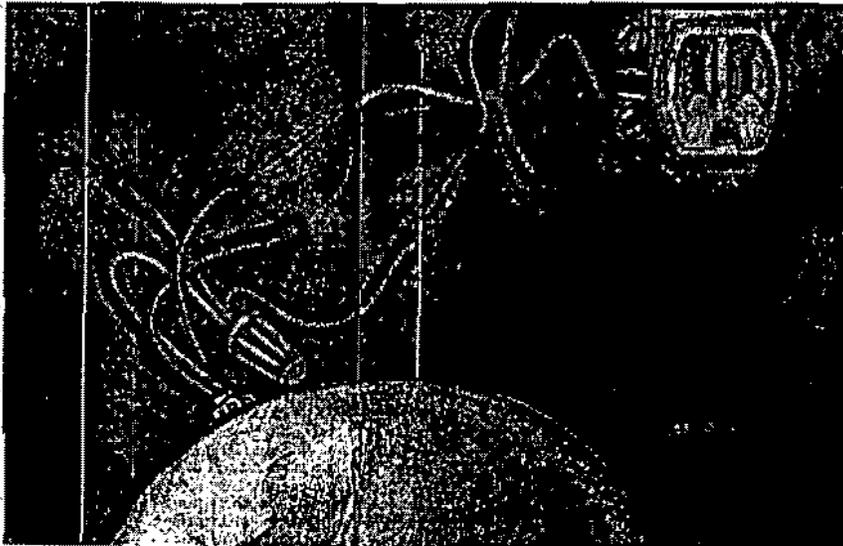
well as on nationally syndicated shows including: Working Mom on the Run, Two Chicks on the Radio, Working Women and Building A World Fit for Children.

### Television

- \* Event fed via satellite to more than 90 downlink locations across the country. Stories aired on more than 29 stations in 26 markets across the country from our satellite feed alone. This is in addition to network affiliate stories which also aired nationwide.
- \* Pitched conference, provided advance information and satellite coordinates to stations in all markets with a downlink location as well as those near the home of a conference participant.
- \* Contacted D.C. bureaus with conference information and interview opportunities. Coordinated two on site interviews with conference participants and audience members and provided advance information for news planning.
- \* Stories aired on network morning shows, Lifetime Television, CNN, NBC, MSNBC, ABC, CBS, and Nightline among others.

Child's play is serious business. Astonishing studies of the way infants' brains develop present news both hopeful and horrible: Children's major mental and emotional growth may peak just as society takes an interest.

# PLUGGING INTO BABY'S BRAINPOWER



By ELLEN DEBENPORT  
Times Staff Writer

**T**hat unfocused look in the eyes of a newborn baby reflects a significant scientific fact: Her brain isn't hooked up yet.

By the time she's 5, her brain will have wired its own neurons — about 100 billion brain cells — into pathways that will govern how she sees, hears, speaks and reacts for the rest of her life.

New research on the development of babies' brains shows the wiring depends not just on genes but on experience. The way a baby is taught and treated as a very young child may largely establish her intelligence and personality.

It's a heavy responsibility for parents, and the new information has implications for all society.

Are young children getting all the nurturing and stimulation they need? Are they being read to or hugged enough? What of children in day care? Should governments try to make sure children turn out right?

If you haven't heard yet about the new science on babies' brains, just wait.



Times art — ROSE MENDOZA

President and Mrs. Carter plan a Washington summit Thursday called the White House Conference on Early Childhood Development and Learning: What New Research on the Brain Tells Us About Our Youngest Children.

A publicity blitz is planned for late April, called the Early Childhood Public Engagement Campaign. It is the brainchild of director Rob Reiner, who says his interest in young children stems from what he learned in psychoanalysis about his own early years.

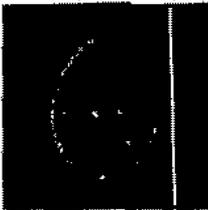
Reiner's one-hour show April 29 on ABC, called *I Am Your Child*, will be hosted by Tom Hanks and feature Robin Williams, Billy Crystal, former Gen. Colin Powell, Arnold Schwarzenegger, Rosie O'Donnell, Charlton Heston and others.

*Newsweek* has published a special edition to coincide with the show, and CBS' *Good Morning America* plans six special reports. NBC's *Today* show is airing reports this week.

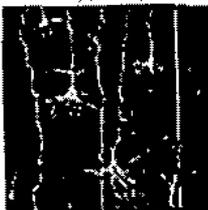
Gov. Lawton Chiles, long an advocate for babies and young children, is disseminating brain research to legislators, agency heads and business people. An education specialist from Florida State University has traveled the state to spread the word.

Please see BRAIN 4D

### 5 DAYS OLD

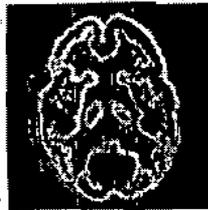


The brain of a newborn governs only the most basic motor functions. The dark colors indicate little activity in a brain that has not yet been "wired." The drawing below shows the electrical connections being made in the brain — relatively few as the baby eats, sleeps and cries.

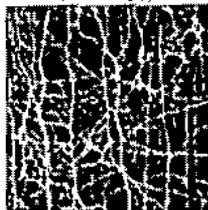


Photos courtesy Children's Hospital of Michigan, Wayne State University

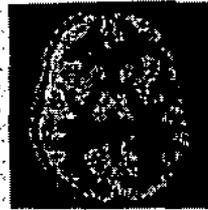
### 6 YEARS OLD



By age 6, the brain is a firestorm of activity. Red and yellow indicate the busiest brain, and the brain cells are furiously expanding the pathways among cells, shown below. The human brain is never more active than from ages 2 to 9. As children experience everything for the first time, they develop more brain pathways than they will eventually need.



### ADULT



The adult has a more mellow brain, reflected by cooler colors, which has lost some of the brain-cell connections made in childhood. If neural pathways aren't used, they die. Others are established by repeated activity. The adult brain is literally set in its ways.



*"At the time a baby is born, the brain is remarkably immature. Some of the cells — the neurons, the actual brain cells — are still moving into their proper positions. And they still have to hook up."*

By IAN RICHMAN

# Brain

to any interested group, some legislators want to use the new science to promote early childhood programs.

"It's the things that intuitively we've known," Chilea said. "We've known that kids that had that kind of nurturing always did well. What we didn't have was a day-to-day measurement, literally a snapshot of babies' brains.

Using something called a PET-scan, or Positron Emission Tomography, scientists can now watch the activity in a baby's brain as it develops language or emotions. They can see what difference a parent's voice or touch makes.

Hearing music, for instance, seems to develop math ability. Chilea is buying music CDs for his grandchildren. Researchers say Mozart works especially well.

"If you took all your kids from zero to 5 and did this — that is, applied all the benefits of brain research — 'in 10 or 15 years, you'd change the world,'" Chilea said.

## The science

The results of the brain research will come as no surprise to any good parent or grandparent: Babies need to be read to, sung to, cuddled and played with from the day they are born.

Now we know why. The brain isn't complete at birth. It governs breathing and heartbeats, but the finer points — eyesight, hearing, language, emotions — are a mass of potential.

"At the time a baby is born, the brain is remarkably immature," said Dr. Will Blechman, a Miami doctor who is now a consultant to the state. "Some of the cells — the neurons, the actual brain cells — are still moving into their proper positions. And they still have to hook up."

It works like this: *Neurons* are the basic brain cells. The gap between them is a *synapse*. They connect when an *axon* at the end of one cell fires chemicals into a *dendrite* on the other.

The axons and dendrites grow instantly as they are needed in a child's blossoming brain, mapping neural pathways as the baby responds to sight, sound, touch and play.

One child's brain may be mapped for English, another for Chinese, depending on what the baby hears in the first six months. One brain may develop a capacity for joy and another be programmed for fear, depending on the baby's home life.

"You will literally have a

brain chemistry that's different from any other child's."

A single cell may connect with at least 15,000 other cells. By 3 months, a baby's brain has 1,000-trillion such connections.

He will keep the pathways he uses continually; the others will wither. For instance, by age 1, a baby's brain will no longer recognize sounds that are not in its native language. But first, the brain tries out everything, making a child's brain busier than an adult's.

"Parents might get a little frustrated reading *Good Night, Moon* for the 40th time, but when that child is pointing at that mouse over and over again, they're learning," said Michael Levine of the Carnegie Corporation of New York, which promotes early childhood research. His kids are 9, 6 and 2.

The brain opens windows of opportunity, during which it must be wired or the chance is lost. The length of time varies.

For example, if a child is born with cataracts that aren't removed until age 2, he will never be able to see, even through a normal eye. The brain is blind, the visual connections never established.

A child with chronic ear infections the first year may miss out on learning certain sounds, which could lead to speech problems later.

Scientists at Baylor College of Medicine found that children who aren't played with and touched develop brains 20 to 30 percent smaller than normal. Even rats develop more complex brains if they are given toys, compared to rats in plain cages.

Some problems can be remediated, but that is expensive and difficult. This helps explain why the gains made from early childhood programs such as Head Start, aimed at 3- and 4-year-olds, often fade over time. The programs start too late. The children's brains are already wired.

"It's a little frightening to me, this brain research," said Susan Muenchow, director of the Florida Children's Forum. "It's an enormous responsibility to have a child, and I'm not sure that many of us have realized quite what an awesome responsibility it is."

But alarming parents is exactly what First Lady Hillary Clinton said she hopes to avoid.

"One of my greatest fears about this research concerning the brain is that parents who are doing their best to raise children, often under difficult circumstances, will feel even more guilt and anxiety because they aren't sure they are

doing everything that the research asks them to do," she said.

Speaking Thursday to the Society for Research in Child Development, Mrs. Clinton said one man she knows read a magazine article about the way synapses develop in young children, and vowed to read two books to his little boy every night. It was awful.

"He raced through the material without ever giving the child a chance to look at the pictures or ask questions about the story," she said. "And he couldn't understand why his son was not enjoying this experience at all."

Parents can relax a little. Not everything in the brain is set by age 3. A child's values develop until age 10 or so, governing the way she will relate to people or control her emotions. The frontal lobes, the seat of understanding, develop until at least 16. And new learning is always possible, as retirees know.

So Mom occasionally can skip a bedtime story. It's the child's repeated experience that lodges permanently in the brain.

That makes the consequences of abuse and neglect all the more tragic. Behavioral scientists have known for a long time that abuse leaves psychological scars. Now research shows an abused child's brain is literally warped.

"This really has implications when we hear about teenagers that are lashing out, killing people. Senseless, random killing may have its roots in the fact that the child's brain didn't develop properly," said Muenchow.

## The policies

Brain research has been going on for years, but it reached critical mass in 1994 when the Carnegie Corp. of New York compiled various studies and produced a landmark report called *Starting Points*.

Carnegie combined scientific findings with some disheartening demographics. The years between the hospital nursery and preschool are the most crucial for children, the report showed, and too many are at risk.

■ One-quarter of families with children under 3 live in poverty.

■ Nearly a quarter of all pregnant women in America receive no prenatal care.

■ Half of all mothers return to the work force within a year of a baby's birth, and studies show only 12 to 14 percent of children are in day care that promotes their growth and learning. At least as many are in harmful settings.

■ More than 5-million children under 3 are in the care of other adults while their parents work.

Almost half of African American children can expect their parents to divorce. One-quarter live in single-parent homes.

■ One in three victims of physical abuse is a baby younger than one year.

■ Only half of infants and toddlers are routinely read to by their parents.

No one is suggesting that mothers leave the work force and go home to the kids. The government, in fact, is sending welfare mothers into jobs and promising to pay for day care.

So day care is key, and brain research underscores the need to improve it, said Gail Robertson, executive director of the Pinellas County License Board for Children's Centers and Family Day Care Homes.

"Now we have a lot of new information about (children's) development, particularly in their first three years," said Robertson. "We know more about the windows of opportunity and more about the importance of the adult-child interaction and how important it is for those caregivers to be trained and educated in early child development."

Florida has higher day-care standards than many states. A recent study by the Families and Work Institute in New York found the changes in children's development "extremely impressive" since Florida increased the ratio of day-care staff to children.

The number of hours a child under 3 spends in day care almost doesn't matter, as long as the quality is good, according to a study this month from the National Institute of Child Health and Human Development. If the teachers interact and respond to the child, the child's language and cognitive skills will develop just as well as those of the children who stayed home with a parent.

Eventually, day care for infants and toddlers may be looked upon as the start of school.

"From an investment perspective, if we think of education beginning with kindergarten, we're starting much too late," said Dorothy Routh, director of the Center for Educational Enhancement and Development at FSU.

"The other irony of this," said Jack Levine of the Florida Center for Children and Youth, "is that one-third of education dollars are remedial, trying to patch up the problems that could have and should have been averted with a better neonatal and early childhood experience."

Chilea has always argued that money spent on the youngest children will pay mighty later on special education, welfare and prisons.

"It is so hopeful," Chilea said of the new findings. "It hasn't been long we had the argument whether it's environment or whether it's genetic. Good scientists came down on the side that this is all genetics, you can't do anything with these kids, they're not going to make it."

"Now you see literally, thank goodness, almost regardless of what your parents were, you get a shot," he said. "When you come in, you've got 1,000-trillion (synapses), just like anybody else does. What that says, if you want to build a community, build a neighborhood, you take care of your kids."

## LEVEL 2 - 4 OF 54 STORIES

Copyright 1997 The Atlanta Constitution  
The Atlanta Journal and Constitution

April 18, 1997, Friday, ALL EDITIONS

SECTION: FEATURES; Pg. 05D

LENGTH: 525 words

HEADLINE: Singing, talking to new baby aids development, experts say

BYLINE: Julia Malone; WASHINGTON BUREAU

BODY:

Washington ---Parents should sing and talk to even the youngest infants, because the verbal stimulation is crucial to how well a child develops thinking and language skills later, a panel of experts urged Thursday at the White House.

"At first glance, it may seem odd to hold a conference here at the White House devoted to talking about baby talk," first lady Hillary Rodham Clinton said as she and President Clinton opened the conference on early childhood development. "But that discussion has never been more important."

Mrs. Clinton said experts have confirmed what many parents have long felt ---that "the song a father sings to his child in the morning, or a story that a mother reads to her child before bed, help lay the foundation for a child's life and, in turn, for our nation's future."

The president added that new information confirming the impact of early child-rearing practices is "absolutely stunning." He announced a modest federal effort, a request that the Department of Defense, whose extensive child care system has been praised by experts, offer its expertise to improve civilian child care centers.

Mrs. Clinton, who returned to her law practice several months after having her only child, Chelsea, said it is time to confront directly the question of whether it's better for a mother to stay at home.

"Some people argue that what the research really tells us is that women with very young children should not work outside the home, period," she said.

Dr. Deborah Phillips, a child care expert with the National Research Council, responded that families "need choices." Studies show that "children can thrive from high quality child care," she said.

The panel of experts flanking the Clintons painted a dark picture of the state of childhood in America.

"Our nation's infants and children are in trouble," said Dr. David A. Hamburg, president of the Carnegie Corp. of New York. He cited high infant mortality, low-birthweight babies, and a much higher percentage of children born to adolescent mothers than in other industrialized countries.



LEXIS·NEXIS®

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS®

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS®

Ⓜ A member of the Reed Elsevier plc group

Even so, the conference focused on children's potential, based on recent research on the first few months of a child's life.

Babies are smarter, more curious and more eager than earlier believed, said Dr. Donald J. Cohen, director of the Yale Child Study Center. "The minds of infants are active from the time that they are born," he said, adding that they remember incidents from an early age and lay down patterns that will determine their future paths.

A survey of more than 1,000 parents released at the conference indicated that many parents did not realize how much their babies were taking in. The poll found that 73 percent said they did not believe a baby could communicate much until learning to speak a few words.

Speech specialist Dr. Patricia K. Kuhl of the University of Washington provided academic backing for holding your baby and cooing softly in gibberish. Babies respond to "mother-ese" and "parent-ese," whose melodic sounds actually provide a tutorial in the sounds that make up language.

"They are listening," she said.

**GRAPHIC: Chart: TAKING THOSE FIRST STEPS**

Dr. William Staso, an expert in neurological development, suggests that different kinds of stimulation should be emphasized at different ages. At all stages, parental interaction and a conversational dialogue with the child are important. Here are some examples:

**FIRST MONTH:** A low level of stimulation reduces stress and increases the infant's wakefulness and alertness. The brain essentially shuts down the system when there is overstimulation from competing sources. When talking to an infant, for example, filter out distracting noises, like a radio.

**MONTHS 1 TO 3:** The brain starts to discriminate among acoustic patterns of language, like intonation, lilt and pitch. Speaking to the infant, especially in an animated voice, aids this process.

**MONTHS 3 TO 5:** Infants rely primarily on vision to acquire information about the world. Make available increasingly complex designs that correspond to real objects in the baby's environment; motion also attracts attention. A large picture of a fork, moved across the field of vision, would offer more stimulation than just an actual fork.

**MONTHS 6 TO 7:** Infants become alert to relationships such as cause and effect, the location of objects and the function of objects. Demonstrate and talk about situations like how the turning of a doorknob leads to the opening of a door.

**MONTHS 7 TO 8:** The brain is oriented to make associations between sounds and some meaningful activity or object. For example, parents can emphasize in conversation that the sound of water running in the bathroom signals an impending bath, or that a doorbell means a visitor.

**MONTHS 9 TO 12:** Learning adds up to a new level of awareness of the environment and increased interest in exploration; sensory and motor skills coordinate in a more mature fashion. This is the time to let the child turn on a faucet or a light switch, under supervision. --New York Times

LOAD-DATE: April 19, 1997



**LEXIS-NEXIS**

A member of the Reed Elsevier plc group



**LEXIS-NEXIS**

A member of the Reed Elsevier plc group



**LEXIS-NEXIS**

A member of the Reed Elsevier plc group

## LEVEL 2 - 8 OF 54 STORIES

Copyright 1997 The Houston Chronicle Publishing Company  
The Houston Chronicle

April 18, 1997, Friday, 3 STAR Edition

SECTION: a, Pg. 4

LENGTH: 642 words

HEADLINE: Clintons highlight child development;  
Conference promotes early interaction

BYLINE: NANCY MATHIS, Houston Chronicle Washington Bureau; Staff

DATELINE: WASHINGTON

BODY:

WASHINGTON - All the White House talk Thursday was baby talk.

President Clinton and Hillary Rodham Clinton hosted the all-day White House Conference on Early Childhood Development to highlight the importance of nurturing infants and toddlers.

"At first glance, it may seem odd to hold a conference here at the White House devoted to talking about baby talk," said Hillary Clinton, the driving force behind the seminar.

"But that discussion has never been more important, because science ... has now confirmed what many parents have instinctively known all along: that the song a father sings to his child in the morning or a story that a mother reads to her child before bed help lay the foundation for a child's life and, in turn, for our nation's future," she said.

The symposium, with experts in the child development field, was beamed to nearly 100 sites in 37 states to publicize to parents and child care workers the latest science on brain development of children and their learning habits.

New research indicates a critical time, from birth through age 3, in which nurturing is important to brain development. It also has found that the brain structure continues developing until age 15.

"No matter how young, a child does understand a gentle touch or a smile or a loving voice," Clinton said. "Babies understand more than we have understood about them. Now we can begin to close the gap and to make sure that all children in this country do have that chance to live up to the fullest of their God-given potential."



LEXIS·NEXIS

A member of the Reed Elsevier plc group



LEXIS·NEXIS

A member of the Reed Elsevier plc group



LEXIS·NEXIS

A member of the Reed Elsevier plc group

The Houston Chronicle, April 18, 1997

Hillary Clinton said she hoped the seminar "will get across the revolutionary idea that the activities that are the easiest, cheapest and most fun to do with your child are also the best for his or her development: singing, playing games, reading, storytelling, just talking and listening."

Experts maintain that such activities are crucial in the early months of a baby's life.

"When we speak to our children something is happening. We are bringing about changes in the brain that will allow them to participate in the communications game," said Patricia Kuhl, director of the University of Washington's speech and hearing sciences department. "Infants are born to learn. Our role is to be good partners in this learning process."

But the president and first lady also heard experts criticize the White House's embrace of the new welfare reform law.

The law requires welfare recipients, mostly mothers, to go to work within two years of receiving benefits and places a lifetime cap of five years on benefits. Critics contend it will push more children into poverty.

Dr. Terry Brazelton of Harvard Medical School, told the president, "In welfare reform, we turned the wrong way. We should have looked at what we were going to do with children before we pushed women out into the workplace." The president, who opened the session, said the welfare reform bill will give states a chance to put extra funds into child care. He said the new law "gives all of you who care about child care a year or two to make strenuous efforts, state by state, to create a more comprehensive, quality system of child care than we have ever had before." Clinton said his administration also wants to expand health care coverage to children who are not now covered.

He said his budget would extend coverage to an additional 5 million children by the year 2000.

The president announced he was ordering the Defense Department to share information with states and corporations on how it operates its successful child care centers.

He also announced the Justice Department will begin a new initiative called Safe Start that will train police, prosecutors and others in child development so they can handle situations involving youngsters.

GRAPHIC: Photo: President Clinton pauses in the White House East Room on Thursday while presiding over a conference on childhood development.; Associated Press



LEXIS-NEXIS™

Ⓜ A member of the Reed Elsevier plc group



LEXIS-NEXIS™

Ⓜ A member of the Reed Elsevier plc group



LEXIS-NEXIS™

Ⓜ A member of the Reed Elsevier plc group

LEVEL 2 - 9 OF 54 STORIES

Copyright 1997 The Kansas City Star Co.  
THE KANSAS CITY STAR

April 18, 1997 Friday METROPOLITAN EDITION

SECTION: METROPOLITAN; Pg. C3

LENGTH: 247 words

HEADLINE: Clinton wants greater effort on child care.

BYLINE: DONALD BRADLEY, Staff Writer

BODY:

Saying that new scientific research has made a child's brain the "new frontier," President Clinton on Thursday renewed his call for a greater public investment in early childhood development.

The research runs contrary to old notions about when a child is able to learn. Scientists now contend that infants as young as three weeks begin to hear voices, recognize faces and distinguish colors.

Each sight and sound sends millions of nerve cells scrambling to establish a "brain's circuitry." The nurturing that a child receives during this time helps mold personality and lays the foundation for education.

The president made the comments during "The White House Conference on Early Childhood Development and Learning: What the Newest Research on the Brain Tells Us About Our Youngest Children."

The conference was linked by satellite from Washington to more than 100 sites around the country, including the University of Missouri-Kansas City where about 300 people had gathered.

Clinton used the event to direct the U.S. Navy, whose child-care system is highly praised, to collaborate with the civilian child-care industry to develop new strategies.

He also called for health coverage for all of America's children and for an expansion of Early Head Start, a program to address the developmental needs of children under age 4.

LOAD-DATE: April 18, 1997



LEXIS-NEXIS™

A member of the Reed Elsevier plc group



LEXIS-NEXIS™

A member of the Reed Elsevier plc group



LEXIS-NEXIS™

A member of the Reed Elsevier plc group

LEVEL 2 - 10 OF 54 STORIES

Copyright 1997 The Kansas City Star Co.  
THE KANSAS CITY STAR

April 18, 1997 Friday METROPOLITAN EDITION

SECTION: OPINION; Pg. C7; ASSISTANT EDITORIAL PAGE EDITOR

LENGTH: 817 words

HEADLINE: Early childhood education has big payoffs

BYLINE: LAURA SCOTT, Assistant Editorial Page Editor

BODY:

Children's advocates have told us for years that a child's experiences in the first years of life are more critical to his ability to learn than what happens in the first grades.

Parents who have routinely enrolled their children in pre-school have understood this. Ditto for working parents who have searched - often with much difficulty - until they found quality child care.

Even if it cost them more, they wanted the enrichment and age-appropriate learning found in those centers and family homes that offer quality programs.

But the political leaders who determine the policies of teacher certification, licensure, health and safety requirements, curriculum, and who appropriate the financial support for child care programs have been slow at getting the connection between child care and learning. Missouri, for example still does not require unlicensed child care centers to have any curriculum at all.

Even the great increase in working mothers that has occurred in the last two decades has not brought a corresponding increase in the number of or quality of child care slots. And, while middle-class parents have had extremely limited choices for child care, the working poor largely has had no choices at all.

Most belatedly, attitudes about child care and the education of pre-schoolers are finally beginning to change. National news articles are reporting on the capacity of the brain to learn in the earliest years of life. President Clinton hosted this week a White House Conference on Early Childhood Development and Learning.

Ironically, welfare reform has spawned much of this critical new look at the state of early childhood programs. More and more people are realizing that society has to answer not only the question of what to do with the children of people who are moving from welfare to work. It also has to find ways to make sure that care is good.

Missouri has been a leader (Yes! Missouri!) in emphasizing the



LEXIS-NEXIS<sup>™</sup>  
A member of the Reed Elsevier plc group



LEXIS-NEXIS<sup>™</sup>  
A member of the Reed Elsevier plc group



LEXIS-NEXIS<sup>™</sup>  
A member of the Reed Elsevier plc group

THE KANSAS CITY STAR, April 18, 1997, Friday

importance of early childhood education reform, thanks largely to Gov. Mel Carnahan and advocacy by pro-child organizations throughout the state, particularly in Kansas City.

Carnahan wisely has recognized the importance of the enrichment experiences of first years of a child's life as they affect learning in later years.

The governor's latest initiative in this regard calls for the partnership of public schools with child care providers to create positive learning experiences for children before they enter elementary school. He also has created a state commission on early childhood education.

Before naysayers try to dismiss these ideas as liberal thinking of Democratic leaders Clinton and Carnahan, it might be well to remember that Missouri led the nation in one other farsighted approach to early childhood education. That program was Parents as Teachers, widely recognized and heralded for the impact that it has on children in their earliest months and years. And the governor who pushed that is a Republican, Kit Bond, now a U.S. senator still known for his work in this area.

Carnahan's proposal to mesh good child care with school-based programs is likely to succeed on a pilot basis because two top-notch administrators, Gary Stangler with the Department of Social Services and Robert Bartman with Department of Elementary and Secondary Education are responsible for implementing it.

For this good idea to go beyond the pilot stage, it may take some convincing of policymakers in the Legislature as well as educators.

On-site child care has had slow acceptance by school administrators who have believed that early childhood education is not their job.

They could not appreciate the important link between good, age-appropriate pre-school experiences and the academic achievements of students down the road.

A debate still rages today within the education community as to who should teach the youngest children - people who are trained as teachers of elementary-age children or people who are trained as early childhood educators. The latter is the most obvious choice because of their special training in working with children of the youngest ages.

But this is undoubtedly one of the issues that will have to be resolved more than once as early childhood education takes center stage in the debate over how to improve student performance. The leadership example set by Missouri on this issue should be emulated at every turn.

LOAD-DATE: April 18, 1997



LEXIS·NEXIS™

A member of the Reed Elsevier plc group



LEXIS·NEXIS™

A member of the Reed Elsevier plc group



LEXIS·NEXIS™

A member of the Reed Elsevier plc group

## LEVEL 2 - 11 OF 54 STORIES

Copyright 1997 Times Publishing Company  
St. Petersburg Times

April 18, 1997, Friday, 0 South Pinellas Edition

SECTION: NATIONAL; Pg. 11A

LENGTH: 494 words

HEADLINE: Parents: We're exhausted, worried, but love our kids

BYLINE: ELLEN DEBENPORT

DATELINE: WASHINGTON

BODY:

Much as they love their children, American parents are exhausted, and they worry every day that they are not spending enough time with their kids, a new study shows.

Parents also know that a child's early years are crucial, but they are confused about what to do, especially with a child's emotional development as opposed to the mental and physical growth.

The poll was released Thursday by a Washington group called Zero to Three, which focuses on early childhood, in conjunction with a White House conference on infant brain development.

At the White House, researchers presented evidence to first lady Hillary Rodham Clinton about the profound importance of a baby's experience from birth to age 3 as its brain is being wired for life.

Ninety-five percent of parents know that babies begin learning the moment they are born, according to the Zero to Three poll, conducted by Peter Hart Research Associates with 1,022 parents nationwide.

But there are gaps in their knowledge.

+ Eighty-seven percent said the more stimulation a baby receives, the better. Not necessarily. It should be geared to the baby's development, interests and mood.

+ Half the parents thought the more caregivers a child had before age 3, the better the child would adapt. Wrong again. The child grieves each change and may have trouble forming new relationships.

+ About one-quarter of parents thought a baby's intelligence level is probably fixed at birth. In fact, the parents' interaction makes a crucial difference.



LEXIS·NEXIS™

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS™

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS™

Ⓜ A member of the Reed Elsevier plc group

St. Petersburg Times, April 18, 1997

+ One-third of the parents polled didn't know that babies younger than 6 months can get depressed.

Most parents think they are doing a good job, but half said they end each day wishing they had spent more time with the children.

They do adore the kids. The poll shows 91 percent of new parents are happier than ever before. But they also report feeling stressed and worn out (56 percent); afraid of doing something wrong (52 percent), afraid of not being a good parent (47 percent) and unsure what to do a lot of the time (44 percent).

The guilt runs especially high among working mothers, who are most likely to say they aren't spending enough time with the kids.

Whether by choice or economic necessity, 40 percent of the mothers of young children work full time, 19 percent work part time and another 8 percent are planning to return to work within six months, the poll showed.

Furthermore, 60 percent of all children under 3 are cared for regularly by someone other than their parents.

A second report released Thursday noted that 24 percent of U.S. children under 3 live in poverty.

The National Center for Children in Poverty said growing up poor means the children are at risk for poor nutrition, environmental toxins, depressed mothers who neglect them, trauma and abuse, low-quality child care and substance abuse. Any of those factors could affect brain development.

LANGUAGE: ENGLISH

LOAD-DATE: April 18, 1997



LEXIS-NEXIS<sup>™</sup>  
A member of the Reed Elsevier plc group



LEXIS-NEXIS<sup>™</sup>  
A member of the Reed Elsevier plc group



LEXIS-NEXIS<sup>™</sup>  
A member of the Reed Elsevier plc group

LEVEL 2 - 16 OF 54 STORIES

Copyright 1997 Madison Newspapers, Inc.  
Capital Times

April 17, 1997, Thursday, ALL EDITIONS

SECTION: Local/State, Pg. 3A

LENGTH: 413 words

HEADLINE: KOHL SEEKS BIG GRANT FOR EARLY EDUCATION

BYLINE: By Jill Braverman The Capital Times/Medill News Service

DATELINE: WASHINGTON

BODY:

As part of a nationwide effort to enhance children's development and education between birth and age 3, U.S. Sen. Herb Kohl has announced a \$ 1 billion proposal to help states fund innovative early education programs.

"Unfortunately, the federal commitment to early education has not caught up with our understanding of how important the first three years of life are," the Wisconsin Democrat said Wednesday. "Early education receives fewer resources, (less) teacher training, salary and even respect than the rest of the education system."

Kohl's proposal is a block grant of about \$ 1 billion over five years. The money would go to states to fund innovative programs to expand education and care for newborns to 3-year-olds. The programs would not duplicate or compete with the Head Start program, which provides the majority of its funds to disadvantaged 4- and 5-year-olds.

Movie actor and director Rob Reiner testified before a Senate education subcommittee in support of Kohl's proposal. The proposal came as part of a campaign launched this week by Reiner and others to raise awareness about the importance of a child's first three years of development.

"With the startling new research in brain development, science now clearly tells us that what a child is physically, emotionally and intellectually exposed to from the prenatal period through age 3 has a far-reaching effect on how a child's brain organizes itself," said Reiner, chairman of the "I Am Your Child" campaign.

"And since we now know that 90 percent of a person's brain growth and development occurs in the first three years, how a child's brain organizes itself in those critical years will have a profound impact on what kind of adult he or she will turn out to be."

As part of the "I Am Your Child" campaign, President Clinton and first lady Hillary Rodham Clinton will host a White House conference on early childhood development Thursday.



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

In addition to his block grant proposal, Kohl has authored the Child Care Infrastructure Act of 1997, a bill that would provide tax incentives to businesses that invest in quality child care options for their employees.

The incentives include tax breaks on costs related to establishing onsite centers, investing in licensed community centers and creating child care resource and referral services. There also would be tax incentives for employers to invest in education and training programs for child care workers.

LOAD-DATE: April 18, 1997



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

LEVEL 2 - 17 OF 54 STORIES

Copyright 1997 The Columbus Dispatch  
The Columbus Dispatch

April 17, 1997, Thursday

SECTION: NEWS LOCAL &amp; NATIONAL, Pg. 8A

LENGTH: 503 words

HEADLINE: VOINOVICH SPEAKS OUT ON CHILD DEVELOPMENT, CLEAN AIR

BYLINE: Jonathan Riskind, Dispatch Washington Bureau

DATELINE: WASHINGTON

BODY:

Tackling two diverse topics, Gov. George V. Voinovich advocated early childhood development and blasted proposed tougher clean air standards in a quick trip to Washington yesterday.

Voinovich said it's easy to measure the benefits of boosting a child's emotional and intellectual development during the first three years of life.

But that isn't the case when it comes to measuring the health benefits of the U.S. Environmental Protection Agency's proposed clean air standards, he said.

In his role as vice chairman of the National Governors Association, Voinovich appeared at a news conference and then testified before a Senate subcommittee to publicize the "I Am Your Child Campaign."

The campaign is a national public awareness and education initiative spearheaded by movie producer-director Rob Reiner. The NGA and a host of corporate sponsors and foundations have joined in the effort, which includes an ABC-TV special on April 28 and participation in today's White House Conference on Early Childhood Development.

The campaign's theme focuses on the critical importance of the first three years of life in determining whether a child becomes an emotionally stable and intellectually fulfilled adult. Stimuli to an infant's brain are crucial in shaping those outcomes, scientists say.

The campaign was first unveiled at the recent NGA annual meeting here. Next year Voinovich, as NGA's chairman, will host a national conference to highlight various early childhood programs in different states.

"If we do our job right, the result will be children who are happier and healthier, ready for school and better prepared to lead productive lives," Voinovich said.

The governor later went before a House panel to reiterate his contention that proposed clean air standards would be an economic disaster for Ohio and other states.



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

The Columbus Dispatch, April 17, 1997

There is no scientific proof that tougher standards would prove beneficial enough to warrant the costs, he told a House Government Reform and Oversight Committee subcommittee.

"I find it hard to believe that anyone in public service has the luxury of throwing billions of dollars at a problem without knowing if it is hitting the right target, yet that is exactly what the EPA is proposing," Voinovich said.

However, the governor came under fire from Northeastern lawmakers who said that Ohio and other Midwestern states are sending massive amounts of pollution their way because of the way airstreams flow.

Voinovich said in an interview after his testimony that Northeastern states are trying to punish Ohio and other Midwestern states for their success in both economic development and in complying with current pollution standards.

In a related development, Rep. David L. Hobson, R-Springfield, says the EPA has admitted there is a lack of consensus in the scientific community about the public health benefit of the proposal rules. Hobson questioned EPA Administrator Carol Browner Tuesday during a House Appropriations subcommittee hearing.

GRAPHIC: Photo, Associated Press, Dr. T. Berry Brazelton of Harvard University holds 6-day-old Barrett Moss Johnson at a hospital in Washington, D.C., as producer-director Rob Reiner looks on.

LOAD-DATE: April 18, 1997

**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

LEVEL 2 - 23 OF 54 STORIES

Copyright 1997 Bergen Record Corp.  
The Record

April 17, 1997; THURSDAY; ALL EDITIONS

SECTION: NEWS; Pg. A07

LENGTH: 171 words

HEADLINE: DOCTORS TO GIVE BOOKS TO INFANTS AND TODDLERS

COLUMN: EDUCATION

SOURCE: Wire services

BYLINE:

DATELINE: WASHINGTON

BODY:

Parents: Expect "Green Eggs and Ham" to be prescribed on your baby's next visit to the pediatrician.

Under a national campaign announced Wednesday by first lady Hillary Rodham Clinton, pediatricians and hospitals have teamed up with book publishers to prescribe reading to infants and toddlers as part of standard pediatric care.

More than 250,000 books, such as the Dr. Seuss classic, have already been donated so that, instead of a lollipop from the doctor, young patients will be given a book to take home.

"Time spent sharing a favorite book with a child, even a newborn, strengthens the bond between a parent and child and prepares that child for reading, and literally helps a child's brain grow," Clinton said at a ceremony announcing the initiative.

It served as a kickoff for today's daylong White House Conference on Early Childhood, which the president and first lady were hosting to explore what the latest brain studies say about how very young children learn and grow.

LANGUAGE: English

LOAD-DATE: April 18, 1997



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

LEVEL 2 - 24 OF 54 STORIES

Copyright 1997 The Hearst Corporation  
The Times Union (Albany, NY)

April 17, 1997, Thursday, THREE STAR EDITION

SECTION: MAIN, Pg. A13

LENGTH: 651 words

HEADLINE: On education, Clintons need quick study

BYLINE: Suzanne Fields

## BODY:

Bill Clinton and Hillary Rodham Clinton are engaging in a one-two punch for education. It's a lot less risky than overhauling health care. Whether it will be more successful is not yet clear but at least it won't put 7 percent of our economy at risk of destruction.

On his Saturday radio broadcast, the President noted that being a parent was "the toughest job any person can have" (we can all agree on that) and he touted the White House Conference on Early Childhood Development and Learning, which begins today.

The conference, popularly referred to in Washington circles as the "White House Brainchild," will examine the current research into the ways infants learn, stressing that a mom's intimacy with her child in the first three years encourages brain development. Hillary's in charge and the First Lady will be an active participant. This is clearly her baby.

The First Lady devoted her newspaper column last week to discussing how quality day care -- the emphasis is on "quality" -- can produce the same quality 3-year-old as a mother at home can. Or so says the research. But the more time babies spend in day care, the weaker their bond with their mothers. The consequence of a weak mother-child bond cannot be measured on a standardized test, but it affects the way a child learns.

Herein lies the dilemma for the President and the First Lady as they embark on the trendiest part of their education policy initiative: early childhood education. Their liberal base demands the government organize more hands-on programs for youngsters, pouring funds into "quality" day care and Head Start (even though Head Start benefits disappear in the third grade.) These are the constituents the President enraged when he signed the welfare reform bill, which changed financial incentives to encourage women with young children to work outside the home.

Conservatives want tax incentives to encourage mothers to stay home with young children. They don't want mothers penalized by high taxes to pay for child care of others when the evidence shows educational and emotional benefits for the child with the stay-at-home mom.

The experts will argue about the diverse theories of early childhood



LEXIS-NEXIS<sup>™</sup>  
A member of the Reed Elsevier plc group



LEXIS-NEXIS<sup>™</sup>  
A member of the Reed Elsevier plc group



LEXIS-NEXIS<sup>™</sup>  
A member of the Reed Elsevier plc group

development, and which of the theories should get the emphasis in policy -- whether behaviorist, cognitive, psychometric, developmental, neurological, cultural, environmental, linguistic, genetic or evolutionary. And that's the short list.

Early childhood education, of course, requires a diligent and disciplined follow-up for older children. In the highly respected Third International Math and Science Study (TIMSS) of 13-year-olds, American youngsters finished 28th in math -- not only behind Singapore, South Korea and Japan, the top three countries, but behind Czechoslovakia, France, Russia and Germany and nearly everyone else. In science our students did slightly better, coming in 17th, but far behind some countries that spend considerably less on education than we do.

Adding insult to ignorance, TIMSS explodes the myth of a correlation between excellence and the level of money spent on education. This explosion of myth contradicts (and enrages) the teachers' unions. The study concludes, albeit tentatively, that teaching methods even more than money determine quality education.

When the first couple visits an elementary school classroom in Washington, they tell the fable of the "Tortoise and the Hare," hoping to get the schoolchildren to understand that the perseverance of the slow but steadily moving tortoise can triumph over the lazy, faster hare.

"It's a lot like reading," says the First Lady. "If you do it slowly and carefully, and just keep at it, you can succeed, just like the tortoise did." But even Aesop is now cast in doubt. How the tortoise succeeds also depends on the mother (and father) as well as the teacher of that tortoise.

LOAD-DATE: April 18, 1997



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

LEVEL 2 - 30 OF 54 STORIES

Copyright 1997 Landmark Communications, Inc.  
The Virginian-Pilot (Norfolk, VA)

April 17, 1997, Thursday, FINAL EDITION

SECTION: LOCAL, Pg. B1

LENGTH: 1724 words

HEADLINE: THE TOOLS OF PARENTING;  
THE HEALTHY FAMILIES PARTNERSHIP SEEKS TO HELP CHILDREN IN A SIMPLE BUT;  
AMBITIOUS WAY - BY TEACHING THE ADULTS IN THEIR LIVES.

BYLINE: BY ELIZABETH SIMPSON, STAFF WRITER

DATELINE: HAMPTON

BODY:

Like many tales of triumph, this one begins with bad news. Hampton city officials noticed in the late '80s that city funds couldn't keep pace with the number of families needing help for things like health clinic visits and abuse complaints.

The community could have tried to fix the problems. Instead, they decided to cut off problems before they ever happened: A coalition of community members began a mission as ambitious as it was simple: Make sure all Hampton children are born healthy and enter school ready to learn. That's how the Hampton Family Resource Project - now called Healthy Families Partnership - was born in 1992. Thousands of Hampton parents have since reaped the benefits of the broad array of family services: free parenting classes that include day care and dinner; newsletters that begin arriving before a child is born and continue until the child graduates from high school; weekly home visits for families who might otherwise need help down the road; and libraries that give parents how-to help in the same area as children's books and toys. The services aren't just for at-risk kids and parents; they're for everybody. And now the rest of the country is about to find out about them, too. On April 28, the Hampton project will be featured in an ABC-TV one-hour documentary called "I Am Your Child." The show, produced by Rob Reiner and Michele Singer Reiner, will be hosted by Tom Hanks and also will feature such luminaries as Robin Williams, Rosie O'Donnell, President Clinton and Hillary Rodham Clinton. The prime-time special is one piece of a national campaign designed to raise awareness of the importance of the early childhood years. The Hampton project will be featured as an example of how a community can mobilize resources to answer those needs. The I Am Your Child campaign, which was launched Wednesday in Washington, will also include a one-day conference today at the White House on early childhood development, a Newsweek Special Edition on the same topic, and a series of public service announcements and parent videos to emphasize the importance of a child's first three years of life. "Communities are realizing that we can't keep pouring money into treatment, that we have to put more money into prevention," said Johanna Schuchert, the director of Healthy Families Virginia, which is coordinating the establishment of new Healthy Families sites across the state. For the people who have worked on the Hampton project, the national recognition



LEXIS-NEXIS<sup>SM</sup>

A member of the Reed Elsevier plc group



LEXIS-NEXIS<sup>SM</sup>

A member of the Reed Elsevier plc group



LEXIS-NEXIS<sup>SM</sup>

A member of the Reed Elsevier plc group

is sweet reward. "It's exciting, and overwhelming," said Debbie Russell, who was on the original task force and now directs Hampton's Healthy Families Partnership. The appeal of the Healthy Families approach, which was first used in Hawaii, is threefold, according to Russell. First, it involves the entire community, from social workers to health professionals to teachers to business leaders to parents themselves. Second, all parents have access to the network of services, no matter their income or need. And third, the approach doesn't come with the stigma that many social programs cast. "The strength of the program is that it includes parents from all walks of life," Russell said. The most intensive piece of the project comes in the form of home visits. Family support workers visit parents who might be at risk of needing family-related services. The workers give advice on prenatal care in weekly home visits starting when a woman learns she is pregnant. They continue to meet with the family each week after the child is born, up until the child is 1 year old. The visits are less frequent after that, but still continue until the child is 5. The family support workers discuss health issues for mother and child, nurturing activities, discipline techniques and games that will help young children be ready for school. On a sunny spring day last week, family support worker Tarsha Davis visited 25-year-old Laura Bradford, who has a house full of children. Six-year-old Chelsea was home from school sick with a virus. Brandon, 3, and Ashton, 17 months, were in search of toys and attention while the newest family member, 5-month-old Shelby, watched the chaos from her mother's lap. Davis pulled out a fuzzy fish, a rattling square and a plastic book that she lets Shelby explore with her tiny fingers and probe with her gums. Davis not only helps Shelby with developmental activities, but also talks with Bradford about whatever she wants, whether it be doctors' appointments, a new job or Ashton's first words. "It's been like having a good friend," Bradford said. "She's been there for me." While Bradford has had experience in mothering, many of the parents who get home visits are first-time parents just learning the ropes. Statistics show the visits make a difference in the health of both parent and child. For instance, an average of 92 percent of the children born to women in the home-visit program have been immunized, compared to the average Hampton rate of 48 percent. Among the teen mothers in the program, the repeat birth rate is 8 percent, far below the 36 percent repeat teen birth rate for the city of Hampton. And women who had the prenatal home visits had fewer pregnancy and birth complications than a control group of similar mothers. "Twenty years ago, every child born in Hampton had a nurse come out to visit them," said Teresa Woodard, director of the home visits. "This is a revival of the same kind of support." Hampton parents can also sign up for less intensive help. The project offers 40 parenting classes a year, on topics like nurturing newborns, disciplining middle-schoolers and raising teen-agers in troubled times. While many communities offer such classes, Hampton's courses go a step further. Class coordinators were not happy with the 30 percent to 40 percent retention rate of the parents who first enrolled in the classes in 1992, even though that's the national average. "We wanted to remove the barriers to going to the classes," Russell said. So they began offering free child care in the same building as the classes and also talked with various Hampton restaurant managers, who agreed to provide free dinners for the families that participated. That eliminated the hassle of getting to class and feeding the family at the same time. The retention rate soared to 72 percent. Cindy Johnson, a Hampton mother of a 13-month-old girl, took her first class five months ago, and is taking two more now. "They cover everything you could possibly want to know," she said. "They teach you what to do if your baby is colicky, how to look for day care, when you need to go to an emergency room if your child has a fever." Besides



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

learning from the instructors, Johnson said the class discussions provide real-life experience from the large range of parents who attend. For Johnson, it's been like having an extended family in town to call on for child-rearing help. "There's so many people like us who are in the military and who go wherever they send you," she said. "If you don't have family nearby, this program can help you. It's great." Not all parents feel they can spare the time for a class. But there's still room for them in the Healthy Families Partnership. They can visit five different Young Family Centers in Hampton libraries, which have rooms set up so parents can browse through parenting manuals while their children play with toys and read board books. Or parents can receive the 14 editions of the Healthy Stages newsletter, which were written and developed by Sentara Health Systems and distributed free to parents by Riverside Hospital. The newsletters begin arriving in the mother's second trimester of pregnancy and arrive every three to six months up until the child's fifth birthday. "The more we read them, the more we learn," said Alesia Duncan, who along with her husband, Michael, are among the 4,000 Hampton families who receive the newsletters. This year the newsletters are being expanded to continue the parenting advice until the child graduates from high school. Parents also can receive the Healthy Family Bulletin, which lists activities for parents and children, every other month. The Healthy Families project is considered a success by Hampton city leaders, who have increased funding for it. The state has also continued to pitch in an annual \$ 150,000 grant. In 1995, Virginia legislators also set aside funding to establish four more Healthy Families sites, in Alexandria, Fairfax, Culpeper and Martinsville. And they committed \$ 625,000 more this year to set up 14 more sites, including one in Newport News and one in the South Hampton Roads region. So far, family resource centers have been set up in Norfolk and Virginia Beach libraries. Home visits will begin later this year. Child advocates across the country are also singing the praises of the Healthy Families approach, promoting it as a way to prevent birth complications and child abuse and to help children arrive at kindergarten ready to learn. Cities in 240 localities in 37 different states are now setting up similar programs. "It would be a miracle if all communities could do this," said Johnson. "It works wonders."

GRAPHIC: BETH BERGMAN COLOR PHOTOS/The Virginian-Pilot;

Family support worker Tarsha Davis, right, visits Hampton resident Laura Bradford and three of her four children, from left, Ashton, 17 months; Shelby, 5 months; and 6-year-old Chelsea. Home visits by workers like Davis are a key element of the Healthy Families Partnership.;

Graphic;

INFORMATION

For more information about the Healthy Families program being set up in South Hampton Roads, call 622-7017, ext. 136 or 125.

For information about the Hampton Healthy Families Partnership, call 727-1882.

For more information about the I Am Your Child campaign, check the following web site: <http://www.iamyourchild.org>.



LEXIS·NEXIS<sup>™</sup>

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS<sup>™</sup>

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS<sup>™</sup>

Ⓜ A member of the Reed Elsevier plc group

The Virginian-Pilot (Norfolk, VA), April 17, 1997

The ABC-TV special 'I Am Your Child' will air at 8 p.m. on April 28.

LOAD-DATE: April 18, 1997



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

## LEVEL 2 - 36 OF 54 STORIES

Copyright 1997, The Advertiser Company  
The Montgomery Advertiser

April 16, 1997, Wednesday

SECTION: Op Ed; Pg. 9A

LENGTH: 961 words

HEADLINE: NOURISHMENT FOR YOUNG BRAINS CRITICAL DEVELOPMENT ELEMENT

BYLINE: By JOAN BECK

BODY:

It's only a one-day conference tomorrow, limited to the number of influential people who can be packed into the White House's East Room. But the idea President and Hillary Clinton are plugging is one of the most exciting of the century, its implications are staggering and its promise is mind-boggling.

The title is almost as long as a press release: The White House Conference on Early Childhood Development and Learning: What New Research on the Brain Tells Us About Our Youngest Children.

It's time the idea got a strong presidential push, especially from a chief executive who wants to be called "The Education President" and a first lady who has found a niche as an advocate for kids.

Research accumulating for more than three decades now shows beyond doubt that the quality and quantity of early mental stimulation -- opportunities for appropriate learning from birth on -- help determine how capable a child's brain will be for life.

Learning stimulation in the first few years of life actually influences the physical make-up of the brain, how the neurons will interconnect, how well the brain will "think," how "smart" the child will be. Educational opportunities later on in life do not affect the brain in the same way or have such an important impact

AN ENVIRONMENT RICH in appropriate opportunities to learn can raise a child's potential IQ by 20 to 30 points (by the inexact measures of intelligence available) because of its impact on the development of the brain. Mental malnourishment in the first years of life can lower potential IQ permanently, beyond what even the best schooling can compensate for completely later on.

Schooling can help a child use the brain he has effectively, give him vast amounts of information and motivate him to learn. But only in the early years of life can mental stimulation actually change the brain to make it a more effective organ of thinking.

Now, the challenge is to identify the kinds of learning experiences that nourish young children's brains best and how they can be made available to all our kids. Some participants in the White House conference will talk about model



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

programs being developed in several communities around the country.

Despite the excitement and promise of neurological research on brain development, early learning ideas have been slow to become part of mainstream child care and education.

Many leaders in the growing field of early childhood education are still too tradition-bound to appreciate the potential of the new neurological research and misunderstand early learning as imposing formal and inappropriate lessons on restless youngsters. Their programs concentrate on emotional development, social behavior and nutrition -- necessary, of course. But parents, politicians and donors may be misled into assuming they provide more neurologically based mental stimulation than they actually do.

MORE THAN HALF of all mothers with young children now hold jobs outside the home, limiting the time and energy they can devote to their youngsters. Using early learning strategies can make their time together happier, more beneficial to the children and more rewarding for the parents.

Much of what good parents do by instinct or because it makes their children happy provides good nourishment for their brains. Talking to a baby, responding to his efforts to communicate by body language or by babbling, creating safe spaces at home where he can explore freely, just giving him something new to see or do when he fusses out of boredom all help the brain to grow.

Parents need more ideas about brain-nourishing activities. They need more time and more flexibility in their jobs so their children don't have to come in second so often. Most of all, they need a new understanding and appreciation of how much they can contribute not only to their youngsters' physical and emotional well-being but to their growing intelligence.

Public school systems generally ignore children younger than age 5 and are too hard-pressed financially to explore the possibilities of reach-out programs. Day-care centers often talk about their learning programs but most provide traditional nursery school fare and lack enough trained teachers to give all of their charges optimal, individual mental nourishment.

Many of the special programs set up to give early learning help to high-risk youngsters in poor areas have had only minimal success. They usually use traditional day-care models and give priority to youngsters' urgent physical and emotional needs.

This is what happens in many Head Start programs, which generally offer too little, too late, in the way of mental nourishment. Early Head Start, begun in 1994, is intended to help children from birth to age 3 in low income areas, but it is still too small and too new for good evaluation.

The promises of early learning based on new neurological research are too exciting to brush over lightly or to push aside after the White House conference in the rush of other political matters. It isn't clear yet, however, how best to make the advantages of these new findings available to all our children, especially those in dysfunctional families and those at risk of eventual school failure.

THAT'S WHERE THE president and first lady could really make a difference. By



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

sticking with this idea for the rest of his term. By using whatever funding Clinton can bully out of Congress to start and expand model programs. By pestering Head Start administrators to upgrade standard day-care fare with special brain-nourishing components. By generating the national sustained excitement that the promise of the new research deserves.

The idea could do a lot for the Clintons -- as well as for the nation's kids.

LOAD-DATE: April 17, 1997



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

LEVEL 2 - 43 OF 54 STORIES

Copyright 1997 The News and Observer  
The News and Observer (Raleigh, NC)

April 15, 1997 Tuesday, FINAL EDITION

SECTION: NEWS; Pg. A3

LENGTH: 612 words

HEADLINE: Proposals encouraging, day-care operators say

BYLINE: Tim Simmons, Staff Writer

BODY:

For parents who wonder about the education of their child's day-care workers or whether their center has a history of problems, state officials have a suggestion: Post details about staff education and results of past inspections on the wall of every day-care center in North Carolina.

Such a public rating system was among dozens of changes discussed by more than 100 day-care owners, directors and others in the field who gathered Monday to discuss a bill to improve day-care centers. The bill, which is backed by Gov. Jim Hunt, would require more education and training of workers, streamlining inspections, and a rating system that makes it easier for parents to judge a center's quality.

Most found the new proposals encouraging.

"This is such an important time in a child's life, we can't afford not to improve our standards," said Susan Cron, who runs Pleasant Day Preschool in Raleigh.

Hunt called for the legislation in response to stories in The News & Observer that showed the importance of brain development during a child's first few years and how the state's low standards often fail children during that critical time.

Studies show that better educated workers and informed parents improve the quality of care.

"We believe, and Governor Hunt believes, the time is definitely right to make these changes," said Stephanie Panjul, director of the state Division of Child Development.

After being ignored for years, those who work with young children have suddenly found themselves at the center of a national debate over childhood development.

This week, Hunt will take part in a forum in Raleigh designed to highlight recent findings in brain research. The White House will hold a day-long conference on early childhood development. A coalition of entertainers, corporate executives, foundation leaders, politicians and doctors also is scheduled to launch a national public awareness campaign Wednesday.



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

Against that backdrop, supporters of the day-care bill hope it will be easier to demand more training of day-care workers while having inspectors focus on what divides quality and mediocre facilities.

Under the proposed changes, poor centers would be visited more often. The classes that would count toward continuing education would be limited to specific areas, such as first aid or child development. Nearly any class is now allowed under the state's definition of continuing education. Some workers have claimed credit for classes where they learn to make an Easter hat out of a paper plate, Fanjul said.

Directors and lead teachers also would have to complete certificate programs. About half of the state's lead teachers and directors now do not meet the standards.

The state would pay for the additional training, and other changes required by the bill, through Smart Start money, Fanjul said.

The bill would raise the minimum age of home day-care providers from 18 to 21 and require a high school diploma of new family day-care operators by Jan. 1, 1998.

The bill does not address lowering child-to-adult ratios at day-care centers, which is considered essential for quality care. Hunt has promised to address that issue before he leaves office.

Day-care providers said that the state also must help them reduce turnover by improving workers' pay. The average day-care worker in North Carolina makes \$ 5.25 an hour and stays on the job about seven months. Even in centers where educated workers are valued and ratios are low, it's tough to compete against other businesses.

"I lost a worker recently to an area dry-cleaning shop because they paid her \$ 1 an hour more," Cron said. "It's something we just have to address."

LANGUAGE: ENGLISH

LOAD-DATE: April 15, 1997



**LEXIS-NEXIS**  
A member of the Reed Elsevier plc group



**LEXIS-NEXIS**  
A member of the Reed Elsevier plc group



**LEXIS-NEXIS**  
A member of the Reed Elsevier plc group

LEVEL 2 - 50 OF 54 STORIES

Copyright 1997 Star Tribune  
Star Tribune (Minneapolis, MN)

April 15, 1997, Metro Edition.

SECTION: Marketplace; Pg. 1D

LENGTH: 278 words

HEADLINE: FYI;  
Mandated maternity leave 'unfeasible'

BODY:

Hillary Rodham Clinton said Monday she would support government-required maternity leave for private companies' employees "if it were feasible," but political and economic forces make it unrealistic.

She met with reporters to preview Thursday's presidential conference on early childhood development. Armed with cutting-edge studies about how the brain blossoms in a child's first three years, the First Lady hopes the conference will educate parents about the long-lasting importance of intimacy with newborns.

Singing to them, reading to them, playing with them and talking to them are scientifically proven ways to increase the development of children's brains, she said.

"We are the result of both nature and nurture," the First Lady said.

Though many companies offer paid maternity leave, there is no government requirement.

Asked why she does not advocate a paid maternity leave requirement, the First Lady said, "I think it's because people believe that in our current political climate . . . that it's not realistic." She noted that it took eight years to pass family medical leave legislation.

- Associated Press

Less is more

"Fill it up" apparently is not the motto of fine wine drinkers. Wine Spectator magazine polled visitors to its Web site found that a pet peeve among the 1,364 respondents was wine stewards or waiters filling a glass too full. Oenophiles say they want room to swirl the wine and sniff it.

- Associated Press



**LEXIS-NEXIS**  
A member of the Reed Elsevier plc group



**LEXIS-NEXIS**  
A member of the Reed Elsevier plc group



**LEXIS-NEXIS**  
A member of the Reed Elsevier plc group

Today

- Commerce Department releases the Consumer Price Index for March. For details on the price figures from NewsWatch call 673-9050 and enter 1210.

LANGUAGE: ENGLISH

LOAD-DATE: April 16, 1997



**LEXIS·NEXIS**  
A member of the Reed Elsevier plc group



**LEXIS·NEXIS**  
A member of the Reed Elsevier plc group



**LEXIS·NEXIS**  
A member of the Reed Elsevier plc group

## FAMILY AND CHILDREN BEAT

Parents Need to Learn That They Can Affect Baby's IQ

Optional trim at 1,250 words

By BETH FRERKING

c.1997 Newhouse News Service

WASHINGTON — Babies' brains are all the rage. They've made magazine covers, launched a star-studded public campaign for kids, complete with an upcoming prime-time television special, and spawned a White House conference on brain development during a child's early years.

At the conference, neuroscientists will appear alongside child development specialists to explain why it is so important that a parent talk and sing to, touch and caress a baby — why a hug, to a baby's growing brain, is more than just a hug. They have discovered that the wiring of a developing brain is literally driven by what a baby sees, hears, touches, smells and tastes.

“Rich experiences, in other words, really do produce rich brains,” Time magazine wrote in its Feb. 3 cover story on babies' brains.

But as a new poll shows, not all parents understand how much they can influence a child's intellectual, social and emotional development. And, as the White House conference on early childhood development opens this Thursday, children's advocates say they have a unique opportunity to unite science with the everyday tasks of parenting and with public policy that affects children, from welfare reform to the quality of child care.

Researchers and advocates recognize that they walk a fine line between encouraging parents and scaring them when they describe the profound effects that good (and bad) parenting can have on a child's developing brain, especially during the critical first three years of life.

And they say that if they are to use these scientific discoveries as a way to help parents — rather than to demoralize them over opportunities lost — they must proceed gingerly.

A poll of 1,000 parents to be released this week in conjunction with the White House seminar found that parents are confused about how much they can shape a baby's developing brain. In the poll sponsored by Zero to Three, the National Center for Infants, Toddlers and Families, fully a quarter of parents believed that a baby's level of intelligence cannot be increased or decreased by how parents interact with the baby.

Scientific research has shown that intelligence is not fixed, said Lynette Ciervo, a spokeswoman for Zero to Three, a private, non-profit research, education and training center on early childhood development. Parents' involvement can strengthen a child's ability to solve problems, increase curiosity and bolster confidence in their ability to learn, she said.

Yet, in response to another question in the survey, some parents seemed to contradict themselves: 85 percent said they believe that babies who are stimulated through reading, playing and touching will develop more fully than those who don't receive the appropriate stimulation.

“Our report points out that there's a lot of confusion,” Ciervo said.

There's also a lot of guilt. In focus groups that accompanied the Zero to Three poll, parents were sensitive about child care issues, especially suggestions that the number of caregivers could affect development.

Thus, because parents tend to disregard advice that sounds preachy or prescriptive, researchers say they need to communicate findings about brain development in an encouraging and positive tone.

Even first lady Hillary Clinton has cautioned vigilance. “One of my great fears, for example, about this research concerning the brain is that parents who are doing their best to raise children, often under difficult circumstances, will feel even more guilt and anxiety because they aren't sure if they are doing everything that the research should ask them to do,” she said recently.

The trick, child development experts say, lies in translating complex findings into lay terms, and in using them to enhance what many parents already

do naturally.

Matthew Melmed, director of Zero to Three, believes it is critical to affirm good parenting in the same way Dr. Benjamin Spock did in his first book, when he advised parents to trust themselves, because they knew more than they thought they did.

"I think that message can be updated for the '90s to add that there's so much more we've learned that you can take advantage of," Melmed said. "The reality is, most parents do it well enough."

Yet the research on children's brain development can help reinforce parenting instruction for those who need help most. In Missouri, for example, the Parents as Teachers National Center has joined with scientists and doctors from the Washington University School of Medicine in St. Louis to link child development research with parenting practices.

Parent trainers will attend seminars by the medical team to learn how a developing brain is helped or hindered by various forms of stimulation. Trainers then will take that information to the classroom, explaining to parents how some parenting techniques actually aid brain development.

Consider teen-age parents, most of whom know little about child development. Many view a newborn much like a baby doll, a love object to kiss and cuddle, said Mildred Winter, director of the Parents as Teachers center. Six months later, when the baby grabs at her face and hair, the young mother may become irritated and distant, Winter said.

"Sometimes we find teen parents resist, because it's very important to them how they look, and they don't want their hair messed up, so they don't pick up the baby," Winter said.

What is happening, of course, is that the baby is trying to learn by reaching out, touching and seeing her mother's face at close range. A mother who responds by smiling, talking, cuddling and mimicking expressions is essentially speaking the baby's language.

"When the baby begins reaching out and learning through all her senses, it's part of the attachment process," Winter said. "If we can show how critical it is to a child's development, then we think (the teen mothers) are going to pay attention to that" rather than to preach-don't-teach methods that omit the science behind effective parenting.

Winter said they will continue to teach the same parenting skills they have always taught. "But the connection we can make with brain development \_ which seems to have captured the nation's attention \_ gives us a new means of making our message more compelling."

Dr. Bruce Perry, a psychiatrist at the Baylor College of Medicine in Houston who has done groundbreaking research on the physiological effects of violence on children, praised the Parents As Teachers project. "That is absolutely the correct way to proceed," he said. "If we educate them about the way the brain develops, they will naturally know why it's appropriate to pick up that child!"

Perry believes that neuroscientists have been their own worst enemies in circulating their discoveries, in part because they speak their own language.

"We're literally drowning in factoids," Perry said, but there's no connection or rational system of linking all the parts, he said.

This fails public policymakers as much as it fails parents, he said. If elected officials understood how early the brain develops, they might better understand the importance of quality child care and early nutrition programs, he said.

(OPTIONAL TRIM FOLLOWS)

Children's advocates hope that the day-long White House conference, which

will be broadcast to about 80 sites in 30 states, will help raise public awareness. They're also depending on a media campaign chaired by actor-director Rob Reiner, an effort that will include public service announcements and a television special on April 28 starring Tom Hanks.

Perry, part of the "I Am Your Child" campaign spearheaded by Reiner, said issues of early childhood development are not embedded in the public lexicon in

the way that, say, smoking risks have been widely acknowledged. Too often, he said, children's issues only gain attention through splashy annual events such as the Stand for Children march or the release of annual child health indices.

Those come and they go, often with little lasting effect. A recent private study of 177 top state legislators around the country found, for example, that only one was familiar with the annual "Kids Count" report on the status of children, a Bible of sorts within the national child advocacy community. And only a handful could name a single child advocacy organization in their state.

Rather, Perry, Reiner and others say that until information about early brain development is as ubiquitous as athletic shoe advertisements, the public may remain ignorant about how best to raise bright and stable children and, ultimately, a healthy and productive society.

"How many T-shirts would Nike sell if they had a one-hour commercial once a year?" Perry asked. "Not very many."

RH        END FRERKING



THE CHAIRMAN

EXECUTIVE OFFICE OF THE PRESIDENT  
COUNCIL OF ECONOMIC ADVISERS  
WASHINGTON, D.C. 20500

April 3, 1997

MEMORANDUM FOR: FRANK RAINES, DIRECTOR  
OFFICE OF MANAGEMENT & BUDGET  
DONNA SHALALA, SECRETARY  
HEALTH & HUMAN SERVICES  
GENE SPERLING, DIRECTOR  
NATIONAL ECONOMIC COUNCIL  
✓ BRUCE REED, DIRECTOR  
DOMESTIC POLICY COUNCIL  
MAGGIE WILLIAMS, CHIEF OF STAFF  
OFFICE OF THE FIRST LADY

FROM: JANET YELLEN *Jif*

Attached is a draft of a CEA whitepaper on the benefits of programs targeted to very young children. We are hoping to release it just prior to the White House Conference on Early Childhood Development.

If you have any comments, please get them to me by COB on Monday, April 7.

Thank you for your help.

Attachment

## The First Three Years: Investments that Pay

### *Introduction*

Experiences during early childhood can make a crucial difference for the rest of the child's life. Health problems ranging from frequent colds to cerebral palsy can be prevented by appropriate nutrition and care for pregnant and nursing mothers, and for their infants. Often very small investments -- like immunization for polio or home-based smoking cessation programs -- yield large benefits.

The time from conception through early childhood does not just present a series of avoidable health problems, but also opportunities to nurture a child's emotional and intellectual development. Nurturing and stimulating a child in the first years of its life can promote emotional health and prepare the young for the challenges posed by school and later life.

Ultimately, parents bear the responsibility for raising their children. The government cannot require parents to spend time holding, feeding, and talking to their small children. Through legislation like the Family and Medical Leave Act (FMLA), however, the government helps provide the opportunity for parents to take time off from work to spend with their newborn children. Similarly although the government does not forbid pregnant mothers from smoking, it can take steps to reduce this behavior by providing information on the dangers smoking poses to the development of their children. More broadly, government supported programs like the Human Capital Initiative. (See Box 1.) leverage government resources into knowledge that can be used by parents, educators, and doctors to help children flourish.

For many families, however, these policies are not enough. For example, without government assistance, pregnant mothers in poverty and children growing up in poor families lack the resources needed for appropriate nutrition and medical care. Programs like the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provide foods, nutrition education, and access to health services for low-income women during and after pregnancy and to their children through five years of age. The Vaccines for Children (VFC) program is helping to ensure that 90 percent of all two-year-olds are fully vaccinated by the year 2000. These programs make an enormous difference in the future of children and may save money, in the long-run, by permanently improving the health of children.

### *Why are the First Three Years So Important?*

In recent years, researchers have made large strides towards understanding the process of early development. Scientists investigating brain development have discovered biological mechanisms that help to explain what psychologists and educators have long known: the first three years are pivotal. Recent evidence suggests that the flurry of brain-building activity that begins in the womb and continues at a rapid clip through a child's early years is affected more by *experience* than was previously thought. This experience in turn is dependent not only on the

### Box 1. The Human Capital Initiative

An important building block of the Administration's efforts to support the well-being of young children is the Human Capital Initiative, an ambitious research program examining the effects of families, schools, communities, and the workplace on the formation of human capital. The Initiative was launched by leading professional associations in the behavioral sciences in the early 1990s and was endorsed by the Clinton Administration and Congress in 1994, with funding provided through the National Science Foundation. The goal of the Initiative is to apply a growing multi-disciplinary knowledge base to the challenges confronted by families and children so as to create an environment where all American children can grow up to become healthy, educated, productive, and successful citizens.

Research funded through the Human Capital Initiative funds has the potential to inform policy and support services for young children. For example, a psychologist at the University of Pittsburgh is exploring the role of social relationships at home in promoting early academic success among at-risk children; two economists at the University of California at Los Angeles are examining the efficacy of early intervention programs in achieving long-term educational and social benefits; a University of Michigan anthropologist is investigating the principles used by young children to organize knowledge and the determinants of young children's social stereotypes; a University of Iowa psychologist is studying conscience development in the first four years of life with the goal of developing a general model of early conscience formation; a University of California psychologist is examining the mathematical competencies that children bring to their earliest preschool experiences.

The social and behavioral sciences have made important contributions to our understanding of what makes our society successful in raising children to become healthy and productive citizens. The Human Capital Initiative is a multi-disciplinary research effort to fill gaps in our knowledge and to inform the actions taken on behalf of children.

physical health and emotional well-being of the child but also on the mother's health before birth.

Links between brain *activity* and brain *structure* are becoming more and more evident to scientists. When children are deprived of a stimulating environment early in life, their brains may not develop to their full potential. More specifically, scientists have identified several "windows" of time when different areas of the brain are developing and children are best able to learn particular behaviors or skills. Of course, these windows do not open and close abruptly,

and improvements are still possible after the window has passed. Still, understanding how and when the brain develops helps adults target resources to children at the most effective times.

### Early Interventions Have Big Payoffs

Family income is an important contributor to children's well-being. Low-income children are at greater risk of virtually every adverse outcome: for example, they are more likely to experience stunted growth, suffer learning disabilities, sustain injuries, have low educational achievement, and exhibit extreme behavioral problems. Low-income children are 1.2 to 2.2 times more likely than the average child to be low birthweight (less than 5 lb 8 oz), and they are 1.3 times more likely to die during infancy. They are about twice as likely to have physical or mental disabilities and at least 3 times more likely to be hospitalized for injuries.<sup>1</sup> Family income seems to be a significant contributor to the well-being of children primarily because of the resources it makes available: medical care, nutrition, parental advice on child development, quality child care, and preschool, for example.<sup>2</sup>

A growing body of research, much of it supported by the Federal government, from sociologists, doctors, and educators, as well as economists has examined the effect of investments -- goods or services like immunizations that are costly during childhood yet save money in the future -- on children. In the language of economists such interventions contribute to the stock of "human capital" -- which includes ideas, knowledge, education, training, and problem-solving skills that make people productive contributors to economic activity. The literature finds that investments in young children can have big payoffs for families, for government, and for society. (See Box 2.) Investments can reduce the need for more-costly measures later in life and lead to increased productivity.

---

<sup>1</sup>Children's Defense Fund, *Wasting America's Future*, Washington, DC., 1994: 62.

<sup>2</sup> A recent study finds that income during the first five years of life has larger impacts on outcomes than that during any other time of childhood (Greg Duncan, Wei-Jun Yeung, and Jeanne Brooks-Gunn, "Does Poverty Affect the Life Chances of Children?", *American Sociological Review*, forthcoming).

## Box 2. Evaluating Investments in Children

Investments in children have the potential for substantial and lasting benefits. However, not all interventions will be equally successful, so it is important to evaluate the gains from specific programs. Ideally, such evaluations involve experimental designs whereby individuals willing to participate in the intervention are randomly assigned to the "treatment" group, who participate in the program, and the "control" group, who do not. The two groups are then carefully monitored for a substantial period of time to see if individuals receiving the treatment have superior outcomes.

Random assignment can be done by the toss of a coin, for example, or using computerized randomization procedures. The treatment can be anything from receiving food stamps to attending a pre-school program. The key advantage of random assignment is that the treatment and control groups are likely to have similar characteristics, increasing the confidence that any observed difference in outcomes is due to the intervention. In the absence of such an experimental design, participants typically chose to enroll in the program while nonparticipants choose not to. (In some cases, program administrators decide who is allowed to enroll.) This nonrandom selection may result in difficult-to-observe differences between participants and nonparticipants.

Unfortunately, randomized experiments are often expensive and have small sample sizes, limiting their use in evaluating programs. Therefore, social scientists have developed a variety of alternative methods of measuring the effects of interventions. Most importantly, statistical techniques are used to account for observable differences between participants and nonparticipants such as income, education, and family status. Researchers also increasingly attempt to obtain information from natural experiments, where participation in the intervention is largely unrelated to individual characteristics or preferences. For instance, cross-state differences in Medicaid eligibility have recently been used to examine how this program affects the health of children.

## Families Face Many Obstacles

Families face many challenges in making these important investments in young children. For example,

- **The share of families with both parents working outside the home has risen rapidly. In 1995, both parents were employed in more than 70 percent of married-couple families with children, an increase from roughly 60 percent in 1980.<sup>3</sup>**

---

<sup>3</sup> Annual Demographic Files of the Current Population Survey (March), Department of Commerce, U.S. Bureau of the Census

- **Many families are single-parent households.** In 1995, more than 20 percent of families were single-parent households, compared to 13 percent in 1965.<sup>4</sup>
- **Some children are without health insurance.** From 1989 to 1995, the percent of children without private insurance increased over a quarter, from 26.4 percent to 33.9 percent.<sup>5</sup> When including publicly provided insurance, a total of 9.8 million children are uninsured (13.8 percent of all children), including 3.3 million under age 6.<sup>6</sup> Surprisingly, nearly nine out of ten uninsured children have at least one parent who works.<sup>7</sup>
- **Crime and instability are prevalent.** Evidence suggests that many young children are exposed to violence, particularly in large cities. In one survey, 47 percent of children were reported to have heard gunshots in their neighborhood, and 1 in 10 children witnessed a shooting or knifing before age 6.<sup>8</sup>
- **Many families with children live in poverty.** About 16 percent of all families with children under the age of 18 were in poverty in 1995, up from 12 percent in 1970. Of female-headed families with children, the poverty rate in 1995 was 42 percent.<sup>9</sup>

Because families are facing these obstacles, they often need help providing their young children's needs. The Federal government has many programs that provide services to young children (see Table 1 for important examples), some of which are discussed later. State and local governments also have a variety of programs.

---

<sup>4</sup>Ibid.

<sup>5</sup>Ibid.

<sup>6</sup>Ibid.

<sup>7</sup>*The State of America's Children Yearbook*, Children's Defense Fund, 1997.

<sup>8</sup>Taylor, L., B. Zuckerman, V. Harik, and B. Groves, "Witnessing Violence by Children and their Mothers", *Journal of Developmental and Behavioral Pediatrics* cited in *Starting Points*, Carnegie Corporation of New York: 17.

<sup>9</sup>Annual Demographic Files of the Current Population Survey (March).

Table 1. Selected Government Programs That Assist Children

Program	Year Of Enactment	Number Served	Annual Expenditure	Average Benefit
<b>Income Support Programs</b>				
Temporary Assistance for Needy Families (TANF)	1996	4.9 million families	\$22 billion	\$377 per family
Earned Income Tax Credit (EITC)	1975	18.9 million tax returns	\$26.5 billion	\$1,404 per return
Child and Dependent Care Tax Credit	1954	6.2 million tax returns	\$2.8 billion	\$445 per tax return
Exclusion for Employer-Provided Dependent Care	1981		\$775 million	
<b>Health and Nutrition Programs</b>				
Medicaid	1965	17.2 million children	\$13.0 billion for children	
Food Stamp Program	1964	28.0 million (13.7 million children)	\$25.7 billion for children and adults	\$71 per month per individual
Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	1972	6.9 million women and children	\$3.5 billion in federal payments	\$30 per month per family
<b>Early Childhood Programs</b>				
Child Care and Development Fund	1996		\$2.0 billion	
Social Services Block Grant	1975		\$2.7 billion	
Head Start	1964	750,696	\$3.5 billion	\$4,345 per child

Note: The year cited varies by program. Sources: TANF-based on 1995 FY AFDC numbers, *1996 Green Book*; EITC-estimated 1996 FY, Department of the Treasury; Child and Dependent Tax Credit-estimated 1996 FY, *1996 Green Book*; Exclusion for Employer-Provided Dependent Care-1996 FY, *President's Budget of the United States Government, FY 98*; Medicaid-1995, Annual Statistical Supplement, 1996, Social Security Bulletin; Food Stamp Program-1995 FY, *1996 Green Book* and U.S. Department of Agriculture; WIC-1995 FY, *1996 Green Book*; Child Care and Development Fund-1997 FY proposal, *President's Budget of the United States Government, FY 98*; Social Services Block Grant-1996 FY, *President's Budget of the United States Government, FY 98*; Head Start-1995 FY, *1996 Green Book*. Devaney, Barbara et al.

### *Improving Children's Physical Health*

Physical health is essential to a child's growth and development and is influenced by the interaction of a complex set of factors including nutrition, access to medical care, and the environment. Investments in health are important throughout life, but some of the most important and long-lasting of these occur before birth and during the first three years of life. Maternal nutrition, lifestyle, and medical care during pregnancy have a serious impact on the health and development of infants and children. Poor habits or deficient health care during pregnancy can inhibit a child's development and may lead to "failure to thrive." Many of these effects last a lifetime and some may even result in death.<sup>10</sup> For example, smoking during pregnancy has been linked to 19 percent of low birthweight births.<sup>11</sup> Similarly, fetal alcohol syndrome is associated with a variety of birth defects and health disorders.<sup>12</sup>

In 1995, 7 percent of babies born in the United States were considered low birthweight.<sup>13</sup> Low birthweight babies often require expensive medical attention early in life and may subsequently suffer from a variety of physical, emotional, and intellectual problems.

- Nearly two-thirds of neonatal deaths and about 60 percent of deaths in the first year of life were low birthweight babies.<sup>14</sup>
- Health care costs in the first year of life for low birthweight infants are, on average, \$15,000 higher than those for normal weight babies, and elevated medical expenditures continue throughout early childhood.<sup>15</sup>
- Cerebral palsy occurs 25 times more often in low birthweight children; and these children also have higher incidences of deafness, blindness, epilepsy, chronic lung disease, learning disabilities, and attention deficit disorder.<sup>16</sup>

---

<sup>10</sup>The Future of Children Staff, "Analysis", *The Future of Children*, Vol. 2, No. 2, Winter 1992: 7-24.

<sup>11</sup>J. Kleinman, and J.H. Madans, "The Effects of Maternal Smoking, Physical Stature, and Educational Attainment on the Incidence of Low Birth Weight", *American Journal of Epidemiology*, Vol. 121, 1985: 832-55.

<sup>12</sup>E.M. Ouellette, H.L. Rosett, N.P. Rosman, and L. Weiner, "Adverse Effects on Offspring of Maternal Alcohol Abuse During Pregnancy", *New England Journal of Medicine*, Vol. 297, No. 10, 1977: 528-30.

<sup>13</sup>Harry M. Rosenberg, et al. "Births and Deaths in the United States, 1995", *Monthly Vital Statistics Report*, Vol. 45, No. 3 (S)2, October 4, 1996: 2.

<sup>14</sup>S. Nigel Paneth, "The Problem of Low Birthweight", *The Future of Children*, Vol. 5, no. 1, Spring 1995.

<sup>15</sup>Eugene M. Lewitt, Linda Schuurman Baker, Hope Cormon, and Patricia H. Shiono, "The Direct Cost of Low Birth Weight", *The Future of Children* 5, No. 1, Spring 1995.

<sup>16</sup>S. Nigel Paneth, "The Problem of Low Birth Rate".

- Children who were low birthweight babies are more likely to repeat a grade in school and are about 50 percent more likely to be enrolled in some type of special education program.<sup>17</sup>

Prenatal care is believed to play a key role in the development of healthy children, largely through the prevention of low birthweight. According to the recommendations of the American College of Obstetricians, prenatal care should include three basic components: early and continuous risk assessment, health promotion, and when necessary medical and/or psychological intervention.

- Adequate prenatal care is associated with reductions in low birthweight births and lengthened duration of gestation, with some evidence that prenatal care is most effective in reducing the probability of low birthweight among high-risk women.<sup>18</sup>
- One careful study finds that prenatal care is a particularly cost-effective method of reducing neonatal mortality, when compared to alternative interventions such as the use of neonatal intensive care.<sup>19</sup>
- We know less about which aspects of prenatal care are most beneficial.<sup>20</sup> Some experts have concluded that standard prenatal care visits do little to reduce low birthweights but that three specific areas of prenatal care are likely to have an impact: cessation of smoking, nutrition of the malnourished, and medical care.<sup>21</sup>

The proportion of women receiving prenatal care in the first trimester of pregnancy rose substantially during the 1970s, leveled off in the early 1980s, and then increased again during the early 1990s (from 71 percent in 1990 to 86 percent in 1995).<sup>22</sup> Poor women and minorities are significantly less likely to receive early and comprehensive prenatal care. The receipt of prenatal services is closely linked to the availability and affordability of high-quality medical care, which we turn to next.

---

<sup>17</sup> Ibid,

<sup>18</sup> Institute of Medicine, *Preventing Low Birthweight*, Ch. 6, Washington D.C.: National Academy Press, 1985.

<sup>19</sup> T.J. Joyce, H. Corman, and M. Grossman, "A Cost-Benefit Analysis of Strategies to Reduce Infant Mortality", *Medical Care*, Vol. 26, No. 4, April 1988: 348-60. Although not a full benefit-cost analysis, this research finds that the costs of providing the prenatal care are more than offset by reductions first year hospital and medical expenses resulting from averting low birthweights.

<sup>20</sup> Institute of Medicine, *Preventing Low Birthrate*.

<sup>21</sup> Greg R. Alexander, and Carol C. Korenbrot, "The Role of Prenatal Care in Preventing Low Birth Weight", *The Future of Children*, Vol 5, No. 1, Spring 1995: 103-20.

<sup>22</sup> Harry M. Rosenberg "Births and Deaths in the United States, 1995".

## Medical Care

Since 1965, the Medicaid program has provided health insurance for poor families. In 1995, nearly 30 percent of children under 6 were covered by Medicaid.<sup>23</sup> Eligibility used to be closely tied to participation in the Aid to Families With Dependent Children (AFDC) program; however, beginning in the middle 1980s, states were permitted and then subsequently required to extend eligibility to other groups of children and pregnant women. All pregnant women and children up to the age of 6 living in households with incomes up to 133 percent of the Federal poverty line are now eligible for Medicaid. All children in poverty born after September 30, 1983 are also eligible, with the result that by 2002 all children (aged 18 and under) in poverty will be eligible for the program.

Pregnant women receive special services under Medicaid including "enhanced" prenatal programs that cover specialized services such as nutritional counseling and health education in many states. Children covered by Medicaid are eligible for a wide variety of services including inpatient and outpatient hospital services, physician services, x-ray services and many others. In addition, under the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program, States are required to provide screening, diagnosis, and treatment services to Medicaid-eligible children (and are required to pay for treatment of conditions identified during EPSDT screens, even if these services would not otherwise be covered). Since 1993, States have been entitled to receive vaccines, free of charge, from the Federal government, for Medicaid-eligible and some other categories of children.<sup>24</sup>

- A recent national study concluded that expanded Medicaid eligibility has reduced the incidence of low birthweight babies and infant mortality.<sup>25</sup>

---

<sup>23</sup>U.S. Bureau of the Census, Department of Commerce, *Children's Health Care*, Washington D.C.

<sup>24</sup> The Federal government also provides funding for a variety of other programs serving women and young children. These include matching funds for services delivered in public health settings and funds provided to community and migrant health centers under the Community and Migrant Health Center Program. For a review of these programs see Ian T. Hill, "The Role of Medicaid and Other Government Programs in Providing Medical Care for Children and Pregnant Women" *The Future of Children*, Vol 2, No. 2, Winter 1992.

<sup>25</sup> Janet Currie, and Jonathan Gruber, "Saving Babies: The Efficacy and Cost of Recent Changes in the Medicaid Eligibility of Pregnant Women", *Journal of Political Economy*, Vol. 104, No. 6, December 1996: 1263-96. However, the health effects of the Medicaid expansions are not unambiguous. Studies of Medicaid expansions in Tennessee and Massachusetts failed to uncover improvements in prenatal care, birthweight, or neonatal mortality (see J.S. Haas, et al., "The Effect of Providing Health Coverage to Poor Uninsured Pregnant Women in Massachusetts" *Journal of the American Medical Association*, Vol. 269, No. 1, January 1993: 87-91 and J.M. Piper, W.A. Ray, and M.R. Griffin, "Effects of Medicaid Eligibility Expansion on Prenatal Care and Pregnancy Outcome in Tennessee", *Journal of the American Medical Association*, Vol. 264, No. 17, November 1990: 2219-23.

- The Medicaid expansions have significantly increased the probability that children have at least one physician visit per year, as is recommended by pediatric guidelines. As a result, child mortality rates have declined.<sup>26</sup>

## Nutrition

Adequate nutrition during pregnancy and the early years is another important investment to ensure children's health. Poor nutrition during this important time can have profound and lasting effects on a child's health.

- Pregnant women with poor nutrition are more likely to have low birthweight babies and children with poor nutrition often lack concentration and energy, experience dizziness, headaches, ear infections and frequent colds.<sup>27</sup>
- Iron deficiency can impede the development of problem-solving skills, motor coordination, attention, concentration, as well as long-term cognitive development.<sup>28</sup>
- Stunted growth, an indicator of poor nutrition, is associated with lower scores on tests of academic ability, even after controlling for socioeconomic characteristics.<sup>29</sup>

The Federal government has two programs that help to ensure good nutrition for low-income pregnant women and young children: the Food Stamps Program and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). WIC is targeted specifically to pregnant women, infants, and young children at nutritional risk. WIC provides supplemental foods, nutrition education, and access to health services for low-income women during and after pregnancy and to their children through five years of age. Almost 7.4 million women, infants, and children participated in WIC in FY 1997, and the program had a budget of \$3.9 billion.<sup>30</sup> WIC has had important benefits for women and young children (see Box 3).

---

<sup>26</sup> Currie, Janet and Jonathan Gruber, "Health Insurance Eligibility, Utilization of Medical Care and Child Health", *Quarterly Journal of Economics*, Vol. 5, May 1996.

<sup>27</sup> Ernesto Pollitt, "Developmental Impact of Nutrition on Pregnancy Infancy, and Childhood: Public Health Issues in the United States" in Norman W. Bray (ed) *International Review of Research in Mental Retardation*, Vol. 15, Academic Press, 1988; Barbara H. Kehrer and Charles M. Wohlin, "Impact of Income Maintenance on Low Birth Weight: Evidence from Gary Experiment," *Journal of Human Resources* Vol. 14, No. 4, 1979; and Food Research and Action Center, *Community Childhood Hunger Identification Project: A Survey of Childhood Hunger in the United States*, Washington, D.C. 1991, all cited in *Wasting America's Future*, Children's Defense Fund.

<sup>28</sup> Children's Defense Fund, *Wasting America's Future*: 15.

<sup>29</sup> *Ibid.*

<sup>30</sup> Office of Management and Budget, *Budget of the United States Government, Fiscal Year 1998: Analytical Perspectives*, Washington D.C.: U. S. Government Printing Office, 1997.

- Participation in WIC is associated with higher probabilities of receiving adequate prenatal care, greater probabilities of receiving advice on nutrition, breast-feeding, and substance use, higher average birthweights, and reduced incidence of low birthweight and premature births.<sup>31</sup>
- WIC participation is associated with lower rates of infant and neonatal mortality, even after accounting for differences in the use of prenatal care, possibly due to improved nutrition.<sup>32</sup>
- Participation in WIC reduces the incidence of iron-deficiency anemia among infants.<sup>33</sup>
- WIC participants are more likely to comply with nutritional guidelines for 4 to 6 month old infants than are nonparticipants.<sup>34</sup>
- One widely cited study found that every dollar spent on WIC for pregnant women saves \$1.77 to \$3.13 in Medicaid costs for new mothers and infants in the first 60 days of life.<sup>35</sup>

---

<sup>31</sup>Anne Gordon, and Lyle Nelson, "Characteristics and Outcomes of WIC participants and Nonparticipants: Analysis of the 1988 National Maternal and Infant Health Survey", mimeo, Mathematica, March 1995.

<sup>32</sup>Barbara Devaney, and Allen Schirm, "Infant Mortality Among Medicaid Newborns in Five States: The Effects of Prenatal WIC Participation", mimeo, Mathematica Policy Research, Inc., May 1993.

<sup>33</sup> Barbara Devaney, Marilyn Ellwood, and John Love, "Programs that Mitigate the Effects of Poverty On Children", *The Future of Children*, Vol. 7, No. 2, Summer/Fall 1997, forthcoming.

<sup>34</sup> Anne Gordon, and Lyle Nelson, "Characteristics and Outcomes of WIC participants and Nonparticipants: Analysis of the 1988 National Maternal and Infant Health Survey". However, not all of the nutritional measures are favorable. In particular, WIC participants are less likely to breast-feed their babies. This may occur partly because infant formula is provided to WIC participants. In addition, some mothers may be referred to WIC because they are feeding their infants improperly. The reduction in breast-feeding rates may be reversible, however, with some evidence that WIC participants who are given advice to breast-feed do so more frequently than income-eligible non-participants (U.S. Department of Agriculture, *The WIC Breast-feeding Report: The Relationship of WIC Program Participation to the Initiation and Duration of Breast-feeding*, Alexandria VA, September 1992).

<sup>35</sup> U.S. Department of Agriculture – Food and Nutrition Service. *A Study of the Savings in Medicaid and Indigent Care for Newborns from Prenatal Participation in the WIC Program*, Washington, D.C., 1990.

### Box 3. The Effects of Prenatal WIC Participation

In an effort to improve the health of newborns, WIC provides nutrition, health care, and social service referrals to low-income pregnant women (and to children aged 5 and under). Participants typically receive vouchers to purchase specific types of foods (milk, cheese, eggs, infant formula, cereals, and fruit or vegetable juices) valued at an average of around \$30 per month, in addition to the services mentioned above.

To study the effect of this prenatal program on birth outcomes and Medicaid costs, Mathematica Policy Research, Inc. undertook a study for the United States Department of Agriculture in five States: Florida, Minnesota, North Carolina, South Carolina, and Texas. Mothers included in the study participated in Medicaid and gave birth to around 105,000 infants in 1987 or 1988. To analyze the effect from WIC, birth outcomes and Medicaid costs of WIC participants were compared to those of WIC nonparticipants. Statistical techniques were used to control for observable differences between the WIC participants and nonparticipants. (However, the two groups probably differ in ways which were not observed by the researchers, which could explain some of the differences in observed outcomes discussed below.)

WIC participants were only one-third to one-half as likely as nonparticipants to have received inadequate prenatal care. Participation in the program was also associated with an increase in birthweights (averaging between 51 and 117 grams), a lower incidence of pre-term births, and a longer gestational age. Medicaid costs were also lower for WIC participants. Every dollar spent on the prenatal WIC program was associated with savings in Medicaid costs during the first 60 days after birth of \$1.77 to \$3.13 for newborns and mothers and from \$2.84 to \$3.90 for newborns only. (These benefit-cost ratios are calculated assuming that the two groups are identical, once the observable characteristics are controlled for.)

### Smoking Cessation

In 1993, an estimated 16 percent of pregnant women in the United States smoked.<sup>36</sup> The harmful effects of smoking on fetal development and child development are well-documented. Programs designed to convince women to quit smoking during pregnancy may be an exceptionally effective means of helping children.

<sup>36</sup> Harry M. Rosenberg, et al. "Births and Deaths in the United States, 1995", p. 89.

- A pregnant woman who smokes less than a pack a day is 53 percent more likely than a nonsmoker to have a low birthweight baby; a woman smoking more than a pack a day is 130 percent more likely to do so.<sup>37</sup>
- The elimination of smoking during pregnancy could prevent about 10 percent of perinatal deaths and about 35 percent of low birthweight births.<sup>38</sup>
- A baby born to a smoking mother is more likely to experience longer-term problems as well, including higher risks of neurological abnormalities, poorer verbal skills (at age 48 months), and reduced fertility in women.<sup>39</sup>

Smoking cessation programs for pregnant women, often administered through public clinics or home-visiting programs (discussed below) are generally inexpensive and likely to be especially cost-effective. Again, the cost-savings are most often associated with reductions in low birthweight babies. Since these programs are inexpensive, they do not have to achieve exceptionally high quit rates to recover costs.

- The cost of providing smoking cessation programs to the 350,000 pregnant smokers seen in public health clinics would be about \$1.75 million. A quit rate of 12 percent (well within the range of rates achieved by these programs) would save \$12 for every \$1 spent.<sup>40</sup> One study of a home-based smoking cessation program costing \$11.75 per patient found that for every \$1 spent on the program, almost \$3 were saved.<sup>41</sup>
- Smoking-cessation programs aimed specifically at pregnant women are more effective and have a lower cost per quit than programs using generic material.<sup>42</sup>

---

<sup>37</sup>Select Committee on Children, Youth, and Family, "Opportunities for Success: Cost-Effective Programs for Children, Update, 1990", 101st Congress, 2nd Session, Washington D.C.: U.S. Government Printing Office, 1990: 131.

<sup>38</sup> Department of Health and Human Services, *The Health Benefits of Smoking Cessation, A report of the Surgeon General, 1990*, cited in "Opportunities for Success: Cost-Effective Programs for Children, Update, 1990", p. 132.

<sup>39</sup>"Select Committee on Children, Youth, and Family, *Opportunities for Success: Cost-Effective Programs for Children, Update, 1990*".

<sup>40</sup> J. Mayer, et al., "Health Promotion in Maternal and Child Health Care" in *Universal Maternity Care: A Description for Ensuring Access*, edited by J. B. Ketch et al., Washington, D.C.: American Public Health Association.

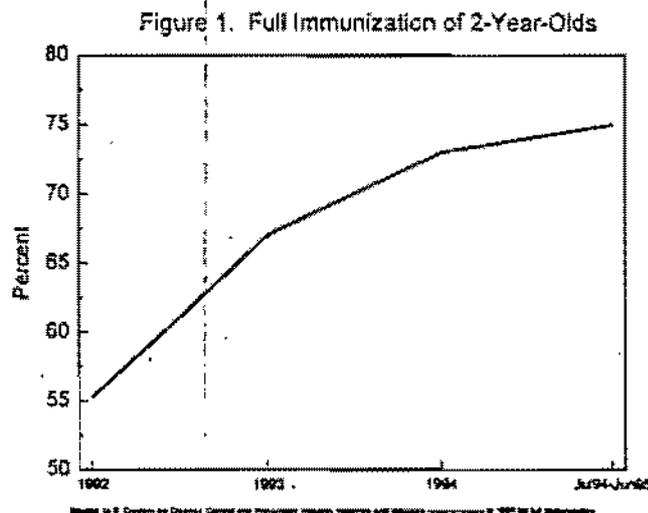
<sup>41</sup>*Ibid.*

<sup>42</sup>R.A. Windsor, et al., "A Cost Effective Analysis of Self-Help Smoking Cessation Methods for Pregnant Women," *Public Health Reports*, Vol. 103, 1988.

## Childhood Immunizations

Childhood immunizations play an important role in preventing diseases such as polio, measles, rubella, diphtheria, and mumps. Prior to the approval of the measles vaccination in 1963, for example, about 500,000 cases of measles were reported each year, killing 400 to 500 people per year. By 1983, the number of cases of measles had dropped to a record low of 1,497. The widespread use of vaccines has reduced the peak-level incidence of the disease in the United States by at least 95 percent.<sup>43</sup> In addition to securing the health of those immunized, vaccines can indirectly protect those who do are not vaccinated (i.e., lower disease risk for all individuals).

Immunizations represent a particularly appropriate area for government involvement :



since the provision of immunizations provides great health and economic savings. In 1993, President Clinton signed the Comprehensive Childhood Immunization Initiative that created the Vaccines for Children (VFC) program to help uninsured, Medicaid-eligible children get vaccinated. This initiative promoted the Administration goal that 90 percent of all two-year-olds should be fully vaccinated by the year 2000. VFC provides all recommended vaccines free of charge to clinics and doctors in all 50 States who provide services to uninsured and Medicaid-covered children. In response to

this initiative, the percent of all 2-year-olds who were fully immunized increased from 55 percent in 1992 to 75 percent in 1994-1995. (See Figure 1.) This increase in immunization rates is correlated with the 35 percent decrease in cases of preventable diseases per 100,000 children under 5 from 1993 to 1996.<sup>44</sup>

- The Centers for Disease Control and Prevention estimate that every \$1 spent on the Diphtheria vaccine saves nearly \$30 in future direct and indirect savings -- which includes savings from work loss, death, and disability; every \$1 spent on the Measles, Mumps, and Rubella vaccine saves over \$20.<sup>45</sup>

<sup>43</sup>Center for Disease Control and Prevention, CDC Immunization Information Document #240010, Centers for Disease Control and Prevention, March 9, 1995.

<sup>44</sup>Children's Defense Fund, 1997. *The State of America's Children*, 1997.

<sup>45</sup>U.S. Department of Health and Human Services, Center for Disease Control and Prevention, National Immunization Program.

- Every \$1 spent on polio vaccines is estimated to save \$10.<sup>46</sup>

### Home Visiting

Services are often particularly effective when provided to families in their own homes. The goals of home visiting programs vary considerably. For example, some programs link families with other social services while others assess the safety of the home. Many other programs help parents set goals and make plans, encourage healthy habits, and answer questions about pregnancy, childbirth, and child-rearing. Home visits are often made during pregnancy and through the first 1 to 2 years after birth. The more successful programs typically continue after the child is born and employ a comprehensive approach that addresses many of the goals previously mentioned.<sup>47</sup>

More than 4,000 programs in the United States use Home Visiting to provide health, social, or educational services to families, sometimes in conjunction with organized child care programs. Although the Federal government has no coordinated effort for home-visiting programs, the Department of Health and Human Services and the Department of Education fund various programs for families with young children. The Head Start program (discussed below) administers one of the largest home-based programs, mostly to children in rural areas who would have difficulty participating in center-based care. In 1990, 24 states used Medicaid funds to provide prenatal care through home-visiting programs.<sup>48</sup> Because they are varied in both goals and approach, evaluating home visiting programs as a whole is difficult.

Many studies have linked home visiting programs to reductions in the incidence of low birthweight babies, to child abuse and neglect, and to improvements in prenatal care, IQ scores, and child development. The studies differ widely, however, in their assessments of these programs, in part due to immense heterogeneity in the intensity, scope, and focus of the interventions. Understanding the differences in the effects of program specifics is necessary for guiding policy.

- Home visiting programs aimed at persuading pregnant women to stop smoking are found to decrease the risk of low birthweight babies.<sup>49</sup>

---

<sup>46</sup>U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, *Justification of Appropriation Estimates for Committee on Appropriations, FY 1991* cited in "Opportunities for Success: Cost-Effective Programs for Children, Update, 1990": 57.

<sup>47</sup>U.S. General Accounting Office, *Home Visiting*, HRD-90-83, July 1990: 3.

<sup>48</sup>Ibid.

<sup>49</sup>David Olds, and Harriet Kitzman, "Review of Research on Home Visiting for Pregnant Women and Parents of Young Children", *The Future of Children*, Vol. 3, No. 3, Winter 1993: 86

- Studies of Philadelphia's and Baltimore's home visiting programs suggest that the programs reduced medical costs associated with low birthweights by more than the cost of the programs.<sup>50</sup>
- In a South Carolina study where "resource mothers" visited pregnant teens in rural areas, program participants showed significant improvements in prenatal care attendance, WIC enrollment, and well-child visits.<sup>51</sup>
- A study of home visiting programs for mothers of premature, low birthweight babies showed that the intervention improved IQ scores at age 3.<sup>52</sup>
- The Prenatal Early Intervention Program (PEIP) resulted in positive effects for children -- fewer emergency room visits and fewer reports of child abuse, for example -- as well as for mothers who were more likely to complete schooling, gain employment, have fewer subsequent children, and delay the birth of additional children.<sup>53</sup>
- A "randomized" experiment examining the effect of a home-visiting program in Elmira, New York revealed substantial reductions in government expenditures during the first four years of life for low-income families (see box 4).<sup>54</sup> The major sources of the cost-savings included reduced transfer payments (from AFDC, Food Stamps, and Medicaid), as well as reduced expenditures by Child Protective Services. Among low-income participants, the cost savings during the first four years of life alone, modestly exceeded program expenditures.

---

<sup>50</sup> Mayer et al., "Health Promotion in Maternal and Child Health Care" in *Universal Maternity Care: A Description for Ensuring Access*, edited by J. B. Kotch et al., American Public Health Association, Washington, D.C. cited in "Opportunities for Success: Cost-Effective Programs for Children, Update, 1990": 145.

<sup>51</sup> Henry C. Heins, "Social Support in Improving Perinatal Outcome: The Resource Mothers Program", *Obstetrics and Gynecology*, Vol. 70, No. 2, August 1987.

<sup>52</sup> The Infant Health and Development Program, "Enhancing the Outcomes of Low Birth Weight, Premature Infants", *Journal of American Medical Association*, Vol. 263, No. 22, June 1990 cited in "Opportunities for Success: Cost-Effective Programs for Children, Update, 1990", pp: 143.

<sup>53</sup> Mayer et al., "Health Promotion in Maternal and Child Health Care": 145.

<sup>54</sup> David L. Olds, Charles Henderson, Charles Phelps, Harriet Kitzman, and Carole Hanks, "Effect of Prenatal and Infancy Nurse Home Visitation on Government Spending", *Medical Care*, Vol. 31, No. 2, 1993.

#### Box 4. The Elmira, NY, Home Visitation Program

Home visiting is thought to improve pregnancy and early childhood outcomes. In the late 1970s and early 1980s, a randomized experiment was conducted in Elmira, a semirural county located in upstate New York, to study the effect of home visiting on health and social outcomes. This study included 400 teenage, unmarried, or poor women who were pregnant for the first time. The women were randomly assigned into four different groups providing some combination of health screenings, free transportation to health providers, and home visits during pregnancy, or home visits from pregnancy through the child's second birthday. In the most intensive intervention, nurses visited once every two weeks during pregnancy and then once every two to six weeks thereafter (with decreasing frequency over time).

In the Elmira intervention, home visitation was found to decrease smoking and improve diets and, for some groups, to reduce the frequency of low birthweight or pre-term deliveries. Participants were also likely to make use of WIC and to attend childbirth education classes. The home visits also increased the partner's interest in the pregnancy and his attendance in the delivery room.

Program costs were compared with changes in government expenditures during the first four years of the child's life. For low income families (but not for their higher income counterparts) the measured benefits of frequent home visitation outweighed the costs -- costs averaged around \$6000 (1996 dollars), while the savings were over \$6,300. The savings resulted from decreased payments in AFDC, Food Stamps, Medicaid, and Child Protective Services, and increased maternal employment. Almost one-third of the savings (among low-income families) was due to the reductions in the number of subsequent pregnancies. This study may underestimate the gains from the program since neither savings after age 4 nor nonmonetary benefits in the earlier period are taken into account.<sup>55</sup>

#### Lead Abatement

Lead ingestion is hazardous to all people but is particularly dangerous for young children because they absorb lead more readily than do adults and because the developing nervous systems of children are more susceptible to the effects of lead. At high levels, lead can cause coma, convulsions, and death. At lower levels, it is associated with reduced intelligence, reading and learning disabilities, impaired hearing, and slowed growth. Many of the harmful effects of elevated levels of lead in the blood are irreversible and result in substantial financial and human costs.

---

<sup>55</sup> David L. Olds, et al., "Effect of Prenatal and Infancy Home Visitation on Government Spending".

Restrictions on the use of lead in gasoline, paint, and solder (used in making food cans and water pipes) reduced blood lead levels for children under 6 by more than 75 percent during the 1980s.<sup>56</sup>

But progress in decreasing blood lead levels has slowed and high levels are frequently found among low-income households, nonwhites, inner city residents, and persons living in older homes.<sup>57</sup> Current efforts focus on reducing exposures to lead-based paint and lead-contaminated dust, which are believed to be the main sources of excess blood lead levels in children. Although few studies have estimated the costs and benefits for such programs, the evidence suggests that the benefits of some abatement efforts may considerably exceed the costs.

- The Department of Housing and Urban Development recently estimated that the costs of proposed regulation requiring lead abatement in all federally-owned housing with lead hazards above a certain level would be around \$450 million and that the benefits would be between \$500 million and \$1.5 billion.<sup>58</sup>

### *Improving the Emotional Well-Being of Children*

Emotional well-being in early childhood plays a critical role in allowing individuals to develop their full potential. Emotionally healthy children enter school with the ability to communicate with their peers and their teachers; confidence in their ability to make friends; confidence in themselves; knowledge of socially acceptable behavior; motivation to learn; and interest in activities. Because these children are prepared to enter school, their early educational experience can be fruitful, enjoyable, and productive. Emotional health lays the foundation for children to realize their talents and capabilities.

To ensure emotional health, children need daily nurturing and guidance from trustworthy and caring adults. In the first years of life, children need love and care from adults who listen and respond to their needs. Infants are dependent upon adults for touching, rocking, feeding, and warming. In addition, stimulation through reading and talking is needed.<sup>59</sup> This nurturing care develops the basic trust that allows children to feel confident about entering the world. Without nurturing care, infants grow up feeling helpless and scared, leading to problems later in life.

---

<sup>56</sup> U.S. Department of Housing and Urban Development, "Regulatory Impact Analysis of the Proposed Rule on Lead-Based Paint", July 7, 1996.

<sup>57</sup> Ibid.

<sup>58</sup> Ibid.

<sup>59</sup> Carnegie Corporation of New York, *Starting Points: Meeting the Needs of Our Youngest Children*: 9.

## Parental Care During The First Months of Life

The experiences of the first months of life are critical for both emotional and physical development. Substantial interactive parental contact during the earliest months is believed to help babies form secure and loving attachments with adults, to ensure confidence and competence, and to aid in establishing the basic trust necessary for psychological development throughout life.<sup>60</sup> For this reason, as well as to allow ample time for mothers to recover from childbirth and to permit parents to adapt to the changes surrounding the birth or adoption of a child, many experts believe that several months of parental leave play an important role in promoting healthy infant development.<sup>61</sup>

The desire to spend time at home in the earliest months of an infant's life has become more difficult to fulfill, as a larger proportion of young children are raised by single parents and as more women work. Even when employed, most new mothers typically take some time off work to care for their babies.<sup>62</sup> However, this often creates tensions between the demands of the workplace and those of the home. To support families in their efforts to strike a workable balance between these competing demands, President Clinton signed the Family and Medical Leave Act (FMLA) into law in 1993. The FMLA grants 12 weeks of job-protected leave to new parents with qualifying employment histories working for covered employers.<sup>63</sup> By providing employed parents with the time to nurture their newborn and to develop their parenting skills, this legislation fosters good parenting skills and infant trust. The evidence suggests that the law has played a positive role in helping parents balance work and home needs.

- During the 18-month period ending in the summer of 1995, approximately 17 percent of workers took time off work for a reason covered by the legislation.<sup>64</sup>
- The FMLA provided these benefits without imposing large costs on employers. Over 90 percent of covered establishments reported that the FMLA had no noticeable effect on their business performance or growth and larger percentages of these employers indicated

---

<sup>60</sup> Ibid.

<sup>61</sup> E.F. Zigler and M. Frank (eds.), *The Parental Leave Crisis: Toward A National Policy*. New Haven: Yale University Press, 1988.

<sup>62</sup> Jacob A. Klerman and Arleen Leibowitz, "The Work-Employment Decision Among New Mothers", *Journal of Human Resources*, Vol. 29, Spring 1994: 277-303, show that 73 percent of employed women with one month old infants and 41 percent of employed women with two month olds were on leave from their jobs, rather than working, during the 1986-1988 period.

<sup>63</sup> For further details on the FMLA, see Ruhm, Christopher J., "Policy Watch: The Family and Medical Leave Act", *Journal of Economic Perspectives*, forthcoming, Spring 1997.

<sup>64</sup> U.S. Department of Labor, Commission on Family and Medical Leaves, *A Workable Balance: Report to Congress on Family and Medical Leave Policies*, Washington, D.C. U.S. Department of Labor 1996.

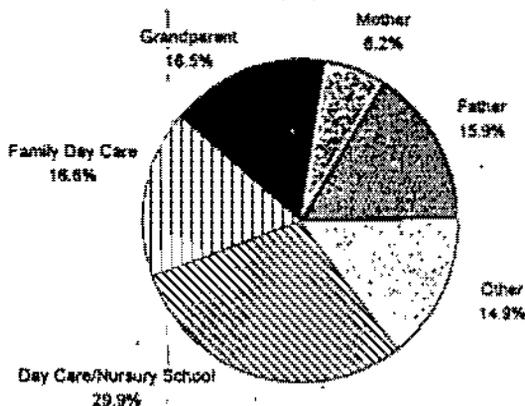
positive rather than negative effects on employee productivity, turnover, and career advancement.<sup>65</sup>

### Quality Child Care for Infants and Toddlers

The emotional well-being of infants and toddlers is promoted by their having close and stable relationships with a small number of adults in safe and intimate settings. Traditionally, these have been provided by parents, particularly mothers, who stayed at home with their children. However, as women increasingly work outside the home and more children grow up in single parent households, full-time parental care is becoming less and less typical.

Accompanying this trend is the increased use of child-care outside the home. In 1993, about 30

Figure 2. Child Care Arrangements for Children Under 5 in Families With Employed Mothers, 1993



Source: Table C1, U.S. Department of Commerce, Bureau of the Census.

percent of children under 5 in employed-mother families were cared for in organized facilities, only 13 percent in 1977. (See Figure 2.) Children in poor families with employed mothers were only two-thirds as likely to receive care in organized facilities as were children in non-poor families.

Another option for care outside the home is family day care -- care by nonrelatives in another home -- which accounts for an additional 17 percent of the care received by children under 5 with working mothers.<sup>66</sup> Among these child care facilities, a bewildering array of options

exist with respect to environment, cost, hours spent per week and per day, and services, along with considerable uncertainty regarding the quality of the services provided. Nonetheless, this care received outside the home can be rewarding for children.<sup>67</sup>

<sup>65</sup> David Cantor, et al., "The Impact of the Family and Medical Leave Act: A Survey of Employers", mimeo, Westat Inc., Rockville, MD, October 1995.

<sup>66</sup> Tabulations from the Survey of Income and Program Participation, U.S. Bureau of Census, Department of Commerce.

<sup>67</sup> Early childhood programs can affect children positively or negatively, depending on the quality of the care. Quality care is best measured by the warmth and interaction between the provider and the child, but assessing these dimensions is necessarily a subjective, timely, and expensive exercise. As a result, researchers and regulators tend to focus on more easily observable specific structural measures, such as child-teacher ratios, group sizes, and staff training, which may also play a role. The available evidence suggests that changes in these structural factors have the potential to improve the quality of child care if they are accompanied by broader changes in the way child care is delivered, with smaller benefits if they occur in isolation.

- Children who receive care in quality centers tend to be less distracted, and more task-oriented, considerate, happy, and socially competent in elementary school. They are also more likely to be assigned to gifted programs and make better academic progress.<sup>68</sup>
- Children enrolled in high-quality programs are more self-confident, proficient in language, and advanced in cognitive development. Poor quality childcare programs risk the development of poor school skills and may lead to heightened aggression.<sup>69</sup>
- The Syracuse University Family Development Research Program provided extensive childcare, in addition to home visiting, health and nutrition resources. The program, which served 108 low-income families with children aged 0 to 5, decreased the number, severity, and chronicity of juvenile justice problems.<sup>70</sup>
- Participation in Project CARE, an intensive combination of center-based and home-based intervention and health care, which serves children beginning at birth, is associated with significant increases in measured intelligence.<sup>71</sup>

Quality child care has important payoffs in terms of increasing emotional well-being and school readiness but the care received by many children is inadequate. For example, more than one-third of classrooms surveyed in the National Child Care Staffing study were rated less than "minimally adequate" and only 12 percent received a score which met or exceeded the standard associated with "good" classroom practices.<sup>72</sup> Scattered evidence from several studies suggests that disadvantaged families, as well as those who are more psychologically or economically

---

<sup>68</sup> See Love, John M., Peter Z. Schochet, Alicia Meckstroth, "Are They In Any Real Danger? What Research Does -- And Doesn't -- Tell Us About Child Care Quality and Children's Well-Being", mimeo, Mathematica Policy Research, May 1996.

<sup>69</sup> Suzanne W. Helburn and Carollee Howes, "Child Care Cost and Quality", *Future of Children*, Vol. 6, No. 2, Summer/Fall 1996: 62-63. However, these studies frequently do not fully control for differences in family background characteristics, which could affect the outcomes analyzed.

<sup>70</sup> Hirokazu Yoshikawa, "Long-Term Effects of Early Childhood Programs on Social Outcomes and Delinquency", *Future of Children*, Vol. 5, No.3, Winter 1995: 59.

<sup>71</sup> Donna Bryant, and Kelly Maxwell, "The Effectiveness of Early Intervention for Disadvantaged Children", *The Effectiveness of Early Intervention*, 1997.

<sup>72</sup> First name Whitebook, et al. *Who Cares? Child Care Teachers and the Quality of Care in America: A Final Report: National Child Care Staffing Study*, Berkeley, CA: Child Care Employee Project, 1989, as cited in John Love et. al. "Are They In Any Real Danger? What Research Does -- And Doesn't -- Tell Us About Child Care Quality and Children's Well-Being".

stressed, are more likely to enroll their children in child care arrangements that are of relatively low quality.<sup>73</sup>

For many families, cost represents a substantial barrier to obtaining quality child care.<sup>74</sup> The Federal government plays an important role in alleviating this financial burden. In 1994, the GAO identified over 90 child care and early childhood development programs administered by 11 federal agencies.<sup>75</sup> Since 1980, federal support has doubled, and for low-income families, support has almost tripled.<sup>76</sup>

- One of the largest Federal child care assistance programs is the **Child and Dependent Care Tax Credit**. This program, which began in 1954 and cost an estimated \$2.7 billion in FY 1997, provides a tax credit to taxpayers who work or are seeking work and have a qualifying dependent (e.g. a child under the age of 13). Parents can receive a credit of up to \$2,400 per year for one qualifying dependent and \$4,800 for two or more qualifying dependents.<sup>77</sup>
- Under the newly established **Child Care and Development Fund**, the Federal government has made \$2.8 billion available to States for FY 1997. This program, authorized by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, will assist low-income families and those transitioning on and off welfare to obtain child care so that they can work or attend training/education. This program brings together four Federal child care subsidy programs and allows States to design a comprehensive, integrated service delivery system to meet the needs of low-income working families. This program represents an increase in child care funding of nearly \$600 million for States over FY 1996.<sup>78</sup>

---

<sup>73</sup> Love, John M., Peter Z. Schochet, Alicia Meckstroth, "Are They In Any Real Danger? What Research Does -- And Doesn't -- Tell Us About Child Care Quality and Children's Well-Being".

<sup>74</sup> Average weekly child care costs were \$74 in 1993 for families that purchased care, with substantially higher expenditures for wealthy than poor households. (L. Casper, "What Does It Cost To Mind Our Preschoolers?", Current Population Reports, Series 70-52, Washington, D.C., The U.S. Bureau of Census.

<sup>75</sup> U.S. General Accounting Office, *Early Childhood Programs: Multiple Programs and Overlapping Target Groups*, HEHS-95-4FS, Washington, D.C. October 1994.

<sup>76</sup> D.S. Phillips, ed. *Child Care for Low-Income Families: Summary of Two Workshops*, Washington, D.C.: National Academy Press, 1995.

<sup>77</sup> House Committee on Ways and Means, *The 1996 Green Book*, 104th Congress, 2nd session: 199; Office of Management and Budget, *Analytical Perspectives, Budget of the United States Government, Fiscal Year 1998*, 643.

<sup>78</sup> Department of Health and Human Services, Administration for Children and Families.

- One of the main purposes of the Social Services Block Grant is preventing neglect, abuse, or exploitation of children and adults. Some of this funding goes to child care services in almost all states.<sup>79</sup>
- Since 1981, employees have generally been allowed to receive an Exclusion For Employer-Provided Dependent Care from their gross income on their tax return. The exclusion is limited to \$5,000 per year with an exception for a married taxpayer filing separately who is limited to \$2,500. The cost of this provision is an estimated \$830 million in FY 1997.<sup>80</sup>
- The 1994 expansions to the Head Start program (discussed below) included a set-aside for establishing Early Head Start, which is targeted at low-income families with children under 3 and pregnant women. Early Head Start employs a "two-generation" approach that is designed to serve parents and children simultaneously. The program provides intensive health and nutrition services during the prenatal period and for the first three years of the child's life. In fiscal year 1996, 4 percent of the Head Start Grant (\$143 million) was set-aside for Early Head Start and, during the 1996 calendar year, Early Head Start grants were awarded to 74 localities across the nation. These programs will serve 7,100 infants and toddlers and their families, many of whom live in public housing developments.<sup>81</sup> Randomized experiments are being conducted to allow accurate evaluation of the success of Early Head Start.

## Early Education

Children need stimulation and interaction to develop motivation, inquisitiveness, acceptable social behavior, and self-confidence. Early education programs for children aged 3 to 5 help children develop these positive traits, and preschool enrollment has risen substantially. (See Figure 3.) The programs vary dramatically on many dimensions -- hours per day and days per week, the type of curriculum, services included, and cost. Some programs incorporate health care by encouraging immunizations, hearing and vision screenings, and home visiting.

Much of the literature on the effects of compensatory preschool finds that the programs initially increase IQ scores but that the effect fades over time.<sup>82</sup> Consequently, it is frequently asserted that pre-school has no permanent effect on cognitive outcomes. However, research

---

<sup>79</sup>House Committee on Ways and Means, *The 1996 Green Book*, pp. 651.

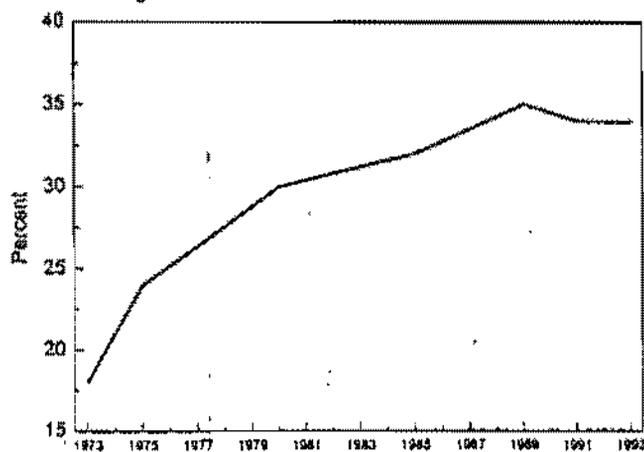
<sup>80</sup> House Committee on Ways and Means, *The 1996 Green Book*; Office of Management and Budget, *Analytical Perspectives, Budget of the United States Government, Fiscal Year 1998*.

<sup>81</sup>Department of Health and Human Services, Fact Sheet, "Improving Head Start: A Success Story", November 5, 1996.

<sup>82</sup>For a review of the literature see W. Stephen Barnett, "Benefits of Compensatory Preschool Education", *Journal of Human Resources*, Vol 27, No.2.

examining effects on other outcomes such as educational attainment, behavior, and health status continues to find benefits of preschool. These long-term benefits are believed to be the result of

Figure 3. Preschool Enrollment of 3-4 Year-Olds



Source: U.S. Department of Commerce, Bureau of the Census.

entering elementary school with more experiences and advantages. School learning is viewed by many as a "cumulative process" where these early advantages foster later performance.<sup>83</sup>

\* A comprehensive review of compensatory preschool education found significant favorable effects on long-term school performance, as measured by grade retention, special education enrollment, and high school graduation.<sup>84</sup>

- Early education programs, in combination with family support programs, have been found to reduce antisocial behavior and delinquency.<sup>85</sup>
- Preschool participants also more likely to receive immunizations.<sup>86</sup>

Particularly noteworthy evidence has been obtained from the Perry Pre-School Study. (See Box 5.) This intervention, which was begun in 1962, randomly assigned 128 3- and 4-year-old children into a treatment or control group. The treatment group received an intensive preschool program and home visits to the parents.<sup>87</sup> No services were provided to the control group. The study had follow-ups annually from age 3 to 11 and at ages 14, 15, 19, and 27. Favorable outcomes have been observed for the treatment group, relative to the controls, over a variety of dimensions including

<sup>83</sup>Ibid.

<sup>84</sup>Ibid. The author notes that some of these studies may not have sufficient control groups since they were self-selected or drawn from different populations.

<sup>85</sup>Hirokazu Yoshikawa, "Long-Term Effects of Early Childhood Programs on Social Outcomes and Delinquency", *Future of Children*, Vol. 5, No. 3, Winter 1995.

<sup>86</sup>Janet Currie and Duncan Thomas, "Can Early Childhood Education Lead to Long Term Gains in Cognition?", *Policy Options*, forthcoming; R. L. McKey, H. Condelli, H. Ganson, et al., *The Impact of Head Start on Children, Families, and Communities: Final Report of the Head Start Evaluation, Synthesis and Utilization Project*, Washington, D.C.: CSR, Inc., June 1985.

<sup>87</sup>The results of the Perry Pre-School study may not be generalizable to other preschool programs, which generally do not provide the same level of services or monetary investment.

- a significantly higher level of IQ at age 7, school achievement at age 14, schooling, general literacy at age 19, monthly earnings and home ownership at age 27 and significantly lower levels of social service receipt from age 17 to 27 and arrests by age 27.<sup>88</sup>
- These estimated benefits translate into savings from \$4.75 to \$8.75 in future expenditure on special education, public assistance, and crime from every dollar spent on Perry Pre-school.<sup>89</sup>

As with child care for infants and toddler, financial constraints make it difficult for many families, especially those with low incomes, to send their children to pre-school programs. In 1990, only 35 percent of children from poor families attended pre-school versus the 60 percent of children in affluent families.<sup>90</sup> Through the Head Start program, the Federal government plays a key role in assuring that low-income children between the ages of 3 and 5 can receive pre-school education and access to social services which will improve their social competence, learning skills, health and nutrition.

---

<sup>88</sup> Lawrence Schweinhart et al., *Significant Benefits*, High/Scope Press, 1993.

<sup>89</sup> Isabel V. Sawhill, "Young Children and Families" in Henry J. Aaron and Charles L. Schultze, editors, *Setting Domestic Priorities*, Washington D.C.: Brookings, 1992, pp. 168; Lawrence Schweinhart et al., *Significant Benefits*: 167.

<sup>90</sup> Deanna Gombry, Mary Lerner, Donna Terman, Nora Krantzler, Carol Stevenson, and Richard Berman, "Financing Child Care: Analysis and Recommendations", *Future of Children*, Vol. 6, No. 2, Summer/Fall 1990.

### Box 5. The High/Scope Perry Preschool Project

In the 1960s, concern for the intellectual development of young children living in poverty spurred research on the ability of early education programs to break the link between poor school performance and family poverty. The hypothesis was that good preschool would help young children move from the home into the classroom, and thus raise these children's educational ability and attainment.

The High/Scope Perry Preschool Project, which began in 1962, is one of the most notable results of this research. It stands out from other studies because of its design and its longevity. Children living in the predominantly black neighborhood on the South Side of Ypsilanti, Michigan were randomly assigned to either the treatment group, who then attended preschool, or the control group, who then did not attend preschool. A total of 128 African-American children entered the project and 123 completed the preschool years.

The 58 children in the treatment group received a daily 2 ½ hour classroom session during the school year. This program employed roughly 4 teachers for every 5 children. In addition to the classroom session, the children and their mothers received a weekly 1 ½ hour visit in the home from the child's teacher. Over three-quarters of these children attended the classroom session for two years, with the rest attending one year. This intensive preschool program that cost roughly \$7,350 per child per year (1996 dollars). For comparison, Head Start costs roughly \$3,900 per child.<sup>91</sup>

The 123 children completing the program were interviewed annually from age 3 to 11, and at ages 14, 15, 19, and 27. The longevity of this study allows analysis of many long-term effects of the preschool intervention. Overall, the benefits from \$1 spent on the program are dramatic, varying from \$4 to \$8, depending on the economic assumptions. These benefits take the form of decreased future costs of education, crime, and welfare dependence, as well as increased labor market earnings.

---

<sup>91</sup>Berrueta-Clement, J.R., Schweinhart, L.J., and Weikart, David, "Lasting School Effects of Preschool Education on Children from Low-Income Families in the United States", *Preventing School Failure: The Relationship Between Preschool and Primary Education*, International Development Research Centre, 1984 cited in Lawrence Schweinhart et al., *Significant Benefits*.

Since Head Start's formation, the program has served over 15 million children and their families. Of the 750,000 children enrolled in fiscal year 1995, two-thirds were 4 year olds and about 13 percent had disabilities.<sup>92</sup> Most programs are center-based but vary in number of days per week and hours per day. However, Head Start currently has slots for only about 40 percent of eligible children. The low participation rates represent a lost opportunity to invest in our children, given the favorable effects of Head Start on future outcomes, and the President has stated the goal of serving one million children by 2002.

- A survey of 72 studies of Head Start concluded that the program had sizable favorable effects on children's cognitive development at the end of the program year.<sup>93</sup>
- A randomized study in four counties revealed that Head Start raised access to health care, the receipt of basic health services, improved diets, and led to better health status.<sup>94</sup> The Head Start participants also had more fully developed and coordinated motor skills.
- An influential study that compared the results for siblings where some participated in Head Start and others did not found that program participation increased test scores significantly for some children and also reduced the probability of being retained in grade.<sup>95</sup>
- Parenting skills have also been found to be positively affected by Head Start in some studies.<sup>96</sup>

### Conclusions

Scientists and educators have identified the first three years of life (and pregnancy) as a time when children have "fertile minds": efforts by parents, care-givers, educators, and government programs to help children during these years are especially fruitful, often for years to come. Because of the long-lasting effects of early investments -- such as the provision of health

---

<sup>92</sup>Barbara Devaney, Marilyn Ellwood, and John Love, "Programs That Mitigate the Effects of Poverty on Children".

<sup>93</sup>Barbara Devaney, Marilyn Ellwood, and John Love, "Programs That Mitigate the Effects of Poverty on Children".

<sup>94</sup>Abt Associates Inc, *The Effects of Head Start Health Services: Report of the Head Start Health Evaluation*, Cambridge, MA, 1984.

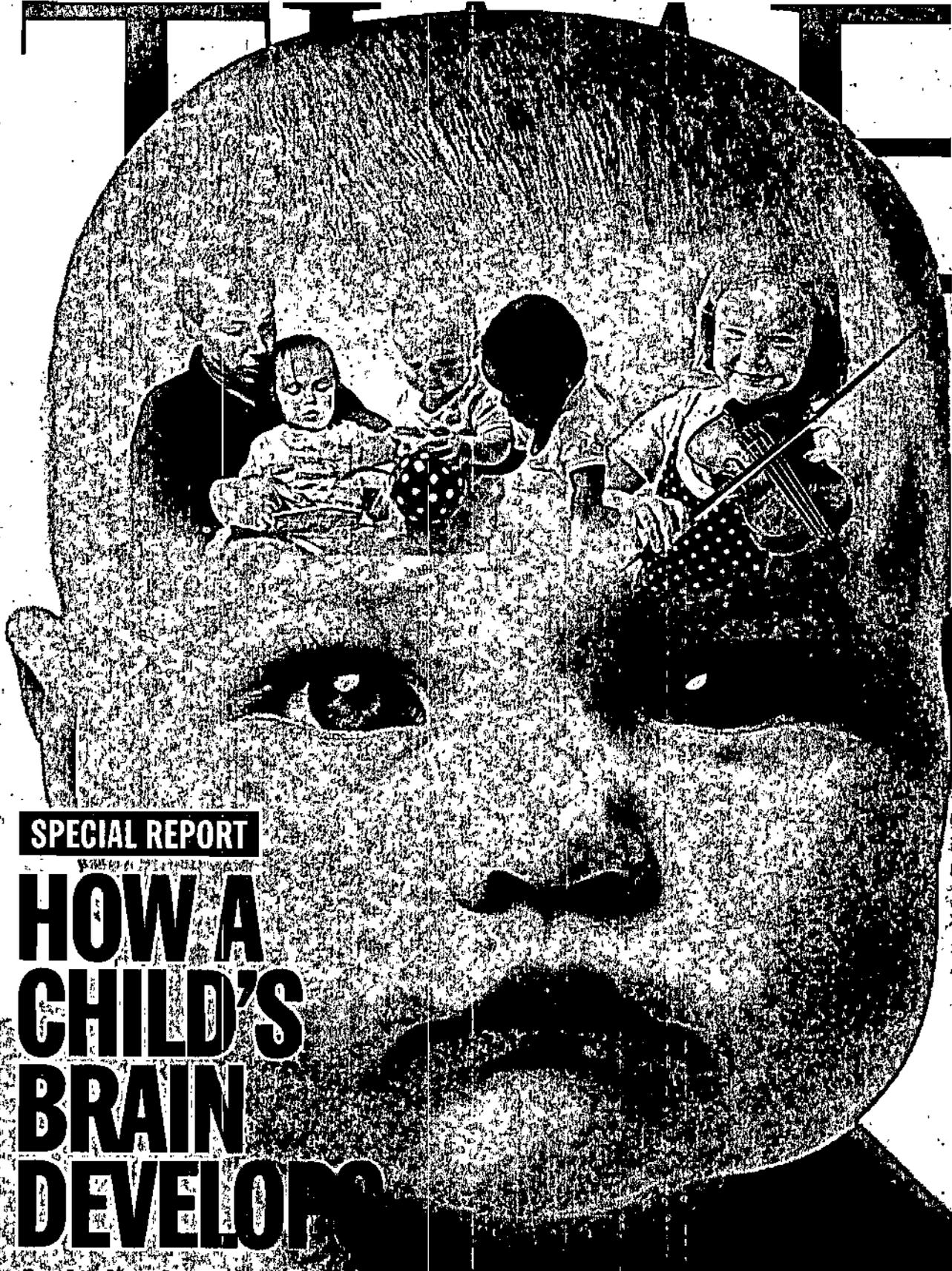
<sup>95</sup>Janet Currie and Duncan Thomas, "Does Head Start Make A Difference?", *American Economic Review*, June 1995: 359; Currie, Janet and Duncan Thomas, "Can Early Childhood Education Lead to Long Term Gains in Cognition?": 4 and 7.

<sup>96</sup>R.L. McKey, H. Ganson Condelli, et al., *The Impact of Head Start on Children, Families, and Communities: Final Report of the Head Start Evaluation, Synthesis and Utilization Project*. Washington, D.C. CSR, Inc, June 1985.

care and quality child care -- they tend to have big payoffs. They avert the need for more-costly interventions -- such as special education or incarceration -- and contribute to generally happier, healthier, and more productive children, adolescents, and adults.

Parents, of course, play the largest role in meeting the needs of their children. Broad social trends -- such as dual-worker families, single-parent families, crime, and poverty -- make it difficult for many families to provide for these needs. The government can help by providing parents with the opportunity to spend more time with their children and supply information on how to raise physically healthy and emotionally secure children. Some families also require more assistance from the government, including various types of financial support, in order to have the resources necessary to give their children a good start in life.

Families, communities, and the government are making innumerable investments in young children. These investments are important because our youngest children are, in a very real sense, the future of America.



**SPECIAL REPORT**

# HOW A CHILD'S BRAIN DEVELOPS

And what it means for child care and welfare reform



PHOTOCOPY PRESERVATION

# FERTILE MINDS

From birth, a baby's brain cells proliferate wildly, making connections that may shape a lifetime of experience. The first three years are critical.

By J. MADELEINE NASH

**R**AT-A-TAT-TAT. HAY-A-TAT-TAT. RAT-A-TAT-tat. If scientists could eavesdrop on the brain of a human embryo 10, maybe 12 weeks after conception, they would hear an astonishing racket. Inside the womb, long before light first strikes the retina of the eye or the earliest dreamy images flicker through the cortex, nerve cells in the developing brain crackle with purposeful activity. Like teenagers with telephones, cells in one neighborhood of the brain are calling friends in another, and these cells are calling their friends, and they keep calling one another over and over again, "almost," says neurobiologist Carla Shatz of the University of California, Berkeley, "as if they were autodialing."

But these neurons—as the long, wiry cells that carry electrical messages through the nervous system and the brain are called—are not transmitting signals in scattershot fashion. That would produce a featureless static, the sort of noise picked up by a radio tuned between stations. On the contrary, evidence is growing that the staccato bursts of electricity that form those distinctive rat-a-tat-lats arise from coordinated waves of neural activity, and that those pulsing waves, like currents shifting sand on the ocean



Photograph by Anne Geddes

PHOTOCOPY  
PRESERVATION



At six weeks, the growing brain of an embryo, richly irrigated by blood vessels, is almost as big as its body

floor, actually change the shape of the brain, carving mental circuits into patterns that over time will enable the newborn infant to perceive a father's voice, a mother's touch, a shiny mobile twirling over the crib.

Of all the discoveries that have poured out of neuroscience labs in recent years, the finding that the electrical activity of brain cells changes the physical structure of the brain is perhaps the most breathtaking. For the rhythmic firing of neurons is no longer assumed to be a by-product of building the brain but essential to the process, and it begins, scientists have established, well before birth. A brain is not a computer. Nature does not cobble it together, then turn it on. No, the brain begins working long before it is finished. And the same processes that wire the

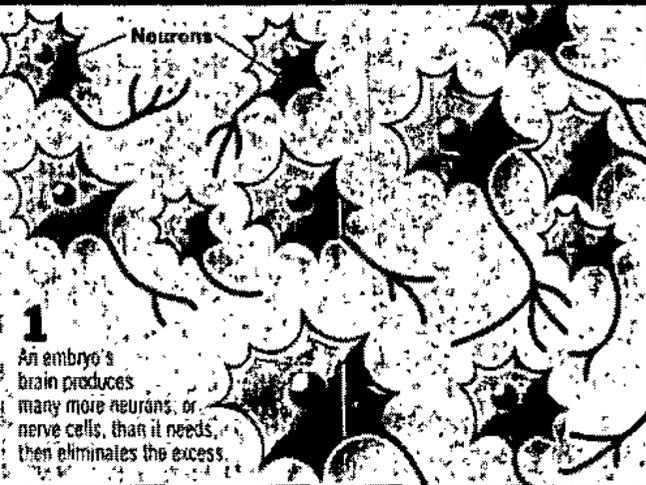
brain before birth, neuroscientists are finding, also drive the explosion of learning that occurs immediately afterward.

At birth a baby's brain contains 100 billion neurons, roughly as many nerve cells as there are stars in the Milky Way. Also in place are a trillion glial cells, named after the Greek word for glue, which form a kind of honeycomb that protects and nourishes the neurons. But while the brain contains virtually all the nerve cells it will ever have, the pattern of wiring between them has yet to stabilize. Up to this point, says Shatz, "what the brain has done is lay out circuits that are its best guess about what's required for vision, for language, for whatever." And now it is up to neural activity—no longer spontaneous, but dri-

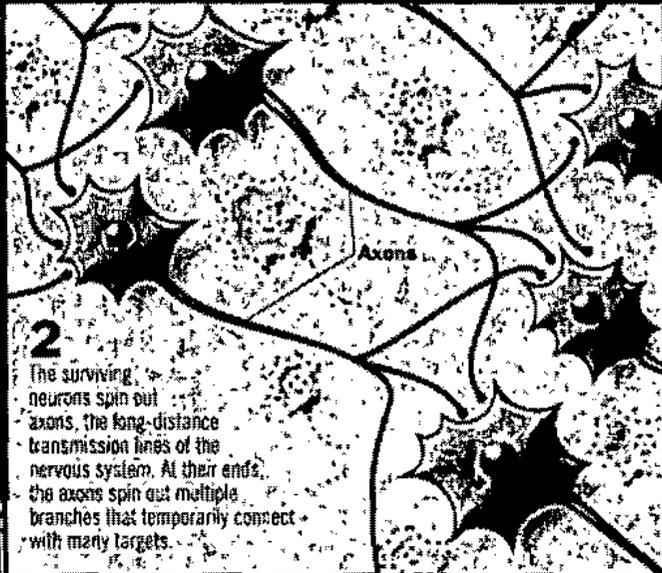
ven by a flood of sensory experiences—to take this rough blueprint and progressively refine it.

During the first years of life, the brain undergoes a series of extraordinary changes. Starting shortly after birth, a baby's brain, in a display of biological exuberance, produces trillions more connections between neurons than it can possibly use. Then, through a process that resembles Darwinian competition, the brain eliminates connections, or synapses, that are seldom or never used. The excess synapses in a child's brain undergo a draconian pruning, starting around the age of 10 or earlier, leaving behind a mind whose patterns of emotion and thought are, for better or worse, unique.

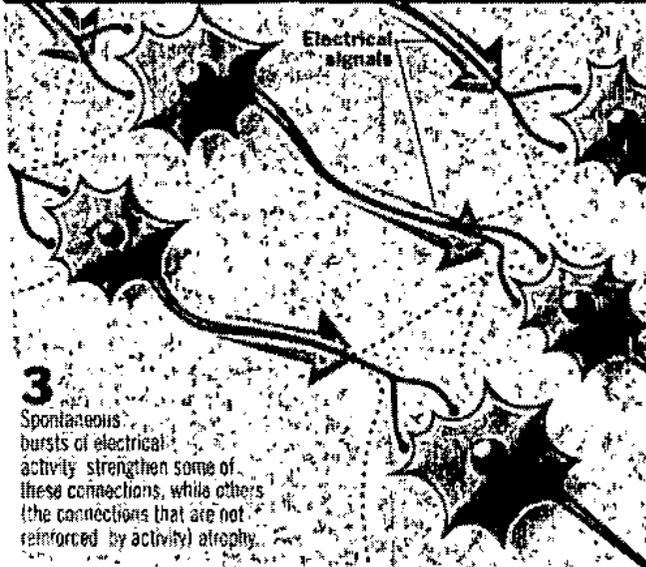
# Wiring the Brain



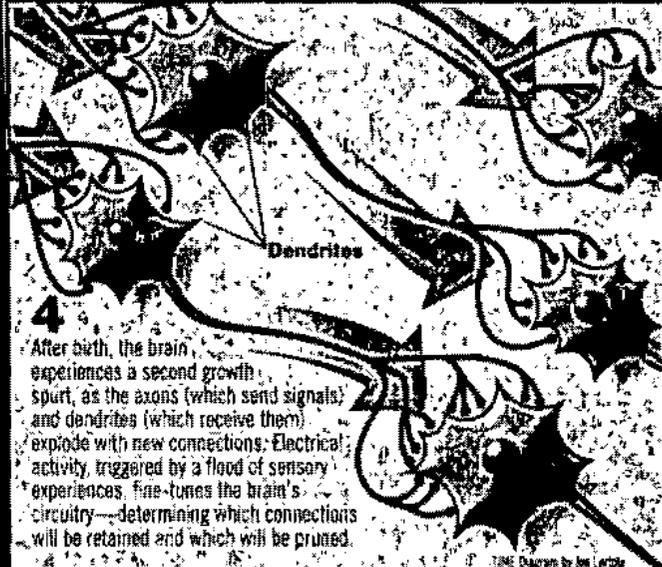
**1**  
An embryo's brain produces many more neurons, or nerve cells, than it needs, then eliminates the excess.



**2**  
The surviving neurons spin out axons, the long-distance transmission lines of the nervous system. At their ends, the axons spin out multiple branches that temporarily connect with many targets.



**3**  
Spontaneous bursts of electrical activity strengthen some of these connections, while others (the connections that are not reinforced by activity) atrophy.



**4**  
After birth, the brain experiences a second growth spurt, as the axons (which send signals) and dendrites (which receive them) explode with new connections. Electrical activity, triggered by a flood of sensory experiences, fine-tunes the brain's circuitry—determining which connections will be retained and which will be pruned.

Deprived of a stimulating environment, a child's brain suffers. Researchers at Baylor College of Medicine, for example, have found that children who don't play much or are rarely touched develop brains 20% to 30% smaller than normal for their age. Laboratory animals provide another provocative parallel. Not only do young rats reared in toy-strewn cages exhibit more complex behavior than rats confined to sterile, uninteresting boxes, researchers at the University of Illinois at Urbana-Champaign have found, but the brains of these rats contain as many as 25% more synapses per neuron. Rich experiences, in other words, really do produce rich brains.

The new insights into brain development are more than just interesting sci-

ence. They have profound implications for parents and policymakers. In an age when mothers and fathers are increasingly pressed for time—and may already be feeling guilty about how many hours they spend away from their children—the results coming out of the labs are likely to increase concerns about leaving very young children in the care of others. For the data underscore the importance of hands-on parenting, of finding the time to cuddle a baby, talk with a toddler and provide infants with stimulating experiences.

The new insights have begun to infuse new passion into the political debate over early education and day care. There is an urgent need, say child-development experts, for preschool programs designed to

boost the brain power of youngsters born into impoverished rural and inner-city households. Without such programs, they warn, the current drive to curtail welfare costs by pushing mothers with infants and toddlers into the work force may well backfire. "There is a time scale to brain development, and the most important year is the first," notes Frank Newman, president of the Education Commission of the States. By the age of three, a child who is neglected or abused bears marks that, if not indelible, are exceedingly difficult to erase.

But the new research offers hope as well. Scientists have found that the brain during the first years of life is so malleable that very young children who suffer strokes or injuries that wipe out an entire hemi-

sphere can still mature into highly functional adults. Moreover, it is becoming increasingly clear that well-designed preschool programs can help many children overcome glaring deficits in their home environment. With appropriate therapy, say researchers, even serious disorders like dyslexia may be treatable. While inherited problems may place certain children at greater risk than others, says Dr. Harry Chugani, a pediatric neurologist at Wayne State University in Detroit, that is no excuse for ignoring the environment's power to remodel the brain. "We may not do much to change what happens before birth, but we can change what happens after a baby is born," he observes.

Strong evidence that activity changes the brain began accumulating in the 1970s. But only recently have researchers had tools powerful enough to reveal the precise mechanisms by which those changes are brought about. Neural activity triggers a biochemical cascade that reaches all the way to the nucleus of cells and the coils of DNA that encode specific genes. In fact, two of the genes affected by neural activity in embryonic fruit flies, neurobiologist Corey Goodman and his colleagues at Berkeley reported late last year, are identical to those that other studies have linked to learning and memory. How thrilling, exclaims Goodman, how intellectually satisfying that the snippets of DNA that embryos use to build their brains are the very same ones that will later allow adult organisms to process and store new information.

As researchers explore the once hidden links between brain activity and brain structure, they are beginning to construct a sturdy bridge over the chasm that previously separated genes from the environment. Experts now agree that a baby does not come into the world as a genetically preprogrammed automaton or a blank slate at the mercy of the environment, but arrives as something much more interesting. For this reason the debate that engaged countless generations of philosophers—whether nature or nurture calls the shots—no longer interests most scientists. They are much too busy chronicling the myriad ways in which genes and the environment interact. "It's

not a competition," says Dr. Stanley Greenspan, a psychiatrist at George Washington University. "It's a dance."

**THE IMPORTANCE OF GENES**

THAT DANCE BEGINS AT AROUND THE THIRD week of gestation, when a thin layer of cells

dominant partner during this phase of development, but nurture plays a vital supportive role. Changes in the environment of the womb—whether caused by maternal malnutrition, drug abuse or a viral infection—can wreck the clockwork precision of the neural assembly line. Some forms of epilepsy, mental retardation, autism and schizophrenia appear to be the results of developmental processes gone awry.

But what awes scientists who study the brain, what still stuns them, is not that things occasionally go wrong in the developing brain but that so much of the time they go right. This is all the more remarkable, says Berkeley's Shatz, as the central nervous system of an embryo is not a miniature of the adult system but more like a tadpole that gives rise to a frog. Among other things, the cells produced in the neural tube must migrate to distant locations and accurately lay down the connections that link one part of the brain to another. In addition, the embryonic brain must construct a variety of temporary structures, including the neural tube, that will, like a tadpole's tail, eventually disappear.

What biochemical magic underlies this incredible metamorphosis? The instructions programmed into the genes, of course. Scientists have recently discovered, for instance, that a gene nicknamed "sonic hedgehog" (after the popular video game Sonic the Hedgehog) determines the fate of neurons in the spinal cord and the brain. Like a strong scent carried by the wind, the protein encoded by the hedgehog gene (so called because in its absence, fruit-fly embryos sprout a coat of prickles) diffuses outward from the cells that produce it, becoming fainter and fainter. Columbia University neurobiologist Thomas Jessell has found that it takes middling concentrations of this potent morphing factor to produce a motor neuron and lower concentrations to make an interneuron (a cell that relays signals to other neurons, instead of to muscle fibers, as motor neurons do).

Scientists are also beginning to identify some of the genes that guide neurons in their long migrations. Consider the problem faced by neurons destined to become part of the cerebral cortex. Because they



**WHAT'S GOING ON** Babies can see at birth, but not in fine-grained detail. They have not yet acquired the knack of focusing both eyes on a single object or developed more sophisticated visual skills like depth perception. They also lack hand-eye coordination.

**WHAT PARENTS CAN DO** There is no need to buy high-contrast black-and-white toys to stimulate vision. But regular eye exams, starting as early as two weeks of age, can detect problems that, if left uncorrected, can cause a weak or unused eye to lose its functional connections to the brain.

**WINDOW OF LEARNING** Unless it is exercised early on, the visual system will not develop.

AGE (in years)	Birth	1	2	3	4	5	6	7	8	9	10
Visual acuity	□	□	□	□	□	□	□	□	□	□	□
Binnocular vision	□	□	□	□	□	□	□	□	□	□	□

in the developing embryo performs an origami-like trick, folding inward to give rise to a fluid-filled cylinder known as the neural tube. As cells in the neural tube proliferate at the astonishing rate of 250,000 a minute, the brain and spinal cord assemble themselves in a series of tightly choreographed steps. Nature is the

arise relatively late in the development of the mammalian brain, billions of these cells must push and shove their way through dense colonies established by earlier migrants. "It's as if the entire population of the East Coast decided to move en masse to the West Coast," marvels Yale University neuroscientist Dr. Pasko Rakic, and marched through Cleveland, Chicago and Denver to get there.

But of all the problems the growing nervous system must solve, the most daunting is posed by the wiring itself. After birth, when the number of connections explodes, each of the brain's billions of neurons will forge links to thousands of others. First they must spin out a web of wirelike fibers known as axons (which transmit signals) and dendrites (which receive them). The objective is to form a synapse, the gap-like structure over which the axon of one neuron beams a signal to the dendrites of another. Before this can happen, axons and dendrites must almost touch. And while the short, bushy dendrites don't have to travel very far, axons—the heavy-duty cables of the nervous system—must traverse distances that are the microscopic equivalent of miles.

What guides an axon on its incredible voyage is a "growth cone," a creepy, crawly sprout that looks something like an amoeba. Scientists have known about growth cones since the turn of the century. What they didn't know until recently was that growth cones come equipped with the molecular equivalent of sonar and radar. Just as instruments in a submarine or airplane scan the environment for signals, so molecules arrayed on the surface of growth cones search their surroundings for the presence of certain proteins. Some of these proteins, it turns out, are attractants that pull the growth cones toward them, while others are repellents that push them away.

### THE FIRST STIRRINGS

UP TO THIS POINT, GENES HAVE CONTROLLED the unfolding of the brain. As soon as axons make their first connections, however, the nerves begin to fire, and what they do starts to matter more and more. In

essence, say scientists, the developing nervous system has strung the equivalent of telephone trunk lines between the right neighborhoods in the right cities. Now it has to sort out which wires belong to which house, a problem that cannot be solved by genes alone for reasons that boil down to

specify more than a tiny fraction of the connections required by a fully functioning brain.

In adult mammals, for example, the axons that connect the brain's visual system arrange themselves in striking layers and columns that reflect the division between the left eye and the right. But these axons start out as scrambled as a bowl of spaghetti, according to Michael Stryker, chairman of the physiology department at the University of California at San Francisco. What sorts out the mess, scientists have established, is neural activity. In a series of experiments viewed as classics by scientists in the field, Berkeley's Shatz chemically blocked neural activity in embryonic cats. The result? The axons that connect neurons in the retina of the eye to the brain never formed the left eye-right eye geometry needed to support vision.

But no recent finding has intrigued researchers more than the results reported in October by Corey Goodman and his Berkeley colleagues. In studying a deceptively simple problem—how axons from motor neurons in the fly's central nerve cord establish connections with muscle cells in its limbs—the Berkeley researchers made an unexpected discovery. They knew there was a gene that keeps bundles of axons together as they race toward their muscle-cell targets. What they discovered was that the electrical activity produced by neurons inhibited this gene, dramatically increasing the number of connections the axons made. Even more intriguing, the signals amplified the activity of a second gene—a gene called CREB.

The discovery of the CREB amplifier, more than any other, links the developmental processes that occur before birth to those that continue long after. For the twin processes of memory and learning in adult animals, Columbia University neurophysiologist Eric Kandel has shown, rely on the CREB molecule. When Kandel blocked the activity of CREB in giant snails, their brains changed in ways that suggested that they could still learn but could remember what they learned for only a short period of time. Without CREB, it seems, snails—and by extension, more developed animals like hu-

## Wiring Feelings



**WHAT'S GOING ON** Among the first circuits the brain constructs are those that govern the emotions. Beginning around two months of age, the distress and contentment experienced by newborns start to evolve into more complex feelings: joy and sadness, envy and empathy, pride and shame.

**WHAT PARENTS CAN DO** Loving care provides a baby's brain with the right kind of emotional stimulation. Neglecting a baby can produce brain-wave patterns that dampen happy feelings. Abuse can produce heightened anxiety and abnormal stress responses.

**WINDOW OF LEARNING** Emotions develop in layers, each more complex than the last.

AGE (in years)	Birth	1	2	3	4	5	6	7	8	9	10
Stress Response		■	■	■	■	■	■	■	■	■	■
Empathy, Envy		■	■	■	■	■	■	■	■	■	■

simple arithmetic. Eventually, Berkeley's Goodman estimates, a human brain must forge quadrillions of connections. But there are only 100,000 genes in human DNA. Even though half these genes—some 50,000—appear to be dedicated to constructing and maintaining the nervous system, he observes, that's not enough to

mans—can form no long-term memories. And without long-term memories, it is hard to imagine that infant brains could ever master more than rudimentary skills. "Nurture is important," says Kandel. "But nurture works through nature."

## EXPERIENCE KICKS IN

WHEN A BABY IS BORN, IT CAN SEE and hear and smell and respond to touch, but only dimly. The brain stem, a primitive region that controls vital functions like heartbeat and breathing, has completed its wiring. Elsewhere the connections between neurons are wispy and weak. But over the first few months of life, the brain's higher centers explode with new synapses. And as dendrites and axons swell with buds and branches like trees in spring, metabolism soars. By the age of two, a child's brain contains twice as many synapses and consumes twice as much energy as the brain of a normal adult.

University of Chicago pediatric neurologist Dr. Peter Huttenlocher has chronicled this extraordinary epoch in brain development by autopsying the brains of infants and young children who have died unexpectedly. The number of synapses in one layer of the visual cortex, Huttenlocher reports, rises from around 2,500 per neuron at birth to as many as 18,000 about six months later. Other regions of the cortex score similarly spectacular increases but on slightly different schedules. And while these microscopic connections between nerve fibers continue to form throughout life, they reach their highest average densities (15,000 synapses per neuron) at around the age of two and remain at that level until the age of 10 or 11.

This profusion of connections lends the growing brain exceptional flexibility and resilience. Consider the case of 13-year-old Brandy Binder, who developed such severe epilepsy that surgeons at UCLA had to remove the entire right side of her cortex when she was six. Binder lost virtually all the control she had established over muscles on the left side of her body, the side controlled by the right side of the brain. Yet today, after years of therapy ranging from leg lifts to math and music drills, Binder is an A student at

the Holmes Middle School in Colorado Springs, Colorado. She loves music, math and art—skills usually associated with the right half of the brain. And while Binder's recuperation is not 100%—for example, she has never regained the use of her left arm—it comes close. Says UCLA pediatric neuro-

by, tiny bursts of electricity shoot through the brain, knitting neurons into circuits as well defined as those etched onto silicon chips. The results are those behavioral mileposts that never cease to delight and awe parents. Around the age of two months, for example, the motor-control centers of the brain develop to the point that infants can suddenly reach out and grab a nearby object. Around the age of four months, the cortex begins to refine the connections needed for depth perception and binocular vision. And around the age of 12 months, the speech centers of the brain are poised to produce what is perhaps the most magical moment of childhood: the first word that marks the flowering of language.

When the brain does not receive the right information—or shuts it out—the result can be devastating. Some children who display early signs of autism, for example, retreat from the world because they are hypersensitive to sensory stimulation, others because their senses are underactive and provide them with too little information. To be effective, then, says George Washington University's Greenspan, treatment must target the underlying condition, protecting some children from disorienting noises and lights, providing others with attention-grabbing stimulation. But when parents and therapists collaborate in an intensive effort to reach these abnormal brains, writes Greenspan in a new book, *The Growth of the Mind* (Addison-Wesley, 1997), three-year-olds who begin the descent into the autistic's limited universe can sometimes be snatched back.

Indeed, parents are the brain's first and most important teachers. Among other things, they appear to help babies learn by adopting the rhythmic, high-pitched speaking style known as Parentese. When speaking to babies, Stanford University psychologist Anne Fernald has found, mothers and fathers from many cultures change their speech patterns in the same peculiar ways. "They put their faces very close to the child," she reports. "They use shorter utterances, and they speak in an unusually melodious fashion." The heart rate of infants increases while listening to Parentese, even Parentese delivered in a

## Wiring Language



**WHAT'S GOING ON** Even before birth, an infant is tuning into the melody of its mother's voice. Over the next six years, its brain will set up the circuitry needed to decipher—and reproduce—the lyrics. A six-month-old can recognize the vowel sounds that are the basic building blocks of speech.

**WHAT PARENTS CAN DO** Talking to a baby a lot, researchers have found, significantly speeds up the process of learning new words. The high-pitched, singsong speech style known as Parentese helps babies connect objects with words.

**WINDOW OF LEARNING** Language skills are sharpest early on but grow throughout life.

AGE (in years)	Birth	1	2	3	4	5	6	7	8	9	10
Recognition of speech	<input type="checkbox"/>										
Vocabulary	<input type="checkbox"/>										

ngist Dr. Donald Shields: "If there's a way to compensate, the developing brain will find it."

What wires a child's brain, say neuroscientists—or rewires it after physical trauma—is repeated experience. Each time a baby tries to touch a tantalizing object or gazes intently at a face or listens to a lulla-

found, mothers and fathers from many cultures change their speech patterns in the same peculiar ways. "They put their faces very close to the child," she reports. "They use shorter utterances, and they speak in an unusually melodious fashion." The heart rate of infants increases while listening to Parentese, even Parentese delivered in a

foreign language. Moreover, Fernald says, Parentese appears to hasten the process of connecting words to the objects they denote. Twelve-month-olds, directed to "look at the ball" in Parentese, direct their eyes to the correct picture more frequently than when the instruction is delivered in normal English.

In some ways the exaggerated, vowel-rich sounds of Parentese appear to resemble the choice morsels fed to hatchlings by adult birds. The University of Washington's Patricia Kuhl and her colleagues have conditioned dozens of newborns to turn their heads when they detect the *ee* sound emitted by American parents, vs. the *eu* favored by doting Swedes. Very young babies, says Kuhl, invariably perceive slight variations in pronunciation as totally different sounds. But by the age of six months, American babies no longer react when they hear variants of *ee*, and Swedish babies have become impervious to differences in *eu*. "It's as though their brains have formed little magnets," says Kuhl, "and all the sounds in the vicinity are swept in."

**TUNED TO DANGER**

EVEN MORE FUNDAMENTAL, SAYS Dr. Bruce Perry of Baylor College of Medicine in Houston, is the role parents play in setting up the neural circuitry that helps children regulate their responses to stress. Children who are physically abused early in life, he observes, develop brains that are exquisitely tuned to danger. At the slightest threat, their hearts race, their stress hormones surge and their brains anxiously track the nonverbal cues that might signal the next attack. Because the brain develops in sequence, with more primitive structures stabilizing their connections first, early abuse is particularly damaging. Says Perry: "Experience is the chief architect of the brain." And because these early experiences of stress form a kind of template around which later brain development is organized, the changes they create are all the more pervasive.

Emotional deprivation early in life has a similar effect. For six years University of Washington psychologist Geraldine Dawson and her colleagues have monitored the brain-wave patterns of children born to

mothers who were diagnosed as suffering from depression. As infants, these children showed markedly reduced activity in the left frontal lobe, an area of the brain that serves as a center for joy and other light-hearted emotions. Even more telling, the patterns of brain activity displayed by these

brain-wave patterns, Dawson has found. What accounts for the difference appears to be the emotional tone of the exchanges between mother and child. By scrutinizing hours of videotape that show depressed mothers interacting with their babies, Dawson has attempted to identify the links between maternal behavior and children's brains. She found that mothers who were disengaged, irritable or impatient had babies with sad brains. But depressed mothers who managed to rise above their melancholy, lavishing their babies with attention and indulging in playful games, had children with brain activity of a considerably more cheerful cast.

When is it too late to repair the damage wrought by physical and emotional abuse or neglect? For a time, at least, a child's brain is extremely forgiving. If a mother snaps out of her depression before her child is a year old, Dawson has found, brain activity in the left frontal lobe quickly picks up. However, the ability to rebound declines markedly as a child grows older. Many scientists believe that in the first few years of childhood there are a number of critical or sensitive periods, or "windows," when the brain demands certain types of input in order to create or stabilize certain long-lasting structures.

For example, children who are born with a cataract will become permanently blind in that eye if the clouded lens is not promptly removed. Why? The brain's visual centers require sensory stimulus—in this case the stimulus provided by light hitting the retina of the eye—to maintain their still tentative connections. More controversially, many linguists believe that language skills unfold according to a strict, biologically defined timetable. Children, in their view, resemble certain species of birds that cannot master their song unless they hear it sung at an early age. In zebra finches the window for acquiring the appropriate song opens 25 to 30 days after hatching and shuts some 50 days later.

**WINDOWS OF OPPORTUNITY**

WITH A FEW EXCEPTIONS, THE WINDOWS OF opportunity in the human brain do not close quite so abruptly. There appears to be a series of windows for developing lan-

*Wiring Movement*



**WHAT'S GOING ON** At birth babies can move their limbs, but in a jerky, uncontrolled fashion. Over the next four years, the brain progressively refines the circuits for reaching, grabbing, sitting, crawling, walking and running.

**WHAT PARENTS CAN DO** Give babies as much freedom to explore as safety permits. Just reaching for an object helps the brain develop hand-eye coordination. As soon as children are ready for them, activities like drawing and playing a violin or piano encourage the development of fine motor skills.

**WINDOW OF LEARNING** Motor-skill development moves from gross to increasingly fine.

AGE (in years)	Birth	1	2	3	4	5	6	7	8	9	10
Basic motor skills	■	■	■	■	■	■	■	■	■	■	■
Fine motor ability				■	■	■	■	■	■	■	■
Musical fingering					■	■	■	■	■	■	■

children closely tracked the ups and downs of their mother's depression. At the age of three, children whose mothers were more severely depressed or whose depression lasted longer continued to show abnormally low readings.

Strikingly, not all the children born to depressed mothers develop these aberrant



guage. The window for acquiring syntax may close as early as five or six years of age, while the window for adding new words may never close. The ability to learn a second language is highest between birth and the age of six, then undergoes a steady and inexorable decline. Many adults still manage to learn new languages, but usually only after great struggle.

The brain's greatest growth spurt, neuroscientists have now confirmed, draws to a close around the age of 10, when the balance between synapse creation and atrophy abruptly shifts. Over the next several years, the brain will ruthlessly destroy its weakest synapses, preserving only those that have been magically transformed by experience. This magic, once again, seems to be encoded in the genes. The ephemeral hursts of electricity that travel through the brain, creating everything from visual images and pleasurable sensations to dark dreams and wild thoughts, ensure the survival of synapses by stimulating genes that promote the release of powerful growth factors and suppressing genes that encode for synapse-destroying enzymes.

By the end of adolescence, around the age of 18, the brain has declined in plasticity

but increased in power. Talents and latent tendencies that have been nurtured are ready to blossom. The experiences that drive neural activity, says Yale's Rakic, are like a sculptor's chisel or a dressmaker's shears, conjuring up form from a lump of stone or a length of cloth. The presence of extra material expands the range of possibilities, but cutting away the extraneous is what makes art. "It is the overproduction of synaptic connections followed by their loss that leads to patterns in the brain," says neuroscientist William Greenough of the University of Illinois at Urbana-Champaign. Potential for greatness may be encoded in the genes, but whether that potential is realized as a gift for mathematics, say, or a brilliant criminal mind depends on patterns etched by experience in those critical early years.

Psychiatrists and educators have long recognized the value of early experience. But their observations have until now been largely anecdotal. What's so exciting, says Matthew Melmed, executive director of Zero to Three, a nonprofit organization devoted to highlighting the importance of the first three years of life, is that modern neuroscience is providing the hard, quantifi-

able evidence that was missing earlier. "Because you can see the results under a microscope or in a PET scan," he observes, "it's become that much more convincing."

What lessons can be drawn from the new findings? Among other things, it is clear that foreign languages should be taught in elementary school, if not before. That remedial education may be more effective at the age of three or four than at nine or 10. That good, affordable day care is not a luxury or a fringe benefit for welfare mothers and working parents but essential brain food for the next generation. For while new synapses continue to form throughout life, and even adults continually refurbish their minds through reading and learning, never again will the brain be able to master new skills so readily or rebound from setbacks so easily.

Rat-a-tat-tat. Rat-a-tat-tat. Rat-a-tat-tat. Just last week, in the U.S. alone, some 77,000 newborns began the miraculous process of wiring their brains for a lifetime of learning. If parents and policymakers don't pay attention to the conditions under which this delicate process takes place, we will all suffer the consequences—starting around the year 2010. ■

# THE DAY-CARE

By JAMES COLLINS

**E**NVIRONMENT MATTERS. FOR ANYONE wondering how the latest brain research applies to the care of infants and toddlers, that is the crucial finding. Yes, proper brain development is a matter of genetics and nutrition and whether a mother-to-be drinks or smokes, but it also depends on the stimuli, as the scientists call them, that a baby receives. It depends on what the baby sees, hears and touches

and on the emotions he or she repeatedly experiences. But if environment matters, we are faced with a question: At a time when children suffer from perhaps the gravest social problems of any group in the U.S., how do we ensure that they grow up in the best environment possible?

In many ways, children are better off today than they were in previous decades. They are healthier, their families have a higher income, the level of their mother's education (the most important determinant of a child's intelligence) has risen. But 1 out of every 10 children three years old and younger lives in "extreme poverty"—at or below 50% of the federal poverty level. And the well-being of many others is threatened by such social changes as the rise of single-parent households, the uneven quality of day care, the decline of communities and, some would argue, the push to reform the welfare system.

Social policy cannot ameliorate all these conditions. A change in attitude toward parenting and marriage would do children far more good than any government program. Over the past few years, however, there has been a movement in Washington and the state cap-

itals to address the problems of children, from newborn to the age of three. Now neuroscientists, by confirming much of what social scientists had already surmised about early development, are giving that movement added momentum.

The recent concern about infants and toddlers has been inspired in part by *Starting Points*, a landmark report published by the Carnegie Corporation in 1994, which identified a "quiet crisis" in the lives of the youngest children. Hillary Clinton has begun to speak out on the importance of a child's earliest years, and several Governors have forcefully taken up the issue. The size of the programs in place is quite modest. But to their advocates they hold out promise not only



PHOTOCOPY  
PRESERVATION

# DILEMMA

Too many children today live in conditions that threaten their brain development. What can we do?

of helping children fulfill their potential but also of saving society the costs incurred when intellectually and socially impaired children grow up to be intellectually and socially impaired adults.

Government policy in any number of areas—health care, taxes, the economy, crime—touches children. But the initiative that will have the most particular and powerful effect on them is welfare reform. If, as some predict, the incomes of poor mothers are drastically reduced as a result of the new system, children will be harmed.

But let's assume that the reforms work as intended and mothers get jobs that pay them more than paupers' wages. What effect may the changes

have on childhood development?

There is some evidence that children benefit if their mothers stay home with them until they are one year old, and the welfare law allows states to exempt new mothers from work requirements for a year. But so far, states do not seem to be taking advantage of the provision. For example, in Wisconsin, which is a leader in welfare reform, mothers must start looking for work when their baby is 12 weeks old. Those who favor these reforms say a mother who has a job will be a prouder and more responsible parent, and some studies suggest that children do benefit if their mother receives earned income rather than a government check for the same amount.

If mothers are out working, however, the quality of child care provided by others will largely determine how well the children fare under the states' new plans. To care for their children, many mothers will rely on relatives and friends, some of whom will be loving and attentive and some of whom will not. Also, the strain on the day-care system is a matter of

grave concern to child-development and child-care experts. A recent study found that 40% of day-care centers for infants and toddlers gave less than the minimal standard of care. Problems ranged from safety hazards to unresponsive caregivers to a lack of toys. If a caregiver spoons food from one bowl into the mouths of half a dozen toddlers lined up in high chairs, as has been known to happen, not only is the health of the children at risk but they are surely not receiving the kind of attention that promotes healthy brain development.

"If you push more children into this system through welfare reform," says Ellen Galinsky, co-president of the Families and Work Institute, "and you are saying to these families, 'Just get any child care you can find and can pay for,' there's a real danger."

The challenge for the states is to regulate and subsidize child care in such a way



PHOTOCOPY PRESERVATION

# What States Are Doing

State-funded prekindergarten program, family centers and pilot home visits

Enhanced pre-kindergarten program; home visits available when family's first child is born

Learning-readiness program; early childhood and family-education program

State-funded preschool; early intervention program for young children with developmental disabilities

Statewide network of parent-child centers

Immunization campaign; scholarships for child-care teacher training

Prekindergarten programs for low-income children

Program for at-risk four-year-olds and their parents

 States with programs for infants and toddlers AGES BIRTH TO 3
  States with programs for preschoolers AGES 3 TO 6
  States with family-support programs for young children AGES BIRTH TO 5

Source: National Center for Children in Poverty. TIME Graphic by Steve Hart

as to increase the likelihood of good outcomes for children. This is true regardless of welfare reform, of course. Bad day-care can harm the development of any child. Research has shown that children benefit when caregivers are trained and the ratio of staff to children is high. Several states license centers accordingly, requiring a minimum amount of training and setting ratios for different age groups. Welfare mothers themselves are not necessarily the best caregivers, and it is possible that in some instances welfare reform will actually improve the care of children. But high-quality care is expensive, and states do not have adequate budgets to subsidize it.

The Federal Government and the states do have programs specifically aimed at helping the development of infants and toddlers, although as social policy they are nowhere near as sweeping as an overhaul of welfare. The most notable federal initiative is Early Head Start, which was created in 1994 when Congress reauthorized funding for Head Start, the 32-year-old program that brings three-, four- and five-year-olds into classroom settings in part to prepare them for school. May Jo Bane was working at the time at the Department of Health and Human Services (she quit over welfare reform), and she led a task force charged with finding ways to improve Head Start. Child-development experts, she says, "pointed the group

toward the importance of interventions earlier than age four."

In 1996, the budget for Early Head Start was \$146 million, and it awarded grants to 143 sites. The money is used to provide a variety of services to poor families with children under the age of four and to poor pregnant women. How the funds are spent is determined to some extent by the communities that receive them. Some communities are experimenting with family interventions that include grandparents; others are trying to address the special health needs of newborns or to provide extra help to teen parents with a history of drug abuse.

## SMART START, HEALTHY START

NORTH CAROLINA HAS INSTITUTED A FLEXIBLE program called Smart Start. Under it, parents, teachers, doctors and nurses, child-care providers, ministers and businesspeople form partnerships at the county level that set goals for the education and health care of children under six. These partnerships then administer private and public funds as they see fit. In one county, for example, administrators chose to give subsidies to new parents so that mothers could stay home from work during a baby's first year. More than half of North Carolina's 100 counties are participating in the program, at a cost to the state of \$68 million.

Governor James Hunt hopes that by adding hard science to his arguments, he will strengthen his position when battling for increases in Smart Start funding. "This is revolutionary information," he says of studies demonstrating the sensitivity of babies' brains in the first years of life. "Now that we can measure it and prove it, and if it can be made known widely so people understand this, then they'll understand why their schools aren't going to work for them, their technical training isn't going to work, other things we do later on aren't going to work fully unless we do this part right and do this at the appropriate time."

Some states have found that a very simple but powerful way to help parents is simply to coordinate the various services that they already offer. In West Virginia, for example, single sites that provide more than a dozen services have been established in seven communities. "Parents typically get a runaround and may only get a long list of phone numbers," says Kimberly Veras, chairwoman of the state's Early Childhood Implementation Commission. "If they're really motivated, they can get information. But now we're rolling out the red carpet to parents. They only have to tell their story once."

As developmental experts often point out, child rearing is not an innate skill, and several states are trying to help educate parents about parenting. Home visits by

social workers or nurses are among the most promising methods. In Oregon such visits occur under a program called Healthy Start. Sandra Daus, 22, a single mother of an 18-month-old girl, recalls the help she received from Mellissa Magill. "She encouraged me to read books, a lot of books," says Daus. "I thought when Sydney got older, maybe two or three, we'd start reading. Mellissa said no, start reading to her now. Sydney was a month old."

In Vermont someone from the state's Success by Six program first visits a home within two weeks of a baby's birth. "That gets us in the door at age zero instead of age five, so we can assess what families need," Governor Howard Dean points out. Visits may continue for up to three years. "It is so inexpensive," says Dean, "to take care of children relative to the other things we do, such as build jails and put up expensive social-service networks for runaway youth."

With the new scientific evidence to bolster it, the logic for spending money on early-childhood development programs may seem incontrovertible. But not everyone is convinced. The question of what approaches have worked and will work has not been resolved. Research supports the long-term benefits of older programs that are used as models today, but those studies are criticized because they look at very small samples of children who were given special attention and care.

"We have seen over and over and over that even if you can produce good results with small programs, when you expand to a national level, the effect often disappears," says Ronald Huskins, a top Republican staff member of the House Ways and Means Committee. "That is the case with Head Start. We still do not have evidence that Head Start produces any long-term effects."

Social science, however, is an imperfect discipline. Referring to programs for young children, Isabel Sawhill, a scholar at the Urban Institute and former official in the Clinton Administration, has written, "The evidence is always mixed. We simply do not know whether they work. In these cases, one must weigh the risk of doing something and having it not work against the risk of doing nothing and missing an opportunity to improve lives. It can be just as costly to not fund a potentially successful program as it is to fund a potentially unsuccessful one."

Right now, the total public expenditure on early-childhood development is tiny. Given the potential rewards, how risky is a bigger investment? —*Reported by Ann Blackman/Washington, Wendy Cole/Chicago, Rita Healy/Denver, Mellissa Luttke/Cambridge and Lisa N. Towle/Raleigh*



ROBERT HEINER/ILLU FOR TIME

## HOLLYWOOD GOES GAGA

Whoopi, Robin, Rob and friends have found a new cause

**C**ELEBRITIES WHO PUBLICLY EMBRACE worthy causes sometimes seem to be auditioning less for *Sense and Sensibility* than for *Chueless*. Stars have dangled from bridges to protest logging practices, hawked clothes made in sweatshops while promoting moral values and slugged pesky photographers even as they were begging for kindness to animals. A recent surge of show-biz interest in children, however, seems to be as well aimed as it is high profile. More than half a dozen organizations founded or funded by Hollywood celebrities are zeroing in on kids' issues. And early childhood development is one of their top concerns.

In April, ABC-TV will air a prime-time special on brain development, directed by Rob Reiner and featuring such A-list stars as Tom Hanks and Robin Williams. It's the opening shot of an elaborate multimedia blitz that is coordinated by Families and Work Institute, based in New York City, and includes public-service announcements, magazine specials, home videos, online sites and CD-ROMs. "I couldn't create a big, federally funded program," says Reiner. "But I certainly can put on a show to raise awareness about how the first three years critically

impact the way a child later deals with society."

Reiner says he became interested in baby brain activity three years ago during his own analysis. Now he is taking his case directly to the top. He has been urging President Clinton to host a Washington summit on the subject, and last month sat beside Hillary Clinton at a White House arts-award dinner. The next day she gave a speech that included a long section on early-childhood learning. "It's an important issue for the President to get on," says Reiner. "You talk about trying to fix the welfare situation. This is a way to do it."

Reiner is one of dozens of celebrities who have joined Hollywood's latest children's crusade. Whoopi Goldberg, Barbra Streisand, Whitney Houston and Henry Winkler have all donated their names, their time and even their money to

various kids' causes. Not only did Steven Spielberg and his wife Kate Capshaw co-found the Children's Action Network, which makes educational films and sponsors immunization campaigns, but Spielberg also chairs the Starbright Foundation, an innovative charity group that deploys entertainment technologies to help ease the suffering of sick children.

Hollywood's interest in a cause often means Big Money. A benefit movie premiere can raise up to \$350,000 in a single night. Still, as Starbright managing director Chris Carvey notes, "Our board members give more than their money and Rolodexes. They relish the hands-on experience of dealing with children in hospitals."

But not too hands on. Celebrity sightings at clinics and youth shelters are, for the most part, rare. "We try to provide children with a calm, soothing place, not chaotic, star-studded events," says Leslie Johnson of the Westside Children's Center in Culver City, California. "Besides, children under three have different ideas about celebrity. When Barney came to our Christmas party, Jim Carrey could have been standing there and no one would have noticed him."

—*By Jeffrey Reiner/Los Angeles*

Hillary Rodham Clinton

# Comfort and Joy

The First Mom suggests reading as an easy way to help a baby's brain grow

**T**HE NIGHT AFTER THE INAUGURAL, BILL AND I GATHERED with our family in the solarium on the third floor of the White House. After dinner our toddler nephews Tyler and Zachary climbed up on the couch with their Uncle Bill to hear him read a story. They accompanied him with words, sounds, pointed fingers and a few tussles over who would hold the book. As I watched them, I thought of all the times Bill and I used to take turns reading stories to Chelsea. Every night one of us (and occasionally both) would stretch out on her bed, hold her in our arms, and either read or make up new tales about imaginary characters who embarked on improbable but breathtaking adventures.

Bill and I did not know about brain cells or synapses or the newest discoveries in neuroscience. Reading to Chelsea became a daily ritual because it's what our own parents and grandparents had done with us, and because we wanted to spend quiet time with her every day. Bill's grandmother thought that reading to him would help him develop a strong vocabulary and the language skills he would need later on in school. My mother and father placed a similar premium on reading, and to this day I remember the feelings of security and comfort that I felt sitting in my grandfather's lap when he read stories to my brothers and me.

Today, thanks to advances in brain research, we know that reading with a child has intellectual, emotional and physical benefits that can enhance the child's development. The intimacy of sharing books and stories strengthens the emotional bonds between a parent and child, helps a child learn words and concepts, and actually stimulates the growth of a baby's brain.

As I discussed in my book, *It Takes a Village*, scientists have discovered that children whose parents read and talk to them during the first three years of life create a stronger foundation for future reading success. In other words, what our parents and grandparents knew instinctively is now backed up by hard scientific evidence.

That's why doctors and nurses are starting to prescribe reading to babies along with regular checkups and vaccinations. Recently I went to Georgetown University's Medical Center with Maurice Sendak, the renowned children's author and illustrator. His book *Where the Wild Things Are* was one of Chelsea's—and Bill's—favorites. Mr. Sendak read the story to children, and I announced, along with representatives of the American Academy of Pediatrics, the American Booksellers Associ-

ation and the American Library Association, a national campaign to put books in the hands of parents who bring their young children to the doctor, and to get doctors to prescribe daily reading. My husband and I will be discussing this and other activities to follow up on the latest findings about the brain at a White House conference in the spring.

It's important that we take to heart what the neuroscientists are telling us—without losing the heart of the reading experience. In today's high-tech world of E-mail and microchips, it is easy to forget the importance of human connections in our daily activities. Technology has brought many welcome conveniences to our lives. But it has the potential to create feelings of distance, detachment and isolation among us.

Reading to a child while touching, hugging and holding him or her can be a wonderful antidote to the im-

personal tendencies of the information age—for both the adult and the child. While critical to building brains, reading is equally important to building trusting and close relationships. That's why many of us remember the warm embrace or the comfortable lap that cradled us when we read books as children. And that's why reading should not be viewed solely as an intellectual proposition, particularly in the era in which we now live.

If Americans take away only one lesson from these

exciting scientific discoveries, I hope it's that reading to children is easy, affordable and feasible for parents no matter what their level of education or economic station in life. Children's books are available for free at public libraries in every community and can be found at reasonable prices in many bookstores. Doctors, librarians, teachers, book publishers, business leaders and the news media can help make books available to families and educate parents about the vital role that reading plays in our children's lives.

It isn't very often that we have before us such a simple, inexpensive and pleasurable way to improve our children's health and development and raise their prospects for a brighter future. Whether you lie down together on the rug, sit together in an old rocking chair or cuddle on your child's bed the way Bill and I used to with Chelsea, there is no better way to spend time than reading to your child.

And now we also know that there are few better ways to help your baby's brain grow. ■



Mrs. Clinton with her daughter in the crucial first three years

PHOTOCOPY  
PRESERVATION

THE WHITE HOUSE

WASHINGTON

April 22, 1997

MEMORANDUM TO INTERESTED PARTIES

FROM: MIKE McCURRY *MM*

SUBJECT: Early Childhood Conference

Listed below please find the print, television and radio press outreach conducted by the Office of Media Affairs surrounding the White House Conference on Early Childhood Development. Additionally, we assigned cabinet members specific media markets to contact about their involvement in the conference. We would particularly like to thank Kris Balderston and Cabinet Affairs for their assistance. The satellite conferences they coordinated with regional administrators produced outstanding regional coverage. Attached please find news clips and a report detailing satellite hits resulting from the conference. Thank you.

Print

\* Conference notification and information was provided to more than 400 reporters across the country and 240 specialty publications, including African American, Hispanic, religious, education press and women's magazines. Pitched stories with conference participants, satellite sites, and supporters of children's health care plan to these regional and specialty press reporters.

\* Mailing to top 250 editorial boards in addition to specialty publications across the country.

\* Expanded pool opportunities on site to ensure that at least 50 reporters, representing more than 75 media outlets nationwide, had access to conference coverage.

\* Stories have resulted so far in the following publications or news services: Knight Ridder, Newhouse, New York Times, USA Today, Washington Times, Washington Post, St. Petersburg Times, Richmond Times Dispatch, Raleigh News and Observer, Boston Globe, and Los Angeles Times. In addition, stories are expected in the following magazines: Parents, Redbook, Newsweek, and Better Homes and Gardens.

Radio

\* Pitched conference panelists, cabinet secretaries and Administration officials on 10 nationally syndicated shows and to more than 40 stations in media markets across the country.

\* Coordinated interviews on WCBS (New York), American Urban Radio Network, National Public Radio, Children's Broadcasting Corporation, KCBS and KGO (San Francisco), KOMO (Seattle), KABC (Los Angeles), WBUR, WBZ (Boston), WBBM (Chicago), WJR (Detroit), as

well as on nationally syndicated shows including: Working Mom on the Run, Two Chicks on the Radio, Working Women and Building A World Fit for Children.

### Television

\* Event fed via satellite to more than 90 downlink locations across the country. Stories aired on more than 29 stations in 26 markets across the country from our satellite feed alone. This is in addition to network affiliate stories which also aired nationwide.

\* Pitched conference, provided advance information and satellite coordinates to stations in all markets with a downlink location as well as those near the home of a conference participant.

\* Contacted D.C. bureaus with conference information and interview opportunities. Coordinated two on site interviews with conference participants and audience members and provided advance information for news planning.

\* Stories aired on network morning shows, Lifetime Television, CNN, NBC, MSNBC, ABC, CBS, and Nightline among others.

Child's play is serious business. Astonishing studies of the way infants' brains develop present news both hopeful and horrible: Children's major mental and emotional growth may peak just as society takes an interest.

# PLUGGING INTO BABY'S BRAINPOWER



By ELLEN DEBENPORT  
Times Staff Writer

**T**hat unocused look in the eyes of a newborn baby reflects a significant scientific fact: Her brain isn't hooked up yet.

By the time she's 3, her brain will have wired its own neurons—about 100 billion brain cells—into pathways that will govern how she sees, hears, speaks and reacts for the rest of her life.

New research on the development of babies' brains shows the wiring depends not just on genes but on experience. The way a baby is taught and treated as a very young child may largely establish her intelligence and personality.

It's a heavy responsibility for parents, and the new information has implications for all society.

Are young children getting all the nurturing and stimulation they need? Are they being read to or hugged enough? What of children in day care? Should government try to make sure children turn out right?

If you haven't heard yet about the new science on babies' brains, just wait.

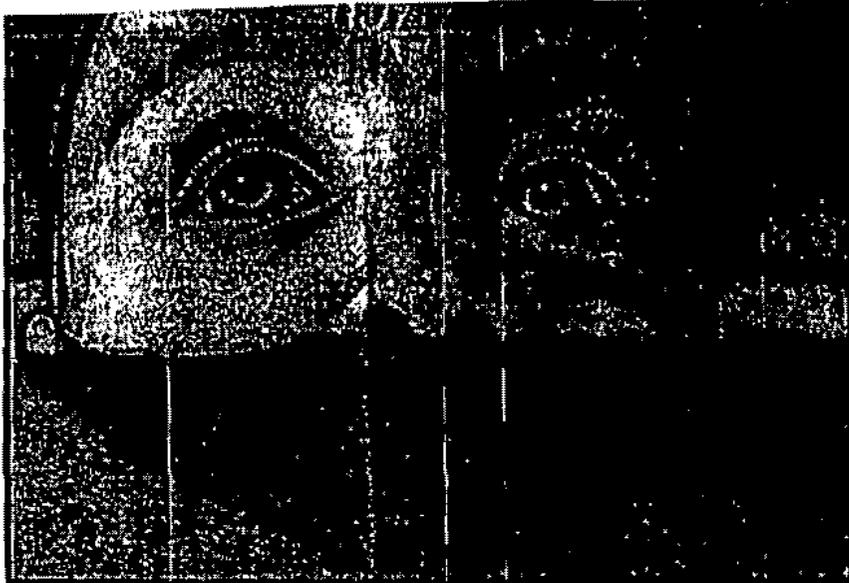


Photo by ROBERT NEWSON

President and Mrs. Clinton photo Washington summit Thursday called the White House Conference on Early Childhood Development and Learning: What New Research on the Brain Tells Us About Our Youngest Children.

A publicity blitz is planned for late April, called the Early Childhood Public Engagement Campaign. It is the brainchild of director Rob Fein, who says his interest in young children stems from what he learned in psychoanalysis about his own early years.

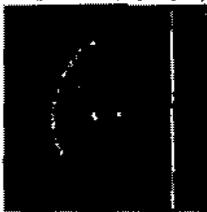
Fein's one-hour show April 23 on ABC, called *I Am Your Child*, will be hosted by Tom Hanks and feature Robin Williams, Billy Crystal, former Gen. Colin Powell, Arnold Schwarzenegger, Rosie O'Donnell, Charlton Heston and others.

Nesovest has published a special edition to coincide with the show, and CBS *Good Morning America* plans six special reports. NBC's *Tuesday* show is airing reports this week.

Gov. Lawton Chiles, long an advocate for babies and young children, is disseminating brain research to legislators, agency heads and business people. An education specialist from Florida State University has traveled the state to spread the word.

Please see BRAIN 40

### 5 DAYS OLD



The brain of a newborn governs only the most basic motor functions. The dark colors indicate little activity in a brain that has not yet been "wired." The drawing below shows the electrical connections being made in the brain — relatively few as the baby eats, sleeps and cries.

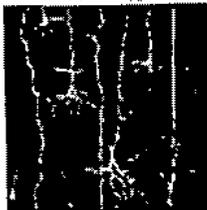
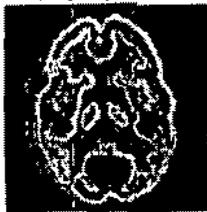
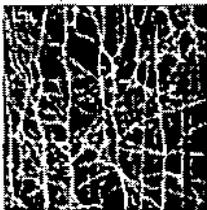


Photo courtesy Children's Hospital of Philadelphia, University of Pennsylvania

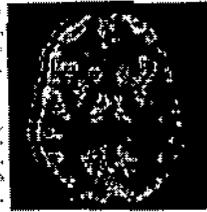
### 6 YEARS OLD



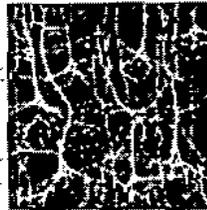
By age 6, the brain is a firestorm of activity. Red and yellow indicate the busiest brain, and the brain cells are furiously expanding the pathways among cells, shown below. The human brain is never more active than from ages 2 to 9. As children experience everything for the first time, they develop more brain pathways than they will eventually need.



### ADULT



The adult has a more mellow brain, reflected by cooler colors, which has lost some of the brain-cell connections made in childhood. If neural pathways aren't used, they die. Others are established by repeated activity. The adult brain is literally set in its ways.



*"At the time a baby is born, the brain is remarkably immature. Some of the cells — the neurons, the actual brain cells — are still moving into their proper positions. And they still have to hook up."*

THE MIND RECHMAN

# Brain

to any interested group. Some legislators want to use the new science to promote early childhood programs.

"It's the things that intuitively we've known," Chiles said. "We've known that kids that had that kind of nurturing always did well. What we didn't have was a day-to-day measurement, literally a snapshot of babies' brains."

Using something called a PET-scan, or Positron Emission Tomography, scientists can now watch the activity in a baby's brain as it develops language or emotions. They can see what difference a parent's voice or touch makes.

Hearing music, for instance, seems to develop math ability. Chiles is buying music CDs for his grandchildren. Researchers say Mozart works especially well.

"If you took all your kids from zero to 5 and did this — that is, applied all the benefits of brain research — in 10 or 15 years, you'd change the world," Chiles said.

## The science

The results of the brain research will come as no surprise to any good parent or grandparent: Babies need to be read to, sung to, cuddled and played with from the day they are born.

Now we know why. The brain isn't complete at birth. It governs breathing and heartbeats, but the finer points — eyesight, hearing, language, emotions — are a mass of potential.

"At the time a baby is born, the brain is remarkably immature," said Dr. Wil Blechman, a Miami doctor who is now a consultant to the state. "Some of the cells — the neurons, the actual brain cells — are still moving into their proper positions. And they still have to hook up."

It works like this: Neurons are the basic brain cells. The gap between them is a synapse. They connect when an axon at the end of one cell fires chemicals into a dendrite on the other.

The axons and dendrites grow instantly as they are needed in a child's blossoming brain, mapping neural pathways as the baby responds to sight, sound, touch and play.

One child's brain may be mapped for English, another for Chinese, depending on what the baby hears in the first six months. One brain may develop a capacity for joy and another be programmed for fear, depending on the baby's home life.

"You will literally have a

single cell may connect with at least 15,000 other cells. By 8 months, a baby's brain has 1,000-trillion such connections.

He will keep the pathways he uses continually; the others will wither. For instance, by age 1, a baby's brain will no longer recognize sounds that are not in its native language. But first, the brain tries out everything, making a child's brain busier than an adult's.

Parents might get a little frustrated reading *Good Night, Moon* for the 40th time, but when that child is pointing at that mouse over and over again, they're learning," said Michael Levine of the Carnegie Corporation of New York, which promotes early childhood research. His kids are 9, 6 and 2.

The brain opens windows of opportunity, during which it must be wired or the chance is lost. The length of time varies. For example, if a child is born with cataracts that aren't removed until age 2, he will never be able to see, even through a normal eye. The brain is blind, the visual connections never established.

A child with chronic ear infections the first year may miss out on learning certain sounds, which could lead to speech problems later.

Scientists at Baylor College of Medicine found that children who aren't played with and touched develop brains 20 to 30 percent smaller than normal. Even rats develop more complex brains if they are given toys, compared to rats in plain cages.

Some problems can be remediated, but that is expensive and difficult. This helps explain why the gains made from early childhood programs such as Head Start, aimed at 3- and 4-year-olds, often fade over time. The programs start too late. The children's brains are already wired.

"It's a little frightening to me, this brain research," said Susan Muenchow, director of the Florida Children's Forum. "It's an enormous responsibility to have a child, and I'm not sure that many of us have realized quite what an awesome responsibility it is."

But alarming parents is exactly what First Lady Hillary Clinton said she hopes to avoid.

"One of my greatest fears about this research concerning the brain is that parents who are doing their best to raise children, often under difficult circumstances, will feel even more guilt and anxiety because they aren't sure they are

doing everything that the research says them to do," she said.

Speaking this month to the Society for Research in Child Development, Mrs. Clinton said one man she knows read a magazine article about the way synapses develop in young children, and vowed to read two books to his little boy every night. It was awful.

"He raced through the material without ever giving the child a chance to look at the pictures or ask questions about the story," she said. "And he couldn't understand why his son was not enjoying this experience at all."

Parents can relax a little. Not everything in the brain is set by age 3. A child's values develop until age 10 or so, governing the way she will relate to people or control her emotions. The frontal lobes, the seat of understanding, develop until at least 16. And new learning is always possible, as retirees know.

So Mom occasionally can skip a bedtime story. It's the child's repeated experience that lodges permanently in the brain.

That makes the consequences of abuse and neglect all the more tragic. Behavioral scientists have known for a long time that abuse leaves psychological scars. Now research shows an abused child's brain is literally warped.

"This really has implications when we hear about teenagers that are lashing out, killing people. Senseless, random killing may have its roots in the fact that the child's brain didn't develop properly," said Muenchow.

## The policies

Brain research has been going on for years, but it reached critical mass in 1994 when the Carnegie Corp. of New York compiled various studies and produced a landmark report called *Starting Points*.

Carnegie combined scientific findings with some disheartening demographics. The years between the hospital nursery and preschool are the most crucial for children, the report showed, and too many are at risk.

■ One-quarter of families with children under 3 live in poverty.

■ Nearly a quarter of all pregnant women in America receive no prenatal care.

■ Half of all mothers return to the work force within a year of a baby's birth, and studies show only 12 to 14 percent of children are in day care that promotes their growth and learning. At least as many are in harmful settings.

■ More than 8-million children under 3 are in the care of other adults while their parents work.

■ One in three victims of physical abuse is a baby younger than one year.

■ Only half of infants and toddlers are routinely read to by their parents.

No one is suggesting that mothers leave the work force and go home to the kids. The government, in fact, is sending welfare mothers into jobs and promising to pay for day care.

So day care is key, and brain research underscores the need to improve it, said Gail Robertson, executive director of the Pinellas County License Board for Children's Centers and Family Day Care Homes.

"Now we have a lot of new information about (children's) development, particularly in their first three years," said Robertson.

"We know more about the windows of opportunity and more about the importance of the adult-child interaction and how important it is for those caregivers to be trained and educated in early child development."

Florida has higher day-care standards than many states. A recent study by the Families and Work Institute in New York found the changes in children's development "extremely impressive" since Florida increased the ratio of day-care staff to children.

The number of hours a child under 3 spends in day care almost doesn't matter, as long as the quality is good, according to a study this month from the National Institute of Child Health and Human Development. If the teachers interact and respond to the child, the child's language and cognitive skills will develop just as well as those of the children who stayed home with a parent.

Eventually, day care for infants and toddlers may be looked upon as the start of school.

"From an investment perspective, if we think of education beginning with kindergarten, we're starting much too late," said Dorothy Routh, director of the Center for Educational Enhancement and Development at FSU.

"The other irony of this," said Jack Levine of the Florida Center for Children and Youth, "is that one-third of education dollars are remedial, trying to patch up the problems that could have and should have been averted with a better neonatal and early childhood experience."

Chiles has always argued that money spent on the youngest children will pay many later on special education, welfare and prisons.

"It is so hopeful," Chiles said of the new findings. "It hasn't been long we had the argument whether it's an environment or whether it's genetic. Good scientists came down on the side that this is all genetics, you can't do anything with these kids, they're not going to make it."

"Now you see literally, thank goodness, almost regardless of what your parents were, you get a shot," he said. "When you come in, you've got 1,000-trillion (synapses), just like anybody else does. What that says, if you want to build a community, build a neighborhood, you take care of your kids."

## LEVEL 2 - 4 OF 54 STORIES

Copyright 1997 The Atlanta Constitution  
The Atlanta Journal and Constitution

April 18, 1997, Friday, ALL EDITIONS

SECTION: FEATURES; Pg. 05D

LENGTH: 525 words

HEADLINE: Singing, talking to new baby aids development, experts say

BYLINE: Julia Malone; WASHINGTON BUREAU

BODY:

Washington ---Parents should sing and talk to even the youngest infants, because the verbal stimulation is crucial to how well a child develops thinking and language skills later, a panel of experts urged Thursday at the White House.

"At first glance, it may seem odd to hold a conference here at the White House devoted to talking about baby talk," first lady Hillary Rodham Clinton said as she and President Clinton opened the conference on early childhood development. "But that discussion has never been more important."

Mrs. Clinton said experts have confirmed what many parents have long felt ---that "the song a father sings to his child in the morning, or a story that a mother reads to her child before bed, help lay the foundation for a child's life and, in turn, for our nation's future."

The president added that new information confirming the impact of early child-rearing practices is "absolutely stunning." He announced a modest federal effort, a request that the Department of Defense, whose extensive child care system has been praised by experts, offer its expertise to improve civilian child care centers.

Mrs. Clinton, who returned to her law practice several months after having her only child, Chelsea, said it is time to confront directly the question of whether it's better for a mother to stay at home.

"Some people argue that what the research really tells us is that women with very young children should not work outside the home, period," she said.

Dr. Deborah Phillips, a child care expert with the National Research Council, responded that families "need choices." Studies show that "children can thrive from high quality child care," she said.

The panel of experts flanking the Clintons painted a dark picture of the state of childhood in America.

"Our nation's infants and children are in trouble," said Dr. David A. Hamburg, president of the Carnegie Corp. of New York. He cited high infant mortality, low-birthweight babies, and a much higher percentage of children born to adolescent mothers than in other industrialized countries.



LEXIS·NEXIS<sup>™</sup>

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS<sup>™</sup>

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS<sup>™</sup>

Ⓜ A member of the Reed Elsevier plc group

Even so, the conference focused on children's potential, based on recent research on the first few months of a child's life.

Babies are smarter, more curious and more eager than earlier believed, said Dr. Donald J. Cohen, director of the Yale Child Study Center. "The minds of infants are active from the time that they are born," he said, adding that they remember incidents from an early age and lay down patterns that will determine their future paths.

A survey of more than 1,000 parents released at the conference indicated that many parents did not realize how much their babies were taking in. The poll found that 73 percent said they did not believe a baby could communicate much until learning to speak a few words.

Speech specialist Dr. Patricia K. Kuhl of the University of Washington provided academic backing for holding your baby and cooing softly in gibberish. Babies respond to "mother-ese" and "parent-ese," whose melodic sounds actually provide a tutorial in the sounds that make up language.

"They are listening," she said.

**GRAPHIC: Chart: TAKING THOSE FIRST STEPS**

Dr. William Staso, an expert in neurological development, suggests that different kinds of stimulation should be emphasized at different ages. At all stages, parental interaction and a conversational dialogue with the child are important. Here are some examples:

**FIRST MONTH:** A low level of stimulation reduces stress and increases the infant's wakefulness and alertness. The brain essentially shuts down the system when there is overstimulation from competing sources. When talking to an infant, for example, filter out distracting noises, like a radio.

**MONTHS 1 TO 3:** The brain starts to discriminate among acoustic patterns of language, like intonation, lilt and pitch. Speaking to the infant, especially in an animated voice, aids this process.

**MONTHS 3 TO 5:** Infants rely primarily on vision to acquire information about the world. Make available increasingly complex designs that correspond to real objects in the baby's environment; motion also attracts attention. A large picture of a fork, moved across the field of vision, would offer more stimulation than just an actual fork.

**MONTHS 6 TO 7:** Infants become alert to relationships such as cause and effect, the location of objects and the function of objects. Demonstrate and talk about situations like how the turning of a doorknob leads to the opening of a door. **MONTHS 7 TO 8:** The brain is oriented to make associations between sounds and some meaningful activity or object. For example, parents can emphasize in conversation that the sound of water running in the bathroom signals an impending bath, or that a doorbell means a visitor.

**MONTHS 9 TO 12:** Learning adds up to a new level of awareness of the environment and increased interest in exploration; sensory and motor skills coordinate in a more mature fashion. This is the time to let the child turn on a faucet or a light switch, under supervision. ---New York Times

LOAD-DATE: April 19, 1997



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

## LEVEL 2 - 8 OF 54 STORIES

Copyright 1997 The Houston Chronicle Publishing Company  
The Houston Chronicle

April 18, 1997, Friday, 3 STAR Edition

SECTION: a; Pg. 4

LENGTH: 642 words

HEADLINE: Clintons highlight child development;  
Conference promotes early interaction

BYLINE: NANCY MATHIS, Houston Chronicle Washington Bureau; Staff

DATELINE: WASHINGTON

BODY:

WASHINGTON - All the White House talk Thursday was baby talk.

President Clinton and Hillary Rodham Clinton hosted the all-day White House Conference on Early Childhood Development to highlight the importance of nurturing infants and toddlers.

"At first glance, it may seem odd to hold a conference here at the White House devoted to talking about baby talk," said Hillary Clinton, the driving force behind the seminar.

"But that discussion has never been more important, because science ... has now confirmed what many parents have instinctively known all along: that the song a father sings to his child in the morning or a story that a mother reads to her child before bed help lay the foundation for a child's life and, in turn, for our nation's future," she said.

The symposium, with experts in the child development field, was beamed to nearly 100 sites in 37 states to publicize to parents and child care workers the latest science on brain development of children and their learning habits.

New research indicates a critical time, from birth through age 3, in which nurturing is important to brain development. It also has found that the brain structure continues developing until age 15.

"No matter how young, a child does understand a gentle touch or a smile or a loving voice," Clinton said. "Babies understand more than we have understood about them. Now we can begin to close the gap and to make sure that all children in this country do have that chance to live up to the fullest of their God-given potential."



LEXIS·NEXIS™

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS™

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS™

Ⓜ A member of the Reed Elsevier plc group

The Houston Chronicle, April 18, 1997

Hillary Clinton said she hoped the seminar "will get across the revolutionary idea that the activities that are the easiest, cheapest and most fun to do with your child are also the best for his or her development: singing, playing games, reading, storytelling, just talking and listening."

Experts maintain that such activities are crucial in the early months of a baby's life.

"When we speak to our children something is happening. We are bringing about changes in the brain that will allow them to participate in the communications game," said Patricia Kuhl, director of the University of Washington's speech and hearing sciences department. "Infants are born to learn. Our role is to be good partners in this learning process."

But the president and first lady also heard experts criticize the White House's embrace of the new welfare reform law.

The law requires welfare recipients, mostly mothers, to go to work within two years of receiving benefits and places a lifetime cap of five years on benefits. Critics contend it will push more children into poverty.

Dr. Terry Brazelton of Harvard Medical School, told the president, "In welfare reform, we turned the wrong way. We should have looked at what we were going to do with children before we pushed women out into the workplace."

The president, who opened the session, said the welfare reform bill will give states a chance to put extra funds into child care. He said the new law "gives all of you who care about child care a year or two to make strenuous efforts, state by state, to create a more comprehensive, quality system of child care than we have ever had before."

Clinton said his administration also wants to expand health care coverage to children who are not now covered.

He said his budget would extend coverage to an additional 5 million children by the year 2000.

The president announced he was ordering the Defense Department to share information with states and corporations on how it operates its successful child care centers.

He also announced the Justice Department will begin a new initiative called Safe Start that will train police, prosecutors and others in child development so they can handle situations involving youngsters.

GRAPHIC: Photo: President Clinton pauses in the White House East Room on Thursday while presiding over a conference on childhood development.; Associated Press



LEXIS·NEXIS<sup>™</sup>

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS<sup>™</sup>

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS<sup>™</sup>

Ⓜ A member of the Reed Elsevier plc group

LEVEL 2 - 9 OF 54 STORIES

Copyright 1997 The Kansas City Star Co.  
THE KANSAS CITY STAR

April 18, 1997 Friday METROPOLITAN EDITION

SECTION: METROPOLITAN; Pg. C3

LENGTH: 247 words

HEADLINE: Clinton wants greater effort on child care.

BYLINE: DONALD BRADLEY, Staff Writer

BODY:

Saying that new scientific research has made a child's brain the "new frontier," President Clinton on Thursday renewed his call for a greater public investment in early childhood development.

The research runs contrary to old notions about when a child is able to learn. Scientists now contend that infants as young as three weeks begin to hear voices, recognize faces and distinguish colors.

Each sight and sound sends millions of nerve cells scrambling to establish a "brain's circuitry." The nurturing that a child receives during this time helps mold personality and lays the foundation for education.

The president made the comments during "The White House Conference on Early Childhood Development and Learning: What the Newest Research on the Brain Tells Us About Our Youngest Children."

The conference was linked by satellite from Washington to more than 100 sites around the country, including the University of Missouri-Kansas City where about 300 people had gathered.

Clinton used the event to direct the U.S. Navy, whose child-care system is highly praised, to collaborate with the civilian child-care industry to develop new strategies.

He also called for health coverage for all of America's children and for an expansion of Early Head Start, a program to address the developmental needs of children under age 4.

LOAD-DATE: April 18, 1997



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

LEVEL 2 - 10 OF 54 STORIES

Copyright 1997 The Kansas City Star Co.  
THE KANSAS CITY STAR

April 18, 1997 Friday METROPOLITAN EDITION

SECTION: OPINION; Pg. C7; ASSISTANT EDITORIAL PAGE EDITOR

LENGTH: 817 words

HEADLINE: Early childhood education has big payoffs

BYLINE: LAURA SCOTT, Assistant Editorial Page Editor

BODY:

Children's advocates have told us for years that a child's experiences in the first years of life are more critical to his ability to learn than what happens in the first grades.

Parents who have routinely enrolled their children in pre-school have understood this. Ditto for working parents who have searched - often with much difficulty - until they found quality child care.

Even if it cost them more, they wanted the enrichment and age-appropriate learning found in those centers and family homes that offer quality programs.

But the political leaders who determine the policies of teacher certification, licensure, health and safety requirements, curriculum, and who appropriate the financial support for child care programs have been slow at getting the connection between child care and learning. Missouri, for example still does not require unlicensed child care centers to have any curriculum at all.

Even the great increase in working mothers that has occurred in the last two decades has not brought a corresponding increase in the number of or quality of child care slots. And, while middle-class parents have had extremely limited choices for child care, the working poor largely has had no choices at all.

Most belatedly, attitudes about child care and the education of pre-schoolers are finally beginning to change. National news articles are reporting on the capacity of the brain to learn in the earliest years of life. President Clinton hosted this week a White House Conference on Early Childhood Development and Learning.

Ironically, welfare reform has spawned much of this critical new look at the state of early childhood programs. More and more people are realizing that society has to answer not only the question of what to do with the children of people who are moving from welfare to work. It also has to find ways to make sure that care is good.

Missouri has been a leader (Yes! Missouri!) in emphasizing the



LEXIS-NEXIS  
A member of the Reed Elsevier plc group



LEXIS-NEXIS  
A member of the Reed Elsevier plc group



LEXIS-NEXIS  
A member of the Reed Elsevier plc group

THE KANSAS CITY STAR, April 18, 1997, Friday

importance of early childhood education reform, thanks largely to Gov. Mel Carnahan and advocacy by pro-child organizations throughout the state, particularly in Kansas City.

Carnahan wisely has recognized the importance of the enrichment experiences of first years of a child's life as they affect learning in later years.

The governor's latest initiative in this regard calls for the partnership of public schools with child care providers to create positive learning experiences for children before they enter elementary school. He also has created a state commission on early childhood education.

Before naysayers try to dismiss these ideas as liberal thinking of Democratic leaders Clinton and Carnahan, it might be well to remember that Missouri led the nation in one other farsighted approach to early childhood education. That program was Parents as Teachers, widely recognized and heralded for the impact that it has on children in their earliest months and years. And the governor who pushed that is a Republican, Kit Bond, now a U.S. senator still known for his work in this area.

Carnahan's proposal to mesh good child care with school-based programs is likely to succeed on a pilot basis because two top-notch administrators, Gary Stangler with the Department of Social Services and Robert Bartman with Department of Elementary and Secondary Education are responsible for implementing it.

For this good idea to go beyond the pilot stage, it may take some convincing of policymakers in the Legislature as well as educators.

On-site child care has had slow acceptance by school administrators who have believed that early childhood education is not their job.

They could not appreciate the important link between good, age-appropriate pre-school experiences and the academic achievements of students down the road.

A debate still rages today within the education community as to who should teach the youngest children - people who are trained as teachers of elementary-age children or people who are trained as early childhood educators. The latter is the most obvious choice because of their special training in working with children of the youngest ages.

But this is undoubtedly one of the issues that will have to be resolved more than once as early childhood education takes center stage in the debate over how to improve student performance. The leadership example set by Missouri on this issue should be emulated at every turn.

LOAD-DATE: April 18, 1997



LEXIS·NEXIS®

A member of the Reed Elsevier plc group



LEXIS·NEXIS®

A member of the Reed Elsevier plc group



LEXIS·NEXIS®

A member of the Reed Elsevier plc group

## LEVEL 2 - 11 OF 54 STORIES

Copyright 1997 Times Publishing Company  
St. Petersburg Times

April 18, 1997, Friday, 0 South Pinellas Edition

SECTION: NATIONAL; Pg. 11A

LENGTH: 494 words

HEADLINE: Parents: We're exhausted, worried, but love our kids

BYLINE: ELLEN DEBENPORT

DATELINE: WASHINGTON

BODY:

Much as they love their children, American parents are exhausted, and they worry every day that they are not spending enough time with their kids, a new study shows.

Parents also know that a child's early years are crucial, but they are confused about what to do, especially with a child's emotional development as opposed to the mental and physical growth.

The poll was released Thursday by a Washington group called Zero to Three, which focuses on early childhood, in conjunction with a White House conference on infant brain development.

At the White House, researchers presented evidence to first lady Hillary Rodham Clinton about the profound importance of a baby's experience from birth to age 3 as its brain is being wired for life.

Ninety-five percent of parents know that babies begin learning the moment they are born, according to the Zero to Three poll, conducted by Peter Hart Research Associates with 1,022 parents nationwide.

But there are gaps in their knowledge.

+ Eighty-seven percent said the more stimulation a baby receives, the better. Not necessarily. It should be geared to the baby's development, interests and mood.

+ Half the parents thought the more caregivers a child had before age 3, the better the child would adapt. Wrong again. The child grieves each change and may have trouble forming new relationships.

+ About one-quarter of parents thought a baby's intelligence level is probably fixed at birth. In fact, the parents' interaction makes a crucial difference.



LEXIS-NEXIS™

A member of the Reed Elsevier plc group



LEXIS-NEXIS™

A member of the Reed Elsevier plc group



LEXIS-NEXIS™

A member of the Reed Elsevier plc group

St. Petersburg Times, April 18, 1997

+ One-third of the parents polled didn't know that babies younger than 6 months can get depressed.

Most parents think they are doing a good job, but half said they end each day wishing they had spent more time with the children.

They do adore the kids. The poll shows 91 percent of new parents are happier than ever before. But they also report feeling stressed and worn out (56 percent), afraid of doing something wrong (52 percent), afraid of not being a good parent (47 percent) and unsure what to do a lot of the time (44 percent).

The guilt runs especially high among working mothers, who are most likely to say they aren't spending enough time with the kids.

Whether by choice or economic necessity, 40 percent of the mothers of young children work full time, 19 percent work part time and another 8 percent are planning to return to work within six months, the poll showed.

Furthermore, 60 percent of all children under 3 are cared for regularly by someone other than their parents.

A second report released Thursday noted that 24 percent of U.S. children under 3 live in poverty.

The National Center for Children in Poverty said growing up poor means the children are at risk for poor nutrition, environmental toxins, depressed mothers who neglect them, trauma and abuse, low-quality child care and substance abuse. Any of those factors could affect brain development.

LANGUAGE: ENGLISH

LOAD-DATE: April 18, 1997



LEXIS·NEXIS

A member of the Reed Elsevier plc group



LEXIS·NEXIS

A member of the Reed Elsevier plc group



LEXIS·NEXIS

A member of the Reed Elsevier plc group

LEVEL 2 - 16 OF 54 STORIES

Copyright 1997 Madison Newspapers, Inc.  
Capital Times

April 17, 1997, Thursday, ALL EDITIONS

SECTION: Local/State, Pg. 3A

LENGTH: 413 words

HEADLINE: KOHL SEEKS BIG GRANT FOR EARLY EDUCATION

BYLINE: By Jill Braverman The Capital Times/Medill News Service

DATELINE: WASHINGTON

BODY:

As part of a nationwide effort to enhance children's development and education between birth and age 3, U.S. Sen. Herb Kohl has announced a \$ 1 billion proposal to help states fund innovative early education programs.

"Unfortunately, the federal commitment to early education has not caught up with our understanding of how important the first three years of life are," the Wisconsin Democrat said Wednesday. "Early education receives fewer resources, (less) teacher training, salary and even respect than the rest of the education system."

Kohl's proposal is a block grant of about \$ 1 billion over five years. The money would go to states to fund innovative programs to expand education and care for newborns to 3-year-olds. The programs would not duplicate or compete with the Head Start program, which provides the majority of its funds to disadvantaged 4- and 5-year-olds.

Movie actor and director Rob Reiner testified before a Senate education subcommittee in support of Kohl's proposal. The proposal came as part of a campaign launched this week by Reiner and others to raise awareness about the importance of a child's first three years of development.

"With the startling new research in brain development, science now clearly tells us that what a child is physically, emotionally and intellectually exposed to from the prenatal period through age 3 has a far-reaching effect on how a child's brain organizes itself," said Reiner, chairman of the "I Am Your Child" campaign.

"And since we now know that 90 percent of a person's brain growth and development occurs in the first three years, how a child's brain organizes itself in those critical years will have a profound impact on what kind of adult he or she will turn out to be."

As part of the "I Am Your Child" campaign, President Clinton and first lady Hillary Rodham Clinton will host a White House conference on early childhood development Thursday.



LEXIS·NEXIS  
A member of the Reed Elsevier plc group



LEXIS·NEXIS  
A member of the Reed Elsevier plc group



LEXIS·NEXIS  
A member of the Reed Elsevier plc group

In addition to his block grant proposal, Kohl has authored the Child Care Infrastructure Act of 1997, a bill that would provide tax incentives to businesses that invest in quality child care options for their employees.

The incentives include tax breaks on costs related to establishing onsite centers, investing in licensed community centers and creating child care resource and referral services. There also would be tax incentives for employers to invest in education and training programs for child care workers.

LOAD-DATE: April 18, 1997



**LEXIS·NEXIS**  
A member of the Reed Elsevier plc group



**LEXIS·NEXIS**  
A member of the Reed Elsevier plc group



**LEXIS·NEXIS**  
A member of the Reed Elsevier plc group

LEVEL 2 - 17 OF 54 STORIES

Copyright 1997 The Columbus Dispatch  
The Columbus Dispatch

April 17, 1997, Thursday

SECTION: NEWS LOCAL &amp; NATIONAL, Pg. 8A

LENGTH: 503 words

HEADLINE: VOINOVICH SPEAKS OUT ON CHILD DEVELOPMENT, CLEAN AIR

BYLINE: Jonathan Riskind, Dispatch Washington Bureau

DATELINE: WASHINGTON

## BODY:

Tackling two diverse topics, Gov. George V. Voinovich advocated early childhood development and blasted proposed tougher clean air standards in a quick trip to Washington yesterday.

Voinovich said it's easy to measure the benefits of boosting a child's emotional and intellectual development during the first three years of life.

But that isn't the case when it comes to measuring the health benefits of the U.S. Environmental Protection Agency's proposed clean air standards, he said.

In his role as vice chairman of the National Governors Association, Voinovich appeared at a news conference and then testified before a Senate subcommittee to publicize the "I Am Your Child Campaign."

The campaign is a national public awareness and education initiative spearheaded by movie producer-director Rob Reiner. The NGA and a host of corporate sponsors and foundations have joined in the effort, which includes an ABC-TV special on April 28 and participation in today's White House Conference on Early Childhood Development.

The campaign's theme focuses on the critical importance of the first three years of life in determining whether a child becomes an emotionally stable and intellectually fulfilled adult. Stimuli to an infant's brain are crucial in shaping those outcomes, scientists say.

The campaign was first unveiled at the recent NGA annual meeting here. Next year Voinovich, as NGA's chairman, will host a national conference to highlight various early childhood programs in different states.

"If we do our job right, the result will be children who are happier and healthier, ready for school and better prepared to lead productive lives," Voinovich said.

The governor later went before a House panel to reiterate his contention that proposed clean air standards would be an economic disaster for Ohio and other states.



LEXIS-NEXIS™

A member of the Reed Elsevier plc group



LEXIS-NEXIS™

A member of the Reed Elsevier plc group



LEXIS-NEXIS™

A member of the Reed Elsevier plc group

There is no scientific proof that tougher standards would prove beneficial enough to warrant the costs, he told a House Government Reform and Oversight Committee subcommittee.

"I find it hard to believe that anyone in public service has the luxury of throwing billions of dollars at a problem without knowing if it is hitting the right target, yet that is exactly what the EPA is proposing," Voinovich said.

However, the governor came under fire from Northeastern lawmakers who said that Ohio and other Midwestern states are sending massive amounts of pollution their way because of the way airstreams flow.

Voinovich said in an interview after his testimony that Northeastern states are trying to punish Ohio and other Midwestern states for their success in both economic development and in complying with current pollution standards.

In a related development, Rep. David L. Hobson, R-Springfield, says the EPA has admitted there is a lack of consensus in the scientific community about the public health benefit of the proposal rules. Hobson questioned EPA Administrator Carol Browner Tuesday during a House Appropriations subcommittee hearing.

GRAPHIC: Photo, Associated Press, Dr. T. Berry Brazelton of Harvard University holds 6-day-old Barrett Moss Johnson at a hospital in Washington, D.C., as producer-director Rob Reiner looks on.

LOAD-DATE: April 18, 1997



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

LEVEL 2 - 23 OF 54 STORIES

Copyright 1997 Bergen Record Corp.  
The Record

April 17, 1997; THURSDAY; ALL EDITIONS

SECTION: NEWS; Pg. A07

LENGTH: 171 words

HEADLINE: DOCTORS TO GIVE BOOKS TO INFANTS AND TODDLERS

COLUMN: EDUCATION

SOURCE: Wire services

BYLINE:

DATELINE: WASHINGTON

BODY:

Parents: Expect "Green Eggs and Ham" to be prescribed on your baby's next visit to the pediatrician.

Under a national campaign announced Wednesday by first lady Hillary Rodham Clinton, pediatricians and hospitals have teamed up with book publishers to prescribe reading to infants and toddlers as part of standard pediatric care.

More than 250,000 books, such as the Dr. Seuss classic, have already been donated so that, instead of a lollipop from the doctor, young patients will be given a book to take home.

"Time spent sharing a favorite book with a child, even a newborn, strengthens the bond between a parent and child and prepares that child for reading, and literally helps a child's brain grow," Clinton said at a ceremony announcing the initiative.

It served as a kickoff for today's daylong White House Conference on Early Childhood, which the president and first lady were hosting to explore what the latest brain studies say about how very young children learn and grow.

LANGUAGE: English

LOAD-DATE: April 18, 1997



LEXIS-NEXIS  
A member of the Reed Elsevier plc group



LEXIS-NEXIS  
A member of the Reed Elsevier plc group



LEXIS-NEXIS  
A member of the Reed Elsevier plc group

## LEVEL 2 - 24 OF 54 STORIES

Copyright 1997 The Hearst Corporation  
The Times Union (Albany, NY)

April 17, 1997, Thursday, THREE STAR EDITION

SECTION: MAIN; Pg. A13

LENGTH: 651 words

HEADLINE: On education, Clintons need quick study

BYLINE: Suzanne Fields

BODY:

Bill Clinton and Hillary Rodham Clinton are engaging in a one-two punch for education. It's a lot less risky than overhauling health care. Whether it will be more successful is not yet clear but at least it won't put 7 percent of our economy at risk of destruction.

On his Saturday radio broadcast, the President noted that being a parent was "the toughest job any person can have" (we can all agree on that) and he touted the White House Conference on Early Childhood Development and Learning, which begins today.

The conference, popularly referred to in Washington circles as the "White House Brainchild," will examine the current research into the ways infants learn, stressing that a mom's intimacy with her child in the first three years encourages brain development. Hillary's in charge and the First Lady will be an active participant. This is clearly her baby.

The First Lady devoted her newspaper column last week to discussing how quality day care -- the emphasis is on "quality" -- can produce the same quality 3-year-old as a mother at home can. Or so says the research. But the more time babies spend in day care, the weaker their bond with their mothers. The consequence of a weak mother-child bond cannot be measured on a standardized test, but it affects the way a child learns.

Herein lies the dilemma for the President and the First Lady as they embark on the trendiest part of their education policy initiative: early childhood education. Their liberal base demands the government organize more hands-on programs for youngsters, pouring funds into "quality" day care and Head Start (even though Head Start benefits disappear in the third grade.) These are the constituents the President enraged when he signed the welfare reform bill, which changed financial incentives to encourage women with young children to work outside the home.

Conservatives want tax incentives to encourage mothers to stay home with young children. They don't want mothers penalized by high taxes to pay for child care of others when the evidence shows educational and emotional benefits for the child with the stay-at-home mom.

The experts will argue about the diverse theories of early childhood



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

development, and which of the theories should get the emphasis in policy -- whether behaviorist, cognitive, psychometric, developmental, neurological, cultural, environmental, linguistic, genetic or evolutionary. And that's the short list.

Early childhood education, of course, requires a diligent and disciplined follow-up for older children. In the highly respected Third International Math and Science Study (TIMSS) of 13-year-olds, American youngsters finished 20th in math -- not only behind Singapore, South Korea and Japan, the top three countries, but behind Czechoslovakia, France, Russia and Germany and nearly everyone else. In science our students did slightly better, coming in 17th, but far behind some countries that spend considerably less on education than we do.

Adding insult to ignorance, TIMSS explodes the myth of a correlation between excellence and the level of money spent on education. This explosion of myth contradicts (and enrages) the teachers' unions. The study concludes, albeit tentatively, that teaching methods even more than money determine quality education.

When the first couple visits an elementary school classroom in Washington, they tell the fable of the "Tortoise and the Hare," hoping to get the schoolchildren to understand that the perseverance of the slow but steadily moving tortoise can triumph over the lazy, faster hare.

"It's a lot like reading," says the First Lady. "If you do it slowly and carefully, and just keep at it, you can succeed, just like the tortoise did." But even Aesop is now cast in doubt. How the tortoise succeeds also depends on the mother (and father) as well as the teacher of that tortoise.

LOAD-DATE: April 18, 1997



**LEXIS-NEXIS**

A member of the Reed Elsevier plc group



**LEXIS-NEXIS**

A member of the Reed Elsevier plc group



**LEXIS-NEXIS**

A member of the Reed Elsevier plc group

LEVEL 2 - 30 OF 54 STORIES

Copyright 1997 Landmark Communications, Inc.  
The Virginian-Pilot (Norfolk, VA)

April 17, 1997, Thursday, FINAL EDITION

SECTION: LOCAL, Pg. B1

LENGTH: 1724 words

HEADLINE: THE TOOLS OF PARENTING;  
THE HEALTHY FAMILIES PARTNERSHIP SEEKS TO HELP CHILDREN IN A SIMPLE BUT;  
AMBITIOUS WAY - BY TEACHING THE ADULTS IN THEIR LIVES.

BYLINE: BY ELIZABETH SIMPSON, STAFF WRITER

DATELINE: HAMPTON

BODY:

Like many tales of triumph, this one begins with bad news. Hampton city officials noticed in the late '80s that city funds couldn't keep pace with the number of families needing help for things like health clinic visits and abuse complaints.

The community could have tried to fix the problems. Instead, they decided to cut off problems before they ever happened. A coalition of community members began a mission as ambitious as it was simple: Make sure all Hampton children are born healthy and enter school ready to learn. That's how the Hampton Family Resource Project - now called Healthy Families Partnership - was born in 1992. Thousands of Hampton parents have since reaped the benefits of the broad array of family services: free parenting classes that include day care and dinner; newsletters that begin arriving before a child is born and continue until the child graduates from high school; weekly home visits for families who might otherwise need help down the road; and libraries that give parents how-to help in the same area as children's books and toys. The services aren't just for at-risk kids and parents; they're for everybody. And now the rest of the country is about to find out about them, too. On April 28, the Hampton project will be featured in an ABC-TV one-hour documentary called "I Am Your Child." The show, produced by Rob Reiner and Michele Singer Reiner, will be hosted by Tom Hanks and also will feature such luminaries as Robin Williams, Rosie O'Donnell, President Clinton and Hillary Rodham Clinton. The prime-time special is one piece of a national campaign designed to raise awareness of the importance of the early childhood years. The Hampton project will be featured as an example of how a community can mobilize resources to answer those needs. The I Am Your Child campaign, which was launched Wednesday in Washington, will also include a one-day conference today at the White House on early childhood development, a Newsweek Special Edition on the same topic, and a series of public service announcements and parent videos to emphasize the importance of a child's first three years of life. "Communities are realizing that we can't keep pouring money into treatment, that we have to put more money into prevention," said Johanna Schuchert, the director of Healthy Families Virginia, which is coordinating the establishment of new Healthy Families sites across the state. For the people who have worked on the Hampton project, the national recognition



LEXIS-NEXIS™

A member of the Reed Elsevier plc group



LEXIS-NEXIS™

A member of the Reed Elsevier plc group



LEXIS-NEXIS™

A member of the Reed Elsevier plc group

is sweet reward. "It's exciting, and overwhelming," said Debbie Russell, who was on the original task force and now directs Hampton's Healthy Families Partnership. The appeal of the Healthy Families approach, which was first used in Hawaii, is threefold, according to Russell. First, it involves the entire community, from social workers to health professionals to teachers to business leaders to parents themselves. Second, all parents have access to the network of services, no matter their income or need. And third, the approach doesn't come with the stigma that many social programs cast. "The strength of the program is that it includes parents from all walks of life," Russell said. The most intensive piece of the project comes in the form of home visits. Family support workers visit parents who might be at risk of needing family-related services. The workers give advice on prenatal care in weekly home visits starting when a woman learns she is pregnant. They continue to meet with the family each week after the child is born, up until the child is 1 year old. The visits are less frequent after that, but still continue until the child is 5. The family support workers discuss health issues for mother and child, nurturing activities, discipline techniques and games that will help young children be ready for school. On a sunny spring day last week, family support worker Tarsha Davis visited 25-year-old Laura Bradford, who has a house full of children. Six-year-old Chelsea was home from school sick with a virus. Brandon, 3, and Ashton, 17 months, were in search of toys and attention while the newest family member, 5-month-old Shelby, watched the chaos from her mother's lap. Davis pulled out a fuzzy fish, a rattling square and a plastic book that she lets Shelby explore with her tiny fingers and probe with her gums. Davis not only helps Shelby with developmental activities, but also talks with Bradford about whatever she wants, whether it be doctors' appointments, a new job or Ashton's first words. "It's been like having a good friend," Bradford said. "She's been there for me." While Bradford has had experience in mothering, many of the parents who get home visits are first-time parents just learning the ropes. Statistics show the visits make a difference in the health of both parent and child. For instance, an average of 92 percent of the children born to women in the home-visit program have been immunized, compared to the average Hampton rate of 48 percent. Among the teen mothers in the program, the repeat birth rate is 8 percent, far below the 36 percent repeat teen birth rate for the city of Hampton. And women who had the prenatal home visits had fewer pregnancy and birth complications than a control group of similar mothers. "Twenty years ago, every child born in Hampton had a nurse come out to visit them," said Terasa Woodard, director of the home visits. "This is a revival of the same kind of support." Hampton parents can also sign up for less intensive help. The project offers 40 parenting classes a year, on topics like nurturing newborns, disciplining middle-schoolers and raising teen-agers in troubled times. While many communities offer such classes, Hampton's courses go a step further. Class coordinators were not happy with the 30 percent to 40 percent retention rate of the parents who first enrolled in the classes in 1992, even though that's the national average. "We wanted to remove the barriers to going to the classes," Russell said. So they began offering free child care in the same building as the classes and also talked with various Hampton restaurant managers, who agreed to provide free dinners for the families that participated. That eliminated the hassle of getting to class and feeding the family at the same time. The retention rate soared to 72 percent. Cindy Johnson, a Hampton mother of a 13-month-old girl, took her first class five months ago, and is taking two more now. "They cover everything you could possibly want to know," she said. "They teach you what to do if your baby is colicky, how to look for day care, when you need to go to an emergency room if your child has a fever." Besides



**LEXIS-NEXIS**

A member of the Reed Elsevier plc group



**LEXIS-NEXIS**

A member of the Reed Elsevier plc group



**LEXIS-NEXIS**

A member of the Reed Elsevier plc group

learning from the instructors, Johnson said the class discussions provide real-life experience from the large range of parents who attend. For Johnson, it's been like having an extended family in town to call on for child-rearing help. "There's so many people like us who are in the military and who go wherever they send you," she said. "If you don't have family nearby, this program can help you. It's great." Not all parents feel they can spare the time for a class. But there's still room for them in the Healthy Families Partnership. They can visit five different Young Family Centers in Hampton libraries, which have rooms set up so parents can browse through parenting manuals while their children play with toys and read board books. Or parents can receive the 14 editions of the Healthy Stages newsletter, which were written and developed by Sentara Health Systems and distributed free to parents by Riverside Hospital. The newsletters begin arriving in the mother's second trimester of pregnancy and arrive every three to six months up until the child's fifth birthday. "The more we read them, the more we learn," said Alesia Duncan, who along with her husband, Michael, are among the 4,000 Hampton families who receive the newsletters. This year the newsletters are being expanded to continue the parenting advice until the child graduates from high school. Parents also can receive the Healthy Family Bulletin, which lists activities for parents and children, every other month. The Healthy Families project is considered a success by Hampton city leaders, who have increased funding for it. The state has also continued to pitch in an annual \$ 150,000 grant. In 1995, Virginia legislators also set aside funding to establish four more Healthy Families sites, in Alexandria, Fairfax, Culpeper and Martinsville. And they committed \$ 625,000 more this year to set up 14 more sites, including one in Newport News and one in the South Hampton Roads region. So far, family resource centers have been set up in Norfolk and Virginia Beach libraries. Home visits will begin later this year. Child advocates across the country are also singing the praises of the Healthy Families approach, promoting it as a way to prevent birth complications and child abuse and to help children arrive at kindergarten ready to learn. Cities in 240 localities in 37 different states are now setting up similar programs. "It would be a miracle if all communities could do this," said Johnson. "It works wonders."

GRAPHIC: BETH BERGMAN COLOR PHOTOS/The Virginian-Pilot;

Family support worker Tarsha Davis, right, visits Hampton resident Laura Bradford and three of her four children, from left, Ashton, 17 months; Shelby, 5 months; and 6-year-old Chelsea. Home visits by workers like Davis are a key element of the Healthy Families Partnership.;

Graphic;

INFORMATION

For more information about the Healthy Families program being set up in South Hampton Roads, call 622-7017, ext. 136 or 125.

For information about the Hampton Healthy Families Partnership, call 727-1882.

For more information about the I Am Your Child campaign, check the following web site: <http://www.iamyourchild.org>.



LEXIS·NEXIS®

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS®

Ⓜ A member of the Reed Elsevier plc group



LEXIS·NEXIS®

Ⓜ A member of the Reed Elsevier plc group

The Virginian-Pilot (Norfolk, VA), April 17, 1997

The ABC-TV special "I Am Your Child" will air at 8 p.m. on April 28.

LOAD-DATE: April 18, 1997



**LEXIS-NEXIS**  
A member of the Reed Elsevier plc group



**LEXIS-NEXIS**  
A member of the Reed Elsevier plc group



**LEXIS-NEXIS**  
A member of the Reed Elsevier plc group

## LEVEL 2 - 36 OF 54 STORIES

Copyright 1997 The Advertiser Company  
The Montgomery Advertiser

April 16, 1997, Wednesday

SECTION: Op Ed; Pg. 9A

LENGTH: 961 words

HEADLINE: NOURISHMENT FOR YOUNG BRAINS CRITICAL DEVELOPMENT ELEMENT

BYLINE: By JOAN BECK

BODY:

It's only a one-day conference tomorrow, limited to the number of influential people who can be packed into the White House's East Room. But the idea President and Hillary Clinton are plugging is one of the most exciting of the century, its implications are staggering and its promise is mind-boggling.

The title is almost as long as a press release: The White House Conference on Early Childhood Development and Learning: What New Research on the Brain Tells Us About Our Youngest Children.

It's time the idea got a strong presidential push, especially from a chief executive who wants to be called "The Education President" and a first lady who has found a niche as an advocate for kids.

Research accumulating for more than three decades now shows beyond doubt that the quality and quantity of early mental stimulation -- opportunities for appropriate learning from birth on -- help determine how capable a child's brain will be for life.

Learning stimulation in the first few years of life actually influences the physical make-up of the brain, how the neurons will interconnect, how well the brain will "think," how "smart" the child will be. Educational opportunities later on in life do not affect the brain in the same way or have such an important impact

AN ENVIRONMENT RICH in appropriate opportunities to learn can raise a child's potential IQ by 20 to 30 points (by the inexact measures of intelligence available) because of its impact on the development of the brain. Mental malnourishment in the first years of life can lower potential IQ permanently, beyond what even the best schooling can compensate for completely later on.

Schooling can help a child use the brain he has effectively, give him vast amounts of information and motivate him to learn. But only in the early years of life can mental stimulation actually change the brain to make it a more effective organ of thinking.

Now, the challenge is to identify the kinds of learning experiences that nourish young children's brains best and how they can be made available to all our kids. Some participants in the White House conference will talk about model



LEXIS-NEXIS™

Ⓜ A member of the Reed Elsevier plc group



LEXIS-NEXIS™

Ⓜ A member of the Reed Elsevier plc group



LEXIS-NEXIS™

Ⓜ A member of the Reed Elsevier plc group

programs being developed in several communities around the country.

Despite the excitement and promise of neurological research on brain development, early learning ideas have been slow to become part of mainstream child care and education.

Many leaders in the growing field of early childhood education are still too tradition-bound to appreciate the potential of the new neurological research and misunderstand early learning as imposing formal and inappropriate lessons on restless youngsters. Their programs concentrate on emotional development, social behavior and nutrition -- necessary, of course. But parents, politicians and donors may be misled into assuming they provide more neurologically based mental stimulation than they actually do.

MORE THAN HALF of all mothers with young children now hold jobs outside the home, limiting the time and energy they can devote to their youngsters. Using early learning strategies can make their time together happier, more beneficial to the children and more rewarding for the parents.

Much of what good parents do by instinct or because it makes their children happy provides good nourishment for their brains. Talking to a baby, responding to his efforts to communicate by body language or by babbling, creating safe spaces at home where he can explore freely, just giving him something new to see or do when he fusses out of boredom all help the brain to grow.

Parents need more ideas about brain-nourishing activities. They need more time and more flexibility in their jobs so their children don't have to come in second so often. Most of all, they need a new understanding and appreciation of how much they can contribute not only to their youngsters' physical and emotional well-being but to their growing intelligence.

Public school systems generally ignore children younger than age 5 and are too hard-pressed financially to explore the possibilities of reach-out programs. Day-care centers often talk about their learning programs but most provide traditional nursery school fare and lack enough trained teachers to give all of their charges optimal, individual mental nourishment.

Many of the special programs set up to give early learning help to high-risk youngsters in poor areas have had only minimal success. They usually use traditional day-care models and give priority to youngsters' urgent physical and emotional needs.

This is what happens in many Head Start programs, which generally offer too little, too late, in the way of mental nourishment. Early Head Start, begun in 1994, is intended to help children from birth to age 3 in low income areas, but it is still too small and too new for good evaluation.

The promises of early learning based on new neurological research are too exciting to brush over lightly or to push aside after the White House conference in the rush of other political matters. It isn't clear yet, however, how best to make the advantages of these new findings available to all our children, especially those in dysfunctional families and those at risk of eventual school failure.

THAT'S WHERE THE president and first lady could really make a difference. By



**LEXIS·NEXIS™**

Ⓜ A member of the Reed Elsevier plc group



**LEXIS·NEXIS™**

Ⓜ A member of the Reed Elsevier plc group



**LEXIS·NEXIS™**

Ⓜ A member of the Reed Elsevier plc group

The Montgomery Advertiser, April 16, 1997

sticking with this idea for the rest of his term. By using whatever funding Clinton can bully out of Congress to start and expand model programs. By pestering Head Start administrators to upgrade standard day-care fare with special brain-nourishing components. By generating the national sustained excitement that the promise of the new research deserves.

The idea could do a lot for the Clintons -- as well as for the nation's kids.

LOAD-DATE: April 17, 1997

**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

LEVEL 2 - 43 OF 54 STORIES

Copyright 1997 The News and Observer  
The News and Observer (Raleigh, NC)

April 15, 1997 Tuesday, FINAL EDITION

SECTION: NEWS; Pg. A3

LENGTH: 612 words

HEADLINE: Proposals encouraging, day-care operators say

BYLINE: Tim Simmons, Staff Writer

BODY:

For parents who wonder about the education of their child's day-care workers or whether their center has a history of problems, state officials have a suggestion: Post details about staff education and results of past inspections on the wall of every day-care center in North Carolina.

Such a public rating system was among dozens of changes discussed by more than 100 day-care owners, directors and others in the field who gathered Monday to discuss a bill to improve day-care centers. The bill, which is backed by Gov. Jim Hunt, would require more education and training of workers, streamlining inspections, and a rating system that makes it easier for parents to judge a center's quality.

Most found the new proposals encouraging.

"This is such an important time in a child's life, we can't afford not to improve our standards," said Susan Cron, who runs Pleasant Day Preschool in Raleigh.

Hunt called for the legislation in response to stories in The News & Observer that showed the importance of brain development during a child's first few years and how the state's low standards often fail children during that critical time.

Studies show that better educated workers and informed parents improve the quality of care.

"We believe, and Governor Hunt believes, the time is definitely right to make these changes," said Stephanie Fanjul, director of the state Division of Child Development.

After being ignored for years, those who work with young children have suddenly found themselves at the center of a national debate over childhood development.

This week, Hunt will take part in a forum in Raleigh designed to highlight recent findings in brain research. The White House will hold a day-long conference on early childhood development. A coalition of entertainers, corporate executives, foundation leaders, politicians and doctors also is scheduled to launch a national public awareness campaign Wednesday.

LEXIS-NEXIS<sup>™</sup>

A member of the Reed Elsevier plc group

LEXIS-NEXIS<sup>™</sup>

A member of the Reed Elsevier plc group

LEXIS-NEXIS<sup>™</sup>

A member of the Reed Elsevier plc group

Against that backdrop, supporters of the day-care bill hope it will be easier to demand more training of day-care workers while having inspectors focus on what divides quality and mediocre facilities.

Under the proposed changes, poor centers would be visited more often. The classes that would count toward continuing education would be limited to specific areas, such as first aid or child development. Nearly any class is now allowed under the state's definition of continuing education. Some workers have claimed credit for classes where they learn to make an Easter hat out of a paper plate, Fanjul said.

Directors and lead teachers also would have to complete certificate programs. About half of the state's lead teachers and directors now do not meet the standards.

The state would pay for the additional training, and other changes required by the bill, through Smart Start money, Fanjul said.

The bill would raise the minimum age of home day-care providers from 18 to 21 and require a high school diploma of new family day-care operators by Jan. 1, 1998.

The bill does not address lowering child-to-adult ratios at day-care centers, which is considered essential for quality care. Hunt has promised to address that issue before he leaves office.

Day-care providers said that the state also must help them reduce turnover by improving workers' pay. The average day-care worker in North Carolina makes \$ 5.25 an hour and stays on the job about seven months. Even in centers where educated workers are valued and ratios are low, it's tough to compete against other businesses.

"I lost a worker recently to an area dry-cleaning shop because they paid her \$ 1 an hour more," Cron said. "It's something we just have to address."

LANGUAGE: ENGLISH

LOAD-DATE: April 15, 1997



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

LEVEL 2 - 50 OF 54 STORIES

Copyright 1997 Star Tribune  
Star Tribune (Minneapolis, MN)

April 15, 1997, Metro Edition

SECTION: Marketplace; Pg. 1D

LENGTH: 278 words

HEADLINE: FYI;  
Mandated maternity leave 'unfeasible'

BODY:

Hillary Rodham Clinton said Monday she would support government-required maternity leave for private companies' employees "if it were feasible," but political and economic forces make it unrealistic.

She met with reporters to preview Thursday's presidential conference on early childhood development. Armed with cutting-edge studies about how the brain blossoms in a child's first three years, the First Lady hopes the conference will educate parents about the long-lasting importance of intimacy with newborns.

Singing to them, reading to them, playing with them and talking to them are scientifically proven ways to increase the development of children's brains, she said.

"We are the result of both nature and nurture," the First Lady said.

Though many companies offer paid maternity leave, there is no government requirement.

Asked why she does not advocate a paid maternity leave requirement, the First Lady said, "I think it's because people believe that in our current political climate . . . that it's not realistic." She noted that it took eight years to pass family medical leave legislation.

- Associated Press

Less is more

"Fill it up" apparently is not the motto of fine wine drinkers. Wine Spectator magazine polled visitors to its Web site found that a pet peeve among the 1,364 respondents was wine stewards or waiters filling a glass too full. Oenophiles say they want room to swirl the wine and sniff it.

- Associated Press



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group



LEXIS-NEXIS

A member of the Reed Elsevier plc group

Today

- Commerce Department releases the Consumer Price Index for March. For details on the price figures from NewsWatch call 673-9050 and enter 1210.

LANGUAGE: ENGLISH

LOAD-DATE: April 16, 1997



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group



**LEXIS·NEXIS**

A member of the Reed Elsevier plc group

## FAMILY AND CHILDREN BEAT

Parents Need to Learn That They Can Affect Baby's IQ

Optional trim at 1,250 words

By BETH FRERKING

c.1997 Newhouse News Service

WASHINGTON — Babies' brains are all the rage. They've made magazine covers, launched a star-studded public campaign for kids, complete with an upcoming prime-time television special, and spawned a White House conference on brain development during a child's early years.

At the conference, neuroscientists will appear alongside child development specialists to explain why it is so important that a parent talk and sing to, touch and caress a baby — why a hug, to a baby's growing brain, is more than just a hug. They have discovered that the wiring of a developing brain is literally driven by what a baby sees, hears, touches, smells and tastes.

“Rich experiences, in other words, really do produce rich brains,” Time magazine wrote in its Feb. 3 cover story on babies' brains.

But as a new poll shows, not all parents understand how much they can influence a child's intellectual, social and emotional development. And, as the White House conference on early childhood development opens this Thursday, children's advocates say they have a unique opportunity to unite science with the everyday tasks of parenting and with public policy that affects children, from welfare reform to the quality of child care.

Researchers and advocates recognize that they walk a fine line between encouraging parents and scaring them when they describe the profound effects that good (and bad) parenting can have on a child's developing brain, especially during the critical first three years of life.

And they say that if they are to use these scientific discoveries as a way to help parents — rather than to demoralize them over opportunities lost — they must proceed gingerly.

A poll of 1,000 parents to be released this week in conjunction with the White House seminar found that parents are confused about how much they can shape a baby's developing brain. In the poll sponsored by Zero to Three, the National Center for Infants, Toddlers and Families, fully a quarter of parents believed that a baby's level of intelligence cannot be increased or decreased by how parents interact with the baby.

Scientific research has shown that intelligence is not fixed, said Lynette Ciervo, a spokeswoman for Zero to Three, a private, non-profit research, education and training center on early childhood development. Parents' involvement can strengthen a child's ability to solve problems, increase curiosity and bolster confidence in their ability to learn, she said.

Yet, in response to another question in the survey, some parents seemed to contradict themselves: 85 percent said they believe that babies who are stimulated through reading, playing and touching will develop more fully than those who don't receive the appropriate stimulation.

“Our report points out that there's a lot of confusion,” Ciervo said.

There's also a lot of guilt. In focus groups that accompanied the Zero to Three poll, parents were sensitive about child care issues, especially suggestions that the number of caregivers could affect development.

Thus, because parents tend to disregard advice that sounds preachy or prescriptive, researchers say they need to communicate findings about brain development in an encouraging and positive tone.

Even first lady Hillary Clinton has cautioned vigilance. “One of my great fears, for example, about this research concerning the brain is that parents who are doing their best to raise children, often under difficult circumstances, will feel even more guilt and anxiety because they aren't sure if they are doing everything that the research should ask them to do,” she said recently.

The trick, child development experts say, lies in translating complex findings into lay terms, and in using them to enhance what many parents already

do naturally.

Matthew Melmed, director of Zero to Three, believes it is critical to affirm good parenting in the same way Dr. Benjamin Spock did in his first book, when he advised parents to trust themselves, because they knew more than they thought they did.

"I think that message can be updated for the '90s to add that there's so much more we've learned that you can take advantage of," Melmed said. "The reality is, most parents do it well enough."

Yet the research on children's brain development can help reinforce parenting instruction for those who need help most. In Missouri, for example, the Parents as Teachers National Center has joined with scientists and doctors from the Washington University School of Medicine in St. Louis to link child development research with parenting practices.

Parent trainers will attend seminars by the medical team to learn how a developing brain is helped or hindered by various forms of stimulation. Trainers then will take that information to the classroom, explaining to parents how some parenting techniques actually aid brain development.

Consider teen-age parents, most of whom know little about child development. Many view a newborn much like a baby doll, a love object to kiss and cuddle, said Mildred Winter, director of the Parents as Teachers center. Six months later, when the baby grabs at her face and hair, the young mother may become irritated and distant, Winter said.

"Sometimes we find teen parents resist, because it's very important to them how they look, and they don't want their hair messed up, so they don't pick up the baby," Winter said.

What is happening, of course, is that the baby is trying to learn by reaching out, touching and seeing her mother's face at close range. A mother who responds by smiling, talking, cuddling and mimicking expressions is essentially speaking the baby's language.

"When the baby begins reaching out and learning through all her senses, it's part of the attachment process," Winter said. "If we can show how critical it is to a child's development, then we think (the teen mothers) are going to pay attention to that" rather than to preach-don't-teach methods that omit the science behind effective parenting.

Winter said they will continue to teach the same parenting skills they have always taught. "But the connection we can make with brain development \_ which seems to have captured the nation's attention \_ gives us a new means of making our message more compelling."

Dr. Bruce Perry, a psychiatrist at the Baylor College of Medicine in Houston who has done groundbreaking research on the physiological effects of violence on children, praised the Parents As Teachers project. "That is absolutely the correct way to proceed," he said. "If we educate them about the way the brain develops, they will naturally know why it's appropriate to pick up that child."

Perry believes that neuroscientists have been their own worst enemies in circulating their discoveries, in part because they speak their own language.

"We're literally drowning in factoids," Perry said, but there's no connection or rational system of linking all the parts, he said.

This fails public policymakers as much as it fails parents, he said. If elected officials understood how early the brain develops, they might better understand the importance of quality child care and early nutrition programs, he said.

(OPTIONAL TRIM FOLLOWS)

Children's advocates hope that the day-long White House conference, which

will be broadcast to about 80 sites in 30 states, will help raise public awareness. They're also depending on a media campaign chaired by actor-director Rob Reiner, an effort that will include public service announcements and a television special on April 28 starring Tom Hanks.

Perry, part of the "I Am Your Child" campaign spearheaded by Reiner, said issues of early childhood development are not embedded in the public lexicon in

the way that, say, smoking risks have been widely acknowledged. Too often, he said, children's issues only gain attention through splashy annual events such as the Stand for Children march or the release of annual child health indices.

Those come and they go, often with little lasting effect. A recent private study of 177 top state legislators around the country found, for example, that only one was familiar with the annual "Kids Count" report on the status of children, a Bible of sorts within the national child advocacy community. And only a handful could name a single child advocacy organization in their state.

Rather, Perry, Reiner and others say that until information about early brain development is as ubiquitous as athletic shoe advertisements, the public may remain ignorant about how best to raise bright and stable children and, ultimately, a healthy and productive society.

"How many T-shirts would Nike sell if they had a one-hour commercial once a year?" Perry asked. "Not very many."

RH      END FRERKING