



Texas School for the Blind & Visually Impaired Outreach Programs

www.tsbvi.edu | 512-454-8631 | 1100 W. 45th St. | Austin, TX 78756

Incorporating Active Learning Theory into Activity Routines

By Kate Moss and Stacy Shafer, Education Specialists, TSBVI Outreach

Abstract: This article focuses on Phase IV and V of Lilli Nielsen's five educational phases of educational treatment outlined in her book, *Are You Blind?*, and how the Active Learning principles can be incorporated into activity routines.

Key Words: programming, blind, deafblind, visually impaired, Active Learning, Lilli Nielsen, activity routines

In Dr. Lilli Nielsen's book *Are You Blind?* she outlines the five phases of educational treatment we can use to help the child with blindness or deafblindness grow emotionally and develop cognitively. The purpose of using the techniques of the first three phases is to establish "an exchange and balance between periods of interaction and sound self-activity, between dependence and independence." In Phase IV, which Dr. Nielsen calls "sharing the work", she describes a child who is at a place where he is ready to learn that taking action and interacting with others is within his capabilities.

If we think about the child at each of these educational phases we can see the progression:

- Phase I - The child is very inwardly focused, engaging in self-stimulation, with very limited experiences with objects in the environment, and who is very reluctant to engage with others except the most trusted adult (usually a caregiver).
- Phase II - The child is somewhat more interested in his environment and others and can be engaged in brief interactions around high-interest objects or actions or "start-stop-start" games such as patting, swinging, bouncing, rocking, etc. He is still somewhat withdrawn, has limited interests, has limited ways to make contact with others, and has limited things he can do with objects. He can "play" along side the adult and show some interest in what the adult is doing, but does not try to imitate the adult.
- Phase III - The child is interested in more interactive types of games (sometimes referred to as "you to me and me to you") where he can take a turn, although he may not be able to initiate these games. Many of these games have imitative elements. The child may take time out from the game to process the experience or explore independently, but will come back to the adult to continue the game. He is interested in his environment and other adults and may fuss when the activity comes to an end.
- Phase IV - The child is ready to learn that taking action and interacting with others does not mean he has to do everything or do it perfectly. He has confidence in some of his actions or activities. He is beginning to understand time and a sequence of events and will often become upset or act threatened when familiar activities are changed.

- Phase V - The child is ready to learn that his own actions have consequences. He generally feels secure interacting with others and though he still may have difficulty initially handling change, he is showing more coping skills. He should have an emotional age of two years before attempting to work with him at this phase. (Nielsen, 1990)

Dr. Jan van Dijk, in his approach to working with deafblind multiply disabled children, also emphasizes the importance of establishing a relationship and learning to read the child's subtle communication as a first step. Similarly he uses co-active movement following the child's lead to engage the child in interaction. He develops anticipation through building structured activities and routines; then slightly changes something in the routine to introduce novelty and learning. All along his goal is to build the child's self-esteem and confidence in his abilities to do for himself and to interact with others. Specific communication skills are tied to these experiences as concepts are developed through experiential learning. (van Dijk, 2001)

Best practices teach us that throughout the child's development in these early stages, routines and turn-taking interactions play a critical role. For example, all children participate in basic care-giving activities such as bathing, diapering, and feeding. Through these care-giving activities that occur daily, the child begins to establish a memory and can anticipate events. Later on, through participation in simple turn-taking games that are done in a routine way, the child is able to cause the adult do something pleasurable by taking an action of his own. Still later in his development, the child is able to take part in a simple series of actions that result in some desired outcome through more structured routines. Finally the child develops independence in completing the steps of the routine he has spent time "helping" the adult to complete.

Phase IV - Sharing the Work or Level I Routines

In her book, *Communication: A guide for teaching students with visual and multiple disabilities*, Linda Hagood describes three levels of routines, and the child at Phase IV is just at Level I. In the Level I routine she describes an activity that:

- Uses short, easy, predictable steps.
- Has a consistent beginning and end.
- Occurs at a consistent place and time with consistent objects and person.
- Is based upon the interests of the child. Is done with the adult in close proximity.
- Focuses on relationship building. Does not have the expectation of the child completing the activity on his or her own.
- Uses non-language forms such as objects, vocalizations, touch cues, etc.
- Views non-communicative behaviors as having communicative intent.

When a child is engaged in an Active Learning approach, it is at Phase IV when we begin using activity routines to supplement his independent exploration activities and simple interaction times with an adult.

At this phase the child should exhibit confidence in performing some actions or activities and have some beginning understanding of time and a sequence of events. When the child is demonstrating these traits, you can begin to include some routines where you expect the child to play an active part into a portion of each day. For example, he might show some anticipation

of a familiar set of steps used in making his breakfast by trying to help pour the milk in his cup when the milk carton is opened. He may also become upset when he discovers that the carton contains orange juice and not milk.

Select a Motivating Activity

So how do you begin? As a first step, try to select activities that are motivating to the child. Think about the things (the objects) the child most enjoys playing with in independent exploration or in times when you are interacting with him. Are there activities you can design that will incorporate these materials? For example, if the child is interested in wire whisks, could you use a whisk to make instant pudding? Also consider the kinds of actions the child finds interesting. Can some of these actions be included in the routine you design? If the child likes to bang the whisk on another object can you have him bang the whisk from the finished pudding on the side of the bowl?

Pick an activity that is simple, one without a lot of complicated steps. Some of the payoff for participating in the routine needs to be apparent to the child from the beginning — "I get to play with the object I like." Additional perks for hanging in there until the end of the activity should also be included along the way — "I really like chocolate. I like banging the whisk on the side of a bowl with my teacher. I like to tear open cartons."

Organize the Materials

Participating in a routine with a child requires your undivided attention so you can respond to him emotionally and not miss any of his comments or reactions. Make sure you have all the materials you will need collected before you begin the activity. Think about the space where you will do the routine. Is this a space where the child feels comfortable and is not distracted by events or people? Is the area set up so that you can be at the child's level, even if that means sitting on the floor? If the child can't or won't sit, can he physically access all the materials and complete an action? This might mean covering the floor with a protective cloth if the activity is likely to get messy. Will the child help you collect some of the materials or is that too much to ask of him at this point? Get everything ready before you ask the child to come "play".

Provide Time to Explore

Give the child time to explore the space and the materials you will be using during the routine. Be sure to let him explore it in his own way and not the way you think he should explore it. If possible, let the child experience his own exploration of the objects outside the routine before introducing it into a structured routine.

Share in his exploration by having a duplicate set of materials for you to use or by giving joint attention to the object. For the visually impaired child this is often demonstrated through a shared tactile experience using a hand-under-hand approach (Barbara Miles, 1999). For example, if he bangs the wire whisk on the table, have one you can bang along side him. If he puts his hand in the water, put your hand in there with his so that he knows you are aware of what he is doing. Don't hurry him in his exploration — this means you need to allow plenty of time for the routine.

Set up the Sequence

It is necessary to the child to provide a clear sequence of steps in the activity. Using a slotted box like the ones typically used for a daily object calendar works well. Place an object you will use in each step in sequential slots of the box. Organize them from left to right so the child can find his way to the next step easily as each step is completed. Provide a finish basket or box to discard the object after you have completed the step. After he becomes more familiar with the routine the child may be able to help you load the objects into the slots after he has thoroughly explored each one. If not you may quickly review each one that you have pre-loaded into the slotted box so he knows where each object and action occurs in the sequence.

Complete the Steps

As you introduce each step, give the child a little time to re-explore the object before asking him to "help" complete the step. Then you can give him the word or sign for the object and model what you are going to do such as pour, stir, throw, tear open, etc. In the beginning the tasks you are asking him to complete can be completed in a few seconds up to a few minutes without any consideration for how perfectly the child can complete them. Be sure he understands which parts you are asking him to complete and which parts you will do. Most importantly, give him plenty of time to attempt to do the step before helping him complete it.

Modeling using a hand-under-hand approach during the routine, allows him to access what you are doing without making demands upon his hands to do all the work. If the child wants to explore the object a bit more after you use it, let him, but finish each step by helping to place the object in the finished box. Going back to the left-most slot and feeling for the next object can be beneficial in encouraging the child to look for the next "step" in the routine. (This is the perfect time to begin to introduce the concept and language of "next".) Eventually (after many times helping you do the action) the object should prompt the child to take the action independently. Wait silently and patiently!

Be Mindful of Pacing

Though you don't want to rush the child through the activity, you also don't want to lose him by dragging things out too long. This is where your teaching becomes an art; you have to be a keen observer of the child's emotional state. You know the child and can read his signs of boredom, anxiety, or pleasure. Allow more time for his "fun" parts and move more quickly through steps that are less pleasurable.

Clean Up and Put Away

To whatever degree the child is capable have him help you collect materials and clean up the space. At first this might simply mean helping you get a key item from its place or put the object representing the activity in the finished basket. If he can carry dirty materials to a sink or throw a water toy into the bucket, get him to do that much. Over time, he should be able to take on greater responsibility for collecting and putting away the materials.

After the Activity is Completed

Take a few moments after the activity is done to "talk" about how the child helped. Don't overly praise him, just comment on his successes and what you did together. If the child is using a calendar system at an anticipation level (at least), you may be able to reflect on the activity before you place the representing symbol in the finished box or basket.

Throw a Curve Once the Routine is Well-Established

When the routine has been completed a number of times and the child is definitely familiar with both the materials and the steps, it may be time to throw him a curve. For example, change the container that holds the milk, put bubble bath into the water, get a very large wire whisk or a very small one. Don't change too much too quickly. You will likely see some surprise or even anxiety when he encounters the change. This surprise will provide a great topic for conversation. It also will expand the child's knowledge of objects and /or actions based on a very familiar, understood event. This is the way we all learn the best, not too much new to take in at one time.

Conclusion

Using routines is an invaluable tool when working with children who are developmentally delayed. A well-designed routine provides a great structure for learning. Incorporating Active Learning principles into the routine is also helpful. Just remember some of the points Dr. Nielsen mentions:

- Help the child learn that to be the one who does something does not necessarily mean that one has to do everything or do it perfectly.
- The abilities the child has been successful with in previous educational phases form the basis for deciding which activities can be used for the technique of sharing work.
- Keep tasks short (few seconds or minutes) initially, accept whatever the child does as correct.
- Explain each time which parts of the activity the adult will perform and what the child will do.
- Give plenty of time for the child to initiate the task and wait silently and calmly — be neutral.
- Let the child know how long the activity is supposed to last.
- Try to keep the environment the same or only make gradual changes.
- Before going to more complicated and longer lasting activities the choice of technique for every part of the activity should be given careful consideration.

References

Hagood, Linda. Communication: A Guide for Teaching Students with Visual and Multiple Disabilities. Texas School for the Blind and Visually Impaired, 1997.

Miles, Barbara and McLetchie, Barbara. Developing Concepts with Children who are Deaf-Blind. DB-Link, 2004. <http://www.tr.wou.edu/dblink/lib/concepts.htm>

Miles, Barbara. Talking the Language of Hands to Hands. DB-Link, 2003.
<http://www.tr.wou.edu/DBLINK/lib/hands.htm>

Moss, Kate. "Five Phases of Educational Treatment Used in Active Learning Based on Excerpts from Are You Blind? by Dr. Lilli Nielsen." Texas School for the Blind & Visually Impaired, See/Hear, Volume 9, No. 2, Spring, 2004.

Nielsen, Lilli. Are You Blind?, SIKON, 1990.

Van Dijk, Jan. Development Through Relationships. DB-Link, 2001.
www.dblink.org/lib/topics/vandijk3.htm

Van Dijk, Jan. An Educational Curriculum for Deaf-Blind Multi-Handicapped Persons, DB-Link, 2001. www.dblink.org/lib/topics/VANDIJK-a2.htm



Figure 1 IDEAs that Work logo.

This project is supported by the U.S. Department of Education Special Education Programs (OSEP). Opinions expressed here the authors and do not necessarily represent the position of the Department of Education.