

TEACHING 3D PRINTING AND ADDITIVE MANUFACTURING

Resources

BOOKS:

- **3D Printing in the Classroom: Innovative Ideas for Makerspaces.** By Steve Clark and Jared Nichol. Available on iBooks and is interactive.
- **The Big Book of Makerspace Projects: Inspiring Makers to Experiment, Create, and Learn** 1st Edition. By Colleen Graves. Available on Amazon.
- **3D Printer Projects for Makerspaces.** By Lydia Sloan Cline. Available on Amazon.

INTERNET AND PDFS:

3D In the Media Center Resources, Lesson Plans, and Lesson Ideas

Amy Wallisch is a media specialist with Williamsburg-James City County Public Schools who has developed a resource guide and has given us permission to use it. She said she has not updated it since last summer and as expected a couple of links are broken. Pros definitely outweigh the cons, though. It is an excellent compendium of Teaching 3D Printing resources. Her contact info is Amy.Wallisch@wjccschools.org.

- <https://wjccschools.org/wp-content/uploads/sites/20/2014/03/3D-in-the-MC-Resources-Lesson-Plans-and-Lesson-Ideas.pdf>

K-12 Internet Resource Center

Originally funded by NSF 20 years ago, volunteers now maintain this repository of classroom activities. Lots of materials on using 3D printing in various subject areas.

- <https://www.k12irc.org/resources/integrated/hands/3d.php>

9 Amazing Ways Teachers Can Use 3D Printing to Teach Math and Science

This site has a ton of information and ideas for incorporating 3D Printing.

- <https://www.weareteachers.com/3d-printing-math-science/>

Ideas for using 3D printing in Mathematics education

- https://www.huffingtonpost.com/ki-karou-/back-to-the-future-3d-pri_b_8302384.html

Tech Resources for Teachers

University of Maryland Eastern Shore has technology education resources for teachers, including a few high-school lesson plans that incorporate 3D printing. Lesson plans are free and permission has been granted to RAMP MD to share. Larry Eberly, of Somerset County, is the educator who has developed many of these lessons and so they map to common core and NGSS. His email is leberly@somerset.k12.md.us.

- <https://www.umes.edu/Tech/Pages/Resources-for-Teachers/>

The Curriculum You Desire To Get Started 3D Printing In Your Classroom

by JJ Johnson, of SeeMeCNC.com. They've got a nice set of links and forums for educators. The pdf is available also on the rampmd.org web site.

- <https://www.seemecnc.com/pages/seemeeeducate>

Teacher's Guide to 3D Printing Classes and Curriculum

This site is a little click-baity but the information is good and the links are fairly current. Offers both free and fee resources and lesson plans.

- <https://all3dp.com/1/3d-printing-classes-courses-curriculum/>