

Toy Topics

Tinkering With Robots Improves Playtime Now, Sets Kids Up For Future Careers

(NAPSA)—The phrase “child’s play” means something very different today than it did 10 years ago. According to a report by the Institute for the Future called “Transformative Changes for Children at Play,” from 1981 to 2003, young people had nine less hours of free time per week—and they’ve got even less today. Their time is spent online and on devices—with access to an average of 12 apps at all times—and they are visually literate, preferring things like YouTube video instruction over reading articles.

For that reason, it’s important that children make the most of the playtime they *do* have, pursuing things that not only excite, engage and entertain, but that also make them think.

“Today’s kids have different expectations about the interactivity of their toys and the ability to fluidly combine online and off-line experiences as they play. They are incorporating personal touches and design preferences into their playthings. Their desire for deep personalization and self-expression gets fulfilled when they are able to create their own toys,” said Lyn Jeffery, Institute for the Future research director.

Tinkering with robots is a great way to give children the flexibility and creative control they crave. Robotics helps increase focus, improves fine motor and problem-solving skills, promotes independence, and builds confidence. To put it simply, in a Wired.com interview, Javier Movellan, an associate professor affiliated with the University of California at San Diego’s Machine Perception Laboratory, said that robots can help “to raise happier and smarter children.”

Since its launch in 1998, LEGO MINDSTORMS has been seen by fans as the pinnacle “smart toy.” In the 15 years since, the renowned platform has driven the growth of the consumer robotics category and helped inspire the



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Maker Movement by encouraging hands-on play and an unprecedented level of tinkering by leveraging the familiar medium of LEGO building. From the bricks themselves to programming software that mimics clicking behaviors together just like building a LEGO set, sophisticated robotics has become “child’s play.” As a result, the MINDSTORMS community quickly grew to over 50,000 members with over 15,000 creations, from a giant chess set to a pancake maker to a flying blimp.

To newbies, the Maker Movement can be overwhelming. Here are some tips for getting children as young as 8 interested in tinkering:

Get Inspired by the Big Dogs. Just as active kids look up to professional sports players, young makers can get stars in their eyes for the guys creating bots in their garages. Make magazine’s list of Ten Makers You Should Be Following on Twitter is a great start for showing kids that tinkerers are heroes, too.

Tinker Together. Spend a Saturday taking apart old printers or DVD players to see how things work—just make sure to set an example and promote

safety first, only dismantling items you’re very familiar with.

Join a Team. Hundreds of thousands of school and after-school teams take part in international engineering and robotics competitions each year, going head to head in fun robotics challenges that are educational, collaborative, social and fun. Find groups in your area at www.firstlegoleague.org.

Build a Bot. Look for a versatile toolkit that fosters robotic tinkering, such as MINDSTORMS EV3. Redesigned to excite and challenge a generation that has grown up in a technology- and mobile-driven world, the set includes everything kids need to create and command robots that walk, talk, think and do just about anything they can imagine. Instructions for five hero models and 12 bonus models help kids get comfortable before they tinker on their own.

You never know; what may start as a childhood hobby may blossom into a full-blown career. Many of today’s leading companies employ adults who grew up tinkering and credit their play experiences as the reason for their career passions.

“I consider myself a maker and attribute the time and encouragement I was given to tinker to my career success today,” said Lasse Stenbæk Lauesen, a software and applications developer. “Never would I have thought that my love of building combined with a knack for technology when I was young would mean I’d be designing robotic solutions for my job, but that’s the thing with robotics: They let children explore their creativity while developing skills that may lead them to future career paths—all while having a good time and using their imagination.”

The Institute for the Future’s other Transformative Changes for Children at Play insights can be found at www.EV3MakerFaire.com.