Access Solutions: a skills development course designed for intergrading powered mobility and technology for functional and successful outcomes

Two Day (1.4 CEU)

Prerequisite: Attendee must have attended an ASL Clinical Course within the last three years.

Course Description:
This two-day advanced course will take a deep look at power wheelchairs and their electronics while focusing on wheelchair performance and integration of external devices such as computer access, AAC devices, phones and tablets. It will help with strategies for connecting technology to a client’s access method and training for more successful outcomes. We will demonstrate why some strategies are ineffective for functional movement and independence.

This course will include the identification of power wheelchairs, their electronics and the components that will be needed to connect to technology. Participants will review wheelchair programming on each electronic platform. It will break down the differences between a client using a joystick versus a three-quadrant head control and how they differ when connecting to external devices.

Attendees will participate in a hand’s on lab where they will be required to program all power chairs with alternative access, drive them, use the seat functions, and set up the chair to access a communication device, computer, tablet and/or phone through the drive control.

Participants will be able to program and design a mobility training activity for someone new to mobility. They will also be able to discuss working with an existing patients’ wheelchairs to help them gain true independence with external devices working through the drive control of their power chair.

The first day will be lecture and hands on with programming and reviewing components of wheelchairs and identifying the various ways computers, AAC devices, phones and tablets can be connected. We will discuss how to identify components necessary to reach clients goals and how to justify them which will help with the decision-making process for better patients’ outcomes.

The second day will be a review and group case studies. The participants will have to demonstrate a plan for a wheelchair evaluation and a functional training schedule for a student new to mobility. They will also have to determine components needed for a person that has an existing power wheelchair and needs to have access to a computer, phone, and seating. They will be required to install the components, program the wheelchair and map navigation sequences needed to use the technology. Finally, the participants will present their case study to the class for review and discussion, which will be the competence test.

Objectives:
1. List and identify 5 power wheelchairs with the type of electronics that are available on them
2. Describe programming parameters and options for each of the power wheelchairs available
3. List wheelchair components necessary to connect external devices such as an AAC device to work through a drive control
4. Understand Bluetooth options and describe when their use would be most beneficial to a patient
5. Describe and identify at least 2 forms of alternative access for power mobility and ways they connect to external devices with an explanation of why connection option was chosen
6. Describe navigation options for someone using a three-quadrant drive control for mobility and external devices
7. Design a mobility training activity to teach a person new to mobility

Outline:
Day One
9:00-9:30  Course overview and explain learning objectives
9:30-10:00  Discuss and identify external technology needs
10:00-10:30  Review wheelchair components and considerations for someone with alternative access what compromises need to be considered
10:30-11:00  Review of wheelchair electronics
11:00-11:30  Hands on programming lab
11:30-12:30  Lunch
12:30-2:30  Hands on programming lab (continued)
2:30-3:30  Discuss wheelchair components necessary to add the external technology and connect to lab chairs
3:30-4:00  Discuss Bluetooth and what options are available for external devices and power wheelchairs
4:00-4:30  External devices and how they function
4:30-5:00  Question and Answer – Overview
Day Two
9:00-9:30  Review programming for powered mobility
9:30-11:00  Hands on connecting power wheelchairs to AAC devices, computers and phones
11:00-11:30  Review case studies
11:30-12:30  Lunch
12:30-2:30  Group sessions case studies with equipment identify components, install on chair and program for the scenario
2:30-4:30  Presentation of case studies to the class
4:30-5:00  Case studies reviewed, class evaluation and questions answered