



Curricula and Instructional Practices

Head Start's Ninth National Research Conference, Creating Connections: Linking Policy, Practice, and Research across Early Childhood Development, Care, and Education occurred in June, 2008 in Washington, D.C. This biannual conference brings together practitioners, researchers, administrators and policy makers involved in Head Start, early childhood, childcare, and health care to share research that promotes positive development in young children. Through the conference's varied presentations, roundtable discussions, and posters, attendees learned about new research and how it can be effectively transformed into practical applications. Curricula and Instructional Practices was one key topic of the conference. All researchers who presented papers or posters related to this topic were invited to submit their presentations for inclusion in this summary sheet; all presentations received were included.

Instructional practices and curricula are essential to how young children experience quality education. Head Start Program Performance Standards require that when serving infants, toddlers, or preschoolers, including children with disabilities, a curriculum must address the goals for children's development and learning, the experiences through which they will achieve these goals, the roles of staff and parents in helping children achieve these goals, and the materials needed to support the implementation of the curriculum. In Head Start, a curriculum is always implemented within the context of sound child development principles about how children learn and develop intellectually, emotionally, physically, and socially.

Researchers at Head Start's Ninth National Research Conference presented their work on specific curricula or curricular components and their associations to early childhood outcomes, as well as particular instructional strategies used by early child educators in the classroom. Other research areas included the effectiveness of curricula in developing children's executive function and emergent literacy skills; the role of teacher language use in fostering children's social-emotional competences, and the importance of individualizing instruction for the growth of early reading skills. Issues of teacher fidelity of implementation were also addressed.

Highlights from the conference and poster sessions are outlined below. Research studies are also summarized in the conference session and poster descriptions following the highlights. Head Start looks forward to applying the results of these and other research studies to help enhance staff's work and support staff in utilizing effective instructional strategies to support each child's learning and developmental progress.

Highlights on Teacher Strategies/Instructional Practice: Key Points Presented at Head Start's Ninth National Research Conference

- Dr. Karen Bierman and colleagues examined the effects of the Research-based, Developmentally Informed (REDI) intervention and found that exposure to REDI had a direct impact on children's acquisition of discrete skills (e.g. vocabulary knowledge, emergent literacy skills, emotion recognition). However, these outcomes were not linked

to teaching practices, indicating the quality of the curriculum (instructional materials and learning activities) may be a more important predictor of a child's acquisition of these discrete skills than teaching practices. In contrast, teaching practices were significantly related to changes in child behavior, particularly observer ratings of child social competence and aggression. These results suggest that efforts to increase the impact of Head Start on child school readiness should continue to focus both on curriculum improvements and on professional development activities to enhance high-quality teaching practices. ([Poster One: Promoting Child School Readiness with Improved Teaching Practices: Mechanisms of Action in Head Start REDI](#))

- A study conducted by Dr. Karen Bierman showed that the way that teachers talk about and respond to children's emotions and behavior problems in the classroom is important. Teachers' use of emotional support and reflecting language (labeling and restating the emotions a child expresses in a way that demonstrates understanding and acceptance) in the classroom predicted child learning in both language and social-emotional skill domains. Teachers' sensitive responding, emotional support and rich talk (communication that expands on children's emotion vocabulary to help them learn new and accurate labels for feelings), fostered children's social competence and aggression control in peer interactions. This suggests that professional development programs should attend more thoroughly to this important domain of teacher practice. ([Paper One: Using Language Effectively to Support Child Social-Emotional Development](#))
- Drs. Carin L. Neitzel and Deborah Wells Rowe investigated the ways that preschool children participate in different writing activities and found that children with various interest patterns engage in the same writing center activities in markedly different ways. For example, children with socially-oriented interests tend to work at the classroom writing table primarily to initiate and maintain social interaction with others, while children with procedural-oriented interests tend to work at the writing table to practice print forms and procedures (e.g. writing and naming letters properly). While further study is needed, this suggests that "usual" classroom writing events may not be equally supportive of all children's engagement in writing and that new instructional practices to support children's different interest patterns may be warranted. ([Paper One: The Impact of Personal Interest on Preschool Writing](#))
- A study of children's school success by Dr. Samuel L. Odom and colleagues found that regular child school attendance and treatment fidelity (e.g. a high percentage of a preschool readiness curriculum completed in the classroom and high quality of teachers' implementation of the curriculum) provided a stronger predication of posttest performance than fidelity of treatment alone. This suggests that curriculum dosage is impacted by school attendance and may affect the degree to which a curriculum is associated with children's performances at posttest. ([Poster Two: Children's School Success: Treatment Dosage and Child Outcomes](#))

- Dr. Jason Troy Downer and colleagues examined teachers' use of a Web-based professional development resource and found that children who experienced high quality teacher-child interactions during language and literacy curriculum activities made greater gains in print awareness and emergent literacy skills than those who experienced lower quality interactions. Curriculum dosage and adherence were not related to change in children's language and literacy skills. This suggests that a curriculum's effectiveness may have more to do with how teachers interact with children than it has to do with simply following a script. ([Poster Three: Teachers' Use of Web-Based Professional Development Resources and Children's Language and Literacy Development](#))
- A study of the Tools of the Mind curriculum by Drs. Deborah Jane Leong and Elena Bodrova showed that first grade students achieved stronger reading comprehension outcomes when teachers used software that provided them instructional support for individualization as compared to a control group. Findings support the importance of individualized instruction on the growth of early reading skills. ([Paper Symposium: Fostering Active Engagement in Learning](#))

Special Sessions

This section includes poster symposia and paper symposia related to the topic of curricula and instructional practices.

PAPER SYMPOSIUM: New Theories, Insights and Practices in Early Writing Assessment and Instruction

Discussant: Elena Bodrova

PAPER One: The Impact of Personal Interest on Preschool Writing

Presenter: Carin L. Neitzel, Vanderbilt University

Authors: Carin L. Neitzel and Deborah Wells Rowe

The ways in which 2- to 3-year-old children participate in early writing activities share important characteristics with their interest patterns of activity in other areas of the classroom. Children with socially-oriented patterns of interest, procedural-oriented patterns of interest, creative patterns of interests, and conceptual patterns of interest were found to use classroom writing center activities in markedly different ways. The children's purpose for using the writing center activities, ways in which they used materials, sources of feedback (e.g. seeking feedback from adults vs. other children), reason for shift in activity type, and structural focus (e.g. whether they wanted to strictly adhere to or transform the structure and features of a particular writing activity) varied according to their interest-based patterns of activity. While further study is ongoing, this suggests the need to develop and study new early writing curricula that support children with different interest patterns.

PAPER Two: Instruction and Assessment of Early Writing*Author and Presenter: Steffen L. Saifer, Northwest Regional Educational Laboratory*

The few early writing assessments that exist for children ages 2–5 are based on the assumption that children learn to read and then learn to write. However, several researchers contend that writing is a separate (but interrelated) developmental domain from reading with its own trajectory and should be taught and assessed accordingly. The Tools of the Mind curriculum system of Scaffolded Writing (Bodrova & Leong, 1998) involves helping children plan what they want to write; draw it; then write it by substituting a line for a word and a series of lines for a sentence. This allows the child to move quickly from an oral meaning-based communication system to a written one. Preliminary research suggests that when children are given tests that do not penalize them for learning letter sounds better than letter names, children in Tools of the Mind classrooms may outperform children in classrooms using other curricula. New assessment tools are needed that can help parents and educators better assist children’s writing development and prevent later difficulties.

PAPER SYMPOSIUM: Talking with Children, Not Just Talking*Discussant: Jerlean Daniel***PAPER One: Using Language Effectively to Support Child Social-Emotional Development***Author and Presenter: Karen Bierman, Pennsylvania State University*

Teacher language use in the classroom can foster children’s social-emotional competencies such as the ability to understand and manage their feelings; understand and use appropriate social behaviors; and apply cognitive skills to manage conflict and resolve problems. These competencies are associated with school success. A randomized, controlled study of 356 4-year-olds in 44 Head Start classrooms found that teachers’ use of reflecting language and emotional support in the classroom predicted child learning in both language and social-emotional skill domains. Teachers’ sensitive responding, rich talk, and emotional support, in particular, fostered children’s social competence and aggression control in peer interactions.

POSTER SYMPOSIUM: Weaving Together Academic and Social-Emotional Learning Through Integrated Curricula and Teacher Professional Development*Discussant: Amy Madigan***POSTER One: Promoting Child School Readiness with Improved Teaching Practices: Mechanisms of Action in Head Start REDI***Presenter: Karen Bierman, Pennsylvania State University**Authors: Karen Bierman, Scott Gest, Robert Nix, Celene E. Domitrovich, Damon Jones, Suhkdeep Gill, Janet Welsh*

Developed in partnership with Head Start, Research-based, Developmentally Informed (REDI) includes curriculum components designed to promote children’s skill acquisition in

the domains of social-emotional understanding and language/emergent literacy. It also utilizes professional development activities that are designed to improve the quality of teachers' language use, emotional support, and positive behavior management strategies in the classroom. The present study examined the effects of REDI on children who started the pre-kindergarten year with low levels of classroom participation, learning motivation and involvement, and attention, indicating risks for later school difficulties, as compared to children in "usual practice" classrooms. Exposure to the REDI intervention had a direct impact on discrete skill acquisition (e.g. vocabulary knowledge, emergent literacy skills, emotion recognition). However, there were no significant relations linking these outcomes to teaching practices, indicating the quality of the curriculum (instructional materials and learning activities) may be a more important predictor of a child's acquisition of these discrete skills than teaching practices. In contrast, teaching practices were significantly related to changes in child behavior, particularly observer ratings of child social competence and aggression.

POSTER Two: Children's School Success: Treatment Dosage and Child Outcomes

Presenter: Samuel L. Odom, University of North Carolina

Authors: Samuel L. Odom, Karen E. Diamond, Marci Hanson, Joan Lieber, Gretchen Butera, Eva Horn, Susan Palmer, Janet Marquist, and Kandace Fleming

Researchers have proposed that the effect of curriculum or treatment on child outcomes is moderated by the "dosage" they receive (Farran, 2000), but there has been little agreement on how to measure dosage. Several variables may contribute to a dosage measure. Classroom-level variables include the proportion of the curriculum teachers actually implement and the quality of implementation. Another possible variable is the proportion of the school year in which the child is in attendance. The researchers examined child outcomes and the fidelity of treatment of a preschool readiness curriculum (e.g. a high percentage of the curriculum completed in the classroom and high quality of the teachers' implementation of the curriculum), along with child school attendance and posttest performance. They found that fidelity of treatment was significantly associated with posttest child performance, but that school attendance also was associated with positive outcomes. The authors concluded that proportion of the school year in which the child is in attendance may affect the degree to which a curriculum or treatment is associated with a child's performance at posttest.

POSTER Three: Teachers' Use of Web-Based Professional Development Resources and Children's Language and Literacy Development

Presenter: Robert C. Pianta, University of Virginia

Authors: Jason Troy Downer, Andrew J. Mashburn, Robert C. Pianta, Bridget Hamre

Early childhood educators are increasingly required to implement language and literacy curricula; however, many teachers have difficulty implementing curricula with a high degree of fidelity. In this study, pre-k teachers were provided with materials and lesson plans to implement the research-informed MyTeachingPartner (MTP) language and literacy curriculum. Three elements of implementation fidelity were measured: 1)

dosage—the duration and frequency of implementation; 2) adherence—the degree to which the curriculum was implemented as prescribed; and 3) quality of delivery—the manner in which the curriculum was implemented. Dosage and adherence were not related to change in children’s language/literacy skills. However, children who experienced higher quality teacher-child interactions during curricular activities focused explicitly on literacy content made greater gains in print awareness and emergent literacy skills. These gains were particularly found in children with low emergent literacy skills in the fall. English Language Learners also made greater gains in receptive vocabulary when their teachers delivered curricular activities within high-quality teacher-child interactions that focused on language modeling. These results suggest that a curriculum’s effectiveness may have more to do with how teachers interact with children within a lesson than it has to do with simply following a script.

POSTER Four: Getting Ready: Preliminary Effects of a Parent Engagement Intervention to Promote School Readiness

Presenters: Susan M. Sheridan, University of Nebraska-Lincoln

Authors: Susan M. Sheridan, Lisa L. Knoche, Carolyn Pope Edwards, James A. Bovaird, Brandy Lee Clarke, Kevin A. Kupzyk

The Getting Ready intervention is designed to improve teachers’ skills in increasing early and sustained parent engagement across multiple social and learning contexts. Children in the Getting Ready treatment group demonstrated enhanced levels of attachment behavior with teachers and other adults, and reductions in teacher-reported measures of anxiety/withdrawal behaviors compared to children in the control group. Preliminary analyses by language group suggest variations between English- and Spanish-speaking children. Future research will focus on issues of dosage, adherence, quality of implementation, and participant responsiveness, as well as teacher and parent variables that may impact intervention effects.

PAPER SYMPOSIUM: Fostering Active Engagement in Learning

Discussant: Frederick J. Morrison

PAPER One: Teaching for Regulated Behaviors: A Case of an Integrated Early Childhood Curriculum

Presenter: Deborah Jane Leong, Metropolitan State College of Denver

Authors: Deborah Jane Leong and Elena Bodrova

Using an integrated approach, the Tools of the Mind curriculum is designed to positively promote children’s development of self-regulation, working memory, and cognitive flexibility during make-believe play and other regular classroom activities. A study of Tools of the Mind found that the play-based curriculum significantly improved several executive function skills in low-income, urban preschool children. Executive function skills include inhibitory control (resisting habits, temptations, or distractions); working memory (mentally holding and using information); and cognitive flexibility (adjusting to change). These skills are strongly associated with school readiness.

PAPER SYMPOSIUM: Instructional Influences on Growth of Early Literacy: The Case for Individualization

Discussant: Barbara Wasik

PAPER One: Implementing Instruction Appropriate to the Child's Skill Level

Presenter: Frederick J. Morrison, University of Michigan

Authors: Frederick J. Morrison and Carol McDonald Connor

Effective instruction differs for children with different skill levels. The researchers examined several dimensions of instruction, including the effects of teacher-managed explicit (TME) instruction versus child-managed implicit (CMI) instruction. TME instruction is when the instructional activity and child's attention is primarily under the direction of the teacher (e.g. when the teacher is explicitly instructing the children in letter sounds); CMI instruction is when the instructional activity and child's attention is primarily controlled by the child (e.g. in silent sustained reading). Children with low fall decoding (e.g. letter recognition, letter-sound correspondence, and phonological awareness) or vocabulary scores achieved higher spring decoding scores in classrooms with more TME instruction and less CMI instruction. Children with high fall decoding or vocabulary scores achieved higher spring decoding scores in classrooms with less TME instruction and more CMI instruction. In addition, an intervention study examining the causal effects of individualized instruction on children's early reading found that first grade students achieved strong learning outcomes in reading when teachers fine-tuned their instruction to individual students under the guidance of a software program that allows teachers to compute recommended amounts and types of instruction for each individual student and adjust their instruction accordingly. Findings support the importance of individualized instruction on the growth of early reading skills. Future research will focus on replication and extension to other grades and identifying the "active ingredients" in individualized instruction.

Conference Posters

This section includes posters related to the topic of curricula and instructional practices that were presented during the poster sessions at the conference.

Efficacy of a Direct Instruction Approach to Promote Early Learning

Presenter: Stephen J. Bagnato, Duquesne University

Authors: Jennifer Lee Salaway, Kara McGoey, Stephen J. Bagnato

Direct Instruction (DI) is a method of teaching that is strongly teacher-directed, using small groups and carefully scripted lessons. The authors examined the efficacy of an intervention intended to (a) integrate a DI module as an enhancement to the regular developmentally appropriate practice curriculum, and (b) provide evidence of the effects of the DI enhancement in the form of increased early literacy, preacademic, and social behavioral competencies for high-risk children. Preliminary data analysis indicates DI is an effective instructional strategy for teaching high-risk preschoolers.

Responses to Academic Challenge for Head Start Graduates

Presenter: Eleanor Brown, West Chester University of Pennsylvania

Authors: Eleanor Brown, Alison Miller, Eric Pizzini, Ronald Seifer, and Susan Dickstein

The social cognitive model of motivation suggests that implicit theories explain individuals' responses to challenge—individuals who implicitly believe that ability is outside of their control approach tasks with the goal of performing and respond to challenges with declining expectations and effort, while individuals who implicitly believe that ability is malleable approach tasks with the goal of learning and respond to challenges with positive attitude, persistent effort, and strategy shifting (Dweck & Leggett, 1988). Using a narrative coding system (Miller & Brown, 2006) based on this model, coders reliably rated Head Start graduates' persistence, attention, and goal orientation when faced with academic challenges during their kindergarten year. These variables showed expected relations to one another and to other school readiness variables (e.g. children with learning orientation showed persistence in the face of challenge, while children with performance orientation showed inattention. Persistence in the face of challenge related to higher reading skills, math skills, and social skills while inattention in the face of challenge related to lower math skills, social skills, and work-related skills, as well as hyperactivity). Understanding children's responses to academic challenges may help teachers and parents better prepare them for the challenges of formal schooling.

Is Teacher Knowledge an Adequate Predictor of Early Literacy Skills?

Authors and Presenters: Anne E. Cunningham and Jamie Zibulski, University of California, Berkeley

The researchers explored the relationship between early childhood educators' actual and perceived knowledge in the domains of language structures, as well as the association between these knowledge constructs and students' emergent literacy skills. No significant associations were found between overall perceived and actual knowledge. Close examination of educators' responses may help inform future intervention programs and the development of instruments measuring knowledge.

Implications of Teacher Psychological Profiles for Classroom Quality and Student Outcomes in Pre-Kindergarten

Author and Presenter: Lauren Elizabeth Decker, University of Virginia

Few existing studies have explored psychological profiles and classroom quality. This study investigated psychological profiles among pre-k teachers and how specific psychological profiles may be related to observed classroom quality and student language and academic outcomes. Findings indicate that psychological profiles do exist for pre-k teachers and these profiles also relate to observed classroom quality and student language and literacy outcomes in pre-k. Finally, classroom quality was found to mediate the relationship between teacher psychological profiles and literacy outcomes for children. Classroom quality tests for instructional support, teaching/interactions, and provisions for learning accounted for variance in children's Letter Word achievement that

was previously explained by teacher psychological profile membership. One explanation for this finding is simply that the association between teacher psychological profiles and early literacy achievement occur because of the practices and interactions that teachers provide for their students. Results suggest the importance of teacher psychological profiles in understanding the large variability currently seen in early education classroom quality. Future work should consider other psychological variables and teachers at varying grade levels.

Do Teachers Practice What They Believe? The Impact of Head Start Teachers' Literacy Beliefs on Classroom Practices

Authors and Presenters: Annemarie H. Hindman, University of Michigan, and Barbara Wasik, Temple University

Links between teachers' educational background, literacy beliefs/knowledge, and classroom literacy practices were explored. Teachers specializing in early childhood expressed more evidence-based beliefs about oral language, while experience predicted evidence-based beliefs about writing. In turn, controlling for these factors, teachers' beliefs were not associated with classroom practices.

Classroom Model and Peer Influence: The Relation Between Preschoolers' Behavior and Academic Achievement in the Classroom

Presenters: Rhonda S. Jamison, University of Illinois at Champaign-Urbana, and Rebecca A. Marcon, University of North Florida
Authors: Rhonda S. Jamison, Rebecca A. Marcon, Susan M. Perez

Previous researchers have found a relation between academic achievement and behavior within individual children. However, the current study of 214 low-income preschoolers found that classroom peers influence each other in both academic achievement and classroom behavior. Furthermore, findings support the idea that the relation between preschoolers' academic achievement and classroom behavior may depend on the context of the classroom in which it is taking place.

Differential Contributions of Whole-Group and Center Activities to Preschoolers' Gains in Achievement and Behavioral Regulation

Presenter: Claire Cameron Ponitz, University of Virginia
Authors: Claire Cameron Ponitz and Frederick J. Morrison

Time spent in "center-time" classroom activities and whole-group or "circle-time" activities were examined as they relate to preschoolers' behavioral regulation, emergent literacy, vocabulary, and mathematics. Center-time activities involve independent work, teacher-child individual instruction, and free play. Whole-group activities involve group instruction, organizing, and switching/waiting for the teacher. Two popular center-time activities— independent work and free play— did not predict skills gains. In fact, children who spent more time in free play made fewer literacy gains. Regarding whole-group activities, more time switching/waiting for the teacher predicted fewer emergent literacy

gains for all children. These findings suggest rethinking assumptions about common preschool activities.

Project ExCEL in Head Start: Improving Kindergarten Readiness Using Tools of the Mind

Authors and Presenters: Steffen L. Saifer and Lena Ko, Northwest Regional Laboratory, and Deborah Jane Leong, Metropolitan State College of Denver

Project ExCEL (Excellence in Cultivating Early Literacy) is an Early Reading First project implemented in five Head Start programs in Oregon. The program promotes children's literacy and social-emotional development using a systematic, intensive teacher training program, and a blend of two research-based programs, Tools of the Mind (Leong & Bodrova) and Building Language for Literacy (Scholastic, Inc.). Project ExCEL was found to have positive impacts on classrooms. ExCEL classrooms made significant gains on various measures of literacy environment, classroom observations and literacy activities. For classroom observation, comparison classrooms made significant gains on only oral language facilitation. Children in the ExCEL and comparison classrooms made gains on all measures of the Phonological Awareness Literacy Screening (PALS) and on the Peabody Picture Vocabulary Test. Children in both groups also made gains on the Social Skills measure of the Social Skills Rating System (SSRS). After controlling for pretest differences and language spoken in the home, the children in the ExCEL classrooms made significantly more gains than did children in the comparison classroom in one area—the PALS Print and Word Awareness measure.

Are Preschool Curriculum Statements Related to Classroom Quality? Examining the Association between Philosophy and Practice

Presenters: Sandra L. Soliday-Hong and Yiching D. Huang, University of California, Los Angeles

Authors: Sandra L. Soliday-Hong, Yiching D. Huang, Carollee Howes

The purpose of this investigation was to explore the association between curricular beliefs/goals and curriculum implementation in preschool classrooms. Each classroom participating in the study submitted a written curriculum/philosophy statement, which was then coded for content. The instructional quality of each classroom was assessed using a variety of observational measures. Results revealed that on average, classrooms implemented 62 percent of their stated curricular beliefs and goals. The results also showed that curriculum/philosophy statements were associated with classroom quality. Programs with highly elaborated curriculum/philosophy statements demonstrated higher levels of classroom quality and better fidelity of implementation than programs with curriculum/philosophy statements which were lacking in such detail.

Getting Ready for School: Views of School Readiness Among Parents, Teachers, and Administrators

Authors and Presenters: Julie Spielberger and Stephen Baker, University of Chicago

The Early Childhood Cluster Initiative (ECCI), based on the High/Scope Perry Preschool model, has been operating in public schools in targeted areas of Palm Beach County, Florida since 2005. An independent implementation study explored beliefs of pre-k and kindergarten teachers, school administrators, and parents regarding school readiness. Results found that stakeholders have different beliefs about what is “very important” but agree that some behavioral items (e.g. child can follow directions, child can communicate verbally, etc.) are relatively more important to school readiness and some school-related items (e.g. child can use pencils and paint, child can count to 20 or more, etc.) are relatively less important. Greater training and communication among stakeholders is needed to develop a common vision of school readiness.

For Further Information

For more details on any of the selected presentations and posters, please contact the presenters listed directly. Presenter contact information can be found in the index of the conference program. ([Creating Connections: Head Start's Ninth National Research Conference 2008 Program Book](#))