A New Wave of Evidence

The Impact of School, Family, and Community Connections on Student Achievement

Annual Synthesis 2002

Anne T. Henderson

Karen L. Mapp

Contributors

Amy Averett

Deborah Donnelly

Catherine Jordan

Evangelina Orozco

Joan Buttram Mar

Marilyn Fowler Ma

Margaret Myers Lacy Wood



National Center for Family & Community Connections with Schools Southwest Educational Development Laboratory 211 East Seventh Street Austin, Texas 78701-3281

Phone: (800) 476-6861 Fax: (512) 476-2286

Web: www.sedl.org/connections/ E-mail: connections@sedl.org

©Southwest Educational Development Laboratory 2002. This publication was produced in whole or in part with funds from the Institute of Education Sciences, U.S. Department of Education, under contract number ED-01-CO-0009. The content herein does not necessarily reflect the views of the U.S. Department of Education, any other agency of the U.S. Government, or any other source.

To the late Susan McAllister Swap

For more than 20 years, Sue worked tirelessly with both parents and educators, exploring how to develop closer, richer, deeper partnerships. In her last post, she directed with distinction the Center on Families, Communities, Schools, and Children's Learning at Wheelock College. Her final book, *Developing Home-School Partnerships*, is a classic. Her family, her many friends, and her colleagues were deeply saddened by her untimely passing. We recall her fondly as a wonderful person with great warmth and many talents. Her contributions to the field and her inspiring leadership will long be remembered.

Table of Contents

List o	ıf Tablesii
Ackn	owledgments1
Forev	word
A Ne	w Wave of Evidence—In Short
Introd	duction9
Abo	ut the Studies
	How We Selected the Studies
	What the Studies Cover
	Limitations of the Research
	How to Get Copies of the Studies
Synt	thesis of Research Studies
	How the Studies Define Family Involvement and Student Achievement
	Studies on the Impact of Parent and Community
	Involvement on Student Achievement
	Studies on Effective Strategies to Connect
	Schools, Families, and Community
	Studies on Parent and Community Organizing
	Efforts to Improve Schools
	Recommendations: Putting These Findings into Action
	Conclusion
The	Research Studies
Appe	endix: Looking Back—A Brief History and Key Studies, 1974–95
Abou	tt the Authors and Publisher
Refer	rences

List of Tables

1.	Studies by General Topic
2.	Studies by Age and Grade Level
3.	Studies by Design Type
4.	Six Types of Parent Involvement for Grades 8 and 12
5.	Combined Effect of Teacher Support and High Parent Involvement
	on Grade Point Averages
6.	Combined Effect of Student Sense of Belonging and High
	Parent Involvement on Grade Point Averages
7.	Examples of the Reported Impact of Community Organizing, by Indicator 55
8.	Overview of Effects in HIPPY Cohorts85
9.	Activities Related to Six Types of Parent Involvement
10.	Percentage of Difference between High and Low Achievers
	That Can Be Explained by Two Clusters of Variables97
11.	Examples of the Reported Impact of Community Organizing, by Indicator 114
12.	Combined Effect of Teacher Support and High Parent Involvement
	on Grade Point Averages
13.	Combined Effect of Student Sense of Belonging and High Parent
	Involvement on Grade Point Averages
14.	Effect of Tutorials by Community Volunteers on Reading Skills
15.	Measures Used for Early Head Start Study
16.	Impact of Three Parental Actions on Early Head Start Children
17.	Impact of Parent Involvement on Reading and Retention
18.	Effects of Three Supports That Favor High Achievement on
	Student Outcomes, by Gender
19.	Effects of Family Background Risk Factors That Favor High
	Achievement on Student Outcomes, by Gender
20.	Effects of Title I Parent Involvement on Math and Reading Comprehension 172
21.	Proportions of Correct Answers in Math and Literacy Tests in Study 1 187
22.	Proportions of Correct Answers in Math and Literacy Tests in Study 2 188
23	Proportion of Fellows Carrying Out Skills Fither "Often" or "Very Often" 200



Acknowledgments

The idea for the *Evidence* publications first began in 1980 at the National Committee for Citizens in Education. Stan Salett had discovered a study that linked schools with PTAs to higher student achievement and wondered if there might be more relevant research. Bill Rioux thought something should be published about it if there were studies available, and Carl Marburger refused to testify or speak publicly about the research unless he had rocksolid information. Their beliefs led to the publication of *The Evidence Grows* (1981). Bill Rioux then insisted on two updates—*The Evidence Continues to Grow* (1987) and *A New Generation of Evidence: The Family Is Critical to Student Achievement* (1994). Chrissie Bamber guided the development and marketing of all early three editions.

This new Evidence publication is the result of a true collaborative effort. In 2000 the U.S. Department of Education's Office of Educational Research and Improvement charged the Southwest Educational Development Laboratory's new National Center for Family and Community Connections with Schools (the Center) with doing an annual review and synthesis of current research about family and community connections. In early 2001 the Center's staff and steering committee began making plans to document the growing evidence that family and community connections with schools make a difference in student achievement and success. About the same time, Karen L. Mapp, president of the Institute for Responsive Education (IRE), and Anne Henderson, senior consultant for the Institute for Education and Social Policy, who had written the earlier Evidence publications, began conversations about an updated version. As a member of the Center's steering committee, Karen Mapp knew about the Center's plans and suggested that the Center partner with IRE and Anne Henderson to do this. The Center agreed that a partnership made sense. So its staff began searching for, reading, analyzing, and annotating the research studies while Anne Henderson and Karen Mapp conceptualized and wrote this newest Evidence publication.

The Center staff—Amy Averett, Joan Buttram, Deborah Donnelly, Marilyn Fowler, Catherine Jordan, Margaret Myers, Evangelina Orozco, and Lacy Wood—all contributed significantly to the content as well, while Artie Stockton provided support and encouragement. At the Institute for Responsive Education, Carol Strickland helped summarize studies, and the rest of the IRE staff—Linda Peterson, Cathy Meza, Brendan McCaffery, and Rashaud Pettway—kept things running. Design consultants Jane Thurmond and Shaila Abdullah provided the design and layout services, Nancy Richey and Johanna Franke edited the final drafts, and Linda Webster prepared the index.

Several colleagues steered the project toward important studies, including their own work. We especially thank Janet Chrispeels, Reg Clark, and Joyce Epstein. Our review panel offered excellent advice, critical comment (sometimes very critical), and fine language. Don Davies chaired the panel and served as official reviewer, bringing his long and fruitful experience to bear on this work. Oliver Moles sent innumerable studies and offered careful comments throughout the process. Warlene Gary hosted an initial review panel meeting, gave useful advice about reaching practitioners, and helped arrange for the debut of *Evidence* at the National Education Association 2002 annual meeting in Dallas, Texas. Sue Ferguson, a steadfast friend to this work, provided eversolid and practical advice. Norm Fruchter gave insight into the history of community organizing and, as always, put his finger on the weak spots.

The Center's steering committee members gave their advice and expertise to the development of this research synthesis: Howard Adelman, Center for Mental Health in Schools, University of California, Los Angeles; Kelly A. Butler, Parents for Public Schools, Inc.; Nancy Chavkin, Center for Children and Families, Southwest Texas State University; Pat Edwards, National Center for Community Education; Joyce Epstein, Center on School, Family, and Community Partnerships, Johns Hopkins University; Arnold Fege, Public Education Network; Ira Harkavy, Center for Community partnerships, University of Pennsylvania; Milbrey McLaughlin, Stanford Center on Adolescence, Stanford University; Maria R. Montecel, Intercultural Development Research Association; Terry Peterson, Network Resource for After-School and Community Education, University of South Carolina; Robert Pianta, University of Virginia; Estus Smith, Kettering Foundation; and Bobby Starnes, The National Center for Collaborative Teaching.

No acknowledgments would be complete without recognizing Paul Weckstein, Kathy Boundy, and Larry Searcy at the Center for Law and Education who continue to promote *Evidence* and make sure that Congress and federal agencies take this research into account as they develop education policy. They have also worked tirelessly to protect the rights of low-income children to attend public schools that are excellent, equitable, and open to their families' full participation.

Karen Mapp and Anne Henderson, the authors, want to thank their families—Basil Henderson, "who has endured through all four editions of *Evidence*, served as genial host for meetings, helped keep the stacks of paper from drifting into chaos, and offered judicious advice," and Donal Fox, "who gave his gift of music, his delicious gourmet cooking, and his constant love and support for Karen during the highs and lows of the writing process."

Finally, as all of the collaborators agree, support from families is what this report is all about.



Foreword by Don Davies

If you are a new principal in a troubled inner-city school under orders from your superintendent to raise student test scores and involve parents, what should you do?

If I were you, I would look at the results of studies that show a convincing link between student achievement and various approaches to parent and community involvement. You could begin by checking out this new report where you'll discover several ideas that have been tested by researchers that might work in your school.

If you are a parent leader or a teacher concerned about improving the reading proficiency of the children in your school, what should you do?

If I were you, I would search for some tested ways that teachers and parents have worked together to foster improved reading skills and test scores. There has been much research in recent years that will provide ideas and guidance about what to do and what not to do. This report will save you a lot of time and be a reliable guide in your search.

If you are a legislator or school board member seeking ways to get more schools to work effectively with the families and community agencies to increase student achievement, what should you do?

If I were you, I would want to know about some promising approaches that might be aided by new policies or increased funding. This report provides a useful starting point with its narrative overview of the positive results of partnership programs.

I offer such advice with confidence, because this is a report that will be of practical value to many audiences if it is used thoughtfully. For example, the urban principal mentioned above could find at least 12 studies summarized that will suggest programs and approaches that he can consider for his school. A principal in a suburban or rural school could also find many applicable ideas. The recommendations are also oriented to action and may offer strategies that would be useful in many settings.

Other potential readers who can benefit from this publication include:

Researchers: the methods described in the study summaries and the many recommendations for future research may be helpful to your work.

Many policymakers, administrators, and funders ask for evidence that parent involvement helps student achievement, including test scores. This report provides some useful answers.

- Professors and graduate students in education programs: the case studies of effective practice may suggest some interesting joint projects with schools.
- Teachers, administrators, and school board members: many ideas in the program
 evaluations (such as parent workshops, interactive homework, and teacher outreach to families) and case studies (engaging families of diverse backgrounds in
 improving student achievement) may be adapted to your own schools. Even
 though the bulk of these studies focus on low-income students, the ideas about
 partnership and participation are important in all settings and for all students.
- Policymakers, including legislators and education department staff at the state and national levels: several studies have clear implications for executive or legislated efforts to encourage parent and community involvement. I especially recommend the studies of Title I and such programs as California Healthy Start, Early Head Start, Project EASE, and Community Schools.
- Funders of educational programs: the studies on community organizing may suggest some interesting funding strategies to increase support for your goals and some indicators for assessing progress.
- Journalists and writers concerned about school reform: you may discover that
 these findings will add depth to your articles and give insight into developments
 in your field.

In this report you will find an impressive increase in the quantity and quality of research in this area over the past two decades, which is encouraging. It will only be significant in contributing to school reform, however, if you pay serious attention to the evidence of the positive contributions that partnership programs can make to student achievement and other beneficial outcomes, and then act on what has been learned.

This report is important because it helps deliver and interpret the evidence. Many policymakers, administrators, and funders ask for evidence that parent involvement helps student achievement, including test scores. Many who ask the question are frustrated with the vague and sometimes confusing answers they get. This report provides some useful answers.

Two new features in the content of this report make it even more valuable for you than the three previous research summaries authored or co-authored by Anne Henderson, the first of which appeared almost 20 years ago. The first new feature is the emphasis on studies that describe successful practice in engaging families of all backgrounds in the challenging work of improving student achievement. Many educators say that they need practical, workable strategies for reaching out to families and sustaining their involvement. This report contains an entire section on collaborative approaches.

The second new feature in this report will give you a useful discussion and summary of the emergence of new approaches to community organizing aimed at school reform. The report documents how scores of community groups are organizing a power base

of parents and residents in low-income communities, with the goal of improving outcomes for all students, through increased funding and educational resources.

While there is not much recent quantitative research about this kind of parent and community participation, this publication offers you a good overview of studies that are mapping research development and points to some important studies and references.

The report has many important assets and few deficits.

On the plus side, you will find the content is generally rich and helpful. The report is well organized and easy to use because of a good index and guides to the study summaries by topic and types of research. The overview and the summaries are well written and should be clear to practitioners who are not researchers. The authors used a careful process to select the studies to be included, and the selection represents a variety of topics and approaches.

On the downside, the report reflects the current limitations of this field of research. This means that there are few experimental or quasi-experimental studies and many of the studies represent quite small samples. If you are interested in the data, analyses, and explanations that underlie the conclusions of many of the studies, you will need to go beyond the summaries to the original reports, articles, or chapters.

All of you who are advocates of school, family, and community partnerships will be heartened by reaffirmation of the partnership idea that is provided in these pages. Those of you interested in research will also find new stimulation and ideas for filling the many gaps that remain to be filled in our knowledge.

I applaud the good efforts of Anne Henderson and Karen Mapp and the Southwest Educational Development Laboratory in undertaking and producing this important work.

> —Don Davies Founder, Institute for Responsive Education Visiting Professor, Northeastern University June 26, 2002



A New Wave of Evidence—In Short

The evidence is consistent, positive, and convincing: families have a major influence on their children's achievement in school and through life. This fourth edition of *Evidence* confirms that the research continues to grow and build an ever-strengthening case. When schools, families, and community groups work together to support learning, children tend to do better in school, stay in school longer, and like school more.

How are the many ways that families are engaged in their children's education related to achievement? Many studies found that students with involved parents, no matter what their income or background, were more likely to

- earn higher grades and test scores, and enroll in higher-level programs.
- be promoted, pass their classes, and earn credits.
- attend school regularly.
- have better social skills, show improved behavior, and adapt well to school.
- graduate and go on to postsecondary education.

Several studies found that families of all income and education levels, and from all ethnic and cultural groups, are engaged in supporting their children's learning at home. White, middle-class families, however, tend to be more involved at school. Supporting more involvement at school from all parents may be an important strategy for addressing the achievement gap.

Do programs and special efforts to engage families make a difference?

Yes, several studies found that they do. For example, teacher outreach to parents was related to strong and consistent gains in student performance in both reading and math. The effective outreach practices included meeting face to face, sending materials home, and keeping in touch about progress. Workshops for parents on helping their children at home were linked to higher reading and math scores. Schools with highly rated partnership programs made greater gains on state tests than schools with lower-rated programs.

How do higher performing schools engage families and community?

Schools that succeed in engaging families from very diverse backgrounds share three key practices. They

- focus on building trusting collaborative relationships among teachers, families, and community members.
- recognize, respect, and address families' needs, as well as class and cultural difference.
- embrace a philosophy of partnership where power and responsibility are shared.

When schools build partnerships with families that respond to their concerns and honor their contributions, they are successful in sustaining connections that are aimed at improving student achievement.

What is the impact of parent and community organizing on improving schools?

This type of engagement is based outside schools and led by parents and community members, and it is growing nationwide. These efforts are aimed at schools that are low performing. Strategies of community organizing are different from traditional parent involvement and are openly focused on building low-income families' power and political skills to hold schools accountable for results.

A new group of studies found that community organizing contributed to these changes in schools:

- Upgraded school facilities.
- Improved school leadership and staffing.
- Higher-quality learning programs for students.
- New resources and programs to improve teaching and curriculum.
- New funding for after-school programs and family supports.

Summing up

When parents talk to their children about school, expect them to do well, help them plan for college, and make sure that out-of-school activities are constructive, their children do better in school. When schools engage families in ways that are linked to improving learning, students make greater gains. When schools build partnerships with families that respond to their concerns and honor their contributions, they are successful in sustaining connections that are aimed at improving student achievement. And when families and communities organize to hold poorly performing schools accountable, studies suggest that school districts make positive changes in policy, practice, and resources.

How can we put these findings into action?

- Recognize that all parents—regardless of income, education, or cultural background—are involved in their children's learning and want their children to do well.
- Design programs that will support families to guide their children's learning, from preschool through high school.
- Develop the capacity of school staff to work with families.
- Link efforts to engage families, whether based at school or in the community, to student learning.
- Build families' social and political connections.
- Focus efforts to engage families and community members on developing trusting and respectful relationships.
- Embrace a philosophy of partnership and be willing to share power with families. Make sure that parents, school staff, and community members understand that the responsibility for children's educational development is a collaborative enterprise.
- Build strong connections between schools and community organizations.
- Include families in all strategies to reduce the achievement gap among white, middle-class students and low-income students and students of color.



Introduction

The Office of the Superintendent of Public Instruction (OSPI) of the State of Washington recently published a literature review of 20 studies that examined the common characteristics of high-performing schools. These studies include several U.S. Department of Education studies, including *Hope for Urban Education: A Study of Nine High Performing, High Poverty Urban Elementary Schools* (Mayer, D. P., Mullens, J. E., & Moore, M. T., 2000), and *Monitoring School Quality: An Indicators Report* (Charles A. Dana Center, 1999). Their research found that high-performing schools tend to have a combination of many characteristics, which were narrowed into these nine areas:

This publication examines parent and community connections with schools and their impact on student achievement.

- 1. A clear and shared focus.
- 2. High standards and expectations for all students.
- 3. Effective school leadership.
- 4. High levels of collaboration and communication.
- 5. Curriculum, instruction, and assessments aligned with state standards.
- 6. Frequent monitoring of teaching and learning.
- 7. Focused professional development.
- 8. A supportive learning environment.
- 9. High levels of parent and community involvement.

The purpose of this publication, *A New Wave of Evidence: The Impact of School, Family, and Community Connections on Student Achievement*, is to examine one of these identified characteristics of high-performing schools: parent and community involvement and its role in impacting on student achievement. This publication is the fourth in the series of *Evidence* publications authored or co-authored by Anne Henderson. It is also the second in the series of publications by SEDL's National Center for Family and Community Connections with Schools (hereinafter referred to as the Center).

The Center's first publication, *Emerging Issues in School, Family, and Community Connections*, is a research synthesis created to identify "key issues that must be addressed if research is to assist schools, families, and communities in working together to nurture high standards and academic success for all children" (p. 1). For *Emerging Issues*, SEDL staff reviewed a broad body of literature on the process and impact of school, family, and community connections. This body of literature reviewed is captured in full in an online, searchable annotated bibliography database, *The*

Connection Collection: School-Family-Community Publications Database (2002) available at www.sedl.org/connections/resources/. (See "About the Studies" section, p. 13, for information about how we selected the studies.)

Although we tried to cover a vast range of topics, certain areas were deemed too important to cover briefly in this publication. These topics will be treated separately in future annual research syntheses published by the Center. The 2003 synthesis will focus on connecting families from diverse backgrounds with schools. In future years the Center will take a closer look at the involvement of community organizations in the process of transforming schools into high-performing learning communities and connecting families and schools to support successful transitions through the education system.

We tried to write in reader-friendly language free of educational jargon. We also tried to explain and demystify some of the more complex statistical methods and results used in the research studies.

Some Definitions

Throughout this report, we frequently use the words "family" or "families" in place of "parent" or "parents." We want to recognize that all family members—siblings, grand-parents, aunts, uncles, and "fictive kin" who may be friends or neighbors—often contribute in significant ways to children's education and development. If a study uses the terms "parent" or "parents," we stick to the terminology used by the researchers.

For the purposes of this report, we use the terms "connection" and "involvement" interchangeably.

By "community" we mean:

- the neighborhood or the places around the school.
- local residents, who live in the area and may or may not have children in the school, but have an interest in the school.
- local groups that are based in the neighborhood.

How This Report Is Organized

We have tried to organize this report in a way that will be easy to navigate. Here is a brief guide to what is in the report.

About the Studies

The section describes the methods used for selecting the studies, describes what the studies cover, and provides a table showing the studies by topic area, by age and grade level, and by design type (Tables 1–3, pp. 15–17). Limitations of the studies are indicated.

Synthesis of Research Studies

The first section of the synthesis sums up the findings briefly and provides some definitions. Following that, the studies are divided into three categories:

- Impact of Parent and Community Involvement on Student Achievement;
- Effective Strategies to Connect Schools, Families, and Community; and
- Parent and Community Organizing Efforts to Improve Schools.

The next section lists a series of recommendations designed to help people put these findings into use in a practical way, followed by the conclusion.

The Research Studies

This section provides summaries of the 51 studies described in this report.

Appendix: Looking Back—A Brief History and Key Studies, 1974–95

Because the studies in this report are all recent (1993–2002), we also include a short history of the research in this field for the past 30 years. Summaries of key studies mentioned in the brief history are also included in this section. A review of these studies with longer summaries is available in the previous edition, *A New Generation of Evidence: The Family Is Critical to Student Achievement* (1994), by Anne T. Henderson and Nancy Berla. It can be obtained from the Center for Law and Education in Washington, D.C., at www.cleweb.org.

About the Authors and Publisher

More information about the writers of this report and the Southwest Educational Development Laboratory is available in this section.

References

This section lists works cited.

Index

This report has a full index to help the reader find studies and topics of interest.

We hope that this report will be a useful tool for educators, researchers, policymakers, funders, community leaders, and others interested in the impact of school, family, and community connections on children's learning.



About the Studies

How We Selected the Studies

This review examines the growing evidence that family and community connections with schools make a difference in student success. It is the second in a series from the National Center for Family and Community Connections with Schools at the Southwest Educational Development Laboratory (SEDL). The first publication in the series was *Emerging Issues in School, Family, and Community Connections*. For *Emerging Issues*, SEDL staff reviewed a broad body of recent literature (published since 1995, with the exception of a few seminal studies) on the process and impact of school, family, and community connections. An annotated bibliography of more than 200 research studies, conceptual or theoretical pieces, practice and policy-oriented works, and literature reviews is available as an online, searchable database titled *The Connection Collection* (2002) on the SEDL Web site at www.sedl.org/connections/resources/.

For *A New Wave of Evidence*, SEDL staff identified about 80 research studies and literature reviews out of the documents they had reviewed. SEDL staff also did a further search in such major databases as the Educational Resources Information Center (ERIC) and Education Abstracts. This subgroup of studies focuses on the influence of family and community involvement on student academic achievement and other outcomes. (See the "Synthesis of Research Studies" section on p. 21 of this report for more detail on how these studies defined student achievement and family involvement.) In addition, we asked colleagues in the field to recommend other studies and send us copies of their research.

All studies were reviewed to make sure they met these standards:

- 1. Sound methodology: experimental, quasi-experimental, or correlational design with statistical controls. For qualitative studies, such as case studies, we looked for sound theory, objective observation, and thorough design.
- 2. Study findings that matched the data collected and conclusions that were consistent with the findings.

Our choices were, of course, limited to what was available, and published in the past eight or nine years. In choosing the 51 studies that were ultimately included, we looked for a range of studies that covered:

- early childhood through high school;
- all regions of the country;

Finally, we included studies that attempted to break new ground, either in defining student outcomes, ways that families and community members were engaged, or theories of change.

- diverse populations (income, race/ethnicity, educational level, and occupation);
- community as well as parent and family involvement;
- · a variety of methods, both quantitative and qualitative; and
- different sources of data (survey research, evaluations, case studies, experimental and quasi-experimental studies, and research reviews).

Finally, we included studies that attempted to break new ground, either in defining student outcomes, ways that families and community members were engaged, or theories of change. In the interest of focus and scale, we did not include studies on special education, educational policy, parent choice, or business partnerships. These topics will be covered in later reports.

What the Studies Cover

Tables 1–3 (pp. 15–17) group the studies by design type, general topic, and age and grade level. This grouping will help the reader find studies more easily and will display the many topics, methods, and grade levels covered. In classifying the studies by methods, we used the typology of empirical studies presented in Amy Baker and Laura Soden's review (1997).

- Pre-experimental studies: no comparison group, or the comparison group not randomly assigned and assessed at pretest.
- Quasi-experimental studies: no pretest comparability between treatment and comparison families (for example, comparing treatment students with students from the year before or in a different class).
- Ex post facto and correlational studies: level of involvement is naturally occurring, not randomly assigned. Parent involvement is a continuous variable that is related to a continuous dependent variable, without an intervention.
- Experimental studies: families are assigned to a treatment and control group at random, compared at pretest, received an intervention or not, then tested after the intervention.

Following the tables, a section on the limitations of this research provides more detailed standards for experimental studies.

Table 1. Studies by General Topic

Evaluations of Programs and Interventions

Baker et al. (1998) (HIPPY)

Balli et al. (1998) (Interactive Math

Homework)

Chrispeels and Rivero (2000) (PIQE)

Dryfoos (2000) (Community Schools)

Epstein, Simon, and Salinas (1997)

(TIPS/Writing)

Epstein et al. (1997) (Partnership Initiative)

Invernizzi et al. (1997) (Book Buddies)

Jordan et al. (2000) (Project EASE)

Kagitcibasi et al. (2001) (HIPPY)

Mathematica (2001) (Early Head Start)

Moore (1998) (Chicago Local School

Councils)

Newman (1995) (California Healthy Start)

Rubenstein and Wodatch (2000)

(Title I)

Shaver and Walls (1998) (Title I Parent

Workshops)

Starkey and Klein (2000) (Head Start Math)

Van Voorhis (2001) (TIPS/Science)

Wang et al. (1995) (Community for

Learning)

Westat and Policy Studies Associates (2001)

(Standards-based Practices)

Wilson and Corbett (2000) (CIPL)

Family Activities at Home vs. at School

Catsambis (1998)

Gutman and Midgley (2000)

Ho Sui-Chu and Willms (1996)

Izzo et al. (1999)

Shumow and Lomax (2001)

Shumow and Miller (2001)

Williams (1998)

Home-School Interactions

Hoover-Dempsey and Sandler (1997)

Mapp (2002)

Marcon (1999)

Miedel and Reynolds (1999)

Sanders et al. (1999)

Sanders and Harvey (2000)

Simon (2000)

Smrekar et al. (2001)

Family Processes and Time Use

Clark (1993)

Clark (2002)

Fan and Chen (1999)

Keith and Keith (1993)

Trusty (1999)

Community Effects

Clark (2002)*

Dryfoos (2000)*

Invernizzi et al. (1997)*

Newman (1995)*

Sanders and Herting (2000)

Culture and Class

Chrispeels and Rivero (2000)*

Lareau and Horvat (1999)

López (2001)

Peña (2000)

Scribner et al. (1999)

Community Organizing and Constituency Building

Gold et al. (2002)

Jacobs and Hirota (in press)

Mediratta and Fruchter (2001)

Shirley (1997)

Wilson and Corbett (2000)*

Literature Reviews

Baker and Soden (1997)

Downey (2002)

Epstein and Sanders (2000)

Hoover-Dempsey and Sandler (1997)*

^{*}Where a study appears under more than one topic, the second mention is indicated by an asterisk.

Table 2. Studies by Age and Grade Level

Early Childhood and Preschool

Baker et al.

Jordan et al.

Kagitcibasi et al.

Marcon

Mathematica

Miedel and Reynolds (preschool-8)

Starkey and Klein

Elementary School (grades K-5)

Balli et al. (6)

Chrispeels and Rivero

Clark 1993

Epstein et al.

Gutman and Midgley (5-6)

Invernizzi et al. (1–3)

Izzo et al. (K–3)

Lareau and Horvat (3)

Марр

Moore

Peña

Sanders and Harvey

Shaver and Walls (2–8)

Wang et al. (K–8)

Westat and Policy Studies Associates (3–5)

Middle and High School (grades 6–12)

Catsambis (8-12)

Epstein, Simon, and Salinas (6–8)

Ho Sui-Chu and Willms (8)

Keith and Keith (8)

López

Rubenstein and Wodatch

Sanders et al. (9-12)

Sanders and Herting (8)

Shumow and Lomax (4-12)

Shumow and Miller (7–8)

Simon

Smrekar et al.

Trusty (8-college)

Van Voorhis (6-8)

Williams (6–8)

All Ages

Clark (2002)

Dryfoos

Fan and Chen

Gold et al.

Jacobs and Hirota

Mediratta and Fruchter

Newman

Scribner et al.

Shirley

Wilson and Corbett

^{*}This table does not include the literature reviews.

Table 3. Studies by Design Type

Literature Reviews

Baker and Soden (1997)

Downey (2002)

Dryfoos (2000)

Epstein and Sanders (2000)

Hoover-Dempsey and Sandler (1997)

Reports based on Interviews and Site Visits

Gold, Simon, and Brown (2002)

Jacobs and Hirota (in press)

Mediratta and Fruchter (2001)

Newman (1995)

Wilson and Corbett (2000)

Descriptive Case Studies

Lareau and Horvat (1999)

López (2001)

Mapp (2002)

Peña (2000)

Rubenstein and Wodatch (2000)

Sanders and Harvey (2000)

Scribner et al. (1999)

Shirley (1997)

Smrekar et al. (2001)

Pre-experimental Studies

Chrispeels and Rivero (2000)

Epstein, Simon, and Salinas (1997)

Invernizzi et al. (1997)

Wang, Oates, and Weishew (1995)

Correlational Studies

Catsambis (1998)

Clark (1993)

Clark (2002)

Epstein, Clark, Salinas, and Sanders (1997)

Fan and Chen (1999)

Gutman and Midgley (2000)

Ho Sui-Chu and Willms (1996)

Izzo et al. (1999)

Keith and Keith (1993)

Marcon (1999)

Miedel and Reynolds (1999)

Moore (1998)

Sanders et al. (1999)

Sanders and Herting (2000)

Shumow and Lomax (2001)

Shumow and Miller (2001)

Simon (2000)

Trusty (1999)

Westat and Policy Studies Associates (2001)

Williams (1998)

Quasi-experimental Studies

Jordan et al. (2000)

Shaver and Walls (1998)

Van Voorhis (2001)

Experimental Studies

Baker et al. (1998)

Balli et al. (1998)

Kagitcibasi et al. (2001)

Mathematica (2001)

Starkey and Klein (2000)

Note: This table uses the typology from Baker and Soden's literature review (1997).

Limitations of the Research

We feel confident in making a strong statement about the benefits of school, family, and community connections. We also feel confident that the studies we have selected were carefully done and thoughtfully interpreted. However, the research in this field shares many of the limitations found in other areas of educational research. Certainly, there are not enough experimental or quasi-experimental studies. We included the few we found.

There is also not enough long-term research because of the limits of funding for such ambitious work. Many studies have small samples, while others depend on self-reports rather than independent verification. Many conclusions have to be carefully hedged because little can be said about cause and effect. Some studies have mixed, ambiguous, or incomplete findings and conclusions.

Nevertheless, we feel that the findings from the research reviewed here can be useful to our country's efforts to improve the policies and practices of schools. Some more detailed comments about the limitations follow.

- **1. Studies of programs.** In their critique of research on early childhood programs, Karl White and his colleagues (1992) point out that few evaluation studies are based on rigorous standards for validity. (See White et al. in Appendix, p. 216.) These standards for experimental studies include:
 - Children to be studied are assigned at random either to a treatment or a control group.
 - The two groups are comparable in terms of family background. This is verified by interviews with families.
 - The two groups stay together from the beginning to the end of the study.
 - The interventions are described in detail, and are fully carried out.
 - Trained testers assess the students in a neutral place.

Only a few studies in this review, all of programs or interventions, met these standards. These were conducted on Early Head Start, Head Start Family Math, and the HIPPY program (Mathematica et al., Starkey and Klein, and Baker et al.). The studies on Project EASE, Interactive Math Homework, and TIPS Science were quasi-experimental because the control groups were not chosen by random selection (Jordan et al., Balli et al., Van Voorhis). Most other studies about the effects of parent involvement on student achievement used a correlational method, with statistical controls (Clark, 2002; Clark, 1993; Epstein, Simon, and Salinas; Invernizzi et al.; Marcon; Moore; Shaver and Walls; and Westat/Policy Studies Associates). The report by Dryfoos reviewed findings from studies done by others, but did not critique their methods.

The correlational studies compared children of more highly involved parents with children of less involved parents, rather than with a control group. Neither group of children was chosen by random assignment. The researchers used statistical methods to analyze the relationship between level of involvement and improved student outcomes. Then they introduced controls for family income, occupation, and education levels

to see if the effects could be explained by other factors. This method is considered reliable, but it may miss or fail to measure some factors that could account for the findings.

- **2. Studies using survey data.** Many studies, and all on middle and high school students, use large databases such as the National Educational Longitudinal Study (NELS). These studies use correlational methods. In interpreting the findings, we need to be aware of some limitations in this type of research.
 - NELS:88 and other survey data about parent involvement are based almost entirely on what parents, students, and educators report in structured interviews or questionnaires. There was no way in the data collection design to confirm that reported behavior matched real behavior. NELS:88, for example, covers 25,000 students. A few studies use a data source that includes information from open-ended interviews with a small subsample of parents or students (Miedel and Reynolds, Gutman and Midgley, Sanders and Herting, Shumow and Miller). This offers more information but it still is self-reported. Three studies cross-checked parent responses with student and teacher reports (Keith and Keith, Miedel and Reynolds, Trusty). Jerry Trusty found that students' reports about their parents' involvement had the strongest effects. In other words, the more students perceive their family's involvement and support, the better they tend to do in school.
 - Studies using survey data are looking after the fact. They ask how much involvement has happened or is happening. That approach can make what is called "directionality" hard to determine. This is a problem with all studies that collect data at one point in time. In these studies, we can see that more parent involvement and higher achievement are related in some areas. But which came first? Perhaps higher-achieving children attract more parent involvement, rather than the other way around. Some studies attempted to address this issue by controlling for prior achievement.

Miedel and Reynolds checked to see if children's kindergarten readiness scores were more powerful than parent involvement in predicting later achievement. They found that the number of activities parents took part in during the early years of schooling had an effect on eighth-grade achievement that was independent of readiness. Controlling for achievement, Catsambis found that students with both low and high grades seemed to benefit from discussions about school and planning for college with their families. In other words, parent involvement is related to achievement gains for both high- and low-achieving students.

• Survey data tend to cover many topics, but without probing them deeply. They don't tell us why parents, students, or teachers responded the way they did—or what they might like us to know. The relationships among parents, teachers, and students are complex and influenced by many factors. From survey research, we can only conjecture what is going on. As Baker and Soden put it in their review (1997):

Closed-ended self-report surveys cannot fully capture the dynamic transactional nature of parents' involvement in their children's education. Many of these

processes could better be explored through open-ended and observational techniques that would produce rich data, shed light on complex processes, and generate new hypotheses. (p. 15)

How to Get Copies of the Studies

Many of the studies covered in this overview are available through the Educational Resource Information Center (ERIC) system. If the study summary includes a listing of ED or EJ, followed by a six-digit number, the publication is indexed in ERIC. The ERIC numbers are the unique identifiers assigned to each ERIC entry. For more information about ERIC, visit the Web site at www.eric.ed.gov.

ED Numbers. ERIC numbers that begin with "ED" (e.g., ED 435484) refer to documents indexed in ERIC. You can use the ED number to find the resource in the ERIC database online at www.eric.ed.gov. Although you can't read the whole document online, you can read an abstract or summary. Most documents can be ordered from the ERIC document reproduction service at www.edrs.com. Choose from the following formats: downloadable PDF file, a print copy, or microfiche.

The ERIC Document Reproduction Service also has a phone number, 1-800-443-ERIC. Another option is to visit one of the ERIC Resource Collections. They provide access to full-text ERIC documents via microfiche or electronic indexes. Find the one closest to you through the Directory of ERIC Resource Collections: http://oeri4.ed.gov/BASISDB/EROD/eric/SF/.

EJ Numbers. ERIC numbers that begin with "EJ" (e.g., EJ 674533) refer to journal articles. The least-expensive way to obtain a full copy is to consult a library. If your local library does not subscribe to a particular journal, or have what is called "full-text electronic access" to that journal, you can get copies through interlibrary loan (ILL). For a fee, there are article reproduction services that will provide a copy. Ask your library to suggest one.