
HANDBOOK OF FAMILY LITERACY

SECOND EDITION

EDITED BY
BARBARA HANNA WASIK

Handbook of Family Literacy

Second Edition

Edited by

Barbara Hanna Wasik



First published 2012
by Routledge
711 Third Avenue, New York, NY 10017

Simultaneously published in the UK
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2012 Taylor & Francis

The right of the editor to be identified as the author of the editorial material, and of the authors for their individual chapters, has been asserted in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

Library of Congress Cataloging in Publication Data

Handbook of family literacy / [edited by] Barbara H. Wasik. — 2nd ed.

p. cm.

Includes bibliographical references and index.

1. Family literacy programs—United States—Handbooks, manuals, etc. I. Wasik, Barbara Hanna.

LC151.H33 2012

302.2'244—dc23

2011038858

ISBN: 978-0-415-88457-0 (hbk)

ISBN: 978-0-415-88458-7 (pbk)

ISBN: 978-0-203-84149-5 (ebk)

Typeset in Bembo and Stone Sans
by EvS Communication Networx, Inc.



Certified Sourcing

www.sfiprogram.org
SFI-00453

Printed and bound in the United States of America
by Edwards Brothers, Inc.

In memory of my youngest sister

Frances Hanna Clark

For her enduring love of children,

her devotion to family, and

her understanding of the role of education in the lives of children

Handbook of Family Literacy

The *Handbook of Family Literacy, Second Edition*, is the most comprehensive and up-to-date resource on family literacy issues, services, and research. It documents the need for literacy education for children and parents, describes early literacy and math development within the home, analyses interventions in home and center settings, and examines the issues faced by men and women with low literacy skills. Cultural issues are examined, especially those for Hispanic, African American, American Indian, Alaskan Native, and migrant populations. Noted experts throughout the United States, Canada, England, the Netherlands, Germany, New Zealand, and South America analyze the commonalities and differences of family literacy across cultures and families. Key features include the following:

Comprehensive—Updated information on the relation between early childhood literacy development, parenting education, and intervention services.

Research Focus—An extensive review of experimental studies, including national reviews and meta-analyses of family literacy.

Practice Focus—A comprehensive treatment of family literacy interventions necessary for program developers, policy makers, and researchers.

Diversity Focus—Detailed information on cultural and diversity issues for guiding interventions, policy, and research.

International Focus—An international perspective on family literacy services that informs program developers, researchers, and policy makers across countries.

Evaluation Focus—Detailed guidelines for ensuring program quality and fidelity and a new evaluation perspective based on implementation science.

This book is essential reading for anyone—researchers, program developers, students, practitioners, and policy makers—who needs to be knowledgeable about intervention issues, family needs, program developments, and research outcomes in family literacy.

Barbara Hanna Wasik, PhD, holds a William R. Kenan, Jr. Distinguished Professorship in the School of Education at the University of North Carolina at Chapel Hill where she is also a Fellow of the Frank Porter Graham Child Development Institute. A clinical and school psychologist, she has devoted most of her professional career to developing and evaluating intervention programs for children at risk of social, emotional, or academic difficulties. She was an invited participant to the White House Conference on Child Care and served as a member of the Committee on Early Childhood Pedagogy of the National Academy of Sciences. She co-authored *Home Visiting: Procedures for Helping Families* and the *Handbook of Child Development and Early Intervention*.

Preface

Literacy is a human right, a tool of personal empowerment and a means for social and human development. Educational opportunities depend on literacy ... Literacy is at the heart of basic education for all....

(UNESCO, 2004)

From an educational, policy, and social viewpoint, discussions of family literacy bring together a fascinating interplay of variables, from the family's role in the child's education, with attendant discussions of family beliefs about children, education, and literacy, to how being an English language learner, an immigrant, a minority, or of lower socio-economic status influences one's literacy skills. In this handbook, I have taken a broad approach to family literacy, from considerations of how literacy develops within the family to variations of family literacy services in different countries. How literacy develops within the family and the role of the home environment have been the foci of considerable research over the past several decades, with increasing evidence supporting the role of parents in children's early literacy development. Extensive research has also provided documentation for the challenges associated with employment, health, and social adjustment for adults with low literacy skills when compared with adults with higher literacy skills. This handbook addresses the role of both fathers and mothers engaged in adult learning to advance their own skills and their ability to facilitate their children's language and literacy development.

During the 1980s in the United States and in other countries, family literacy services began to be offered as a way of providing for parents with low literacy skills and their young children, assuming that this combination would provide advantages over independently offered and uncoordinated services. Educators, program directors, and policy makers have driven these services, based on a belief that addressing the needs of both parents and children would lead to positive outcomes for the family as a unit. The international chapters included in this handbook demonstrate that these services are inextricably linked with the country's heritage, language, population characteristics, educational philosophies, and political positions.

The chapter authors in this handbook accepted responsibility for addressing a host of educational, social, and research issues related to literacy, from the literacy development of young children to adult education and parent education. Social and cultural factors influencing literacy attainment are also addressed, including a consideration of family literacy in other countries and how culture and political factors influence the provision of family literacy services. Authors pull extensively from diverse research efforts that include national studies and meta-analyses, as well as field-based examples, to elucidate findings on ways to enhance child and adult literacy. Research on both home-based and center-based services is also described, providing updated information on the use of these intervention strategies. Several chapters address issues essential for advancing work in family literacy, including ways of ensuring program quality, assessment

considerations, and program fidelity, issues that provide direction for research on literacy within the family, and ways future services can best be provided.

This second edition takes the reader beyond the fundamental topics addressed in the first edition to a considerably expanded view of how literacy develops within the family; how beliefs, culture, and ethnicity influence literacy development; how countries differ in their approaches to developing family literacy services; and how one's literacy skills influence so many of life's outcomes. This edition also provides considerable information for program developers and practitioners to enhance program quality, from early childhood classrooms to adult education. The information on program quality and program implementation provides a strong foundation for a new generation of research on family literacy.

Acknowledgments

To Lane Akers, the acquisitions editor at Routledge, thank you for encouraging me to prepare this second edition and providing wisdom, knowledge, and support throughout. To Barbara Van Horn, Co-Director of the Goodling Institute for Research and Family Literacy and Co-Director of the Institute for the Study of Adult Literacy, The Pennsylvania State University, for the hours we spent discussing this volume and your efforts in helping to identify authors, topics, and relevant policy and research. This second edition would not be as comprehensive or informative without your understanding of the field and graciousness in sharing knowledge and time. To all the chapter authors, it is your knowledge, expertise, and time that made this handbook possible and for that I am deeply grateful. I also appreciate the work of Adrienne Villagomez, Sheena Berry, Beth Anne Newman, and Priya Mudholker, doctoral students who helped in editing and manuscript preparation, especially Adrienne and Sheena who provided intensive editorial assistance as we prepared the final manuscript, to ensure we met the publication deadline. In addition, I extend a special thanks to Robert Pleasants who provided detailed editorial feedback to many authors and worked under tight deadlines as well as to Leigh Anna Hutchison who carefully edited the final manuscript. To my three grandsons, Andrew, Zachary, and Nicholas—your presence continually reminds me of the importance of family in the lives of young children. My deepest appreciation is to my husband, John, for your unfailing support when I work on these large projects.

Reference

UNESCO. (2004). Retrieved from <http://www.unesco.org/en/education-ar/themes/learning-throughout-life/literacy/literacy-important/>

Contributor List

Judith A. Alamprese, Principal Associate, Abt Associates Inc., Bethesda, Maryland

Oscar A. Barbarin, Ph.D., Lila and Douglas Hertz Endowed Chair, Department of Psychology, Tulane University, New Orleans, Louisiana, Fellow, Cowen Institute

Sandra Barrueco, Ph.D., Assistant Professor, Clinical Psychology The Catholic University of America Washington, DC

John Benseman, Ph.D., Owner and Co-Director, Critical Insight, Auckland, New Zealand

Viv Bird, Director, Booktrust, London, England

Karen A. Blasé, Ph.D., Co-Director, National Implementation Research Network, Senior Scientist, Frank Porter Graham Child Development Institute, The University of North Carolina at Chapel Hill

Kimberly Boller, Ph.D., Senior Research Psychologist, Mathematica Policy Research, Inc., Princeton, New Jersey

Greg Brooks, PGCE, Ph.D., Research Director, Sheffield Arm of the National Research and Development Centre for Adult Literacy and Numeracy, Emeritus Professor of Education, University of Sheffield, England

Jeffrey M. Brown, Graduate Student, Department of Psychology, Tulane University, New Orleans, Louisiana

Amy J. Carey, Graduate Student, Purdue University, West Lafayette, Indiana

Dina C. Castro, M.P.H., Ph.D., Senior Scientist, Frank Porter Graham Child Development Institute, Director, Center for Early Care and Education Research – Dual Language Learners, The University of North Carolina at Chapel Hill

Rachel Chazan-Cohen, Ph.D., Federal Project Officer, Office of Planning Research and Evaluation, Administration for Children and Families, DHHS, Washington, DC

Snoeks Desmond, Ph.D., ECD Consultant, Family Literacy Project, Durban, South Africa

Helena Duch, Ph.D., Associate Research Scientist, Mailman School of Public Health, Columbia University, New York, New York

Barbarina Ertle, Ed.D., Assistant Professor, Ruth S. Ammon School of Education, Adelphi University, Long Island, New York

Susan C. Faircloth, Ph.D., Associate Professor, (Educational Leadership) American Indian Leadership, The Pennsylvania State University, State College, Pennsylvania

Dean L. Fixsen, Ph.D., Co-Director, National Implementation Research Network, Senior Scientist, Frank Porter Graham Child Development Institute, The University of North Carolina at Chapel Hill

Vivian L. Gadsden, Ed.D., William T. Carter Professor of Child Development and Education, Director, National Center on Fathers and Families, Associate Director, National Center on Adult Literacy, The University of Pennsylvania, Philadelphia, Pennsylvania

Sandra Gloria Garcia, M.A., Graduate Student, School of Education, Frank Porter Graham Child Development Institute, The University of North Carolina at Chapel Hill

Herbert P. Ginsburg, Ph.D., Jacob H Schiff Foundations Professor of Psychology and Education, Columbia University, New York, New York

Lynda Ginsburg, Ph.D., Senior Advisor, National Center for Adult Literacy, Education Research, Rutgers University, Cream Ridge, New Jersey

Deanna S. Gomby, Ph.D., M.S., Vice President, Education, Heising-Simons Foundation, Los Altos, California

Karin Guill, Researcher, Technical University of Dortmund, Institute for School Development Research (IFS), Dortmund, Germany

Ramazan Gungor, M.A., Graduate Assistant, Goodling Institute for Research in Family Literacy, The Pennsylvania State University, State College, Pennsylvania

Peter Hannon, Ph.D., Emeritus Professor of Education, University of Sheffield, England

Stephanie Herppich, Doctoral Student and Research Associate, University of Goettingen, Educational Institute, Göttingen, Germany

Esther Jean-Baptiste, Graduate Student, Department of Psychology, Tulane University, New Orleans, Louisiana

John R. Kruidenier, Ph.D., Education Consultant, Kruidenier Education Consulting, Horsham, Pennsylvania

Jeanne Kurvers, Ph.D., Associate Professor, Department of Culture Studies, Tilburg School of Humanities, Tilburg University, Tilburg, Netherlands

Christopher J. Lonigan, Ph.D., Associate Director, Florida Center for Reading Research, Professor, Department of Psychology, The Florida State University, Tallahassee, Florida

John Love, Ph.D., President, Ashland Institute for Early Childhood Science and Policy, Ashland, Oregon

Nele McElvany, Ph.D., Professor, Technical University of Dortmund, Institute for School Development Research (IFS), Dortmund, Germany

Julia Mendez, Ph.D., Professor, Department of Psychology, University of North Carolina at Greensboro

Sandra F. Naoom, MSPH, Doctoral Candidate, Research, Measurement and Evaluation, Associate Director, National Implementation Research Network, Frank Porter Graham Child Development Institute, The University of North Carolina at Chapel Hill

Susan B. Neuman, Ph.D., Director, Michigan Research Program on Ready to Learn, Professor, Educational Studies, The University of Michigan, Ann Arbor, Michigan

Kimberly G. Noble, M.D., Ph.D., Assistant Professor, Department of Pediatrics and G.H. Sergievsky Center, Columbia University, New York, New York

Robert C. Pianta, Ph.D., Dean, Curry School of Education, Novartis Professor of Education, Director, Center for Advanced Study of Teaching and Learning, The University of Virginia, Charlottesville, Virginia

Ashley M. Pinkham, Ph.D., Postdoctoral Fellow, School of Education, The University of Michigan, Ann Arbor, Michigan

Douglas R. Powell, Ph.D., Distinguished Professor of Developmental Studies, Purdue University, West Lafayette, Indiana

Esther Prins, Ph.D., Co-Director, Goodling Institute for Research in Family Literacy, The Pennsylvania State University, State College, Pennsylvania

Helen Raikes, Ph.D., Professor, Child, Youth and Family Studies, The University of Nebraska-Lincoln

Eileen Rodriguez, Ph.D., Survey Researcher, Mathematica Policy Research, Inc., Princeton, New Jersey

Kristin M. Scott, Graduate Student, Tulane University, New Orleans, Louisiana

Monique Sénéchal, Ph.D., Associate Professor of Psychology, Carleton University, Ottawa, Ontario, Canada

Timothy Shanahan, Ph.D., Professor, Center for Literacy and Department of Curriculum and Instruction, The University of Illinois at Chicago

Sheila Sherow, Ph.D., Research Associate, The Goodling Institute for Research in Family Literacy, The Pennsylvania State University, State College, Pennsylvania

Linda Shohet, Executive Director, The Centre for Literacy of Quebec, Montreal, Canada

Joseph Sparling, Ph.D., Professor, Melbourne Graduate School of Education, The University of Melbourne, Melbourne, Australia, Fellow, Frank Porter Graham Child Development Institute, The University of North Carolina at Chapel Hill

Alison Sutton, M.A., Strategic Analyst, COMET, Partner, Critical Insight, Auckland, New Zealand

Nicole L. Thompson, Ph.D. (Menominee/Mohican), Assistant Professor, Instruction & Curriculum Leadership, College of Education, University of Memphis, Memphis, Tennessee

Blaire Willson Toso, Ph.D., Research Associate, Institute for the Study of Adult Literacy, The Pennsylvania State University, State College, Pennsylvania

Melissa Van Dyke, MSW, Director of Technical Assistance Services, National Implementation Research Network, Investigator, Frank Porter Graham Child Development Institute, The University of North Carolina at Chapel Hill

Barbara Van Horn, M.Ed., Co-Director, Institute for the Study of Adult Literacy, Co-Director, Goodling Institute for Research and Family Literacy, The Pennsylvania State University, State College, Pennsylvania

Roel van Steensel, Ph.D., Researcher, University of Amsterdam, Research Centre of Child Development and Education/Kohnstamm Institute, Amsterdam, Netherlands

Cathy Van Tuijl, Ph.D., Associate Professor, Department of Pedagogical and Educational Sciences, Utrecht University, Utrecht, Netherlands

Adrienne N. Villagomez, B.A., Graduate Student, Doctoral Program in School Psychology, The University of North Carolina at Chapel Hill

Cheri Vogel, Ph.D., Senior Staff, Human Services Research Division, Mathematica Policy Research, Inc., Washington, DC

Barbara Hanna Wasik, Ph.D., William R. Kenan, Jr. Distinguished Professor, School of Education, Fellow, Frank Porter Graham Child Development Institute, The University of North Carolina at Chapel Hill

Drucie Weirauch, MEd., Family Literacy Specialist, The Goodling Institute for Research in Family Literacy, Doctoral Candidate, Curriculum & Instruction, Literacy & Language, The Pennsylvania State University, State College, Pennsylvania

Diana Westerberg, M.A., Graduate Student, Department of Clinical Psychology, The University of North Carolina, Greensboro

Jessica E. Vick Whittaker, Ph.D., Research Scientist, Center for Advanced Study of Teaching and Learning, The University of Virginia, Charlottesville, Virginia

Contents

<i>Preface</i>	<i>xi</i>
<i>Contributor List</i>	<i>xiii</i>

PART I

Overview of Family Literacy	1
------------------------------------	----------

- | | |
|---|---|
| 1 The Role of Family Literacy in Society | 3 |
| <i>Barbara Hanna Wasik and Barbara Van Horn</i> | |

PART II

Children's Early Literacy and Language Development	19
---	-----------

- | | |
|--|-----|
| 2 Early Literacy Development | 23 |
| <i>Ashley M. Pinkham and Susan B. Neuman</i> | |
| 3 Child Language and Literacy Development at Home | 38 |
| <i>Monique Sénéchal</i> | |
| 4 How Can Parents Help Their Children Learn Math? | 51 |
| <i>Herbert P. Ginsburg, Helena Duch, Barbrina Ertle, and Kimberly G. Noble</i> | |
| 5 Nested Strategies to Promote Language and Literacy Skills | 66 |
| <i>Barbara Hanna Wasik and Joseph Sparling</i> | |
| 6 Focus on Children under Age Three: Family Literacy in Early Head Start | 87 |
| <i>Kimberly Boller, Eileen Rodriguez, Cheri Vogel, Rachel Chazan-Cohen, Helen Raikes, and John Love</i> | |
| 7 Family Literacy and Home Visiting Programs | 103 |
| <i>Deanna S. Gomby</i> | |
| 8 Translating Research into Practice: Results from the National Early Literacy Panel and Their Implications for Family Literacy Programs | 118 |
| <i>Christopher J. Lonigan and Timothy Shanahan</i> | |

- 9 How Effective Are Family Literacy Programs for Children's Literacy Skills? A Review of the Meta-Analytic Evidence 135
Roel van Steensel, Stephanie Herppich, Nele McElvany, and Jeanne Kurvers

PART III

Parent and Adult Learning and Engagement 149

- 10 Father Involvement and Family Literacy 151
Vivian L. Gadsden
- 11 Adult Learning in Family Literacy: Special Considerations for Women Learners 166
Esther Prins and Barbara Van Horn
- 12 Effective Strategies for Teaching Reading to Adults 181
John R. Kruidenier
- 13 Effective Strategies for Teaching Math to Adults 195
Lynda Ginsburg
- 14 Preparing Adults for the Future: Transitions to Postsecondary Education or Work 209
Judith A. Alamprese
- 15 Parent Engagement and Parent Leadership 223
Blaire Willson Toso and Ramazan Gungor

PART IV

Culture and Diversity 237

- 16 A Socio-Cultural Conception of Literacy Practices in African American Families 239
Kristin M. Scott, Jeffrey M. Brown, Esther Jean-Baptiste, and Oscar A. Barbarin
- 17 Meeting the Needs of American Indian and Alaska Native Families 255
Susan C. Faircloth and Nicole L. Thompson
- 18 Family Literacy Programs for Latino Families in the United States 270
Dina C. Castro, Julia Mendez, Sandra Garcia, and Diana Westerberg
- 19 Linguistic, Literacy, and Socioemotional Interventions for Young Children in Migrant and Seasonal Farm Worker Families 289
Sandra Barrueco

PART V

Global Efforts in Family Literacy 303

- 20 Family Literacy in Canada 307
Linda Shohet

21	Family Literacy in England <i>Greg Brooks, Peter Hannon, and Viv Bird</i>	325
22	Family Literacy Programs in the Netherlands and in Germany: Policies, Current Programs, and Evaluation Studies <i>Nele McElvany, Roel van Steensel, Karin Guill, Cathy Van Tuijl, and Stephanie Herppich</i>	339
23	Family Literacy in New Zealand: Weaving Together Families, Schools, and Community <i>John Benseman and Alison Sutton</i>	354
24	Family Literacy Programs in South Africa <i>Snoeks Desmond</i>	370
PART VI		
	Program Quality and Fidelity in Family Literacy	385
25	Approaches to Program Fidelity in Family Literacy Research <i>Douglas R. Powell and Amy J. Carey</i>	387
26	Assessing Early Childhood Classrooms <i>Jessica E. Vick Whittaker and Robert C. Pianta</i>	401
27	Assessing Adult Basic Education Classrooms in Family Literacy Programs <i>Sheila Sherow</i>	417
28	Program Improvement through Action Research <i>Drucie Weirauch</i>	433
29	Developing Implementation Capacity of Organizations and Systems to Support Effective Uses of Family Literacy Programs <i>Sandra F. Naoom, Melissa Van Dyke, Dean L. Fixsen, Karen A. Blasé, and Adrienne N. Villagomez</i>	447
	<i>Index</i>	465

Part I

Overview of Family Literacy

The introductory chapter in this handbook provides a conceptual and empirical foundation for the sections that follow, beginning with information on how the concept of literacy has evolved over time from a focus only on reading and writing to a more plural view that takes into account the functions of literacy and the interactions between culture and literacy. The authors, Barbara Hanna Wasik and Barbara Van Horn, build on their collective experiences in family literacy, early childhood, parent education, and adult education to examine family literacy, both as a phenomenon of family life and as a framework for literacy services. Several major variables with a direct bearing on family literacy in the United States and globally are discussed, including (a) demographic data on the literacy levels of adults, (b) children's literacy levels, (c) the influence of parents on children's literacy, and (d) the impact of immigration on child and adult literacy education. Literacy levels of parents are highly predictive of child outcomes and for this reason they become a significant factor when considering children's literacy development. Also, parent interactions with children are well documented as significant factors in children's language and literacy development. Children's early literacy levels, in turn, are also highly predictive of school outcomes; without intervention children who begin preschool or elementary school with low literacy skills are likely to maintain their relatively low status throughout their schooling. This empirical evidence, expanded upon in later chapters, provides the strongest rationale for involving parents in literacy interventions with their children.

This overview chapter also includes statistics on current immigration status in a sampling of countries to illustrate the need for basic literacy skills on the part of many adult immigrants. The children of adult immigrants are often at risk of low school performance and experience added challenges when entering the formal educational system. By providing both parent and child services, family literacy programs are uniquely positioned to assist these families. The statistics documenting large numbers of both immigrant and nonimmigrant adults and children without basic literacy skills add to the empirical research of parent influences on child development that supports the role for family literacy programs. The statistics also provide urgency to learning how best to help parents and children gain the literacy skills important for accessing educational and work opportunities, as well as opening doors for other life opportunities.

The Role of Family Literacy in Society

Barbara Hanna Wasik and Barbara Van Horn

The intergenerational transfer of literacy has intrigued educators, researchers, and policy makers, and served as a fundamental rationale of family literacy programs. Children who come into the world without language learn one of thousands of languages, depending upon the family into which they are born. Not only does the family determine the child's early language, but a family's culture, beliefs, and traditions also influence the way children use words for discourse (Heath, 1983). Their family's literacy levels also influence whether children develop strong language skills as well as reading and writing skills. Some parents provide a strong foundation for language and literacy at home, having many print materials available and modeling the use of reading, writing, and math in daily life. Other families communicate primarily through oral language, with storytelling being an important way to share family or cultural history. Regardless of a family's desires for their children's success, some parents, especially those with limited literacy skills or formal education, do not have the knowledge or skills needed to adequately support their children's early language and literacy development. As a result, these children often struggle with and do not master school-related literacy skills, putting them at a lifelong disadvantage related to educational outcomes, future employability, and social and health status.

Internationally, the impact of literacy on economic and social indicators is of increasing interest. The relationship between educational attainment and income has been well-documented in the United States and other countries (Blanden & Gregg, 2004; Day & Newburger, 2002; Hertz et al., 2007). Further, business and industry leaders continue to stress the need for more highly educated adults to fill positions, many of which require at least some postsecondary education or training. These positions require more advanced academic skills (e.g., reading and writing, mathematics and numeracy, technology, problem-solving) and are more likely to pay family-sustaining wages than positions that do not require these skills. This global need for better skilled workers has raised awareness and increased commitments to adult literacy. Studies on literacy and health outcomes have also highlighted the importance of literacy for understanding medical information (Moon, Cheng, Patel, Baumhaft, & Scheidt, 1998), for compliance with medical procedures and for patient safety (Immink, & Payongayong, 1999; Moon et al., 1998; Williams, Baker, Honig, Lee, & Nowlan, 1998), and for more positive child health outcomes (DeWalt, & Hink, 2009; Sanders, Federico, Klass, Adrams, & Dreyer, 2009; Sandiford, Cassel, Montenegro, & Sanchez, 1995), underscoring the broad implications for literacy far beyond schooling and employment.

One of the compelling global issues of literacy education is whether we can reach the goal of having all young children become literate before they reach adulthood, able to function at their