ARE YOU A DATA BREACH AWAY FROM DISASTER?
page 26

3D PRINTING ADDS DIMENSION TO MANUFACTURING
page 23

WHY BABIES MATTER TO BUSINESS
page 28
Before I met Jackie Cowell of Early Learning NH and Laura Milliken of Spark NH in Concord last spring, I thought day care was glorified babysitting. Early childhood education was not part of my lexicon.

But spend an hour with Laura and Jackie and you will know differently. They are leading the charge to educate people about the importance of high quality early childhood education centers and the critical role they play in shaping our future workforce. In fact, scientists have found from birth to age 5 is a critical time for brain development. We’re always learning during that time. That is unless you are under toxic stress that pumps the fight or flight hormones into your body constantly. The same hormones your body discharges when a bear comes running after you are the same ones an abused child experiences… only the bear never goes away, as Cowell describes it. Instead of learning and building new connections, the brain is bathed in these hormones and is focused solely on survival. These children start off life at a disadvantage and it takes hard work and nurturing to help them catch up. Many don’t. They have trouble with focusing, connecting with people and with self-control—all essential work and professional skills we learn during those years.

When we took two boys into our home this past summer, we were lucky that they were already in a great early adult childhood center in Dover with loving professionals who knew our children’s history and worked with them—and my wife and I—on helping them heal and learn. What kind of difference can a stable loving home and a quality early childhood education setting make in the lives of children? A lot. Both of our children (whom we expect to adopt soon) have blossomed both emotionally and cognitively. It is amazing the connections they can make. When we broached the topic of adoption with them, I asked our oldest what it would make him if I was his daddy and my wife his mommy. I wanted to see if he would make the connection that he would be our son. He looked at me, smiled, and said, “loved.” It’s a moment I’ll never forget.

The series of stories I am writing on early childhood education as a workforce issue kicks off with our cover story in this issue. But what began as an interesting project has given me so much more insight. It also has me concerned. We live in a state where funding education is a sticky issue and our track record for supporting K-12 and higher education is considered shoddy by some. It will be an uphill battle to convince folks that investing in the education of babies and toddlers is a wise use of resources. But it is critical. Just ask this parent.

Sincerely,

Matt Mowry

Matthew J. Mowry
Editor
Stacking blocks and knocking them down can entertain a baby for 20 minutes or more, an eternity for infant concentration. What some may dismiss as child’s play, though, is actually the infant equivalent of an 18-year old taking a college-level course.

The whole time those babies and toddlers brains are learning about cause and effect, positive interaction and concentration, gravity and symmetry, and developing brain synapses at the rate of 700 a second—which will form the literal building blocks of children’s learning in the future.

So while businesses invest heavily in partnerships with high schools and colleges, it may be too late. Studies show attending quality pre-kindergarten increases high school graduation by 31 percent and employment by 23 percent, according ReadyNation/America’s Edge, a national advocacy group for early childhood education as an economic driver.

Therefore, says early childhood experts, babies and toddlers offer the best return on investment. Numerous economic studies have calculated a return of $7 for each dollar invested in early childhood education through savings on remedial education and grade repetition, as well as increasing productivity and earnings in adulthood. Early childhood education advocates are making the case to businesses that childcare is a critical workforce issue akin to health insurance and retirement savings when it comes to worker productivity and satisfaction.

Until recently, childcare has essentially been an invisible industry in NH. Unless you have a kid in care, chances are you never interact with childcare centers. It’s been problematic for early childhood educators, who see greater demand to improve quality and hire trained, credentialed professionals at a time when funding is drying up. Nationally, and more recently in the Granite State, a movement is afoot to get businesses more involved with the education of babies and toddlers. It’s based on research that demonstrates all those skills cherished by employers—the ability to focus, demonstrate self-control, multitask and follow directions—are established in the first five years of life. Children who fall behind in those crucial formative years tend to stay behind. Yep, you got it…many kids are already behind the educational eight ball before they even arrive at kindergarten.

“Children who do not get a good start can arrive in kindergarten already 18 months behind,” according to ReadyNation/America’s Edge. “Children who aren’t ready for kindergarten are half as likely to read proficiently by third grade, and children who are not reading proficiently by third grade are four times more likely to drop out of high school.” That is why organizations ranging from the U.S. Chamber of Commerce to the Business and Industry Association in NH are recognizing the critical role early childhood education plays in economic development and building a skilled workforce.

In 2010, the U.S. Chamber of Commerce and the Institute for a Competitive Workforce issued a report, “Starting Smart & Finishing Strong, Fixing the Cracks in America’s Workforce Pipeline Through Investments in Early Childhood Development” that states:
A 2009 survey found that U.S. 15-year-olds ranked 25th among 34 developed countries in math and 17th in science. Only 25 percent of 17- to 24-year-olds would qualify to serve in the U.S. military. The rest cannot meet the physical, behavioral or educational standards for service—standards that are similar to those many industries use in hiring. 20 percent of U.S. workers are functionally illiterate.

Even with these findings, asking businesses to take a 20-year view of workforce needs seems like a long shot given the dire short-term shortages of skilled workers. But early childcare professionals say they must: “We need to invest now or we pay more later,” says Commissioner Nicholas Toumpas of the NH Department of Health and Human Services, which is charged with overseeing early childhood education in NH, among a myriad of other issues.

 Costs and Benefits

Research shows that children who attended pre-kindergarten equaled or exceeded national norms in eight of nine standardized assessments by the end of their kindergarten year, according to the Center for Public Education, an initiative of the National School Boards Association. Having children enter kindergarten at those higher levels, the organization found, affects the learning of all kids in the class. The problem is not all families have access to quality childcare because of cost. A study by Child Care Aware of America reported that infant care in NH in 2012 averaged $11,400 a year while pre-school for a 4-year-old averaged $9,100.

It is for those reasons President Obama called on Congress to expand access to quality preschool through a series of new investments, including the Preschool for All initiative, which provides all low- and moderate-income 4-year-olds with high-quality preschool, while encouraging states to serve additional 4-year-olds from middle-class families.

The proposal would invest $75 billion over 10 years. The White House estimates NH would receive $5.8 million in the first year with an initial estimated state match of $600,000, serving about 708 children from low- and moderate-income families. The President also proposed spending $1.4 billion on a competitive Early Head Start-Child Care Partnership grant program to expand access to high quality early childhood programs for infants and toddlers.

Should those initiatives pass, it would be a boon for a sector that struggles to keep its programs affordable. New Hampshire
struck out this past fall when it applied for the Race to the Top: Early Learning Challenge grant, which has doled out more than $1 billion to 20 states to better coordinate early learning systems, create clearer standards and educate and train educators. The state requested $37.5 million over four years, but was not selected.

“I feel like its barrier after barrier. All of these initiatives are going to make progress, but it’s still a long road ahead of us,” says Lisa Ranfós, center manager of the Child Study and Development Center at the University of NH. “We can’t ask families to pay more. They’re already maxed out. If we want to get to a place where all families can have quality care, we need to change the system.”

New Hampshire recently lowered the co-pay requirements in its early childhood education scholarship program for families in need. “My team came to me and said if we lower the co-pay, we’ll get more people into the program and make it more affordable,” Toumpas says.

Getting the Attention of Business

“I don’t think businesses understand how dependent on childcare they are,” says Ellen Wheatley, administrator for the child development bureau at the NH Department of Health and Human Services.

In the short-term, industry experts say having high quality early childhood programs promotes a productive workforce. If parents are distracted because of childcare issues, they are less productive at work, says Tom Raffio, president and CEO of Northeast Delta Dental in Concord and past president of Early Learning NH, a nonprofit that advocates for and supports early learning programs in NH.

“Having cost effective quality childcare allows parents to make it to the office,” says Kristin Smith, family demographer with the Carsey Institute at the University of NH.

The economic reality for many families is it takes two incomes to keep afloat, making access to quality early childhood education essential, says Deb Stokel, co-executive director and program director for early childhood education at the Community Childcare Center of Portsmouth. “We have single parents who rely on us completely [as] they are going back to school or holding down full-time jobs. We’re as important to them as their right arms,” Stokel says.

A big part of the problem is access. There are 950 licensed childcare programs in NH, but many have waiting lists and cost more than parents can afford to pay or are not convenient to a parent’s work. Also, quality can be hard to measure. There are 120 centers that have sought and earned the more stringent license-plus designation, which requires the center to meet high quality standards of safety, worker education levels and

A child uses a level at the Child Study and Development Center at UNH.
programming, all of which then allows centers to access subsidies for low- and middle-income families. And 57 have national accreditation, which sets the most ardent standards for the industry, Wheatley says.

The Child Development Center at White Mountains Community College in Berlin is one of the centers with a waiting list for its infant and toddler programs, says Director Sue Cloutier. “Most of the time, when [families] need it, they need it fairly immediately and they don’t always get the slot or the facility they would like,” Cloutier says, which means a child may end up at a neighbor’s house watching TV all day or the parent may have to miss work while dealing with childcare issues.

The long-term effect early childhood education has on businesses shows up later. Experts say high quality early childhood programs prepare children for kindergarten and, ultimately, for future learning and success. “Its important children are born healthy, continue their healthy development and start kindergarten ready and able to learn. When children receive a healthy start, the chances of being successful in school and in their careers is high,” says Steve Rowe, president of the Endowment for Health in Concord, which recently added early childhood development as one of its areas of focus.

Childcare is also critical in rural areas, such as Berlin, where economic opportunities may be scarcer. “We don’t have a lot of other opportunities for children to socialize. We don’t have a lot of extra curricular for younger students. This is a place where parents can take their children to be stimulated while they are at work so they can be successful in school,” Cloutier says.

But childcare is not just a socioeconomic issue focused on those with low income. New Hampshire participates in the When Work Works Sloan Awards, a national competition operated by the Families and Work Institute that recognizes best practices in workplace flexibility and family-friendly policies. In NH, the project is led by The Family Education Collaborative, a coalition of Child and Family Services New Hampshire, UNH Cooperative Extension, University of NH-Manchester, and YWCA NH.

Monica Zulauf, president and CEO of YWCA NH in Manchester says the winning businesses tend to provide employees with a time off package they can use as they wish as opposed to delineating vacation and sick time. “It’s not a huge change for a company but it is big for a family because they have a band of time for them to manage,” Zulauf says. “One of the interesting things the Sloan folks have found is people don’t abuse these policies.”

Wheatley points to the military as a model for making these connections and investing in early childhood education programs. A good chunk of recruits come from military families, and at one point, Wheatley says, the childcare system in the armed forces was “abysmal.” Based on the research about the impact of quality early childhood education and interventions, military brass argued that putting subpar childcare centers on bases essentially choked off a significant source of recruits. The military then ratcheted up its early childcare centers to meet the most stringent industry standards and now boasts “the top childcare system in the country,” Wheatley says. “I wish there were a way to translate this to business.”

Raffio says it makes sense to invest in toddlers as research shows that how a person is treated and nurtured from pregnancy to age 4 is the best indicator as to how successful they’ll be in school. “It’s almost too late in junior high and high school if
they haven’t been nurtured,” he says, pointing out it will take public-private partnerships to create a stronger early education system in NH.

**Gaining Momentum**

Enter Spark NH and Early Learning NH. Spark NH is an early childhood advisory council appointed by Gov. John Lynch to promote a comprehensive system of early childhood programs and services in NH. Since being enacted in 2011 (in accordance with federal law requiring the establishment of an early childhood advisory council), Spark NH has lead the charge to get all the major players in the early childhood sector talking and is now reaching out to businesses. Early Learning NH is a nonprofit that advocates for early childhood education.

In November it released a five-year strategic plan that calls for the creation of a comprehensive, coordinated early childhood system in NH. The plan calls for Spark NH to lead a number of initiatives, including engaging stakeholders (childcare centers, government agencies, businesses, families and more), creating benchmarks for a statewide system, developing consistent messaging around the importance of early childhood development, securing sustainable funding, and overseeing the implementation of a formal professional development system for those working in the sector. Chief among its and Early Learning NH’s initiatives is to further develop the state’s quality rating and improvement system for early childhood programs and increase resources to improve quality.

The work that Spark NH is undertaking is part of a national movement, led by such entities as ReadyNation/America’s Edge. Those efforts have gained national momentum, with support from companies like Toyota, Home Depot and Publix Super Markets. While the infrastructure needed to support a comprehensive early childhood education system in NH is not there yet, Laura Milliken, director of Spark NH, says her organization is working with many partners to build it. “We have connections to all these groups. We are looking for opportunities all the time to link them more formally,” she says. Part of the problem is the lack of data specifically about NH and Spark NH is looking to change that as well. “New Hampshire has not had the capacity to build it the way we want,” Milliken says. “Spark NH has allowed there to be infrastructure around early childhood and to start developing a plan for an early childhood system.”

New funding sources may be opening as well. The Endowment for Health, the state’s largest health foundation, announced last year its five-year focus includes new work in early childhood development. In October, it granted Early Learning NH $62,530 to advance its comprehensive plan for early childhood.

**How Businesses are Helping**

Rowe of the Endowment for Health is a passionate advocate dating back to when he was Maine’s attorney general. After seeing the damage inflicted on young children living in emotionally toxic environments, and seeing the research on brain development and the effect of high quality early childhood education, he helped to lead the charge for businesses getting involved in the issue in Maine. Rowe was a member of a group that set up a donor advised fund at the Maine Charitable Foundation.

Cowell notes that’s a missing component in NH where there is no central place to invest in early childhood education. “It is in our long-term plan to be part of the creation of an early childhood investment place,” Milliken says.
What NH does have in place is the NH Coalition for Business and Education launched in 2013 by Raffio, Tom Horgan of the NH College and University Council, Commissioner Virginia Barry of the NH Department of Education, and Fred Kocher of the NH High Technology Council. This group of more than 40 leaders meets to discuss education issues affecting NH and how businesses can help to move those issues forward. “One of the topics we will be discussing is the early childhood years,” says Raffio, who chairs the Coalition.

Early childhood education leaders were part of the Business and Industry Association’s discussions leading up to its strategic economic development plan for the state. “They get this is a workforce issue,” Milliken says.

Perhaps one of the most successful public/private partnerships is a web-based platform developed by CCA Global Partners in Manchester to provide business operations and administrative tools, programs and services to help early childhood education centers and home-based providers manage their programs more efficiently and effectively.

It allows childcare programs to use a cooperative model to receive deep discounts when purchasing goods and services, and includes marketing tools and guides, online social networking tools, reference materials, online interactive training for staff, access to state rules, forms and documents, and HR functions such as job descriptions, interview guides and appraisal forms.

CCA, a multi-billion dollar cooperative for businesses, launched the platform for early childhood educators five years ago and it is now being used by 4,000 childcare programs in 15 states says Denise Sayer, vice president of CCA for Social Good. “In New Hampshire, we have well over 300 programs using it,” she says.

CCA has invested more than $1 million into the platform, Sayer says. “Childcare is a necessity for many families in the workforce,” she says. “Anytime you can make another sector better, it enriches the fabric of the community overall.”

Several directors of nonprofit childcare centers interviewed say one of their strongest links to the business community is Granite United Way and its Day of Caring, though which companies send volunteers to nonprofits across the state. “We fully take advantage of their day of caring. They’ve sent people to paint classrooms, power wash the buildings, and plant,” says Christina Lachance, vice president for Children’s Services for Easter Seals NH, which runs an early childhood program servicing about 400 children annually. “Comcast connected with us and provided literacy bags with books, crayons, and pencils.”

Other businesses have invested in onsite childcare for employees. Among the few in NH is Timberland in Stratham, which houses a private center on its campus. W.S. Badger, a manufacturer of natural body products in Gilsum, opened the Calendula Children’s Center in June about two miles away from its main campus to provide subsidized, childcare for employees. The company renovated its old facility and worked with experts to design the program. The company is investing $30,000 annually in subsidizing the childcare center. Badger subsidizes the cost of sending toddlers to the nearby Waldorf School while keeping the infants program at its own center. W.S. Badger also closes at 4:30 p.m. so parents have time to get their children and get home to make dinner. For years, W.S. Badger has allowed new parents to bring their babies to work for the first six months after maternity and paternity leave.

There are many policies companies can adopt to support parents of young children and early childhood education. The challenge for advocates is cultivating champions among business leaders who will speak to their colleagues and legislators about the need to support early childhood education, Milliken says. That includes speaking in front of business groups like chambers of commerce and Rotary Clubs and writing op-ed pieces, says Jackie Cowell, executive direct of Early Learning NH. “If we had done this 20 years ago, we’d be there by now. It’s time to start.”

One study found that investing just $6,692 in quality pre-k for at-risk children substantially improved outcomes such as education levels, home ownership and salary while reducing negative behaviors, including substance abuse and crime. The net result was a lifetime societal benefit of up to $69,937—an ROI of greater than 10:1.

Source: “Starting Smart & Finishing Strong, Fixing the Cracks in America’s Workforce Pipeline Through Investments in Early Childhood Development,” U.S. Chamber of Commerce, Institute for a Competitive Workforce