

# ***GRAPHIC DESIGN PORTFOLIO***

***SHOWCASING THE WORK OF***

# ***ALLAN DEYONG***

***OCTOBER 2022***

## **“No Food or Drink” Table Tent**

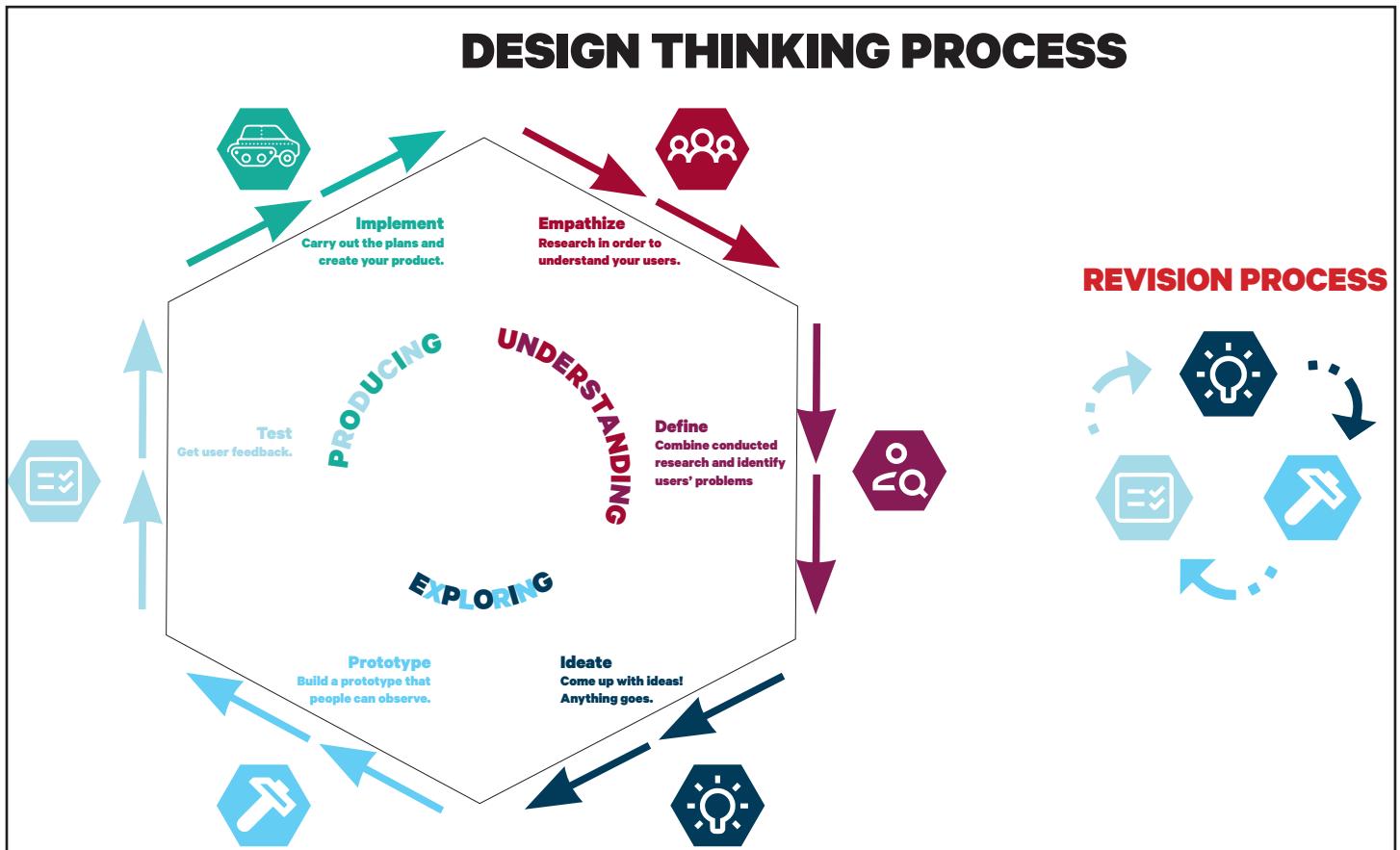
**The EDvolution Center**  
does not permit  
food or drink.  
Patrons with food  
or drink will be  
asked to remove it  
from this space.



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I utilized a royalty-free “No Food or Drink” logo to create this table tent, which when printed centered vertically on a standard 8 1/2” x 11” sheet of paper, can be laminated and stapled to stand on its own, with the message visible upright from both sides. An example can be seen in the photo on page 9 of this document.

# Design Thinking Process Poster



Working from someone else's very specific vision, I designed this chart and sub-chart explaining the design thinking process. I utilized royalty-free icons to represent each step.

# **Training Resource and Handbook for EDvolution Specialists & Graduate Assistants**

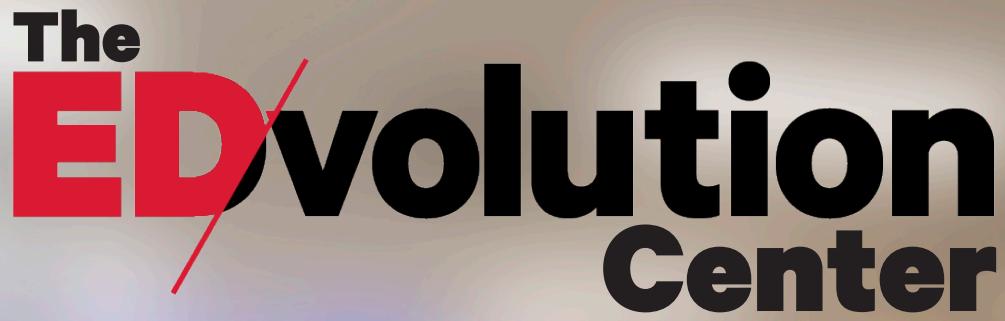
**Pages 4-12 are select pages from the training handbook that I designed for The EDvolution Center circa 2018 and updated as necessary. This version was created in late 2020. The EDvolution logo was provided to me. All photos, screenshots, designs/graphics and copy were created by me.**

**Pages 4-7 demonstrate visually appealing graphics in full compliance with University brand guidelines at the time. Pages 7 and 8 are part of a spread which is depicted here in the same configuration as in the printed handbook.**

**Pages 8-12 are from sections which explain technical operations in great detail, including 3D print preparation, use of 3D printers, and green screen effects, all for beginners.**

**The page numbers in these sections continue to reflect portfolio page numbers, and are not seen in the handbook itself.**





Training Resource and Handbook for  
**EDvolution Specialists**  
&  
**Graduate Assistants**

**Spring 2021**  
**Updated November 2020**



**EDvolution Specialist Training Packet**

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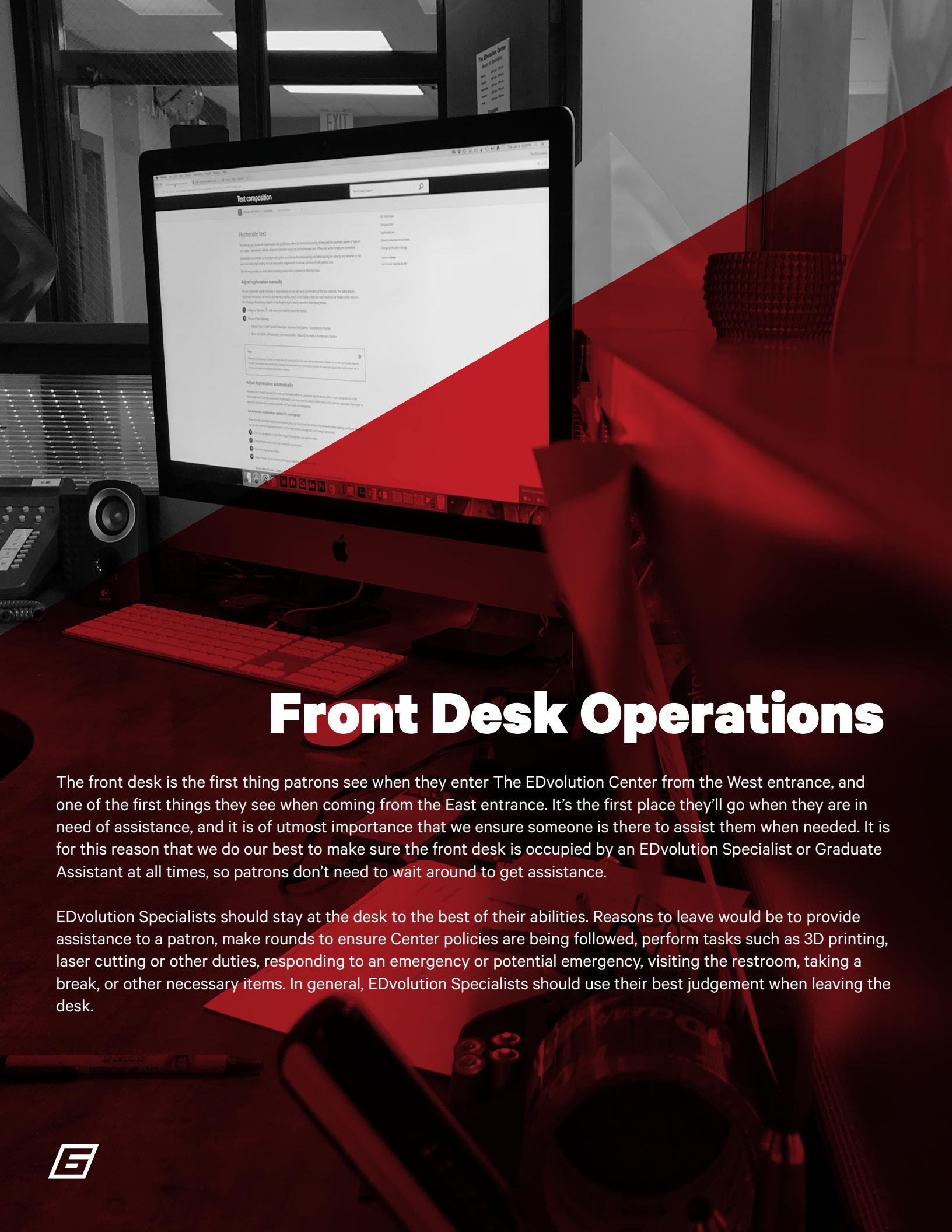
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# Front Desk Operations

The front desk is the first thing patrons see when they enter The EDvolution Center from the West entrance, and one of the first things they see when coming from the East entrance. It's the first place they'll go when they are in need of assistance, and it is of utmost importance that we ensure someone is there to assist them when needed. It is for this reason that we do our best to make sure the front desk is occupied by an EDvolution Specialist or Graduate Assistant at all times, so patrons don't need to wait around to get assistance.

EDvolution Specialists should stay at the desk to the best of their abilities. Reasons to leave would be to provide assistance to a patron, make rounds to ensure Center policies are being followed, perform tasks such as 3D printing, laser cutting or other duties, responding to an emergency or potential emergency, visiting the restroom, taking a break, or other necessary items. In general, EDvolution Specialists should use their best judgement when leaving the desk.





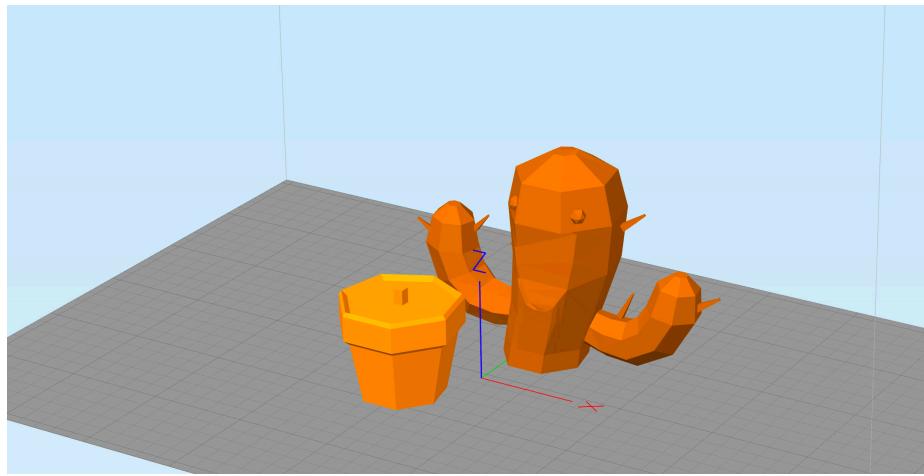
# EDvolution Center Policies

The EDvolution Center has policies for use of the space and the valuable resources within it. Most of the technologies, furnishings and resources in the space represent significant expense and we take great care in avoiding any damage to these. It is for this reason that most of the policies we have are in place.

It is up to EDvolution Specialists and Graduate Assistants not only to follow these policies themselves but to hold others to the same standard, which often means reaching out to patrons currently in the space to let them know if something they are doing is against one of our policies.

This section provides a list of these policies, and best practices for enforcing them in a way that's gentle, yet firm - effective, but without making patrons feel unwelcome.





**Fig. 3e, Model on Virtual Build Area**

the screen, then look near the top of the resulting box for the profile selection menu.

With that done, you can close the process settings box and import the model you wish to use. You can do this by using the “Import” button on the left side of the screen, and then selecting the model you want to import.

The model will then drop into the virtual build area (fig. 3e) and you can manipulate it using the mouse and options on the right side of the screen, such as resizing, rotating, and moving.

A few useful tools are:

- Moving your view on the object (right-click and drag)
- Rotate your view around the object (left-click and drag)

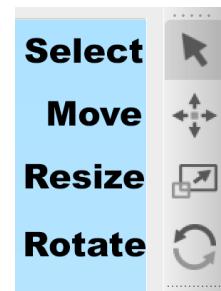
- Resize an object (click the resize button on the right panel with an object selected, then left-click and drag)
- Move an object (click the move button on the right panel, then left-click and drag the object of your choice)
- Rotate an object (click the rotate button on the right panel, then click and drag within the circle that appears around the object)

You can also double-click any item in the virtual build area and more precise options will appear (fig. 3g), giving you the ability to adjust specific aspects of the model's size and rotation with numerical values, on one or all axes of the item's position and size.

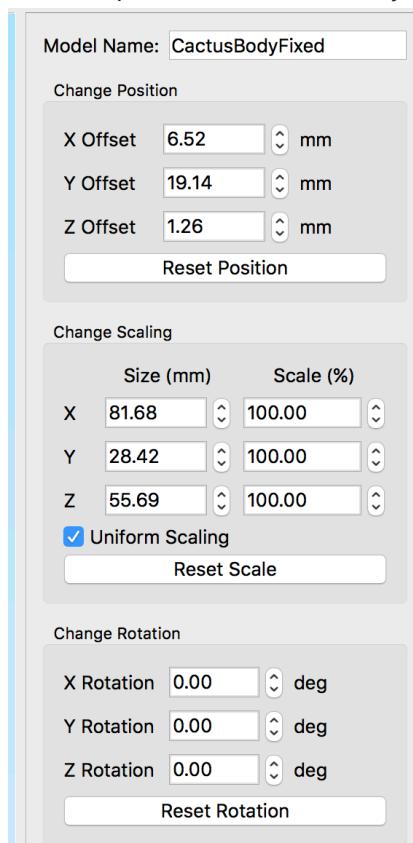
Once you are happy with the size and position of the model(s), you're ready to choose your print settings. This is done in the same settings box where you chose your printer profile, and there are just a few settings you may want to adjust.

Under the Layer tab (fig. 3h):

- Layer height should be between 0.1mm and 0.3mm, with 0.1mm being finer layers that look better but make the print time longer, and 0.3mm being thicker layers that don't look as good but print much faster, and usually result in more successful prints.
- Top solid layers is the number of layers covering the top of the print, sealing off the hollow inside. 3-8 top solid layers are recommended, depending on the layer thickness you chose. The thinner your layers,



**Fig. 3f, Right Panel**



**Fig. 3g, Precise Model Options**



Under the Support tab (fig. 3k):

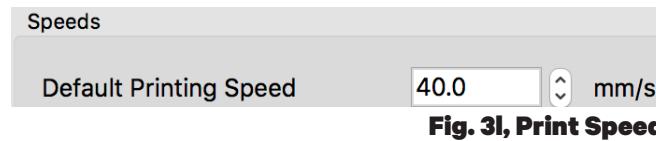
- Generate support material is an option that chooses whether or not supports will be added.

Supports will be covered later in this section in more detail.

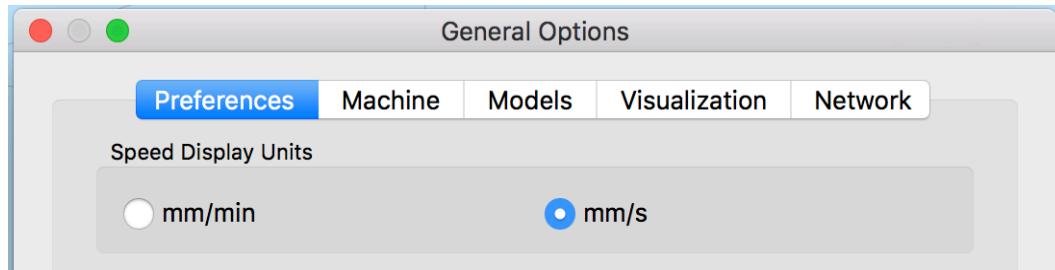
- Support infill percentage controls how dense the supports are. This is good to leave between 10% and 20%.
- Extra inflation distance controls how far outside the model the supports will extend. 0mm-2mm is adequate.

Under the Speeds tab (fig. 3l):

- Default printing speed determines how fast the nozzle will move while printing, except when slowed down during certain parts of the print. 25-35mm/s (millimeters per second) is a slow speed that is good for the best quality prints, but makes print time very long. 70-90mm/s is very fast, and is good for most prints, though this can result in lower quality prints and can sometimes cause a print to fail entirely. It is best to reduce speed for more detailed items.



**Fig. 3l, Print Speed**



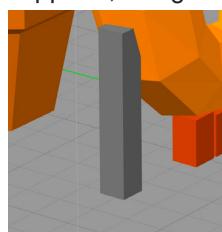
**Fig. 3m, Speed Display Units**

By default, Simplify3D measures speed in mm/min (millimeters per minute). You can change this to mm/s from the Preferences box, which you can access by clicking Simplify3D at the top left corner of the screen and selecting "Preferences." The resulting box will provide the option to change the speed measurement (fig. 3m).

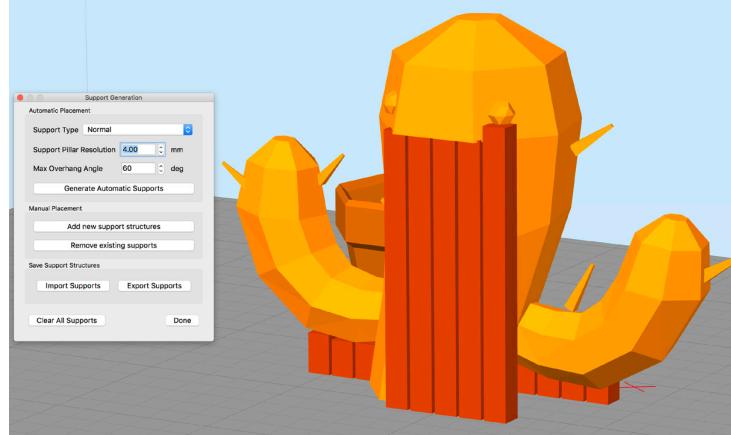
Once you've completed your settings choices, it's time to ensure the model is adequately supported. This is

done through the use of support material, made up of pillars that form underneath overhangs and bridges between parts of the model.

To work on supports, click Tools, then Customize Support Structures. Simplify3D can generate supports on its own, appearing as the red portions of the model that appear to hold up overhangs in this example. However, sometimes these are excessive, or miss portions of the model that we want them to support. We can remedy this by customizing the supports, using the add and remove

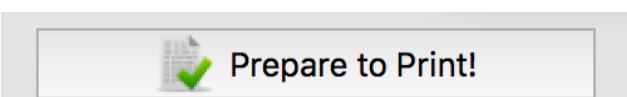


**fig. 3o, custom support**



**Fig. 3n, Auto-Generated Supports**

support structure buttons and clicking either above or below where we want to add supports. This takes some trial and error to learn, and you'll have to experiment to find how you prefer to use this function. Below is an example of a support that is being added manually (fig. 3o). It's gray until you click and add it to the model.



**Fig. 3p, Prepare to Print Button**

Once you're happy with your support structures and all other settings, you're ready to export a file that the 3D printer will use to print the model. You can start this process



where it enters the extruder (fig. 4c), and once the printer is ready, it will begin to purge the rest of the old filament. The screen will direct you to insert the new filament, which you will need to do after threading it through the entry hole at the spoolholder side, and through the final guide before entering the extruder. Follow the instructions on the screen, continuing until the new color of filament appears coming out of the nozzle.

Once the filament has been loaded, you'll need to prepare the build plate. If there is already a model on the build plate, you must first remove it, then ensure the build plate is free of leftover plastic or excessive buildup of glue. Then use a glue stick to coat the area of the build plate that will receive a model, before loading the plate back into the printer. Do not use the blue Dremel build tape sheets.

At this stage, you are ready to print. If you haven't already, insert the thumb drive into the printer and select the "Build" option from the home screen, then select the thumb drive and choose the model you wish to print. The printer will take it from there, but it's always a good idea to monitor the first layer or two to ensure the print is going smoothly. This helps prevent a print from failing unattended and wasting a lot of time and plastic extruding into a mess.

### 3D Printing - MAKEiT Pro-L

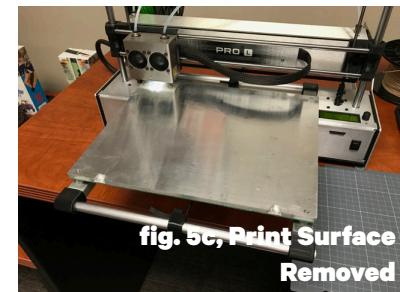
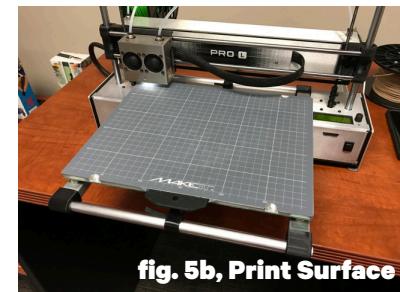
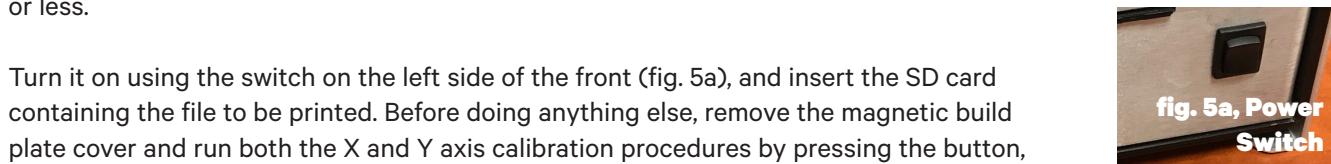
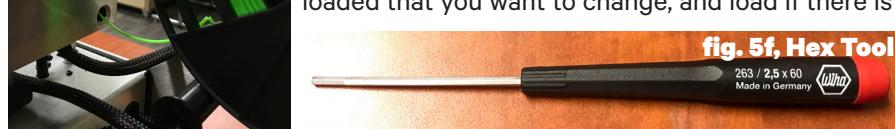
The MAKEiT Pro is an industrial-grade 3D printer that has higher accuracy, more features and more opportunities for complications than the Dremels printers. It has a heated build plate for improved adhesion without the use of glue, two nozzles for dual-filament printing, and a very large build volume. The nozzles on this printer get **EXTREMELY HOT** and will cause burns/injury if touched. The build plate also gets **VERY HOT** and can also cause burns. Never touch either of these things unless the temperature readout on the screen reads 40 degrees Celsius or less.

Turn it on using the switch on the left side of the front (fig. 5a), and insert the SD card containing the file to be printed. Before doing anything else, remove the magnetic build plate cover and run both the X and Y axis calibration procedures by pressing the button, scrolling down to Calibration, and choosing the desired calibration mode. The machine will tell you if any of the corners are too high, and if one is high, use micro-adjustments with the provided hex tool (fig. 5f) to perform the needed adjustments. Turn the hex screw within the corner(s) that needs adjusting (fig. 5d) slightly right to lower a corner, and slightly left to raise it.

Once this has been done, check that the nozzle distance is correct. Within the calibration types, there is a nozzle distance mode, where the nozzles will hover above the hotbed. Be careful, as they will be **EXTREMELY HOT** during this process. Slide a piece of paper under both nozzles. Use the hex tool to adjust the screw on the right side of the extruder body to adjust tilt between the two

**fig. 5d, Bed Leveling Adjustment**  
nozzles, and the control knob to adjust distance from the bed, until both nozzles provide slight resistance to moving the paper under them.

Once this is complete, you're ready to replace the hotbed cover, ensure it is aligned, and move on to filament loading. Press the knob and choose Filament, then choose the nozzle you wish to load or unload (1 or 2). You'll choose between unloading or loading - unload if filament is loaded that you want to change, and load if there is no filament loaded and you are ready



to load your filament. For unloading, the machine will handle everything. For loading, you must insert the end

## Nearpod and Nearpod Gold

The College provides Nearpod Gold membership for 12 months to students and faculty via an award code which we provide upon request. They can redeem the code by going to [nearpod.com/redeem](http://nearpod.com/redeem) and following the instructions.

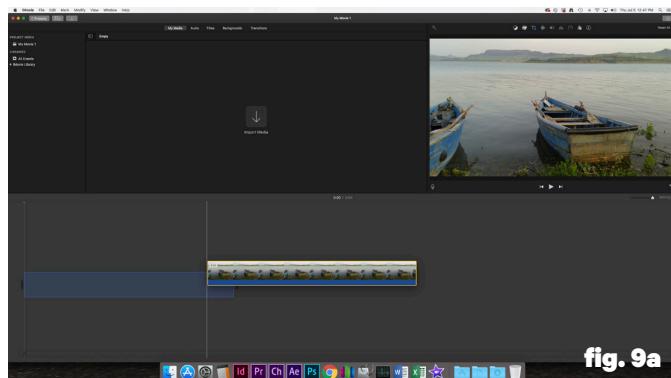
## Video Editing - Green Screen

At The EDvolution Center, one of our core services is the ability to record and edit videos using green screen technology. One of the most common questions from students is regarding where to find good background images, video and music for their projects. Unfortunately, due to copyright regulations, it is not permissible to simply download material from sources like Google or YouTube and reuse them. They will need to obtain material from a royalty-free source.

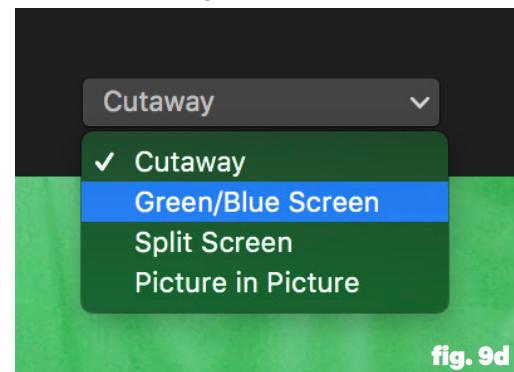
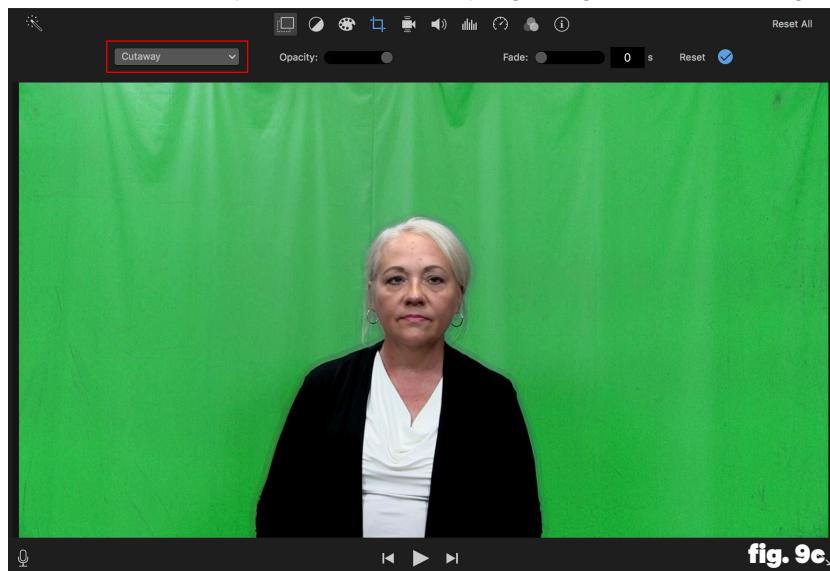
Royalty-free music and audio can be found on Incompetech ([incompetech.com](http://incompetech.com)) and all types of media can be found on Wikimedia Commons ([commons.wikimedia.org](http://commons.wikimedia.org)).

Green screen functionality is one of the most important video editing functions we provide, and this requires post-production editing to complete this effect. Students will use either iMovie or Camtasia to perform this effect.

To utilize green screen on iMovie, the background image or video must be placed into the timeline prior to the actual green screen footage (fig. 9a). The green screen footage can then be placed above the background image in the



timeline (fig. 9b). To activate the green screen effect, double-click the green screen footage in the timeline, and then click in the “cutaway” box toward the top-right (fig. 9c), and select “green/blue screen” (fig. 9d).



To utilize the green screen effect in Camtasia, refer to the video on this topic on The EDvolution Center's YouTube Channel.



of the filament into the receiving hole (fig. 5e) and then press the button with “Insert” selected, and the machine will handle the rest.

Once filament is loaded and calibrations are done, you can press the knob, select the SD card, and choose the file you want to print. Monitor the machine for the first layer at least, as the MAKEiT Pro is prone to issues. There are more maintenance procedures necessary for this machine such as nozzle cleaning, nozzle replacement and other now-and-then basis procedures, which are covered in the MAKEiT Pro-L’s manual.

### **Processing 3D Print Requests**

Processing a 3D print request has several particular steps, which are as follows:

1. Review request against rubric and approve or deny request based on findings from rubric review. Ask GA or Coordinator for a decision if you are still not sure after checking the request against the rubric.
2. Forward the Wufoo request email to the provided student email address and add our response (approved, declined, more information requested) to the email. Leave the subject line as it is so that Wufoo request numbers can be used to search for emails in the future.
3. Put the request in the spreadsheet and fill out all applicable fields. Be sure to update the “communications” field so that others know the communication status of the request, as well as the progress status.
4. Fulfill approved 3D print requests by printing them and making sure to record the estimated cost of the project as calculated by Simplify3D in the spreadsheet.
5. Email requestors of completed requests using the appropriate email template, informing them of completion. Be sure to update the spreadsheet to reflect the updated communication status.

### **3D Printing Approval Rubric**

Criteria	Yes	No
Is the requester a current student, faculty or staff member of the College of Education, Health, and Human Studies?	Keep going!	Are they a current SEMO student, faculty or staff member? Are they a community teacher? If yes, ask the Coordinator. If no, decline.
Did the requester give TEC at least three weeks to complete the request?	Keep going!	Did they give TEC reasonable time (given the amount of printing to be done) to complete the request? If yes, keep going. If no, stop.
Is the request for more than 50 of something?	Is the amount to be printed going to cause issues with printing other requests? If no, keep going. If yes, stop.	Keep going!
Does the request fit within TEC 3D printing guidelines?	Keep going!	Stop.
Is the request tied to a clear curricular purpose? This means that the print request has an obvious tie to the stated educational purpose.	Approve this request!	Can you ask clarifying questions to get a better connection to curricular purpose? If yes, do so. If no, decline this request.

### **Simplify3D Cost Estimations**

Simplify3D provides an easy way to see the estimated cost of a print, which we use to estimate the total cost of 3D printing over a given time period. Before using this function though, we must ensure that the cost estimation values are appropriate.



# Job opening flyer

# **JOB OPENING**

Student employee positions starting Fall 2021

## **KENT LIBRARY**

Heather MacDonald Greene Multimedia Center

Hiring student employees to start Fall 2021! This position includes 3D modeling, 3D printing, video production, graphic design, and more!

See our job posting  
on REDHAWKjobs for  
more information!



**GRAPHIC  
DESIGN**



Application deadline November 10, 2021

**YOU'LL  
DO  
THAT  
HERE.**



**3D  
PRINTING**

**library.semo.edu**

I created several variations of this job opening flyer in 2021. It complies with brand guidelines and incorporates suggested design concepts. Variations included targeted wording for different academic departments, and sparing use of lighter colors for printed flyers, vs. more intense usage of more vibrant colors for digital distribution. The photos used in this flyer are royalty-free photos.



# Kent Library stand-up poster



The poster is a vertical stand-up design. The top section features the Southeast Missouri State University logo (a red building with a dome) and text: "SOUTHEAST MISSOURI STATE UNIVERSITY · 1873®" and "Kent Library". Below this is a black box with the phone number "573.651.2232" and website "library.semo.edu". The middle section has a red background and contains "Free community library card" and "Public computer resource access". The next section has a blue background and is titled "Heather MacDonald Greene Multimedia Center" with subtext: "3D modeling, printing, and scanning", "A/V production and editing", and "Digital art and design". The following section has a gold background and is titled "Special Collections & Archives" with subtext: "Regional history", "University archives", and "Rare Book Room". The bottom section has a teal background and is titled "Arts Resource Center at the River Campus" with subtext: "Fine and performing arts materials". The background of the poster is a grayscale photograph of a library interior.

**SOUTHEAST MISSOURI**  
STATE UNIVERSITY · 1873®  
Kent Library

573.651.2232  
library.semo.edu

Free community library card  
Public computer resource access

**Heather MacDonald  
Greene Multimedia Center**  
3D modeling, printing, and scanning  
A/V production and editing  
Digital art and design

**Special Collections  
& Archives**  
Regional history  
University archives  
Rare Book Room

**Arts Resource Center  
at the River Campus**  
Fine and performing arts materials

I designed this poster over a photo from the university's photo archive to serve as an unobtrusive, but informative, poster to be displayed on or beside Kent Library's table at public-facing events such as welcome-back events and informational fairs. I created this design specifically to incorporate specific text that was provided to me.



## Thanksgiving break hours sign

# THANKSGIVING BREAK

Due to Thanksgiving Break, the HMGMC will be closed or operating with reduced hours during and around Thanksgiving week.

November 21-27: Closed

November 28: 6pm-8pm

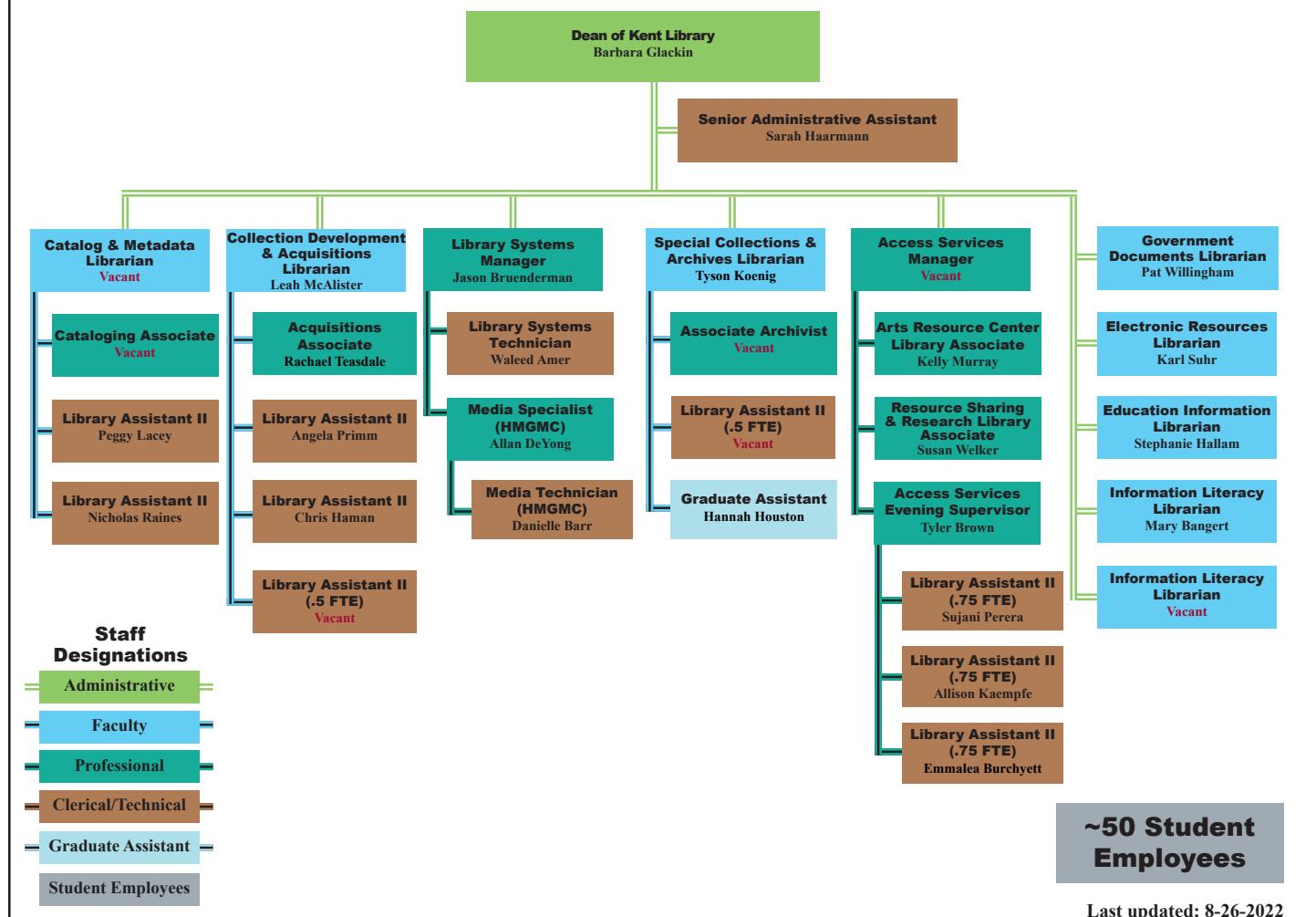
Regular hours will resume Monday,  
November 29.

**Created using a royalty-free image and brand-compliant visual design to elegantly display a temporary set of hours of operation.**



# Organizational chart

## Kent Library Organizational Chart: AY23



Created using colors that both conformed to a brand palette, and satisfied the chart's requestor, this chart illustrates the staff and management/direct report structure of Kent Library as of August 2022.

## Web banners

Created over royalty-free photos to add visual appeal to sections of a website, and designed within brand guidelines.





# ENGAGING PRESENTATIONS



# AUDIO PRODUCTION



# 3D MODELING AND PRINTING

# THANK YOU!

**I appreciate that you have taken the time to review my work.**