



PIXON: A Simple Engaging Approach That Keeps Potential Alive

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Why do we communicate?

- Well for many reasons.....
- Write down one reason for communication and then 2 words that will fulfil that communication function
- E.g. To request.....More. Want.





Reasons why we communicate

1. **Initial Mediating/Regulating of Activities**
2. **Expressing Self, Others, & Possession**
3. **Expressing Negation & Negatives**
4. **Regulating Time Aspects of an Activity**
5. **Requesting & Direction Actions**
6. **Describing & Commenting on an Activity**
7. **Requesting objects & Stating Existence**
8. **Stating & Directing Locations**
9. **Requesting Information**
10. **Stating Personal Attributes & Feelings**
11. **Stating & Directing Specific Actions**
12. **Stating Additional Time Concepts**





What is The PIXON Project Kit?

A Language Development Curriculum

- Pixon Language & Learning Activity Notebook (PLLAN)
- Pixon Picture Set
- Pixon Manual Communication Boards & Displays
- Pixon Educational & Environmental Materials





What Is PIXON?

A New Language System
that uses a fresh Single-Meaning
Symbol Set
which echoes both Minsymbols & PCS
symbols





PIXON Equipment

- A No-Tech TEACHABLE approach using:
 - pre-made manual boards
 - flip charts
 - portable boards
 - wall charts
 - props
 - environmental engineering labels
-





Origins of PIXON

- Gail Van Tatenhove + International Team
- Guiding Principles:
 - Language-Based Structure
 - Immediate Access to Core
 - Controlled Access to Fringe Vocab.
 - Ease Transition to High-Tech
 - Out of the Box Experience
 - Need for a no-tech back-up system





PLLAN (Manual)

- Guide to implementing PIXON
- Follow or Discard!
- General Intervention Principles
- Pixon Language Learning Modules
 - 12 modules covering 150 vital words





Symbol Set

- Based around the 84 location MAP





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Communication without limitations

- Designed to incorporate elements of the Minspeak icon sequence
- Contextual depth of meaning
- Fitzgerald colour coding
- Initial target of 212 key words
- Use of Symbolic conventions
400 Core + 1000 Extended Vocab.



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Communication without limitations

Eat



Come



Ride



Help



Make

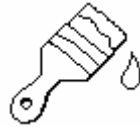


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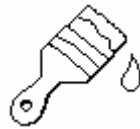
Communication without limitations



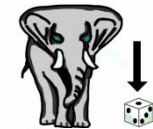
Hungry



Big



Little



Hot



Cold



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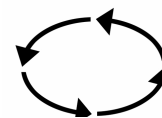
All gone



All done



Again



More

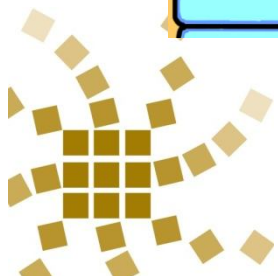
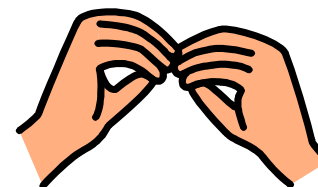


Busy





PCS & PIXON...not so different



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Personal Pronouns

I 	you 	he 	she 	it 	we 	they
me 	you 	him 	her 	it 	us 	them
myself 	yourself 	himself 	herself 	itself 	ourselves 	themselves
my 	your 	his 	her 	its 	our 	their
mine 	yours 	his 	hers 	its 	ours 	theirs





Manual Communication Boards

- **Communication Boards**
 - “Core” Board - your main board with 2 types of add-on flip charts
 - Supplemental “Core” Displays
 - Extended Vocabulary Displays
- **Activity-Based Displays**
 - Provided AFTER the client has a personalised board – not a replacement for a personalised communication board





- **Pre-made boards** were developed to assist families, teachers, and inexperienced SPs to begin AAC intervention without having to develop the necessary expertise or confidence to make their own communication boards
- However, you can **opt to make your own** boards or customise the pre-made ones using Pixon with Word or BoardMaker





Readiness To Learn

- **General Intervention Principles**
 - Sensory Integration
 - Visual & Hearing
 - Positioning





Types of Core Boards

- 10 pre-populated CORE BOARDS to match: **Mobility, Vision Skills, Access Skills, Cognition, & Language...**
- Based on 212 core words
- The Stationary Laptop style is in:
20,30,50,77,112,198,216 locations
- Plus an Eye Gaze Board
- Plus a Portable Board (cloth case)





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20 Location Board



50 Location Board



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198 LOCATION PIXON BOARD

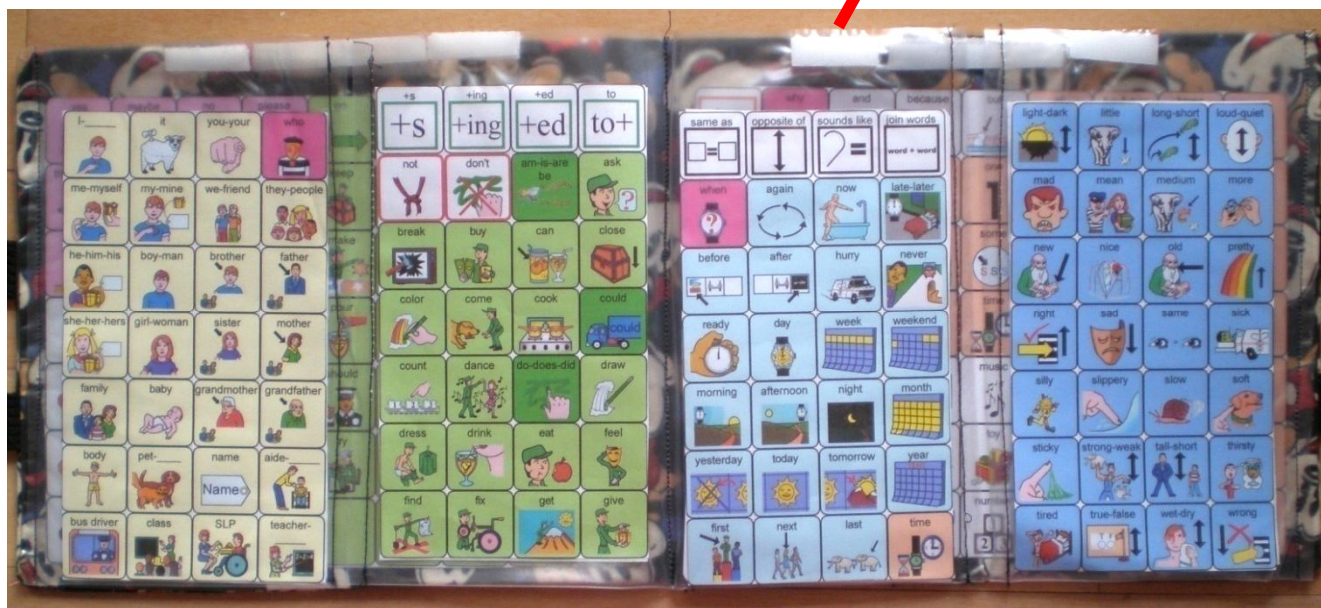
I- 	it 	who 	what 	+s 	+ing 	+ed 	to 	when 	same as 	opposite of 	starts with 	+s 	all 	fun-funny 	home 	idea 	one
me-myself 	my-mine 	not 	don't 	am-is-are 	ask 	break 	buy 	can 	again 	now 	late-later 	be careful 	place 	problem 	question 	school 	some
you-your 	we-friend 	they-people 	color 	come 	count 	do-does-did 	dress 	drink 	before 	after 	ready 	hurry 	stuff 	thing 	that 	this 	time
he-him-his 	boy-man 	brother 	eat 	feel 	find 	get 	give 	go 	morning 	afternoon 	night 	yesterday 	today 	tomorrow 	town 	trouble 	way
she-her-hers 	girl-woman 	sister 	have-has-had 	hear-listen 	help 	hold 	know 	let 	where 	away 	how 	how much 	er 	est 	why 	and 	because
family 	mother 	father 	like 	live 	look-see 	love 	make 	need 	here 	there 	afraid-scary 	all done-finished 	all gone-gone 	bad 	big 	busy 	clean-dirty
baby 	grandmother 	grandfather 	open-close 	play 	put 	read 	ride 	say-tell 	in 	out 	cold 	confused 	different-same 	dumb-smart 	easy-hard 	empty-full 	fast
body 	pet- 	name 	share 	sing 	sit 	sleep 	stand 	stop 	on 	off 	favorite 	good 	happy 	hard 	hot 	hungry 	hurt
aide- 	bus driver 	child-children 	take 	talk-call 	think 	try 	turn 	wait 	over 	under 	little 	long-short 	loud-quiet 	mad 	mean 	medium 	more
class 	SLP 	teacher- 	walk 	want 	was-were 	wash 	watch 	win-lose 	top 	bottom 	nice 	new 	old 	pretty 	right 	sad 	sick
			work 	write 					up 	down 	silly 	slow 	soft 	thirsty 	tired 	wet-dry 	wrong

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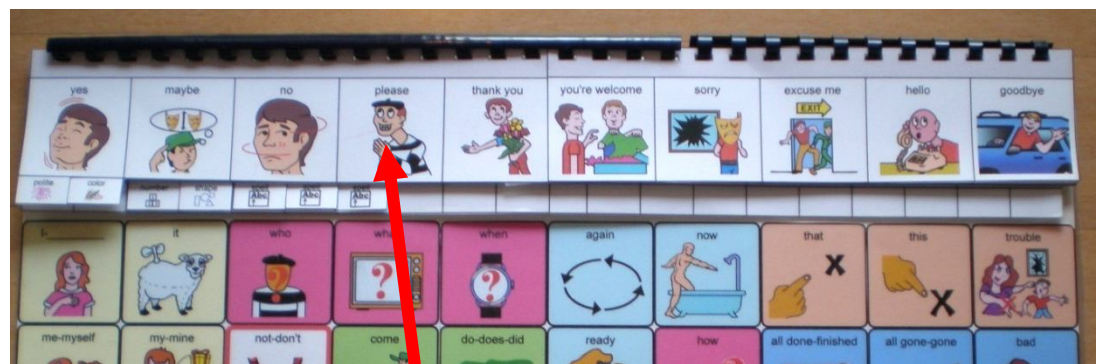
Portable Board





SUPPLEMENTAL CORE FLIP CHARTS

- Supplemental = frequently used, predictable words - they would be in the “core” section if there was enough room
- Templates & Samples developed
 - Polite words
 - Colours
 - Numbers (0-9)
 - Shapes
 - Alphabet
- Category Icons on Tabs

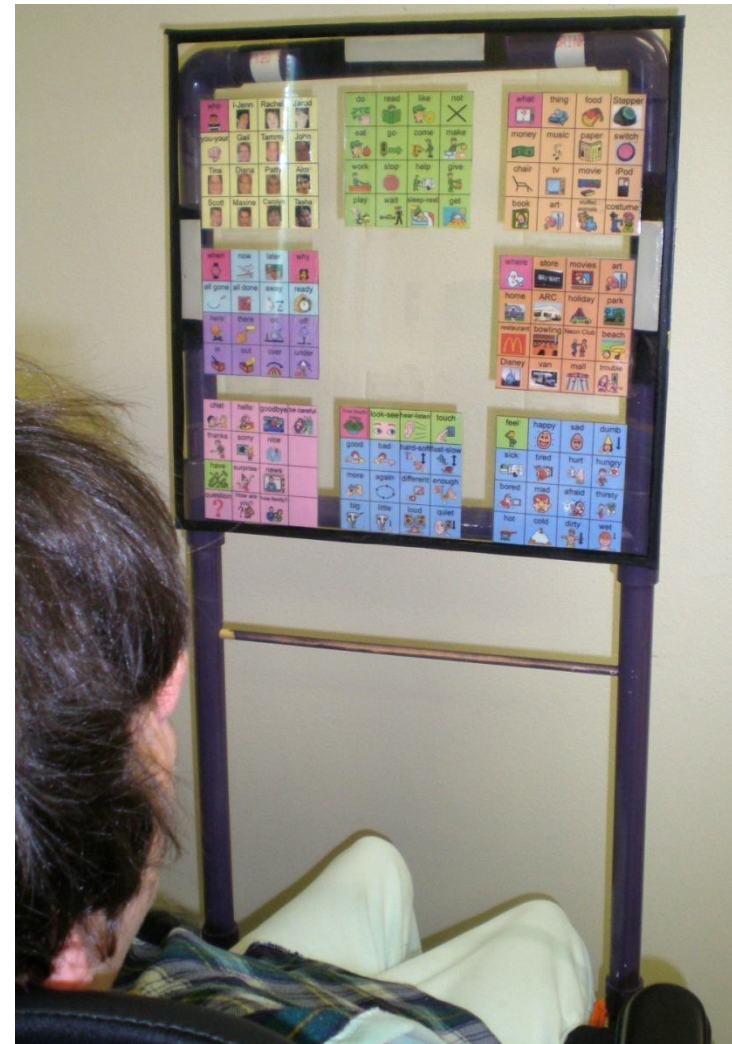




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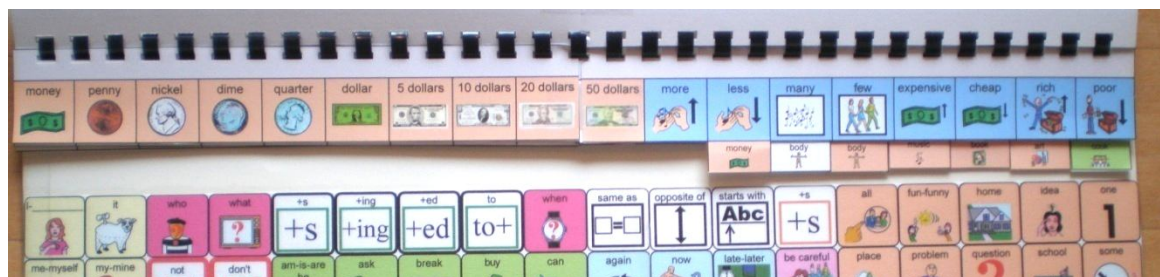
Eye Gaze Board





PERSONAL EXTENDED VOCAB. FLIP CHARTS

- Personal/ fringe vocabulary driven by interests and activities
- Templates & Samples developed
 - Group time (days, seasons, months, weather)
 - Numbers (10-31) and Time words (o'clock)
 - Music
 - Books
 - Art
 - Cooking
 - Body parts
 - Money







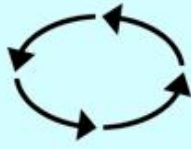













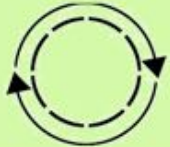



ACTIVITY BASED BOARDS

- Stand-alone displays (2 types)
 - Pragmatic and Interaction focused
 - Content focused
- Samples developed
 - Alphabet (ABC & QWERTY)
 - Calendar Time
 - Time Concepts
 - Money
 - Music
 - Reading
 - Cooking





Reading

I-____-me 	what 	again 	fun-funny 	trouble-problem-uh oh 
my-mine 	not-don't 	get 	that 	this 
you-your 	look-see 	read 	book 	page 
think 	turn 	want 	story 	different 





The 12 modules.

1. **Initial Mediating/Regulating of Activities**
2. **Expressing Self, Others, & Possession**
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The Teaching Modules

- **Designed to introduce 150 core words, selected on the basis of**
 - Normal Language Development
 - Evidence Based Practice
- **Each module provides basic instructions for teaching the words in functional activities**
 - Modules are only a STARTING point
 - Designed to help track Outcomes and Performance





Teaching-Module Components

- Purpose
- Target Vocabulary
- Long Range Goals
- Teaching Suggestions





Module 1

- **Title:** Initial Mediating/Regulating of Activities
- **Purpose:** To encourage the client to direct the behaviour of others and the course of any activity with words instead of behaviour





Module 1

- Target Vocabulary: 10 words
 - again
 - all done/finished
 - all gone/gone
 - different
 - do
 - help
 - look
 - more
 - stop
 - what





Module 1: Long Term Goals

1. The client will ask “what” when he/she doesn’t know about an object or activity. (function = request information)
2. The client will say “all gone” to show that he/she recognizes that something is missing or depleted. (function = disappearance, nonexistence)
3. The client will call attention to something that is out of the ordinary using a word, such as “look.” (function = request action, direct attention)
4. The client will ask for “help” when he/she is unable to do something independently before or during the activity. (function = request assistance)
5. The client will ask for “more” of something during the activity. (function = request recurrence)





Module 1: Long Term Goals

6. The client will request a repetition of the same activity or an aspect of the activity using the word “again” or “more.” (function = request recurrence)
7. The client will request change in activity, using the word “different.” (function = request action, directive, comment) Client will request a complete stopping of all activity, using the word “stop” function rejection, & cessation
8. The communication partner will model language during the activity that describes, discusses, or comments upon the activity and people engaged in the activity. (*E.g. good, bad, like, silly, big, little, up, down, go, eat, run, open, turn, etc.*)





Module 1: Teaching Suggestions

1. Provide the “materials” of the activity to the client in such a way that he/she doesn’t know what the activity is all about (e.g., put them in a container, bag, etc.). Model and prompt the word “what.”
2. If possible, forget or lose one of the key materials for the activity. Model and prompt the words “all gone” or “look.”
3. Engage with the materials of the activity and do something notable with one of the objects (e.g., drop it, turn it upside down). Model and prompt the word “look” or “all gone.”





Module 1: Teaching Suggestions

4. During the activity, use obstacles and barriers to prevent the client from independently being able to manipulate the materials. Model and prompt the word “help” or “do.”
5. During the activity, use “moderation” with the materials, encouraging the client to ask for “more” of something. Model and prompt the word “more.”
6. Complete the activity. (NOTE: In later modules, you will expand communication expectations for the client during the activity. But for now, focus on mediating and regulating the activity.)





Module 1: Teaching Suggestions

7. Upon completion of the activity, determine whether you are going to do exactly the same activity (e.g., read the same book) or something different (e.g., different book, different activity). Model and prompt the words “again, ”more.” and “different.”
8. At any point in the activity, the student has the option of asking to “stop” if he is bored, irritated, or ready to be left alone. Model and prompt the word “stop” when all activity is over.





Working Through the Modules

- **The modules are NOT Linear, except for #1**
- **Use the most robust board possible with “masking” as needed**
 - To support learning of “new words”
 - To support non-adult driven interaction
- **Teach “all the words all the time, but not all at the same time” through supportive learning activities**
- **Sample Storybook Teaching Activity**
- **Select a book with a “plot” (Three Billy Goats Gruff)**
- **Determine language function(s) to model and target with each repetition of the story**
 - Mediating Reading (Module 1)
 - Pronouns & People Words (Module 2)
 - Negation (Module 3)
 - Directing Action (Module 5)
- **Track outcomes with forms in the Appendices**





Steps to Vocabulary Learning 1

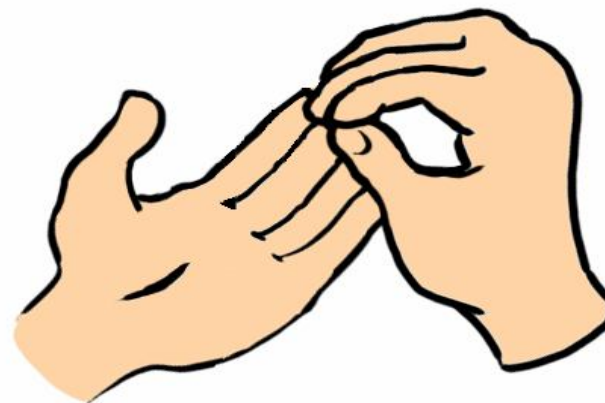
- **Learn the concept** (e.g., more) through hands-on activities (contextual teaching)
- **Learn the symbol/metaphor** for the concept (e.g. the Pixon symbol for “more”)
 - Do this through activities that “match” the metaphor in the Pixon (context – more music) and extend the concept beyond the pictured metaphor (de-contextualization = more juice, more swinging, etc.)
 - Do this through props that can be manipulated during the hands-on activities
 - Props must be made by the client from a PPT on the CD in the Kit





Pixon PROP for “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.





Steps to Vocabulary Learning 2

- Learn the concept (e.g., more)
- Learn the symbol for the concept
- Locate the symbol on the communication display and use it
 - with and without “masking”
 - ALS, modeling
- On-going generalisation of the concept and symbol





Object & Descriptive Labels

Label Objects in the environment: WHAT IS

Label Objects in the environment; WHAT DO

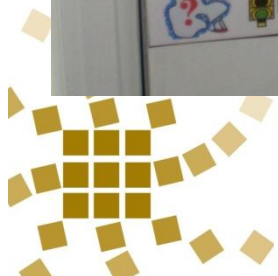


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Sample Labels





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PIXON: Wall Chart





Evidence & Progress

- Appendices provide charts & suggestions to check & monitor the Communication Profile
- **Communication Functions**
- **Vocabulary Acquisition**
- **Syntax & Sentence Development**
- **Morphology Development**





PIXON Transition to PRC Minspeak AAC

- **Data from Gail van Tatenhove: Early findings....**
- **Number of Clients using Pixons, then Unity = 15+**
- **Rate of Transition**
 - Relatively “seamless” because “root” was present on the Unity84 overlay and colour code/characters were visual cues
- **Accommodating “differences”**
 - Changes in Unity84 MAP versions are annoying to staff/family, but not significant to cause issues with client transition
 - Differences between U45, U60, U84, U128 are present, but manageable
- **Attitudes about Transition**
 - Laptray boards - kept communication boards and added device when using boards with 100+ words
 - Portable - like communication boards better because lightweight/ease





Value of Pixon Kit

- **Even IF a client NEVER makes a transition to a high tech device with the Unity program, the materials in the Pixon Project Kit still provide a valuable language development curriculum with single meaning pictures.**
 - **Many people who are already vested in other AAC strategies have asked for the PLLAN as a separate product.**
- **Teams who had previously been only using PCS took the Pixon Kit with the intent to “translate” it to PCS, but 18 months later, they never did and are using the boards and educational/environmental materials with Pixons.**





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Thank you!

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