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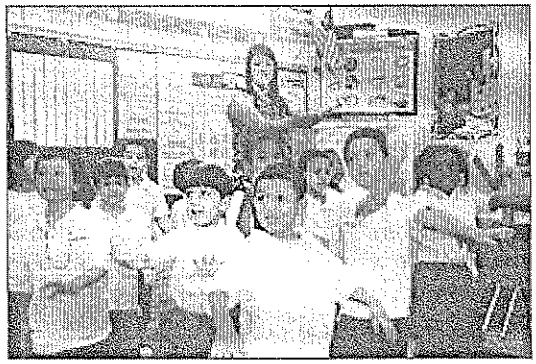

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Kids Haven't Changed; Kindergarten Has

New data support a return to "balance" in kindergarten

By LAURA PAPPANO

New Haven teacher Elise Goodhue tries to fit play into the rigors of kindergarten

In the ongoing battle over kindergarten—has exploratory play been shunted aside for first-grade-style pencil-and-paper work?—one of the nation's oldest voices in child development is weighing in with historic data.

The Gesell Institute for Human Development, named for pioneering founder of the Yale Child Study Center, Arnold Gesell, and known worldwide for its popular parenting series *Your One-Year-Old* through *Your Ten- to Fourteen-Year-Old*, will share the results of an 18-month study at a conference in New Haven, Conn. on October 15.

The national study, undertaken to determine how child development in 2010 relates to Gesell's historic observations, used key assessment items identical to those Gesell created as the basis for his developmental "schedules" which were published in 1925, 1940, and after his death by colleagues Louise Bates Ames and Frances Ilg in 1964 and 1979.

Given the current generation of children that—to many adults at least—appear eerily wise, worldly, and technologically savvy, these new data allowed Gesell researchers to ask some provocative questions: Have kids gotten smarter? Can they learn things sooner? What effect has modern culture had on child development?

The surprising answers—no, no, and none. Marcy Guddemi, executive director of the Gesell Institute, says despite ramped-up expectations, including overtly academic work in kindergarten, study results reveal remarkable stability around ages at which most children reach cognitive milestones such as being able to count four pennies or draw a circle. For the study, 92 examiners conducted 40-minute one-on-one assessments with 1,287 children ages 3–6 at 56 public and private schools in 23 states.

"People think children are smarter and they are able to do these things earlier than they used to be able to—and they can't," says Guddemi. While all children in the study were asked to complete 19 tasks, results echoed previous Gesell findings showing, for example, that a square is in the 4 1/2-year-old repertoire, but a child cannot draw a triangle until 5 1/2. These developmental milestones, Guddemi says, relate directly to what can be expected of children in kindergarten.

"The Gesell findings to me are very comforting," says Lisa Fiore, program director for Early Childhood at Lesley University School of Education in Cambridge, Mass. She sees the data as a stroke in favor of those who find the focus on test scores—and not exploratory learning—troublesome. "I hope someone will pick up a hard copy of this study and say, 'Listen, we should all relax.'"

Although the study shows children have the same developmental schedule they always have, Jerlean E. Daniel, executive director of the National Association for the Education of Young Children, says findings in recent years about the value of one-on-one conversations to early literacy, and music and patterns to math concepts, have added to the understanding of how children develop cognitively. Nonetheless, says Daniel, kindergarten has become more rigid and pressured. "Above all, young children need time—time to manipulate objects and ideas, time to make the information their own," says Daniel. The Gesell study, she says, "is a resource to people who want to find greater balance in kindergarten."

Learning vs. Training

For teachers, the study provides some concrete guidance for understanding how child development meshes with student learning. For example, says Guddemi, children must be able to see and understand the oblique line in a triangle to recognize some letters in the alphabet. Until children can draw a triangle they cannot perceive angled lines in, say, the letter "K," nor can they write it, or recognize it when printed in different fonts, she says.

Similarly, Gesell's study results show 4-year-olds can count four pennies, making a one-to-one correspondence. But only half at age 4 1/2 respond "four" when asked how many they have all together. This skill, called "conserving" because they must hold the number in their heads, is needed to do addition. By 5 1/2, children can conserve 13 pennies and can count 20 pennies. But they cannot conserve 20 pennies until age 6. If they cannot conserve, says Guddemi, a child memorizes 2 + 3 = 5, but doesn't realize that 3 + 2 = 5.

What's tricky, says Guddemi, is that children can be *trained* to perform tasks (called "splinter skills"), such as writing names or counting. But just because "April" can pen her name doesn't mean she can perceive letters with oblique angles. "You can train them, but the knowledge and understanding—the true learning—has not happened," she says. "Our country has this hang up that if the child can perform, that they know."

Guddemi worries that many kindergarteners are facing work inappropriate to their developmental abilities. For example, Gesell study results, compiled by the non-profit Mid-continent Research for Education and Learning (McREL) in Denver, CO, show that children at age 4 1/2 know and recognize 12 letters (no letter is more popular than another). For a child on the younger side in kindergarten, Guddemi says, the mismatch is jarring: "Day One they are going to be hit with the [entire] alphabet." Drilling students on the alphabet is a much different strategy for increasing literacy skills than exposing students to vocabulary-rich conversations, she says. (See "Small Kids, Big Words," *Harvard Education Letter*, May/June 2008.)

The perception that "more input is always better," may be misguided, agrees David Daniel, psychology professor at James Madison University and managing editor of the journal *Mind, Brain, and Education*. "The four-year-old has a four-year-old brain and a six-year-old has a six-year-old brain. There are certain things connecting in a six-year-old brain that are still being worked on in the four-year-old brain," he says. Serious academics in kindergarten? "They can be teaching it," says Daniel, "but the question is: Is the child learning it?"

The New Kindergarten

Elise Goodhue's kindergarten classroom at the Fair Haven School in New Haven, Conn., does not have lofts or pillows. Children sit at tables; print is everywhere. A fourth year teacher, Goodhue says her classroom is different from the one she attended as a student in 1988. "When I was in kindergarten, I had the drama center and the sand table," she says. "Now it's a lot more instruction."

While Goodhue says some are not ready—one child a few years ago regularly slept through the afternoons—she doesn't see a choice. "To meet the expectations for first grade, kindergarten has to be like this," she says, explaining that, among other skills, students entering first grade must be able to speak and write in complete sentences, read independently, and be able to retell and comprehend what they read. There is much to accomplish, but Goodhue includes physical breaks, at one point gathering students on the rug for the "Months-of-the-Year Macarena."

After dancing, children have a writer's workshop assignment: Write a one-sentence story about yourself and a special person. Briana, age 6, forms petite letters in upper and lower case, marching them across the top of the page. Her invented spelling needs translation, but she nails the assignment, writing: "I played with my sister and my cousin."

It is, however, a tall task for Abdula, age 4 and newly arrived from Iraq. With a pencil in his fist-like grasp, he makes broad geometric marks on the page. He may be on target developmentally, but certainly isn't ready to use upper- and lower-case letters or a period—concepts Goodhue discussed when presenting the assignment.

Abdula doesn't seem to mind the gap between his work and others, but some children may. This is why Guddemi advocates play-based curriculums in kindergarten that smooth over developmental ranges, allowing children to work on skills without feeling judged. At the private Greenhill School in Addison, Texas, which participated in the Gesell study, kindergarten classrooms still have gardens and adjoining outdoor spaces. But perceptions have changed enough that Kim Barnes, head of early childhood, must explain it to parents.

"I tell them, when you walk through our classrooms, you will not see kids practicing letters," she says. "You will see kids painting and reciting stories; you will see them with manipulatives across the floor."

In many districts, worries about benchmarks and test scores have made kindergarten less play-centered and developmental gaps more pronounced. When some children couldn't handle expectations and were disrupting class, the William H. Frazier Elementary School in Fallbrook, Calif. began "Preppie Kindergarten" to separate those children who are ready for today's kindergarten from those who are not. These children spend two years in kindergarten rather than one.

"All these kids were struggling and we wanted to give them a better start," says Preppie Kindergarten teacher Kim Kinsman, who requires children to sit 15 minutes—not 30—at a stretch. "You cannot make a baby walk before they are ready to walk," she says. "You cannot push a child. If they are not ready, they're not ready."

Not everyone, however, believes that expectations and child development are out of sync. Trisha D'Amore, supervisor for K–12 literacy for New Haven Public Schools, says it's time to recognize that children's lives today are different. Second graders care for kindergarteners at home and children are exposed to more life challenges and responsibilities in general, she says.

"This is not the 1950s," says D'Amore, who sees nothing wrong with pencil-and-paper work in kindergarten. "The thing with the costumes and the playing was the interaction and oral language. You can walk around; they are talking to each other. The whole point is that it just looks different."

Laura Pappano is a writer-in-residence at Wellesley Centers for Women at Wellesley College and a frequent contributor to the Harvard Education Letter. *She is the author of* Inside School Turnarounds: Urgent Hopes, Unfolding Stories, *to be published in November 2010 by Harvard Education Press.*