

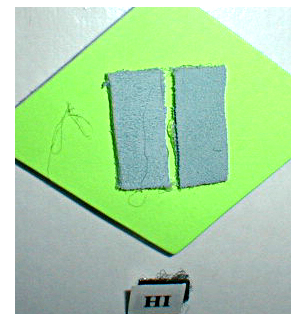
Access to core vocabulary using 3D Tactual Symbols



Vision PLC

September 14, 2016

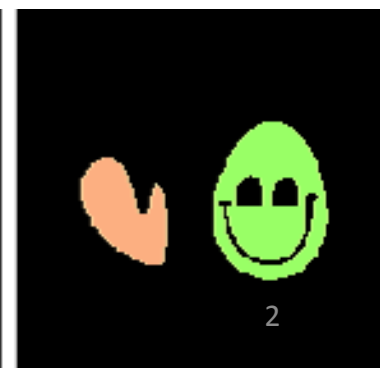
Kathy Look Howery



16-09-21



Kathy Look Howery



2

Presumed Competence
Symbols
Symbol Hierarchy
Core vocabulary
Tactual Symbols



that was then
this is now
CB

Changing Understandings

Then

- **Candidacy model** – only some children can benefit from AAC supports



<http://kino.com/watch-audio-7/>

Now



Opportunities Matter!



Candidacy Model of AAC

Low expectations are the norm. Hopes and dreams are stripped away by physicians, educators, services providers, and even parents, as in, “People with _____ will never _____.”

But have we ever given the person the opportunity?

Presuming Competence

Every child communicates!

If given the appropriate opportunities, education, tools, supports and services any child can learn to use AAC to expand their communicative abilities.

Presumed Competence...

a kind of contract between teacher and student to choose **the most optimistic stance possible.**



Bilken & Burke (2006) Presumed Competence.

that was then
this is now
CB

Changing Understandings

Then

Begin Requesting/ Choice Making



Now

Let's start modeling TALKING



AAC users need access to **COLORFUL** language!

Communication

By and large, communication is a **purposeful activity** of exchanging information and meaning across space and time using various technical or natural means, whichever is available or preferred.



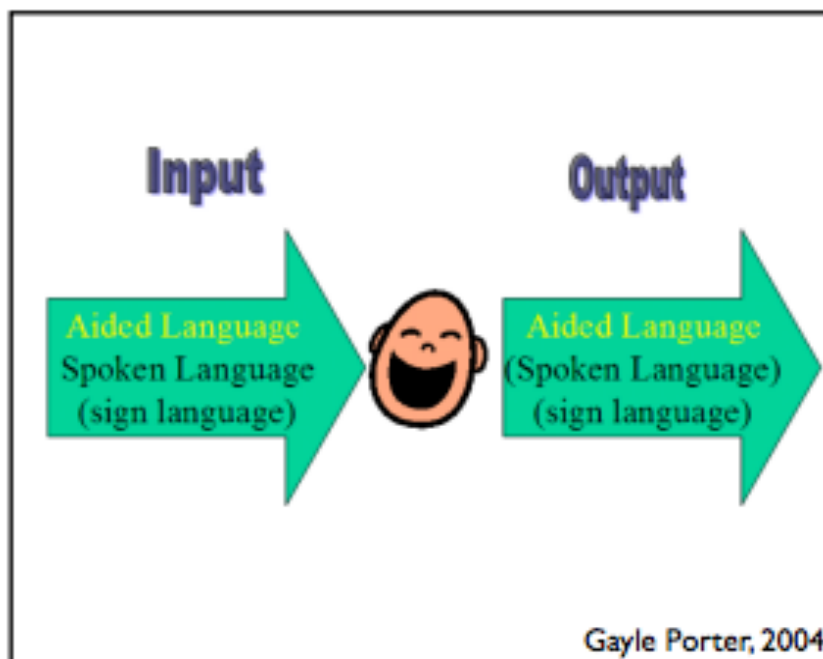
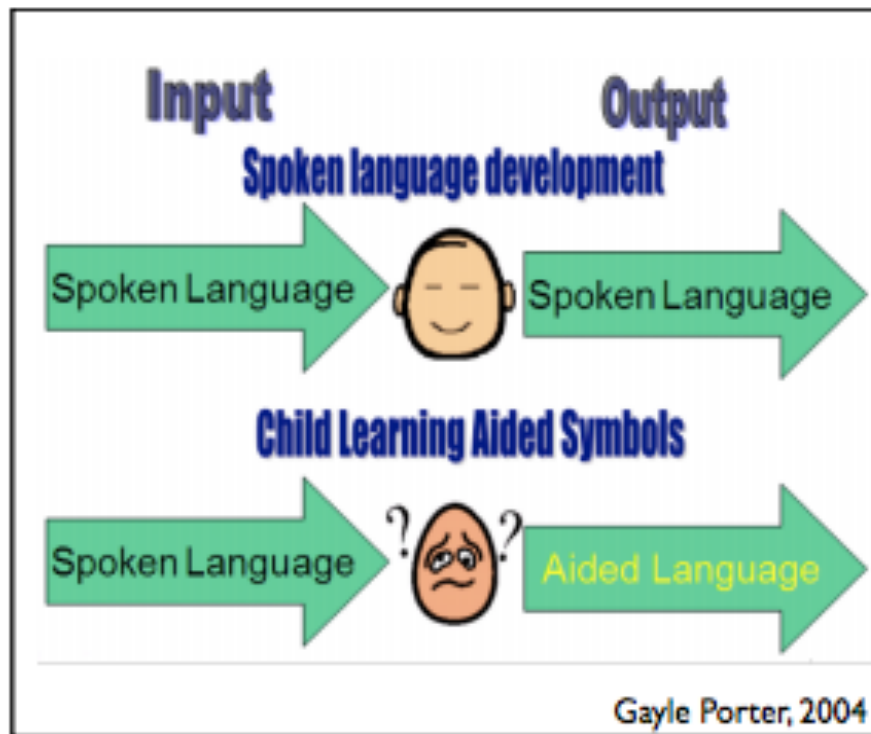
But it doesn't start out that way!

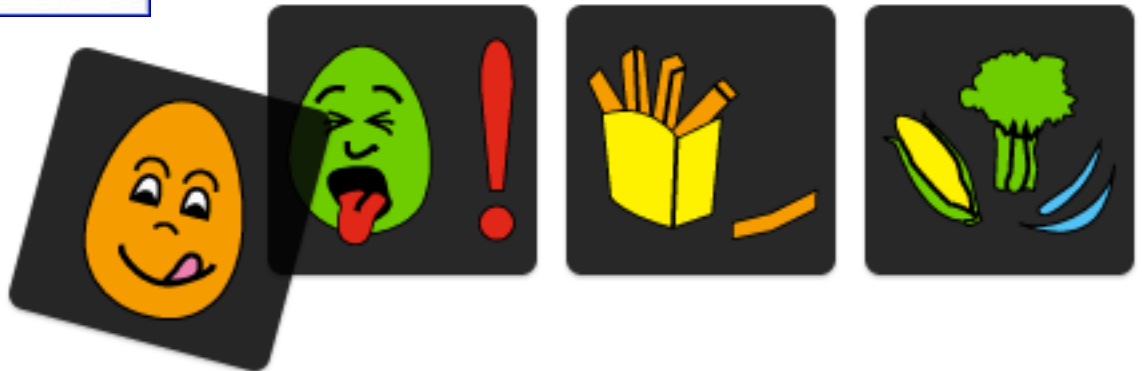


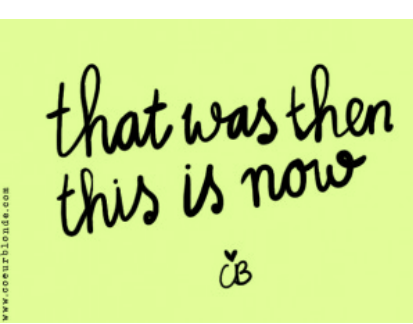
“From the moment a baby is born, they hear and respond to the spoken word. We bombard that infant with language for the first 12-18 months of their lives. During that time, we do not expect that they will utter a single understandable word.”



<http://atto.buffalo.edu/registered/ATBasics/Populations/aac/consider.php> fppt.com







Changing Understandings

Then

Symbol Hierarchy

- We should start with real objects, then photographs before we introduce symbols



Now

Language is Arbitrary!

- We would never wait to speak to a child until they demonstrated understanding of pictures
- Children learn language by repeated exposure across a variety of conditions

It is a characteristic of the sign that it is arbitrary, that there is no direct relationship between the form and the meaning of the word.
(von Tetzchner, 2012)



cup

New Research Shows....

Our year 1 results are exciting. A group of 72 children (ages 3-21) made statistically significant improvements in both complexity and range of communication. *One of the biggest challenges we encountered was the commonly held (mis)belief that we have to start with concrete referents.*

Dr. Karen Erickson



a 9-year-old boy with multiple disabilities, including intellectual disability and deaf-blindness, learned to make appropriate use of three conceptually referenced tactile symbols for the concepts of more, done, and new as an initial communication vocabulary

Snodgrass, Stoner & Angell (2013)

that was then
this is now
CB

Changing Understandings

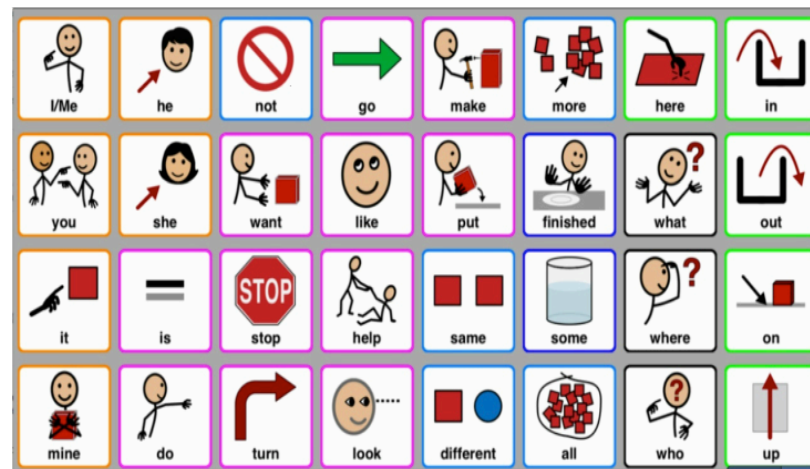
Then

Activity based
'Concrete' Referents



Now

Core Vocabulary





Core Vocabulary

Did you know?

85% of what we say is communicated
with only 200 basic words.

We call these our “core” words.

“Core is consistent across place, topic, cognitive
ability”

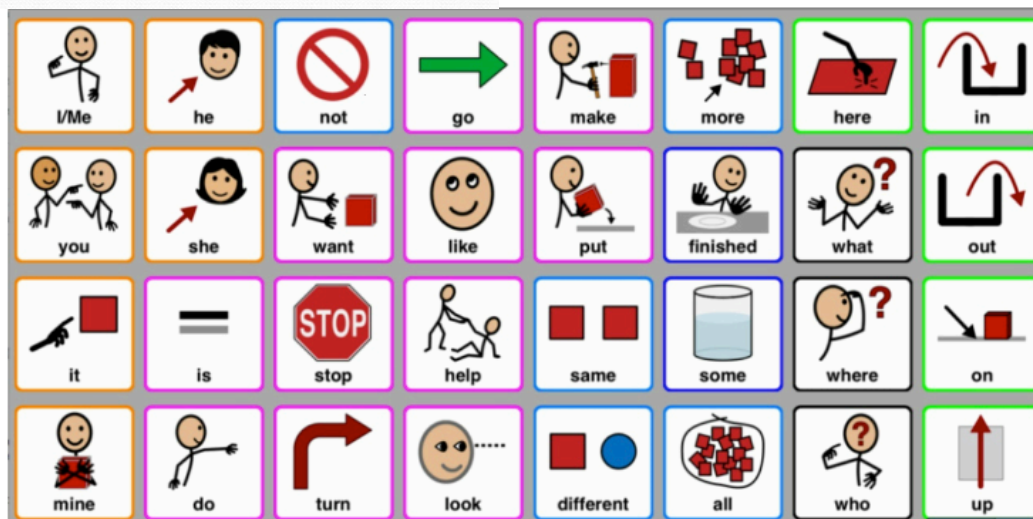
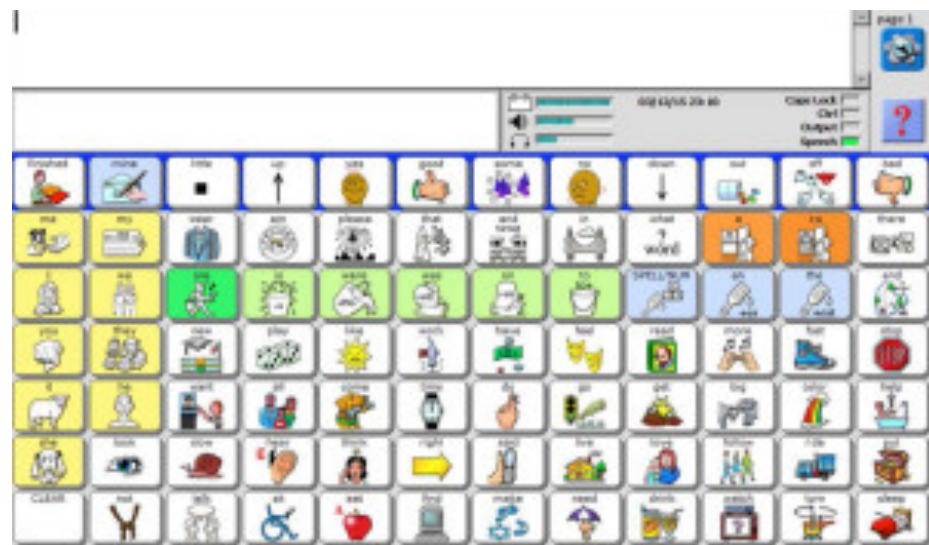
Core Vocabulary & AAC

- Core vocabulary is a small set of simple words, in any language, that are used frequently and across contexts (Cross, Baker, Klotz & Badman, 1997).
- Core vocabulary contains all parts of speech - nouns, pronouns, verbs, adjectives, adverbs, prepositions, conjunctions, and interjections and serves as a great medium for teaching language.

Gail Van Tatenhove—The Pixon Project Kit and online resources

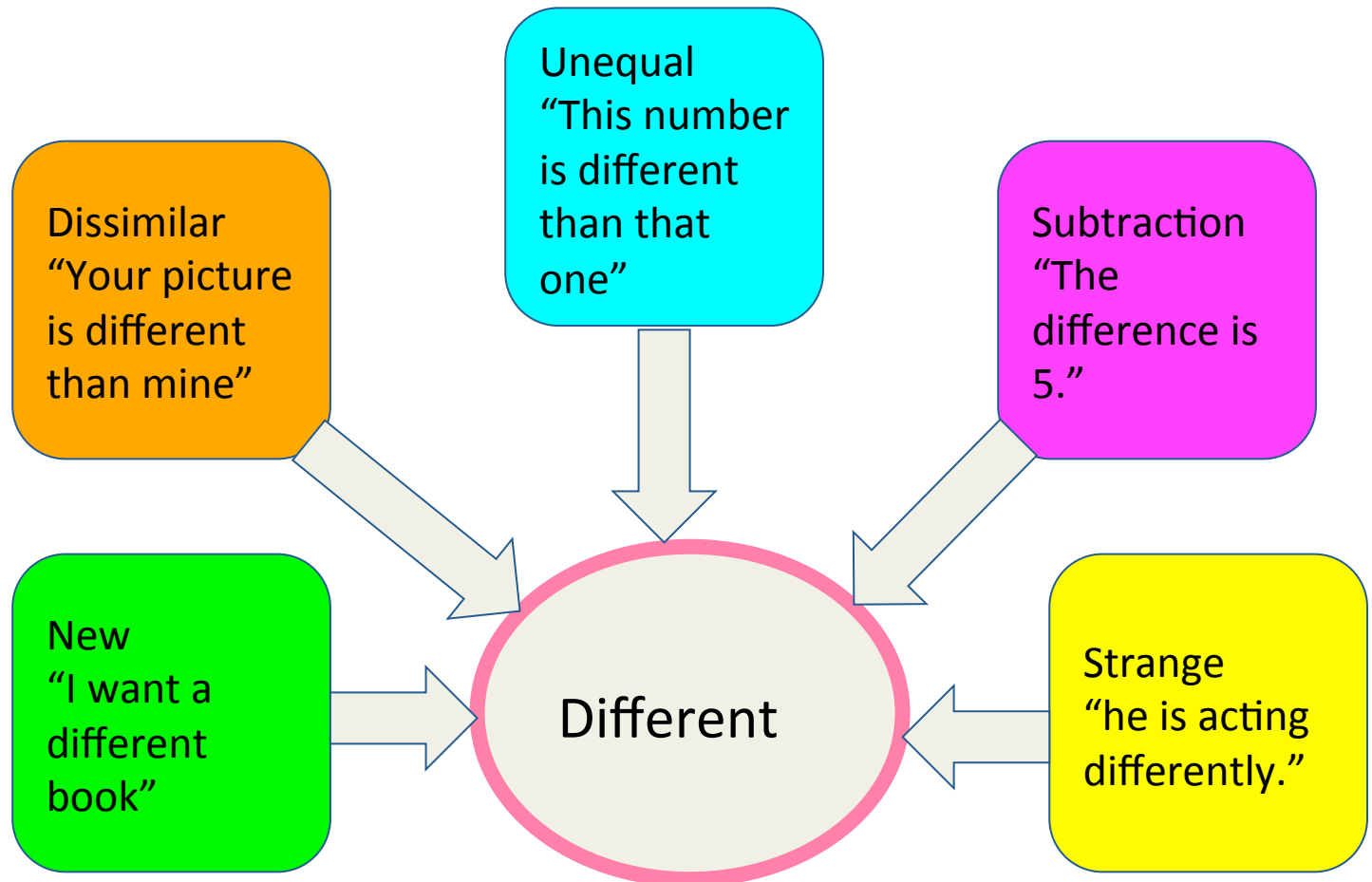


Gail Van Tatenhove "Pixon" core board 112.



Core Vocabulary & AAC

Core vocabulary is *flexible*:


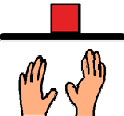
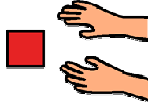








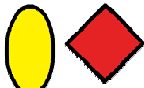


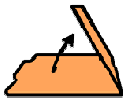






















Core Vocabulary & AAC “Turn”

Context	Phrase
book	“Turn the page”
game	“Your turn”
toy	“I want a turn”
TV	“Turn the channel”
radio	“Turn it up/down”
bath	“Turn water on/off”
car	“Turn the corner”
person	“Turn away”

Using a Few Words ...

I	LIKE	NOT	WANT
HELP	IT	MORE	DIFFERENT
WHO	SHE	YOU	HE
WHERE	UP	ON	IN
ME	MAKE	GET	LOOK
WHAT	NEED	ARE	IS
SOME	PUT	ALL	THIS
DON'T	THAT	GO	DO
WHEN	FINISHED	CAN	HERE
OPEN	TURN	STOP	OVER

like 	want 	get 	make 	good 	more 	
not 	go 	look 	turn 	help 	different 	
I 	he 	open 	do 	put 	same 	
you 	she 	that 	up 	all 	some 	
it 	here 	in 	on 	can 	finished 	
where 	what 	why 	who 	when 	stop 	

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Tactile Symbols



Tactile Symbols

APH American Printing House
for the Blind, Inc. ~ *Shopping*



STACS: Standardized Tactile Augmentative
Communication Symbols Kit

<http://www.tsbvi.edu/tactile-symbols>





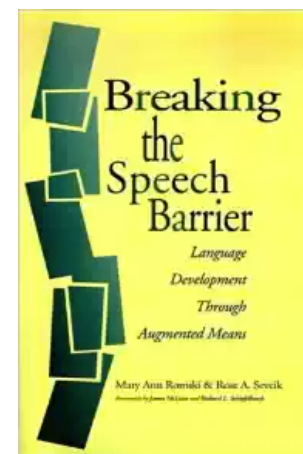
Project Core

A Stepping-Up Technology Implementation Grant
Directed by the Center for Literacy and Disability Studies at UNC Chapel Hill



Project Core aims to develop a comprehensive implementation program for the delivery of universal core vocabulary instruction and augmentative communication supports using the multi-tiered system for augmenting language (mSAL).

<http://www.project-core.com/>



The *current* set includes:

go, like, not, do, don't, finished, help, it, make,
more, open, out, turn.

These 3D tactile symbols are designed to fit in a small hand for manipulation.

Each includes a unique raised element, the printed word, and braille.



They also have little handles built into them to make it possible to string the set together (and avoid having to pick them up off the floor all day).

Tactual Symbols

Benefits of 3D printed tactual symbols

1. They are re-producible
2. They are relatively easy to produce
3. They are low cost
4. Changeable in size



Let's Take a Closer Look



Our current “rules” follows (Dr. Lori Geist):

Part of Speech	shape	edge	color
adverb	circle	bumps (reverse golf ball dimples)	yellow
adjective	heart	smooth	blue
pronoun	hexagon	crosshatched	white
preposition	square	slanted ridges	green
verb	triangle	ridge like a quarter	red

How do you use these?

Actively and repeatedly linking the symbol to the action/word it represents

Example (Teaching Script): Core Sandwich - GO



We identified *go*, *like*, and *not* as an appropriate place to start with our current students...

Karen Erickson:

You can use them (GO, LIKE, NOT) to refuse, obtain, engage in social interactions, and seek/share information

JUST THOSE THREE

Refuse (GO away; NOT; NOT LIKE)

Obtain (LIKE)

Social (LIKE, GO, NOT)

Share information (LIKE, NOT)

objects will let you obtain but only IF someone else sets up the obtaining





Each symbols is paired with a hand sign (sign in hand) or, ideally, a gesture the student can actually do. For example, one of the girls in our study swipes her hand across her chest for LIKE. It isn't a standard sign, but she can't physically do the standard sign.



For 10 years she hasn't been able to learn to use the gesture (hand swipe) for LIKE either, but at the end of the school year she did it when the team put the LIKE 3D symbol in her hand paired with something they already knew she liked. ...



Her gesture for go is to move her hand forward - with her palm facing down. Each time they have to go, they put the GO symbol in her hand, use hand-under-hand to sign GO (using her gesture), and then go



Early Days!

“Important to mention here that all of this is a work in progress.” (Dr. Lori Geist)





time 4 new possibilities

Questions? Comments?





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