

# Baby tech boom produces new technologies to help parents

March 11 2014

---

Long before the dawn of the pacifier, parents of newborns and toddlers found ways to use surrounding resources to help soothe and distract tots into precious moments of peace.

In today's smartphone era, a proliferation of applications, video monitors, robotic strollers and other technologies have cropped up to create an industry built around the notion of helping parents with the push of a button.

Hoping to pinpoint a cause for the fussy tears? Ontario-based Biloop Technology's Cry Translator analyzes distinct cries to determine if a baby is sleepy, stressed, hungry, annoyed or bored.

Want to push a toddler toward early literacy? Brigham Young University's Hideout: Early Reading iPhone and iPad [app](#) is one of thousands of options designed to teach preschool-age kids to read through techniques such as letter-sound association and word repetition.

Unsure if repeated efforts to install a [car seat](#) were correct? This year, Pittsburgh-based company 4moms is expected to launch the world's first fully robotic car seat to do the job.

The car seat - like the newly released motion-sensing 4moms rockaRoo Infant Swing and the self-folding 4moms Origami Power Stroller - is expected to catch on quickly, at least with an established tech-savvy customer base that includes actress Natalie Portman.

But with prices plunging for motion sensors, accelerometers and other tools vital to advanced robotics, Henry Thorne, 4moms chief technical officer, said he wouldn't be surprised to see the market grow in coming years.

"There is a new toolbox of incredibly low-cost micro-controls available that wasn't there before," he said.

Rob Daley, CEO of 4moms, said lowering the barriers to creating new technologies doesn't mean all new juvenile products will be necessary or even helpful. The company decided to make a robotic car seat thanks to feedback from parents and statistics showing that 7 in 10 car seats are installed improperly, and he said any technologies coming out of 4moms will be in direct response to consumer need.

"Technology for technology's sake is not something we pursue," Daley said.

When it comes to early learning apps and digital technologies for toddlers and children, the subject shifts from questions of the necessity to questions of harm related to increased screen time.

The American Academy of Pediatrics discourages media and screen time for children younger than 2 years and limiting screen time to two hours per day for older children, a stand supported in January 2012 through a joint position statement from the National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children's Media.

But the statement also allowed for some leeway in the matter because of conflicting research around the impact of screen time, the availability of digital educational material and a new relationship between young children and touch-screen technologies.

The Fred Rogers Center's Early Learning Environment (Ele) program is an online database of early learning resources designed for children "from birth to age 5." The Ele site said it encourages caregivers to treat digital media "more like they would treat a book."

"Infant caregivers must be sure that any exposure to technology and media is very limited, that it is used for exploration and includes shared joint attention and language-rich interactions, and that it does not reduce the opportunities for tuned-in and attentive interactions between the child and the caregiver," reads a portion of the statement.

At the Pittsburgh-based community organization Kingsley Association, the Baby Promise program is in its third year of putting the study's assessments into action.

During instructional visits to parents of children newborn up to 3 years old, the program uses iPhone smartphone app "Bubble Popper" by Los Angeles-based MobTouch, DHX Media's Yo Gabba Gabba "Lets Glow Dancing" app, and simple drawing apps to help children as young as 9 months become acquainted with touch-screen interfaces.

Denise Hill, director of Kingsley's East Liberty Family Support Center, said she would discourage [screen time](#) for children younger than 10 months to 1 year. But, she said, seeing parents regularly handing off smartphones as distractions made her want to help steer them away from "Candy Crush" toward more educational offerings.

In 2011, Kingsley Association won a \$50,000 grant from the Sprout Fund to create the program, hire staff, and purchase tablets, e-readers and other technologies.

Baby Promise, which was intentionally named to play off of the Pittsburgh Promise scholarship program, works with 106 families and

supports children up to age 6 through a summer day camp and offers in-center programs for children up to age 7.

"Our center works with low-income families, so we were thinking, 'How do you use technology to get kids ready for school, get them ready to learn?' Baby Promise is (unofficially) linked with the Pittsburgh Promise because it's a part of early learning," Hill said.

Even with the possible benefits of [early learning](#) apps, parents should "weigh on the side of caution" when it comes to depending on technology, said Susan Newman, social psychologist and author of "Little Things Long Remembered: Making Your Children Feel Special Every Day."

She applauded 4moms and other juvenile product makers for robotics items that provided practical solutions, but said many digital apps offer interactions that could be done just as easily, and often better, between parent and child.

"By having some kind of device tell a child what to do, they could become very dependent, and they don't have to learn to amuse themselves and be creative when everything is being put out there in front of their face. The best developmental tools are peers and family interaction," she said.

Thorne admitted the sector can only offer a slight hand in the hands-on activity that is parenting.

"I don't see R2-D2 stepping up and changing anybody's diaper," he said.

©2014 Pittsburgh Post-Gazette  
Distributed by MCT Information Services

Citation: Baby tech boom produces new technologies to help parents (2014, March 11) retrieved 10 April 2024 from <https://phys.org/news/2014-03-baby-tech-boom-technologies-parents.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.