

AT 206: HOW DO I DETERMINE WHAT TYPE OF SWITCH THE STUDENT CAN USE?

Michelle L. Lange, OTR/L, ABDA, ATP/SMS



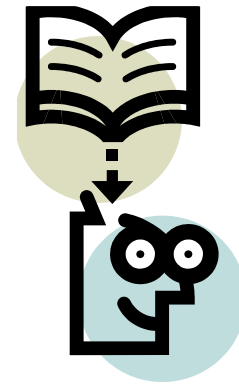
Introductions

- Who I am
- Goals?
 - Put in chat box



What are we covering?

- Switch Types
 - Mechanical
 - Electrical



Let's get Practical!

- Think of a client you are working with
- As we move through the course, think of what type of switch you may try for access to assistive technology

Switch Types



Switch Types

- Mechanical
 - activation pressure
 - travel
- Electrical
 - no pressure
 - travel often required
 - less feedback

Mechanical Switches

- Plate
- Light Touch Plate
- Lever
- Pneumatic
- Other

Plate Switches

- AbleNet
 - Big Red
 - Jelly Bean
 - Spec



Michelle's Tool Bag Item

Plate Switches

- AbleNet
 - Buddy and Big Buddy Switches
 - Formerly Tash
 - Trigger



Plate Switches

- Adaptivation/Origin
 - Orby Switch



Plate Switches

- Enabling Devices
 - Pancake
 - Jumbo
 - Also available with Latch Timer
 - Gumball
 - Mini Gumball



Plate Switches

- Enabling Devices
 - Plate
 - Compact



Plate Switches

- Inclusive TLC
 - Smoothie



Light Touch Plate Switches

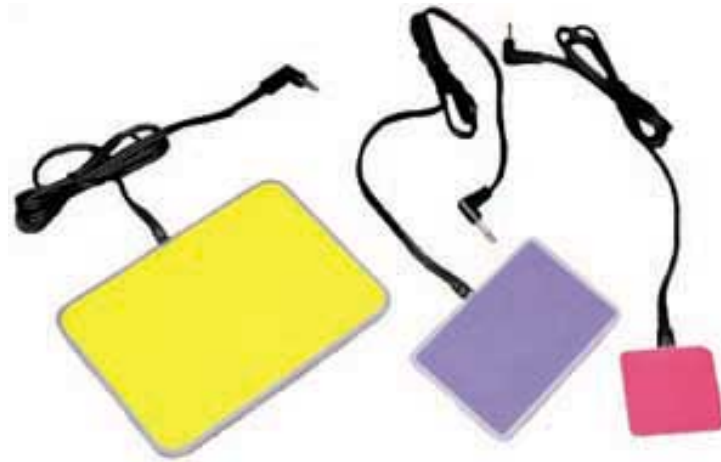
- AbleNet Microlite
- Personalize with Color

Michelle's Tool Bag Item



Light Touch Plate Switches

- Adaptivation Pal Pads



Light touch Plate Switches

- AMDi
 - Moon Switch



Light Touch Plate Switches

- Enabling Devices
 - Saucer
 - Mini saucer



Light Touch Plate Switches

- ASL
- Ultra Light switch
- Extremely light touch
- Various color strips for top
- 2 tap holes



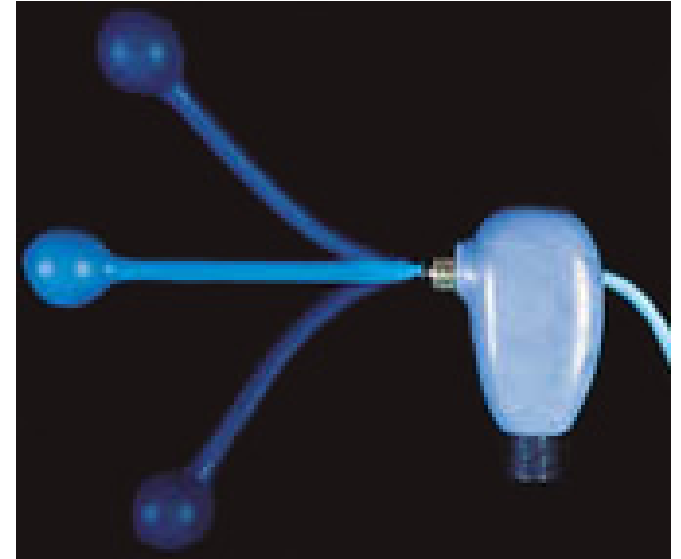
Lever Switches

- AbleNet
 - Flex



Lever Switches

- Enabling Devices Ultimate



Pneumatic Switches

- AbleNet
 - Grasp
 - Pneumatic



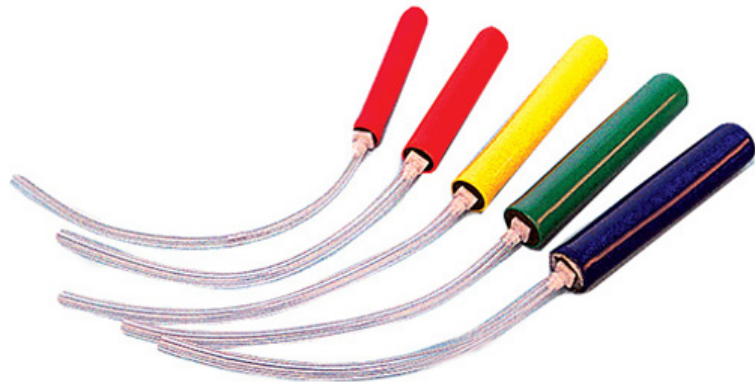
Pneumatic Switches

- ASL



Pneumatic Switches

- Enabling Devices
 - Sip and Puff
 - Grip



Lip switch

- ASL
- Designed for end of pneumatic switch
- Depressed by lip or tongue



Questions?

Electrical Switches

- Proximity
- Fiberoptic
- Infrared
- Touch
- Sensor
- Photocell/Photoelectric
- Sound activated
- Piezo Electric Film (detects vibration)

Electrical Switches

- Power source required
- Less auditory and tactile feedback
- Typically more costly

Proximity Switches

- AbleNet Candy Corn
 - Big and Little



Proximity Switches

- Adaptivation
- HoneyBee
- Battery
- Adjustable range



Proximity Switches - adjustable

- Adaptive Switch Laboratories (ASL)
- AMDi
- Stealth Products / Mo-Vis
- Switch It!

Michelle's Tool Bag Item



Fiberoptic Switches

- Adaptive Switch Laboratories
- AMDi
- Stealth Products
- Switch It!

Michelle's Tool Bag Item

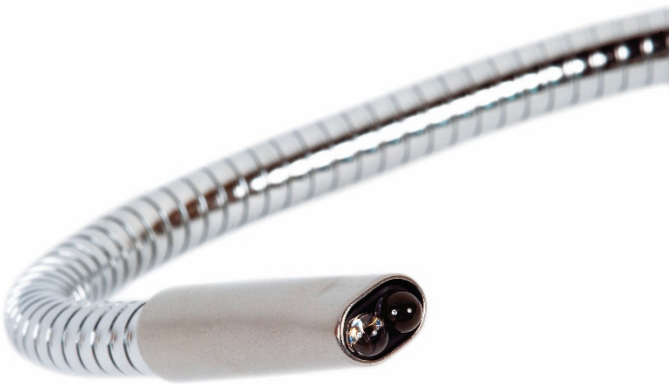


LocLine for mounting



Infrared Switches

- AbleNet
 - SCATIR (Self-Calibrating Auditory Tone Infrared)



Infrared Switches

- Enabling Devices
 - Eye Blink Switch



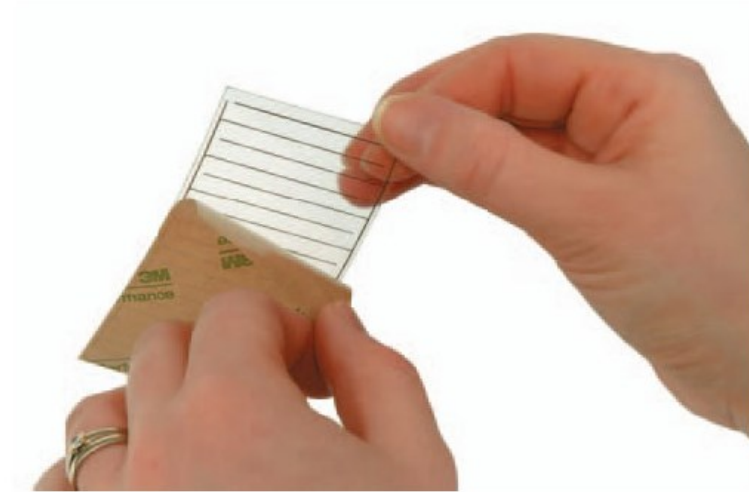
Touch Switch

- AbleNet Plate Switch



Touch Switches

- Adaptation Taction Pads



Touch Switches

- AMDi
 - Membrane switch
 - Picture Plate switch



Sensor Switches

- A sensor picks up muscle activity
- Not recommended for power mobility as vibration of the power wheelchair may activate the switch

Sensor Switches

- Enabling Devices



Sensor Switches

- Tinkertron EMG Switch



Sensor Switch

- Control Bionics
- Neuronode EMG switch



Piezo Electric Film

- Vibration of a piece of film causes activation
- Not recommended for power mobility as vibration of the power wheelchair may activate the switch

Piezo Electric Film Switches

- Adaptivation
 - TableTapper
 - Also a switch latch and timer



Piezo Electric Film

- Enabling Devices
 - Twitch



Questions?

How Does This Apply to the Classroom?

- The optimal switch type can also make the difference between dependent, assisted and independent access
- Goal is automaticity so that the student can focus on the task, not where the switch is
- No matter where the switch is located and what type of switch it is, it can access technology for education and communication

Let's get Practical!

- What switch type do you think might work for the client you identified?

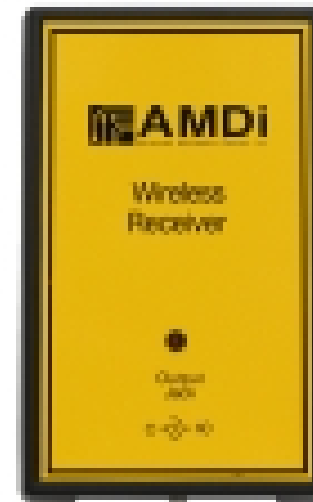
Wireless Switches

- AbleNet
 - Mini beamer
 - Jelly Beamer
 - Jelly Beamer with SLAT



Wireless Switches

- AMDi
 - Wireless switch converter



Wireless Switches

- Inclusive TLC
- SimplyWorks Switch
- Large and small sizes
- Requires SimplyWorks receivers



Bluetooth Switches

- Allows access to iPad (iOS7 and above)
- AbleNet
 - Blue2



Take Home Message

- Optimal switch access is very dependent on optimal positioning
- Optimal switch access is dependent on switch training
 - Motor skills – 300 hits a day!
 - Scanning concepts
- Optimal switch access can make or break AT use and subsequent function, participation and socialization

Questions?

Thanks!

Upcoming Webinars:

- 10/17/18
- AT 207: How do I develop switch skills?

- 11/13/18
- AT 208: How do I develop scanning skills?

Contact Information:

- Michelle Lange
- MichelleLange1 @outlook.com
- www.atilange.com