

AAC Supports for Transition to Adult Life

David McNaughton
Penn State University

1

Transition Goals

1. Have a safe place to live



2. Participate in meaningful activities



3. Access to services



4. Develop friendships and intimate relationships



2



Communication (AAC)
supports achievement
of goals



Goals drive development
of communication



3

Plan for the future

- Visit the future
- Talk to someone who is already there
 - Success stories and challenges

4

Transition Goals

1. Have a safe place to live
2. Participate in meaningful activities
3. Advocate for services
4. Develop friendships and intimate relationships

Anne

5

Transition Goals



1. Have a safe place to live

2. Participate in meaningful activities
3. Maintain a reliable source of income and access to services
4. Develop friendships and intimate relationships

6

Personal Care Attendants



- No matter where someone lives, their quality of life depends to a great extent on the degree to which they can direct the services of the person who provides attendant care
 1. Direct care
 2. Give positive and constructive feedback
 3. Deal with conflicts and dangerous situations
- Barbara Collier, 2005

7

Documenting Service Routines



- Identify important contexts
 - Transfers, mealtimes, toileting
- Document Service Routine
 - Step-by-step description
 - Binders, pages on wall, programmed into devices
 - Photos
- Practice use in role-playing situations

8

Service Routine for Nail Care

(Collier et al., 2006)



- When cutting or cleaning my nails, it is important to know that my hand may clench. This is due to my spasticity. It does not help to ask me to relax or open my hand. I cannot control it.
- The best thing to do is
 - Gently pry open each finger
 - Hold each nail firmly when cut or clean the nail
 - Cut my nails short
 - File any jagged nails because I might scratch myself

9

Teach Needed Strategies: Dealing with problem

(Collier, 2007)

Use role plays to teach needed strategies

- Describe problem
 - *I have a problem with my nails*
- State significance
 - *It hurts when they have jagged edges*
- Communicate what needs to happen
 - *Please follow the service routine in my book*

10



11

Communication and Self-determination



Encourage children and young adults to

- Communicate what they want and how they want it done (**requires specific vocabulary**)
 - Give polite feedback
 - Problem solve
- Develop a sense of personal privacy
 - Say “no” when appropriate

12

Crime and Abuse 
 (Bryen, Carey & Frantz, 2003)

Survey of 40 adults who use AAC

- 45% have experienced crime or abuse
- 97% knew the perpetrators
- 71% victimized multiple times
- 28% reported abuse to police

13

My Student: 

Goal	Teaching opportunity
Introduce AAC system	<ul style="list-style-type: none"> • peers without disabilities during group projects/ongoing activities • restaurants, community trips
Document and teach service routines to others	<ul style="list-style-type: none"> • classroom volunteers
Give polite feedback to staff, problem solve	<ul style="list-style-type: none"> • “sabotage” opportunities (wrong coat) • Communicate “no”

14

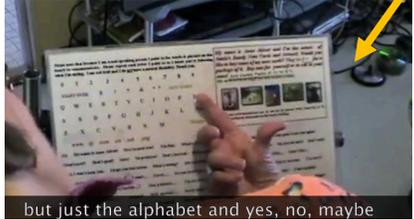
Transition Goals

1. Have a safe place to live 
2. Participate in meaningful activities
3. Advocate for services
4. Develop friendships and intimate relationships 

15

Expert communicators

- Need AAC systems that support communication about their **individual** interests
- Literacy
- Photos/videos



but just the alphabet and yes, no, maybe

16



17

- ### Transition Goals
1. Have a safe place to live
 2. Participate in meaningful activities
 3. Maintain a reliable source of income and access to services
 4. Develop friendships and intimate relationships

18

- ### Transition Goals
1. Have a safe place to live
 2. Participate in meaningful activities
 3. Maintain a reliable source of income and access to services
 4. Develop friendships and intimate relationships

19

Video Visual Scene Displays

Support for

- Participation (learning a new skill)
- AND
- Communication

20

Lena

- 16 years old
- Prompt dependent
- Echolalia

Transition program

- Work in school office
- Work in print shop
- Ride public transportation

21

Work in School Office

1. Leave classroom and say **goodbye**
2. **Walk to room 111**
3. **Enter room 111 and greet staff**
4. Walk to shredding area
5. Place paper in shredder
6. Empty shredder

22

Video Visual Scene Displays = Video modeling

- Watch the video until a “pause” (still image)
 - Cue to perform step

23

Video Visual Scene Displays = Video modeling + Communication supports

- Watch the video until a “pause” (still image)
 - Cue to perform step
- The still image is a *Visual Scene Display*
 - Can be programmed with hotspots

24

Video Visual Scene Displays = Video modeling + Communication supports

- Watch the video until a “pause” (still image)
 - Cue to perform step
- The still image is a *Visual Scene Display*
 - Can be programmed with hotspots

25

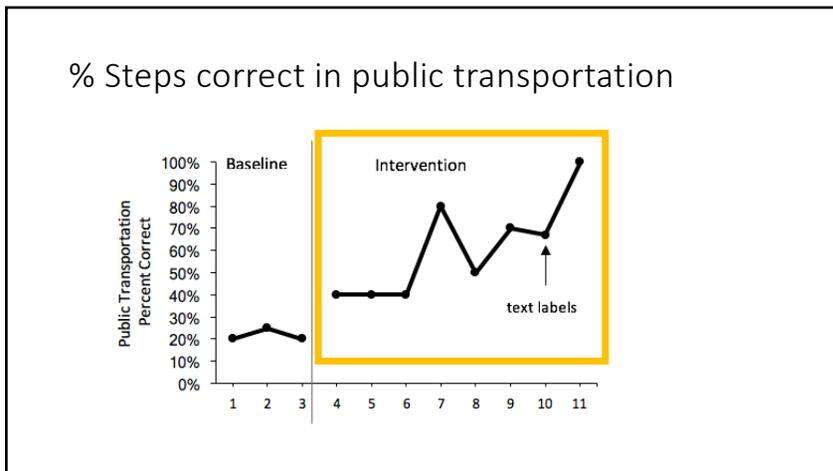
Lena

- Riding bus

Video visual scene displays (VSDs) = Video modelling + Hot spots

participation communication

26



27

A different way of thinking about AAC

28

Transition Goals

1. Have a safe place to live
2. Participate in meaningful activities
- 3. Advocate for services**
4. Develop friendships and intimate relationships



29

Medical Services (McNaughton, Balandin, Kennedy, & Sandmel. 2010)

Children	Adults
Parents coordinate care	Individuals are responsible for managing their own health care, including identifying service providers and advocating for needed services
Children's rehabilitation facilities often provide "one-stop" coordinated services	Individuals may need to interact with and coordinate information between •general practitioners, • medical specialists and •habilitation / rehabilitation specialists
Government guarantees of health and rehabilitation services	Individuals need to be able to advocate for adult services

30

Medical Services (McNaughton, Balandin, Kennedy, & Sandmel. 2010)

Children	Adults
Parents coordinate care	Individuals are responsible for managing their own health care
Children's rehabilitation facilities often provide "one-stop" coordinated services	Individuals may need to talk to and share information between •general practitioners, • medical specialists and •habilitation / rehabilitation specialists
Government guarantees of health and rehabilitation services	Individuals need to be able to advocate for adult services

31

Medical Services (McNaughton, Balandin, Kennedy, & Sandmel. 2010)

Children	Adults
Parents coordinate care	Individuals are responsible for managing their own health care
Children's rehabilitation facilities often provide "one-stop" coordinated services	Individuals may need to talk to and share information between •general practitioners, • medical specialists and •habilitation / rehabilitation specialists
Government guarantees of health and rehabilitation services	Individuals need to be able to advocate for adult services

32

What do doctors expect?

- Typical medical appointment : 20 minutes
- Time for patient to talk before being interrupted?
 - 23 seconds

33

Needed skills

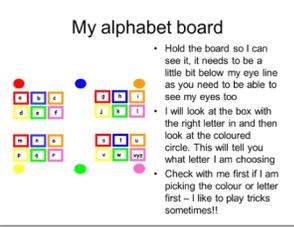
1. Introduce oneself and one's communication system;
2. Use appropriate vocabulary and language to communicate concerns and needs;
3. Use appropriate communication strategies to ensure that previous health care and current health concerns are understood by the health professional.

34

Communication Passports



My alphabet board



- Hold the board so I can see it, it needs to be a little bit below my eye line as you need to be able to see my eyes too
- I will look at the box with the right letter in and then look at the coloured circle. This will tell you what letter I am choosing
- Check with me first if I am picking the colour or letter first – I like to play tricks sometimes!



but just the alphabet and yes, no, maybe

Communication Methods (Communicative Behaviors)	Possible Meaning	How to Respond
Touch right finger to chin	Yes, hi, or thank you	
Push items away	I don't want that	
Hands up to ears and won't move	I don't do this	
Runs in a circle	happy	
Point to objects	Want the item or want someone to do something	
Point to TV	Turn on	
Put on hoodie	Want to go out	
Pull on back of pants/pumper	Needs to be changed	Take to bathroom
Points to door	Wants to go somewhere	Follow him

35

Needed skills

- **Children**
 - How AAC equipment should be set up and why it is important
 - Ask for AAC device
 - Make sure it is charged
- **Adolescents**
 - Be familiar with names of medication, schedule
 - Take leadership role in medical appointments, school meetings

36

My Student: Advocate for services



Goal	Teaching opportunity
Advocate for AAC	<ul style="list-style-type: none"> • “Ask” for AAC • “sabotage” • Direct charging schedule
Prepare for appointments	<ul style="list-style-type: none"> • Booking transportation • roleplay
Develop leadership skills in appointments	<ul style="list-style-type: none"> • “Speak for self” in appointment • roleplay

37

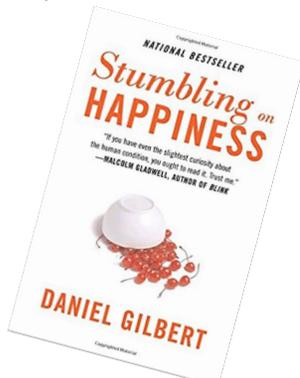
Transition Goals



1. Have a safe place to live
2. Participate in meaningful activities
3. Maintain a reliable source of income and access to services
- 4. Develop friendships and intimate relationships**
 - Meaningful activities lead to friendship opportunities
 - Friendships lead to opportunities for meaningful activities

38

Happiness (and social closeness)



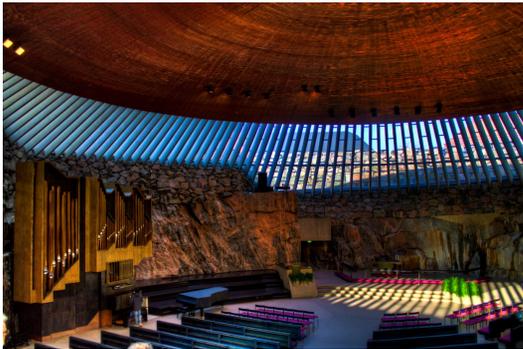
39

Communication should be fun!

- It should allow use to easily talk about what makes us interesting, and what we find exciting!

40

Happiness (and social closeness)

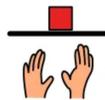


41



Eat

42



Want

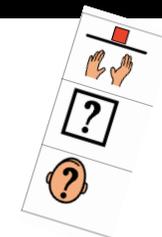
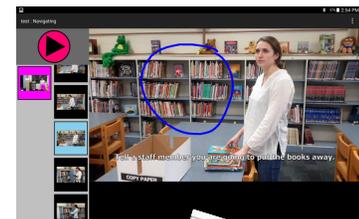
43

Visual Scene Displays (photos)

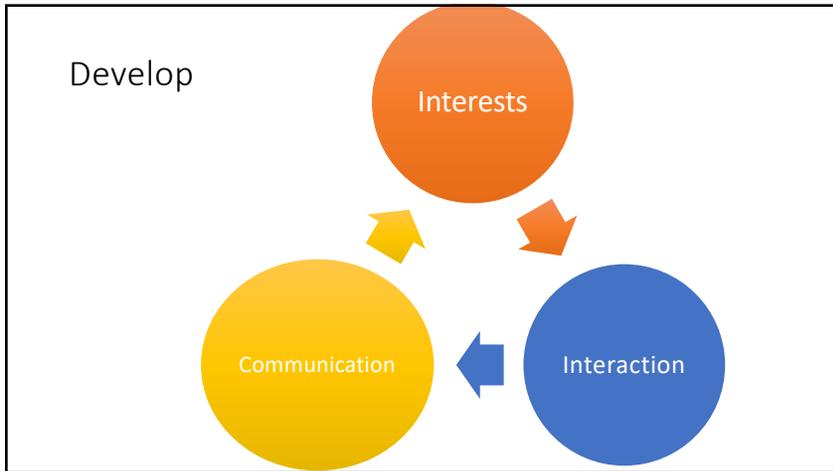
- Capture important activities in the life of an individual
- Add hotspots with speech (and text)
 - SnapScene,

Videos with Visual Scene Displays

- Videos with VSDs
 - Example: Library
 - GoVisual
- Rapid access to contextually supported vocabulary
- Easily expandable to capture interests of user
- Support sight word acquisition



44



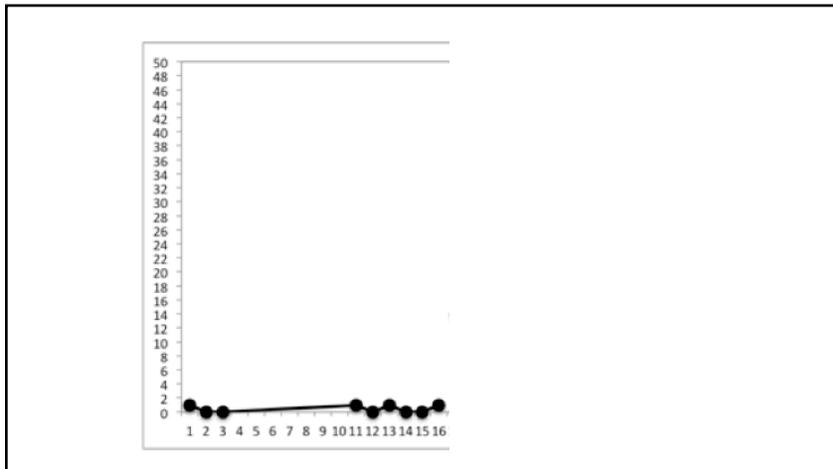
45

Beginning communication

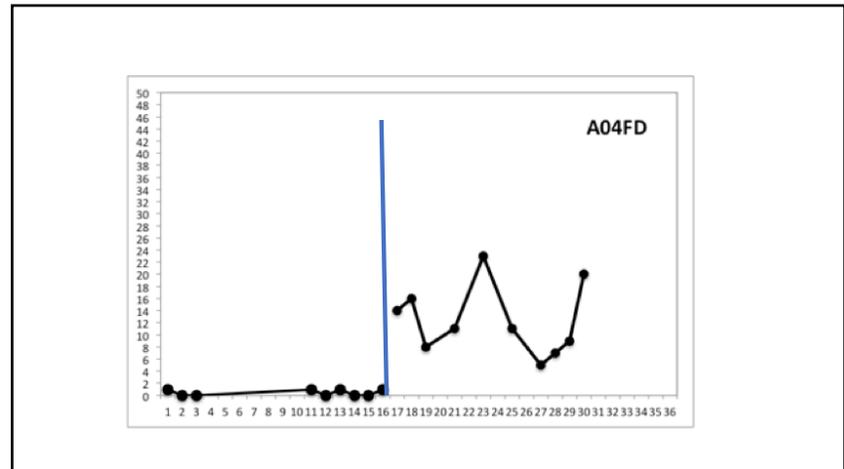
Videos with Visual Scene Displays for Beginning Communicators

Chapin, McNaughton, Light & McCoy

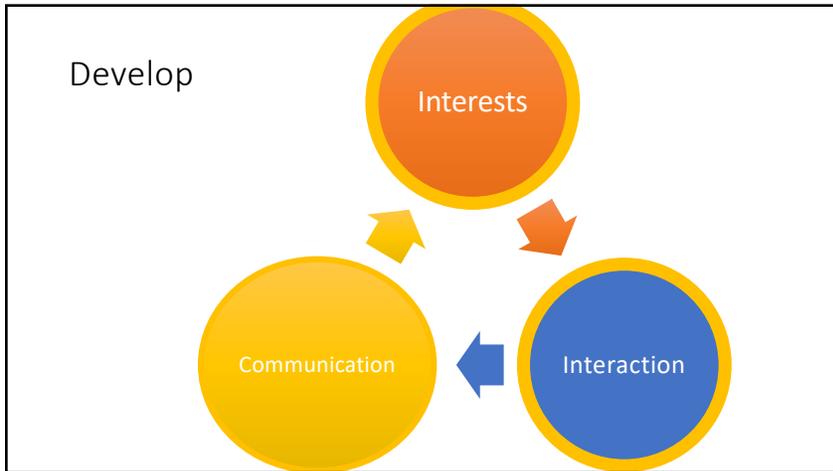
46



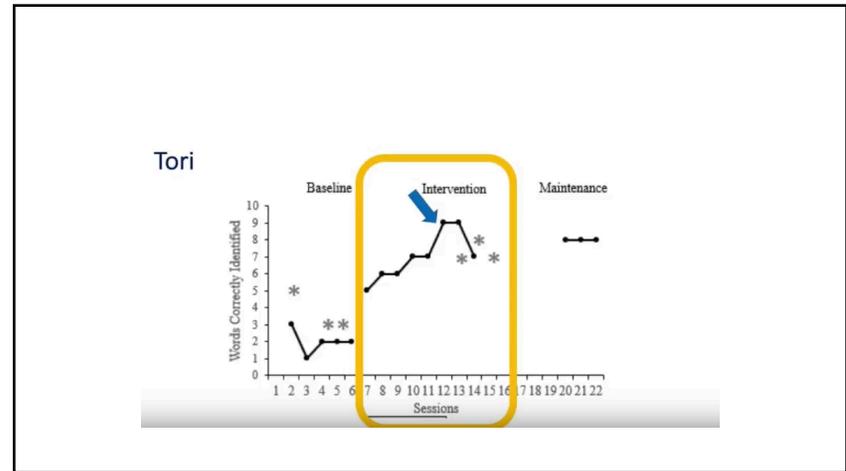
47



48



49



50



51



Effect of an AAC App-based Video Training on Peers' Accuracy Identifying Communicative Behaviors in Presymbolic Middle Schoolers with Multiple Disabilities

Christine Holyfield
Arkansas University
(Proud Penn State grad!)

52

- Symbolic language emerges through the “linguistic mapping” provided by communication partners (parents) in response to the child’s presymbolic communicative behavior .



53

The Problem

- Older pre-symbolic communicators interact with wide range of communication partners
- Inconsistent responsivity (including inconsistent linguistic mapping) can make symbolic communication much more difficult

54

What is the impact of

- a short, AAC app-based video training on participant’s:
 - accuracy in judging video clips documenting the behavior of presymbolic communicators, and
 - self-reported level of certainty when making those judgments.



55

Students with Multiple Disabilities

- Three middle-school students with multiple disabilities provided the communicative behavior serving as the content in the current study.

56

Students' Identified Communicative Behaviors

	Alyse	Van	Frankie
Communicative Behavior #1			
Linguistic Map	"That's funny."	"Yes, I want it."	"I want it."
Operational Definition	<ul style="list-style-type: none"> Smiles Moves hand/arm 	<ul style="list-style-type: none"> Moves head down Hums 	<ul style="list-style-type: none"> Extends arm toward person/object Moves hand/fingers
Communicative Behavior #2			
Linguistic Map	"I'm unhappy."	"Ball"	"I don't want it."
Operational Definition	<ul style="list-style-type: none"> Moves eyebrows down and together Moves hand/arm 	<ul style="list-style-type: none"> Vocalizes a sound that starts with a "buh" 	<ul style="list-style-type: none"> Extends arm with palm out to push person/object away

57

Students' Identified Communicative Behaviors

	Alyse	Van	Frankie
Communicative Behavior #1			
Linguistic Map	"That's funny."	"Yes, I want it."	"I want it."
Operational Definition	<ul style="list-style-type: none"> Smiles Moves hand/arm 	<ul style="list-style-type: none"> Moves head down Hums 	<ul style="list-style-type: none"> Extends arm toward person/object Moves hand/fingers
Communicative Behavior #2			
Linguistic Map	"I'm unhappy."	"Ball"	"I don't want it."
Operational Definition	<ul style="list-style-type: none"> Moves eyebrows down and together Moves hand/arm 	<ul style="list-style-type: none"> Vocalizes a sound that starts with a "buh" 	<ul style="list-style-type: none"> Extends arm with palm out to push person/object away

58

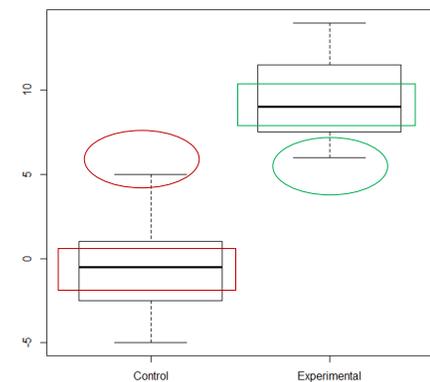
Video Training

- multiple clips of communicative and non-communicative behavior.
- videoVSD software (Jakobs, Invotek).
 - with hotspots.

59

Gain Scores

- Significant difference between control and experimental group



60

Transition Goals

1. Have a safe place to live
2. Participate in meaningful activities
3. Access to services
4. Develop friendships and intimate relationships



Tracy Rackensperger

- I am a very ambitious individual with lots of goals for my life....I, and others who use augmentative communication, want good jobs, good places to live, and individuals who care about us and love us. It is important for the individuals who work with people who use augmentative communication to believe they can **succeed at high levels**. (Rackensperger, 2006)

61

62

The contents of this presentation were developed , in part, under a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR grant #90RE5017) to the Rehabilitation Engineering Research Center on Augmentative and Alternative Communication (RERC on AAC). NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this presentation do not necessarily represent the policy of NIDILRR, ACL, HHS, and you should not assume endorsement by the Federal Government.