

**PROCEEDINGS
OF THE RESIDENCY ROUNDTABLE:**

INDICATORS OF COGNITION AND APPROACHES TO LEARNING

**The Fairmont Scottsdale Princess
Scottsdale, Arizona**

March 13th – 14th, 2003

Sponsored by:

The David and Lucile Packard Foundation
The Ewing Marion Kauffman Foundation
The Ford Foundation

Hosted by:

Rhode Island KIDS COUNT

Participating States:

Arkansas, Arizona, California, Colorado, Connecticut, Kansas, Kentucky, Massachusetts, Maine, Missouri, New Hampshire, New Jersey, Rhode Island, Vermont, Virginia, Wisconsin

Purpose:

This meeting was the third in a series of small work sessions to help states make accelerated progress in selecting and/or developing school readiness indicators in priority areas. Participants included state agency data and policy staff from state departments including Education, Health, Human Services and Governor's Offices as well as state school readiness team members from child policy organizations, universities, and Head Start. The Roundtable focused on indicators related to children's cognitive development and approaches to learning from birth to age eight. The Roundtable also focused on achievement gaps according to race, income, and ethnicity. Indicators reflected state investments in programs and policies for young children and families as well as child outcomes. Participants received background materials prior to the meeting in order to inform the discussion. Materials in the briefing binder are available on the Initiative website at www.GettingReady.org.

Meeting Objectives:

- Identify issues that are critical to young children's cognitive development and approaches to learning, including family environment, community conditions, child characteristics, and service systems for young children and their families.
- Consider a set of school readiness indicators that reflect child outcomes (cognitive development of infants, toddlers, pre-schoolers and early elementary school children; young children's approaches to learning) as well as systems outcomes (disparities in achievement according to race and income, state policies and programs that affect young children and families).
- Select priority indicators to track progress in supporting the cognitive development of young children from birth to age 8.
- Identify potential data sources for indicators of the cognitive development of young children and their approaches to learning.

Definitions

- Cognition and General Knowledge: This dimension includes multilateral knowledge in three broad areas of academics: reading, mathematics, and general knowledge. Cognitive development is stimulated by children's environment and experiences, which create knowledge regarding similarities, differences, and associations. It also includes knowledge about societal conventions, such as the assignment of particular letters to sounds, and knowledge about shapes, spatial relations, and number concepts. General knowledge is a child's understanding of the world around them.
- Approaches to Learning: This dimension refers to ways in which kindergartners approach and perform specific tasks in a variety of situations. Individual differences use of skills, knowledge, and capacities reflect children's future attitudes and approaches toward school and learning. Key components include enthusiasm, curiosity, and persistence on tasks, as well as temperament and cultural patterns and values.
- Achievement Gap: This term refers to disparities in achievement between economic, racial, and ethnic groups. Standardized state and national tests demonstrate unequal academic proficiency between groups of students beginning in elementary school and persisting through high school. These disparities often result in unequal academic and economic opportunities for students according to their race, class, or ethnicity.

Thursday, March 13

Welcome and Opening Remarks

Elizabeth Burke Bryant
Executive Director
Rhode Island KIDS COUNT

Carol Kamin
Executive Director
Children's Action Alliance

Catherine B. Walsh
Deputy Director
Rhode Island KIDS COUNT

Ms. Burke Bryant opened the meeting, marking the start of the third Residency Roundtable of the School Readiness Indicators Initiative. The purpose of these meetings is to collect our expertise in one room to build our understanding of important issues and highlight essential data and indicators in critical areas. Our past Roundtables looked at indicators of social and emotional development as well as language and literacy. This meeting will explore two further domains: cognition and approaches to learning.

The first day of the meeting will be grounded in research and policies at the state and national levels. We will then brainstorm potential indicators together for prioritization the next day.

Indicators are different for every state. We recognize that our different policy environments necessitate the creation of diverse indicator lists. It is essential that indicators reflect the state policy work happening in the state. That in mind, we still benefit from sharing indicator development strategies across states and considering indicators that are supported by research.

Dr. Kamin welcomed participants to Arizona, the 2nd fastest growing state in the nation. The state's governor has promised not to balance the budget "on the backs of kids." The creation of a state Board of School Readiness has helped the state leap forward in the field of early care and education. The Board will identify key indicators of school readiness and make recommendations to the Governor and Legislature. While recently losing Jaime Molera as Superintendent, his successor Tom Horne has shown strong support for early education and the School Readiness Indicators Initiative.

Ms. Walsh said that cognition was a natural next step after exploring social/emotional and literacy indicators. Children's cognitive development is a shared process of social, thinking and learning skills, making it a perfect area to explore further as our Residency Roundtable series continues. In addition to exploring two more domains of school readiness, this Roundtable will provide insight into one of the Initiative's overarching goals: closing the achievement gap in education. Kati Haycock from The Education Trust will provide data on the achievement gap in the United States. Susan Landry's presentation will describe the environments that support children's cognitive development as well as the impact of professional development on the field.

State and Federal Policies: Focus on Cognition and Learning

Jana Martella
Senior Project Associate
Council of Chief State School Officers

Ms. Martella provided participants with an overview of federal policy and history related to children's cognitive development. She also described relevant projects of the Council of Chief State School Officers.

Ms. Martella's presentation and the Council of Chief State School Officer's policy statement *Early Childhood and Family Education* are attached in Section 3.

Additional points:

The agenda for the Council of Chief State School Officers (CCSSO) is *all kids*. The organization's 1999 policy statement *Early Childhood and Family Education* described five central and strategic commitments:

- To promote parent and family education and join in coordinated health, child care and education services which enable families to provide creative developments for their young children.
- To ensure that every child has the opportunity for high quality, universal early care and education at age 3 and 4 through either public or private schools and agencies with funding through public and/or private sources, depending on need.
- To assure the continuity of education experiences as children move through early childhood programs and into elementary schools, particularly in terms of pre-literacy preparation.
- To strengthen early childhood program standards and accountability and improve assessment of child development and readiness.
- To expand and disseminate new knowledge about how to improve early childhood education.

The promotion of children's cognitive development is a system that includes science, practice and programs. Each is linked through both federal policy and good practice. The implementation of research-based practice leads to high quality programs that improve child outcomes.

Federal policy has always been influenced by societal and cultural events. For example, the passing of the Elementary and Secondary Education Act was an outgrowth of Russia's launching of the Sputnik satellite. Our current demand for system-wide educational accountability has led to the passing of *No Child Left Behind*. The wide dissemination of brain development research has influenced policy from welfare reform to Head Start.

Education, Head Start, and child care have evolving federal and state roles. In education, federal funding has increased over the years. The increasing federal role in education greatly impacts the way states handle the work of educating children. States are now federally required to assess all children in all schools, a significant change from past policy. Never before have schools been held publicly accountable for the achievement of all kids.

This year the federal government is reauthorizing several major initiatives, including Head Start and the Individuals with Disabilities Education Act (IDEA). The Head Start Policy Book describes proposed changes in Head Start, but these changes must be authorized by Congress. There are currently no firm proposals on IDEA, which includes pieces on infants, toddlers and preschoolers.

Nationally there is a growing emphasis on early childhood learning standards. The Early Childhood Education Assessment State Collaborative on Assessment and Student Standards (ECEA-SCASS) has developed appropriate early childhood standards across domains. These standards should be available online soon. Sharon Lynn Kagan and Catherine Scott-Little have collected and analyzed state standards. Their work should be available soon. In addition, Mid-Continent Research for Education and Learning and The National Institute for Early Education Research (McREL-NIEER) are partnering on an in-depth analysis of early childhood standards and their connection to K-12 standards. The State Preschool Accountability Research Collaborative (SPARC) is doing case study work in states developing early childhood standards.

The Head Start National Reporting System is soliciting comments on the proposed standards for Head Start.

As early childhood issues continue to develop federally, it is essential for us to stand unified on the diverse issues affecting the field. The individual pieces of early childhood are each as important as the whole picture. The system will only be as strong as the quality of the individual pieces.

Questions/Discussion

Kristie Kauerz (Education Commission of the States) discussed the issue of *No Child Left Behind* requirements for adequate yearly progress (AYP). A recent discussion on the School Readiness Indicators Initiative listserv debated the usefulness of incorporating measures of early childhood into states' annual AYP reports. While we know that standards and assessments are essential, linking school readiness measures to K-12 with limited financial resources puts early childhood in a potentially negative situation.

Marnie Campbell (Kansas) reported that collaboration is increasing across Kansas. Existing projects and programs such as Head Start and state preschool are finding good reasons to work together and strategically utilize resources. This process has brought people together to new tables in positive ways.

Barbara Gardner (Massachusetts) has moved toward full day kindergarten programs across the state. In other states, kindergarten programs are being downsized or cut altogether. Is CCSSO tracking this issue? Ms. Martella reported that the Education Commission of the States has great resources on the issue of kindergarten across the states. She was not aware of any states cutting back kindergarten programs. Catherine Walsh (Rhode Island) shared that full day kindergarten has been a policy in Rhode Island that indicators have helped move forward. By measuring the extent to which districts full day programs, stakeholders were able to make the case for increasing access statewide, especially in cities with the most vulnerable children. Kristie Kauerz added that we have a lot more movement on kindergarten research than policy. We should keep on top of this research to properly inform our policy work. Marnie Campbell reinforced that an effective full day kindergarten program requires an appropriate curriculum.

Update on State Early Childhood Policy Technical Assistance Network

Charles Bruner
Executive Director
Child and Family Policy Center

Mr. Bruner updated participants on the work of the State Early Childhood Policy Technical Assistance Network. SECPTAN provides research-based assistance to states seeking to examine policy issues. The network offers research, workshops and presentations on a variety of issues. SECPTAN is a resource to all states involved in The School Readiness Indicators Initiative.

Mr. Bruner's presentation is attached in Section 4.

The State Early Childhood Policy Technical Assistance Network has a variety of resources already available to School Readiness Indicators Initiative states, including:

- 7 Things Legislators Need to Know About School Readiness.
- Compendium of Multi-State Early Childhood Initiatives.
- Financing School Readiness – Annotated Bibliography.
- School Readiness Template – Measures, Policies, and Budgeting.
- Assessing School Readiness – Baselines and Benchmarks.

In the next few months, SECPTAN is planning several workshops and presentations to enrich the work of states as they continue to develop effective early childhood policies:

- Kindergarten assessment workshop (Summer 2003).
- Financing Workshop with the BUILD Initiative (date TBA).
- A child welfare and school readiness publication (due in April with a possible presentation after).
- A health services and school readiness publication (due in May with a possible presentation after).

For more information or to request technical assistance from SECPTAN, contact either Charles Bruner or Sheri Floyd at The Child and Family Policy Center in Des Moines, Iowa. They can be reached at 515-280-9027 (see additional contact information in Section 4).

Children's Development and Approaches to Learning

Susan Landry
Professor of Pediatrics
University of Texas at Houston

Dr. Landry provided a comprehensive look at the field of early care and education in terms how adults can best provide children with what they need for positive development. Effective teaching strategies were discussed along with a look at how environments affect children's learning.

Dr. Landry's presentation is attached in Section 5.

Additional points:

Part of the issue in talking about children's cognitive development is that the term "cognition" feels hard, dry and intimidating, as opposed to a term like "social-emotional." It is critical to recognize that cognitive and social-emotional development are linked.

There is a strong need in the field of early care and education to create an integrated curriculum. Many excellent curricular pieces exist, but there is nothing pulling them all together. Instructional approaches must be moved forward. A balance must be achieved between pedagogical approaches such as direct instruction and child discovery.

Research has identified 6 key essentials for optimal support of young children's cognitive and social development:

- Rich language input.
- Responsiveness to children's signals.
- Maintaining and building on interests.
- Fewer restrictions.
- More choice providing strategies.
- Adapting support to child's changing needs.

These approaches are framed by the central relationship between the adult and the child. The relationship can be used to enhance the set of scaffolding behaviors outlined above. These behaviors make up the supportive environment that children need to thrive. Of all groups of children, special needs children tend to have the poorest environments; in other words, they are less likely to receive the supports listed above.

The behavior most frequently seen in the classroom is responsiveness to children's signals. This behavior is a skill, therefore it can be taught to professionals. However, this skill is learned over a long period of time with modeling from experienced professionals.

Babies' brains are capable of a higher level of cognitive activity than previously thought. For example, babies can access memories and respond to familiar objects.

As we establish guidelines to frame what happens in early childhood environments, we should:

- Describe what children should know, understand, and be able to do;
- Guide what teachers will do;
- Help make informed decisions about curriculum content;
- Inform assessment approaches; and
- Provide the basis for professional development.

These guidelines should be structured around two broad goals: early reading development and mathematical development. Early reading domains include:

- *Oral language*: the ability to express ideas and understand language in a social context.
- *Background knowledge*: the acquisition of vocabulary and information about the world.
- *Phonological awareness*: sensitivity to, manipulation of, and use of sounds in words.
- *Print knowledge*: the knowledge of letters and words and the transition of print to sound and sound to print.

Mathematical domains include:

- *Numbers and operations*: counting and ordering.
- *Geometry*: the understanding and representation of directions, locations and relationships between objects.
- *Measurement*: specifying “how much” of an attribute (e.g. length) an object possesses.
- *Data analysis*: classifying, representing, and using information to ask and answer questions.
- *Algebra*: using patterns to recognize relationships and make generalizations.

Questions/Discussion

Joyce Mallory (Wisconsin) and Catherine Walsh (Rhode Island) asked how pedagogical approaches and learning styles affect children cross-culturally. Dr. Landry replied that there is no research that supports the idea that any group of children learn differently than other groups. Patricia de Cos (California) later added that California’s demographics are quite diverse. For example, 39% of children entering kindergarten in the state are English language learners. How does learning a language affect children’s development? This is a concern for states where immersion is taking the place of bilingual education programs. Dr. Landry said that the six scaffolding behaviors are critical for English language learners, as they are for all children. We do a disservice to children when we expect them to learn differently depending on their background. Cognitive development is fairly universal.

Ann Segal (Action Strategies) said that many children enter kindergarten with low skills and difficult backgrounds. How are these children affected when they do not have access to programs that provide an environment in which scaffolding and responsiveness are present? Dr. Landry underscored the importance of knowing exactly why parents do not access programs. Carol Kamin (Arizona) said that many Latinos do not choose formal child care settings, believing home environments are better for kids. Joyce Mallory (Wisconsin) shared that in Milwaukee, Latino families were found to be more comfortable in centers that have Latino providers. Families see these programs as culturally sensitive and appropriate. Dr. Landry noted that this example highlights the importance of creating nurturing, supportive environments for both children and families.

Barbara Gardner (Massachusetts) submitted that the information provided on the strategies that support children's development should be shared with the full range of adults who affect the development of children: parents, teachers, higher education teacher trainers, etc. Carol Kamin (Arizona) noted that child care providers have virtually no access to this information.

The Achievement Gap: An Essential Component of Learning Indicators

Kati Haycock
Director
The Education Trust

Ms. Haycock shared her organization's nationally acclaimed research regarding disparities in achievement between economic, racial and ethnic groups as well as successful policy recommendations for tackling this problem. The presentation demonstrated the long-term effects of uneven cognitive development as well as described environments where these disparities do not exist.

Ms. Haycock's presentation is attached in Section 6.

Additional points:

During the 1970s and 80s, the achievement gap nationwide was narrowing. Since about 1988, the gap has been widening. The gap today is wider than it was 10 years ago. As a result, Black and Latino 17 year-olds perform at the same level as White 13 year-olds.

Popular explanations for the achievement gap focus on something present in children and their families' lives: poverty, poor parenting, poor nutrition, lack of books, etc. In truth, there are thousands of highly successful schools, districts, and even states in which poor, minority children perform as well or better than their peers. These high-poverty, high-performing schools tend to:

- be explicit about what, when, and how material is taught.
- monitor student learning closely.
- provide immediate support to students and teachers when students are not performing.
- invest generously in teacher quality.
- focus only on what matters to student learning.
- create a system and spirit of accountability for each student's learning.

The single greatest contributor to a student's failure is teacher quality. Students who have several strong teachers in a row will thrive no matter what their home environment is like.

Questions/Discussion:

Ruth Flynn (Missouri) asked how teacher and administrator quality are measured. Ms. Haycock said the for teacher quality, the measure looks at student performance over time and also value-added characteristics. For administrators, effective leadership is determined by the elements of quality instruction. Effective principals are often not the strong personalities seen on television

and movies; they are normal people who are simply highly focused on one goal: higher student performance.

Joe Perry (New Hampshire) asked that since the national student achievement data comes from the National Assessment of Educational Progress (NAEP), it is important to note who is taking that test and who is not. There is a concern that special education students are not included in the data. Ms. Haycock answered that NAEP is clear about who is included and who is not. Still, state exemption policies are inconsistent nationwide.

Royce Conner (Rhode Island) asked about teachers' reactions when presented with this data. Ms. Haycock said the response tends to be mixed, from highly positive to highly critical.

Celina Hurley (Rhode Island) asked how we account for the fact that teacher quality is linked to teacher salary. Ms. Haycock said that teacher salaries are not going to change in the near future for teachers of any group. Finding quality teachers is a challenge. However, projects such as the New Teacher Project actively recruit talented professionals into teaching. Ann Segal (Action Strategies) added that school climate also drives quality. Ms. Haycock said that administration is responsible for setting a tone of achievement. If children are engaged in learning, they tend to behave and have fewer discipline problems.

Indicators of Young Children's Cognitive Development and Learning

Catherine B. Walsh
Deputy Director
Rhode Island KIDS COUNT

Ms. Walsh facilitated this small group session. Participants worked in small groups to identify the indicators that are currently in place in their states and the ways the indicators are used to inform policy and planning. Special attention was paid to indicators for high-risk populations. Critical gaps in knowledge about the family factors, community conditions, service systems, and child outcomes related to language and literacy development were explored. Participants then came together as a large group and shared their indicator lists. The full list was turned into a worksheet for use the following day.

The indicator worksheet is attached in Section 8.

Friday, March 14

Indicators as a Tool to Improve State Policies and Programs

Catherine B. Walsh
Deputy Director
Rhode Island KIDS COUNT

Using the full indicator list developed the previous day, participants worked in small groups to prioritize the indicators of cognition and approaches to learning. Using the worksheet, participants were asked to rank each indicator on three criteria: meaningfulness (the connection to cognition and approaches to learning), measurability (the extent to which the indicator can be measured), and communication power (how well the indicator can be understood by a general audience). The product was a prioritized list of indicators of cognition and approaches to learning.

The prioritized indicator list is attached in Section 9.

Groups were given the opportunity to report back after the discussion.

Sara Radich (Colorado) noted that her group tended to agree on ready child indicators. The question was whether we were developing a list that can truly impact policy. Elizabeth Burke Bryant (Rhode Island) stressed that the indicators are ultimately a tool for policy change. They must reflect the policy environments in the state and speak strongly to the policymakers who make the decisions about legislation and funding. Kristie Kauerz (Education Commission of the States) asked if indicators were to be used at the program level. Some indicators speak well for programs, but may not resonate statewide. Catherine Walsh responded that our work needs to be aware of the best practices being used in our programs, but the indicators must inform state policy decisions.

Yasmine Daniels (New Jersey) reported that her team struggled with measurability. She also felt connecting this work to the indicators selected at past Residency Roundtables would be helpful.

Joyce Staples (Connecticut) said when her group struggled with measurability, they acknowledged that an important indicator could be measured if enough momentum was built around it.

Sandy Miller (Ohio) felt the next difficult layer of work would be communications. The indicators must be taken from our language into a language more easily understood by a broad audience.

Dee Cox (Arkansas) shared that data collection was also an issue in her group. The group agreed on several priority indicators, particularly in the areas of schools and communities. Other important areas to explore further are transitions and professional development.

Deborah Scott (Missouri) added that another important indicator to explore further is child care quality. In addition, we need to talk more about school level accountability in terms of closing the achievement gap.

Wrap-Up and Next Steps

**Royce Conner
Policy Associate
Rhode Island KIDS COUNT**

Mr. Conner thanked all participants for their hard work and deep thinking on children's cognition and approaches to learning. As a next step, the prioritized indicators will be collected and shared among participants in the Roundtable as well as state team coordinators of the School Readiness Indicators Initiative. The list will be made available on www.GettingReady.org as part of the proceedings of this meeting. Participants will have the further opportunity to work with national experts to narrow the list further as our work progresses. States are encouraged to use the list as an immediate resource for their own indicator lists.

The next Residency Roundtable will be held in the Fall of 2003 and focus on indicators for children ages birth to three across all domains of child development. The Fourth National Meeting of the School Readiness Indicators Initiative will be held in Kansas City, Missouri on May 13th – 14th, 2003. Topics will include policy development, health indicators, English language learners, and children with special needs.