Intervention Programming for Nonverbal Children

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Today’s Purposes
- Comfort Zones, Finding Joy!
- Considering differing needs of non-verbal kids
- Determining Starting points with non-verbal kids
- Intervention Programming

A KDG frame of Mind
- Start with a framework for decision making
- Programming Ideas from the Kindergarten classroom
- Relationship Building with students and teachers
- Repetition over time
- Creating a world of wonder “WOW”

Framework for Nonverbal Decision Making

Nonverbal Challenges
- “Speech is speech”
- Ignored recommendations defeat the purpose of therapy
- Misunderstanding of our roles
- Underutilized in the school setting
- Creating the communication friendly setting outside of therapy
- Trust in decision making

Our Roles
- Dispelling the “speech is speech” philosophy
- Integrate communication with all activities
- Assist in creating the communication friendly classroom
- Assist in daily programming activities
- Avoid isolationism

Nonverbal-FC Flowchart
- Created based on my challenges
- Streamline Evaluation
- Expedite Decision Making
- Consistent Procedures
- Promotes understanding of roles
Non-Verbal Flowchart

**Basis**

Unintelligible Speech  
Or absence of speech  
Absence of Language  
Very low verbal

**Possible Etiologies**

- Apraxia  
- Autism  
- Phonological  
- Stroke & Neurological Syndromes  
- Dysarthria  
- TBI  
- Stroke & Neurological TBI  
- “Locked in” syndromes  
- Unknown etiology

**Assessment:** SETT Framework (Zabala 1996)

Student: gather information regarding student's current mode of communication, cognitive ability, attention, behavior, pragmatics, physical capability and complexity of communication.

Environments: observe the student across settings...where does the student need to communicate?

Tasks: look at tasks, academic activities and basic skills. What does student need in order to communicate in current educational programming?

Tools: Based on the information provided above, determine the tools that will best fit the student's needs that will be usable across settings and that others will implement

**Main Goals**

- Provide an interim device/means of communication while determining if speech can be a viable means of communication
- Establish a means of communication that meets the child’s cognitive and physical capabilities

**Skill Development Hierarchy**

- Device Usage and Care  
- Sign/Gestures  
- Functional utterances: Personal & Scripts  
- Speech Sounds  
- Personal Information  
- Underlying vocabulary deficits  
- Enhance Reading and Writing Skills  
- Attention/Listening/Behavior  
- Determine mode of communication  
- Cause-Effect: switch, sign, pix, vocal  
- Pragmatics/Communication Behavior  
- Functional Utterances-Scripts  
- Concept Development-Vocabulary  
- Personal Information
Flowchart paths

- Evaluation route is the same for both paths
- Type of nonverbal student determines the treatment goals
- Therapy may be similar if using a "kindergarten programming approach!"

Why Consider FC for Articulation?

- Decrease student’s frustration
- Eliminate guessing about the message
- Improve response from others
- Improve student’s participation
- Increase student’s independence
- Improve socialization skills

A word on…“Locked-in” Syndromes

- How to tell:
  - Easy to get a consistent yes/no response
  - Compliance
  - Reliable
  - Willingness to duplicate responses
  - Others tell SLPs the person is "locked in" when it’s really absence of language

SETT Framework

- Designed to encompass aspects of AT evaluations, this guide can be adapted for non-verbal evaluation
- Helps organize and maintain focus
- Systematic collection of information through observation, interview and interaction

Observation

- Key tool of SETT
- Main goal: look for any type of communicative behavior
- Observe student in several settings to learn as much about the student as possible

Gathering Information

- Look for anyone who has prior experience with the student
- Talk to teachers—determine their concerns and expectations
- Research what has been tried before
- Tip: don't be quick to change goals...
Present level of Communication
• A mode of communication
• Vocalization/speech
• hand gestures
• eye movement
• facial expressions
• picture usage
• Effectiveness of the current system

Milestone Checklists
• Birth to five speech and language checklists
• Determine a “functional” language level
• Gauge cognition based on checklists
• Mayo Clinic Checklist
• Language and Cognition

Receptive Language Tests: Consider tests in cases of:
• “locked-in” syndrome
• Severely impaired speech
• Alternate mode of communication in use
• Find a general cognitive level

Cognitive Status
• Will dictate the complexity of a system
• Provides an impression of what typical activities of daily living might be
• Will determine the types of vocabulary to be incorporated into a system

Physical Capabilities & Mobility Issues
• Dictates the mode of communication
• Point of access
• Portability
• Ease of use
• Determines if speech is a viable mode of communication

Impeding Factors
• determines whether an alternative mode will be incorporated into the client’s daily life
• Family barriers
• Staffing barriers
• Environmental barriers
• Student barriers—attention, behavior

ABC's of communication
• Attention and Behavior must precede developing a foundation for Communication
• Use observation to determine:
  • Is the student attending to activities and people?
  • Does the student have self control of behavior?
  • If attention or appropriate behavior is not present, there lies the focus of any educational programming
  • Therapy is going to be geared to gaining and maintaining attention

If behavior is a concern...
• Is negative behavior being used as a “mode” of communication?
• Has the student communicated needs and then protests when need is not taken care of?
• Is there consistency with behavioral expectations across settings?

Two Solutions
• Providing the tools for communication and teaching the student to use those tools can reduce or eliminate using behavior as a mode of communication
• Providing consistent behavioral programming is necessary to eliminate aggressive behavior when a communication system is in place
• The trick: make conventional communication more appealing than the behavior mode as a means to communicate
• As long as the student is getting needs met with behavior, the behavior will continue

Pragmatics
• Pragmatics is the foundation for communication
• ability to participate in an interaction precedes any ability to access a communication system
• Look for evidence of turn taking, requesting, responding verbally, greeting, eye contact, etc. (Prutting)
• Does the student understand they are in a communication interaction?
• Can they initiate communication?
• If they do initiate, how does that happen?
• Are there some “undesirable” or “physical” behaviors that need to be extinguished first?
• If the student is not demonstrating pragmatic skills consistently, this is the therapy focus
• Once the student demonstrates pragmatic skills move on to vocabulary or developing a more complex communication system
Social Interaction
• Give serious consideration to social interaction...
• Foundation for communication
• Quality of life
• Determines leisure activities
• Determines vocabulary levels
• Determines complexity of system

Ultimately...
• The student will reveal the mode that works best for them
• Our job is to figure out how to improve what is currently in place
• Then get everyone working toward getting the student to use it consistently

E - Environment
• Observe in natural environments during typical activities
• Consider the types of objects and persons the student will come into contact with
• Helps determine vocabulary
• Determines barriers

T - Tasks
• Consider the types of tasks, academic activities and skills
• What types of communication skills are needed to participate in current programming
• What limitations does the student have when performing the activity or task

Determine Basic Skills
• Choice Making
• Cause and effect
• Matching
• Scanning
• Response Consistency

Current Academic Programming
• Provides insight into cognitive ability
• Determines pragmatic needs
• Determines vocabulary needs
• Determines complexity of system
• Determines therapy activities
T² - Technology/Tools
• Use S-E-T to determine a mode of communication
• The mode will determine the technology or tools selected
• Try some alternative modes during the assessment to determine if one is more viable than another

Putting it together
• Using SETT to determine:
  • Mode of communication
  • Impeding factors (e.g., A & B)
  • Pragmatic Skill Targets
  • Determine vocabulary needs
  • Identify reinforcers through student interests and preferences

Using the Flowchart
• Let the flowchart guide your assessment
• Many of the assessment areas are the same whether the student is non-verbal due to speech impairment or language impairment
• Goals for each differ

Decision Making
• Two Decisions:
  • Absence of Language or Impaired Articulation
  • Use the flowchart to set goals

Where does an AT team fit
• AT teams are valuable
• Recognize the contributions of AT
• Let S/L determine the level of communication
• Let AT pair the technology to the level of physical ability and reading capability

The ARC Meeting
• Set the stage
• Be realistic
• Provide Prognosis information
• SLP's main goal: establish a mode of communication
• Outline roles
• Discuss fading of SLP over time—e.g., need for s/l services
FC Goals: Unintelligible Speech

• Get something in place to give the student control ASAP
• Pour all effort into getting the student to a level of literacy where written language can serve as a mode
• intelligibility of functional utterances
• Determine if speech is a viable means
• Underlying vocabulary deficits

Goals: Absence of language

• Determine ability to participate in interactions
• Determine a course of action that involves all who work with the student
• Establish a Mode of Communication
• Develop functional vocabulary
• Pragmatics and scripts

Objective writing

• only a few (no more than 4) broad-based objectives to be implemented across the school day
• Mode of communication
• Pragmatics
• Vocabulary
• Device usage/maintenance

What does a Kdg approach look like?

• Gets something in place ASAP
• Multi-modality
• Dynamic-able to build upon or step back
• Flexible---able to make minor changes within the activity to meet student needs
• Repetitive to target mastery over time
• Balance of settings, consultative, collaborative and resource
• Easily implemented within the context of a special education setting in absence of an SLP
• Develops vocabulary skills-language enriching!
• Allows opportunities for learning play skills
• Holds and sustains attention...taps into student interest
• In short, FUN!
• Creates WOW! opportunities
FC: Intervention: Unintelligible Speech

- All effort on literacy building
- How to use a device
- Infused across activities
- Target underlying vocabulary deficits with activities (ideas to follow)
- When speech becomes intelligible fade device

FC speech enhancement tools

- Sign
- Picture Systems
- Handheld texting
- Alphasmarts
- Keyboard and text to speech
- Morse Code-Darci
Considerations for Designing Communication Boards

These are some areas to consider when developing a communication board. This is not an exhaustive list, but includes some of the major areas to consider when developing a board.

1. **Use of the board** - in what contexts and settings will the board(s) be used? This will determine the materials you select as you design the board.
2. **Durability** - the board has to be able to withstand usage over time - Double laminating and heavy board will help expand the amount of time a board can be used without wear and tear.
3. **Portability** - the board has to have the ability to be carried from setting to setting without having to spend too much time setting up the system.
4. **Ability to change over time** - design a board that you can use as a starting point for moving to a more complex board. Transitions to a new board should be smooth and should build on the person's previous skills.
5. **Type of communication board** - depending on the person's needs, the board can be simple (such as a black flannelboard with Velcro icons that can be pulled off for choice-making) or complex (such as a notebook of multiple communication boards arranged by category).
6. **Number of Icons** - There should be enough icons so that the person has choices, but not so many that the person becomes overwhelmed. Cognitive and visual capabilities will come into play when considering number of icons.
7. **Size of Icons** - Icons on a board are generally equal in size for uniformity. The size of icons will depend on a person's visual capability and ability to select icons. A larger size is generally better for persons having visual impairments or poor fine motor skills.
8. **Color of Icons** - Depending on visual capabilities, color of icons may be an issue. When a person is visually impaired, usually less color is better. For cognitively impaired populations, representations that look realistic may be a better choice.
9. **Line Drawings or Photographs** - The choice between line drawings or photographs will be an issue when cognition is severely affected. Line drawings tend to be more abstract and harder to associate with real objects, actions or needs.
10. **Types of Icons** - Which symbol system to use? Many companies produce picture icons that can be used as a person's pictures for a communication board or voice output device. Many companies have their own symbol system. The most commonly used icon program in public schools tends to be. Its ease of use and ability to manipulate the pictures into grids to print boards make it a very popular item. Picture This is also a popular tool. It has photographs Mayer-Johnson Boardmaker of common objects, actions and emotions. It is about 1/6 of the price of Boardmaker, but it is harder to manipulate symbols on the computer.
11. **Color of the Board** - When a person has a visual impairment, the color of the board should be in direct contrast to the icons. People with visual impairments can have difficulty with distinguishing the icon from other items in space. A black board contrasted with white icons, a Yellow board with icons containing a black border, etc...can provide a contrast between board and icon.
Types of Communication Boards

Design of a communication board is limited only by the imagination of the person designing the board. These are some examples of my favorite boards I have designed and used with AAC students in the past.

Magnetic, Dry Erase Board – very portable, great for adults who have lost the ability to speak but maintain the ability to write. Cheap and widely available at variety stores.

Billfold communication booklet – nice for personal information, especially when the person has difficulty remembering phone number, address, etc... or when the person is a child who is highly unintelligible.

PECS booklet – wonderful for beginning choice making and building skills needed to access more complex communication boards and devices.

Flannelboard – wonderful for beginning recognition of icons, very changeable and adaptable for each activity. Difficult for keeping up with icons unless a large envelope pocket is attached to the back of the board.

Boardmaker Paper Boards – My favorite of all materials to use in making any communication icon or board. The boards themselves can be up to any size you specify and individual icons can be used together as a board or separated into separate icons. Icons can be any size you’d like them to be. Any number of icons can be placed on a page. This tool allows you to make multiple boards, limited only by your imagination. Icons can be manipulated and new icons can be created. Boards can be stored in a binder or clipcase for easy access. Double laminate for extended wear and tear. Extremely versatile tool. A definite must for SLPs to have in their AAC toolkit.

Clipboard – Use the back of a clipboard with Velcro to place two icons for vertical or horizontal placement. Great for teaching visual scanning, easy to change as activities change. Hard to keep up with icons unless attached to the clip on the board.

Clipcase Board – great for storing multiple communication boards in the storage case and removing the board you need for a given activity, by attaching it to the clipboard. A great way to introduce an intermediate board or as a means to store multiple square icons for beginning choice-making. Very portable and easy to expand.

Calendar Box Schedule Board – a board with icons with Velcro backing that can be used to outline tasks that a person might do during a given day. After each activity is completed the person removes the corresponding from the board and places it into a “Finished” bucket. The icons can be reviewed at the end of the day. Great for teaching association of pictures with activities and direct selection strategies.

Photograph Booklet – a booklet containing photographs of familiar objects and people where the person can select or point to that photo in order to supplement spoken words in meeting daily needs. Great for memory activities, especially with the elderly. Great for unintelligible kids that may need a little help supplementing verbal communication.

Bathtub Boards – a board made from a gladware (or clear buoyant) container with icons placed inside, then sealed with silicone adhesive to make it waterproof. The client can use the board to signify desired items such as towel, washcloth, soap, rubber duck, etc. It could also be used in a swimming pool for choice-making activities or PECS.

Talking Photo Voice Switch – a simple single message communication device that can be constructed from a Radio Shack Talking Photograph device. On the side where the photograph would be located, take a small piece of a hot glue stick (about \( \frac{1}{2} \) inch) and adhere it with hot glue so that when closed, it will make contact with the “play” button. When closed and the cover is depressed, a pre-recorded short message, such as a greeting or request for assistance, can be played. Messages can be changed as often as needed.
Considerations for Selecting Complex Communication Devices and Voice Output Systems

These are some things you should keep in mind when selecting a complex communication device/voice output system. This is by no means an exhaustive list, but includes major factors to consider in selecting VOCAs.

1. Communication report recommendations - use the recommendations you made in the communication report or AAC report as a basis for selecting a device.

2. What will be the purpose(s) of the device - What types of uses will the person need the communication device for? What are the person's needs?

3. Scanning capability - does the person need visual scanning, auditory scanning or direct selection as a part of their system? The mode of scanning will dictate placement of the device and switches or buttons for optimal accessibility.

4. Site of most physical range of motion - if the person has a physical impairment, device placement and access should be at the point where the person has the most capability to move and access the device.

5. Cognitive skills needed to access the device - make certain that the complexity of the device is equivalent to the cognitive level of the person planning to use the device

6. Portability - Will this person be able to transport the device from place to place over long periods of time? The weight of the device will be an issue when physical skills or stamina are areas of concern.

7. Complexity of the device - Can the person (or family, staff, etc.) given their physical and cognitive skills manipulate the controls needed to access the device? Does the device match needs?

8. Desire to use the device - does the person (and family) demonstrate a willingness to use the device outside of therapy?

9. Ability and willingness to program and maintain the device - Can the person (or their family, staff, etc.) program and maintain the device?

10. Ability for the device to grow with the person - Can the device be programmed for more complex communication as the person's needs increase?

11. Voice Quality of the device - if the device has its own capability to generate voice, is it natural, similar to the age and gender of the person? If recorded, the voice used should be similar to the person who will be using the device. Quality of both should be excellent without static.

12. Performance on a trial basis - before purchasing an expensive device, it is best practice to try the device with the person before committing funds to purchase it. Some companies or en-tech centers may "loan" the devices on a trial basis. Check the communication report for evidence of any devices tried during the assessment.

13. Cost of the device - AAC devices can cost thousands of dollars, be certain that the person is capable of using a complex device before purchasing. If the device is a part of the person's AAC program in a public school, then the school system is obligated to purchase the device once it is recommended by the ARC and written into the IEP. If the device is purchased with Medicaid funds, be sure it is the final device the person needs. Medicaid usually funds devices as a one-time purchase.
Adapt spinners for games. Make a spinner with a personal fan and a switch with battery interrupter. Purchase an All-Turn-It spinner. Even an old see and say could possibly work as a spinner.

Examples of games that can be adapted with spinners:

**AAC Skills:** turn taking, cause/effect, response consistency, social interaction

Hi Ho Cherri-o
Twister
Candyland
Chutes & Ladders
Trouble
Sorry
Mr. Potato Head
Any Dice Game (just put numbers on a spinner instead)

Toys that are appropriate for teaching AAC skills

**AAC Skills:** cause/effect; turn taking; response consistency; vocabulary building; hands-on manipulation; social interaction

Bowling
Don't Break the Ice
Don't Spill the Beans
See and Say
Kerplunk
Mr. Potato Head
Little People Farm /House Sets
Barbie
Bubbles
Elefun

Musical Activities that help teach AAC skills

**AAC Skills:** cause/effect; response consistency; hands-on manipulation; social interaction; large and small motor skills; vocabulary; sign language

Instruments (play along with recorded music or use to teach imitation)

Drums
Maracas
Xylophone

Bells
Tambourine
Rhythm Sticks

Use musical & movement activities to teach basic skills. Artists that have great songs to teach vocabulary, movement and interaction:

Greg and Steve
Hap Palmer
Wee Sing

Raffi
Wiggles
**Books set to music** are great for teaching vocabulary and improving attention skills of AAC students. Here are some examples:

- *Any Christmas Carol* in book form
- *I know an Old Lady Who Swallowed...*(series of books)
- *Inch by Inch*
- *Baby Beluga*
- *Old MacDonald*
- *Today is Monday*
- *Inch by Inch*
- *Farmer in the Dell*
- *I've been working on the railroad*
- *America the Beautiful*

**Listening to Music:** Provide students with photos of CD covers of two artists to help them choose whom they will listen to. Make one choice an undesirable choice to help teach consistency of responses and attention skills.

**Literacy and Vocabulary on Computer**

**AAC Skills:** cause/effect; switch access; response consistency; sustained attention; emergent literacy; vocabulary building

**Literacy Activities on PowerPoint.** Take digital pictures of book illustrations and adapt these on PowerPoint. Record your voice on each page. Any PowerPoint presentation can be programmed to act as a single switch activity. If you want specific directions, please contact me.

**Living Books Series.** These are books on computer programs, usually you can buy these for about $10.00. Several Mercer Mayer and Arthur books can be found in this format. Put a touch screen on your computer and students can access by touch.

**Soft Touch Software.** This software teaches switch access, vocabulary skills, switch access skills and more! Some titles are: *Old MacDonald* and *Puzzle Play.*

**Inclusive Software:** Teaches switch access, pattern and opposites. You can find a free version of this for MAC computers on the web. Try the Priory Woods School Website for a ton of downloads - freeware.

**Intellipics.** Program your intellipics or intellitalk boards to do matching quizzes, where AAC students work to identify animals, shapes, colors, numbers or do puzzle play activities. Puzzles could be of familiar faces, places, animals, or other vocabulary to teach recognition skills.

**Cooking Activities**

**AAC Skills:** cause/effect; interaction with others; develop likes-dislikes; switch access; picture/object matching; improvement of oral functioning

**Use pictures** to represent the food items being used for an activity.

**Use a powerlink** to operate any devices needed by switch access.

**Provide practice** with varying consistencies and textures of food, tasting improves oral motor functioning
Keys to Nonverbal Communication

- All day, every day
- Usage of pictures, sign and verbal modes simultaneously, especially when a system is not evident
- Build a foundation for device usage
- Direct instruction in using the system
- Simultaneously build vocabulary and pragmatic skills

Keys to Nonverbal Vocabulary

- Begin by teaching sign for words that will get needs met
- Yes/No
- More
- Want
- Reinforcers

Pictures and Sign in "WOW"

- Infused across all activities
- Paired with verbal speech
- Paired with objects, activities
- Used consistently
- Vocabulary selection based on needs

Attention Activities in Kindergarten

- Develops group behavior skills
- Builds vocabulary skills
- High interest activities build attention
- Helps students prepare for instruction Kdg teachers have quick tricks to get attention
- My tricks: guitar, music, movement

For Nonverbal Kids: Attention

- Develop understanding that an interaction is taking place
- Prepares for activity, provides transition signals
- Language & Sensory Stimulation
- Cause/Effect
- Determine desired reinforcers
- Vocabulary/expansion-extension
Attention Activities for Nonverbal Kids

• Look for Novelty Items to use during sessions:
  • Feely Bags/Hidden items
  • Cause/Effect Toys
  • Things that have light, sound or motion
  • Action activities with hands or body movement

Music

• Songs for getting attention:
  • Catchy rhythms and lyrics
  • Can be action oriented
  • Can promote preparation for listening
  • Samples:
    • Greeting
    • Open them, shut them
    • Puppetry
  • Flannel Board
  • Feely Bags
  • Literacy Activities---more on this later!
  • Fingerplays: Grandma’s glasses
  • Chants-echo responses: Princess Pat, Bear Song

Vocabulary to Infuse

• Greetings
• Attention Words:
  Look
  Ready
  Finished
  See
  More

Listening Strategies for KDG

• Teaching listening skills brings about attention
• Gets student(s) quiet
• Focus on eye contact
• Focus on following directions
• Prepares student for learning activities
• Develops concept vocabulary
Listening Strategies for Nonverbal Kids

• All of the above, plus:
• Pragmatics
• Routines
• Focus on following directions
• Setting the stage for building vocabulary

Listening Example Activities

• “whole body” listening strategies
• Music: following directions songs
• Cowboy Dance, Freeze, Body Rock
• Happy and you know it, Waddle-e-acha
• More Fingerplays: upon my head
• Games: Simon Says
• Activities: beanbag boogie, shapes

Vocabulary to Infuse

• Pictures and/or Signs
• Body Parts
• Actions (stand, sit, walk, etc.)
• Prepositions
• Colors, Numbers, Shapes
• Manner markers: please, thank you

Read Aloud in Kindergarten

• Familiarity with book handling
• Sentence Structure
• Rhythm of Language
• Listening Comprehension
• Vocabulary Development

Read Aloud-Nonverbal Kids

• All of the above, plus:
• Listening Skills
• Joint Attention Skills
• Pragmatic Group Behavior Skills
• Self control
• Reading as a leisure activity

Reading Genres to Select
• Sequential Books
• Seasonal Books
• Themed Books
• Concept & Vocabulary Building Books
• Predictable Books
• Get to know your Librarian

Examples:

Simple, Bold Pictures
Familiarity & Rhythm of Language
Bed-time Routines
Prediction, Clothing, Action
Children's Classics
Multi-Modality Instruction
Concept Development
Cause/Effect & Prediction
Add Extension Activities

Infusing Vocabulary
• Use pictures from Boardmaker or copied from the book to use to work on comprehension
• Number of pictures depends on student's ability to discriminate pictures
• Signs can be used in conjunction with pictures
• Questions are as complex as the student's ability...from identifying, to matching, to making a choice to answer questions
• Use the pictures in books to hold attention and teach picture identification skills
• Only limited by your "WOW" abilities

LB for unintelligible kids
• Provide lots of opportunities for the student to develop literacy skills
• The more a student is read to and experiences print, the better reader they will become
• If reading skills are adequate, then ability to access a complex system is possible

Literacy Extras
• Use literacy to build a theme that integrates activities across domains
• Music
• Hands On
• Concept Building
• Author study
• Art Activities
• Movement Activities

Calendar time in Kindergarten
• Teaches routine
• Focus on group listening
• Introduces vocabulary
• Teaches Time Concepts
• Math Concepts

Calendar as a non-verbal tool
• In addition to the kindergarten concepts:
• Signing
• picture usage
• rote memorization
• pragmatics-routines
• Repetition!

Vocabulary to Infuse
• Days, Months
• Numeral recognition
• Rote counting
• Weather
• Seasons
• Greetings

Specific things I focus on:
• Repetitive sequence
• Integrate each skill with music:
• Months of the year
• Days of the Week
• Weather
• Counting to 20
• Patterns
• Having fun!

Examples: What’s Today? Today’s Date What’s the Weather?, Additional Calendar Concepts
Calendar Boxes

• Concrete Objects in compartmental boxes
• Represents daily activities
• Builds connection between objects, activities and routines
• Move to picture schedule ASAP

Picture Schedules

• Act as a more portable calendar box
• Generally based
• Build association of pictures to activities
• Builds routines
• Know what’s coming next
• An attention and behavioral tool!

Vocabulary to Infuse

• Daily activities: gym, library, recess, art, math, etc...
• People associated with activities
• Greetings
• Schedules within schedules as student is able

Computer Access

Computer Tips

• In Kdg...computer is used for drill and skill practice
• FNVC...use as a language building experience
• Build joint attention
• Structured vocabulary practice
• Avoid having students do solitary activities at a computer
• IntelliTools
• Soft Touch Software:
  • My Own Bookshelf
  • Teach Me to Talk
• Old Mac’s Farm
• Jigsaw Maker
• Power Point One Click Activities
Low Budget Materials
- Adapting your own materials, games
- Carol Musselwhite's website  [www.aacintervention.com](http://www.aacintervention.com)
- Linda Burkhart's website  [www.lburkhart.com](http://www.lburkhart.com)
- Visit my website for more links to more materials
- View my handouts for more ideas

Vocabulary to Infuse
- Concept Building Vocabulary
- Attention Vocabulary
- Pragmatic Vocabulary:
  - my turn
  - your turn
- More
- I want

Music in Kindergarten
- Attention Grabbing
- Fun!
- Concept Development
- opportunities for attention and focus
- Improves memory
- Large and small motor skills

Music as a teaching tool
- Power to reach kids through novelty
- No musical talent required!
- variety of children's artists that teach a variety of concepts
- Allows for repetition without boredom
- opportunities for attention and focus
- Builds rote memory

Examples
- Today is Monday, Days of the Week
- Tooty-ta, Touch
- Brown Bear, Animal Boogie, Old Mac
- Thematic Songs, Holidays, Ocean
Weather songs
Counting Songs
Greeting Songs
Songsforteaching.com
Music to teach Animal Names

Vocabulary to Infuse
- Concepts
- Thematic
- Attention
- Pragmatic
- Limited by your ability to create “WOW”
- Add to literacy, concept building activities

Recess Time/Indoor Play Kindergarten
- turn-taking
- Social scripts
- fine and large motor skills
- reasoning and strategy skills
- Develop friendships

Recess/Indoor Play-FNVC
- Teach how to initiate play
- Using a peer tutor
- Learning “play” vocabulary
- How to play a game
- Turn taking
- interaction skills
- Pragmatics—e.g., keeping up with a game or conversation

Art Activities in Kindergarten
- Makes academics fun
- Builds fine motor skills
- Builds creative skills
- Following directions skills

Art Activities for Nonverbal Kids
- Use picture directions
• Use pictures to have students request materials
• Use signs in the same manner
• Teach following directions
• attention skills

Vocabulary to Infuse
• School Supplies
• Requesting: I want, help, I need, finished, more, etc...
• Pragmatics: please and thank you
• Numeric Concepts: first, second, third
• Prepositions
• Shapes and Colors
• Combine with literacy activities

Rain Painting/Butterflies
Combining with Books/Pictures
• With Eric Carle's Very Hungry Caterpillar
• Eric Carle Books for Author Theme
• Additional Animal Books for Animal Theme
• With other Spring-themed books to focus on seasons
• Use icons to teach life cycles of butterfly
• Use icons to sequence the Very Hungry Caterpillar

Cooking in Kindergarten
• Vocabulary Building—utensils, foods, concepts
• Pragmatics Building, Manners
• Exposure to new foods and tastes
• Following Directions
• Thematic and concept building
• Reinforces material taught in class

Cooking for Nonverbal Kids
• All of the above, plus:
• Vocabulary - Picture or Sign
• Requesting
• Experiencing tastes
• Opportunity to teach social scripts
• Following directions & routines
• Allows opportunities for sabotage

Cafeteria-Suggestions
• Implement PECS and choice making with caregivers and aides
• Teach cafeteria staff to sabotage
• Peer Tutoring
• table manners
• Pragmatics and rules of conversation
• Following Routines
• Teaching food vocabulary

Kindergarten Routines
• Daily schedule, repetition
• builds organizational skills
• Develops prediction skills
• Comforts students
• Builds self esteem

Routines for Nonverbal Kids
• Social skills through social scripts
• Daily exposure
• Repetition
• Real life interaction opportunities
• Vocabulary enhancement

Walk, Walk, Walk!
• Think of all of the vocabulary you can teach by walking in the hallways of your school through routine conversation:
• greetings, closings
• eye contact
• general scripts...how are you/I'm fine
• Entering/exiting rooms
• Places to go
• People to see

Kaylee's Walk Time
• Short, Intense
• Repetitive
• Enlists staff, students
• Communication Scripts
• Pragmatic Focus

Sabotage: Kindergarten
• Leave out something necessary or putting something irrelevant into the activity
• Used by Teachers to build students’:
  • Reasoning
  • Prediction
  • Organizational skill

Sabotage for Nonverbal Kids
• Not to be mean, but to force communication
• Many non-verbal kids don’t get opportunities to communicate
• Situations have to be structured to require the student to respond

Sabotage
• Teachers need to observe you using this artfully
• not opening a door, playing music or providing food until a desired response is given or withholding a turn at a desired activity
• Builds ability to request
• Incorporate across activities

Basic Vocabulary Targets
• Key attention words: "Look", "point"
• greetings
• Nouns
• Verbs
• Words that meet needs: more, want, help, go, no, yes
• Names
• Personal information

For Nonverbal Children
• A systematic way of teaching meaningful, basic vocabulary
• Not PECS
• Developed for a specific student at Warner, autistic, non-verbal
• Taps into the need for routine, repetition and familiarity
• Available at Linguisystems
Sections
• Each unit contains 10 vocabulary words
• Teaches basic picture identification
• Teaches basic ASL or SEE gestures
• Teaches discrimination between pictures
• Teaches yes/no responses
• Teaches answering simple questions by pointing on a grid

Work across settings
• Contains activity suggestions for using the vocabulary in a thematically based activity that could be resource or individually completed
• When a unit is mastered, proceed to the next unit
• Revisit units often to ensure mastery
• Designed for meeting a range of needs

Samples online @ linguistics

Modify FNVC to meet your needs
• Cut grids to decrease complexity
• Use single picture cards during the classifying activities to help students match pictures on a complex grid
• Put single cards on a key ring
• Focus on only one or two sections of a unit at a time
• Number the backs of the two choice cards to correspond to stimulus items
• Use it unit by unit or just a section of a unit
• My nonverbal students are not at the level of discriminating pictures
• I use pointing to pictures (single) and signing sections only for these students
• Give the teacher a section to incorporate into daily activities

Modifying…the Kdg way
• Incorporate music into the activity
• Add movement
• Teaching key words “look”, “see”
• Pair environments or objects with pictures
• Used as a part of a holistic approach
• Pair with activities where student can see pictures over and over again

Kaylee's FNVC
• One part of a larger program
• Use in conjunction with teaching social scripts and participation skills
• Focus on imitation of signs, picture recognition
• Use walking paired with pictures and signs to teach people and places sections of FNVC
• Use music paired with pictures and signs to teach animals, colors, clothing

Kaylee’s Current Status
• Increased sign imitation
• Increased memory for signs
• Recognizes places and people by sign and vocalization
• Increased ability to attend to picture stimuli
• Does not discriminate pictures
• Main gains: increased vocabulary, social interaction and attention

Why I like FNVC
• Builds a vocabulary base
• Contains hands on activity suggestions
• Taps into need for repetition
• A starting point when nothing else is working
• Gives teachers concrete tasks to use
• Concrete data collection
• Flexible

Into the functional
• Why the resource classroom?
• Real-where kids spend a lot of time
• Model techniques and strategies
• Determine “real” interventions to be used throughout the day
• Opportunity to “bring in” relevant communication skills
• Chance to infuse the “kindergarten” approach
• Improve quality of education programming...All day, every day!
• Improve students' communication independence
• Determine adverse educational impact

Resource Collaboration & Literacy Building

Early Literacy Skill Builder
• Attainment Company
• Leveled skill building
• Designed mainly for severely impaired populations
• Is a great way to work on oral and written language for functional communication kids

ELSB
• Targets nonverbal participation and responses
• Teachers may need some assistance modifying and interpreting student responses as genuine
• Systematic & Repetitious
• Uses puppetry to sustain attention
• Video (6:30-10:30 & 10:30-12:53)

KDG Connections to ELSB time
• Group Routines, Behavior, Participation
• Turn Taking, Greetings, Pragmatics
• Key attention words "look"
• Pointing to pictures
• Repetition
• Have teachers generalize format to other activities

ELSB Photographs
• Warner Kids
• Variety of communication abilities
• Integrating Literacy, Social Participation and Communication
• Ways we modify the system to meet needs

Eliminate by covering
Add sign...
Teaching Joint Attention Skills
and Vocabulary
Substitute Icons for Words:
Comprehension Building
Sound Recognition-Voicing
And Visual Phonics
Social Interaction with Moe...
ELSB Modification Tips...
• Reduce picture choices/Cover Up
• Make sure teacher is using pictures or signs if the student is non-verbal
• Teaching the teacher the signs for the vocabulary targeted in ELSB during the session
• Encouraging attention and participation
• Add language stimulation activities in a thematic way
ELSB Modifying on the Fly

• stack of index cards on hand
• Create simple line drawings to work on exchanges in a pinch during the activity
• provide teachers with direct instruction in how to implement a PECS or picture choice making program during their ongoing activity
• Use with Visual Phonics to teach letter sound correspondence

RC: Increasing Involvement

• Model what you are asking teachers to do
• Incorporate aspects of the Kindergarten approach into resource collaboration
• Observe the resource room to determine where the kindergarten approach could be implemented
• Make small suggestions for the teacher to incorporate with the student
• Offer increasing assistance based on how accepting teachers are of your suggestions
• Treat all of those you work with respectfully

Grab & Go Collab Bag

• Carry a bag that contains things you need to modify activities for nonverbal students
• Index Cards
• Marker, Pencil
• Cover-Up Construction Paper
• Communication Boards or Boardmaker Cards frequently used

Skills to use on the go

• Tap into your own talents
• Incorporate what you like into those things you don’t like
• Don’t be afraid to say “I don’t know”
• Jump in with both hands
• Look for places where you can be a help
• Hear what others are saying
• Each interaction is a learning opportunity
• Have Fun!

Stepping Back

• Ultimately, progress depends on student’s ability and cognition
• therapy lasts as long as it takes for the student to be able to use a means of communication to meet current educational programming
• Could mean a period of years as long as the student is progressing
• less if the student makes no progress or a system cannot be established
Stepping Back

• When the student is using the designated mode of communication to the best of their ability, the special education teacher can address vocabulary building as they serve the student

• The SLP’s direct role should fade gradually until the student is released from services

Nonverbal Q & A

• specific nonverbal cases
• my programs
• Questions about FNVC
• KEG-R guidelines

Miscellaneous Thoughts

• ASHA and Autism
• PECS
• Infusion v. PECS
• Additional Ideas…Board Examples

www.speechfriends.com for:

• FNVC Information
• Seminar Information
• Parent, teacher and SLP Information
• Ideas and Links
• If you wish to schedule a CEU training for your group at a future date, please let me know!