

# Assistive Technology and STEM:

Five assistive technology guides  
to create tools for impact.



Matthew LeVac M.S. OTR/L  
Therapy Supervisor



# About Me

---

- Occupational Therapist and Therapy Supervisor at ACCEL
- Graduate Certificate in Assistive Technology from NAU
- Arizona Chapter Leader for Makers Making Change
- Late bloomer to the tech field



# About this guide

- The purpose of this guide is to allow anyone who has a passion to make things the opportunity to impact the life of a student with exceptional needs.
- Any tool on this guide can benefit a special education classroom in your school district or in your community.
- Each slide has a tool that will have a link to a website that will have an online guide on how to create the tool.
- Resources at the end will allow you to view other assistive technologies that can be created.



# What can you make?

- Non-3D printed tools
  - Adapted Toys
  - Ipad stand
- 3D printed tools
  - Keyguards
  - AT Makers Switches
  - Pen Holder





Adapted  
Toys

Guide



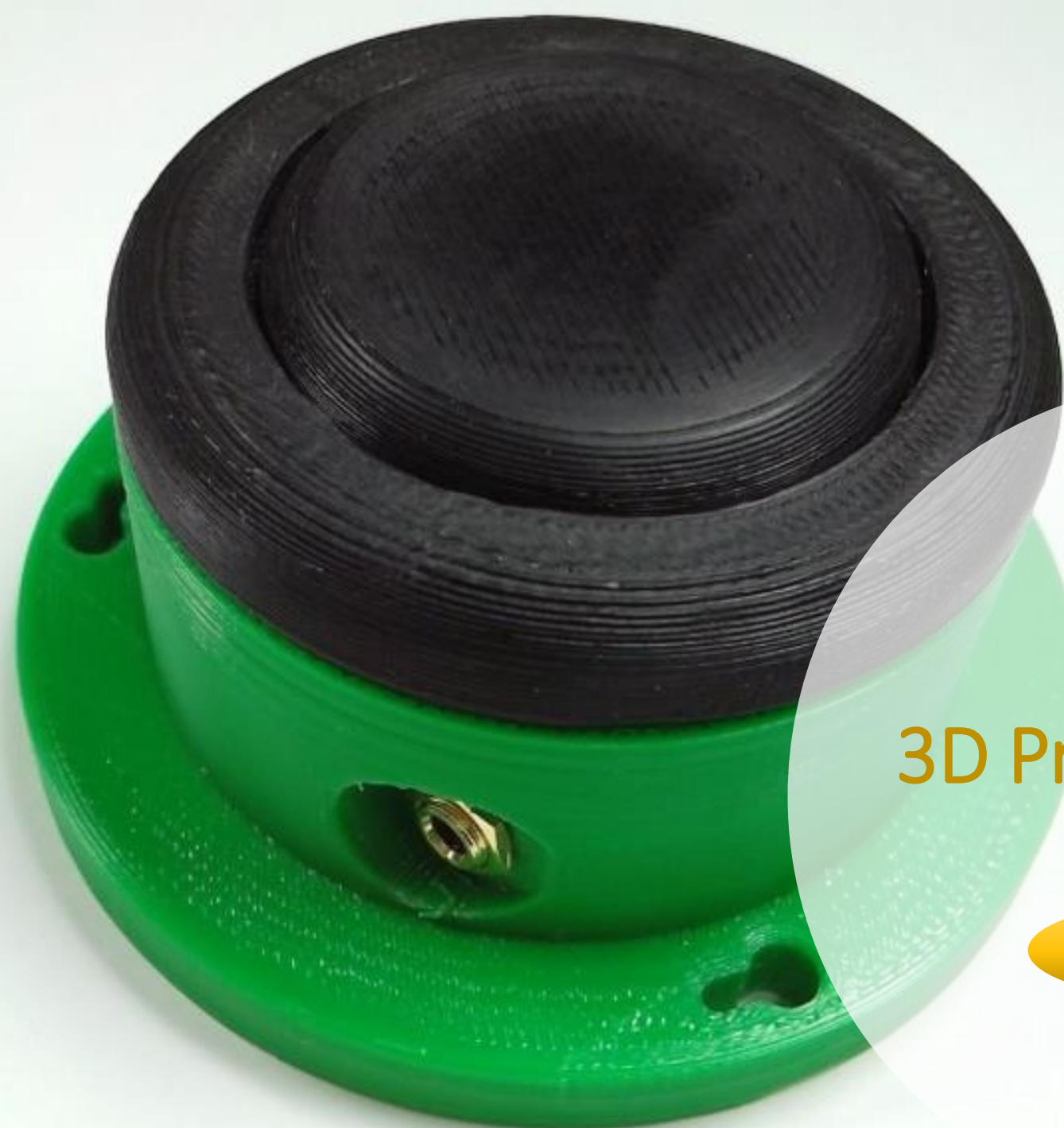
# DIY Ipad Stand

---

**Guide**







# 3D Printed-Switches

---

**Guide**



# Keyguards

Guide







# Penholder

---

Guide





# Resources:

# AT Makers Resources

- <http://atmakers.org/>
- <https://www.makersmakingchange.com/>
- <https://depts.washington.edu/adaptuw/>
- <https://replayforkids.org/>
- <http://www.project-core.com/>
- <http://atnomad.org/>

# Makers Making Change

---

If you are interested in learning more check out the Makers Making Change website below.

[www.makersmakingchange.com](http://www.makersmakingchange.com)



## Makers Making Change

A Neil Squire Program



# Makers of Change Challenge

- Annual AT Maker challenge help by Southwest Human Development
- View website for more information

<https://atmakerschallenge.com/>



**MAKERS of Change**  
ASSISTIVE TECHNOLOGY CHALLENGE

SAVE THE DATE **SEPTEMBER 17, 2019**

Join us for the second annual **MAKERS of Change Assistive Technology Challenge!**

Teams will be challenged with three new assistive technology scenarios, which will utilize IOT technology and design.

The six week challenge will end with final presentations held in front of a panel of judges at the Burton Barr Library on Saturday, November 16.

**2018 Sample Scenario**

Patricia is a 23-month-old girl with seizures and hypotonia after a near drowning when she was 15 months old. She is now unable to sit independently and will fall to the side or slowly collapse forward. She uses a custom made seating system that holds her up, but after a few seconds her head falls forward. The family and team would like to see that Patricia can use her custom supportive seat to work on holding her head upright. Can you help us measure when her head is in the correct position and encourage Patricia to hold that position?

For more information, contact David Reno at (602) 769-3958 or [dreno@swhd.org](mailto:dreno@swhd.org)

LEARN MORE AT [SWHD.ORG/MAKERS](https://swhd.org/makers)

Benefiting  southwest human development  
making a better future for every child

<https://atmakerschallenge.com/>



# Contact info

Matthew LeVac

Email: [mlevac@accel.org](mailto:mlevac@accel.org)

Phone: (602) 995 7366

