

A PRIORITY FOR GROWTH AND EQUITY

Early Child DEVELOPMENT

FROM
Measurement
TO Action



EDITED BY MARY EMING YOUNG WITH LINDA M. RICHARDSON

Early Child Development From Measurement to Action

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A Priority for Growth and Equity

Editor

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with Linda M. Richardson

Children and Youth Unit

Human Development Network



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Contents

Foreword	vii
Preface	xi
Acknowledgments	xiii
Introduction	
The ECD Agenda: Closing the Gap <i>Mary Eming Young</i>	1
I. Investment in ECD—Benefits for Society and Children	
Chapter 1 A Productive Investment: Early Child Development <i>Rob Grunewald and Arthur Rolnick</i>	17
Chapter 2 Early Child Development Is a Business Imperative <i>Charlie Coffey</i>	33
Chapter 3 Experience-based Brain Development: Scientific Underpinnings of the Importance of Early Child Development in a Global World <i>J. Fraser Mustard</i>	43
II. Evaluating ECD Outcomes—Lessons from Longitudinal Studies	
Chapter 4 Outcomes of the High/Scope Perry Preschool Study and Michigan School Readiness Program <i>Lawrence J. Schweinhart</i>	87
Chapter 5 The Abecedarian Experience <i>Joseph Sparling, Craig T. Ramey, and Sharon L. Ramey</i>	103

III.	Monitoring ECD Interventions—Country Experiences	
Chapter 6	Colombia: Challenges in Country-level Monitoring <i>Beatriz Londoño Soto and Tatiana Romero Rey</i>	131
Chapter 7	Step by Step: A Multicountry Perspective on Implementing and Monitoring ECD Programs <i>Sarah Klaus</i>	155
Chapter 8	Canada: Longitudinal Monitoring of ECD Outcomes <i>Jane Bertrand</i>	167
Chapter 9	The Early Development Instrument: A Tool for Monitoring Children’s Development and Readiness for School <i>Magdalena Janus</i>	183
IV.	Financing of ECD Initiatives—Innovations	
Chapter 10	Jamaica: Recent Initiatives in Early Childhood Policy <i>Omar Davies and Rose Davies</i>	205
Chapter 11	Brazil’s Millennium Fund for Early Childhood <i>Osmar Terra and Alessandra Schneider</i>	215
Chapter 12	Dominican Republic: Competitive Fund for Educational Innovations <i>Clara Baez and Guadalupe Váldez</i>	225
Chapter 13	Indonesia: Public Financing of Block Grants for Privately Delivered Services <i>Nina Sardjunani, Ace Suryadi, and Erika Dunkelberg</i>	233
V.	Looking to the Future—The Next 5 Years	
Chapter 14	Measuring Child Development to Leverage ECD Policy and Investment <i>J. Fraser Mustard and Mary Eming Young</i>	253
	Index	293

Foreword

In our increasingly global world, the quality and competence of the future population hinges on the development of children who are born today. Experts have recently estimated that 219 million children below age 5 in developing countries are not reaching their development potential due to adverse environments and experiences. Poverty, poor health and nutrition, as well as lack of stimulation create life-long developmental barriers that have devastating effects on a person's learning, productivity, and earning potential. These effects result in unfortunate negative impacts on households, national economies, and, potentially, global markets.

The largest number and highest prevalence of disadvantaged young children live in South Asia and Sub-Saharan Africa. Just 10 countries account for two-thirds of these children. The numbers at risk may be even larger, however, because so many are not counted. What is clear is that these vulnerable children are found beyond the poorest families and across all social gradients. The estimate of 219 million is thus conservative, but nevertheless a strong basis for advocating global action to improve early child development at all levels in all countries and, particularly, for poor and vulnerable children in developing countries.

In a world of open borders and economic interdependence, poverty and inequality translate into social, economic, and political threats to security, and the whole world suffers the consequences. The global imperative for humanity's 21st century, as fueled by technology, innovation, and access to information, is human development. The World Bank embraces this imperative, beginning with reduction of poverty and emphasis on equity.

Poverty and weak human development outcomes go hand in hand. A child's trajectories for physical and mental health and for cognitive, social, and emotional development are set very early.

Poverty correlates strongly with short-, medium-, and long-term negative outcomes, such as high infant mortality rates and malnutrition, low school enrollment and achievement, and high prevalence of infectious and chronic diseases in childhood and beyond. Children living in poverty have worse outcomes overall in health, nutrition, and education than do other children. Later in adulthood, the same individuals become victims of high unemployment, which increases their vulnerability and exposure to undesirable social outcomes. Since weak outcomes in human development also are associated with corollaries of poverty, whole communities become caught in a vicious cycle of limited access to health and education services and lower utilization of services that are often of low quality and/or too costly.

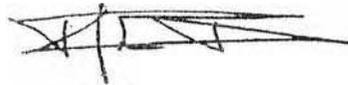
Economists and business leaders around the world are recognizing that improving early child development is the foundation for enhancing human development. Early child development (ECD) programs help to level the playing field for all children—before they begin school—and to close the opportunity gap for disadvantaged children who live in poverty. Sound economic data show that ECD programs are the most cost-effective way for reducing poverty and generating economic growth.

Investing in ECD programs—which integrate health and nutrition, care and nurturance, and stimulation—is both productive and positive for children and society. ECD programs enable children to grow healthy and well, to reach the potential inherent in their birth, and ultimately to contribute to society. Direct benefits also extend to each child’s family and community. ECD programs are community-driven. They depend on a supportive network of organizations and institutions that deliver the combined services and a systems approach that engages multiple stakeholders across sectors at community, national, and international levels. The programs complement and add value to existing health and education systems, and they offer opportunities for tagging on other services. Time and again, ECD programs have fostered linkages between families and a broader array of social services.

We know the attributes and essential ingredients of effective ECD programs and policies. Priority action is now needed to ensure that

ECD programs are accountable and make the best use of resources to achieve the most beneficial outcomes for children. Just as societies spend large sums of money measuring the performance of businesses and economies, so should nations invest in measuring the outcomes of early childhood, which portend the future performance of their populations. Already, in several countries, ECD practitioners are pilot testing, adapting, and validating a standardized instrument and measures to assess early childhood outcomes. Investment is needed to support and expand these efforts to other countries, with a goal of developing a systematic base of comparable data on early child development. Having this essential evidence will enable us to enhance accountability, improve planning, and stimulate further investment and action.

Though the broad benefits of ECD programs may not accrue to society for 20 years, the time is not far off and our action must be urgent. The World Bank leads the donor community in supporting early child development. With a portfolio totaling US\$1.7 billion in cumulative lending for ECD programs worldwide, the Bank considers early child development a priority for human development. The Bank will continue to build investment in ECD programs, promote innovative initiatives, and encourage support for a mix of ECD options in both funding and programming. With the knowledge, evidence, and will that we have, we can and must expand this investment in young children.



Joy Phumaphi
Vice President
Human Development Network
The World Bank

Preface

This publication began with an international symposium held at the World Bank on September 28–29, 2005, in Washington, D.C. The symposium was the third in a series of conferences hosted by the World Bank to focus attention on the importance of investing in early child development (ECD) as “the natural starting point” for human development programs and policies. The third symposium emphasized, in particular, early child development as a priority for sustained economic growth and equity.

This publication captures and expands on the presentations and discussions at the symposium. It consists of 15 chapters authored by ECD experts and leaders in the field. The chapters are grouped into five main parts relating to the:

- Business imperative and societal benefits of ECD investments
- Lessons from evaluation of longitudinal ECD interventions
- Countries’ experiences in monitoring ECD interventions
- Innovative approaches to countries’ financing of ECD initiatives
- Next steps on the ECD agenda for the next 5 years.

A theme highlighted at the symposium and enlarged upon here is the urgent need for evidence- and population-based instruments and measures to monitor, evaluate, and compare ECD interventions over time and across settings. The leveraging of enhanced policies and investments in early child development depends on being able to assess and document, consistently and rigorously, the need for ECD programs across communities and the outcomes for children and families participating in these programs.

The scientific evidence already exists to support broad and intense interventions to improve young children’s developmental outcomes *before* they enter school—and thereby enhance their

performance and achievement while in school and beyond. The next step is to measure, monitor, and assure the efficacy of all ECD programs and to use these research data to strengthen local and national support for ECD policies and programs.

Acknowledgments

This publication stems from the World Bank symposium “Early Child Development — A Priority for Sustained Economic Growth and Equity,” held at the World Bank, Washington, D.C., September 28–29, 2005. The symposium and publication drew on the collective knowledge of 180 participants and presenters who came from 42 countries in all regions of the world and are experts across a range of disciplines relating to early child development. Many thanks to all who participated in the symposium, including those who contributed to the discussions via satellite connections in five Latin American countries—Brazil, Chile, Mexico, Peru, and República Bolivariana de Venezuela.

This symposium was the third in a series of international gatherings that the World Bank has convened since 1996 to focus attention on early child development. The symposium represented a collaborative effort of many—multilateral agencies (the United Nations Children’s Fund [UNICEF], United Nations Educational, Scientific, and Cultural Organization [UNESCO], World Health Organization [WHO], and Organization of American States [OAS]); development banks (Inter-American Development Bank and Asian Development Bank); government officials; and international and local nongovernmental organizations. Thanks to these organizations and their representatives, who helped to make the symposium possible. From diverse disciplines, the global community continues to close the gap between what we know about early child development and what we do to improve the lives of young children around the world.

At the World Bank, early child development (ECD) activities continue to receive high-level support, starting with senior managers and including colleagues in each region. Strong supporters are Jean Luis Sarbib, Vice President (retired), and Nicholas Krafft, from the Bank’s Human Development Network, and Tawhid Nawaz, in the Bank’s Operations Department. Heartfelt thanks to Elaine Wolfensohn, who

championed ECD efforts during the past decade and continued her support during and after James Wolfensohn's tenure at the World Bank.

The planning for the symposium drew on the insights and guidance of many. Special thanks to Joan Lombardi, Director of The Children's Project, and Paul Gertler, Chief Economist of the World Bank's Human Development Network. Thanks to Marie Madeleine Ndaw and Erika Dunkelberg, of the Bank's ECD team, who efficiently managed the registration and logistics for the symposium and, together with our colleagues from the Children and Youth team (Viviana Mangiaterra, Juan Felipe Sanchez, Gerold Vollmer, Minna Mattero, Amina Semlali, Peter Holland, and Liisa Hietala), ensured that the event ran smoothly and efficiently. The symposium benefited from Ashkan Niknia's information technology support. The conference presentations were posted in a timely fashion on the Bank's ECD Web site <www.worldbank.org/children> to reach a wider audience globally.

The conference was funded in part under the Bank–Netherlands Partnership Program with funds from the Netherlands Multilateral Development Agency, Ministry of Foreign Affairs. The Bank is most grateful to the agency for its continued funding, which supports broadening and deepening of the ECD knowledge base and North–South sharing and dissemination of knowledge.

Introduction

The ECD Agenda: Closing the Gap

*Mary Eming Young**

Global interdependency is posing formidable challenges for future generations and society. The workplace of the 21st century is becoming vastly different from that of even the 20th century. The new century is increasingly favoring a work force consisting of individuals who are intellectually flexible, skilled in problem solving, emotionally resilient, and well able to interact with others in constantly changing social environments and highly competitive economies.

Maximizing human potential is more important and necessary than ever before.

To meet this overriding challenge, we must first understand and appreciate the developmental processes which enable each child to attain his or her full potential—neurobiologically, physically, psychologically, and emotionally. Children’s early experience has far-reaching and solidifying effects on the development of their brains and behaviors. Diverse experiences affect the architecture (i.e., wiring) of the brain, the expression of genes, and the biochemistry and physiology of the human body—all of which mediate our cognitive, emotional, and social behaviors.

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The developmental influences are particularly powerful during sensitive periods of brain maturation—that is, during the very early years of childhood.

Awareness of early child development and investments in early child development (ECD) programs and services have increased during the past decade, yet much more attention is urgently needed. Researchers continue to define the attributes of effective ECD programs, and educators and policymakers are confronting the challenges of scaling up successful programs—regionally and nationally. The World Bank is contributing to these efforts. The target is clear: healthy development for every child worldwide.

Early Child Development: Raising Awareness and Investments

The evidence is solid—economists, political scientists, neuroscientists, and social scientists have substantial data proving that programs which promote the growth and development of young children (ages 0–6 years) are the *best* investment for developing the human capital necessary for economic growth. Early child development:

- Is the foundation of human capital formation
- Has the highest rate of return in economic development
- Is the most cost-effective way to reduce poverty and to foster economic growth.

Scientists now state, without equivocation, two key findings concerning human development:

1. A person's responses to internal and external stimuli depend on critical pathways and processes formed in the brain.

Research shows that billions of neurons in the brain must be stimulated to form sensing pathways, which influence a person's competence and coping (i.e., learning and behavioral skills), and biobehavioral processes, which affect a person's physical and mental health. In short, experiences in early life activate gene

expression—and result in formation of the critical pathways and processes.

2. Positive and negative experiences in early childhood influence the formation of these critical pathways and processes.

Traumatic experiences may damage deep structures in the brain. Positive experiences in a child's physical, social, and psychological environments activate critical pathways and stimulate connections that enhance development. For example—

Simple, routine aspects of a physical environment such as noise, light, and temperature variations stimulate brain activity (music by Mozart or fancy mobiles are not necessary). Simple, routine aspects of a social and psychological environment such as touching, cooing, smiling, responding, and playing enhance babies' brain development.

For these reasons, investing in young children makes economic sense. ECD programs are designed specifically to provide the positive physical, social, and psychological environments that young children need—beginning at birth and even earlier, in utero, when mothers are pregnant.

Children who participate in ECD programs do better in school and in life. The returns on investing in these programs exceed those associated with any other investment in a country's infrastructure. Some key facts:

- The return on investment in quality, targeted ECD programs is 7–16 percent and more.
- Just 1 year of preschool potentially increases a child's earning capacity and income as an adult by 7–12 percent (World Bank 2002).

Going to Scale: ECD Programs and Services

We know that early child development is an essential component of human development and that investing in ECD programs makes

economic sense. Why then is the gap in coverage for ECD services still so large in so many countries? How can we successfully scale up proven, effective ECD programs to reach more children in more communities?

The Challenges

Expansion of ECD programs within a country is a major and complex undertaking. To extend ECD opportunities nationwide, two major challenges are:

Support for ECD Programs. An intricate web of support systems at all levels—locally, regionally, and nationally—must be coordinated and assured. Support for ECD programs is needed from parents, communities, clinics, nongovernmental organizations (NGOs), other local and regional institutions, and larger societal institutions and government departments.

Alternative ECD Options. A full range of ECD options must be available to children, parents, and communities. Having alternative and complementary cost-effective options will reduce the overall cost of ECD programs and increase the access to these ECD programs by poor and/or rural children and families.

World Bank Activities

The World Bank holds that early child development is integral to social and economic development—and to reducing poverty, the Bank's core mission. ECD programs are a fast-growing component of the Bank's portfolio of activity, and promotion and support of ECD programs are a priority.

Box 1 describes the Bank's ECD program, which is conducted in partnership with other organizations and institutions.

With World Bank support, ECD projects of various designs are packaged and delivered in different governmental sectors. A program may emphasize one or more of the following:

- Delivery of services to children
- Education and support of parents

Box 1. The World Bank's ECD Program

- Lend funds for specific, approved ECD projects
- Accumulate and share knowledge about early child development
- Promote awareness among communities and the public about ECD services and benefits
- Build capacity for ECD programs within countries
- Offer technical ECD assistance to governments, organizations, and projects
- Advise on policies that affect young children.

- Training and development of teachers and caregivers
- Community development
- Strengthening of institutional resources and ECD capacity
- Use of mass media to raise awareness about early child development and to improve knowledge and practice of good child-rearing.

The World Bank specifically encourages ECD programs that are:

- Integrated within a comprehensive package of social and educational services
- Culturally relevant and tailored to children and families in a community
- Actively involving parents and community leaders
- Supported by local, regional, and national institutions.

These four attributes are key characteristics of successful, sustainable ECD programs. While promoting ECD services for all children, the Bank recognizes that no single ECD model fits every community. Every ECD program must be carefully designed to reflect the culture and needs of a community—and every program should be evaluated on this basis.