Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Using Core Vocabulary In the Classroom

Part 1:  Core Vocabulary with Emergent and Context-Dependent Communicators in Special Education Classrooms

Orlando

Gail Van Tatenhove, PA, MS, CCC-SLP
Orlando, FL

## Handouts

- PowerPoint Slides
- 50-Location Communication Board
- 198-Location Communication Board
- Core Vocabulary List for Students with Severe Intellectual Disabilities
- ABI Lesson Planning Form

## ASHA Disclosure

- My name is Gail Van Tatenhove.  I am in private practice and a part-time employee of Semantic Compaction Systems.  Today, ….
  - I will be mentioning the Pixon Project and the **Pixon Project Kit®**. The **PPK** is owned by Semantic Compaction Systems and distributed by Prentke Romich Company. I was the team leader for the Pixon Project and author of the **Pixon® Project Kit**, but receive no compensation or royalties from the sale of the **PPK**.

## References for Vocabulary Lists

- AAC Lists
  1. www.aac.unl.edu/vocabulary.html
  2. www.minspeak.com/CoreVocabulary.php
  3. www.aacinstitute.org
  4. www.vantatenhove.com/files/NLDAAC.pdf
- High Frequency Reading/Writing Lists
  1. www.eyeonthesky.org/highfrequencywords.pdf
  2. www.rmtc.fsdb.k12.fl.us/literacy/wordlists.html
  3. www.cantonschools.org/content/pdf_files/ high_frequency_words.pdf



What's happening with AAC in our classrooms?



If we aren't okay with it, can we change it?

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Emerging Communicators

- No reliable means of expressive communication through symbolic language
- Have some functional non-verbal communication (gestures, vocalizations and other non-symbolic communication)
- Able to attend, even briefly, to people, conversations, objects, pictures
- Yes/No (acceptance/rejection) expressed through body language, but lacks reliable yes/no for more complex communication

Beyond Sensori-Motor Stage of Learning

## Context-Dependent Communicators

- Have symbolic communication that is reliable, but is limited to particular contexts (or partners)
- Rely on partners to provide limited response set
- Need frequent instruction, prompts, cueing
- Have difficulty with initiation and maintenance of interaction
- May only be functional in particular settings

## A Class of E/C-D Students



## What is happening in our Special Education Classrooms?



## Teacher Quote



- "The students in my class all have severe disabilities. The curriculum in my classroom is centered around **functional activities**, along with "specials," and of course, speech, OT and PT. My students need a lot of **repetition** and they do best when I follow a daily **routine**."

## Common Routines and Activities

**Elementary**

- Arrival Activities
- Circle Time/Morning Meeting
- Center or Work Time
  - Literacy
  - World Knowledge
  - Sensory Area
  - Motor Area
- Lunch & Snack
- Personal Care
- Specials & Therapy

**Middle/High School**

- Morning News
- Functional Reading
- Math & Money
- Life Skills (cooking, laundry, cleaning)
- Lunch & Snack Time
- Social Skills
- Creativity (art, music, computer)
- Physical Fitness
- Community Inclusion

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Teacher Quote

- "I attended an **ECT** (environmental communication teaching) training and I've set up my classroom around the principles of creating communication environments and using a prompt hierarchy."

George Karlan, Ph.D. (Grant Research Project 1988-1991, Purdue University);
Kelly Fonner, Sue McCloskey and many others provide ECT or ECT-like training
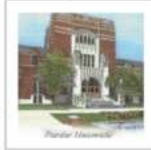
## Keep Doing or Change?

**Keep Doing**

- Activity-based instruction
  - learn by doing an activity, not through direct instruction on a specific skill
- ECT training principles
  - activity/environment/partner skills
  - prompt hierarchy
- Planned repetition
- Daily routine

**Change**

- Nothing

## Teacher Quote

- "In my classroom, we identified the vocabulary that my students need to participate in our activities. We really try to focus on **concrete words** to keep things easy for our students.  We now have between **500 & 1000 words**."

Ace® 18 Drawer Parts Storage Box
$20.99

## Teacher Quote

- "I've spent a lot of time selecting vocabulary for all of my different activities, but my students *don't seem to use much of it* outside of the activity.  I'm thinking about how to revise what I'm doing."

## Keep Doing or Change?

**Keep Doing**

- Identify vocabulary

**Change**

- Identify CORE vocabulary, not activity-specific or "concrete" words
- Target 50 to 200 core words, not 500 or 1000 activity-specific nouns & verbs

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Teacher Quote

- "We have big books that we use with the students with displays for all of our activities.   All I have to do is pull out the display and the students pass it around to participate in the activity."

## Teacher Quote

- "I'm really stuck on trying to find a way for the students *to talk after the activity is over*.  We go to the page and help them answer questions during the activity, like telling me the ingredients we need for cooking, but they don't seem to understand that their boards are not just *something to use during the activity*."

## Teacher Quote

- "During our classroom activities*, we pick out the symbols and boards* for the students and *we prompt them to use* them during the activity. When we are done, *we put them away*.  We are getting concerned that the students are waiting for us to do everything for them and aren't really participating on their own."

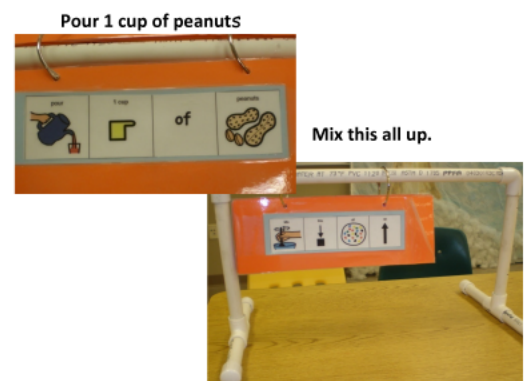## Keep Doing or Change?

**Keep Doing**
- Use some type of AAC display or system during the activities
- Use similar boards with all students
- Aware of prompts

**Change**
- Use stable, core displays, not constantly changing displays
- Start with similar boards and shift to personal, customized boards
- Prompt with modeling

## Teacher Quote

- "We have created **scripts** for many of the activities in our classroom.  Our students direct the steps in an activity by selecting the sentences and pointing at each picture."

Pour 1 cup of peanuts

Mix this all up.

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Keep Doing or Change?

**Keep Doing**
- Use scripts to learn a new routine and get familiar with the activity
- Encourage active participation for each step in the activity

**Change**
- Re-script for repeated use of core
- Use both word- and sentences-based scripts

## Teacher Quote

- "We use a lot of different **symbols around our classroom**. We engineered our room and **labeled everything** with symbols. Ambulatory students just have to **go over to that station to tell us** what they want or to participate in the activity."



## Keep Doing or Change?

**Keep Doing**
- Engineer the environment with symbols

**Change**
- Engineer with core to expose students to more words beyond those on the core board displays
- Engineer with core to create an external display for "on-site" communication

## Teacher Quote

- "It seems that most of the children talk with just **one word**. I think some of the children could combine words, but none of them seem to be doing that. I'm concerned that we are developing vocabulary, but not language."



## Keep Doing or Change?

**Keep Doing**
- Provide single words in the AAC system
- Keep the focus on language

**Change**
- Provide words from all word groups
- Do Aided Language Stimulation (model)
- Use strategies that promote multi-word talking

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Teacher Quote

- "My students all participate in my class with Big Macs and Step-by-Steps. I have a Big Mac they use to ask for "more." I pass it around during snack time and they tell me if they **want more**. Then I use the Step-by-Step for them to **give me answers** and tell me what to do. We did a lesson on Thanksgiving today and each one took a turn answering a question about Thanksgiving."

## Keep Doing or Change?

**Keep Doing**
- Use single or sequential message devices to provide speech output

**Change**
- Adjust programming in single or sequential message devices for non-generative language
  - Getting attention
  - Song lyrics
  - Lines from a book
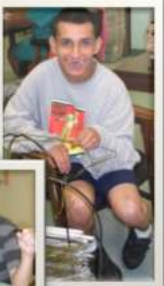  - Active re-listening activities

## Teacher Quote

- "I have 3 students in my class with expensive devices. For each of our activities, I tried to make pages in the (devices). It seems like I was **constantly making new pages**. For example, for cooking activities, we have a page for making pizza, and another page for pudding, and another for brownies. Some students have as many as 100 pages in their devices. It is starting to get **very confusing** and hard to keep up with all the **programming**."

## Keep Doing or Change?

**Keep Doing**
- Advocate and use robust AAC devices

**Change**
- Stop endless programming
- Use a stable, core vocabulary

## What are the outcomes at age 22?



## AAC Outcomes at 5 Adults Facilities

- Identified 17 new clients (aged 21-23) with CCN
  - ALL had received intensive AAC intervention in special education classes with aided AAC systems (no signers)
- 9/17 had NO personal AAC system
  - Neither a manual communication board or device
  - Some rudimentary gestures only
- 8/17 had personal AAC Systems
  - 6 had AAC systems **which had only activity-based vocabulary appropriate for school activities**
  - 2 had SGDs that allowed for generative language across any setting, topic, environment, partner, etc.

Only 2/17 graduated with a functional communication system

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

Together, let's promote the idea of special education classrooms that have 90% of their daily activities focus, in some way, around the modeling, teaching, and use of a stable set of core words.

## A Core Vocabulary Classroom

### With Emergent and Context-Dependent Communicators

## We Believe Emergent and Context-Dependent Students Can …

- Communicate like peers who speak
- Use core to communicate
- Be helped to overcome or compensate for challenges
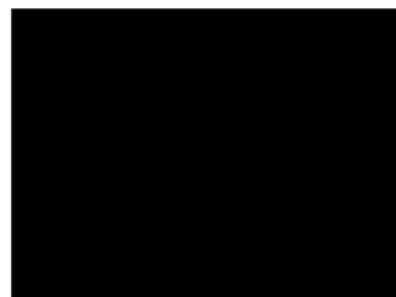
## A Few Communication Challenges

- Physical Challenges
  - Positioning & Access
  - Health & Nutrition Issues
- Level of Communication Intention
  - Unintentional
  - Intentional, but not symbolic
  - Intentional and symbolic
- Restricted Interests
  - Preferences
  - Discrimination
  - Reinforce-ability
- Sensory Differences
  - Auditory sensitivity and processing
  - Visual attending
  - Motor planning
- Communication "Dance"
  - Shared focus
  - Read-able, intentional communication signals (look, point at, reach for, give to)

## Creating a CVC for Emergent and Context-Dependent Communicators Emphasizes …

- Core Vocabulary
- Systematic Pictures
- Simple AAC Systems

## Why Do Core???

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

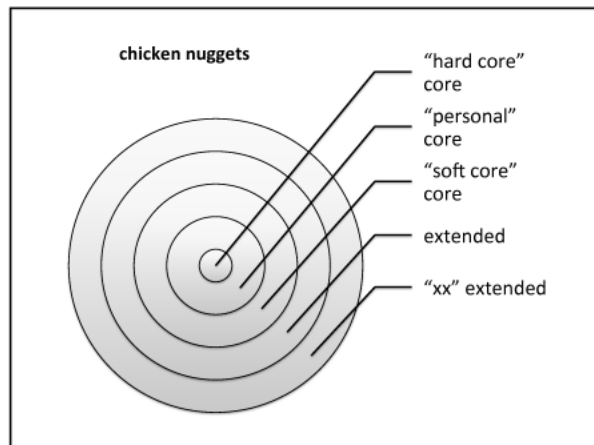| Core vocabulary is a statistical concept related to overall word frequency. | The most frequently occurring words = 80% of the actual words spoken |
| | 78 – 80% of the words we use daily come from a set of fewer than 350 - 400 words |
| | The 50 most frequently occurring words account for 40-50 % of total words said, while the 100 most frequently occurring = 60% of what is said |

## What is Core Vocabulary?

Vocabulary

top 100    top 400    top 200

What are you eating for lunch today?

I want chicken nuggets.    FRINGE/EXTENDED

---

chicken nuggets

- "hard core" core
- "personal" core
- "soft core" core
- extended
- "xx" extended

---

## The Issues Raised by This Scenario

- Chicken nuggets is the "meat" of the response and is a valid, necessary answer to that direct question    BUT....

the question forces the focus on infrequently used words; perpetuates being a responder, not an initiator; and shouldn't be the type of classroom interaction that occurs throughout the entire day if you expect the person to be able to communicate in life after school.

---

## Vocabulary Goal for Emergent and Context-Dependent Communicators

- Core Words for a full range of pragmatic functions
- Core Words from the most significant word groups
- Personal Core for people, places, things

---

## Communication Functions & Words

- Greet/Part
  - Hello, goodbye
- Request object
  - That, please, cup
- Request action
  - Want, get, do, up
- Request assistance
  - Help, do
- Request recurrence
  - More, again, another
- Request information
  - What, why, where
- Existence
  - This, that, look, see, there, here
- Self/Possession / Person
  - Mine, you, it, he, she, mom

- Nonexistence
  - Uh oh, away, all gone, what
- Disappearance
  - Away, all gone
- Rejection
  - No, stop, don't, uh uh
- Cessation
  - Stop, all done, finished
- Comment/Describe
  - Like, bad, good, naughty, big, little, yuk, yum, hurt
- Direct action/events
  - Go, help, stop, come, eat, read
- Name
  - Car, shoe, cup
- Associative
  - Big, hot, pretty, up, off

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Communication Functions & Words

- Greet/Part
  - Hello, goodbye
- Request object
  - That, please, cup
- **Request action**
  - Want, get, do, up
- Request assistance
  - Help, do
- Request recurrence
  - More, again, another
- Request information
  - What, why, where
- Existence
  - This, that, look, see, there, here
- Self/Possession / Person
  - Mine, you, it, he, she, mom

- Nonexistence
  - Uh oh, away, all gone, what
- Disappearance
  - Away, all gone
- Rejection
  - No, stop, don't, uh uh
- Cessation
  - Stop, all done, finished
- **Comment/Describe**
  - Like, bad, good, naughty, big, little, yuk, yum, hurt
- **Direct action/events**
  - Go, help, stop, come, eat, read
- Name
  - Car, shoe, cup
- Associative
  - Big, hot, pretty, up, off

## Word Groups

- People and Pronouns
- Interrogatives
- Verbs
- Time (adverbs & nouns)
- Place (adverbs & prepositions)
- Nouns
- Adjectives
- Negation
- Interjections
- Conjunctions

handout/wall chart

## Vocabulary Goal for Emergent and Context-Dependent Communicators

- Core Words for a full range of pragmatic functions
- Core Words from the most significant word groups
- Personal Core for people, places, things
- **Extended Vocabulary essential for academics, independence, behavior management, etc.**

## Balance Core to Extended: The Visible Vocabulary



core · core · core · core → **4:1** ← noncore
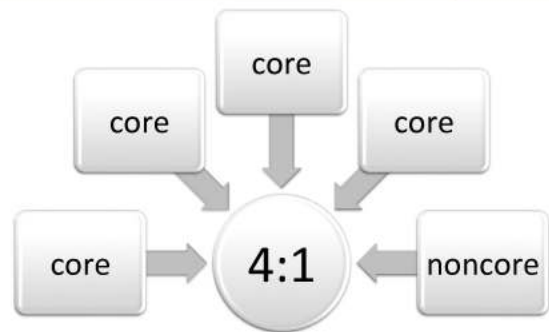
## Pixon® 50 Location Board



## The Top 3 Reasons to <u>Not Do Core</u> with E-CD Communicators

Isn't it normal to talk with nouns when you are a beginning communicator?

Emergent and context-dependent communicators need concrete vocabularies and concrete pictures.

I need lots of nouns to participate in my curriculum (state standards, activity-based instruction).

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Normal to Talk with Nouns

*Isn't it normal to talk with nouns when you are a beginning communicator?*

- The first 20 words that a child says are primarily nouns. **Small set of nouns!**
- Primarily use nouns from the age of 15 – 18 months.
- By 24 months, the child has 150 – 300 words and nouns no longer dominant. **Short period of time!**
- By 26 months, the child is using 80% core and will for the rest of his/her life.

## AAC "Lessons"

- Okay to start AAC intervention with a child under 18 months with a small set of nouns
  - But, don't do nouns exclusively and don't stay there indefinitely
- If a person functions cognitively below 18 months, the proportion of extended to core may shift in favor of extended
  - But, don't ignore core!

## Kevin  1:4

- 28 "hard" and "personal" core
  - people = Kevin, mom, dad, brother
  - negative = not
  - verbs = want, look, help, stop, like, wait, go, come, feel, eat, drink, listen, play
  - descriptive = finished, again, different, all gone, more, away, good, bad, tired
  - placeholder = that
- 98 infrequently used non-core
  - places and things

## The Top 3 Reasons to Not Do Core with E-CD Communicators

✔ Isn't it normal to talk with nouns when you are a beginning communicator?

Emergent and context-dependent communicators need concrete vocabularies and concrete pictures.

I need lots of nouns to participate in my curriculum (state standards, activity-based instruction).

## Do cognitively impaired individuals use core?

- How ya doing?
- Good
- Did you see those pictures on my tray?
- Those are pictures.
- You like them?
- Yeah.
- How ya doing?
- I so lucky.
- I lucky.
- I at work.

**27/30 = 90% of conversational speech**

## MR/DD Adults that Talk

**Clay – Down Syndrome**          **Joe – CP/Blind**

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Vocabulary Usage of People with Moderate to Severe Cognitive Impairments (A, T, W)

"This paper reports part of a study of the oral vocabulary of the severely subnormal carried out during 1958 and 1959." Hypotheses are advanced to account for the existence of a small core vocabulary.

| A | Take | Was |
|---|------|-----|
| About | That | Way |
| After | The | We |
| Again | Them | Went |
| All | There | What |
| And | They | When |
| Another | Thing | Where |
| Apple | This | With |
| At | | |

Mein, R., & O'Connor, N. (1960) *A study of the oral vocabularies of severely subnormal patients.* Journal of Mental Deficiency Research, 4, 130-143

## Core Vocabulary Usage of Youth with Moderate or Severe Learning Impairment

- *AAC* devices for people with severe cognitive disabilities and little or no functional speech primarily contain nouns which seem easiest to acquire and evaluate. **The effect of a more diverse vocabulary was assessed.**
- The use of speech-output devices by 12 youths with moderate or severe mental retardation and severe spoken language disability showed core vocabulary was used as soon as it was introduced and expanded the focus of conversation both at home and at school. Although the AAC users had more than 3 times as many nouns are core words, the usage of core words equaled that of nouns during the second year.

L. Adamson, M. Romski, K. Deffebach, R. Sevcik,
*Journal of Speech and Hearing Research,*
Volume 35, 1333-1343, December, 1992.

## Core Vocabulary & Pictures

- Core Vocabulary is always challenging to represent (and teach) because **core words are NOT picture producers.**
  - Usually represented with some kind of "story" in the picture
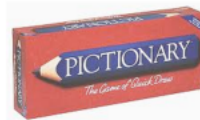
Any picture can be used to represent a core vocabulary word.

And the student can learn to use nearly any picture given appropriate supports.

## **Single** Meaning Pictures

- Picture Communication Symbols (Boardmaker)

- Symbolstix

- Pixons

## **Multiple** Meaning Pictures

Minspeak is the most widely used multiple meaning picture system in the world.

Each picture means more than 1 thing.

The meaning is defined by combining it with another picture.

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Examples of Minspeak

 **+**  **=** **drink** 

 **+**  **=** **thirsty** 
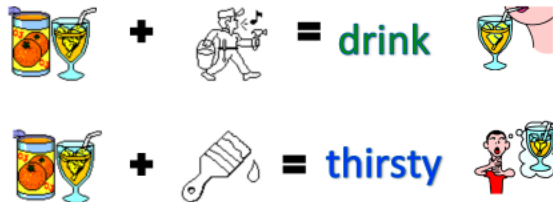
## AAC Lessons

- Create AAC systems with enough words.
- Give core vocabulary words from ALL word groups.
- Use the words across ALL activities.
- KEEP YOUR BALANCE in designing the system.
- Don't sweat the pictures so much.

## The Top 3 Reasons to Not Do Core with E-CD Communicators

✔Isn't it normal to talk with nouns when you are a beginning communicator?

✔Emergent and context-dependent communicators need concrete vocabularies and concrete pictures.

I need lots of nouns to participate in my curriculum (state standards, activity-based instruction).

## Participate in the Curriculum

A HUGE ISSUE for Students included in General Education

What about with students with emergent and context-dependent communication skills?

## Three Questions

What are your state standards for students with emergent or context-dependent communication skills?

What is the curriculum adopted by your school or in your classroom?

What is on the student's IEP?

## Florida Standards

**What Are Access Points?**

Next Generation Sunshine State Standards Access Points:
- Drive the curriculum, instructional strategies, and assessment
- Reflect the key concepts of the Next Generation Sunshine State Standards with reduced levels of complexity
- Ensure access to the standards that apply to all students in the same grade
- Are written to three levels of complexity: participatory, supported, and independent

**Next Generation Sunshine State Standards**

**E-CD Communicators are usually at the participatory or supported level**

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Social Studies – Grade 1 - Economics

- Participatory
  - Associate "not enough" with "no more"
  - Recognize that an item can be saved for "later"
- Supported
  - Recognize when there is "not enough" of something
  - Recognize a way to save money for "later," like putting it in a bank
- Independent
  - Recognize that when there is "not enough" of something, people need to make choices, such as sharing, saving, or doing without

## Health – Grade 3 – Responsible Behavior

- Participatory
  - Demonstrate refusal communication skills to reduce health risks in the classroom
- Supported
  - Demonstrate a basic refusal skill to avoid or reduce health risks in the classroom
- Independent
  - Demonstrate basic refusal skills to avoid or reduce own health risks at school, such as making clear statements, expressing feelings, and asking for help

## Goal = Responsible Behavior



- Teacher integrates the concept of <u>making good choices</u> into a storybook reading activity to meet goal of responsible behavior.

## Can I Meet My State Standards with Core?

What are your state standards for students with emergent or context-dependent communication skills?

Review your standards with an eye towards determining whether the standard can be met as a receptive or expressive language task.

Word your questions in a way that promotes use of core vocabulary, not extended vocabulary.
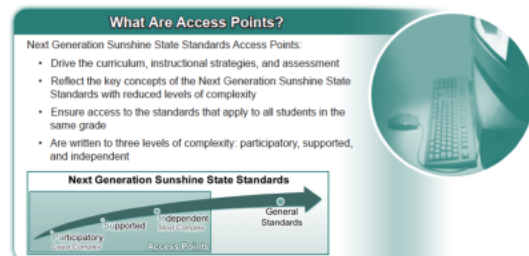
## Three Questions

✔ What are your state standards for students with emergent or context-dependent communication skills?

What is the curriculum adopted by your school or in your classroom?

What is on the student's IEP?

## Special Education Curriculum

- Most Special Education classrooms are using teacher-developed curriculum with an Activity-Based Instruction model
  - You can revise your activities to target Core Words (video examples later in seminar)
- Curriculum materials for students with AAC needs are available – often noun-driven
  - Unique Learning Systems
  - PCS/Boardmaker materials

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Unique Learning Systems



## Three Questions

✔ What are your state standards for students with emergent or context-dependent communication skills?

✔ What is the curriculum adopted by your school or in your classroom?

What is on the student's IEP?

## Write Core-Driven IEP Goals

- Develop goals **based on pragmatic function** to allow "flexibility" in the core words that the student might be able to use to meet that function during your various activities.
  - Max will comment when asked his opinion about something he did, say/heard or might want.
  - Max will use core words instead of screaming when he doesn't like or want something.
  - Max will direct others with core words to do actions he can not physically do himself.

## Write Core-Driven IEP Goals

- Develop goals based on simple language construction.
  - Max will combine 2 core words to create a simple verb phrase.
  - Max will select 2 words out of his core book when doing a table-top activity.
  - Max will use up to 2 adjectives with a noun or determiner during writing activities.

## Final Note on Noun Vocabulary

- The content words of the lesson are NOT "bad" words.
- Hearing and learning about those words are important for language enrichment,  but saying those words with the AAC system, when the person hasn't learned the "core" words, is not a good use of time.

## AAC Lessons

- You can meet state standards with CORE.
- You can do your curriculum and activity-based instruction with CORE.
- You can write IEP goals that focus on CORE.
- You can demonstrate learning with a focus on core over extended words.

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## The Top 3 Reasons to Not Do Core with E-CD Communicators

✔ Isn't it normal to talk with nouns when you are a beginning communicator?

✔ Emergent and context-dependent communicators need concrete vocabularies and concrete pictures.

✔ I need lots of nouns to participate in my curriculum (state standards, activity-based instruction).

---

Core Vocabulary Can Be Consistent Across Students with Emergent and Context-Dependent Communication Skills.

No One-Size-Fits-All AAC System for this Diverse Population!

---

## Multi-Modal AAC Systems with E-CD Communicators

**Unaided**

- Vocalizations
- Gestures and Manual Signs

**Aided*** (today's focus)

- Manual Communication Boards*
- Low Tech SGDs
- High Tech SGDs
- Apps

A Place for Everything

---

## Manual Board Benefits

Can be totally customized for the physical, sensory, cognitive, language (and style) needs of the individual

Easily changeable (vocabulary, design, etc.)

Relatively inexpensive to develop

Usually less intimidating than devices to most communication partners (handle, model, change, etc.)

Low maintenance for caregivers and communication partners

---

## The Big 3 Design Factors

**Access -** Space, Target Size, Selection Method

**Vision –** Target Size, Detail, Color

**Mobility-** Portability, Safety

**Personal AAC System**

---
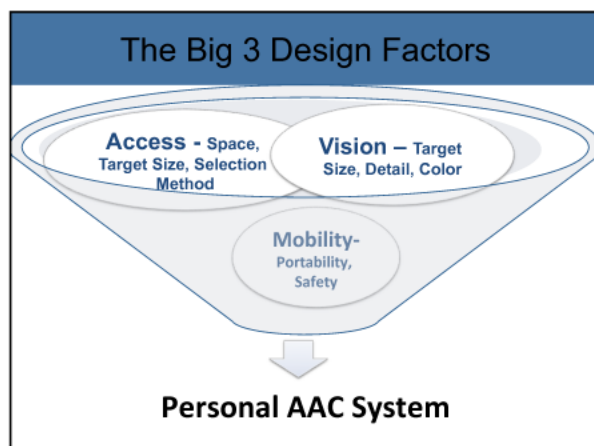
## Single Sheet Designs

- All your Core Words are on one page
- Use this design as your "First Choice" for core words
- Do EVERYTHING YOU CAN to get your core words on 1 display/level/page

# Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Single Page of Core with Flip Section of Supplemental Core and Extended



MULTIPLE SEQUENTIAL DESIGN

SINGLE SHEET DESIGN

**Example is COMMERCIALLY MADE and comes in Pixon® Project Kit**

## Sub-Divide Targets



## Color-Number Encode



"Jennifer" = Yellow 4 2
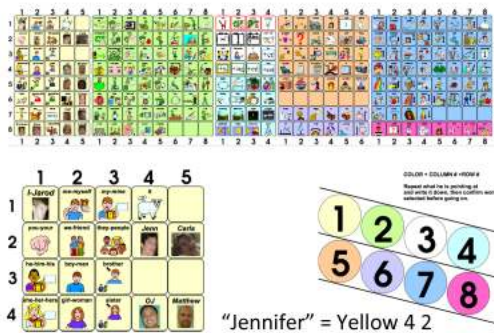
## Jenn's Eye Point System



- Multiple Sequential Rows with 12 per row
- **Single Sheet Display with 8, 4x5 quadrants providing up to 160 words**
- 14 Pragmatic Clarifiers

## Eye-Point with Partner Assisted Scanning

Example is HOME MADE with personal printer. Printed on transparency film and taped together



## Multiple Simultaneous Design

- You turn a "section" of your MCB to get some new core words, but you don't lose all your other core words
- Use as the "Second Choice" for core words
  - Put less frequently used core words on the "lower levels"

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Portable Board in a Cloth Carrying Case



MULTIPLE SIMULTANEOUS DESIGN

Example is COMMERCIALLY MADE and comes in Pixon® Project Kit

## Multiple Sequential Designs

- Turn the page to get more core words and lose access to core words you just had
- "Last Choice" for providing core vocabulary
- Strategies to maximize language and minimize challenges of this design for organizing core
  – Make the best single sheet main core word page as possible
  – Repeat critical core words across pages
  – Reduce navigation as much as possible

## Communication Books



MULTIPLE SEQUENTIAL DESIGN

Example is part of the PODD® system by Gayle Porter.

## Three Sources of Historical Evidence About These Designs

1. Nonoral Communication System Project 1964/1973 (B. Vicker)
2. The Formative Evaluation of the Ontario Crippled Children's Centre Symbol Communication Program 1974-76 (S. McNaughton)
3. Nonvocal Communication Resource Book 1978 (G. Vanderheiden)

## Evidence

- Single Sheet design for core
  – Easiest to use physically, cognitively, and linguistically
  – Produced the "best" language structure and content
  – Conversation flowed the best
  – Used spelling and other strategies when need more words
- Not a great design for extended vocabulary

## Evidence

- Multiple simultaneous for core
  – Awkward to manage
  – More challenging to create language
  – Best used when less frequently used core was in the "bottom" level
- A good approach for extended vocabulary

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Evidence

- Multiple sequential for core
  - A reduction in language output by 40–60% due to
    - Memory load for having to recall words on multiple pages and the steps for getting to those pages
    - Conversational dissonance (forgot what they were going to say while flipping pages)
    - Physical effort to turn the page
- Children compensated by staying on a main core word display and using strategies to alter words
  - language went back up by 40-60%
- Useful for extended vocabulary

## Core Vocabulary & SGDs

- Robust SGDs
  - Goal = 50 words "at-a-glance" on a single sheet
    - Single-sheet based SGD
    - Page-based system
      - core words repeated on pages (30 to 50/page)
      - short navigations for the top 50 – 350 words
- Low Tech SGDS paired with MCB
  - Manual Board = 50+ core
  - SGD = Social Language
    - mediate interaction = "I have something to say, " "come over here"
    - participation language = story lines, ordering lunch, etc.

## AAC Lessons for E-CD Communicators

- Be multi-modal, using the mode that is appropriate *for the right purpose*
  - Voice/Gesture/MCB/SGD/App
- Design a stable, single sheet design AAC system for **Core Vocabulary** as strategy of "first choice"
- Move toward use of whatever design promotes independent communication in more settings with more **trained** partners

## Applying This Information

### How does this work in the classroom?
- Classroom vs. Personal Boards
- Activity-Based Instruction

## Develop Core Vocabulary Boards to Use in the Class to have CONSISTENT CORE in CONSISTENT LOCATIONS

**Phase 1: Early Teaching**
- Use a classroom board with enough, but not too much core vocabulary  (50 board)
- Use individual symbols from the wall chart

**Phase 2: Everyday Use**
- Customize the classroom boards for each student's diverse needs
  - Expand the core vocabulary beyond 50 words
  - Easier for ambulatory students to transport
- Boards are with the students as much as possible at school/home

## AT Consultant Perspective

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Activity-Based Instruction Meets Core Vocabulary

### Do the Same Activities in a Different Way using the Activity as the Means-to-the-End

Video 1:  Class Group Activity
Video 2:  One-on-One Therapy Activity

## Class Group Activity

- A special class in a regular school
- 7 students in class
  - 4 students with Autism Spectrum disorders
  - 3 students with moderate to severe multiple disabilities
- One teacher with 2 assistants
- A "first" experience for everyone!

## While Watching the Video

Jot down the VOCABULARY that I am visually *modeling* for the students  and helping the students to *say*

Note the REASONS that I am asking students to communicate

Describe how I am creating a COMMUNICATION ENVIRONMENT

## Core Vocabulary in an Art Project
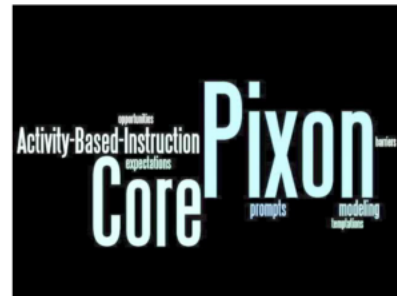


## Target Vocabulary Modeled & Said

- question words
  - what, who
- verbs
  - do, look, make, help, make, give/ gave, wait, want
- prepositions
  - in, out
- pronouns
  - I, you, it
- determiners
  - this, that

## Reasons to Talk

- Request action
- Request assistance
- Request recurrence/more
- Describe action
- Negation (not)
- Request object (this, that)
- Comment (not like)
- Control behavior (Patrick – not like, wait)

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Communication Environment

- Expect students to communicate and give them multiple opportunities (at least 3)
- Recognize and respond to their communication attempts
- Engineer the activity to increase the opportunity and likelihood of language use
  - Activity: process not product oriented
  - Arrangement of materials (barriers, sabotage, quick access to symbols, etc.)

## One-On-One Therapy Activity

- Context-Dependent Adult in her 30s
  - No record of an AAC system provided until after the age of 22
- Eye gaze communication with an AAC system that is custom designed for her
- Working in her bedroom at her group home
- Diagnosis = Quad Cerebral Palsy, Moderately Cognitively Impaired, Seizure Disorder, Unspecified Visual Acuity/Discrimination

## While Watching the Videos

Transcribe "my script" for the activity

| | |
|---|---|
| | communication environment |
| | target language function & word(s) |
| | prompts |
| | strategies to scaffold to success |
| | communication partner skills |

1. How was a communication environment created?
2. What was the target language function and word?
3. How was communication prompted?
4. What strategies were used to scaffold to success?
5. What communication partner skills did you notice?

1. How was a communication environment created?
2. What was the target language function and word?
3. How was communication prompted?
4. What strategies were used to scaffold to success?
5. What communication partner skills did you notice?
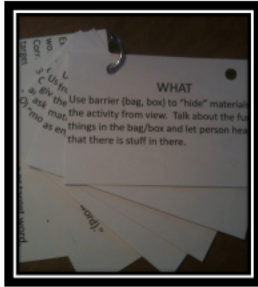
1. How was a communication environment created?
2. What was the target language function and word?
3. How was communication prompted?
4. What strategies were used to scaffold to success?
5. What communication partner skills did you notice?

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Script Cards for ABI



- Order of words
- Create the opportunity
- Prompting guide
- Responding guide
- Script cards
  - Module 1 Script Cards
  - http://www.minspeak.com/teachers/InterventionPlanningArchives.php

## Small Group Activity #1

*Scripting and Role Playing*

## Activity

- Activity = color a picture
- Talk through the activity to plan how you will engineer it to create the opportunities to....
  - Model 10+ CORE words
  - Have students say 5-10 CORE words
  - Specifically target 1 – 2 CORE words
- Collect any other "stuff" you need
- Role play the activity

## Words & Stuff Available for the Activity

- 50 – 200 Core Words
  - 50 +/- location core board
  - 200 +/- wall chart (see handout)
- No more than 10 non-core words allowed
  - Write in Activity-Row strip on top of MCB

- SCRIPT CARDS – 1 per group

## Large Group Activity #2

*Applying the Model to Meet State Standards with Core Vocabulary*

## Science Standards

**State Standards**

- Participatory Level
  - **Recognize** that water and wind can move soil
  - **Recognize** a landform in Florida, such as a beach (coastline), river, or lake

**Classroom Practice**

- How do you interpret the word "recognize?"
- What does the student have to do to meet these state standards?
- What would you do as a teacher to measure success on these standards?

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Activity

- Experiencing & Learning
  - Describe the learning activity you will do.
    - What Core Words will you use in the activity?
    - How will the student participate?
- Evaluating
  - What must the student "say" (rather than "do") to meet the state standard?

- Do at least 2 State Standards (see next slide)

## Meet These Standards with Core

- Make observations about common objects from the natural world.
- Recognize that water in an open container will disappear (evaporate).
- Identify the effects of wind.
- Identify harmful consequences of being outside in severe weather (e.g., hurricane, lightning storm, blizzard) and alternative choices to being outside.
- Identify the effects of forces (e.g., push/pull) on an object.

## Specific Strategies for Teaching Core Vocabulary

with Emerging and Context-Dependent Communicators

## Strategies for Teaching Core
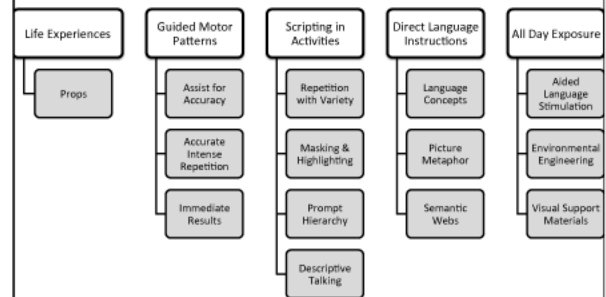


## Strategies for Teaching Core
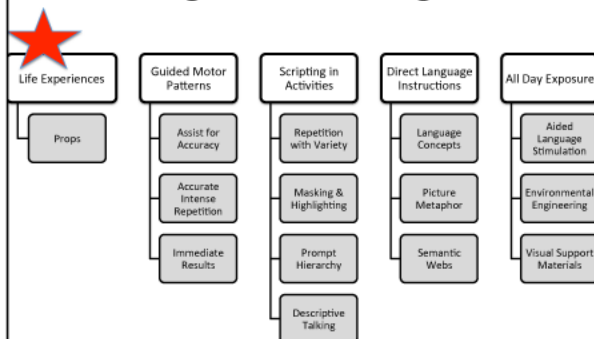


## Live It to Learn It

- Life experience is the foundation for all language learning
- Valuable to associate an experience with a picture
- Provide Experiential Learning using …
  - Props
  - Meaningful, hands-on experiences
  - De-contextualized activities and applications

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Life Experiences with Object Props

- Collect the props for your pictures
- Play with the objects you see represented in the picture in a way that builds language comprehension and supports the picture metaphor
- Encourage families to use the props at home in associative ways

## Do Hands-On Activities for Words with Common Elements in the Pictures
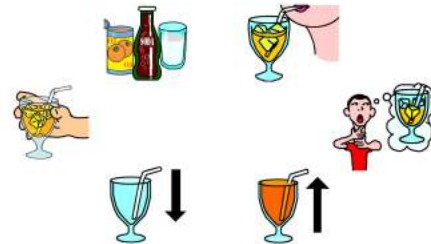


## Concept to Picture Teaching

- Experiential teaching
- How would you do de-contextualization?
- How would you apply it immediately to demonstrate value and power?

## Props & Costumes

**Wanted "root"**          **Negative – "not"**



## Costumes & Songs

**Verbs – Mr. Action Man**          **Question Words**



word

## Paper Prop = "more"

- To teach "more," the Unity symbol for more was modified with 1 open hand. The musical notes are attached to the hand via Velcro. Each time you ask for more, you get "more" notes placed in your palm.

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Paper Prop = "all done"

- To teach "all done," the symbol is made into a puzzle.
- Put the puzzle together and when you are finished, you say "all done."

**Keep this Pixon prop around while you do ANY activity. As you do each bit of the activity, put in another piece of the puzzle, until you are ALL DONE with the activity.**

## 150+ Ideas from the *PLLAN

- Teaching Object Pronouns (me, her, him, you) and the Pixon
  - Wrap a small box in wrapping paper, doing it in a way so you can open it and put things in and out of it. Simulate the package represented in the Pixon.
  - Give it to the person and let them open it up and see what is inside. Put something inside that the person can keep (e.g., small pieces of candy, pennies).
    - Teacher – "Who wants the candy?"
    - Student – "me" (assist as necessary)

\* Pixon Language and Learning Activity Notebook

## Life Experiences with Paper Props

- Do as "projects" in the classroom
  - Idea 1:
  - Idea 2:
  - Idea 3:
- Do as hands-on activities when you lack the actual physical prop
- Do as a supplement when doing other activities to learn about the metaphor (e.g., all done prop)

## The Strategies

| Life Experiences | Guided Motor Patterns | Exposure | Scripting in Activities | Direct Language Instructions |
|---|---|---|---|---|
| Props | Assist for Accuracy | Aided Language Stimulation | Repetition with Variety | Language Concepts |
| | Accurate Intense Repetition | Environmental Engineering | Masking & Highlighting | Picture Metaphor |
| | Immediate Results | Visual Support Materials | Descriptive Talking | Semantic Webs |

## Motor Learning comes with…

- Consistency and relative "permanence"
  - Get the same thing with the same movement plan
  - Stable, single sheet systems for core vocabulary
- Meaningful repetition
  - Student-driven learning
  - Fun and functional activities

## Motor Learning comes with…

- Accurate practice and repetition - with error restriction and error detection
  - Levels of prompting (verbal, visual, auditory, physical)
  - Multi-sensory input and feedback
  - Masking/Highlighting visual displays
  - De-activated keys on an AAC device

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Teaching Through Motor Planning

**Wait vs. Physically Assist**

1. Masking
2. Verbal Prompts with expectant delay
3. Physical Prompt
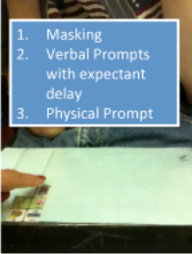
**Motor Plan with Visual Orientation & Auditory Awareness**

1. All Keys Activated
2. Error Detection (auditory/visual)

## Teaching Through Motor Planning

Learning Like Rudy

Available at Gail's YouTube channel.

## AT Consultant Perspective

## Motor Learning

- Motor learning is an important key in the <u>learning and use</u> of any AAC system
- The more cognitively impaired the person, the more he/she depends on motor learning to <u>learn and use</u> AAC
- It teaches the POWER of communication

**HOWEVER....**

JUST DO IT.

I don't want to depend on teaching every word through ONLY motor plans because .....

Being taught about words and pictures is important for ....

1. on-going language development
and
2. developing strategic use of core vocabulary to talk about things not pictured in my AAC system

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Balanced Direct Teaching of Core

✔ Motor Learning

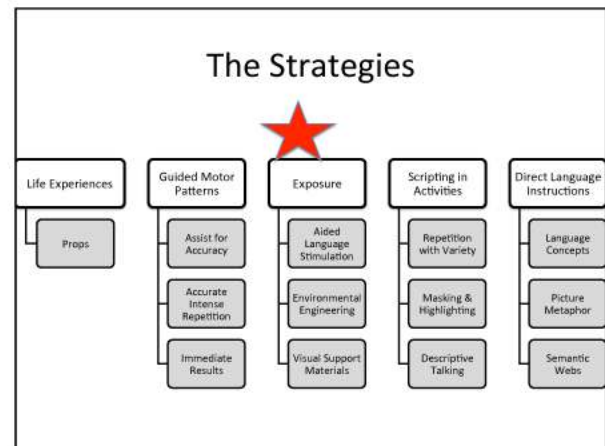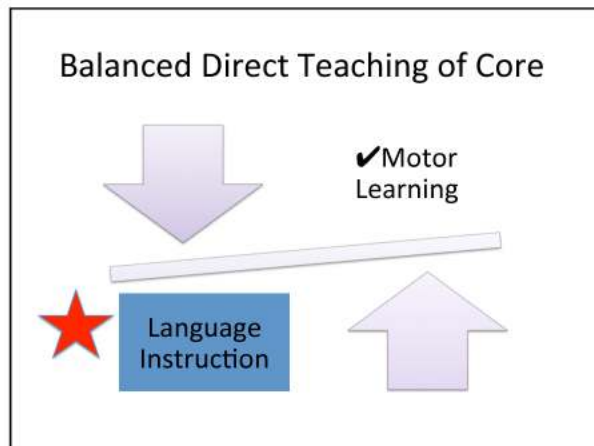Language Instruction

## The Strategies

| Life Experiences | Guided Motor Patterns | Exposure | Scripting in Activities | Direct Language Instructions |
|---|---|---|---|---|
| Props | Assist for Accuracy | Aided Language Stimulation | Repetition with Variety | Language Concepts |
| | Accurate Intense Repetition | Environmental Engineering | Masking & Highlighting | Picture Metaphor |
| | Immediate Results | Visual Support Materials | Descriptive Talking | Semantic Webs |

## Exposure to a Rich Core Vocabulary

- Continual modeling of core vocabulary
  - on a classroom core vocabulary board
  - on external "core" displays (e.g., carpet with loose symbols)
  - symbols held by hand and visually presented as you speak
  - on wall chart of all target words
  - on personal, customized core boards

## Target Vocabulary

**50 Location Board**     **200 Word Wall Chart**

## Exposure to a Rich Core Vocabulary

- Modeling for 2 Reasons
  - You model what you want the student to say
  - You model what you want the student to see, hear, do, understand, etc.
    - Visual – Auditory – Motor input results in better understanding and behavioral responses

## Exposure through Modeling

**Interpret Gesture and Assign Meaning & Picture**

**Teacher Board = More Words**

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Modeling in Natural Opportunities

**Direct Others**

**Model Comments and Requests**



## Exposure to Rich Core Vocabulary

- Wall chart of words placed in the room
- Visual exposure with environmental engineering and stationary, external mini-displays

## Communication Board Wall Chart

- Full target core vocabulary



## Wall Charts in the Classroom

Area 1: Magnets on Whiteboard   Area 2: Table Area



## Use of Wall Chart Pixons



## Environmental Engineering

- Identify areas in the home and school where spontaneous, unplanned talking happens.
- Serve as stationary, location-specific external mini-displays

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
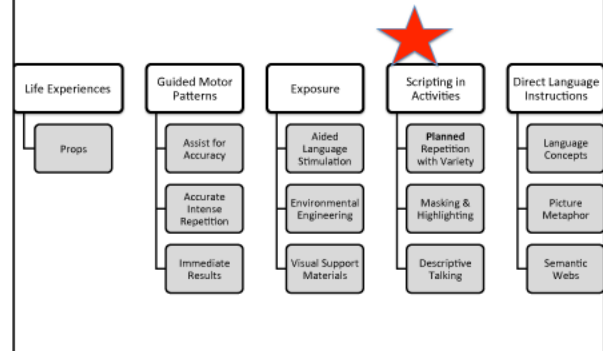www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Additional Visual Support Materials

What other materials do you use in your classroom that you need developed with core?

- Educational Materials
  - Story boards
  - Reading boards (to use with all students)
  - Game boards
  - Song boards
  - Reading materials
  - Sequencing activities
  - Social stories
- Environmental Materials
  - Visual Schedules
  - Specific Activity Boards
  - Calendar Time

## The Strategies

| Life Experiences | Guided Motor Patterns | Exposure | Scripting in Activities | Direct Language Instructions |
|---|---|---|---|---|
| Props | Assist for Accuracy | Aided Language Stimulation | Planned Repetition with Variety | Language Concepts |
| | Accurate Intense Repetition | Environmental Engineering | Masking & Highlighting | Picture Metaphor |
| | Immediate Results | Visual Support Materials | Descriptive Talking | Semantic Webs |

## Planned Repetition (with Variety)

- Create a general plan for bringing core into your classroom activities and daily routines
  - **If** 1 – 3 core words are targeted in everything you do with your students …..
  - **If** you always have the core board with you when interacting with your students …..

you will be modeling and your students will be saying more core words than you would have ever guessed possible.

## Train Teachers to Select Activities

- Nearly ANY activity can be used
  - Some lend themselves to target 1-3 words while others allow for targeting of 4+ words
  - Pick motivating activities for unmotivated students
- Expect that it will take MORE time than before to do the activity
- Start gradually with 1 or 2 activities per day
  - Brief, repeated 3 – 4 times/week
  - Aim for a minimum of 3 target core words for students to say (you will model MORE than that)

## Help Teachers Plan the Activity

**Beginning Teachers/Therapists need to ….**

- Create a lesson plan
  - What's the activity?
  - How are you going to organize what you do to provide opportunities to use core?
  - How are you going to manage the materials of the activity?
- Develop a simple script of how he/she is going to organize the activity
- Practice until the "plan" and "script" become an automatic part of the teaching routine

## Implementing "Scripts"

- We all need a chance to practice without anyone watching or critiquing us
- We will observe each other and provide constructive feedback about ….
  - Our activities
  - Our classroom set-up, materials, and access to AAC
  - Our partner skills
    - modeling, prompt hierarchy, & response strategies
    - engagement, attention, & wait time
    - use of questions (Do I overuse yes/no questions? Ask too many specific /wh/ questions?)
    - proportion of "testing" vs. "talking"

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Provide Script Cards To Train Others

- Helpful to ….
  - keep the activity "core focused"
  - plan the "order" in which you will target words
  - change communication partner behavior
- But scripts are not …..
  - required
  - rigid
  - rote

http://www.minspeak.com/teachers/
InterventionPlanningArchives.php

## Practice Using Core

### 1:1 before doing Groups



## Observe & Give Feedback

**Art Activity Intro**          **Art Activity**



## One Teacher's Plan

Ms. Ashley – DeSoto Trails

### Sample – Elementary Program  (K-4 Special Ed Classrooms)

| TIME | SUBJECT/ACTIVITY | TEACHER/ASSISTANT | CORE WORDS EMPHASIZED/MODULE # |
|---|---|---|---|
| 8:00 – 8:15 | Students arrive, manage materials, informal greetings | Teacher and Assistant | • greetings – AR<br>• pronouns and people (#2) |
| 8:15 – 8:40 | Morning meeting (pledge, announcements, meeting, daily schedule) | Teacher and Assistant | • question words as review home/school books (#9)<br>• pronouns and people (#2)<br>• time words (#12, #4)<br>• feeling words (#10) |
| 8:40 – 9:30 (50 minute block) | Language Arts using Storybooks for Unit Activities (3- week rotation schedule of activities) | Teacher and Assistant | • varies by activity<br>• mediate (#1) - with 1st reading of book<br>• characters (#2)<br>• actions (#5, #11)<br>• descriptions (#6)<br>• negation (#3) |
| 9:30 – 9:45 | CLEAN UP TIME and HYDRATION (all students get 3 – 4 ounces liquid.) | Assistant with students | • varies as wait for teacher<br>• mediate (#1)<br>• negation (#3) |

## A CVC Teacher!

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

## Teaching Strategies = Masking

- Using MASKING
  - Helps to visually locate words
  - Reduces random selections
  - Requires preplanning to make them



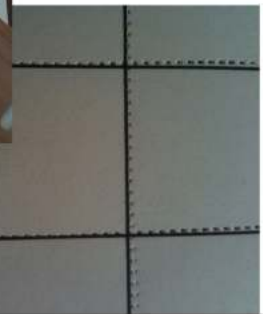## Masking Board and Full Board for Modeling



## Masking Toolkit



## Perforated Masks



## Punching/Cutting Out Holes



## Teaching Strategies = Highlighting

- Foam frames

- Craft stick frames, pointers

- Post-it Note frame

- Adhesive putty/tack

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## 5 Tools to Use with Modeling for Highlighting and Directing Attention

http://praacticalaac.org/praactical/5-tools-to-make-aided-language-input-easier/

1. Maglite or Laser Pointer
2. Squeakers and Noisemakers
3. Word/Picture Wands
4. Thematic Pointers
5. Finger Puppets



## Descriptive Talking

- Use core words to define and describe objects
- Create a fast and easy way to "label" the objects of the activity with core words



---

Figure out what target core words will be used to replace the nouns in choice making activities – then have the tools to implement your plan.



## Activity #3 – Lesson Planning

- Develop a lesson around SEQUENCING with the making of a Smoothie
  - Ordering what happens first/next/last
  - Identify consequences of failing to follow the order
- Develop a lesson around a MONEY/SHOPPING activity to teach about....
  - getting what you want takes money
  - you need enough money to buy what you want
  - you have to save to buy things if you don't have enough money now

---

## The Strategies
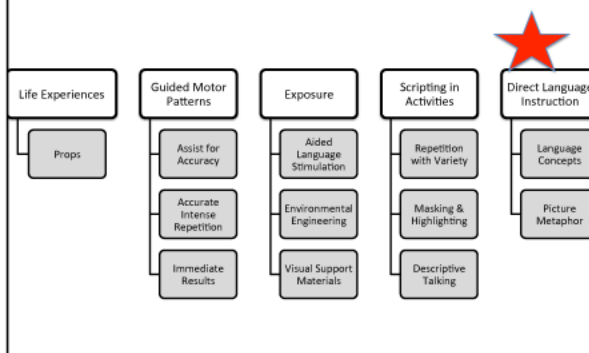


## Direct Language Instruction

- Built into all the other strategies
  - Receptive Language Concepts
  - Learning the Picture Metaphor for the Concept
  - Expressive Use of Words
- My Role as the SLP is to:
  - Help the teacher do language instruction as part of the curriculum
  - Supplement language instruction with therapy activities within the classroom and/or in pull-out therapy

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## SLP Time in Classroom



## Outcomes

What's happened in the classrooms? What outcomes are reported by teachers?

## Comments of Ms. Williams



## First Goals at 1 School

- Students:
  - Exposed to Core Vocabulary in 2 – 3 part constructions
  - Learning to go to Core Boards, when directed

- **Teachers, Assistants, SLPs:**
  - **Develop confidence**
  - **Develop skills modeling**
  - **Implement prompt hierarchy**
  - **Awareness of communication partner skills being used**

## As we continued ….

- Document core words modeled in a day
  - 50 - 70+ different core words modeled in 1 day
  - Teachers requesting use of a more robust board for modeling purposes
- Introduce more Descriptive Talking
  - Use core words (that, this, big, little, hard, soft) for extended vocabulary words (foods, art supplies, etc.) in 70 – 80% of planned activities in the classroom

## Student Changes We Observed

- Receptive language
  - Improved responses to verbal/visual directions
  - Identifying 60% - 80% of the Pixons by label (without ever having providing direct instruction)
- Expressive language
  - Meaningful talking by echolalic students
  - Improved attention and topic maintenance
  - ALL students producing some 2 – 3 word utterances
  - Going to wall chart to retrieve and give pictures - INITIATION

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn    gvantatenhove@cfl.rr.com

## Communication Changes

**Reduced Echolalia & Increased Meaningful Communication**

**Family Reports**



## The Next Steps …

- Implementation outside of Classroom
  - Taking portable boards to lunch
  - Boards/Charts posted around schools
  - More parent/home involvement
    - Evening group training with parents (9/19/2012)
- Investigate some Speech Generating Devices for select students

## Outcomes Across Schools

- Used in 10+ schools with E/CD communicators over the past 4+ years (preschool/elementary level/high school)
- Data collected on focus group of 50 nonspeaking students (and 200+ speaking)
  - None had a personal AAC system
  - All had potential to learn language and some literacy

## Objective Outcomes

- Vocabulary acquisition • Start / End
  - 151+ core words        – 0 / 12
  - 101-150 core words     – 0 / 13
  - 76-100 core words      – 0 / 17
  - 51-75 core words       – 10 / 7
  - 26-50 core words       – 24 / 1
  - 10-25 core words       – 10 / 0
  - 0-9 core words         – 6 / 0

## Objective Outcomes

- Multiple word utterances • Start / End
  - Emerging morphology*         – 0 / 9
  - Consistent 3-part utterances – 0 / 6
  - Emerging 3-part utterances   – 0 / 14
  - Consistent 2-part utterances – 0 / 21
  - Emerging 2-part utterances   – 2 / 5
  - Some word strings            – 5 / 4
  - All 1 word utterances        – 43 / 0

## Converting to a CVC Approach

- One teacher at a time
- Follow a process
  - Step 1: Train on the "CVC" Approach
  - Step 2: Re-engineer the Classroom
  - Step 3: Demonstrate/Collaborate with teacher on his/her lesson(s)
  - Step 4: Provide on-going collaboration with gradual shifting of responsibility from the trainer to the teacher

Core Vocabulary with Emergent & Context-Dependent Communicators in Special Education Classrooms
Gail M. Van Tatenhove, PA, MS, CCC-SLP
www.vantatenhove.comn   gvantatenhove@cfl.rr.com

Thank you.

Be happy, live safely, do well.