

FPG
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at Chapel Hill

early developments

Winter 2008 | Vol. 12, No. 2



UNC

FPG CHILD DEVELOPMENT INSTITUTE

FirstSchool

Uniting the Best of
Early Childhood,
Elementary, and
Special Education



Research on Disparities in Autism Diagnosis Wins Gallagher Award

Twyla Perryman has been awarded the FPG's 2008 James J. Gallagher Dissertation Award. Perryman's research will examine factors that may lead to disparities in the age of diagnosis of children with autism spectrum disorders. Perryman will receive a \$3,500 award. The award honors Dr. Jim Gallagher, who was director of FPG from 1970 to 1987 and continues his research at the institute. Gallagher's work over the years has focused on children at both ends of the developmental spectrum—those with disabilities or at-risk conditions and those who are gifted. Perryman is currently completing her doctorate degree at The University of North Carolina at Chapel Hill.

FPG Projects Showcased in RWJF Hearing

The Robert Wood Johnson Foundation Commission to Build a Healthier America showcased FPG's Abecedarian and Family Life Projects in a hearing in Raleigh, NC in June 2008. The Commission is investigating how factors outside the health care system, such as education and housing, shape and affect opportunities to lead healthy lives. The North Carolina hearing was the Commissioners' first opportunity as a group to review nationally recognized early childhood and youth development programs that have been shown to improve health.

For more information, visit www.commissiononhealth.org/.

Two National Centers Move to FPG

Two nationally recognized leaders in implementation science, Drs. Dean Fixsen and Karen Blase, have joined FPG.

Dr. Fixsen has spent his career developing and implementing evidence-based programs, initiating and managing change processes, and working with others to improve the lives of children, families, and adults. Dr. Blase has been a program developer, researcher, trainer, evaluator and published author in the human service field for over 25 years.

They will bring two national projects to FPG: The National Implementation Research Network and the State Implementation and Scaling-Up of Evidence-Based Practices Center (SISEP).

The National Implementation Research Network works to close the gap between science and service. It helps states, communities, and providers take evidence-based programs proven effective as research models and implement them in the "real world" while maintaining fidelity to the original process.

SISEP helps states scale-up their capacity to deliver evidence-based practices to improve students' academic achievement and behavioral health. It is a national technical assistance center of the U.S. Department of Education's Office of Special Education Programs (OSEP).

For more information about SISEP, visit www.fpg.unc.edu/~sisep/

For more information about NIRN, visit <http://nirn.fpg.unc.edu/>.



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Winter 2008 | Vol. 12, No. 2

ISSN 1536-4739

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Early Developments is published by the FPG Child Development Institute at The University of North Carolina at Chapel Hill. FPG is one of the nation's oldest multidisciplinary centers devoted to the study of children and families. Our mission is to cultivate and share knowledge that enhances child development and family well being.

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Periodicals postage paid at
Chapel Hill, NC

11,500 copies of
Early Developments were printed
at a cost of \$6142 or 53¢ each.



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PUBLIC SCHOOLS across the country are providing early care and education for children as young as three. Today, nearly a million four-year-olds are served in public school pre-kindergarten programs. Simply being in a public school building, however, will not help children gain the skills they need to succeed. That's where FirstSchool comes in.

FirstSchool is a pre-kindergarten through third grade initiative led by FPG and the School of Education at The University of North Carolina-Chapel Hill. It is a system-based change process—meaning the FirstSchool team works with schools, districts, and states to move toward an integrated approach for children ages 3 to 8 that unites the best of early childhood, elementary, and special education.

Decades of research have demonstrated that the pre-kindergarten and early elementary years represent a unique time in children's development. This is when children acquire the basic skills that provide the foundation for later learning.

Unfortunately, people's eyes tend to glaze over when phrases like "school reform" begin to be tossed about—"been there, done that." School reform is not a new idea. As the nation's public schools have failed to meet the needs of many children—particularly minority children, school districts have been desperate for ideas that will provide real and lasting results.

FirstSchool is different. Rather than taking my word for it, read through this issue of *Early Developments* and make up your own mind.

As the first article "Long-Term Change Requires Long-Term Planning" notes, one reason FirstSchool is different (and that it has a greater likelihood of success) is that FPG didn't start with a prescribed answer. It started with the notion that the answer had to come from within, from all of the people that intersect within a school community.

Second, FirstSchool is predicated upon the ideal of equity. This requires paying particular attention to inequalities associated with race, social class, language, and gender.

And that in turn demands that minority communities are a guiding force in all FirstSchool work. The second article, "A Real Voice for Minority Communities," demonstrates how African American and Latino leaders are shaping every aspect of FirstSchool.

Values and principles are imperative, but they don't mean much if they are not put into action. The third article, "FirstSchool in Action," shows FirstSchool's core values being brought to life through a project designed to reduce North Carolina's dropout rate. FirstSchool and its partners are working to increase pre-K through third grade teachers' knowledge and understanding of the circumstances of boys of color; enhancing teachers' capacities to handle the challenges of teaching boys of color; and improving the academic, socio-emotional, and behavioral functioning of boys of color through more effective teaching.

The last section illustrates how FirstSchool's guiding philosophy—uniting the best of early childhood, elementary, and special education—moves from ideal

to reality. Readers can learn more about using developmental science to transform children's early school experiences, how to overcome the financing challenges associated with bringing younger children into public schools, and how learning environments can support the development of relationships.

Each of these articles emphasizes the driving force behind FirstSchool—it is shaped first and foremost by what young children and their families need from school. In so doing, FirstSchool is creating a new vision for the education and care of young children from pre-kindergarten through third grade that unites the best of early childhood, elementary, and special education. |ed|

—Tracy Zimmerman



Long-Term Change Requires Long-Term Planning

A little over three years ago, the W. K. Kellogg Foundation took a radically different approach to the education challenges that plague disadvantaged children. They recognized that long-term change required long-term planning. They awarded FPG over \$2 million to support a three-year planning process to develop what has come to be known as FirstSchool.

“MOST NEW EFFORTS do not have that much time to plan,” said FirstSchool Director Sharon Ritchie. “That said, we do not believe that this has been a *luxury* of time but rather a *necessity* of time. The challenges in providing high quality education and care to an increasingly diverse group of children ages 3 to 8 are great—and they deserve careful consideration.”

Much has happened in these three years. Most significantly, the question, “What is FirstSchool?” has been answered. One reason FirstSchool is different (and that it has a greater likelihood of success) is that FPG didn’t start with a prescribed answer. It started with the notion that the answer had to come from within, from all of the people who intersect within a school community. That meant inquiry.

Anyone who comes into contact with the FirstSchool concept will hear the word inquiry a lot. Teaching methods are based on inquiry. Learning is based on inquiry. And the FirstSchool concept itself is based on inquiry. Inquiry

in this context means exploring what works, what does not work, and why.

“FirstSchool is based on the development of the inquiring mind,” Ritchie explains. “This is what professionalizes people. It’s the interest in actively engaging in what you are doing.”

As a starting point, it meant bringing together teachers, administrators, higher education faculty, researchers, parents, and community leaders to tackle these questions on a large scale. The result is a concept of schooling that reflects the best available research as well as the needs and values of the community and the experiences of educators.

To be fair, FirstSchool did not begin as a blank slate. There are a core set of values that remain non-negotiable. These include:

- Schools should be ready for children instead of expecting children to be ready for schools.
- School should be a place where *each* child can be successful.
- Schools must invest resources and time to support systemic change.

- People must actively explore and strengthen equity in all aspects of schooling.
- Positive, reciprocal relationships are key to successful education as well as successful reform.
- Successful school practices should build on the best of early childhood, elementary, and special education.

In addition to the value statements, FirstSchool is based on the understanding that pre-kindergarten and the early elementary years represent a unique time in children’s development. This is a time when children learn to read and write—the basic tools needed to learn and to achieve future school success. Young children also are growing and learning in many other areas such as emotional and social development and physical health and development. These areas are important to address in school too. Essentially, FirstSchool is an initiative driven first and foremost by what young children and their families need from school.

As part of the planning process, and to ground it in reality, FPG worked

within its own community—Chapel Hill-Carrboro City Schools in NC. It started by building relationships. It sounds simple, but it's a foundational step that is typically overlooked. It also was a critical step to buy-in and a genuine partnership.

"I love to tell this story. One of the teachers came up to me and said, 'You just kept coming back.' That's what it's all about," Ritchie says. "There's a new educational fad every day and schools and teachers are tired of it. That's one of the reasons that FirstSchool is about changing the system, not enforcing a prescribed curriculum."

These relationships yielded a plan for moving forward and scaling up the initiative. Over the next six years, FirstSchool plans to work in three states, beginning in North Carolina. To partner with FirstSchool, schools will have to apply and meet certain criteria. They must serve high needs populations, have leadership and vision that is consistent with FirstSchool values, have a district that will support the partnership, put in place a multi-perspective team, and be willing to acknowledge that change is slow. Following the advice of its Minority Advisory Board, FirstSchool will offer a series of workshops to help schools complete the application process.

Once schools are on board, FirstSchool will collect observational data. How much time is being spent on reading? How much time is being spent on transitioning from one activity to the next? How much time is spent with a teacher at the front of the class giving instructions? In other words, how do children spend their day?

At the same time, each school's multi-perspective team will undergo a self assessment process. FirstSchool relies on the Ready Schools Assessment tool developed by High/Scope. The findings of both assessments are the foundation for the school's detailed action plan.



Sharon Ritchie
FirstSchool Director

There's a new educational fad every day and schools and teachers are tired of it. That's one of the reasons that FirstSchool is about changing the system, not enforcing a prescribed curriculum.

FirstSchool recognizes that change takes resources. The selected schools will receive funds to implement the work, provide ongoing professional development, and engage in ongoing assessment. In addition, FirstSchool will hire (in conjunction with the school) and pay for the salaries of two full-time FirstSchool facilitators in each school. One will focus on family-school partnerships, and the other will focus on instructional quality.

What will success look like?

- A school challenges itself through ongoing inquiry and the willingness to ask questions about what contributes to patterns of success and failure.
- A school relies on collaborative structures and the use of data to inform change efforts.
- Children experience a seamless transition from home to school and one grade level to the next.
- Communication between and among educators, families, interdisciplinary staff, community members, and university faculty is a priority.
- Families who have historically been alienated from school are engaged in the life of schools.
- Children are engaged with their teachers, peers, and the learning environment. All children are successful.
- Children experience teachers as humans who know them, their parents and the details of their lives. Teachers believe that their job goes beyond teaching children math and reading to helping children flourish and become good and responsible citizens.

This is the vision. How we get there will evolve differently in each school. Each school and community will have particular histories, strengths, and needs that will shape the priorities and strategies identified. |ed|

A Real Voice for Minority Communities

“Violence is black children going to school for 12 years and receiving 6 years’ worth of education.”



THESE ARE THE WORDS OF JULIAN BOND, Chairman of the National Association for the Advancement of Colored People. They underscore why FirstSchool is more than an education initiative; it’s a social justice movement.

FirstSchool is predicated upon the ideal of equity. This requires paying particular attention to inequalities associated with race, social class, language, and gender. And that in turn demands that minority communities are a guiding force in all FirstSchool work.

Listening to Minority Communities

African American and Latino leaders are shaping every aspect of FirstSchool. Minority educators, families and local community leaders provide guidance about what it takes to authentically engage minority families in the life of schools, what it takes to prepare teachers to improve the early school experiences of minority children, and implications for changing policy that currently has adverse effects on minority children and their families.

Focus groups are prompting frank conversations with African American and Latino parents about what is important to them in the education of their children, the role of schools and teachers in helping children grow and learn, and their own experiences being the parents of young school children.



The first African American Consortium was held over the course of three days in August 2008. Participants shared both good and bad experiences.

“One teacher faces the same challenge every year—if her assistant teacher is white, new parents assume the assistant is the teacher.”

“Little boys of means get taken to soccer, camp, etc. If you don’t have the money for recreation, they are acting up in class or on the streets. One teacher got forms for free recreation, filled it out for the parents, got it signed, and turned it in.”

“One teacher’s school doesn’t do home visits. She finds the parents who come to special programs are the parents who have already provided their children with these experiences.”

“One principal gives a key to teachers to use a learning cottage to meet parents on Saturday or Sunday when the school is locked.”

“Summer can be a difficult time for many children. They often have no place to go, don’t get adequate food, have to take care of siblings, and face crime in the community. They are safe in school.”

“One policy that really drove a teacher crazy was for children receiving a reduced price lunch. There are certain items for which children have to pay. But if a child ran out of money, the policy was that cafeteria

workers would take the child’s tray, throw it away, and give him a peanut butter sandwich or vegetables.”

The meeting also gave participants the opportunity to suggest actions it wanted FirstSchool to take as it moved forward. These included:

- Question policies like zero tolerance that disproportionately affect African American children.
- Talk openly about race and expect everyone to have a grown-up attitude.
- Refuse to follow policies that require suspension, even in-school suspension.
- Ask teachers to talk about the children who made the least progress, and why, and how skin color played a role. Don’t let teachers claim they don’t see color.
- Give minority administrators, teachers and parents a voice in leadership teams and ask to have a voice in how at-risk money is spent at school.
- Encourage principals to facilitate and accompany their teachers on home visits across grade levels.
- Make sure children eat! Children need all of their meals. If a child comes late, is it his fault? Is breakfast still being served? Just because a family has not paid the lunchroom bill, should children be given inadequate nutrition?
- Provide African American educators with role models to show them they can rise to levels where they can change schools.





- Ensure that all children experience an African American teacher sometime during their elementary career.
- Push leadership to accept that African American males need to be in education.
- Make sure you have a mechanism for moving conversation and action forward when you bring race to the table.
- Bring school board members and superintendents into the discussion. They will take the heat for hard conversations about race, and they have to feel stable enough to handle that.
- Push for year-round schools to meet the educational, nutritional, safety, and recreational needs of African American children.

A Latino Consortium will be held this winter (2008). After that, the two groups will unite to provide ongoing guidance as the Minority Consortium.

Acting on What We Hear

“To listen without acting is to patronize,” said Marvin McKinney, FPG investigator and a member of the FirstSchool leadership team. “We know real change depends on a genuine and equal partnership—one that is based on listening *and* action.”

That action already is evident. For example, FirstSchool originally planned to hire one person to serve as the in-

structional quality and family relationships facilitator. This facilitator would be responsible for working with all schools in a state. The minority consortium advised differently. It said that for FirstSchool to make a real impact it would need to pay for a staff person to be housed in each school and coordinated by a state facilitator. That wasn’t all. The group strongly believed that job requirements for someone ensuring instructional quality were quite different from those of someone building family-school relationships. In moving forward, FirstSchool will be following their recommendations and filling two positions for each school.

The consortium also helped FirstSchool leaders tackle a significant concern—making sure that a broad range of schools applied to partner with FirstSchool. The answer: workshops. FirstSchool plans to hold workshops around North Carolina to provide guidance on the application process.

Long-Term Engagement

The Minority Consortium is not a one-time event. It is designed to be an integral driver of the evolution of FirstSchool.

“We say over and over that FirstSchool is based on inquiry. How could we ever produce meaningful change if we ourselves didn’t engage in that process with those who come from the very communities with which we hope to partner?” said Cristina Gillanders, FPG investigator and a member of the FirstSchool leadership team. |ed|

FirstSchool in Action



WHAT HAPPENS IN THE EARLY YEARS, pre-kindergarten through third grade, has direct impact on what happens in the later years. The North Carolina General Assembly recognized this relationship when it awarded FirstSchool one of the state's first Dropout Prevention Grants.

In 2007, the North Carolina General Assembly convened a Dropout Prevention Grants Committee to address the state's dropout rate. Graduation rates for Black, Hispanic, and American Indian students (61.4%, 53.6% and 55.6% respectively) trail those of White and Asian students (75% and 79%).

These data highlight the well-established achievement gap between different racial and ethnic groups. A number of studies over the past decade have shown that this gap appears early—before children enter kindergarten—and is difficult to reduce throughout the school years.

FirstSchool's first partner, NC Ready Schools, works statewide to ensure that elementary schools are ready for all children who walk through their doors. Its second partner, Promoting Academic Success in Boys of Color (PAS), is another FPG project. It is working to ensure that boys of color are successful in elementary school. PAS' teacher training modules embody FirstSchool's commitment to ongoing professional development.

All three projects acknowledge that:

- schools play a critical role in ensuring the success of vulnerable children,
- schools have traditionally failed at supporting the most vulnerable children, and
- a new approach is needed to ensure school success.

“Expectations often dictate results. For too long, we've expected less from boys of color. The professional development we provide is designed to change this paradigm. Teachers are



learning how to ensure that high expectations are held for boys of color and that strategies are implemented toward achieving these high standards,” said FirstSchool Director Sharon Ritchie.

Additionally, all three initiatives focus on the first few

years of school because research has demonstrated that it is during these years that children’s academic trajectory is generally established. Preventing school dropout begins when children first walk through the school doors, often in pre-kindergarten.

Professional Development Series

What Do We Want Teachers to Know and Be Able to Do?

I. Get to Know Boys of Color

- Exchange personal experiences with other teachers in the group to develop group rapport.
- Be aware of how boys of color in their district are doing in education and how they compare to female and white peers on academic indicators.
- Understand the relationship between problems in school during early elementary years and later outcomes.
- Understand different views on the nature of learning and ability and the relationship to teachers' and students' behavior.

II. Build Relationships

- Understand importance of positive relationships with students.
- Examine ones' own beliefs, values, and perceptions about boys of color and how beliefs and values might influence interactions with them.
- Understand unique qualities and circumstances of many boys of color that might interfere with relationship building such as learning styles, behavior, and language.
- Learn new ways to interpret boys' behavior and respond to challenging behavior.
- Learn and use strategies for communicating and building relationships with boys of color.

III. Partner with Families to Promote Achievement

- Understand values, beliefs, norms, expectations, and practices of families of color.
- Learn and use a variety of approaches/strategies for reaching out to families from diverse cultural backgrounds.
- Be familiar with differences and similarities across contexts of development in discipline strategies, communication styles, language/dialect, goals/expectations for boys of color.
- Learn strategies for conveying expectations to families and soliciting/asking parents to share their expectations of the school/teacher.
- Provide parents with materials and strategies to support boys learning at home.
- Learn about and employ strategies for having productive discussions with families about difficult subjects.
- Strategize on how to repair relationships and partner with "difficult" parents.
- Create varied and multiple opportunities for parents to participate in classroom activities.



IV. Engage, Support, Motivate (Classroom Environment)

- Use multicultural literature to engage boys of color and to enhance their literacy and reading skills. Enhance self-efficacy by encouraging effort and hard work, focusing on boys' strengths, and providing numerous opportunities to be successful.
- Adapt the classroom environment to build on boys' strengths.

V. Promote Social-Emotional Development

- Be sensitive and responsive to the emotional needs of boys of color.
- Develop closer, more nurturing relationships with them.
- Be able to help boys of color learn to manage their aggressive and angry feelings appropriately.
- Promote pro-social identities among boys of color when teachers help them problem-solve.

VI. Address Challenging Behavior in the Classroom

- Identify different types and sources of challenging behavior in the classroom.
- Structure the classroom environment to prevent or reduce challenging behaviors.
- Learn strategies to reduce violence, aggression and other types of challenging behavior "in the moment."
- Learn ways to work with families to address difficult behavior.
- Tap into school resources and other teachers as a source of support, information, and practical strategies.

VII. Promote Positive Racial and Gender Identity

- Create opportunities for children to learn about and share information about their ethnic heritage and culture.
- Examine one's own beliefs and values about ethnic and gender differences.
- Create opportunities for students to meet with and learn about the work, family, and community experiences of positive male role models of minority backgrounds.

Why Is Starting Early Important?

When boys have problems adjusting to school it often is due to a poor fit between the boys and the requirements of the typical public school classroom. The structure and processes of most classrooms reward skills in which boys tend to be deficient and sanction the skills that are often the boys' preferred ways of engaging the world.

For example, boys are predisposed toward direct communication, hands-on activities that rely on gross motor skills, low control of behavior, and communication, and interaction through movement. In contrast, schools prefer and reward inductive and indirect forms of communication, quiet desk work using fine motor skills, high control of behavior, and verbal mastery and fluency. The goal of the school-based interventions are to alter teacher practices related to language use, discipline, and classroom management so as to increase their relevance to the developmental needs of boys. This includes:

- Frequent language-rich interactions with boys.
- Use of mnemonic strategies to elicit recall of shared experiences.
- Ample literacy material for reading, writing, and times to talk about what is read and experienced.
- Opportunities to explore and learn about objects in the physical world.

- Intentional instruction, which is instruction that promotes active inquiry by the child, letter-sound knowledge, and information about the world. This is not to be confused with “drill and kill” which emphasizes rote learning through endless repetition.
- Relationships with emotionally engaged adults who help to promote emotional well-being, social competence, and self regulation of behavior.
- Less punitive, more responsive, management of behavior in classroom involving realistic expectations for behavior and achievement, firm, and even-handed control, close emotionally expressive contact, and interpersonal warmth.

How Does the Project Work?

Six schools in three North Carolina districts are participating in the dropout prevention work. All schools have high minority populations and low achievement scores, and all have pre-K classrooms on their campuses.

One school in each district is a “treatment” school; the other is the control and receives no intervention. The treatment schools are participating in a training protocol adapted from PAS, receiving ongoing consultation, and establishing professional learning communities.

These are not light endeavors. At each intervention school, FirstSchool Director Sharon Ritchie has facilitated

honest discussions about the impact of race and poverty on children in school and in the classroom. These conversations lead into examining institutional and personal attributes that contribute to maintaining or reducing the achievement gap.

Teachers also hear from real people. For example, men from Triangle Residential Options for Substance Abusers talked to the group about their early school experiences.

“This discussion had a particularly strong impact on teachers,” Ritchie said. “Teachers were struck by the men’s comments on how they adopted a façade of toughness from a very early age. Many teachers commented that this gave them new insight into their relationships with some of the boys in their classrooms.”

The combination of professional development, consultation and professional learning communities is already changing what teachers do in the classroom.

“I got rid of my behavior system. I was afraid to do it, and all of the teachers told me I would be sorry. But I found out that I really did not need it. My relationships with the kids are far more important than anything I give or take away from them,” said one third grade teacher.

She’s not alone. A kindergarten teacher noted, “I reflect a lot more on what I am doing. I have become so much more patient and willing to listen.”

Teachers have made other changes as well. One commented on expanding the choice of books available in the classroom and making sure that

“My relationships with the kids are far more important than anything I give or take away from them ...”

African American and Latino children are depicted in the stories and pictures. Another started a lunch club to give boys more time outside. And a second grade teacher began having the children move around more in the classroom.

Their efforts are the result of a new willingness to engage in ongoing inquiry and to ask questions about what contributes to patterns of success and failure. Within their professional learning communities, teachers are focusing on the practice of reflective thinking. As shown above, they are using information gathered through the eyes of multiple stakeholders to inform changes in instructional practice and relationships with children and their families. |ed|

Uniting the Best of Early Childhood, Elementary, and Special Education



FIRSTSCHOOL WORKS TO CREATE COLLABORATION among early childhood, elementary, and special education to provide seamless and excellent education for children in pre-kindergarten through third grade.

That sounds good, but what does it mean? To illustrate how this guiding philosophy moves from ideal to reality, the Foundation for Child Development funded FirstSchool to develop a series of papers. Currently, they include:

- *What is FirstSchool?*
- *Using Developmental Science to Transform Children's Early School Experiences*
- *Financing Services for 3- and 4-Year Olds in a Pre-K-3 School*
- *FirstSchool Learning Environments: Supporting Relationships*

Three of these papers are adapted and excerpted in this issue of *Early Developments*. The complete text and the remaining papers are available at www.fcd-us.org.



Using Developmental Science to Transform Children's Early School Experiences

This is adapted from a chapter, "Rethinking early schooling: Using developmental science to transform children's early school experiences" written by Sharon Ritchie, Kelly Maxwell, and Sue Bredekamp in "Handbook of Developmental Science and Early Education" (tentative title) to be published in July 2009. Rerinted with permission of The Guilford Press.

GREAT CHEFS know more than how to follow a recipe. They understand how to nurture a plant to produce the tastiest herbs. They recognize the complexities involved in raising cattle that yield tender meat. And they know how to tease out flavor by combining just the right ingredients.

Similarly, great teachers know more than subject matter. They understand that children do not learn simply by being provided with information. They recognize that social and intellectual interactions are essential to children's growth and learning. What teachers do in the classroom and how they do it is informed by understanding each child's social-emotional, cognitive, language, and motor development (also called developmental psychology).

Unfortunately, in the current climate of accountability that is based on test scores that limit what and how teachers teach, it is difficult for such teachers to develop and thrive.

Teacher preparation and professional development typically don't include information gleaned from research about the essential foundations for children's learning. And elementary teacher preparation programs typically focus on the important issues of content (e.g., math, science, and literacy) and instructional strategies, but rarely include or integrate any significant coursework on child development.

"These issues are so important that they are at the heart of FirstSchool's mission—uniting the best of early childhood elementary, and special

education," said Kelly Maxwell, a founding co-director of FirstSchool. "These education systems need to work together to rethink teacher education, professional development and daily practice to provide the best possible education for children age 3-8."

What We Know About Development and Learning

Researchers have identified four foundations for learning that appear to predict children's success in school from pre-kindergarten through third grade—self-regulation, representation, memory, and attachment.

Self-regulation: Self-regulation is the ability to adapt one's behavior, emotions, and thinking according to the demands of the



situation. It is what allows a person to stop or start doing something even if one does not want to do so. For example, a child who stops talking to his neighbor when the teacher starts reading a book is self-regulating.

Representational

Thought: Representation is using one thing to stand for another. For example, in English, the word *chair* represents an object with four legs on which to sit. The letters of the alphabet visually represent the sounds of spoken language. Young children use gestures or speech in pretend play to represent an object, such as when a child strums an “air guitar.”

Memory: Scientists have identified two critical processes of how memory and learning interact in practice—consolidation and reconsolidation. Consolidation is the process of “keeping newly learned material alive long enough for it to be integrated into memory.” Consolidation is important because when learning is “new,” it is highly vulnerable to being forgotten. Reconsolidation is the process of revisiting what has been learned previously through additional learning or experience. It offers the opportunity to connect or integrate new learning with prior knowledge.

Attachment: From birth, children’s development is influenced by the care that they receive from adults. If important adults are responsive, consistent, and sensitive to their needs, children develop secure attachment relationships that allow

them to comfortably explore and learn about the world. Secure attachment relationships also help children learn self-regulation and social skills.

When, how, and to what extent children develop these abilities varies by individual. Children’s experiences in their homes and communities influence individual differences in their development and learning. Therefore, early childhood programs need to focus as much or more on developing these fundamentals as they do on basic skills. Developmental processes including self-regulation, representation, memory, and attachment are the *real basics* of education.

How Would School Be Different if We Applied Developmental Science?

If we united what we know about child development with quality educational practices, what would school be like for young children in pre-kindergarten through third grade? Seven major differences are highlighted below. Please note that generalizations are used to paint a broad picture of today’s classroom. We recognize that in reality there are a wide range of practices.

1. Development, Content, and Process

Preschool teachers generally have a good understanding of

children’s development but are less confident of academic content, while elementary teachers generally have a good understanding of content but not development. Neither group has had access to educational experiences that help them understand that the foundational processes of learning, such as memory and problem solving, are something that can be taught.

What would be different if we applied developmental science?

Teachers would have a solid understanding of child development from ages 3 to 8, the content of the curriculum in all areas, and the process of learning. This understanding would translate into an integrated approach to instruction and classroom practice. The foundational processes of learning, such as memory and problem solving, would be explicitly addressed in the curriculum.

2. Play (Self-Regulation)

Dramatic play promotes self-regulation and language competence. Although play is valued by early childhood professionals, there is still insufficient understanding of the benefits of different kinds of play, the critical role of teachers in ensuring that play is beneficial, and the ways that play continues to enhance children’s learning as they get older.

Pretend play in small groups is particularly effective in promoting self-regulation because it requires that children regulate their own behavior, be regulated by others,

and help regulate others all within the same context. For example, a group of children may play grocery store. Each child, whether customer, cashier, or store manager must conform to the rules of their role as well as stick to the script. The customer can't say, "Paper or plastic?" That's the role of the cashier. For the play grocery store to function effectively, each child must engage in high-level self-regulation.

Assuming a pretend role—being another person for a while—helps children move between their own perspective and the perspective of another. This ability is essential for success in school where children must negotiate their perspectives with those of teachers or peers. This ability also is necessary for the development of reflective thinking.

What would be different if we applied developmental science?

Play would be a regular, intentionally planned, teacher-guided activity. As children become older, play becomes more representational and rule-governed. Whereas younger children may create their own dramas in the play area, older children might act out a play or dramatize a story they've read. By understanding the development of children's play and the role of play in learning, teachers can effectively use play as instructional tool.

3. Understanding Misconceptions (Representational Thought)

Teachers tend to focus on "right" answers, often correcting children without providing an explanation. Yet for children to understand a concept, they need to know more than the correct answer—they need to be able to apply it.

Tapping into representational thought can reveal how much a child actually understands. An example from the *Hundred Languages of Children* (cited in Landry & Forman, 1999) demonstrates this approach. After many days of rain, teachers asked children, "Where do you think rain comes from?" Children expressed several theories, among them: "It comes from God." "It comes from the devil." One five-and-a-half year old explained, "The sun heats the rain that has fallen and that's how it goes away afterwards, it goes back into the clouds and then it starts to rain again." From her explanation, it seems that she has a good understanding of the rain cycle.

Yet when the teacher had the children draw pictures of where the rain comes from, her detailed drawing included pipes or tubes going up from the ground to the sky to convey the water. Thus, by engaging children in graphic representation of their theories, the teacher got a much clearer picture of the child's misconceptions, despite her seemingly accurate verbal representation.

What would be different if we applied developmental science?

Teachers would spend considerable time asking children questions in order to understand where misconceptions occur. Effective teachers understand children's naiveté or partial thinking so that they can provide the experiences and explanations that specifically address their misconceptions.

4. Covering the Real Basics (Memory)

Teachers want and expect children to remember many things throughout the school day, but very few intentionally teach children how to be good at remembering, or purposefully set up an instructional activity to maximize children's ability to consolidate and reconsolidate.

What would be different if we applied developmental science?

Teachers would use specific, deliberate strategies to improve children's memory. These could be simple strategies such as asking children to talk about what they remember or more complex strategies in which children reflect on their own memory processes. They would structure activities and questions specifically to help children remember key aspects. Teachers also would help children make connections among concepts to help with the reconsolidation of information, increasing the likelihood that children would remember the correct information and that their understanding of a concept would be deepened each time it was addressed in class.

5. Relationships (Attachment)

Although most teachers acknowledge the importance of the social context of the classroom, their efforts in this area are too often limited to behavior management rather than developing positive relationships with and among the children. If relationships and feelings are addressed, they are often covered in social skills lessons taught in isolation (e.g., a counselor comes to the class once a week to read a book and talk about being a good friend).

What would be different if we applied developmental science?

Social development would not simply be scheduled into the day, or ignored outright, but would be addressed throughout the day as opportunities emerged for conflict resolution and expressions of feelings. Teachers would work to develop positive relationships with each child, creating many opportunities for extended conversations and interactions between herself and the children and among the children themselves. Teachers would be willing and able to explore more effective ways to interact with challenging children. Difficult behavior would be viewed as a child's way of communicating problems, rather than as misbehavior or an opportunity for discipline.

6. Experimentation, Explanation, and Explicit Instruction

Many preschool teachers have been taught that children construct knowledge from their own experiences. They often implement this concept by acting as facilitators of children's learning as they explore the classroom environment and materials. Teachers may facilitate children's thinking by asking basic questions, but rarely probe fully enough to promote a deep understanding of concepts. There is little explicit instruction, except for letter names, counting, and days of the week.

By contrast, elementary schools teachers engage regularly in explicit instruction and provide little time for exploration. When experiments are included, children are often expected to understand the concepts from their own trial and error.

What would be different if we applied developmental science?

Preschool and elementary school teachers would be intentional about when best to provide explicit instruction and when to promote experimentation or independent exploration. Experimentation would include appropriate teacher or peer support. Teachers would provide explanations and be purposeful as to when and how they do so. Explicit instruction would be one of a range of tools teachers use to foster children's knowledge. It would not be seen as the "be all and end all" or as the "never ever to do" but rather as an efficient way to ensure that children master certain concepts.

7. Deciding What to Teach

Some skills are harder to master than others. In developing literacy skills, for example, learning to recognize letters is much easier than building vocabulary. Children must learn thousands of new words per year to acquire the vocabulary necessary for later reading comprehension and learning across subject matter. Yet teachers of young children often spend considerable time on letter recognition and much less time intentionally teaching new vocabulary words. In elementary school, teachers emphasize various science facts (e.g., frogs are amphibians) with minimal attention to the overall scientific method (e.g., hypothesis testing).

What would be different if we applied developmental science?

Teachers would spend more time on the skills of a specific subject that are harder to acquire. Furthermore, teachers and researchers would work together to determine the more challenging aspects of

each curriculum area and use the information as guides for use of instructional time in classrooms for children across the 3 to 8 age span.

Conclusion

Infusing knowledge about child development into the education system for young children would transform early schooling and help all children achieve and succeed. A developmental approach to early education is not prescriptive, nor is it one size fits all.

Given the pressures of No Child Left Behind and the limited existing knowledge of child development throughout much of the elementary school community, moving toward such an approach will require a long-term commitment and deliberate steps. For state and district efforts, this means including child development knowledge in professional development and supporting interdisciplinary communication and interaction to develop a holistic approach to children's learning. For institutions preparing future teachers, this means providing coursework and experiences that lead to a deep understanding of children's developmental and learning processes in early childhood and elementary education, and supporting a repertoire of effective strategies for applying this important knowledge pre-K through third grade.

For FirstSchool this means promoting and supporting public school efforts to become more responsive to the needs of an increasingly younger, more diverse population of children. Therefore, the developmental science lens is built into every aspect of FirstSchool. |ed|

To Learn More

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FirstSchool Learning Environments Supporting Relationships



This is adapted from *The FirstSchool Design Guide: Optimal Learning Environments for Children 3 to 8* by the FirstSchool Design Collaborative, FPG Child Development Institute at The University of North Carolina at Chapel Hill.

CAREFUL THOUGHT is given to every aspect of a model home. Designers arrange the furniture, accessorize, and choose colors all with one purpose. They want the house to look like a home. They want buyers to be able to envision themselves living their lives in the space.

In the same sense, schools also need to appeal to all who enter as welcoming, safe places to learn and grow. The buildings themselves need to contribute to the success of the children, family members and staff who spend their hours there.

A well-designed school setting can encourage the development of positive relationships, maximize children's learning opportunities—and promote health and wellness for all members of the school community. This article focuses on how indoor and outdoor learning environments can support positive relationships.

Positive Relationships and Design

The relationships that develop early on in school affect children's growth and development for years to come. Positive relationships among and between education professionals, families, and children need to be based on respect and cooperation.

To promote such relationships, the school design process should address the following questions:

- How are relationships fostered by our indoor and outdoor environments?
- What barriers to relationships are apparent in our design?
- How does a facility promote family and community engagement?
- How does technology support interdisciplinary work?

- How do we use the skills and talents of staff to enhance the environment?
- How do our values and beliefs influence our design?
- How does a facility welcome and honor all staff, children and families?

Below, we explore these questions as they relate to different types of school relationships.

Relationships Among School Staff and Children

Trust between a teacher and a child plays a vital role in a child's learning and development. Research consistently demonstrates a link between positive teacher-child relationships and children's social, emotional, and intellectual abilities. When a child trusts her teacher, she is more open to new experiences and ideas and is

A beautiful, sensitively organized environment has a major impact on the sense of belonging, comfort and safety, and capacity of all participants to be responsible and productive.

more comfortable engaging in learning and exploration. Learning through exploration requires that children have the ability to organize their emotions and behaviors, and feel confident in an adult's availability and ability to help.

Designing an environment that promotes positive interpersonal interaction and socialization between children and adults means creating spaces indoors and outdoors that are comfortable, accessible, welcoming, conducive to work and play, and support one-on-one as well as small and large group interactions. Indoor spaces should be interesting and include such things as windows that overlook wildlife habitats, cozy spaces surrounded by books, work areas that have tools and resources and spaces that will spark interaction and exchange. The placement of indoor spaces in relation to one another can support the school's chosen configuration, such as multi-age groupings and children's access to same-age peers.

The outdoor physical environment provides the stage for action and stimulates children's play and learning. By being exposed to trees, plants, and other natural materials, children can independently discover nature and its processes. This is particularly important for many children whose outdoor activities are limited by unsafe neighborhoods and limited recreational opportunities.

The outdoor environment should engage children's sense of inquiry, stimulate their imaginations, invite exploration, and support their developing abilities. Limiting outdoor playgrounds to gross motor activities and manufactured equipment falls far short of the potential of outdoor areas to be rich play and learning environments. Children need tools, open space, and multiple opportunities to observe, explore, and interact with nature. The outdoor area should contain

a variety of play and learning settings with constructed or natural elements that encourage physical activity, arts and crafts, scientific and mathematical exploration, dramatic play, conversation, relaxation, and solitude.

Relationships Among School Staff and Families

The National Education Goals Panel emphasizes the importance of family and parental support to children's school success. Their objective is for every school to engage parents in a partnership that supports academic learning at home and shared decision making in schools. The Panel writes, "To gain greater reciprocity between education professionals and families would be of enormous benefit in our vision to empower the full potential of children."

Building design can promote respect for learning and a sense of belonging, ownership and pride for all members of the school community, including families. A beautiful, sensitively organized environment has a major impact on the sense of belonging, comfort and safety, and capacity of all participants to be responsible and productive. The design should be accessible and welcoming, and a place where families can learn more about their children's classrooms and teachers, access a variety of resources (including technology and tech support), and have the opportunity to meet and talk with staff and other families.

Unless there is clear thought put into making a school friendly to adult family members, they may feel uncomfortable entering a strange and imposing space. Having spaces specifically designed for their use lets parents and family members know that they are a welcome part of the school community and encourages them to

become active in the life of the school. While the school must be designed to provide security for children at all times, this does not mean spaces cannot be friendly to both children and adults as they enter the building. Indeed, a sense of safety is essential to a welcoming atmosphere.

School buildings should include a family resource suite as dedicated space for parents, siblings, and other family members. It should be a warm and inviting space, similar to one's own home. The suite should include a living room furnished with chairs, tables, and couches; kitchen; coat closet; a small conference/tutorial room; a counselor's office; and a family specialist office centrally located and near the school entrance. It is a place where parents, teachers, staff, family, and students interact in a friendly and social environment. It also serves as a resource room for parents and includes computers, network access, books, and magazines.

In addition, within the school there should be an indoor or outdoor central gathering space. Display areas of varying kinds throughout the classrooms and shared spaces should celebrate the diverse community of students, staff, and families through child and adult art, photos, murals, and other media formats.

Space for support services to children and families should be incorporated into the school. These may include counselors, psychologists, social workers, therapists (e.g., speech, occupational, and physical), health care workers, special educators, and remediation specialists. Each of these professionals will require office and service space. Attention must be given to their accessibility and proximity to one another, to children, and to family members for optimal engagement and efficient communication.

In a large school community, the population may be divided into 'homes' in an effort to enhance relationships with a more manageable number of children and families. Each 'home' team works toward consistency and a continuum of academic and social development both within and across grades. Options for collaboration at the 'home' level embrace the full spectrum of the interactions ranging from individual child and family consultation to team interactions. The goal of this approach is to promote collaboration that integrates services based on the unique needs of child and family rather than the *availability* of services.

Relationships Among School Staff

Opportunities for open discourse and honest reflection allow education professionals to enhance their instructional practices and improve learning experiences for children. Unfortunately, teachers are not always taught or encouraged to participate in such dialogue or to gather and use data to modify their practice. In addition, there is often a lack of collegial support in teaching and no consensus as to how to put recommended practices into use. In recent years, Professional Learning Communities—opportunities for educators to seek, share, learn and collaborate—have been increasingly recognized as a promising framework for meeting these professional development and practice challenges.

Professional Learning Communities for educators are facilitated through both accessible space and the use of state of the art technology. In First-School, school staff has personal and professional spaces that provide them places to plan, work, and meet in small groups. There are spaces for other professionals who spend time at

the school, such as community health professionals and social workers, to conduct their work and collaborate. State-of-the-art technology supports professionals in multiple ways. Technology can maximize the sharing and storage of resources and materials for professional staff and family members; provide the means for regular communication with multiple disciplines, community stakeholders, university faculty and family members; and support professional development within and across schools by providing opportunities for members of the school community to view and reflect upon their students, their work and the work of others.

The design should value all members of the school community. This includes custodians and cafeteria and office workers. Custodial and service-related spaces need to be conveniently located for maximum efficiency and demonstrate respect for staff through appropriate work and personal space.

Building Positive Relationships from the Ground Up

Designing an environment that promotes a sense of belonging, ownership and pride for all members of the school community requires collaborative work. Communities planning new schools must engage a broad range of stakeholders in ongoing inquiry into how the principles outlined here can reflect their community's unique context. A carefully designed environment promotes the development and maintenance of important relationships and partnerships throughout the school community. |ed|

Financing Services for 3- and 4-Year Olds in a Pre-K–3 School



This is adapted from the “FirstSchool Financial Planning Model” by Richard Clifford, Helene Stebbins, Stephanie Reszka, Gisele Crawford, and Barbara Coatney.

Who Pays for It?

Educators would like to focus their time and energy on best meeting children’s needs. However, financing education is an inescapable reality. And because FirstSchool brings pre-kindergarten programs into the elementary school system, who pays for it all becomes a significant question.

Publicly funded pre-kindergarten programs and the public K-12 system are financed by very different mechanisms. Pre-kindergarten programs are supported by a complex combination of local, state and federal funding streams. And these streams have their own sets of rules and regulations. So while FirstSchool is creating a seamless education experience for children from pre-kindergarten through third grade, the corresponding funding makes accomplishing this seamless system for children and families difficult.

The Cost of Pre-K

There is little data on the true costs¹ of pre-kindergarten programs. Most reports provide only state expenditures and acknowledge that not much is known about the extent to which programs rely on other sources of support. For example, a study of pre-kindergarten costs in North Carolina found total cash expenditures averaged \$7,857 per child in 2002–03 when total state expenditures were approximately \$3,500 per child in the same year.¹

Overall, the operational cost² of pre-K programs appears to be in the range of \$7,000 to \$10,000 per child

- 1 We use the term “cost” to refer to the total of all types of support including cash and the value of in-kind donations. Expenditures refers to the cash outlays used to support a program.
- 2 Operational costs exclude capital construction including major renovation costs.

for a school year, with variations from state to state heavily dependent on the salary levels for teachers and other personnel, and to a lesser degree on variations in program intensity (length of day and year, and class size). These estimates roughly equate to the combined total of federal, state, and local support for public school students in the US, meaning the cost per child in pre-kindergarten in a given district is the same as the cost per child in the same K-12 system.

Sources of Support for Pre-K Programs

Given that state funding typically covers only a fraction of the cost, where does the rest of the money come from? Several funding sources are available. The eligibility criteria for many are in keeping with FirstSchool’s focus on minority and low-income children.

The most frequently used resources are described briefly below.

Head Start: The federal government provides grants directly to local Head Start programs. Using Head Start revenue means the pre-kindergarten program must meet the Head Start standards, and children must meet the Head Start eligibility criteria, which are largely based on income. Head Start funds can be combined with other funding streams as long as they are pro-rated to pay for children who meet Head Start eligibility criteria. For more information on how to integrate Head Start funding and program standards into a larger pre-kindergarten program, see *Better Outcomes for All: Promoting Partnerships Between Head Start and State Pre-K*.²

“Using Head Start funding is a way to ensure that children living in poverty not only benefit from having a high quality pre-K experience, but also benefit from the advantages of being part of a pre-K through 3rd grade coordinated system,” said FPG Senior Scientist Richard Clifford.

Title I of the Elementary and Secondary Education Act (No Child Left Behind): Title I is the U.S. Department of Education’s largest source of funding for local school districts, and it can be used to fund pre-kindergarten programs. Title I provides financial assistance to local school districts with high concentrations of poor children. Local education agencies have the flexibility to choose how to allocate these funds, and three percent of Title I funds supported early education programs in 2007. The Center for Law and Social Policy offers more detail on the use of Title I funding to educate children prior to kindergarten.³

Subsidized Child Care: Each state regulates how state and federal child care subsidies can be combined with other funds to provide a pre-kindergarten program. Some states allow child

care funds to supplement the pre-K program, while others limit funds to the portion of the day that is not considered pre-K. Local administrators can only access child care subsidies for children who meet the state’s eligibility criteria—generally those with low-income, working parents. As with most programs targeting children from low-income families, many states do not allocate enough funds to meet the needs of all eligible children. For more information on the availability of state child care funds, the amount of the subsidy, and the rules for combining funds, contact the state or local child care subsidy administrator. See state contacts at www.nccic.org.

Special Education: Part B Section 619 of the Individuals with Disabilities Education Act ensures children ages 3 to 5 with disabilities are provided a free, appropriate, public education that emphasizes special education and related services designed to meet their unique needs. States define who is eligible for services and supplement the federal funding when the demand for services requires more than the federal funding will support. Unlike most other funding sources, special education funding is guaranteed as long as the child meets the eligibility criteria. Contact the state or local Part B, Section 619 coordinator for information on potential funding levels.

National School Lunch Program: The federal government subsidizes the cost of providing nutritionally balanced snacks, breakfast, and lunch for programs operating in public and nonprofit private schools and residential child care institutions. Reimbursements rarely cover the full cost of the food. For current information on the reimbursement rates, go to www.fns.usda.gov/cnd/lunch/. For details on how the rates apply to your school, contact your local school food service supervisor.

Local Education Funds: In most cities and towns, local tax revenues pay a significant portion of public elementary and secondary school costs. The availability and flexibility of these revenues to pay for pre-kindergarten depends on local authorities. Local support frequently includes in-kind funds such as utilities, maintenance, and rent when the public school houses the pre-K program. In many communities, local education revenues also can be designated for salary and operating costs at the discretion of the local authorities.

State Pre-kindergarten: In 2007, 42 states either funded a state pre-kindergarten program or supplemented the federal Head Start program, making state funding the single largest revenue stream for pre-K. Each state pre-kindergarten program is unique, from the eligibility criteria, to the length of the school day, to the scope of the program. Like the Head Start funds, accessing state pre-k funds means local programs must meet the state standards and unique funding requirements. Some states prohibit the blending of state pre-K funds with other state dollars, while other states require matching funds. For general information on state pre-K standards and potential revenue streams, the National Institute for Early Education Research publishes annual data (see <http://nieer.org/yearbook/>). For current data, including the potential for increased funding for state pre-kindergarten, contact your state pre-kindergarten program administrator.

Private Tuition: Most federal and state funding streams are restricted to children who meet specific eligibility criteria that are generally related to risks for poor educational outcomes. Programs may be able to serve children who do not meet these criteria by charging parents for the cost of

the program. With approximately half of all three- and four-year-olds in the U.S. enrolled in some type of preschool program, many parents are already paying for a pre-kindergarten experience. Administrators can generate additional revenue by charging tuition for families who can afford it. It should be noted that collecting tuition often proves difficult in practice.

School administrators face two significant challenges in tapping into these potential revenue sources.

- *Competition for existing funds:* Existing funds may already be allocated.
- *Restrictions on funding streams:* Detailed knowledge is necessary to understand how funding streams can be combined.

Funding Capital Construction Costs

Many existing schools need construction or major renovations to provide appropriate space for early childhood programs. However, while the funding for operational costs is often from a mix of federal, state, and local funding sources, rarely is there a corresponding mix of funding available for construction financing.³ School districts typically finance construction and renovation costs for pre-K from the same sources used for K-12 facilities.⁴

3 An exception to this general situation is Head Start. There are provisions under federal Head Start regulations that allow Head Start funds to be used to finance a portion of the capital costs for facilities serving Head Start children. School districts that are Head Start grantees have the ability to access Head Start funds to pay a portion of the cost of building facilities to serve children in the Head Start program, even when the facility serves other children as well. Details on the Head Start options are available at: <http://eclkc.ohs.acf.hhs.gov/hslc/Program%20Design%20and%20Management/Fiscal/Procurement%20Standards>

This means schools either access state funds for construction or rely on local bond issues.

The Charlotte-Mecklenburg school district in North Carolina, for example, has financed renovation of older schools as special pre-K centers and has added pre-K classrooms to elementary school buildings under construction bonds for some 3,000 preschoolers served in the district. It secured additional funding in a bond referendum to construct a new pre-K facility to address a higher than expected demand for its program.

Increasingly states are recommending that local boards of education include three- and four-year-old children in their long range plans for elementary school buildings.⁵ Often districts are under intense pressure to increase the total capacity of the school system to meet the needs of an increasing population. Building pre-K classrooms may be seen as competing with the funding needs of older children.

School administrators need to pay particular attention to designing spaces that meet the full range of needs young children. Classrooms may need to be larger than those found in many K-12 buildings. There is a greater need for dedicated spaces for families to promote the necessary relationship between programs and families of young children. The facility should foster close working relationships with community agencies, including health, social services, mental health and other core community agencies. In addition, the funding programs previously described often have their own building regulations.

Looking to the Future

Expanding public schools to serve large numbers of children as young as three and four years of age will con-

tinue to test the ability of local school administrators to acquire and budget funds to support this new work. In nearly all states the traditional financing mechanisms for K-12 are not yet modified to include these younger children, forcing administrators to seek new and varied sources of financial support.

“We need changes in both federal and state financing mechanisms for education services for young children,” said Gisele Crawford, research specialist at FPG. “These changes will be even more challenging in the current economic atmosphere. However, the future of our economy is dependent upon effectively and efficiently serving young children now.” | **edj**

Notes

- 1 Yonce, K. G., Clifford, R. M., Doig, S. P., & Nugent, L. M. (2007). *NC's More at Four pre-kindergarten program: A cost study*. Chapel Hill: The University of North Carolina, FPG Child Development Institute.
- 2 Stebbins, H., & Scott, L. C. (2007). *Better outcomes for all: Promoting partnerships between Head Start and state pre-k*. Washington, DC: Pre-K Now. Retrieved April 23, 2008, from: http://www.preknow.org/documents/HeadStartPre-KCollaboration_Jan2007.pdf
- 3 Ewen, D., & Matthews, H. (2007, October). *Title I and early childhood programs: A look at investments in the NCLB era*. CLASP Policy Paper, Child Care and Early Education Series, paper No. 2. Washington, DC: Center for Law and Social Policy. Retrieved April 23, 2008, from: http://www.clasp.org/publications/ccee_paper2.pdf
- 4 Sussman, C., & Gillman, A. (2007). *Building early childhood facilities*. (Preschool Policy Brief, Issue No. 14). New Brunswick, NJ: Rutgers University, National Institute for Early Education Research.
- 5 North Carolina Department of Public Instruction. (2003). *North Carolina public schools facilities guidelines*. Raleigh: author. Retrieved April 28, 2008, from: <http://www.schoolclearinghouse.org/>

FirstSchool

UNITING THE BEST OF EARLY CHILDHOOD,
ELEMENTARY, AND SPECIAL EDUCATION

Poised to Succeed



FirstSchool's three-year planning process gave it time to encounter and struggle with issues that have hindered other reform movements. The concept has moved from the rhetoric of change to the concrete things needed to achieve success. FirstSchool is poised to succeed because:



- It is institutionally based. FPG is the pre-eminent center for child research in the nation.
- It is based upon years of research and analysis by national experts and scholars.
- Its goal is the equality of outcomes, not just treatment. FirstSchool recognizes the need to engage people and ideas that promote understanding of the political and social disenfranchisement of minority groups and how that continues to impact their experiences in schools.
- It is a systemic approach that looks at multiple components of schools and schooling (business and finance; health and wellness; curriculum and instructional design; evaluation and research; facilities; families, communities and outreach; professional development; and transitions).
- It conducts simultaneous work to change policy and affect university teacher and administrative preparation in concert with the needs of schools, families, and communities.
- It was developed through dialogue with hundreds of people.
- It is based on taking the time to form relationships to build the trust necessary, through the inquiry approach, to challenge educators to reflect upon and change their fundamental assumptions about the abilities of children.
- It recognizes that families need to be central to what happens in school. It emphasizes using an inquiry approach to think about family engagement that will change how teachers and schools relate to families.
- It has been piloted in the Drop Out Prevention grant.
- It is based on both a top down and a grassroots approach.
- It is not a packaged product that is imposed upon schools, but rather a process in which schools, families, and communities engage. This process involves collaboration of people who bring multiple perspectives and inquire deeply into the specific underlying factors that result in inequities for vulnerable children.
- It has taken a leadership role in comprehensive state and national pre-K through 3rd grade efforts. It is part of larger movement.



New Study Will Investigate Complex Social, Family Issues Surrounding Newborn Screening

Researchers at FPG Child Development Institute, UNC, and RTI International have begun a groundbreaking study that will offer newborn screening for a genetic defect known as fragile X syndrome, the most common inherited cause of intellectual disability.

The study promises to address complicated issues about the future of genetic testing—answering questions regarding the types of information parents want to know and when they need that information.

The genetic test will identify children who are severely affected by fragile X syndrome, many of whom also have autistic behavior and behavior problems, as well as children who are mildly affected or show no symptoms.

The testing also will find children who are fragile X carriers. Carriers usually are not affected, but their children could have fragile X syndrome. And carriers are at risk for adult-onset conditions such as early menopause or FXTAS, a neurological condition that can occur in adult carriers.

Because fragile X syndrome is inherited, identifying a newborn means that other family members must cope with unexpected information about their own carrier status. “Fragile X has many ramifications for parents and their relatives,” said Debra Skinner, Ph.D., senior scientist at FPG Child Development Institute at UNC and co-director of the study. “Our study will show how families from diverse backgrounds respond to, share, and use information gained from a newborn diagnosis of fragile X.”

Newborn screening typically identifies only debilitating conditions for which a medical treatment is available that must be provided early in life. Fragile X screening challenges this paradigm by identifying children who might be mildly affected or who are carriers. No medical treatment currently exists for fragile X, but early intervention programs can help and studies show that families want a diagnosis as early as possible.

Our research shows that most children with fragile X syndrome are not identified until age 3 or later,” said Don Bailey, Ph.D., Distinguished Fellow at RTI and the study director. “Because children with fragile X syndrome seem normal at birth, it has to be discovered gradually, first seen in developmental delays and only later confirmed by genetic testing.”

The researchers are interested in who accepts or declines the screening test after being informed of the risks and benefits of the study, and the reasons for their decision. Once identified, families will participate in a longitudinal study of how the screening results affect parent-child relationships and how the family copes with new genetic information.

The study is jointly funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (to study family adaptation) and the National Human Genome Research Institute (to study ethical, legal, and social implications).

Investigators Study Effects of Music on Brain Development

Researchers from FPG and UNC-Greensboro are starting a novel study looking at the effects of musical instrument instruction on young children’s development. The study will examine whether violin instruction using the Suzuki Method improves children’s early thinking skills through changes in brain activity.

“Previous research has focused on the effects of music exposure itself. We believe that it may be the instruction itself that enhances cognitive development through brain changes,” argue lead investigators Dr. Susan Calkins, professor of human development and family studies at UNCG and Dr. Michael Willoughby, research scientist at the FPG Child Development Institute.

Calkins and Willoughby explain that the process of learning a musical instrument can be thought of as a complicated, multi-step problem that requires children to focus their attention on multiple tasks at once, store steps in working memory and inhibit the urge to play familiar patterns as they learn new ones. They theorize that this kind of cognitive experience likely contributes to the learning of new behavioral skills, but also supports new neural pathways that support such skills. The study will be the first of its kind to test the idea that naturally occurring experiences, such as musical instrument instruction, contribute specifically to brain development in preschool-aged children.

The research is funded by a \$125,000 grant from the National Association of Music Merchants and conducted with the support of the Music Academy of North Carolina in Greensboro and Artley Violins in Gibsonville, NC.

Early Childhood TA Support-MSRRC

Funder: University of Kentucky

Principal Investigator: Lynne Kahn

Duration: 4/21/2008 to 5/31/2009

This project supports the Mid-South Regional Resource Center's efforts in early childhood technical assistance to Part C lead agencies and preschool special education programs in the nine states in the region.

Evaluation of Miami-Dade's Quality Counts Initiative

Funder: The Children's Trust

Principal Investigator: Noreen Yazejian

Duration: 7/1/08 to 6/30/11

FPG will study how the quality system is being implemented and examine how it is impacting children, programs, and the wider early education system.

FirstSchool

Funder: W. K. Kellogg Foundation

Principal Investigator: Sharon Ritchie

Duration: 6/1/2008 to 11/30/2008

FirstSchool will recruit diverse leadership; obtain guidance from minority educators, families and the local communities; and expand strategies to incorporate state policy support for FirstSchool principles.

Georgia Early Care and Education Quality Systems Indicators Evaluations

Funder: Georgia's Bright from the Start: Dept. of Early Care and Learning

Principal Investigators: Kelly Maxwell & Donna Bryant

Duration: 7/1/2008 to 6/30/2009

A statewide study of center-based child care and pre-kindergarten programs will be conducted as part of a contract with Georgia's Bright from the Start: Department of Early Care and Learning. The study will describe the quality of care and types of services provided to infants, toddlers, and preschoolers in these programs.

Partnerships for Inclusion (PFI)

Funders: NC Department of Health and Human Services (Division of Child Development, Early Intervention Branch of Women's and Children's Health Section in the Division of Public Health), NC Department of Public Instruction (Exceptional Children Division, Office of School Readiness)

Principal Investigator: Brenda Dennis

Duration: 7/1/2008 to 9/30/2009

PFI will provide professional development activities focusing on evidence-based strategies to support the inclusion of children with disabilities in early childhood programs. Services will include consultation, training, product development, and on-going support to local technical assistance providers through regional meetings.

Recognition & Response (R&R): Response to Intervention (RTI) Model for Early Childhood

Funder: Institute of Education Sciences, US Department of Education

Principal Investigators: Virginia Buysse & Ellen Peisner-Feinberg

Duration: 7/1/2008 to 6/30/2011

This research study will further develop, refine, and evaluate the Recognition & Response (R&R) model for early childhood.

School Composition, Instructional Quality and Student Achievement

Funder: American Educational Research Association

Principal Investigator: Kirsten Kainz

Duration: 7/1/2008 to 6/30/2010

This next phase of research will investigate the associations among teacher quality, instructional quality, reading outcomes, and segregated schooling contexts.

Speech of Young Males with Fragile X Syndrome

Funder: National Institute of Child Health and Human Development, National Institutes of Health, US Department of Health and Human Services

Principal Investigator: Joanne Roberts

Duration: 9/30/2008 to 6/30/2013

This study compares segmental and prosody/voice features and speech intelligibility to identify potential mechanisms underlying speech intelligibility of boys with FXS, Down syndrome (DS), and typical development (TD). It determines whether individual differences in speech production relate to FXS specifically or to MR in general.

Stability and Change in Attachment and Social Functioning, Infancy to Adolescence

Funder: University of Washington

Principal Investigator: Margaret Burchinal

Duration: 7/1/2008 to 6/30/2009

The quality of relationships with parents and peers are examined for youth in their last year of high school for the participants in the NICHD Study of Early Childcare and Youth Development. These youth and families have been followed since the child's birth, and these longitudinal data will be examined to identify stability and change in relationships and identify family and school characteristics that predict the overall level and change in relationships.

Next Steps in Early Childhood Education

Funder: Spencer Foundation

Principal Investigators: Joseph Sparling & Craig T. Ramey

Duration: 4/1/2008 to 9/30/2009

FPG and Georgetown University will identify one or more urban, early childhood programs to incorporate the intervention strategies from the ground-breaking Abecedarian Project.

Planning Grant for a Randomized Control Study in Educare Programs

Funder: Bill and Melinda Gates Foundation

Principal Investigator: Noreen Yazejian

Duration: 10/1/08 to 4/30/09

The grant will be used to assess the feasibility of and plan for a randomized control study in Educare programs. The planning phase will include document reviews, interviews, site visits, meetings, and data analyses.

recently published

FPG research is published in the most respected journals and publications in the field. Below we highlight selected articles. A complete list of recent publications and citations can be found at www.fpg.unc.edu/products/cite_search.cfm.

Making Friends: Assisting Children's Early Relationships

<http://www.fpg.unc.edu/~snapshots/snap55.pdf>

FPG Scientists Barbara Davis Goldman and Virginia Buysse explore friendships between very young children and between children with and without disabilities.

Goldman, B. D., & Buysse, V. (2007). Friendships in very young children. In O. Saracho & B. Spodek (Eds.), *Contemporary perspectives on research in socialization and social development* (pp. 165-192). Greenwich, CT: Information Age.

After Abuse: Early Intervention Services for Infants and Toddlers

<http://www.fpg.unc.edu/~snapshots/Snap54.pdf>

By law each state is required to ensure that all substantiated cases of maltreated infants and toddlers are referred to Part C early intervention services. In reality, many children may not be receiving the child development services they need.

The *Developmental Status and Early Intervention Services Needs of Maltreated Children Final Report* is available online at <http://aspe.hhs.gov/hsp/08/devneeds/index.htm> or by contacting Anita Scarborough, Ph.D., at scarboro@mail.fpg.unc.edu at FPG Child Development Institute.

Talking to Children: Why Some Mothers Do It More

<http://www.fpg.unc.edu/~snapshots/snap53.pdf>

Just as exposing children to books helps develop their interest in reading, talking to children helps develop their language abilities. Research shows that from a very young age, children are influenced by the manner in which their mothers verbally interact with them. An FPG study examines how mother and child characteristics might influence the way mothers talk to their infants.

Vernon-Feagans, L., Pancsofar, N., Willoughby, M., Odom, E., Quade, A., & Cox, M. (2008). Predictors of maternal language to infants during a picture book task in the home: Family SES, child characteristics and the parenting environment. *The Journal of Applied Developmental Psychology, 29*(3), 213-226.

Technology Stereotypes Broken When Children's Health Involved

<http://www.fpg.unc.edu/~snapshots/snap52.pdf>

In some cases, extenuating circumstances, such as a health condition, increases Internet use among those with lower incomes and educations. A study of mothers of children with genetic disorders found that the Internet served as a major resource in parents' quests for diagnosis, prognosis, treatments, services, and supports.

Schaffer, R., Kuczynski, K., & Skinner, D. (2008). Producing genetic knowledge and citizenship through the Internet: Mothers, pediatric genetics, and cybermedicine. *Sociology of Health & Illness, 30*(1), 145-159.

FPG Mourns the Loss of Our Colleague

It is with great sadness that we share the news that Dr. Joanne Roberts passed away on Saturday, November 1, 2008.

Joanne was a senior scientist at FPG Child Development Institute and a professor of speech and hearing sciences of pediatrics at The University of North Carolina at Chapel Hill.

Her early research focused on ear infections and children's language development and helped develop evidenced-based guidelines for treating ear infections.

She then launched a series of longitudinal studies on language development in African American children. Beginning when children first entered school, she followed them through early adolescence to study the impact of vernacular dialect on literacy, and how youth, family, and school characteristics impact these relationships.

Joanne conducted extensive research on the language development of children with disabilities, specifically children with Down syndrome, autism, and fragile X syndrome. Her research on the speech and language development of children with fragile X syndrome set a new standard for rigor and quality, and provided important new insights for parents and professionals.

As a result of her work, she authored more than 125 articles published in scholarly journals.

Joanne was born in 1950 in New York City and received her Ph.D. at Indiana University in Speech Pathology and Audiology. She came to Chapel Hill in 1976 with her husband Barry, a professor in the business school at UNC Chapel Hill.

The most important part of Joanne's life was her family. Her two sons, Justin and Matthew were born in Chapel Hill. She cared greatly about her sons and took enormous pride in their successes. Joanne and Barry were married for over 37 years. Her personal strength and devotion showed through in both work and family life. Joanne was a member of Judea Reform Congregation where she led various committees and counted many close friends. She will be dearly missed by all who knew her.





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ISSN 1536-4739

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