#### Sustaining Early Childhood Learning Gains

How gains from early childhood experiences are initiated, increased, and sustained, and how they affect life-course development, is fundamental to science and society. These matters also have increasing policy relevance, given public investments in early learning programs and the need to measure their effectiveness in promoting well-being. With contributions from leading researchers across many disciplines, this book emphasizes key interventions and practices over the first decade of life and the elements and strategies through which gains can be enhanced by schools, families, communities, and public institutions. Three critical themes are addressed: firstly, the importance of documenting and understanding the impact of investments in early childhood and schoolage years. Secondly, increased priority on elements and principles for scaling effective programs and practices to benefit all children. Thirdly, a focus on multiple levels of strategies for sustaining gains and promoting long-term effects, ranging from early care and family engagement to school reform, and state and federal policy.

Arthur J. Reynolds is a professor in the Institute of Child Development at the University of Minnesota. A leading expert in the early intervention field, he directs the Chicago Longitudinal Study, one of the largest studies of the effects of early education.

Judy A. Temple is a professor in the Humphrey School of Public Affairs at the University of Minnesota. Her research focuses on the evaluation of long-term effects of early educational interventions and policy evaluation.

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> "This book has it all. Sustaining early learning gains is a top education policy priority. The content is first rate and the authors offer a plethora of effective recommendations that will strengthen programs and practices. The authors themselves are a who's who list of educational and developmental scientists with vast experience in knowing what works. The book clearly shows that good early childhood education policy and effective school reform go hand in hand."

> > Arne Duncan, Former Secretary, United States Department of Education

"This research reinforces why we're taking significant strides to expand early education, which is fundamentally about giving every child in every neighborhood their best chance to succeed. Reynolds and Temple show us that these significant investments in our children will help level the playing field, further close the achievement gap, and build stronger communities for generations to come."

Rahm Emanuel, Mayor, City of Chicago

"This volume focuses on one of the most crucial issues facing us today: how to build upon and sustain the gains from early intervention. The editors and authors are clear that we need a multi-year commitment to continuity and quality. The work presented here provides powerful justification for this comprehensive investment."

Samuel J. Meisels, Founding Executive Director, Buffett Early Childhood Institute, University of Nebraska

"The research is ripe with insights and directives gleaned from years of investments, programming, and evaluations. This is well-timed and well-aimed as public and private investments in early childhood seek to spur an increasingly greater impact. It is an invaluable volume for practitioners, policymakers, and all those who care about providing young children accessible pathways of opportunity."

Rip Rapson, President and CEO, The Kresge Foundation

"Investing in children's early learning is an investment in our shared future. Much has been written about the importance of early learning for brain development, but this book provides important research and insights into how to sustain those early gains through the K-3 years and beyond. This is a valuable resource for practitioners, researchers, policymakers, and philanthropists."

Kate Wolford, President, McKnight Foundation

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# Sustaining Early Childhood Learning Gains

Program, School, and Family Influences

Edited by Arthur J. Reynolds University of Minnesota Judy A. Temple

University of Minnesota



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#### Contributors

LAURA BORNFREUND New America Foundation BARBARA A. BOWMAN Erikson Institute MARGARET BURCHINAL University of North Carolina at Chapel Hill GREGORY CAMILLI Rutgers University FRANCES A. CAMPBELL University of North Carolina at Chapel Hill JUAN C. CHAPARRO Universidad EAFIT, Colombia GREG J. DUNCAN University of California at Irvine MADELYN GARDNER Learning Policy Research Institute KAREN HANSON University of Minnesota момоко науакаwa University of Minnesota NATHAN HUEY University of Minnesota JADE M. JENKINS University of California at Irvine DAVID KIRP University of California at Berkeley ABBIE LIEBERMAN New America Foundation ANDREW J. MASHBURN Portland State University BETH MELOY Learning Policy Research Institute CHRISTINA F. MONDI University of Minnesota TUTRANG NGUYEN University of California at Irvine SUH-RUU OU University of Minnesota YI PAN University of North Carolina at Chapel Hill CRAIG T. RAMEY Virginia Tech Carilion Research Institute, Virginia Tech SHARON LANDESMAN RAMEY Virginia Tech Carilion Research Institute, Virginia Tech ARTHUR J. REYNOLDS University of Minnesota LAWRENCE J. SCHWEINHART HighScope Educational Research Foundation (Emeritus) EMILY K. SNELL Temple University AARON J. SOJOURNER University of Minnesota DEBORAH J. STIPEK Stanford University JUDY A. TEMPLE University of Minnesota BARBARA A. WASIK Temple University MARJORIE WECHSLER Learning Policy Research Institute **RITA YELVERTON Portland State University** 

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#### Foreword

This volume presents the proceedings of a research conference convened by the Human Capital Research Collaborative (HCRC), hosted by the Federal Reserve Bank of Minneapolis, on the critically important topic of increasing and sustaining early childhood development gains. I welcome the opportunity to provide a brief foreword for the proceedings, as I am grateful for the work of these scholars on this crucial topic.

By way of background, let me note that, as Provost and Executive Vice President of the University of Minnesota, I had the privilege of working with the members of our Twin Cities campus community to create and implement a campus strategic plan that reinvigorates our commitment to the land-grant mission of the University. The HCRC exemplifies two of the campus plan's four main strategic pillars, so the work presented at this conference clearly aligned with our institution's central aspirations.

One pillar of our campus plan is a commitment to capitalize on the extraordinary breadth, as well as the quality, of our research capacity, in order to address the world's grand challenges. We understand "grand challenges" to be not only deep and difficult problems, but also multi-faceted challenges, requiring expertise and ideas drawn from many spheres and disciplines in order to be effectively addressed. These grand challenges are among the most important and complex problems facing local communities, states, nations, and the world.

Enhancing individual and community capacity for a changing world, ensuring that everyone has the opportunity to realize his or her potential, is one of the aims of the HCRC, and it is also among the five grand challenges explicitly identified as a priority research focus for our university. This is a meaningful alignment of goals, one that promises constructive synergies.

Another central pillar of our campus strategic plan is a commitment to reciprocal engagement with our various communities, a commitment to draw on and respond to our specific location in a vibrant but complicated metropolitan area. The University of Minnesota wants to work *with* community, government, nonprofit, and corporate partners on *shared* 

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#### xvi Foreword

priorities, with mutually inflected identification of issues and of pathways forward.

For more than ten years, the HCRC has exemplified reciprocal engagement. The HCRC is focused on the links between human capital and economic development, public health, and K-12 education. In another iteration of this reciprocity, it must be noted that the future of the University of Minnesota – which exists to develop human potential – also depends upon our community's commitment to develop the potential of its children.

Thus, I'm delighted that this center brought together researchers, policymakers, and funding organizations to focus on the challenge of sustaining early childhood developmental gains. I want to thank Arthur Reynolds, Judy Temple, and Art Rolnick for leading this effort, and all of the participants of the conference and contributors to the volume for this signally important work.

KAREN HANSON Executive Vice President and Provost University of Minnesota

#### Acknowledgments

This volume is a product of the Human Capital Research Collaborative (HCRC), an interdisciplinary research center at the University of Minnesota. Since 2006, HCRC has been dedicated to promoting public policies and programs for young people through research and practice from birth to early adulthood. In support of this mission, HCRC conducts research on the determinants of well-being; investigates the efficacy and cost-effectiveness of social programs; synthesizes, integrates, and disseminates knowledge on socially significant topics; and designs and implements interventions to promote healthy development (http://hcrc.umn.edu).

This is the third volume designed to highlight leading research and practice on critical topics in human capital, education, and child development. The first two books by HCRC, published by Cambridge University Press, were *Childhood Programs and Practices in the First Decade of Life:* A Human Capital Integration (2010) and Health and Education in Early Childhood: Predictors, Interventions, and Policies. The current volume's focus on early learning gains and well-being is timely and of great social significance. Increasing and sustaining gains from many kinds of positive early childhood experiences is one of the major goals of our time in all human services. This volume provides many perspectives and strategies for effectively addressing both the challenges and opportunities.

Preparation of this volume was supported, in part, by grants from the National Institute of Child Health and Human Development, the Bill & Melinda Gates Foundation, and the US Department of Education. We thank the Federal Reserve Bank of Minneapolis for hosting the conference upon which this volume is based, and for help in organizing the initial drafts of the chapters presented at the conference. We also thank Linda Rees-Christianson for assisting in the editing and administrative process in completing the final chapter preparations. We are grateful for the support of the College of Education, the Institute of Child Development, and the Humphrey School of Public Affairs at the University of Minnesota for sharing and advancing common interests with HCRC in promoting the well-being of children and youth.

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