Elder Library 3D Printing Policy September 2017

The 3D printers are for the use of the students and faculty of Elder High School. Students are encouraged to create and test their own designs for use with the 3D printers, especially to solve a problem or make something for practical (rather than only decorative) use. We also want a wide variety of students to experience designing and printing. For these reasons, we ask that anyone who wants to use the 3D printers sign up in advance for a day and time. This can be done by going to the Library website and opening the 3D printing tab: <http://elderhslibrary.weebly.com/3d-printing.html> On this page you will see the calendar of prior reservations, and you can choose your date and time accordingly. Fill out the form on the right, and your reservation will populate to the common calendar.

In the event that conflicts arise over dates and times, the following priority flow will be used:

Is the print being created for a practical purpose?

Is the print an original design?

Is the printing person a first-time user?

(See flow chart, attached)

**General rules**

1. Check in with library staff when claiming your reservation
2. Limit your print to 2-2.5 hours. If there are special circumstances, consult the library staff for permission for longer prints
3. Keep your printer time to no more than 4-5 hours per week.
4. If you are printing a file that you found on Thingiverse, or elsewhere, check to see if there are photos of completed prints or comments. Just because you found it there does NOT mean that it is print ready!

**Workflow**

* Download Makerbot Print software
* Create or find file you want.
* Import file into Makerbot Print
* Make any adjustments in size, or orientation
* First time will have to choose “unconnected printer” then Replicator+
* When object is correct size and oriented correctly to the printbed (not hanging above it, or balanced on a tiny point), choose the red EXPORT command and save to a flash drive
* Inspect the printer to be sure the correct color is loaded. **Please ask for help to do the following change:**
  + If not, choose Filament from main menu, then choose Unload Filament.
  + Follow the directions on the screen EXACTLY.
  + When filament is unloaded, press Continue.
  + Choose Load Filament and follow directions on that screen.
  + When the new color starts to extrude, press the main knob again.
  + Clear away the extruded material, then plug in the flashdrive and select PRINT from the main menu.
  + Find the file you want to use, and press the main knob to select it. Press Print to begin.
  + Please claim your print and flashdrive promptly – we don’t want them to wander away.

Should the need for more specific guidelines arise, we will revise this document accordingly.