



Research has shown that a person's early-life experiences are connected to the ability to achieve economic productivity as an adult. Boeing is giving increased attention and resources to early learning as part of the company's charitable investments in education.



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By Susan Birkholtz

Scientific discoveries over the past two decades have transformed how researchers, policymakers and the public think about early childhood.

Researchers have found that brain development is more vulnerable to environmental influences than ever suspected, and the effect of early environment on brain development is long lasting. What's more, studies show that this environment affects not only the development of connections in the brain, but also the way these connections are "wired."

"The trillion or so neurons that we all have in our brains are largely in place at birth, but they can't talk to each other until they form neural connections that allow electric impulses to flow between them," said Dr. Patricia K. Kuhl, co-director for the Center for Mind, Brain, and Learning at the University of Washington. "Think of telephone lines connecting houses. These telephone wires, or synapses, begin networking in a complex and interesting process after birth."

What does this have to do with Boeing? The answer is nothing less than the future success of its business, the U.S. aerospace industry and the overall global economy. Evidence indicates that cognitive, social and emotional capacities play important roles in achieving economic productivity in adulthood, and that these capacities are shaped by early life experiences with a child's parents and intimate caregivers.

That's why Boeing is giving increased attention and resources to early learn-



## Why Boeing invests in community programs that support early learning

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ing as part of the company's charitable investments in education, made through the Boeing Global Corporate Citizenship (GCC) function.

### WHEN LEARNING BEGINS

In the past, it was thought that "real learning" began when a child entered primary school. Now it's clear that it happens earlier. "Children are literally born learning," said Dr. Jack P. Shonkoff, founding director of the Center on the Developing Child at Harvard University in Cambridge, Mass. "Young children from the beginning cannot help but learn—they don't have to be taught to learn, they are naturally wired-up to learn."

Unfortunately, many parents and caregivers do not know how they can best take advantage of these early years to help children develop in a way that will make the most of their potential, both in school and in work.

The Institutes for the Achievement of Human Potential, a nonprofit educational organization near Philadelphia, is designed to do just that—instruct parents how to significantly enhance the development of their children by teaching them about how the brain grows and how to speed and maximize that growth.

"Society needs to do better by babies," said Dr. Janet Doman, director of the Institutes. Every company that wants to have a future should care about this issue. Any company that understands this will create a much better world."

That "better world" includes having a work force with the skills and capabilities

to meet the technological and scientific challenges the future will bring.

However, the current education system in the United States "is falling behind in the development of the kind of work force that the global economy demands," said Rick Stephens, senior vice president, Boeing Human Resources and Administration. Stephens speaks often about the importance of early learning to the preparation of the future work force.

"Of the 4 million children born each year in the United States, about a third do not graduate from high school," he said. "And of those who do, only 200,000 graduate college with science, technology, engineering or math degrees. In fact, a mere 60,000 of that number graduate as engineers."

### THE ROLE OF PARENTS

As research shows that parents are a child's first and most important teachers, Boeing's charitable investments in early learning focus on programs that provide information and related resources to parents, so that they can aid in their children's development.

"There's no more important role in the world than the role of parent in their children's lives," said Joyce Walters, who directs GCC's Education and Workforce Initiatives. "It's a tough job, and the more support and resources parents have in their children's important early years, the better the chance that those children are ready to learn when they start school."

Boeing recently committed \$5 million in support to America's Promise, a partner-

ship alliance committed to seeing that children have the fundamental developmental resources they need to succeed. According to the organization, these resources are represented by the "Five Promises" that young people need for success in life. "Caring adults," the No. 1 Promise, is the cornerstone of a child's development, on which success is built in both childhood and adulthood. According to America's Promise, although parents rank first, children also need to experience the support of caring adults in all areas of their lives. (The other Promises are listed on the organization's Web site at [www.americaspromise.org](http://www.americaspromise.org).)

This is why, in addition to parent training, Boeing also invests in programs that provide information and resources to caregivers, both formal (for example, day care workers) and informal (family members, friends), who, according to research, play a large but often overlooked role in children's development.

In addition, Boeing is investing in programs that increase the public's still-low awareness about the importance of providing children with quality early learning environments.

"Support for the first five years of a child's life is support for human capital development," said Samuel Meisels, president of the Chicago-based Erikson Institute. Erikson is one of only a few institutions of higher education in the United States whose central mission is to provide professional education and training in child development to those who work in early learning environments. "Evidence is quite



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clear that if we want to enhance the work force of the future, we need to begin in the earliest years. Boeing's contributions today will pay off for years to come."

### DATA PRECEDES SHIFT

According to Walters, Boeing started to invest in the early learning programs after the company wasn't seeing its investments in U.S. primary and secondary schools reap the benefits originally anticipated.

An analysis of the data indicated that many children enter kindergarten two-to-three years behind where they should be in their development—making success in school that much more difficult.

"That's when we knew that our education strategy needed to reach further back in the education process than we had traditionally focused," Walters said. "While we continue to invest in primary-secondary school education by supporting programs that develop teachers and school leadership and align curriculum, now we know it's just as important, if not more important, to make sure children are prepared for school once they get there."

Boeing is playing a leadership role among corporate funders, according to Rob Grunewald, an associate economist at the Federal Reserve Bank and responsible for a 2003 study about the economic

return on investment in early education initiatives. "Boeing is well-positioned to not only make strategic investments in early childhood, but also to provide leadership among members of the business community on this issue," he said.

According to Walters, Boeing will continue to lead, collaborate and convene other businesses in order to help place this vital issue—providing children with quality early learning environments—at the top of the agenda in communities throughout the enterprise.

"I believe we all have a role to play in making sure children get the best start in life as possible, even those of us who are not parents but have some connection to a child in our lives. It's not only the right thing to do, research shows it also makes good business sense," said Walters. ■

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# Aiding an early start

Where has Boeing support helped boost early-learning efforts? Here's a look at some of these investments.

- Boeing partnered with PNC Bank in Washington, D.C., and several charitable foundations to create a multimillion-dollar fund aimed at improving pre-kindergarten in the Potomac region. The goal for the initiative, tentatively titled the Early Care and Education Collaborative, is to raise at least \$1 million annually for four years for improving area early learning programs and promoting their importance to local policymakers. According to organizers, this effort marks one of the area's largest-ever partnerships between corporations and nonprofits.
- Boeing supports the Child Crisis Center, a Mesa, Ariz.-based nonprofit committed to preventing child abuse and neglect, along with this facility's Family Resource Center, which provides parenting classes focusing on the science of early-childhood brain development. Boeing funds helped develop the center's parenting programs, including a "boot camp" for new dads, a newborn baby-care class, a parent-support group, and a program to teach parents and babies how to communicate with gestures and signs before they learn to speak.
- Boeing recently signed on as a major supporter of "Sid The Science Kid," a new educational series produced by KCET-TV, the public TV station in Los Angeles, and The Jim Henson Company. The show promotes exploration, discovery and science readiness among preschoolers. A portion of Boeing's grant will fund a national educational outreach plan aimed at parents, grandparents and childcare providers. This plan is intended to expand the program's reach by offering information and resources on how to use the series' content to support the development of young learners.

—Susan Birkholtz