Deep Dive into: DIY Assistive Technology for the New Normal

AbleNet Inc.,
June 2021
Greetings from South Carolina!

Rachell Johnson, MCD
CCC-SLP
AT Team Lead
Florence One Schools/Stepping Stones Group
Virtual AT consultant with the MN Technology For Home Program
Hello from Minnesota!

Barb Kelii MA OTR/L

Occupational Therapist with Mounds View Public Schools
Independent Assistive Technology Consultant
Speaker disclosures

**Rachell Johnson** is receiving financial compensation from AbleNet Inc. for this presentation.

**Barb Kelii** is receiving financial compensation from AbleNet Inc. for this presentation.

This presentation contains products that can be purchased in most cities and towns at “Dollar” stores, local markets OR thru internet merchants such as Amazon. Some links are provided to sites where purchases can be made. The presenters have no affiliation with nor receive any financial compensation if you choose to purchase any of the items discussed in this presentation.
Learning Objectives

Participants will:

- Identify and locate at least 3 DIY resources
- Gain insight into the usefulness of DIY technology for e-learning, distance education, and virtual AT services
- View DIY tech examples to utilize in their day-to-day practice
Session Outline

- What are the challenges to implementing DIY?
- DIY for virtual AT assessments
  - Computer access
  - Remote access
  - Working with multiple devices
- DIY for distance learning and teletherapy
  - Communication and participation
  - Written expression and Literacy
- Other DIY resources for your toolbox

*our handout is the full presentation and we added as many links as we could!
DIY AT

Overcoming Challenges
How can I overcome barriers to DIY?

**Safety**
- Has it been tested?
- Is it safe?
- Test it
- Trial & error
- Would this hurt someone?

**Making**
- Who is going to make it?
- Partnership
- AT Makers
- Makers Making Change
- Stem & Robotic Clubs

**Materials**
- How much is it going to cost?
- Money Saving
- Fraction of the cost to buy
- Make a materials list
- Create a makers budget
Some of our favorite materials for DIY
AT services

AT Assessments
Computer Access
Head Trackers

Traditional Eye Gaze Cameras & Head Trackers
● can be expensive
● may not be available

How can these products help during an AT assessment?
Remote Access
Windows 10 Quick Assist

A therapist or teacher can use this to gain access to another Windows 10 device.
Chrome Remote Desktop

A therapist or teacher can use this to gain access to another device that is using Chrome as a browser.
Other Remote Access Methods

- Teamviewer
- Zoom
- Microsoft Teams “Give Control”

Use your virtual meeting platform **screen sharing** function to view your client’s screen.
  - Therapist view
  - Coaching
Working with Multiple Devices
Using Multiple Devices

Cost alternative: Jmount by Communicare

Off the shelf phone holder! Great for parents and therapist to use together to provide a view of the AAC device!
Consider what you already own!

Don’t forget about items you might have tucked in a closet!

You can swap out the mount plate from your camera for a phone or tablet mount!
Distance Learning and Teletherapy Resources
The New Normal
Digital Resources
A free app in the Google Workspace for Education tools for computer, tablet, or iOS. **OT example; ST example.**
You can Jam a physical activity or home exercise program

Jamboard can be used as a teletherapy tool when working with speech, OT, and PT students.
Green Screen Therapy

To DIY

- use green felt, paper, or curtain/shower curtain
- make sure your manipulatives are made with an exact green color match
- Use free backgrounds and felt pieces from PlaySpark
Free Google Tools

Google Slides
- Bitmoji Classrooms
- AAC modeling
- Ready made-CVI resources
- Create your own-CVI Slides
- Drag and drop activities

Google Docs
- Voice Typing
- Explore Tools/Image Search

Additional Google Resources: controlaltachieve.com
Communication and Participation
Recordable Buttons

- 30 seconds of recording time
- Affordable $10-$12
- Easy to replace
- Vocabulary of the week
- Repetition in stories

See the completed A-Z Keep Talking Poster from Call Scotland

Amazon Recordable Talking Button
Communication at Home

Use your fridge as a communication board
Add food choices
Use product wrappers to represent real objects
Use photos or print them from online.
Easy Communication at Home

Use a cookie sheet to make a magnetic object choice board.

Use product wrappers to represent real objects.

Consider the size; more options with smaller objects.
Home Made Boards

- Behavior Token Board
  - Dollar store cutting board with handle
  - Velcro
  - Picture Symbols

Visual Schedule

Choice board
Communication Boards

Enlarge a picture board at photo center

Use with a laser pointer

Be creative with your placement!
Laser Pointer Under $5

- Dollar Store Laser Pointers and Eyeglasses versus very expensive Laser Pointer
Laser Pointers

- Switch adapted laser pointers cost $129.00+
- An alternative by RJ Cooper cost $29.99
Literacy & Written Expression
3-Ring Binder Slant Board

- 3-4 inch binder
- Paper clips
- Magnetic sheet
- Magnetic strip
- Velcro
- Small piece of wood for the lip
Pool Noodle Pencil Grips!

They are so soft, easy to make different sizes, and can be used with Right or Left handers!
Document Camera

IPEVO Mirror Cam 6-pack for $39.99
Adapted Writing

Materials:
- Business card sheet protector
- Picture symbols

No need for glue or velcro.

Snap into a binder. Make multiple sheets to create:
- paragraphs
- Stories
- Book reports

Use a symbol word bank.

You can reuse symbols for other writing assignments.
Pool Noodle letters!

Alphabet order, Name building, CVC and sight words!
DIY Wireless Switch

- Wireless mouse
- Small box or sandwich container
- Sponge
- Velcro
- Scissors

- Cause and effect activities
- Page turning
- In combination with partner assisted scanning

Screenshots from Tarheelreader.org
Other Items for your ToolBox
Floral Foam for Positioning

Make stands for tablets and phones!
So easy to cut and shape! These are covered in Press ‘N Seal to keep the foam from getting green flakes everywhere!

Use for tablets or phones
Think Outside the Box

Be creative while using safe and available materials

Paintbrushes + assistive touch becomes a quick fix in an emergency for an ill-fitted case.
Chrome Music Lab

- Several different activities to do
- Use it with a touch screen or mouse
- Have the student present their screen and you can see them writing.
- Or Use use a tablet or phone positioner idea
Be Active Kids

- Home DIY
- Activity Sheets
- Movement
The Do It Yourself OT

- Website links
- How to Resources
Eat
Speak
Think

- Free low tech picture symbols
- Multilingual resources
- Lots to explore!
Virtual Calming Rooms & Apps

- Sound
- Visual
- Yoga
- Helpful links
- Home or School use

Rosemount Apple Valley Eagan ISD 196 Virtual Calming Room
Osseo Area Learning Center Virtual Calming Room
Mindpowerful powers app for kids
Other Literacy Resources

- Story Jumper
- Book Creator
- LessonPix
- Boardmaker Student Center
Voice Amplifiers

Teachers! Save your voice and let your students hear you better while wearing a mask!

Click here for an example of how an amplifier sounds while wearing a mask.

Students can use during speech therapy while maintaining social distance!
DIY Voice Amplifiers

Can use other bluetooth mics/headsets, or lapel mics. Check how it works with a mask on!

Portable Bluetooth Speaker $10 and up!
Use cabinet door bumpers as tactile cues for a mouse and/or keyboard.
These handy add-on hardware devices can help solve both positioning and computer access problems!
SUGRU Mouldable Glue
Check out our Wakelet!

DIY AT & AT Resources

https://wakelet.com/@DIY_AT_and_AT_Resources4821
Thank You!

Rachell Johnson, M.C.D., CCC-SLP  AT Team Lead and AT Consultant
consultrachell@gmail.com

Barb Kelii, MA OTR/L  AT Consultant
tctechgal@gmail.com
Credits

Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by SlidesCarnival
- Photographs by Unsplash
- Backgrounds by SubtlePatterns