







Technology Solutions Toolkit

Table of Contents

About this Toolkit	3
 Part 1: Tech Solutions	4
Tools & Tech Examples	5
Strategy Examples	8
Environment Examples	9
 Part 2: Tech Solutions Plan.....	10
Starting a Tech Solutions Conversation.....	11
Tech Plan Form.....	15
 Part 3: Communication Supports.....	21
 Part 4: Daily Living Supports.....	24
Funding Tech Solutions in Oregon.....	26
Resources	27
Definitions	28

About this Toolkit

Welcome to the Tech Solutions Toolkit! Use the kit to follow along with the video series: Technology Solutions Training for Support Professionals. Both can be found at: <https://cv-atlab.org/tech-training>.

This Toolkit was created for support professionals but may also be helpful for people with disabilities, their family and friends, or anyone who would like to learn more about Tech Solutions!

Support professionals help empower and equip people with disabilities who receive social services. They provide one-on-one care and interaction. They are sometimes called Direct Support Professionals (DSPs) or Personal Support Workers (PSWs.) The support is provided in a person-centered approach with the goal of promoting independence and self-determination.

The Technology Solutions Toolkit was created by Community Vision, a disability non-profit in Portland, Oregon.



The creation of this Toolkit was funded by the Oregon Office of Developmental Disabilities Services.



Note for Facilitators:

Make sure to download the **Facilitator Guide** from the training website!



Scan the QR code to
access all training videos,
materials, and resources!

Part 1: Tech Solutions



Tech Solutions are anything that help people with disabilities participate in life! Tech is more common than ever and can often make everyday tasks easier. You may have asked your phone or smart speaker a question, dictated a text message, or used closed caption on a video. In addition, most off-the-shelf tech has built-in accessibility features that can make it easier to use. Tech solutions can also be specialized equipment such as assistive technology or adaptive devices.

Tech Solutions include the **Tech and Tools**, but it also includes simple solutions such as **Strategies** and how the **Environment** is set up. On the next five pages, you will see examples of all of these. Use these pages while watching the first video in this series: Part 1, Tech Solutions.



Tools & Tech Examples

1. Communication

- Devices
- Communication Board
- Communication App



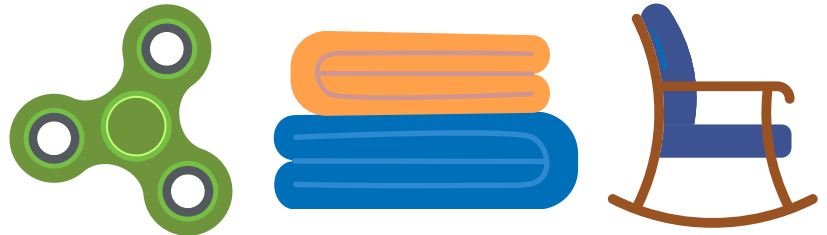
2. Mobility

- Wheelchairs
- Walkers
- Cane



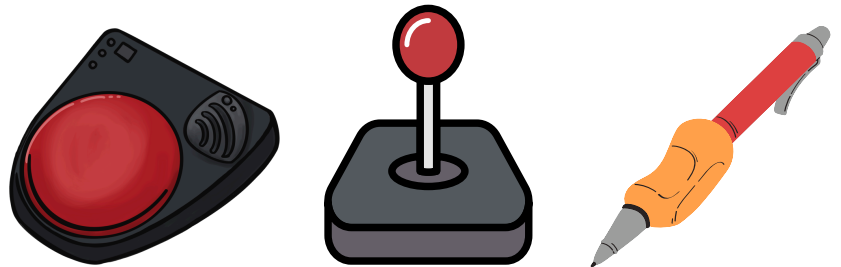
3. Sensory

- Fidgets
- Weighted Blanket
- Rocking Chair



4. Fine-Motor Access

- Switches
- Joystick
- Pencil Grip



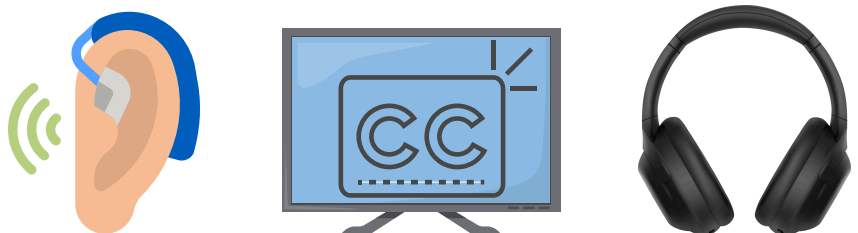
5. Vision

- Glasses
- Screen Readers
- Walking Cane



6. Hearing

- Hearing Aid
- Subtitles & Closed Captions
- Headphones





Tools & Tech Examples

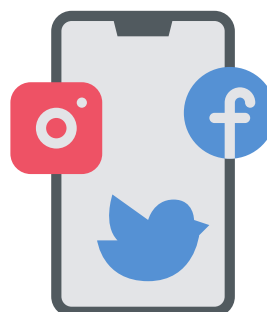
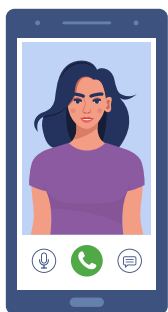
7. Emotional

- Feelings chart
- Meditation App
- Deep breathing visual



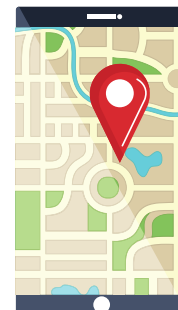
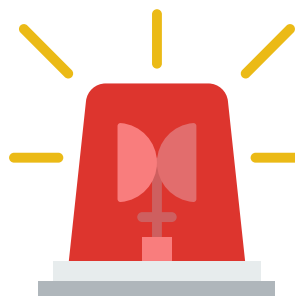
8. Social

- Video Call
- Social Media
- Email Access



9. Safety

- Doorbell Camera
- Alarm
- GPS



10. ADLs

- Raised toilet seat
- Angled spoon
- Automatic soap dispenser



11. Smart Home

- Smart Speaker
- Smart Bulb
- Smart Plug

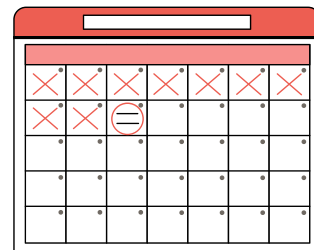




Tools & Tech Examples

12. Planning & Time

- Timers
- To-do list
- Calendar



13. Budgeting

- Financial Plan or Money Map
- Apps
- Organizer for receipts, coupons, etc.



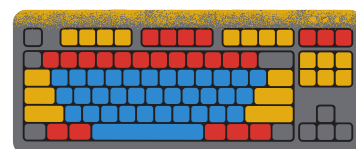
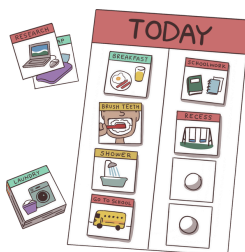
14. Getting Around

- Interactive Maps
- Transit or ride share app
- Adaptive car seat



15. Work & School

- Picture schedule
- Adaptive mouse or keyboard



16. Rec & Leisure

- Adaptive trike
- Adaptive gaming
- Audio books





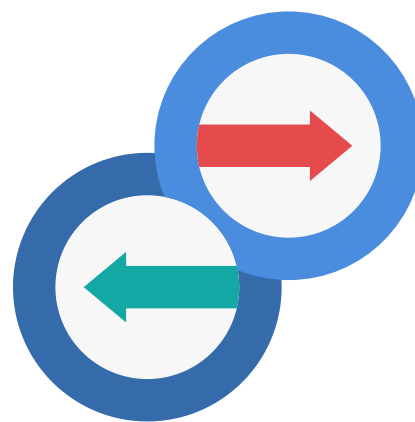
Examples of Strategies (‘The Way We Do Things’)

Wait Time



Give plenty of wait time for the person to respond to questions. Avoid asking more questions during this time.

Transitions



Provide plenty of advance notice for upcoming changes, such as:

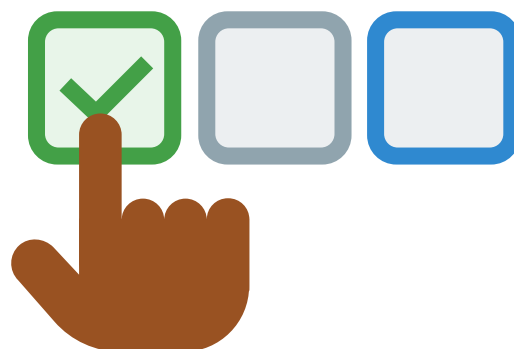
- a new support person
- the end of an activity

Calming



Take three deep breaths to help reduce stress, anxiety, and heart rate.

Clear Choices



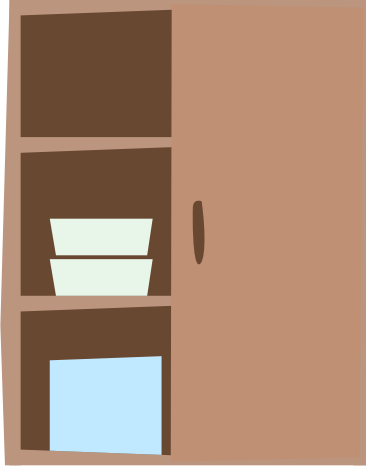
Make sure people know their options. Then present options clearly.





Examples of Environmental Set-up

Household Items within Reach



Move everyday items such as bowls, plates, or clothes to a lower shelf or somewhere within reach.

Lighting & Floors



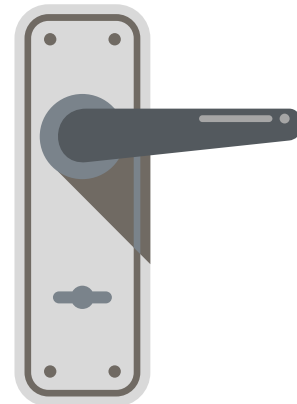
Clear the floor of loose rugs, trip hazards, and clutter. Use good lighting.

Important Items!



Place important items such as keys in the same spot every day. Put them where they are easy to find and see.

Re-Think Handles



Replace drawer knobs with handles/pulls and door knobs with levers. These may be easier to grab.



Part 2: Tech Solutions Plan



Hopefully the first part of this toolkit got some ideas brewing about Tech Solutions for someone you support. You may be asking, now what? Where do I start? Start with a conversation about technology! This section of the toolkit walks you through how to start a **Tech Solutions Conversation** and what a **Tech Plan** looks like.

Use the following pages while watching the second video in this training series: Part 2, Tech Solutions Plan.



Starting a Tech Solutions Conversation

There are **five steps** to starting a conversation about Tech Solutions. Ask the questions below to the person you are supporting. If verbal communication is hard, get help from family, friends, and professionals. Learn more about **Communication Supports** in Part 3 of the Toolkit!

At the end of the five steps, there is a place to make notes about your own thoughts. You may have some different ideas than the person you support and that is ok!

Supported Person: _____

Interviewer: _____ **Date:** _____

1. Get to Know the Person

What are your interests and hobbies? _____

What and who is important to you? _____

What does a typical day look like for you? _____

2. Possibilities for More Independence

Is there anything that you would like to be more independent in?

Think about the things you do each day: getting dressed, eating, house work, having fun, talking with friends, etc. Is there anything you wish you could do by yourself (or need less help with?)

Will you show me around your house?

For Interviewer: Make notes on how they use and find things, get things done, pick up or reach for things, move around their house, and how much assistance is needed for daily activities.

3. Tools & Technology

Do you use any assistive technology, adaptive devices, or items that help you each day? (Look through the Tools & Technology Example List for ideas.)

If yes:

► Which of these work well for you? _____

► Which of these do not work well? _____

► Does anyone help you use these? _____

► What do you do if they break or stop working? _____

Make Notes about Tools & Tech used in the past:

4. Simple Solutions

Strategies:

Are there ways that you do things that help you be more independent? Are there strategies you or your support person use? See Example Strategy List on page 8 for ideas.

Environment:

Is there anything you would change about the way your environment is set up? Your environment can be your room, house, yard, workplace, school, etc. See Example Environment List on page 9 for ideas.

5. Next Steps

- ▶ Get permission from the person to **share their answers** with the team.
- ▶ A key person from the team will **start a Tech Plan**.
- ▶ A case manager can help with funding items.

.....

INTERVIEWER NOTES:



Tech Solutions Plan Overview

A Tech Solutions Plan is a place to organize current technology solutions, as well as future needs and ideas. The Plan can be categorized by life area. Use the Conversation Worksheet and input from the team to fill out the chart on the next page. For ideas, here are some examples of Tech Solutions:



Tools & Technology

A **TOOL** or piece of **TECHNOLOGY** may help someone be more independent. For example:

1. Someone who is sensitive to loud noise uses sound reduction headphones.
2. For reminders, someone uses alarms and reminders on their smart phone.
3. Having a picture choice board on a slant board makes it easy to see and select meal options.



Strategies

Sometimes a simple **STRATEGY** can be very effective. For example:

1. Someone who does not use speech taps their leg to show they have something to say. Their caregiver responds and says "Do you want your communication book? Or is it something else?"
2. After asking someone a question, you pause for 30 seconds to give them time to process what you said.



Environment

Setting up the **ENVIRONMENT** could help someone do something for themselves, instead of others doing it. For example:

1. Clearing the floor of rugs and rearranging furniture can make it easier to walk independently.
2. Putting a big bowl by the front door may help with finding and remembering keys.

Tech Solutions Plan



Tools & Tech



Strategies



Environment

Name: _____

Date: _____

Life Area	Current Solutions	Future Needs & Ideas
Example Daily Living: Cooking	<ul style="list-style-type: none">• Chooses recipes on YouTube• Uses electric can opener, adaptive knife, & non-slip cutting board• DSP opens packages• DSP reminds to set timers	<ul style="list-style-type: none">• Needs help with remembering clean up steps• Can't reach some pots and pans• Research automatic stove shut off options for safety
Communication		
Mobility		
Sensory		

Tech Solutions Plan



Tools & Tech



Strategies



Environment

Life Area	Current Solutions	Future Needs & Ideas
Fine-Motor Access		
Vision		
Hearing		
Safety		

Tech Solutions Plan



Tools & Tech



Strategies



Environment

Life Area	Current Solutions	Future Needs & Ideas
Emotional Regulation		
Social & Relationships		
Activities of Daily Living (ADLs)		
Budgeting		

Tech Solutions Plan



Tools & Tech



Strategies



Environment

Life Area	Current Solutions	Future Needs & Ideas
Work & School		
Recreation & Leisure		
Smart Home		
Getting Around the Community		
Planning & Time		

Tech Solutions Plan



Tools & Tech



Strategies



Environment

Life Area

Current Solutions

Future Needs & Ideas

Part 3: Communication Supports



Communication is a human right! How do you support people who have limited or no use of verbal speech? One way is by using Augmentative and Alternative communication (AAC). AAC is communicating without the use of speech. In the next few pages, you will see AAC tools that range from “no tech” to high-tech speech generating devices.

In addition to AAC tools, you will learn how to be a good communication partner by using support **strategies** and making adjustments to the **environment**.

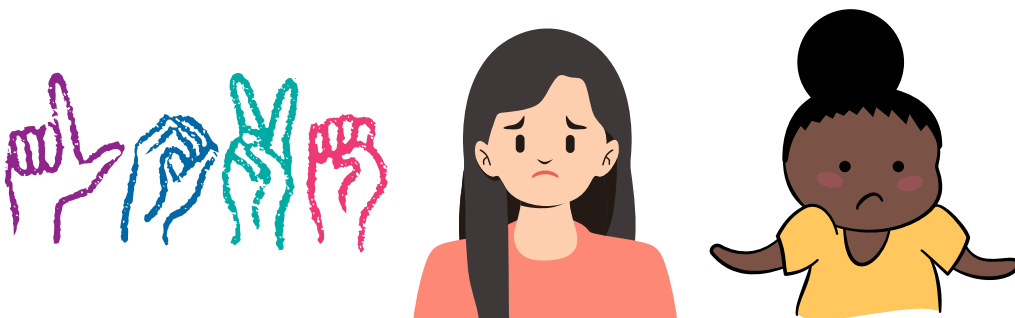
Use the following pages while watching the third video in the series: Part 3, Communication Supports.



AAC Communication Supports

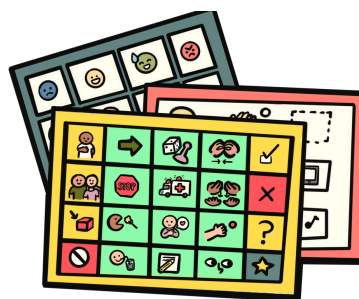
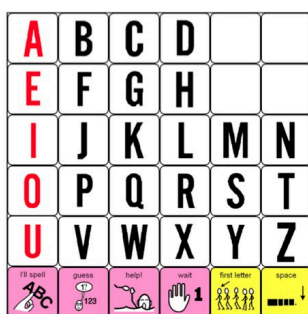
No-Tech

- Sign language
- Facial expressions
- Vocalizations
- Gestures



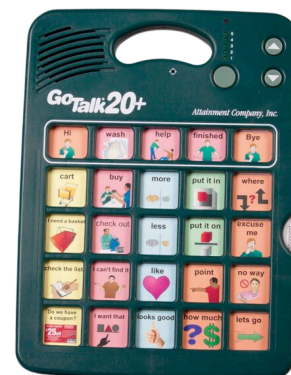
Paper-Based

- Alphabet board
- Communication book
- Picture cards



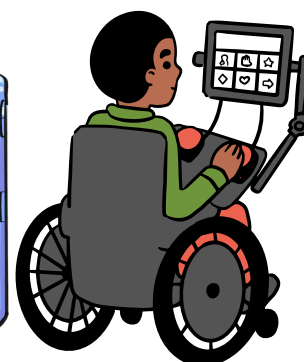
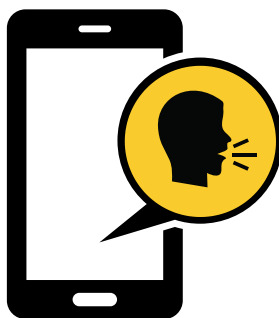
Battery Operated

- Message buttons
- Recordable simple devices
- Multi-Cell Devices



High-Tech

- Tablets or phones with communication apps
- Speech-generating devices





Getting Started with Communication Supports

① Fill out the Communication Section on the Tech Solutions Plan

Include 'Current Solutions' and 'Future Needs and Ideas.'

Consider referring to a Speech Language Pathologist.

② Get to Know the Person

Learn about what they want to communicate. Don't start with a communication tool and try to make it fit the person.

③ Questions to Consider

How and what are they able to communicate now?

- How do they answer yes/no questions?
- Who understands them best and why?

④ What is Hard to Communicate?

Think about the "reasons we communicate" from the video.

How do they tell you when they:

- | | |
|---|---|
| <input type="checkbox"/> Feel sad, happy, worried, bored (emotions) | <input type="checkbox"/> Have a question |
| <input type="checkbox"/> Need something (request) | <input type="checkbox"/> Greet someone |
| <input type="checkbox"/> Want something to stop (refuse) | <input type="checkbox"/> Make a comment or complain |
| | <input type="checkbox"/> Share news or information |
| | <input type="checkbox"/> and more! |

⑤ Ideas to Try!

After finding missing parts of their communication, come up with a plan to build supports.

- Include them in conversations. Talk TO them, not ABOUT them.
- Find ways for them to make decisions and choices.
- Start with ideas for participation and fun.
- Think about how you could be a better communication partner.



Part 4: Daily Living Supports



Daily Living Supports can help people with disabilities live more independently. These supports include Activities of Daily Living (**ADLs**) self-care tasks such as eating, bathing, and cooking. Daily Living Supports also include **Smart Home** technology, as well as solutions for **planning** and keeping track of **time**.

In this section, you will meet several people who use daily living supports. You'll learn about real life examples, and have a chance to come up with your own ideas for daily living supports.

Use the following page while watching the fourth video in the training series: Part 4, Daily Living Supports.



Daily Living Supports Examples



Kelsey is able to turn on kitchen appliances with a wireless switch. She has the switch velcroed to her tray and prefers that appliances are placed on a separate table. These tips are written down in Kelsey's Tech Plan.



Alina has a smart speaker with a digital assistant and can ask questions like "What is the weather today?" and "What time does the post office open?" She learned some strategies such as: talk slowly and clearly to the speaker, take a deep breath before speaking to increase speech volume, decrease background noise, and place the speaker in a central location.



Laddie is able to control lights in his house with smart home equipment. He has an iPad, adaptive stylus, smart plug, and iPad mount to attach to his bed frame. He remembers to ask is support staff for help when his smart home tech does not work. He keeps a trouble-shooting cheat sheet next to his bed.



Orlando uses supports for planning and keeping track of time. He has a large wall calendar for important events and color codes each one. He also uses a daily to-do list that hangs on the refrigerator. Before he goes to bed each night, Raphael checks his calendar and makes a to-do list for the next day.



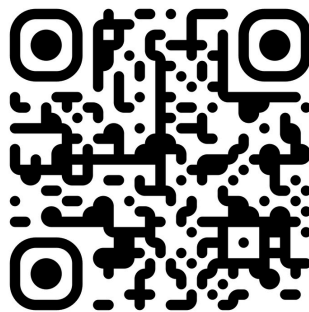
Lamar can reach food more easily in his kitchen. He has a smaller, more accessible refrigerator and freezer. He puts items on the middle shelves. He stores dry and canned food in lower drawers. He also has lower hooks placed around the house for important things that he needs to grab quickly and easily, like neck ties for work.

Funding Tech Solutions in Oregon

If someone lives in Oregon, has a developmental disability, and gets services through the **Oregon Office of Developmental Disabilities (ODDS)**, there is funding available for Assistive Devices and Technology! In Fall 2023, Oregon updated its guidelines, called the Worker Guide for Assistive Devices, Assistive Technology, and Specialized Medical supplies. This guide is often called the **AT Worker Guide** for short.

The [AT Worker Guide](#) explains what types of tech are funded and how to apply. The Guide is on the ODDS website on their [Worker Guides page](#).

Community Vision made an easy-to-follow **video** that explains the Worker Guide. Scan the QR code or click the link below!



<https://youtu.be/D3lC5MDe8yI>

Resources

See the Resources listed at the end of each module.

Community Vision Assistive Technology Lab

Access Technologies Inc. Oregon's Statewide AT Program

Understanding Assistive Technology: Simply Said - Short video made by The PACER Center

Getting to know Assistive Technology - Minnesota's Tech Resource Center

CTEC - California's Communication Technology Education Center

Communication Bill of Rights - National Joint Committee

Smart Homes Made Simple Guide - Pennsylvania Assistive Technology Foundation



Access resources here!

Definitions

Adaptive Devices: any tool (including a product, system, or machine) used to help people with disabilities or impairments complete activities of daily living (ADL).

Activities of Daily Living (ADLs): basic personal everyday tasks such as eating, using the restroom, grooming, dressing, and bathing.

Assistive Devices and Technology: equipment, aids, controls, programs, operating systems, supplies, or appliances which enable someone to increase their ability to perform ADL/IADLs, health related tasks, or communicate in the home and community.

Direct Support Professional (DSP): professionals who work directly with people with intellectual and developmental disabilities, with the aim of assisting the individual to become integrated into their community or the least restrictive environment.

Instrumental Activities of Living (IADLs): include more complex activities related to the ability to live independently in the community. Such as managing finances and medications, food preparation, housekeeping, and laundry.

Personal Support Worker (PSW): help children and adults with intellectual or developmental disabilities who receive Medicaid in-home services through the Office of Developmental Disabilities Services.

Self-Determination: the process by which a person controls their own life.