"Making is fundamental to what it means to be human. We must make, create, and express ourselves to feel whole. There is something unique about making physical things. Things we make are like little pieces of us and seem to embody portions of our soul. **Make. Just make.**" [source]

THE RISE OF MAKER ED

WHAT IS DRIVING THE MAKER MOVEMENT? [source]

Economic
Individuals are empowered by a growing array of alternative ways to engage in the economy.

Societal
Curiosity, ideology, necessity: whatever the reason, people are relying more heavily on their own hands and brains to meet daily needs.

Technological
The barriers of access to making have come crashing down, as simplified design tools and cost-effective DIY kits provide individuals with cheap means to make extraordinary projects.

BY THE NUMBERS

A **Maker Faire** is "part science fair, part county fair, and part something entirely new." [source]

MAKER FAIRES AROUND THE WORLD [source]

some **465** FAB LABS & **1,146** HACKERSPACES are open for business around the world, with hotspots in Europe and Southeast Asia [source]

2005-2014 $1B+ of venture capital was invested for 3D printing startups

3,051 patents filed in field, with **1,452** of them filed between 2013 & 2014 alone [source]

2006 22,000 attendees — 1 MAKER FAIRE
2014 800,000 attendees — 135 MAKER FAIRES
2015 1,000,000+ attendees (projected) [source]

FROM MAKING TO MAKER ED

The Maker Movement "overlaps with the natural inclinations of children and the power of learning by doing...The maker community brings children, hobbyists and professionals together in a glorious celebration of personal expression with a modern flare." [source]

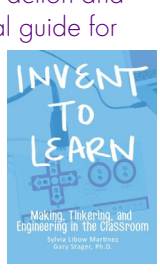
2005 — summer: Launch of **Instructables** website (Now more than 2M have signed up for their newsletter.) [source]

2006 — april: **First Maker Faire** in San Francisco Bay Area

2009 — november: **President Obama** launches **Educate to Innovate**, an all-hands-on-deck campaign to help more girls and boys be inspired to excel in STEM subjects. The White House Science Fair, President Obama calls for **"every child, a maker."** [source]

2012 — may: **Maker Ed** is formed.

2013 — may: Hailed as the "MakerEd Bible," Sylvia Martinez and Gary Stager release **Invent to Learn: Making, Tinkering, and Engineering in the Classroom**–offering a call to action and practical guide for teachers to bring "the maker movement to every classroom."



2014 — june: President Barack Obama declares **June18 the National Day of Making** and the **first White House Maker Faire** was held.

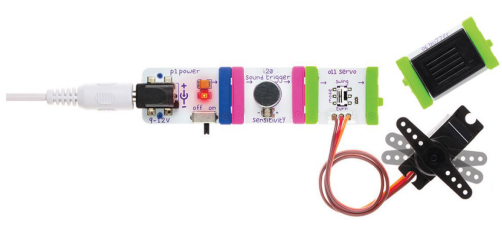
2015 — june: The Obama White House expanded 2014 activities to a **Week of Making from June 12-18**, an event that coincides with the National Maker Faire in Washington D.C.

The **Nation of Makers** initiative is a call to action for companies, colleges, communities and citizens to join the White House in lifting up makers and builders and doers across the country.

"Makerspaces are zones of self-directed learning. Their hands-on character, coupled with the tools and raw materials that support invention, provide the ultimate workshop for the tinkerer and the perfect educational space for individuals who learn best by doing...they promote multidisciplinary thinking and learning, enriching the projects that are built there and the value of the makerspace as an educational venue." [source]

CASE STUDY: THE RISE OF MAKER ED

littleBits™



The **littleBits** platform of electronic building blocks empowers everyone to create inventions, large and small. The system is comprised of color-coded pieces for specific functions (like motion, lights, sound, sensors, internet connectivity) that snap together to make larger circuits. People use littleBits in formal and informal learning settings - from K12 to higher ed and in makerspaces and homes across the globe. With an ever-expanding library of littleBits, educators and students can engage in increasingly complex projects as their technology literacy, critical thinking and creative confidence grows.

9,200+ EDUCATORS
2,200 SCHOOLS & AFTER SCHOOL PROGRAMS
400 UNIVERSITIES
240 MAKERSPACES & LIBRARIES
60 COUNTRIES

LITTLEBITS EDUCATION PRODUCTS & PROGRAMS

littleBits' offerings have evolved to meet the growing demand of educators seeking to bring the Maker Movement to their classrooms.

STUDENT SET (2013) has all the Bits and instructions needed to engage a small group of students in creating circuits in seconds and combining them with craft materials to make projects.

WORKSHOP SET (2014) is designed for a group setting and supports up to 32 inventors in a classroom, library or makerspace.

PRO LIBRARY (2014) is a large, diverse collection supporting up to 72 inventors. It is perfect for entire schools, libraries, makerspaces, and anyone looking to create and prototype inventions.

LITTLEBITS STEAM PD (2015) helps teachers learn about how to use littleBits to integrate STEAM instruction in grades 2-8 through an interactive, hands-on course.

LITTLEBITS INVENTION LAB (2015) is a bundle specifically for makerspaces in libraries and other learning environments.

LITTLEBITS CLASSROOM INTEGRATION (2015) is for schools or districts that want to start integrating invention and STEAM into the curriculum in at least five classrooms.

LITTLEBITS 1:1 (2015) is a bundle that provides every student with their own mobile makerspace to use across subjects, both in and outside school.

FOR MORE ON MAKER ED:
Join the Virtual Maker Ed Community
#MakerEd hashtag and chats
GooglePlus Community
K12Makers.org
Maker Pinterest Boards

ACCESS ONLINE RESOURCES:
MakerEd Resource Library
Youth Makerspace Playbook
littleBits Educators Guide
Invent To Learn Resources
Getting Smart Maker Blogs

littleBits™ GETTING SMART Think. Learn. Innovate.

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#makered #makeredspace