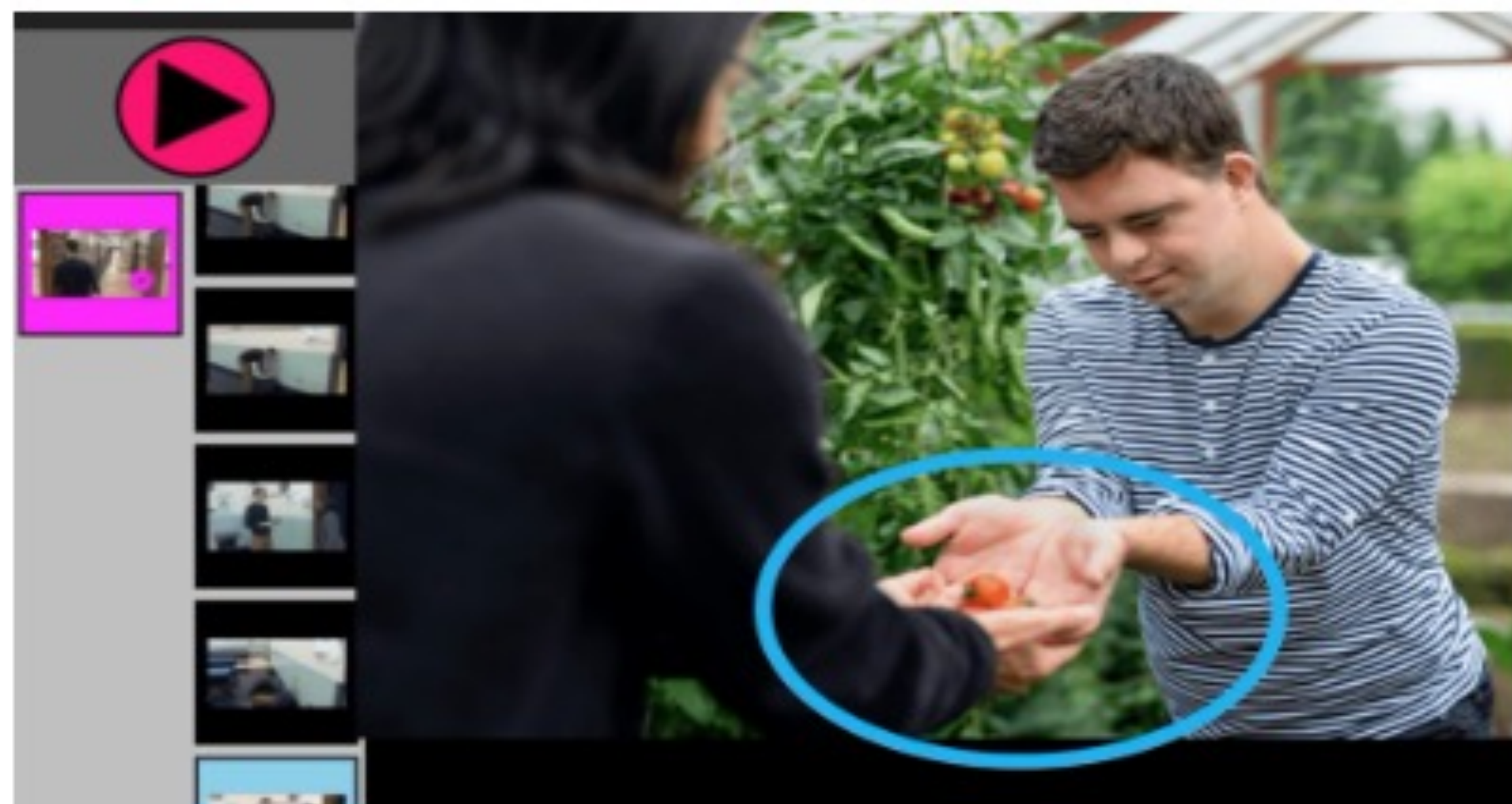


Rationale

- Individuals with developmental disabilities (i.e., autism spectrum disorder, Down syndrome) can face communication challenges in community participation.
- Less than 10% of adults with disabilities who **need** communication supports **receive** communication supports.

Video VSD Technology



This is the image that would be seen by the participant - they can see a video model of their expected behavior (give the fruit to a staff member) and they can use the hotspot (the area with a blue circle) to retrieve digitized speech programmed in the app.

Methods

Video Visual Scene Displays (VSDs)

- Combine video modeling with communication supports
 - Support both participation + communication
- Are easily developed
 - Capture video of events/ interests
 - Pause at key moments
 - Create visual scene at these junctures
 - Add hotspots with speech output
- Are quickly learned
 - Series of single-case experimental studies
 - Babb et al., 2019, 2020, 2021; O’Neill et al., 2017
 - Randomized Clinical Trial (RCT) in progress
 - 72 participants by 2025 (20 to date)

Sample Participant

Cameron*

- Male, 22
- Autism Spectrum Disorder
- Worked at integrated employment setting for adolescents and adults with autism and intellectual disabilities
- Prompt dependent to complete activities

Prior Communication Abilities and Challenges

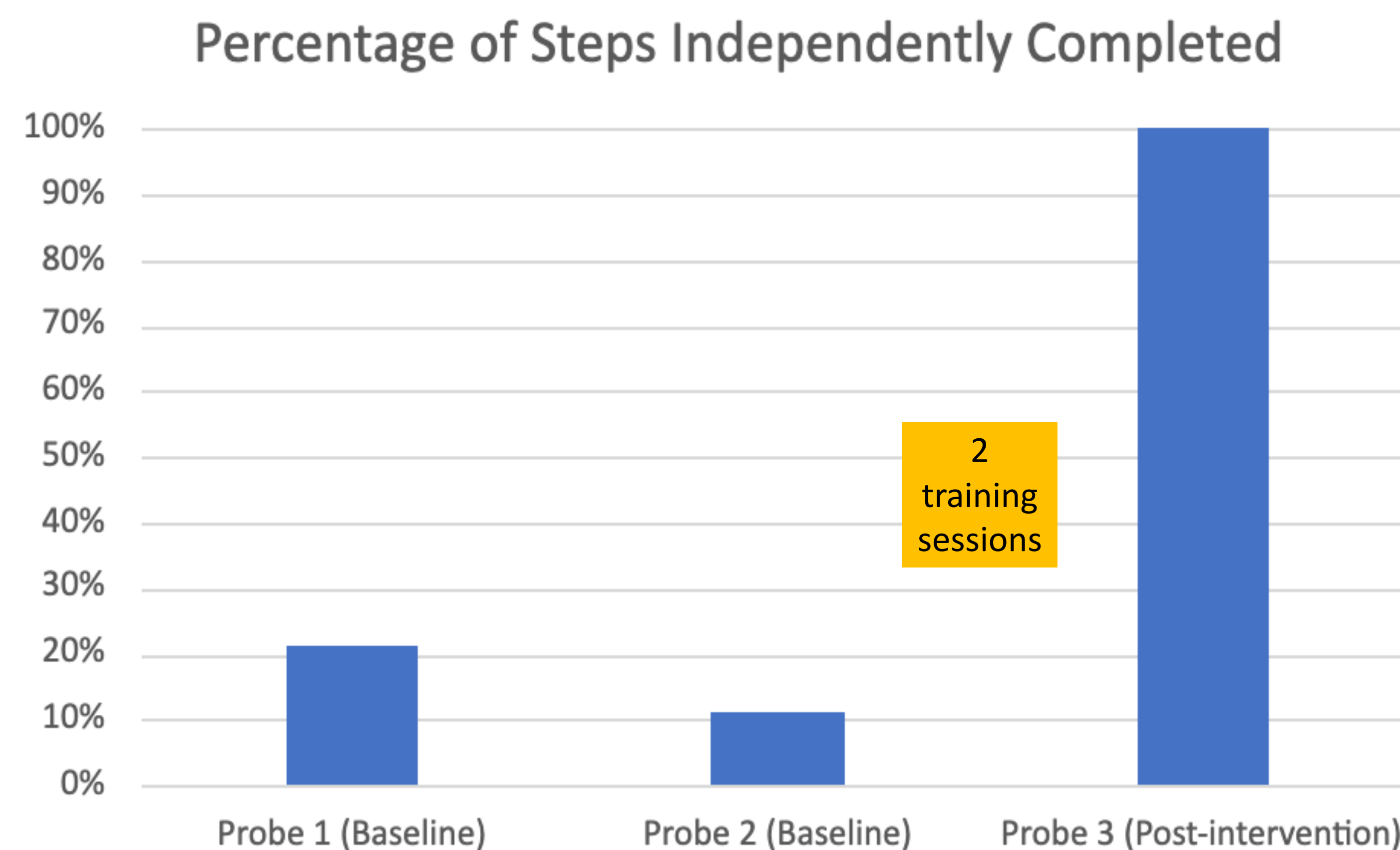
- Some use of speech
- Limited vocabulary
- Responded with one-word answers to questions
 - “yes” “no” “I don’t know”
- Rarely initiated

Sample Task

Working in the Greenhouse (5 of the 19 steps)

- Feed fish in the tank
- Measure and record height of 8 plants
- Sweep the floor
- Report completed work to supervisor
- Ask what should be done next

Sample Results

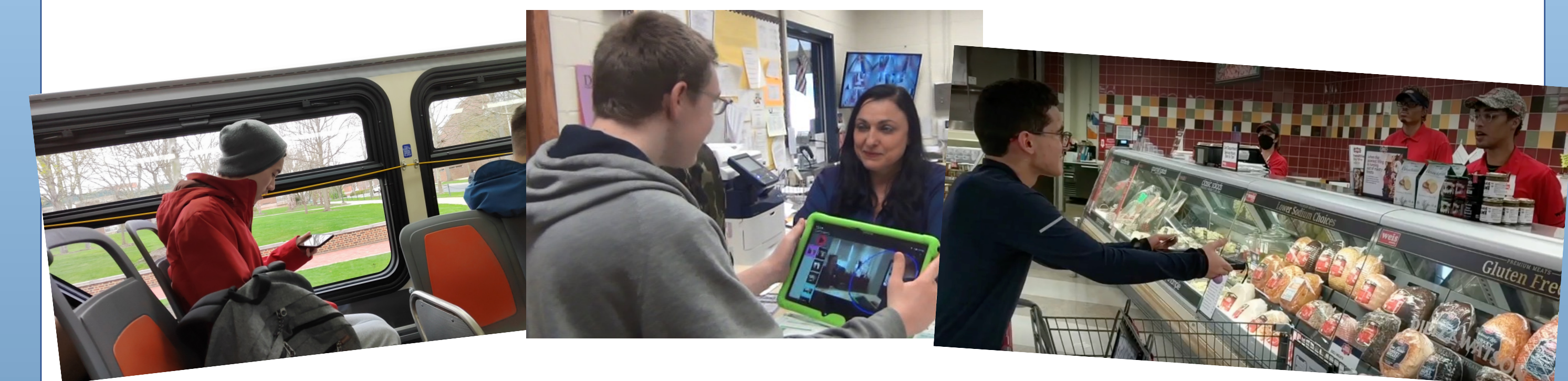


Following the two brief training sessions, Cameron independently completed 19 out of 19 steps (100%) during the final probe session, this included 2 communication acts.

Discussion & Implications

- All participants (n=20) have demonstrated strong increases in:
 - independent participation in community vocational activities
 - appropriate communications acts
- All participants (n=20) indicated that they would like to continue to make use of the Video VSD app
- The employment supervisors reported that:
 - the video VSD resulted in increases in independent participation and communication
 - they would support continued use of the video VSD app

Benefits of a Video VSD Approach



- Supports **independent performance** of complex, multi-step skills in community settings
- **Easily learned and used** by autistic persons
- Provides **communication assistance** as needed
- Makes use of **highly portable, commonly available technology**
- Easily developed for **individually selected goals** by typical support providers
 - family members, group home workers

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