



Texas School for the Blind & Visually Impaired Outreach Programs

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Coffee Hour – September 24, 2020

Active Learning is More Than a Piece of Equipment

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What Are the Components of Active Learning?

- Assessment: Functional Scheme
- Curriculum: FIELA Curriculum
- Instructional Strategies (Five Phases of Educational Treatment)
- Specifically-Designed Equipment and Materials

Jack's Progression



Figure 1: Collage of images from video Jack's Progression: prone on Resonance Board, in a HOPSA Dress, sitting independently.

Rylan Before and After



Figure 2: Ryland in a swing surrounded by Active Learning materials.

Dynamic Learning Circle



Figure 3: Graphic of the Dynamic Learning Circle shows progression from Stage 1 Aware and interested to Stage 2 Curious and active to Stage 3 Completion of learning or habituation to Stage 4 Ready for new learning back to Stage 1.

Developmentally Appropriate Play



Figure 4: An adult tries to force a 2-year-old to trace letters with a crayon which is a level of play that is too high developmentally.

Home Hacks

- [Activities of Daily Living](#)
- [Bathroom Activities](#)
- [Family Room Activities](#)
- [In the Shed or Workshop](#)
- [Kitchen Classics](#)
- [Outdoor Activities](#)



Figure 5: A toddler plays with daddy's shoes. "child wearing adult shoes" by *carrie-ann-nelson* is licensed under *CC BY-NC-ND 2.0*

5 Phases of Educational Treatment

- Phase 1 – Offering: promote trust, observe the learner's reactions, identify likes/dislikes, understand emotional level, and introduce self-activity
- Phase 2 – Imitation: increase learner's interest in activities nearby, ability to initiate, belief in self, and introduce new activities / movements
- Phase 3 - Interaction: learn dependency on others, initiate interactions, enhance development of self-identity, and to give basis for social development
- Phase 4 – Sharing the Work: increase experience of success, involve in new social relationships, increase interest in acquiring new abilities
- Phase 5 – Consequences: endure meeting demands and changes in life, feel self-confident, and establish a sense of responsibility

Phase 1: Offering



Figure 6: A teacher sits on a Resonance Board with a young boy and uses the Phase 1 treatment of offering by holding a toy for him to touch as he likes.

Phase 2: Imitation



Figure 7: A teenager imitates his young brother's actions by mouthing a toy utilizing the educational treatment of Phase 2 Imitation.

Phase 3: Interaction



Figure 8: A young man who is deafblind follows the movements of his teacher who is playing a drum by resting his hand on his teacher's wrist. This video demonstrates the educational treatment of Phase 3 Interaction.

Phase 4: Sharing the Work



Figure 9: Using the educational treatment of Phase 4 Sharing the Work, Patty Obrzut helps a young boy make paper bag puppets.

Phase 5: Consequences



Figure 10: An adult watches a young boy completing the tasks of serving his food so he can eat in the video demonstrating the educational treatment of Phase 5 Consequences.

Major Pieces of Equipment

- Esfef Board
- HOPSA Dress
- Little Room
- Multifunctional Table
- Position Boards
- Support Bench



Figure 11: A collage showing children using (left to right, top to bottom) an Esfef Board, a Support Bench, a Little Room, and a Resonance Board.

Quick Guide to Equipment



Equipment	Skills Area Targeted	Ways to Use	Considerations
Esfef Board	Increase vocalization Improve localization of sounds Discriminate between voice and other sound sources	To create and make sounds with attached objects while in motion or in motion in a wheelchair	Attach object that can be manipulated and that also have different sound qualities Position so that child's vocalizations are amplified
Esfef Board	Increase leg and foot movement/strength Increase independence in self-transporting	To push against with legs and feet in various positions and activities To sit on table playing with objects or activity that is doing other activity To stand up and down from to work on weight shifting and balance To stand on with feet together to work on weight shifting and balance	Use alone or in groups to create a large surface area Use on a stand to push or kick against Springs may be added or removed to change the amount of resistance available

Figure 12: Screen shot showing page 1 of the Quick Guide to Active Learning Equipment.

- See Page 17 of this handout.

Things You Can Make

- Activity Wall
- Apron, Belt, Vest, Glove
- Echo Bucket
- Mobile
- Position Board
- Resonance Board
- Trays



Figure 13: Collage of equipment you can make (top to bottom, left to right) wrist scarf, door stop board, PVC mobile, Activity Wall.

Materials

- [Attractive Objects](#)
- [Ideas to Match Materials to Goals](#)
- [Points to Consider When Choosing Materials](#)
- [Selecting Materials for a Position Board](#)
- [Sources for Materials](#)



Figure 14: Pinterest image of a red page showing the title "Introduction to Active Learning Materials."

Getting Started

[Guide to help you utilize the Active Learning Space in planning and implementing an Active Learning program for your student.](#)



Figure 15: Image of webpage button. A blue square with the words "New to Active Learning? Download the Getting Started Guide!" and the image of a child in a playroom.

Forms

- Active Learning Planning Sheet
- IEP Goals and Objectives Progress Form
- Active Learning Skills Checklist
- Essef Board Observation Form
- HOPSA Dress Observation Form
- Little Room Observation Form
- Multi-Functional Activity Table Observation Form
- Support Bench Observation Form
- Other Perceptualizing Aids Observation Form

Where to get more information

- [Active Learning Space Website](#)
- [Books by Dr. Lilli Nielsen](#)
- [Recorded Webinars](#)
- [Self-Paced Courses](#)
- [Study Group](#)
- [Sign up for eNewsletter](#)



Active Learning Space

Dr. Lilli Nielsen's techniques that emphasize simple ways to change the environment so that a child becomes an "active learner".

Active Learning Materials and Activities Planning Sheet

Adapted from personal notes from a seminar by van Dijk, J. 1985 and information from Dr. Lilli Nielsen in Functional Scheme

Fill one sheet out for each child. Over a period of time (at least 3-4 weeks), through listening to stories from others and through observation of the child, simply list things the child likes and things he doesn't like. We all enjoy things that we are good at and that we understand. The child's "Likes" will be his areas of strength and use sensory channels that are working. His "Dislikes" will be areas of need and sensory channels that may not be working efficiently. The information gathered on this form will give you underlying themes that you can use for identifying objects and activities to use in Active Learning instruction.

Child's Name:

District:

Date:

LIKES (objects, actions, people)	DISLIKES (objects, actions, people)

Pathways to Learning:

How well does the child use each sensory channel? Assign a percentage to each, with 100% being a sensory channel used well to get information, and a lower percentage for a sensory channel that the child is not able to use well. Describe the child’s behaviors that show the reason(s) you recorded that percentage.

Sensory Channel	%	How do you know?
Vision		
Hearing		
Touch		
Taste		
Smell		
Movement/ Proprioception		

What are possible attributes of materials that might appeal to his/her top three sensory channels? (Color, shape, texture, size, etc.)

What do you currently observe the child doing with his/her hands (e.g., grab and release, bat at fist, transfer hand to hand, throwing, scratching)?

What do you currently observe the child doing with arms, feet and legs?

What do you currently observe the child doing with his/her head, mouth, lips and tongue?

What kinds of vocal play do you observe? (e.g., babbling, squealing, clicking, etc.)

What sounds does he/she respond to? (e.g., dad's voice, computer generated sounds, door slamming, etc.)

What kind of scents does he/she like or dislike? (types of smells or particular things that smell)

What kinds of foods or flavors does he/she like or dislike?

What kind of touch does he/she like or dislike? (e.g., light, heavy, deep pressure, etc.)

Social and Emotional Development

In order to utilize the best educational approach with your student, what Dr. Nielsen calls the Five Phases of Educational Treatment, we need to look at the child's behavior. Look at the behaviors described below and place a in the row(s) where you see behaviors that are demonstrated by your student.

Developmental Age	Child contacts or responds to contact by:	✓
Birth-3 months	<ul style="list-style-type: none"> ● clutching fingers or some hair of the adult ● clutching some of the adult's clothing ● smacking lips, ● making "grrr" sounds ● by nodding, sucking, and grunting ● can be calmed by being taken in the arms and cuddled ● transfer of clutching/grasping to biting, pinching may be seen in older children 	
4-6 months	<ul style="list-style-type: none"> ● babbling or crying consciously to get adult's attention or when nothing is wrong ● may scream or cry most of the day - possible that the screaming is a child's attempt at babbling ● may respond to contact by babbling ● shows anxiety to unfamiliar rooms, persons, toys 	
6-9 months	<ul style="list-style-type: none"> ● molding his/her body into the shape of adults ● snuggles close to the adult ● touches adult's face or puts finger in eyes, mouth ● likes to be moved from the arms of one familiar person to another ● imitates the adult's movements, reaches hand toward light switch after adult turns on light ● seeing Mom or Dad after return causes joy ● shows joy when recognizing familiar voices ● may want to move his or her body the way he or she wants to move their body ● may be pulling their arms away and, kind of, hiding them ● may want to sit in a specific way ● if able to be held by an adult, may want to be held or positioned a certain way 	
9-15 months	<ul style="list-style-type: none"> ● "showing objects" - wants to share interests with adult ● if adult does not respond, may attempt to establish contact by hitting the adult with the object (banging objects) ● refuses contact with persons whom he does not feel attached to ● puts arms around adult he feels attached to ● wants to drink from adult's cup or feed adult ● laughs and babbles in interactions with adult ● enjoys adult-learner games such as clapping hands and playing with lips ● may hit themselves or other people ● moving to the adult (pull to standing, walking or crawling) ● acts like he/she wants to sit on adult's lap, but as soon as he/she gets there, wants to get down ● may lean against the adult briefly, or rest an arm or a hand on the adult briefly 	

15-18 months	<ul style="list-style-type: none"> ● picks up an object and gives it to adult with expectation adult will give the object back ● If adult will not engage in game, child looks for another adult who will engage in game ● tests activities that are allowed and not allowed ● demonstrates strong attachment to one or a few objects ● often has the need for physical contact, wants to be carried and sit on lap 	
18-24 months	<ul style="list-style-type: none"> ● lends adult most cherished toy ● engages in building games as a contact game ● can react intensely to changes in daily routine ● throws a tantrum when crossed ● presents strong feelings of ownership: my mother, my toy ● plays language games with adults – jingles and rhymes 	
2-3 years	<ul style="list-style-type: none"> ● contacts by hiding and then revealing himself with a shocked attitude ● involves adult in hiding games and games of searching for each other ● Involves adult in rough and tumble games ● wants to interfere in activities of an adult ● demonstrates his will in the presence of other children by claiming ownership of his toy ● appreciates help with things like dressing and undressing ● has a strong need for physical contact, holding hands while walking ● is able to engage in contact with only one adult at a time ● uses language more often in contacting others ● has difficulty accepting criticism ● has difficulty choosing between yes/no, coming/going, milk/juice, etc. ● can be quite rigid and will change results by demonstrating anger, passivity or withdrawal 	
3-4 years	<ul style="list-style-type: none"> ● contacts by standing next to adult and leaning against him ● shows great independence, often thinks he can do more than he actually can ● can become very despaired when he has to receive help from the adult ● direct physical contact is most often replaced by conversation ● is eager to help with domestic activities ● leans against, places an elbow against or looks at an adult to receive a smile or a comment-- and then looks at others present to share with them this emotional experience 	

Describe your general impressions about the individual's ability to self-regulate, show empathy, manage strong emotions, identify his/her own feelings, read others emotions, and establish and maintain relationships.

Plan for completing the Functional Scheme:

Decide as a team how and by when you will address all sections of the Functional Scheme. It is recommended that team members work in pairs on each section for better verification of the student's use of skills across multiple domains and with multiple people. Use the chart below to plan who will be responsible for each section. You may choose the official due date or assign an earlier due date to each section to spread work out across time. CT=Classroom teacher, Para=Paraeducator.

Section	Name and title of participants responsible for section (suggested roles are listed for reference only)	Official Due Date	Team assigned due date
Gross Movement	PT/COMS		
Fine Movement	OT/TVI		
Mouth Movement	OT/SLP		
Visual Perception	TVI/COMS		
Auditory Perception	TDHH/SLP/TVI		
Haptic-tactile Perception	OT/TVI		
Smell & Taste	OT/TVI		
Spatial Relations	TVI/COMS		
Emotional Perception	CT/Para/Parents		
Object Perception	TVI/CT		
Language: Non-verbal	SLP / TDHH / TVI		
Language: Verbal	SLP / TDHH / TVI		
Comprehension of Language	SLP / TDHH / TVI		
Social Perception	CT/Para/Parents		
Perception through Play & Activity	PT/OT		
Developmentally Impeding Functions	CT/Parents		
Toileting Skills	CT/Para/Parents		
Undressing and Dressing	OT/CT/Para/Parents		
Personal Hygiene	OT/ CT/Para/Parents		
Eating Skills	OT/ CT/Para/Parents		

Plan for completing the Functional Scheme (cont.):

How will the team share information between team members?

How and when will team members discuss discrepancies? Dates/times/locations?

Who will go over the assessment with and get information from parent(s)?

Goals, Objectives, Skills – Data for Child Progress Reporting:

You may find it helpful to have a list of goals/objectives and/or skills that will be the focus of data collection for documenting child progress. You can list them for specific environments and activities and post them near each environment so all staff know what behaviors they should take note of during an observation. Or you may have them in a child’s folder so any staff member can select an environment or activity to observe and collect data. This also could serve as the basis for your lesson plan.

Environments or Activities	Goal/Objective or Skills Child Should Demonstrate	# Observed	Other Skills to Watch For	# Observed
<i>Example: HOPSA Dress</i>	<i>Explores various surfaces with feet</i>		<i>Movement of legs to push</i>	

Team Notes



Quick Guide to Active Learning Equipment Selection

It is very important to select the correct equipment based on the skills the child is working on and to use it appropriately. This guide is designed to help you remember key information about each piece of equipment. For detailed information visit Active Learning Space and go to the Equipment tab.

Equipment	Skills Area Targeted	Ways to Use	Considerations
Echo Bucket	<p>Increase vocalization</p> <p>Improve localization of sounds</p> <p>Discriminate between voice and other sound sources</p>	<p>To vocalize and make sounds with attached objects while in supine or in recline in a wheelchair</p>	<p>Attach object that can be moved to have different sound qualities</p> <p>Position so that child's voice is heard</p>
Essef Board	<p>Increase leg and foot movement/strength</p> <p>Increase balance in sitting/standing</p>	<p>To push against with legs and feet in various positions and activities</p> <p>To sit on while playing with objects on Activity Wall or during other activity</p> <p>To climb up and down from to work on weight shifting and balance</p> <p>To stand on with wall ladder to work on weight shifting and balance</p>	<p>Use alone or in groups to work on balance</p> <p>Use on a stand to push or pull</p> <p>Springs may be added or removed to provide different amount of resistance provided</p>

<p>HOPSA Dress</p>	<p>Improve leg movement Improve weight bearing Improve balance in standing Improve coordination of movement needed to walk and orient in space in standing Improve head control Improve independent arm movement</p>	<p>To be in an upright position with hands, arms, feet, legs free to move/explore objects attached to HOPSA or Activity Wall (on a single point hook)</p> <p>To move along a straight path and orient along the way with hands, arms, feet, legs free to move/explore objects attached to HOPSA or Activity Wall (straight track)</p> <p>To move in a large space and orient to that space with hands, arms, feet, legs free to move/explore objects attached to HOPSA and throughout the large space (H-Track)</p> <p>To be in an upright seated position with support from the HOPSA Dress, allowing free movement by the child when positioned in a swing or on the Essef Board promoting core strength, improving head control, arm and leg movement in sitting.</p>	<p>Initially the child should be moving along a track).</p> <p>Initially child's feet do not b ground</p> <p>Bare foot when possible to positioned under feet</p> <p>Has been used with children after consulting with doctor</p> <p>If child can walk independently introduce activities such as up/down stairs, etc.</p>
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<p>Little Room</p>	<p>Gain the ability to reach and grasp</p> <p>Gain the beginning of the understanding of space</p> <p>Develop early object concept</p> <p>Develop skills needed to roll</p> <p>Develop skills needed to vocalize</p> <p>Develop skills to be independently active</p>	<p>To use while in supine to learn to reach and grasp</p> <p>To use in supine to explore objects when a child is unable to sit independently.</p> <p>To use in seated position to explore objects</p> <p>To use as a den to go in and come out for play Always use on Resonance Board</p>	<p>Depending on ability to reach plastic tubing on elastic.</p> <p>Designed so that appropriate child from drowning or over</p> <p>Use the proper size little room development skills of the child should be able to touch the objects as well as the objects hanging as well as the objects hanging children who cannot sit up to sit up 2' generally, though for be configured at 3' high.</p> <p>Objects on ceiling and walls whatever movements a child with the objects</p> <p>Designed so that child cannot Little Room or any of the pa</p> <p>Do not use not lights/switch Room.</p> <p>Individualize items on each to include motivating and d objects, avoiding bells and</p> <p>Remove lid prior to putting of the Little Room so object face.</p>
<p>Multi-Functional Activity Table</p>	<p>Initiate a large variety of cognitive activities (constructive play, sorting, categorizing, etc.) while sitting on the floor, in a chair, or wheelchair</p> <p>To give a child/adult a designated "work" area coordinating all previously learned skills.</p> <p>To teach a child responsibility in set up and clean up tasks.</p>	<p>To improve the learner's creative capabilities in constructive play with various materials</p> <p>To improve the learner's creative capabilities in constructive play with various materials</p> <p>To enlarge object concept through manipulation of various materials</p> <p>To enhance knowledge about which objects can be separated, sorted, and put together</p> <p>To enhance the ability to solve problems through constructive play</p>	<p>Adjust the height of the table in a chair.</p> <p>Panels can be interchanged Velcro surfaces, position of containers.</p>

<p>Resonance Board</p>	<p>Develop an understanding of space limited “room” which the resonance board represents</p> <p>Increase movements and movement from one place to another</p>	<p>To amplify feedback of any movement during independent, interactive play through vibration</p> <p>To learn about a defined space</p> <p>To learn about orienting and placing things within a defined space</p>	<p>May be used with a variety of equipment including Little F Esfef Board or alone as play interactive play.</p> <p>Do not dampen vibrational mats, etc. unless there is a</p>
<p>Position Boards Scratch, Position and Grab Boards</p>	<p>Promote increased fine motor development from a level of scratching, to a level of grasping and increase skills for manipulation of objects</p> <p>Learn the position of objects/materials, To use with various low profile textures to develop finger movements to scratch</p>	<p>To use with objects of higher profile in fixed position to work on grasp</p> <p>To use with a variety of objects on short elastic to work on grasp and release</p> <p>To use with variety of objects on long elastic to grasp and manipulate</p>	<p>May be positioned on a wall tray or as freestanding device</p> <p>Need to consider size of the grasp when choosing objects</p> <p>Child needs to be able to be manipulating them.</p> <p>Consider child’s preferences when selecting materials to</p>
<p>Support Bench</p>	<p>Improve muscle strength in torso, neck</p> <p>Increase movement of arms and legs in crawling position</p>	<p>To use in a fixed position to have the child be able to play with objects and materials while in a prone position using hands and feet</p> <p>To improve head and neck strength while in a prone position</p> <p>To imitate movements of crawling when wheels are attached</p>	<p>Meant to help children who old and not yet able to sit w intensive adult supervision</p> <p>Use first without wheels attached becomes familiar and comfortable Bench.</p> <p>Do not add soft padding to foam with hole for feeding t</p> <p>Adjust height to fit child and</p>
<p>Wall Ladder</p>	<p>Improve ability to pull to kneel or stand</p> <p>Improve weight bearing in standing</p>	<p>To use with objects attached on rails to encourage pulling to stand, letting go of the surface with one hand, crossing midline, and trunk rotation</p> <p>To use with Esfef Board to practice balance</p> <p>To use with step to practice stepping up and down</p>	<p>Make sure ladder is secure cannot be pulled lose – especially children.</p>