

**A Current Equipment List of Products I USE; including  
Seating, Switches, Switch Mounting, & Alternative Access**

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***Basic Products I use for assessment with seating***

- 1. EZ Back; Standard** comes in pediatric size, can be used on manual chairs or other seating, this is what I use most often in assessment, now, to assist in trunk support. From: Advanced Mobility Systems, 621 Justus Drive, Kingston, Ontario K7M 4H5 800-661-6716; [www.amstilt.com](http://www.amstilt.com)  
available in USA, check out website: [www.sosrehab.com](http://www.sosrehab.com)
- 2. Mother Earth Pillows;** Flaxseed pillows/bolster in various shapes, used for simulated seating as demonstrated;. Primarily Small bolster(5" x 15") and small flaxseed pillow (7"x 10") 2024 Key West Drive, Suite E, Arnold, MO, 63010; 800-344-2072; [www.motherearthpillows.com](http://www.motherearthpillows.com)
- 3. Elite Head array with mini-laterals from:** Adaptive Switch Labs, Inc., 125 Spur 191, Suite C, P.O. Box 626, Spicewood TX 78669; 1-800-626-8698; [www.asl-inc.com](http://www.asl-inc.com)
- 4. Chest Strap, Elastic, large or small,** from Bodypoint Designs, Inc. [www.bodypoint.com](http://www.bodypoint.com)
- 5. Neck towel roll:** 100% chamois, PakTowl (brand name) I get mine from Campmor; [www.campmor.com](http://www.campmor.com)  
but they can be obtained from many camping/hiking/outdoor stores.
- 6. Chair Hugger and Cuddle loop** (from Abilitations catalog) [www.abilitations.com](http://www.abilitations.com)

***NEW(er) PRODUCTS to look for and use in pediatrics:***

- 1. The Tiger CUB,** will use Invacare's Mark 6 electronics, a small powered chair, half the size of Invacare's powered Tiger, will have new, pediatric seating, a real chair for little kids. Should be ready any day now. Will be distributed by Adaptive Switch Labs, Inc. 125 Spur 191, Suite C, Spicewood, TX 78669, 1-800-626-8698; [www.asl-inc.com](http://www.asl-inc.com)
- 2. X-Panda,** a great high/low chair, uses only one tool (and it's on-board); seating is truly adjustable, not just one piece, can get feet onto floor by taking off footrests completely. Developed by therapists from Europe. Uses one tool, and it's "on board." Also can be configured as a "dynamic" seat, similar to Rock Active's motion. Has various bases, to work from. Distributed by Snugseat, [www.snugseat.com](http://www.snugseat.com)
- 3. Nandu,** a new high/low chair again from snugseat. Just played with it, haven't yet used with a student, but love it, as it is. Let me know if it works for you. [www.snugseat.com](http://www.snugseat.com)
- 4. KidWalk,** finally a hands-free walker, meant to help kids get close, also able to get child in in less than 30 seconds (and that's true) only in two sizes, but will be three. Developed by pediatric therapist with real kids, for real movement, nothing like it!! Two sizes (with lots of growth), already available. Can use headrest bracket with a head array and proximity switches too!! Can potentially replace standers. Is manufactured and obtained from Prime Engineering, Inc. [www.primeengineering.com](http://www.primeengineering.com)
- 5. Activity Chair,** another high/low chair by Rifton. Comes with a rolling base or a standard base. I have only played with it, but I am so glad we are getting choices. Let me know what you think. [www.rifton.com](http://www.rifton.com)
- 6. Leckey's High/Low Chairs; Leckey Mygo and Squiggles;** distributed by Ottobock. Will see in class this year. I haven't yet used, but am happy to see re-design. [www.ottobockus.com](http://www.ottobockus.com)
- 7. ATOM head array,** new headswitch with proximity switches and other controls located within the headrest. Just came out, I have only used it myself trying it with driving a powered chair, very exciting. [www.asl-inc.com](http://www.asl-inc.com)
- 8. Tecla Shield.** Switch access to IPAD, allows multiple switches and configurations; [www.gettecla.com](http://www.gettecla.com) or [www.asl-inc.com](http://www.asl-inc.com)

## Seating System Components

1. **Adaptive Engineering Lab**, P. O. Box 12930, Mill Creek, WA 98082-0930; 800-327-6080; FAX: 800-368-0785; Makes all types of seating accessories, as the two companies above, nice quick release brackets, & adjustable summer/winter hook-ups; love their Posa-fit trunk laterals. [www.aelseating.com](http://www.aelseating.com)
2. **Freedom Designs**, Inc. , 2241 Madera Rd., Simi Valley, CA 93065, 1-800-331-8551; [www.freedomdesigns.com](http://www.freedomdesigns.com)
3. **Bodypoint Designs**, Inc., 80 South Washington #303, Seattle, WA 98104; 1-800-547-5716; prefer their pelvic positioning belts, are padded, and stable, come in various types. also make other seating products like chest harnesses, trays, etc. Also like their new padded ankle supports. Are carrying NEW BED mattress system, very worth looking at, and soon to be carrying a rigid pelvic assist positioner. [www.bodypoint.com](http://www.bodypoint.com)
4. **Roho Inc.**, From: Crown Therapeutics Inc., 100 Florida Ave., Belleville, IL 62221-3429; 800-851-3449 dry flotation or air cushions and seating products, best for pressure relief, very effective. [www.therohogroup.com](http://www.therohogroup.com)
5. **RIDE Designs**, Decaf Back and Forward Cushion: 4211-G South Natches Court, Sheridan, CO, 80110; 1-866-781-1633email: [info@ridedesigns.com](mailto:info@ridedesigns.com); [www.ridedesigns.com](http://www.ridedesigns.com);
6. **JAY Medical**, and **Adaptive Equipment Systems**., [www.sunrisemedical.com](http://www.sunrisemedical.com) .  
rom: Sunrise Medical/Quickie, 7477 East Dry Creek Parkway, Longmont, CO 80803; 800-333-4000; Manufacturer of JAY products including the JAY GS system, pressure relief cushions, drop down seats, seat and back cushions, etc.; always adding new cushions and/or mounts, check site often. [www.sunrisemedical.com](http://www.sunrisemedical.com)
7. **Miller's Adaptive Technologies**, ,2023 Romig Road., Akron, OH 44320; 1-800-837-4544; FAX: 216-376-4948. Make multiple hardware parts and seating components. including various types of clamps. Also have extensive catalog, be sure to obtain it. They have been in business a long time, and are happy to make customizations for a specific situation. Most hardware is especially durable. [www.millersadaptive.com](http://www.millersadaptive.com)

## Custom Molded Seating Products

1. **Otto-Bock's OBSS** (CAD-CAM custom seating;) seating developed on a simulator and then "copied" via light pen into computer for a CAD-CAM development. . OTTO BOCK Two Carlson Parkway Suite 100, Minneapolis, MN 55447-4467; 1-800-328-4058, Contact local vendor. [www.ottobockus.com](http://www.ottobockus.com)
2. **Precision Fit and Signature 2000**; Uses the simulator, but then a "photo" is taken and from that, the custom contour product is developed. They have added "tempurpedic" foam to top their systems. 11861 East Main Road, North East, PA 16428; 814-725-87311; FAX: 814-725-2934; [www.prmrehab.com](http://www.prmrehab.com)
3. **Contour-U seating**; a negative mold is taken of the patient and then shipped to company for the seat and back to be formed, covered and returned to be mounted within the chair. Cushion feels like a dense type foam. Both systems are from **Pin-Dot now owned by Invacare Corporation**. Also has a new way to make these without the "negative mold." Its called the "Scribbler" and requires more technology, but allows you to digitize the individual's shape in real time. [www.invacare.com](http://www.invacare.com)
4. **Silhouette System**; custom seating developed on a simulator, not as aggressive as two systems above, but does allow more contour and support. Also available through Invacare.
5. **Foam in place** Various manufacturers make molds which are created literally while the person is sitting. They are either "partially" foam in place or totally "foam in place" where a cover is added. This is done in "real time" but it is a one-shot deal, can't be altered, is done once only.
6. **Matrix Seating**; not molded as above, a totally different method, contoured with many, unique, build-able, changeable, pieces, more popular in Europe, now available here and in Canada. Have worked with a few kids who had it, haven't recommended it myself, but am interested in it and its use, as it is "thin" rather than so "thick" as all systems above. From: Symmetric Designs, 125 Knottot, Salt Swamp Island, BC, Canada, V8K 2M4, 800-537-1724; [www.symmetric-designs.com](http://www.symmetric-designs.com)
7. **RIDE Designs**, custom contoured seating, make a negative mold first: 4211-G South Natches Court, Sheridan, CO, 80110; 1-866-781-1633email: [info@ridedesigns.com](mailto:info@ridedesigns.com); [www.ridedesigns.com](http://www.ridedesigns.com);

## Electronic and Other Switches

### 1. Proximity Switches, Zero pressure switch/sensor (a capacitive switch/sensor, must get “near” it)

Can be located within a Head Rest (called a Head Array) or placed within a tray for hand use or placed anywhere else.

Can be used with a battery pack in a configuration for single switch use or two, three or four, five switch use combinations for hands, for head, in a tray, or on a headrest or loose.

Can be used in a head array with a powered chair

Can be adjustable (larger switch, can be placed under or behind head array) or fixed; not adjustable.

*I use these the most often, as I find them extremely helpful in most circumstances for assessment and then use.*

### 2. Fiber optic switches, Zero pressure switch/sensor (break the “beam” of light)

Can be located anywhere, but cable must be protected, generally best in a tray, or in tubing

Have adjustability in distance (nearness) to switch

Multiples can be placed very close together if ROM is compromised

Can be used as a “reset” switch and mounted on a head rest, too

### 3. Photo electric switch, Zero pressure switch/sensor (break the beam)

Also has adjustability, I have used this to assist in powered mobility driving with kids with visual impairments, attached to a buzzer/audio feedback to “mark” nearness to wall in hall

From: Adaptive Switch Labs, Inc. (for powered chairs)/ 125 Spur 191, Suite C, Spicewood, TX. 78669;

1-800-626-8698. [www.asl-inc.com](http://www.asl-inc.com)

**These can be mounted** readily in many situations, especially mounted to wheelchairs. Contact ASL. (Adaptive Switch Labs Inc. is used to developing customization, call them and talk).

### 4. Mini joystick, (a very small joystick, light touch, can be mounted multiple places)

If ordering as a speech therapist or teacher, when calling ASL, , (equipment can be purchased directly instead of through ASL which requires a medical supplier as it is most often for powered chairs)

by Adaptive Switch Labs & , 125 Spur 191, Suite C, P.O. Box 626, Spicewood TX 78669; 1-800-626-8698;

[www.asl-inc.com](http://www.asl-inc.com)

### 5. TASH Switches (send for a catalog, these are not all, just ones I often use. Now owned by Ablenet)

**TASH SCATIR switch** (Self calibrating auditory tone infrared) switch, mounted on a gooseneck

**TASH Buddy button**, (light touch with aud. feedback) My favorite

From: TASH, Inc. (Technical Aids & Systems for the Handicapped), [www.ablenetinc.com](http://www.ablenetinc.com)

### 6. Ablenet switches

**Jellybean Switches** ( with aud. and can touch any part of the surface of the switch, fairly light touch)

**SPEC switch** (little jellybean, sold with plate, velcro, or without, LOVE these new ones!)

**Jelly Beamer**, wireless switch, best used with hands, but no cables, (uses batteries)

**Airlink Cordless switch**, again cordless, works with their ECU module, PowerLink

**Candy Corn**, Proximity switch with monoplug

**Bluetooth Switch**

From: ABLENET, Inc., [www.ablenetinc.com](http://www.ablenetinc.com)

## Switch Mounting *(This is not an inclusive list, just some I use now and like)*

**1. Slim Armstrong Mount** From: ABLENET, Inc., 1081 Tenth Ave. S.E., Minneapolis, MN 55414-1312; 1-800-322-0956; FAX: 612-379-9143; [www.ablenetinc.com](http://www.ablenetinc.com)

**2. Switch Mounting Arm**, Comation (see under switches), [www.asl-inc.com](http://www.asl-inc.com)

**3. Switch Mounting Systems, even separate switch Hardware, and Switch Mounting Kits** from TASH (see under switches), [www.ablenetinc.com](http://www.ablenetinc.com)

**4. Stem Switch Mount and Communication mounts by Daedalus Technologies, Inc.**, 2491 Vauxhall Place, Richmond, BC, Canada, V6V 1Z5; 1-800-561-5570; FAX: 604-244-8443: Mounting systems for switches, communication aids, too and trays. Especially helpful, and ;make custom systems. Make attachments and “mounting blocks” for all Tilt bases. My most favorite systems, reliable, adjustable, and durable. [www.daessy.com](http://www.daessy.com)

**5. Magic Arm System**, From: R.J. Cooper, 24843 Del Prado Suite 283, Dana Point, CA 92629, 1-800-RJCooper; [www.rjcooper.com](http://www.rjcooper.com)

## Mouse Emulation and Multiple Switch Interfaces

### 1. Mouse emulation, 3 switch, both wired and wireless, USB

This 3 switch configuration (one switch moves cursor up & down, one switch moves cursor right and left, one switch controls click, double click and click 'n drag). The "hard-wired" mouse emulator is both a 3 and 5 switch, can be configured either way. However, if "wireless" is chosen and you obtain both a transmitter and receiver, then the emulator is only 3 OR 5 switch and cannot be reconfigured. As far as I know at this time, the 3 switch wireless configuration can only be obtained from Comation.

From Adaptive Switch Labs, Inc. [www.asl-inc.com](http://www.asl-inc.com) or TASH, Inc. [www.ablenetinc.com](http://www.ablenetinc.com)

### 2. Other Mouse Emulation and emulators

Mouse emulation can occur various ways, and many manufacturers have alternative mice, like trackballs, or "head" mouse, have different software or other hardware, too. I have tried many, and, finally this whole area of interest in increasing for the individuals we serve the most. Inquire if a "trial" can occur with new equipment, review information on the internet. Talk to your AT consultants, as they have been able to view many of these hardware/software combinations at conferences like Closing the Gap, ATIA, TASH, AOTA, etc. However, as a few additional resources, I do have some favorites. I really love the company INFOGRIP. They sell many products not readily available other places, and some equipment available from other manufacturers. They sell all types of alternative mice, trackballs, etc. They are an excellent resource and a reputable company. They have also developed some software themselves, PointSmart (which you can request a free demo CD to try), which helps really "slow" a mouse among other things (more than you can on the computer's controls).

**Infogrip** [www.infogrip.com](http://www.infogrip.com)

#### The Head Mouse

I love the head mouse. However, many of the individuals I work with can't get control of it quickly, as they are very unfamiliar or inexperienced with the programs/software they are attempting to control. Consequently, another form of mouse emulation or alternative mouse, I think, is more helpful to begin. Once an application or other software becomes very familiar, then a new method of access can be tried. This is when a Head Mouse can be tried. Many of the manufacturers of these costly products do have "loaner" programs, please avail yourselves of these for your students/patients/clients. However, you need to learn to use it first, not just set it up for them to use. You move it through the programs to be tried, and become more familiar with it yourself. I have been around these Head Mice for a long time, and they have come down in price, and "new" ones appear periodically. Please don't just look for the cheapest one, make sure you know the company, how long they've been around, how many have they sold and serviced, and what happens if one breaks?.. Instead of "saving" money up front, "spend" money wisely, by purchasing reliable, durable products. Here is my favorite:

**Origin Instruments'** Head Mouse and Head Mouse Extreme: [www.orin.com](http://www.orin.com)

This device is also sold by many other companies since it works so well. I used to use the HeadMaster, but how you have to wear it on your head, is old technology. You can find others, again, at **Infogrip**.

I saw several new products at CTG this year, and at ATIA, but I haven't yet used them. But make sure you pay attention to how the device mounts, how it is calibrated and most importantly, what software are you managing.

You will need to also look at **On-Screen Keyboard programs** when using a head mouse. Make sure you look carefully through these, too. Again, you can find them through searches on the internet, your local AT resources may have some, but, again, look at **Infogrip**, as they carry several choices, including the popular REACH on-screen keyboards. Then, you need to choose looking at **word prediction and screen reading programs** too.

## Communication Device Mounting

1. Each Augmentative Communication device Manufacturer has mounts for their systems, Prentke-Romich, Dynavox, Salthill, Words+, Zygo, etc. . These are made to fit their devices exactly, and I usually order from them. HOWEVER, you must know where and on what brand chair, and the tubing diameter of that chair's part so that you make sure they will fit the chair. Each chair and each part of each chair is NOT the same diameter tubing.

2. If there is unique tubing, or the company does not make a size to fit your child's chair, call Daedelus below because they can make a fitting for ANY Chair!

**Daedelus Technologies, Inc.**, 2491 Vauxhall Place, Richmond, BC, Canada, V6V 1Z5; 1-800-561-5570; FAX: 604-244-8443; Mounting systems for communication aids, too, switches, and trays; [www.daessy.com](http://www.daessy.com)

3. **Mount'N Mover**: I also really love this new company's products. I think this will really change our whole choice categories for mounting. Please see and try: Mount'n Mover. [www.mountnmover.com](http://www.mountnmover.com)

## *Wheelchair Manufacturers and Programmable Electronics*

### **NEW PRODUCT for pediatric power**

**1. The Tiger CUB,** uses Invacare's Mark 6 electronics, a small powered chair, half the size of Invacare's powered Tiger, will have new, pediatric seating, a real chair for little kids. Should be ready any day now. Will be distributed by Adaptive Switch Labs, Inc. 125 Spur 191, Suite C, Spicewood, TX 78669, 1-800-626-8698; [www.asl-inc.com](http://www.asl-inc.com)

### **2. Invacare MK6 (Mark 6, and past Mark 5)**

**\*\*\*All powered chairs now have new electronics. Invacare's is now Mark 6. However, you will still have MK5 in the schools with students who are still using their chairs.**

My favorite programmable electronics in powered chairs for children who need to use the same methods of access for their powered chair as they would for their augmentative communication device.

These electronics have multiple drives but these drives can be programmed separately specifically in their ECU functions, without being "global" (meaning in all drives.)

In short, this allows the chair's drives to be set up very easily for the new learner. A single drive can be used for only driving, and another could be used for ONLY communication access, and/or for powered seat functions. This allows the adults within the new learner's environment to easily assist the child and the chair to perform in multiple settings easily. Then, the drives can be "re-programmed" as the child develops increased competence in driving and managing the communication device.

When a child is first learning to drive, the chair can be set up to JUST DRIVE, and drive readily, without any need for additional switches or switches to "allow" the chair to be ready to drive. (don't need a select switch)

Also for assessment, each drive can utilize a different method of access without interfering with another drive

To allow the chair's access to work for both driving and for control of the computer or a communication device, a COM unit (just changed to be called an AUX unit for auxiliary) must be ordered. This interface is what is needed to work between the comm. device/computer and the chair. Only Invacare's COM/AUX module allows the choice of a communication device or a "motor" device. The "motor" device has a delay in responsiveness, while the communication selection allows for immediate responsiveness. This is critical when using AAC.

Also, these electronics have auditory cues which are "different" for each function. (Others only have auditory cues for "change" in function)

Don't have to read visual display to work this system.

Also has "torque" separate from "power level" allowing the chair to move very slowly, but still get over bumps.

**a. Action Power Tiger** (comes as small as 10" x 10", (manual tilt-in-space with rigid frame chair, batteries can be removed, and chair can be folded partially) My favorite chair, because a manual base, the ORBIT can also be purchased and voila, two chairs, one set of seating; power and manual chair for the child. This chair is so easy to physically manage by the adults in the environment, when the child is not in it, that is another reason I like it. It is also small enough so that the child can learn how to drive quite readily in this size chair.

Make sure you order the Easy Remote Programmer so that the family and the therapist can alter the programming of the chair as the child gains competence. .

Will use a visual display for ON/OFF control when student uses switches. I order Chin Joystick configuration with toggles to obtain a proportional joystick for attendant control. Will then order Stealth's (see number later in list) mount, so that it can be added to back handles, and removed to use if necessary. Visual display can come with hardwire alteration from Invacare to allow a mono-plug (mechanical switch) control of Drive Select. with visual display with chin joystick as attendant control

Can obtain hardwire change to visual display to allow for alternative switch for ON/OFF from Adaptive Switch Labs. I am doing this now regularly.

Or for another type of attendant control you can use TASH's CA-5 or Adaptive Switch Labs (5 switch) connecting adaptor connecting adaptor for hooking into "driver controller" 9 pin connector, and then the TASH WaferBoard as attendant control while in digital drive as it plugs into the opposite end of the connecting adaptor. I



program the Drive 1 and 2 for "digital"(SJOY or "switch joy" control, (single switches) and the Drive 3 for joystick as "attendant control for parents" Drive 4 can be anyone's.

Or obtain Remote Attendant controller from Adaptive Switch Labs.

**b. The TDX**(center wheeled drive with MKV electronics), **the Pronto (mid-wheeled drive), for the older child. Don't get these large chairs for a very slender child who is still first learning. They are too big and too powerful!!**are also available. Make sure you have utilized an equipment trial with each of these products before choosing them for older students.

With the TDX can have powered tilt, recline, elevating legrests and seat elevation, in fact, have just delivered my first system with powered headrest (all these powered seat functions are from Motion Concepts, now owned by Invacare, but still operated out of Toronto, Canada).

**c. The Spree**, a powered base, with seat elevation. Invacare is supporting this as their "new" pediatric chair. It is too unwieldy, in my opinion, as a "first" chair for many drivers. I prefer the Tiger. Its seat-to-floor height is too large, can't free wheel, which is important for parents. Also, hard to make go very slow, readily. However, always perform an equipment trial, don't just take these opinions. Try and compare.

**d. AT'M chair**, a very small chair in total size, but made for adults, but have put teenagers in it who could use a joystick for use in school when money was an issue. Primarily an indoor chair or sidewalks and even terrain. From: Local Vendors or manufacturer is: Invacare Corporation, One Invacare Way, P.O. Box 4028, Elyria OH 44036-2125; 800-333-6900; [www.invacare.com](http://www.invacare.com)

### 3. Permobil

*Permobil's new electronics are R-net (Penny and Giles). However, you will still ( P&G, Penny and Giles), in the schools with students who are still using their chairs.*

**a. K450 (has replaced the Robo)** seating goes down to floor & has seat elevation, Does not have Permobil's usual front wheeled drive, which I loved for children, but now is a rear wheel drive. But it does go down for feet to be on the floor.

\*\*\*\*I love front wheel drive. I loved these two little chairs, although both are "big" and "heavy" only seating is little. Need to have a van for transport or be quite strong. I will miss them.

**b. Koala** (it's back!) Smaller seating with front wheeled drive, seat elevation and tilt.

**c. K300 PS Jr.** A front wheeled drive larger size chair (supposed to be a "smaller" base, but still very large). It has elevating seat, recline/tilt/power legs, or can be obtained with a stander component, Need vendor who is familiar and can service it well,

**d. M300 PS Jr.**, midwheeled drive powered chair.

From: Permobil Inc., 300 Duke Drive, Lebanon, TN 37090; 800-736-0925; FAX: 800-231-3256;  
[www.permobilus.com](http://www.permobilus.com)

### 4. Quantum Rehab's Products

**a. Q600, 610, 6000Z, 6 Series base** (smallest) is actually not much larger than Dynamo's base, and has more power, with pediatric seating on it, is an adult base. Q-logic does have a great color display, but when using with a head array if child is going to use AAC, still a bit challenging for child to go between driving and AAC access independently. Again, please compare, and try. . .I still consider it a better chair for joystick drivers.

Moving into "free wheel" is a real problem, improved but still a hard chair to "Push" for parents when they need to move the chair around. From: Quantum Products, Inc., (a part of Pride Mobility) 182 Susquehanna Ave., Exeter, PA 18634; 800-800-8586; [www.pridemobility.com](http://www.pridemobility.com)

### ***Powered Assist chairs***

**1. E-motion, pushrim power assist**, this new product is a powered assist system which fits on many manual wheelchairs, allowing a manual chair user to gain some powered assistance, I would like to see this used more for some kids who need to be in rigid framed chairs. Can be added to many types of chairs. from: Frank Mobility Systems, Inc., 1003 International Drive, Oakdale, PA 15071; 888-426-8581; [www.FrankMobility.com](http://www.FrankMobility.com)

**2. E'fx systems:** a powered assisted, can be programmable joystick or not, with a joystick and battery added to manual wheelchair, as motors are in the wheelrims. Again, should be considered more for some kids, than is currently being evaluated. From Frank Mobility, see product above.

\*\*I love both of these systems. They can be put on small chairs, and work great. Also have programmable electronics, not as programmable as others, can have a head array, but I generally use with joystick.

\*\*\*E'fx systems can work with a head array.

### **Interesting Further Reading:**

*This is not a bibliography, as I have shared with you, instead my own understandings and musings as a treating therapist who has had so many wonderful children as a part of my clinical life. However, I do attempt to base my observations, thoughts, and attitudes not only on experience but also on current and past readings, and studies of others. These books I have found particularly helpful to me, I offer them to you for further study yourself, if you so choose. This is by no way a comprehensive list, but rather a good beginning.*

**1. Prescriptive Seating for Wheeled Mobility, Vol. 1, Theory, Application and**

**Terminology**, By Diane E. Ward, M.Ed., OTR, Published by: Healthwealth International, 517 NW 103 Avenue, Ft. Lauderdale, FL 33324-1625; [www.hlthwlth.com](http://www.hlthwlth.com) ; 954-472-0517

\*\*\*I love this book, every therapist involved in seating should have it to refer to, and read frequently. Will help in the "big" picture, and explain all terminology accurately. I use this text in my graduate course. Don't think it's "old" just because AOTA no longer carries it.

**2. Ergonomic Seating, A True Challenge; Wheelchair Seating and Mobility Principles**, By Bengt Engstrom, P.T., Published by: Posturalis Books, Sweden, copyright, 2002

Email: [pbooks@telia.com](mailto:pbooks@telia.com) \*\*\*\*\*I also love this book, not for "kids" but for its humanity expressed by a therapist who really did and does observe the client. Wonderful section in last chapters on training and use of manual wheelchairs.

**3. Clinical Assessment and Training Strategies for the Child's Mastery of Independent**

**Powered Mobility** By Karen M. Kangas OTR/L, updated 2008, booklet can be purchased directly from author (by check or money order to Karen M. Kangas OTR/L, for \$22.00 includes S&H)

**4. Sensory Integration, Theory and Practice** by Anne G. Fisher ScD, OTR, Elizabeth A. Murray, ScD, OTR and Anita C. Bundy, ScD, OTR copyright 1991; published by F. A. Davis Company, Philadelphia OR (I think this has replaced it)

**Sensory Integration, Theory and Practice, 2<sup>nd</sup> edition**, By Bundy, Anita; Lane, Shelly; Murray, Elizabeth, ISBN ; 0545-5 from F.A. David Company, 1-800-323-3555;

[www.fadavis.com](http://www.fadavis.com)

**5. Early Diagnosis and Intervention Therapy in Cerebral Palsy** edited by Alfred Scherzer, 2001, ISBN: 0-8247-6006-9, Marcel Dekker, Inc., New York, Basel; [www.dekker.com](http://www.dekker.com)

**6. Sensory Integration and the Child** by A. Jean Ayres from Harcourt Publishing (previously Therapy Skill Builders); [www.psychcorp.com](http://www.psychcorp.com) (Dr. Ayres wrote this book for parents, but I think it is so readable, it helps all of us in our busy lives to remember the issues and concepts we need. Then, we can go back and re-read her textbooks.)

7. **Understanding the Nature of Sensory Integration with Diverse Populations** by Susanne Smith Roley, Erna Blanche, and Roann Sc. Schaaf from Harcourt Publishing (previously Therapy Skill Builders); [www.psychcorp.com](http://www.psychcorp.com)
8. **Occupational Therapy for Children**, 4<sup>th</sup> edition, edited by Jane Case-Smith, Chapter 20, "Mobility", (By Christine Wright-Ott), 2001, published by Mosby, Inc.
9. **Sensory Integration and learning disorders** by A. Jean Ayres, copyright 1972, Los Angeles: Western Psychological Services (can be obtained at [www.amazon.com](http://www.amazon.com) too)
10. **The Child's Conception of the World**, by Jean Piaget (1969), Littlefield, Adams & Co., Totowa, New Jersey (can also obtain from [www.amazon.com](http://www.amazon.com) )
11. **The Origins of Intelligence in children** by Jean Piaget (1952) New York: W. W. Norton
12. **The Mechanisms of Perception** by Jean Piaget (1969), New York: Basic Books
13. Any books by T. Berry Brazleton, M.D, and others by Stanley Greenspan (check all bookstores.)

### **Some Additional Articles of interest:**

1. **"Translating Motor Control and Motor Learning Theory into Occupational Therapy Practice for Children and Young Adults,"** Part One, Nov. 17, 2008, Part Two, Jan. 19, 2009, American Occupational Therapy Associations (AOTA Publications) OT Practice.
2. **"Prognosis for Gross Motor Function in Cerebral Palsy"** by P. Rosenbaum, S. Walter, S. Hanna, JAMA (Journal of American Medical Association), Sept 18, 2002; 288; 1357-1363
3. **"Prevention of serious contractures might replace multilevel surgery in cerebral palsy"** Journal of Pediatrics Orthopaedics, Part B/European Pediatrics Orthopaedics, 2005, July 14 (4) 269-73
4. **"Therapeutic interventions for tone abnormalities in cerebral palsy"** Journal of the American Society for Experimental Neuro Therapeutics, 2006, April 3(2) 217-27
5. **"Effect of intrathecal baclofen on dystonia in children with cerebral palsy and the use of functional scales"** Journal of Pediatric Orthopaedics, 2008, vol. 28 pp 213-217
6. **"Abnormalities of tactile sensory function in children with dystonic and diplegic cerebral palsy"** By Sanger, Dept of Neurology, Journal of Child Neurology, (2007) vol. 22, 289-293
7. **"Can spasticity, dystonia be independently measured in cerebral palsy"** By Gordon, Keller, Stashinski, Hoon, Bastian, Pediatric Neurology (2006), Vol. 35, p. 375-381
8. **"Driving to Learn: a new concept for training children with profound cognitive disabilities in powered wheelchairs"** By, Nilsson and Nyberg (from Sweden), published, 2003, American Journal of Occupational Therapy, March/April 2003, 57,2
9. **"Use of Power Mobility for a Young Child with Spinal Muscular Atrophy":** by Maria Jones, McEwen, and Henson, Journal of American Physical Therapy, Volume 83, No. 3, March 2003
10. **"Powered Mobility and preschoolers with complex developmental delays:** By Deitz, Sunth, and White, American Journal of Occupational Therapy, 2002, 56, p.86-96
11. **"Evaluation of Powered Mobility Use in Home, and Community Environments,"** By Wiatt, Darrah, Cook, Hollis, May; Physical, Occupational Therapy, Pediatrics, 2003, 23 (2), 59-75
12. **"Evaluation Needed for Powered Mobility for Young Children or children with significant Developmental Delays,"** By Karen M. Kangas OTR/L, International Seating Symposium Paper, p.96-98, ISS 2006, published 2006
13. **Who Needs Power?** By Liebel, OTR, and Fischer, OTR, International Seating Symposium, 2005, P. 195-197
14. **"Family priorities in Activity and Participation of Children and Youth with Cerebral Palsy"** By Chiarello, Palisano, Maggs, Orlin, Almasri, Lang and Chang *Physical Therapy Sept 2010 (Journal of APTA), pp. 1254-64.*



15. **“Pediatric Outcomes Data Collection Instrument Scores in Ambulatory Children with Cerebral Palsy: an Analysis by Age Groups and Severity Levels”** By Barnes, MD; Linton, PT; Sullivan, PhD; Bagley, PhD; Oeffinger, PhD.; Mark, MD; Damiano, PT; Romness, MD; Rogers, Tylkowski, MD, *Journal of Pediatric Orthopaedics*, Jan/Feb 2008, Volume 28; Issue 1, pp. 97-1032
16. **“Analysis of the Pediatric Outcomes Data Collection Instrument in Ambulatory Children with Cerebral Palsy Using Confirmatory Factor Analysis and Item Response Theory Methods”** By Allent, Foteon, Oeffinger, Tylkowski, Tucker, Haley *Journal of Pediatric Orthopaedics*, March 2008, Volume 28, Issue 2, pp. 192-198
17. **“Sensory Processing Abilities in Children Who Have Sustained Traumatic Brain Injuries”** By Galvin, Froude, Imms, *American Journal of Occupational Therapy*, Nov/Dec 2009, Vol. 63, Nbr. 6
18. **“Can spasticity, dystonia be independently measured in cerebral palsy”** By Gordon, Keller, Stashinski, Hoon, Bastian, *Pediatric Neurology* (2006), Vol. 35, p. 375-381
19. **“Therapeutic interventions for tone abnormalities in cerebral palsy”** *Journal of the American Society for Experimental Neuro Therapeutics*, 2006, April 3(2) 217-27
20. **“Mobility experiences of adolescents with cerebral palsy”** By Palisano, Shimmel, Stewart, Lawless, Rosenbaum, Russell *Physical and Occupational Therapy in Pediatrics*, 2009; 29 (2) pp. 1355-55
21. **Powered Mobility and Socialization in Pre-school, a Case Study of a Child with Cerebral Palsy, A research report”** By Ragonesi, Chen, Agrawal and Galloway, *Pediatric Physical Therapy*, 2010, Vol 22, Issue 3, pp. 322-329
22. **Use of Manual and Powered Wheelchairs in Children with Cerebral Palsy: a cross-sectional study**, By Rodby-Bousquet, Hagglundm Dept of Orthopaedics, Lund University, Lund Sweden, Centre for Clinical Research, Uppsala University, Vasteras, Sweden, *BMC Pediatrics*, 2010 10: 59

## **Other Video/DVD:**

### **1. My Streaming Video Webinars:**

PaTTAN Project (Pennsylvania Training and Technical Assistance Network)

<http://pattanat.com>

“The Challenge of Integrating the Use of Assistive Technology Equipment for Independent Control and Access of Multiple Systems”

“The Challenge of Developing Consistency of Access”

### **2. Other PaTTAN webinars**

[www.pattan.net](http://www.pattan.net) ; Choose “Videos” Then Search my name: **Karen Kangas**

“AT Tools for Computer Access for Students with Complex Bodies -Hands On Lab”

“Configuring and Teaching AT Tools for Computer Access for Students with Complex Bodies”

### **3. Including Samuel**

[www.includingsamuel.com](http://www.includingsamuel.com)