**Supplemental Material S4.** Operational definitions.

**Barriers/Challenges**
- Mentions having trouble or difficulty
- Mentions having an issue
- Mentions requiring more time
- Mentions an activity being stopped or discontinued
- Mentions somebody not understanding
- Mentions financial difficulty
  - *Subthemes:*
    - Intrinsic: related to an individuals' inherent skills or characteristics
    - Extrinsic: related to outside environmental factors

**Supports**
- Mentions assistance, support, help, or prompting from staff, family, communication partner
- Mentions personal needs or strategies used to help them through the experience
- Mentions or refers to intrinsic or extrinsic supports
- Mentions existing or ideal program or activity rules and structure
- Mentions own physical motor skills and abilities
  - e.g., "I can physically do most of it on my own"
- Mentions teaching staff, a communication partner, or family a technique or skill to improve the participant's experience
- Mentions support from family, friends, staff, or communication partners
  - e.g., encouraging words or smiles
- Something a person needs to do to be successful within an activity
- Mentions financial support
- Mentions communication being key or required for support from instructors
  - *Subthemes:*
    - Intrinsic: related to an individuals' inherent skills or characteristics
    - Extrinsic: related to outside environmental factors

**Benefits**
- Mentions individual benefits, positive outcomes, or positive feelings
  - e.g., physical benefits, emotional benefits, cognitive benefits, social benefits, health and wellness benefits
- Mentions something that the individual gets or takes away from the experience
  - e.g., enjoyment, fun, likes
- Mentions something that is important to the individual

- Mentions education and advocacy for the general public about individuals with disabilities
- *Subthemes:*
  - Intrinsic
    - Mentions physical/wellness benefits, love for the outdoors, fun/enjoyment/happiness, adventure, like/love
  - Extrinsic
    - Mentions social opportunities, meeting others, teaching others, environmental factors

## Communication

- Mentions talking or communicating
- Mentions types of communication modalities
  - e.g., email, cell phones, typing, verbal, communication board/device, laptop, computers, whiteboards, yes/no, social media, talking
- Mentions multimodal communication
- Mentions sharing information or teaching others about what works best for them
- *Subthemes:*
  - Methods: Mentions communication modality (e.g., email, cell phones, typing, verbal, communication board/device, laptop, computers, whiteboards, yes/no, social media, talking

## Recommendations

- Mentions "encouraging" others
- Uses the statement "I recommend," "I suggest," "make sure," "I would like to see," "I encourage," "should establish," "caregivers should," "___ should," etc.
- Mentions something they would like to have happen within an activity
- Subthemes
  - People who use AAC
    - Recommendations for AAC users and their caregivers
  - AAC Partners
    - Family, caregivers, volunteers, instructors, program directors

## Uncodable

- Statements that do not fit into any other category