Computing for All: How to Truly Prepare 21st Century Learners

HELPFUL LINKS

Lockheed Martin Links

Engineers in the Classroom – http://www.classroomengineers.org/

Lockheed Martin Generation Beyond – https://www.generationbeyondinschool.com/

Build a Robot – https://www.lockheedmartin.com/buildarobot

Funding for the classroom

DonorsChoose.org page – https://www.donorschoose.org/

Scratch

Tutorial – https://scratch.mit.edu/tips and https://scratch.mit.edu/studios/4520280/

The original Scratch publication – http://web.media.mit.edu/~mres/papers/Scratch-CACM-final.pdf

Scratch Homepage – https://scratch.mit.edu/about/

TED Talk – https://www.youtube.com/watch?v=Ok6LbV6bqaE

ScratchED community homepage for educators – http://scratched.gse.harvard.edu/

Scratch sample projects across multiple subjects – http://scratched.gse.harvard.edu/resources/scratch-projects-across-curriculum

Raspberry Pi

History of the Raspberry Pi – https://www.youtube.com/watch?v=UCt6d0SCxO4

Raspberry Pi web site – http://www.raspberrypi.org

RasPi Forums – https://www.raspberrypi.org/forums/ (post questions here)

Education Link on Pi site – https://www.raspberrypi.org/education/

Education newsletter – available from the education link above

MagPi magazines – these are a great resource and date back almost to the start of Raspberry Pi. Can find fantastic projects, information and tutorials throughout these.

Electronic version free (including all back issues) – https://www.raspberrypi.org/magpi/issues/

Linux

Intro to Linux site – https://training.linuxfoundation.org/linux-courses/system-administration-training/introduction-to-linux (Free online self-paced training)

https://learn.adafruit.com/series/learn-linux-with-raspberry-pi

http://www.toptechboy.com/raspberry-pi-with-linux-lessons/

Arduino

Editors and Simulators – www.arduino.cc; create.arduino.cc;

Learning Resources (and parts) – www.adafruit.com; www.sparkfun.com

3D Printing

17 Incredible 3D Printed Objects – https://www.youtube.com/watch?v=FSu19nz7NlE

PC Magazine "The Best 3D Printers of 2018" – https://www.pcmag.com/article2/0,2817,2470038,00.asp

Shape Repositories:
Thingiverse – https://www.thingiverse.com/
YouMagine – https://www.youmagine.com/

Online Printing Services Shapeways – https://www.shapeways.com/

Online CAD Freeware TinkerCAD – https://www.tinkercad.com/

Terminology Guide (One of Many) – http://pages.makerbot.com/rs/444-ZTM-866/images/MakerBot-3D-Printing-Terminology-Guide.pdf

File Types (MakerBot) – https://support.makerbot.com/learn/3d-printing/3d-printing-terms/file-types_12662

Using MakerBot Print – https://support.makerbot.com/learn/makerbot-print-software/using-makerbot-print/using-makerbot-print_13586