Reviews of Collections of Programs, Curricula, Practices, Policies, and Tools: Evaluated According to Evidence

Compiled by Judy Smith-Davis, Ph.D.

For more information, see: http://nirn.fpg.unc.edu/resources/reviews

This collection originated as part of the Results for Kids: Resources library of The IDEA Partnership, which transferred early contents to NIRN in 2009.

Early Childhood Education and Interventions

A Compendium of Transition Initiatives in the Early Years: A Resource Guide to Alignment and Continuity Efforts in the United States and Other Countries

“Currently, young children and the services they receive are garnering unprecedented attention in the United States and internationally. Globally, this burgeoning attention is being accompanied by new policies, increased fiscal investments, and loud calls for better transitions for young children that align preschool and the early years of schooling. In consonance with the context and with support from the W.K. Kellogg Foundation, a body of work has been completed that addresses the practical and policy dimensions of early childhood transitions. Donning a global perspective, this work has sought to: (a) review existing transition theory and research; (b) chronicle effective and promising transition efforts; and (c) building on both, posit a new way to think about transitions.” The paper covers 82 efforts that address transition in young children’s lives.

Full text – A Compendium of Transition Initiatives
[Click on the second title]

A Matter of Degrees: Preparing Teachers for the Pre-K Classroom

This report “reviews research on training for pre-k teachers and concludes that educators with at least a bachelor’s degree — coupled with specialized training in early childhood — are best able to foster development of the cognitive, social and emotional skills children need to be ready for kindergarten. Evidence shows that states offering mandates, incentives and training programs for teachers create more effective pre-k classrooms. The report highlights state models for increasing teacher quality and shows how raising qualification requirements can professionalize the workforce and improve student outcomes. The report also documents (a) research on teacher preparation and its relationship to effective teaching and other benefits to children and communities; (b) challenges states face as they aim to raise qualification requirements for pre-k teachers; (c) models for building a better-educated pre-k workforce; and (d) recommendations for steps states should take to implement research-based teacher education requirements for early childhood educators.”
National Early Childhood Transition Center (NECTC), Human Development Institute, University of Kentucky, Lexington. (2009).

"NECTC was asked by the U.S. Department of Education's Office of Special Education Programs to conduct a thorough review of existing refereed research on early childhood transition, with a specific focus on findings related to young children with disabilities and their families. The review included articles published in refereed journals between January 1990 and March 2006 and resulted in the identification of 50 articles, 33 of which focused on children in transition and 18 which focused on families of young children moving between early childhood services, such as between infant-toddler programs and preschool, prekindergarten to kindergarten, or kindergarten to early elementary services. . . . Of the 50 studies, 9 were experimental or quasi-experimental in design, 14 were correlational, and 28 were descriptive. The paucity of studies located and the fact that the majority of studies were descriptive, rather than experimental, meant that few specific transition practices could be validated sufficiently to satisfy current criteria. In this Technical Report, participants and key findings of the studies are noted, promising practices are indicated, and future directions for researchers are suggested."

A Science-Based Framework for Early Childhood Policy

This is “a ground-breaking framework for using evidence to improve outcomes in learning, behavior, and health for vulnerable children, co-authored by the members of the National Forum on Early Childhood Policy and Programs and the National Scientific Council on the Developing Child. Combining knowledge from neuroscience, behavioral and developmental science, economics, and 40 years of early childhood program evaluation, the authors provide an informed, nonpartisan, pragmatic framework to guide policymakers toward science-based policies that improve the lives of young children and benefit society as a whole.”

Assistive Technology and Emergent Literacy for Preschoolers: A Literature Review

“The purposes of this review were to conduct a literature review of scholarly publications (within the last five years) in the area of assistive technology (AT) that focus on emergent literacy for preschoolers, and discuss the outcomes and benefits of AT; and (c) describe implications for future research. The
examination of the literature was conducted by applying four procedures: search procedures; inclusion criteria; relevance; and completion of an article analysis form per each article reviewed. . . . This review generated the need for (a) more empirical research in the area of AT, emergent literacy, and early childhood; (b) shared professional perspectives regarding the conceptualization of emergent literacy, technology and AT in early childhood education; (c) increased collaboration, communication and investment of time and resources among key stakeholders regarding AT and its role in emergent literacy for young children; and (d) heightened recognition of the sociocultural influences affecting technology and AT integration in early childhood emergent literacy programs and activities.”

Full text -- Assistive Technology and Emergent Literacy for Preschoolers
[Click the next to last title]

CELLreviews (early literacy learning)
Center for Early Literacy Learning (CELL), Orelena Hawks Puckett Institute, Asheville, North Carolina. (Continuing Collection).

“The goal of the Center for Early Literacy Learning is to promote the adoption and sustained use of evidence-based early literacy learning practices. This site has resources for early childhood intervention practitioners, parents, and other caregivers of children, birth to five years of age, with identified disabilities, developmental delays, and those at-risk for poor outcomes. . . . CELLreviews are practice-based research synthesis of early literacy studies.”

Full texts -- CELLreviews

Challenging Behaviors and the Role of Preschool Education (Policy Brief)

“Some research suggests a rise in challenging behaviors among children in early care and education. Among the findings are a high rate of removal from preschool classrooms for behavior problems, a possible link between early non-maternal care and aggressive behaviors in preschool, and concerns from teachers that too many children arrive at school without the social skills required to learn. This begs the question of the role preschool education plays in regard to problem behaviors — whether under certain circumstances it is a contributing factor or whether it can in fact provide positive experiences that lead to a reduction of challenging behaviors. This policy brief reviews the research in order to answer these questions and makes recommendations that can lead to better behavioral outcomes.” Samples of research-based social skills curricula are included. References are cited by number in the text and are shown in the reference list.

Full text -- Challenging Behaviors and the Role of Preschool Education

Clinical Interventions to Enhance Infant Mental Health: A Selective Review

"This brief describes selected programs that represent current approaches in infant mental health. This is not an exhaustive review; rather, illustrative programs are selected that: (a) focus on the parent-infant relationship as a target of intervention; (b) have been implemented in primary, focused, or tertiary care
settings, with low to high risk families; and (c) demonstrate evidence of short or long term improvement in parent-infant relationships." Programs include (a) Healthy Steps; (b) Bright Futures; (c) Touchpoints Program; (d) MH Consultation in Child Care Settings; (e) Promoting First Relationships; (f) UCLA Family Development Project; (g) Tulane Infant Team; and (h) Early Intervention Foster Care Program.

**Connecting Neurons, Concepts, and People (Policy Brief)**

“The past decade has seen an upsurge in public understanding of early brain development. News reports, statements by policymakers, and commercial marketing of products for infants and young children have all contributed to a widespread understanding of the explosive growth of the brain in the early years and that stimulation acts as a catalyst to brain growth. Beyond this, however, most people are unsure what to make of this new knowledge about brain development. This policy brief summarizes what is known about early neurobiological development and corrects some of the common misunderstandings and misrepresentations of the research. “ References are cited by number in the text and are shown in the reference list.

**Developing Early Literacy: Report of the Early Literacy Panel**

"The National Literacy Panel (NELP) was established for the express purpose of summarizing scientific evidence on early literacy development and on home and family influences on that development. Toward that end, the panel posed the following four questions: (a) What are the skills and abilities of young children (age birth through five years or kindergarten) that predict later reading, writing, or spelling outcomes?; (b) Which programs, interventions, and other instructional approaches or procedures have contributed to or inhibited gains in children’s skills and abilities that are linked to later outcomes in reading, writing, or spelling?; (c) What environments and settings have contributed to or inhibited gains in children’s skills and abilities that are linked to later outcomes in reading, writing, or spelling?; and (d) What child characteristics have contributed to or inhibited gains in children’s skills and abilities that are linked to later outcomes in reading, writing, or spelling? Search procedures yielded more than 8,000 potential articles. This led to the identification of approximately 500 research articles that were used in the meta-analysis by the panel. The panel then grouped the identified studies into five analytical categories: (a) code-focused interventions; (b) shared-reading interventions; (c) parent and home programs; (d) preschool and kindergarten programs; and (e) language-enhancement interventions. The NELP report provides a rich set of findings about the relationship between early developing child skills and later literacy attainment and the effectiveness of interventions for helping young children to progress toward successful literacy learning."

**Full text -- Developing Early Literacy**
Developmental Screening and Assessment Instruments with an Emphasis on Social and Emotional Development for Young Children Ages Birth Through 5
National Early Childhood Technical Assistance Center (NECTAC), FPG Child Development Institute, University of North Carolina, Chapel Hill. (2008). Compiled by S. Ringwalt.

“This list of instruments was gathered through a review of: (a) the infant mental health literature, (b) states’ Part C and Part B—Section 619 Web sites, (c) screening and assessment texts, and (d) publishers’ web sites. The complete list of sources used is at the end of this compilation. The screening instruments include both those that address multiple developmental domains as well as those that focus on the social-emotional developmental domain. The screening instruments are further sub-divided into those which must be administered by professionals and those that may be completed by family members or other caregivers. The information for each instrument includes a description, the age range for which the instrument was validated, the time to administer, the scoring procedure, psychometric properties, requirements for administrators, and a link to, or address for, the publisher or source of more information.”

Access the Developmental Screening and Assessment Instruments
[Scroll down — titles are in chronological order]

Also see – The Long-Term Benefits of High Quality Early Childhood Intervention Programs: Minibibliography

Dollars and Sense: A Review of Economic Analyses of Pre-K

The ten studies compiled in this review "capture the strength and breadth of the currently available research to offer what is relevant and accessible to States and communities across the country. These studies are part of a growing body of research regarding the economics of early childhood education and range from benefit-cost analyses of well-known experimental Pre-K programs to projections of the potential returns on expanded State and federal Pre-K investments." The report lists studies according to peer reviews, randomized sample design, and other factors."

Full text – Dollars and Sense

Early Childhood Assessment: Why, What, and How
C. E. Snow & S. B Van Hemel (Eds.) and the Committee on Developmental Outcomes and Assessments for Young Children, National Research Council.

“This book affirms that assessments can make crucial contributions to the improvement of children's well-being, but only if they are well designed, implemented effectively, developed in the context of systematic planning, and are interpreted and used appropriately. Otherwise, assessment of children and programs can have negative consequences for both. The value of assessments therefore requires fundamental attention to their purpose and the design of the larger systems in which they are used. Early Childhood Assessment addresses these issues by identifying the important outcomes for children from birth to age 5 and the quality and purposes of different techniques and instruments for developmental assessments. . . . This report is the result of over a year of effort by the Committee on Developmental Outcomes and Assessments for Young Children. . . . The committee gathered and
reviewed literature on developmental outcomes and assessments for young children, listened to briefings and presentations by experts and stakeholders, and, using this information and its combined expertise, has attempted to provide its best advice on issues associated with assessing children from birth to age 5.”

Full text – Early Childhood Assessment
[Click on READ to read the book, section by section]

Early Childhood Education: Publications and Resources
What Works Clearinghouse (WWC), Institute of Education Sciences, U.S. Department of Education (Continuing Collection)

“The WWC review of early childhood education interventions examines the evidence of the effectiveness of center-based curricula and practices designed to improve children’s school readiness. Items reviewed are intended to improve outcomes in: (a) cognition, (b) functional abilities, (c) mathematics achievement, (d) phonological processing, (e) early reading/writing, (f) language competencies, (g) oral language, and (h) social-emotional development. Grade/age range – preschoolers aged 3 to 5. Population – All, English language learners, children with disabilities.” Contents cover Intervention Reports, Single Study Reviews, and Reference Resources.

Access all early childhood education resources

Early Childhood Interventions: Proven Results, Future Promise
RAND Corporation, Santa Monica, California. (2005).

"The PNC Grow Up Great initiative, a program financed by PNC Financial, Inc., asked RAND to prepare a thorough, objective review and synthesis of current research that addresses the potential for various forms of early childhood intervention to improve outcomes for participating children and their families. The authors consider (a) the potential consequences of not investing additional resources in the lives of children, (b) the range of early intervention programs, (c) the demonstrated benefits of interventions with high-quality evaluations, (d) the features associated with successful programs, and (e) the returns to society associated with investing early in the lives of disadvantaged children. . . . After reviewing the literature on studies of early childhood interventions that met criteria for rigorous evaluation, (the authors) identified published evaluations for 20 early childhood programs with well-implemented experimental designs or strong quasi-experimental designs. . . . Sixteen programs had the strongest evidence base.” Reviewed programs are discussed and displayed.

Full text -- Early Childhood Interventions

Early Childhood Longitudinal Study (ECLS)
National Center for Education Statistics, U.S. Department of Education. (Several dates).

“The Early Childhood Longitudinal Study (ECLS) program includes three longitudinal studies that examine child development, school readiness, and early school experiences. The birth cohort of the ECLS-B is a sample of children born in 2001 and followed from birth through kindergarten entry. The kindergarten class of 1998-99 cohort is a sample of children followed from kindergarten through the eighth grade. The kindergarten class of 2010-11 cohort will follow a sample of children from kindergarten through the fifth grade. The ECLS program provides national data on children's status at birth and at various points
thereafter; children’s transitions to nonparental care, early education programs, and school; and children's experiences and growth through the eighth grade. The ECLS program also provides data to analyze the relationships among a wide range of family, school, community, and individual variables with children's development, early learning, and performance in school.

To review the studies and related information -- ECLS

Also see – First-Time Kindergartners in 2010-2011: First Findings From the Kindergarten Rounds of the ECLS, Kindergarten Class of 2010-2011

Early Childhood Predictors of Early School Success: A Selected Review of the Literature

“There is a long-standing lack of integration between the fields of child development and health and health services research. In this brief, (the authors) review scientific evidence from all these literatures as they relate to early school readiness, focusing on results from large longitudinal studies. . . . (The authors) intend that the results will provide a foundation for research that may lead to the development of practical clinical tools allowing health caregivers to identify young children at risk for early school performance problems, and target them for additional preventive and ameliorative care leading to improved outcomes.”

Full text – Early Childhood Predictors
[Click under 2009. Titles are presented in chronological order]

Early Head Start Research and Evaluation Project (Overview, Reports, Presentations, Papers, Instruments, and Related Resources)

"The Early Head Start Research and Evaluation project, a rigorous, large-scale, random-assignment evaluation of Early Head Start, was designed to carry out the recommendation of the Advisory Committee on Services for Families with Infants and Toddlers for a strong research and evaluation component to support continuous improvement within the Early Head Start program and to meet the 1994 reauthorization requirement for a national evaluation of the new infant-toddler program. The Early Head Start Research and Evaluation project was funded in three waves. The Congressionally-mandated Birth to Three Phase (1996-2001) included an Implementation Study, an Impact Evaluation that investigated program impacts on children and families through their time in the program, and local research projects. In 2001, the ACF funded the Pre-Kindergarten Follow-up Phase (2001-2004) to build upon the earlier research and follow the children and families who were in the original study from the time they left the Early Head Start program until they entered kindergarten. In 2005, ACF funded the Elementary School Follow-up Phase (2005-2010) to again build upon earlier research and follow the children and families from the original study while the children are in fifth grade, or attending their sixth year of formal schooling."

All Resources – Early Head Start Research and Evaluation Project
Effective Early Childhood Education Programs: A Systematic Review
Best Evidence Encyclopedia, Johns Hopkins University, Baltimore. (2010).
B. Chambers, A. Cheung, R. E. Slavin, D. Smith, & M. Laurenzano.

"The education of young children who are at risk for school failure is widely recognized as an important factor in determining future school success. Previous reviews of programs for children between the ages of three and five, or before they begin kindergarten, demonstrate that early childhood education is a worthwhile investment. This report systematically reviews research on the outcomes of programs that teach young children in a group setting before they begin kindergarten. The purpose of the review is to: (a) assist educators and policy makers in selecting the types of programs to implement, and (b) inform researchers about the current evidence on early childhood programs and guide further research." This resource includes information on top-rated programs, limited-evidence programs, review methods, and other details.

Full text and ratings -- Effective Early Childhood Education Programs
[Click at the right for the full report]

Effective Early Childhood Programmes
Published in collaboration with Open University. I. Siraj-Blatchford & M. Woodhead (Eds.).

This publication “offers accessible and clear reviews of the best and most recent available research, information and analysis on key policy issues, offering clear messages on core policy topics and questions. This publication, the fourth in the series (called Education in Focus), looks at the policy issues surrounding the early childhood education and care programmes. There is compelling scientific evidence showing improved long-term outcomes for disadvantaged children who participate in a high-quality programme, but realizing this potential through policies and programmes is far from straightforward. It tackles the issue in three parts: (a) the case for early childhood programmes; (b) evidence for early childhood programme effectiveness; and (c) challenges for early childhood programmes.”

Full text – Effective Early Childhood Programmes

Effects of Different Types of Adaptations on the Behavior of Young Children with Disabilities (Research Brief)
Tots-n-Tech Institute, Arizona State University, Tempe. (2010).

“The effectiveness of adaptations to (a) the environment, (b) materials, and (c) activities with young children with disabilities was the focus of this research synthesis. The synthesis included 19 studies of 104 children with different types of disabilities (autism, multiple disabilities, developmental delays, Down syndrome, visual impairments, cerebral palsy, and behavioral disorders). Most of the studies used single participant designs, two studies used contrasting conditions designs, two investigations were case studies, and one was a cross-sectional study. Results showed that all three types of adaptations were related to variations or changes in child behavior; the adaptations were most effective when used for 10 or more sessions; and the outcomes most effected by the interventions were communication and cognition, and to a lesser degree, social behavior. Implications for practice are described.” The focus is on pre-school aged children.
Effects of Preschool Curriculum Programs on School Readiness: Report from the Curriculum Evaluation Research Initiative

"In 2002, the Institute of Education Sciences began the Preschool Curriculum Evaluation Research (PCER) initiative to conduct rigorous efficacy evaluations of available preschool curricula. Under a competitive process, 12 research teams were awarded grants to implement and conduct research on one or two preschool curricula of their choosing with a predominantly low-income population under an experimental design. IES also contracted with Research Triangle Institute International and Mathematica Policy Research to collect evaluation data from all research sites in fall and spring of the preschool year and spring of the kindergarten year, using a common set of measures. At each site, preschools or classrooms were randomly assigned to the intervention curricula or control curricula, and the children were followed from pre-kindergarten through kindergarten. The goal of the PCER initiative was to identify the impact of each preschool curriculum on five student-level outcomes (reading, phonological awareness, language, mathematics, and behavior) and six classroom-level outcomes (classroom quality, teacher-child interaction, and four types of instruction). This final report presents findings for the impact of each curriculum on student-level and classroom-level outcomes."

Evaluating Early Care and Education Practices for Dual Language Learners: A Critical Review of the Research
Center for Early Care and Education Research – Dual Language Learners (CECER-DLL), FPG Child Development Institute, University of North Carolina at Chapel Hill. (2011).

“This brief report is a summary of a systematic review of the research literature evaluating the effects of early care and education practices on the development and learning of dual language learners (DLLs) birth through 5 years of age. The review focused primarily on peer-reviewed studies published in the U.S. from 2000-2010. The purpose of the review was to describe the nature of the educational interventions used with DLLs and to determine the effectiveness of these approaches with this population, as well as to identify any moderators of these effects. A related purpose was to appraise the quality of the research, with a particular focus on the specific methodological issues that emerge in conducting research on DLLs. An exhaustive search of the literature produced 24 articles that were analyzed with respect to research methods and study results as described here.”
Evaluations of School Readiness Initiatives: What Are We Learning?

"The purpose of this paper was to conduct a review and synthesis of evaluation studies conducted on early childhood interventions, with a focus on programs that emphasize school readiness as a goal. This synthesis begins with an overview of the evidence regarding the effects of model early care and education programs and includes a discussion of the program characteristics associated with those findings. This literature provides an important context for understanding the actual subject of the synthesis -- evaluation of school readiness initiatives. Following this section, the methodology and findings of the syntheses are presented. Implications of the findings are discussed in the final section."

Full text -- Evaluations of School Readiness Initiatives

Evidence-Based Social-Emotional Curricula and Intervention Packages for Children 0-5 Years and Their Families

“This synthesis examines interventions that (a) are specifically intended to impact social-emotional-behavioral outcomes for children 0-5 years; (b) are manualized; and (c) have been evaluated in at least one study that reported social-emotional-behavioral outcomes for children 5 years or younger, and was published in a peer-reviewed journal. Interventions include curricula and intervention packages meant for use with children and for use with parents/families. . . . Curricula or intervention packages were considered to be manualized if a description of the intervention was available that contained sufficient detail to allow it to be implemented, either by itself, or in conjunction with training. . . . Table 2 provides information concerning the research evidence for each package (including ratings on nine efficacious adoption criteria).”

Full text -- Evidence-Based Social-Emotional Curricula and Intervention Packages
[Also see related resources on this page]

Examine the Definition and Measurement of Quality in Early Childhood Education: A Review of Studies Using the ECERS-R from 2003 to 2010

“The field of early childhood education continues to grapple with the issue of understanding quality in classrooms. The lack of clarity in definition (or conceptualization) and related ability to assess (or operationalize) quality has contributed to a reliance on the Early Childhood Environment Rating Scale (ECERS-R), which is often interpreted to be synonymous with the quality of a classroom. Likewise, the ECERS-R (although a measurement tool) is often used to define quality. Because of the widespread use of this measure as an evaluation tool, early childhood programs have strived to achieve high ratings on this measure, and subsequently the item content of the ECERS-R has often become a focus for quality enhancement initiatives. The present study examines the definitions of quality (i.e., how quality is operationalized) in research studies using the ECERS-R over the past 8 years (2003-2010). A content analysis of 76 studies conducted in the United States indicates that studies using the ECERS-R to operationalize quality do not use a consistent definition; instead they conceptualize quality in a variety
of ways ranging from ‘quality is ECERs’ or ‘classroom quality’ to ‘environmental quality.’ In light of these varying definitions, implications for research and policy in early childhood education are discussed.”

Full text – Examining the Definition and Measurement of Quality

Guide to Datasets for Research and Policymaking in Child Care and Early Education

"This guide is an annotated bibliography of available large-scale databases that provide information useful to researchers, policymakers, state administrators, and others concerned about child care and early education. The guide follows an ecological approach to research and policy in the field: it brings attention not only to children, but to the different contexts in which they grow and develop. The aim is to promote research and decision-making that take into account the interrelations among those contexts and their impacts on children. For each dataset, this guide provides information on the study design and specific data it contains on the use and characteristics of child care and early education, as well as on child, family, household, school, and community characteristics. Datasets are included in this guide if they are publicly available, are part of a major research project or data collection effort, focus primarily on child care and early education, shed light on any of the contexts in which children develop, and allow users to create estimates at the national, regional, and/or state level.”

Full text -- Guide to Datasets for Research and Policymaking

Home Visitation: Assessing Progress, Managing Expectations

"The purpose of this paper is to promote analytic thinking and use of evaluative research. The sections review the evolution of home visitation programs and the research evaluating this intervention, discuss improvements that have taken hold in home visitation programs, and outline reasonable expectations for home visitation programs moving forward." The review includes six major national home visitation models: (a) Nurse Family Partnership; (b) Healthy Families America; (c) Parents as Teachers; (d) Parent-Child Home Program; (e) Home Instruction Program for Preschool Youngsters (HIPPY); and (f) Early Head Start.

Full text -- Home Visitation: Assessing Progress, Managing Expectations

Also see – Implementation of Home Visitation Programs: Stories from the States

Home Visiting Evidence of Effectiveness (HomVEE)

“The Department of Health and Human Services launched Home Visiting Evidence of Effectiveness (HomVEE) to conduct a thorough and transparent review of the home visiting research literature and provide an assessment of the evidence of effectiveness for home visiting program models that target families with pregnant women and children from birth to age 5. To carry out the HomVEE review, Mathematica Policy Research, in partnership with the National Institutes of Health library, conducted a thorough search of the research literature on home visiting. Mathematica also issued a call for studies to
identify additional research, reviewed the literature, assessed the quality of research studies, and evaluated the strength of evidence for specific home visiting program models. . . . The ‘Program Model Reports’ provide a brief program model description with a review of studies, evidence of program model effectiveness, and a summary of findings by outcome domain. These reports also include details about the studies reviewed.”

Access Home Visiting Evidence of Effectiveness

**Impacts of Early Childhood Programs**

"The goal of this set of research briefs is to provide policy-makers with a user-friendly summary of up-to-date, high-quality evidence on several early childhood interventions and their impact on children and families. . . . (These are) (a) State Pre-K; (b) Head Start; (c) Early Head Start; (d) Model Early Childhood Programs (Abecedarian Project, High Scope/Perry Preschool, and the Chicago Child-Parent Centers); and (e) Nurse Home Visiting. . . . All have had positive impacts on children’s cognitive skills and/or school outcomes, with the largest effects reported from some State pre-K programs and the model center-based programs. Most early childhood interventions also have had positive impacts on children’s emotional and behavioral outcomes, including long-term reductions in criminal behavior. There also is some evidence of improvements in children’s health and safety, and some programs have had positive effects on the children’s parents." The five sections of the report describe the impact of these interventions, followed by notes that document the findings.

Full text and individual briefs -- Impacts of Early Childhood Programs
[Click at the end of the overview]

**Math and Science in Preschool: Policies and Practice** *(Policy Brief)*

“High-quality preschool experiences can positively affect later math achievement, and mathematics skills at school entry are correlated with academic achievement in later grades. Although science is recognized as important content for preschool learners, there is not yet a clear picture of the ways that early science knowledge and skills influence later outcomes. This policy brief reviews research that addresses the development of mathematics and science knowledge in preschool children, identifies areas that require further study, and outlines recommendations for early education policy in these domains.”

Full text – Math and Science in Preschool

**Mathematics Learning in Early Childhood: Paths Toward Excellence and Equity**

“Relying on a comprehensive review of the research, *Mathematics Learning in Early Childhood* lays out the critical areas that should be the focus of young children’s early mathematics education, explores the extent to which they are currently being incorporated in early childhood settings, and identifies the
changes needed to improve the quality of mathematics experiences for young children. This book serves as a call to action to improve the state of early childhood mathematics. It will be especially useful for policy makers and practitioners-those who work directly with children and their families in shaping the policies that affect the education of young children.”

Full text – Mathematics Learning in Early Childhood
[Click on READ under “Free Resources”—and click at the right for the PDF summary]

National Early Intervention Longitudinal Study (NEILS): Final Report

“This National Early Intervention Longitudinal Study (NEILS) report presents the key findings from a national longitudinal study that followed children who were identified when younger than 3 years of age as meeting their state’s eligibility criteria for early intervention and whose families were subsequently provided with those services. NEILS is the first and only national look at important policy issues such as which children and families are being served in early intervention programs, what services they receive, and what outcomes they experience. This report summarizes some of the key findings from this 10-year study and notes their implications for policy, practice, and additional research.”

Abstract and click for the full text – NEILS Final Report

PK-3 Education: Programs and Practices That Work in Children’s First Decade

"In this report, (the authors) review the knowledge base on the effectiveness of PK-3 intervention programs and practices for young children making the transition to school. Coverage includes extended early childhood interventions, preschool programs, full-day kindergarten, reduced class sizes in the early grades, parent involvement, instructional practices, and school transitions (mobility). (They) also document new findings on PK-3 programs and practices from the Early Childhood Longitudinal Study-Kindergarten Cohort of 1998-99. After summarizing the evidence in each of these areas, (they) review evidence on the cost effectiveness of PK-3 programs and practices with particular attention to findings from a few extensive longitudinal studies. (They) conclude with a discussion of the implications and policy recommendations from this evidence." The reviews of PK-3 extended early childhood programs cover (a) the Carolina Abecedarian Project; (b) Head Start/Follow Through; (c) Chicago Child-Parent Centers; and the (d) Head Start-Public School Early Childhood Demonstration Project. Program characteristics and studies of selected effect sizes are described.

Full text -- PK-3 Education Programs and Practices That Work

PK-3: An Aligned and Coordinated Approach to Education for Children 3 to 8 Years Old

In this article, the authors "describe the need for increased attention to the front end of education to ensure school readiness and educational achievement for all children. They describe what the first five years of schooling should look like." The authors review a number of studies that support this premise, including longitudinal studies of several validated early childhood programs. These include (a) Perry
Preschool; (b) the Abecedarian Project; (c) FACES-Head Start; (d) Child-Parent Centers -- and several local or State programs.

Full text -- PK-3: An Aligned and Coordinated Approach to Education for Children 3 to 8 Years Old
[Scroll to 2005 and click on No. 3]

Pre-Elementary Education Longitudinal Study (PEELS)

This study follows “a nationally representative sample of children with disabilities ages 3–5 for a period of six years. This study is designed to describe the characteristics of children receiving preschool special education, their educational programs and services, and their transitions from preschool programs to elementary schools. The study will examine the achievement of students with disabilities in preschool, kindergarten, and elementary school and determine the factors associated with this achievement. In its first year of data collection (2003–2004), information on 2,906 children with disabilities and their families was gathered through parent/guardian interviews, child assessments, and teacher and service provider questionnaires. In addition, information was collected through mail questionnaires from each child’s preschool program director or school principal, local educational agency, and state educational agency). PEELS data collection will continue through 2009. PEELS data are weighted to generate national estimates; therefore, the results can be generalized to the entire U.S. population of children with disabilities ages 3–5.”

Click for info and open the PDF for the Wave 1 Overview Report

Preschool Education and Its Lasting Effects: Research and Policy Implications

"Over the last several decades, participation in center-based preschool programs has become much more common, and public support for these programs has grown dramatically. Nevertheless, participation remains far from universal, and policies vary across States, as well as across options such as private child care, preschools, Head Start, and state pre-K. Since policy makers typically have more alternatives than money, they face key questions about the value of preschool education, whom it should serve or subsidize, and which program designs are best. This brief reviews the research regarding the short- and long-term effects of preschool education on young children’s learning and development."

Full text -- Preschool Education and Its Lasting Effects

Preschool Education: Delivering on the Promise for Latino Children

“Although we are far from answering all of the questions about the most effective practices for instructing young English language learners (ELLs), researchers have contributed significantly to the literature on dual-language development for young children. Experts in brain development, language acquisition, and instructional strategies have revealed important findings that can greatly inform the education of young ELLs.” The report includes (a) research on second-language development; (b) some examples of best practices; (c) policy implications – and associated topics.
News release and click for the full text – Preschool Education: Delivering on the Promise

[Click on the title in the first paragraph of the news release]

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**Programs That Work: Early Childhood**
Promising Practices Network, RAND Corporation, Santa Monica, California. (Continuing Collection).

The Promising Practices Network (PPN) website features summaries of "programs and practices that are proven to improve outcomes for children. All of the information on the site has been screened for scientific rigor, relevance, and clarity. Programs are generally assigned either a 'Proven' or a 'Promising' rating, depending on whether they have met the evidence criteria. In some cases a program may receive a Proven rating for one indicator and a Promising rating for a different indicator. In this case the evidence level assigned will be Proven/Promising, and the program summary will specify how the evidence levels were assigned by indicator." This topical section covers programs that target children from birth through third grade.

To access Programs That Work: Early Childhood

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**Promoting Children's Socioemotional Development in Contexts of Early Educational Intervention and Care: A Review of the Impact of Federally-Funded Research Initiatives on Young Children’s School Readiness – A Working Paper (Appendix B.4)**

"Recent findings in applied developmental science highlight ways that children’s socio-emotional development may play an important foundational role for later chances of school success. Children’s social skills and emotional and behavioral adjustment have been identified as particularly important sources of support for low-income children facing higher risk of school failure. Appendix B.4 reviews selected models and methods in applied developmental science that focus on young children’s socio-emotional development. It then reviews recent findings from a large number of randomized trials, as well as nonexperimental studies, and places those findings in the context of applied developmental science. Lessons learned regarding ways to strengthen children’s school readiness are discussed."

Full text – Promoting Children's Socioemotional Development
[This is Appendix B.4 of the larger paper. It’s the basis for the above info]

To access the full text of the larger paper – Proceedings from a Working Meeting on Recent School Readiness Research

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**Promoting Social Behavior of Young Children in Group Settings: A Summary of Research**

“This brief synthesis provides a summary of intervention practices that are supported by empirical evidence for promoting social-emotional behavior of young children in group settings (e.g., pre-K
classrooms, child care settings). The focus of the synthesis is on toddlers and preschool children who are identified as having disabilities or who are at risk of disabilities, and who have been identified with social-emotional problems. . . . The vast majority of evidence, and the strongest evidence, related to this topic is derived from analyses using single-subject experimental designs. . . . Research-based practices are described in broad categories of intervention strategies. Where the level of procedural specificity and quantity of research permits, the categories are divided into more specific types of interventions. The practices described in the synthesis include those that are explicitly designed to increase the frequency or improve the quality of prosocial interactions, as well as those intended to improve emotional responding and reduce inappropriate and challenging behaviors.”

Full text -- Promoting Social Behavior of Young Children in Group Settings
[Scroll down –and see related papers on this page]

Rapid Response: Early Childhood Education Curricula and Programs for PreK Students
Southeast Comprehensive Center (SECC) at SEDL, Austin, Texas. (2008).

"A state department of education served by the Southeast Comprehensive Center requested a list of research-based early childhood education curricula and programs for preK students (3- to 5-year-olds) that address both reading and math readiness. The department also requested a list of organizations (other than the What Works Clearinghouse and Florida Comprehensive Center for Reading Research) that systematically review curricula for these students. In response to this request, the Southeast Comprehensive Center (SECC) contacted a number of individuals and organizations whose work involves early childhood education research and information dissemination. SECC also conducted a literature search and reviewed numerous resources and publications to obtain information on this topic."

Full text – Rapid Response

Readiness: School, Family, and Community Connections
National Center for Family and Community Connections with Schools, SEDL, Austin, Texas. (2004).
M. Boethel.

This synthesis “explores the research addressing three major questions related to children’s readiness and family, school, and community connections: (a) What is known about differences in children’s skills and performance at kindergarten entry and the contextual factors associated with those differences? (b) What is known about early childhood or preschool interventions that include family or community components? and (c) What is known about children’s transition to kindergarten, including transition beliefs and practices and patterns of family-school interactions? . . . The researchers identified 48 studies with focuses and methodologies that met their basic criteria. From the array of information among these studies, they identified a set of broad findings related to the three research questions. . . . In selecting studies, the first priority was to identify intervention studies that used experimental designs or randomized controlled trials. . . . They excluded intervention studies that did not include a comparison or control group. In addition, they identified studies that did not address interventions but provided useful descriptive data, including correlational and survey designs." The study covers the effectiveness of a range of practices, as well as evidence on nine national models (discussed in Finding 3)
Research Connections: Child Care & Early Education
National Center for Children in Poverty (NCCP). Mailman School of Public Health, Columbia University, New York City & the Inter-university Consortium for Political and Social Research (ICPSR), University of Michigan, Ann Arbor. (Continuing Collection).

“Research Connections is a unique resource that promotes high quality research and the use of that research in policymaking. . . . Through a free, easy to use web site, one can quickly search the full text of thousands of resources relevant to the field of child care and early education. Interactive tools allow users to refine their searches, download full text documents, build customized tables on state policies, compare state demographics, and analyze research data online. This comprehensive and unbiased collection includes scholarly research, policy briefs, government reports, data, and instruments from a wide range of disciplines and sources, including multiple federal agencies. Research Connections compiles and distributes bibliographies, develops issue briefs, and synthesizes research on key topics.”

To search Research Connections

Research on Early Childhood Education Outcomes (a matrix)

“This matrix provides links to longitudinal studies, reviews and meta-analyses, and cross-sectional studies on various aspects of early childhood education – and on several early childhood program models. The matrix summarizes the effects. These effects are color-coded/rated according to whether the outcomes are significant; measured but not significant; or not measured. The ratings cover (a) cognitive; (b) behavioral; (c) social; (d) educational; (e) external benefits to society; and (f) benefit-cost ratio. In addition to literature on practices, cost-benefits, and other topics, the program models include the Abecedarian Program; Chicago Child Parent Centers; High/Scope Perry Preschool Program; Head Start; Early Head Start; the Infant Health and Development Program, and others.

View the matrix

Research Synthesis on Screening and Assessing Social-Emotional Competence (pertains to early childhood)

“This synthesis provides information for early care and education providers on using evidence-based practices in screening and assessing the social-emotional competence of infants, toddlers, and young children. . . . (The authors) begin with a discussion of what is meant by social-emotional competence, and then describe general issues and challenges around screening and assessment. They then discuss the roles of families, culture, and language in screening and assessing social-emotional competence, and end with a list of resources and some examples of social and emotional screening and assessment tools.”

Full text – Research Synthesis on Screening and Assessing
Research Synthesis Points on Quality Inclusive Practices
National Professional Development Center on Inclusion (NPDI), FPG Child Development Institute, University of North Carolina at Chapel Hill. (2011).

“This document provides brief descriptions and supporting references for the evidence-based and promising practices that support early childhood inclusion. These practices are organized into three major sections corresponding to the defining features of high quality early childhood inclusion as described in the joint position statement: of the CEC Division for Early Childhood and the National Association for the Education of Young Children: (a) Access -- removing physical barriers, providing a wide range of activities and environments, and making necessary adaptations to create optimal development and learning for individual children; (b) Participation -- using a range of instructional and intervention approaches to promote engagement in play and learning activities, and a sense of belonging for every child; and (c) Supports—creating an infrastructure of systems-level supports for implementing high-quality inclusion. Citations for each practice include best available research in the form of research reviews or syntheses or, when a summary of the research does not exist, the most recent and relevant individual studies evaluating specific practices.”

Full text – Research Synthesis Points

Resource Guide for Early Childhood Transitions: Annotated Bibliography

“This bibliographic resource provides a selected listing of journal articles, research briefs, and reports that focus on early childhood transitions and school readiness. They cover a variety of topics central to the issue of early childhood transitions, including family engagement and home–school and program–school partnerships. . . . Links are provided to resources which are publicly available on the Web, and DOI numbers are provided for those journal articles which may be available electronically for a fee.”

Full text – Resource Guide for Early Childhood Transitions

Resources to Promote Social and Emotional Health and School Readiness in Young Children and Families: A Community Guide

This guide "provides information about resources and strategies that families, child care providers, teachers, and others who come into contact with young children every day can use to help infants, toddlers and preschoolers, especially those living in low-income communities, develop the social and emotional skills they need to succeed in school." Figure 1 (page 7) lists a number of early education programs and curricula with (a) strategy type, (b) presence or absence of control group evaluation, and (c) availability of national training. More detailed descriptions of programs and their evaluation designs and outcomes begin on page 22.

Overview and click for full text -- Resources to Promote Social and Emotional Health and School Readiness

State Pre-K Assessment Policies: Issues and Status
In this Policy Information Report, the authors “have put together a useful ‘primer’ on state pre-K assessment policies. They describe the instruments that are used across the states and identify important aspects of their use. Just as important, the authors remind us of the particular challenges that are inherent in assessing young children’s learning, and they report on sound assessment practices that recognize these challenges.” Three state-by-state tables are included (Tables 1, 2, and 3).

Full text – State Pre-K Assessment Policies

The Early School Transitions and the Social Behavior of Children with Disabilities: Selected Findings from the Pre-Elementary Education Longitudinal Study (PEELS)


“In spring 2006, researchers completed the third wave of data collection for the Pre-Elementary Education Longitudinal Study (PEELS). PEELS is funded by the U.S. Department of Education’s National Center for Special Education Research to examine the preschool and early elementary school experiences and performance of children with disabilities. The study followed a nationally representative sample of children until 2009; the children were identified as having disabilities when they entered the study in 2003-04. This report describes changes in services and eligibility at times of transition, transitions into kindergarten, and social skills and problem behavior of young children with disabilities from 2003-04 to 2005-06. Five broad descriptive research questions guide the data collection, analysis, and reporting for this multiyear study: (a) What are the characteristics of children receiving preschool special education? (b) What preschool programs and services do they receive? (c) What are their transitions like — between early intervention and preschool and between preschool and elementary school? (d) How do these children function and perform in preschool, kindergarten, and early elementary school? and (e) Which child, service, and program characteristics are associated with children’s performance over time on assessments of academic and adaptive skills?”

Full text – The Early Childhood Transitions and Social Behavior of Children with Disabilities

The Head Start Child Development and Early Learning Framework: Promoting Positive Outcomes in Early Childhood Programs Serving Children 3-5 Years Old


“The original Framework, published in 2000, was a groundbreaking document reflecting early childhood research at the time, as well as requirements of the 1998 Head Start Act. . . . The revised Framework reflects the legislative mandates of the Improving Head Start for School Readiness Act of 2007 and current research in child development and learning. The Framework also reflects Head Start’s core value to promote all aspects of child development and learning in early childhood programs. . . . The Office of Head Start expects the revised Framework to be used by programs in curriculum and assessment decisions just as the original Framework was intended to be used. It should also continue to be used to connect child assessment data to aspects of Head Start program design, including school readiness goals consistent with state and local expectations, if appropriate. Additionally, the Office of Head Start expects it will guide the collection of child assessment data for other early childhood
reporting systems, if locally required. When used in these ways, the revised Framework will provide data for program self-assessment and promote continuous quality improvement in programs and child well-being and success.”

**Full text – Head Start Framework**

**The Science of Early Childhood Development: Closing the Gap Between What We Know and What We Do**

The National Scientific Council on the Developing Child “brought together several of the nation’s leading neuroscientists, developmental psychologists, pediatricians, and economists. This document presents their critical review of the existing literatures in their fields and a consensus about what we now know about development in the early childhood years. The objective of the Council is to move beyond the public’s fascination with ‘the latest study’ and focus on the cumulative knowledge of decades of research that has been subjected to rigorous and continuous peer review. The goal of this document is to help the public and its policy makers understand the core principles of that body of work that are now sufficiently accepted across the scientific community to warrant public action.”

**Full text -- The Science of Early Childhood Development**

**Also see -- A Science-Based Framework for Early Childhood Policy**

**The State of Preschool 2011**

This is the newest edition of NIEER’s “annual report profiling state-funded prekindergarten programs in the United States. This latest Yearbook presents data on state-funded prekindergarten during the 2010-2011 school year as well as documenting a decade of progress since the first Yearbook collected data on the 2001-2002 school year. . . . The 2011 Yearbook is organized into three major sections. The first section offers a summary of the data, and describes national trends for enrollment in, quality of, and spending on state-funded preschool. The second section presents detailed profiles outlining each state's policies with respect to preschool access, quality standards, and resources for the 2010-2011 program year. A description of NIEER’s methodology follows the state profiles. The last section of the report contains appendices, which are available online only. The appendices include tables that provide the complete 2010-2011 survey data obtained from every state, as well as Head Start, child care, U.S. Census, and special education data.”

**Full text – The State of Preschool 2011**
[And click at the left for all of the reports since 2003]

**Understanding and Choosing Assessments and Developmental Screeners for Young Children Ages 3-5: Profiles of Selected Measures, 2009-2011**
“This document has three purposes. First, the compendium aims to help Head Start managers and other early childhood education administrators review information regarding the reliability and validity of commonly used assessment and developmental screening tools in order to help them better select appropriate tools for the populations they serve. Second, the compendium aims more generally to increase awareness about reliability and validity and how to evaluate whether an instrument is reliable and valid for the population and purpose for which it will be used. Finally, the compendium aims to highlight areas in which the early childhood field is lacking information on reliability and validity of early childhood assessments and developmental screeners. While originally developed in response to Head Start’s reauthorization, the compendium is designed to be useful to managers and staff who work in different types of early childhood education programs and who are responsible for selecting and evaluating assessment or screening instruments.”

**Full text – Understanding and Choosing Assessments**

**What We Know About Professional Development** (in the early childhood education field)
National Professional Development Center on Inclusion, FPG Child Development Institute, Chapel Hill, North Carolina. (2011).

“This document provides references to support specific statements related to professional development (PD) in the early childhood field.” Topics include: (a) Reaching consensus on defining PD and associated approaches; (b) Early childhood teachers are not adequately prepared in preservice programs for working with children with disabilities, with infants and toddlers, or with children who are culturally or linguistically diverse; (c) Graduate students in early childhood programs do not get adequate preparation on how to plan and implement PD; (d) Early childhood PD initiatives are multiple and disconnected; (e) Research summaries on adult learning strategies and teacher development provide some empirical basis for designing PD; (f) Promising but unproven models of PD include coaching, consultation, mentoring, communities of practice, and different forms of peer study groups; (g) The body of teacher education and PD research that addresses pupil or other desirable outcomes is relatively small and inconclusive.”

**Full text – What We Know About Professional Development**


**And see – Reaching Consensus on a Definition of Professional Development for the Early Childhood Field (2009)**

**What Works for Home Visiting Programs: Lessons from Experimental Evaluations of Programs and Interventions**

This paper reports "the findings from 66 rigorous evaluations of programs with a home visiting component. . . . The literature review synthesizes findings from multiple random assignment experimental evaluations conducted to examine the impacts of various intervention programs with a home visiting component. The goal of this review is to identify programs that work, as well as the intervention strategies that contribute to program success. . . . The fact sheet includes short
descriptions of the rigorously evaluated programs and whether they were found to work, were not proven to work, or had mixed findings. Overall, 32 programs had positive impacts on at least one child outcome, 23 had mixed reviews, and 11 were not proven to work." The preponderance of programs covered in this review pertain to early childhood and preschool, although home visiting programs in middle childhood and adolescence are included.

Overview and click for the full text -- What Works for Home Visiting Programs

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This information is an attempt to gather wide-ranging information in one place, to convey what others have accomplished, and to make valuable resources readily accessible. Information is presented in the language of the developer, publisher, distributor, or author to the maximum possible extent. The National Implementation Research Network has no ownership of contents described in this library. Nor does NIRN make claims about any models, curricula, strategies, tools, products, or papers that are annotated. Links to evidence are provided, so that you can decide whether the evidence is convincing and the material is relevant to your context. Some collected reviews are developed and distributed by a U.S. Government agency. Otherwise, the opinions expressed herein do not necessarily reflect the position or policy of any U.S. Government agency, and no endorsement should be inferred.