



THE BENEFITS OF TEACHING SIGN LANGUAGE TO CHILDREN WITH AUTISM

**Francesca degli Espinosa, BCABA
University of Southampton**

AUGMENTATIVE ALTERNATIVE COMMUNICATION

- The benefits of teaching students with autism augmentative and alternative communication when speech is lacking or limited has long been documented
- The majority of systems utilised are based on visual discrimination, for example Picture Exchange Communication System, or computer and voice generative devices
- Lack of research that demonstrates the superiority of either system



WHAT WE DO KNOW

- All students with autism can learn to communicate effectively through AAC
- Many of those students will develop speech as a result of using AAC
- The use of AAC needs to be integrated in a “total communication” programme where the production of speech is also a target
- The starting point should be the “request” (mand)



ADVANTAGES AND DISADVANTAGES OF SIGN LANGUAGE

ADVANTAGES	DISADVANTAGES
Portability	Universality
Response efficiency	Speed of acquisition of initial signs
Comprehensive	Poor imitation may hinder acquisition
Topography based	



WHY TEACH SIGN LANGUAGE

- To compensate for the absence of speech
- To support existing speech
- To support comprehension
- To replace challenging behaviour with a communication function



PRIOR CONSIDERATIONS:

- The student's current repertoire (imitation, visual skills)
- The student's environment
- Parental preference
- The student's age



HOW TO START

- The starting point is the same as with vocal requests (mands): the manipulation of motivation
- PAIRING
- IDENTIFY REINFORCERS
- MAKE THOSE INACCESSIBLE
- AS STUDENT APPROACHES YOU...



PROMPTING SEQUENCE

- 1) Student demonstrates desire to obtain item
- 2) Instructor models sign - and says word
- 3) Prompts the student (hand manipulation) – and says word
- 4) Gives item – and says word



TEACHING MANDS

Motivation

Hungry

Non-verbal stimulus

CRISP

Verbal stimulus

“Crisp”

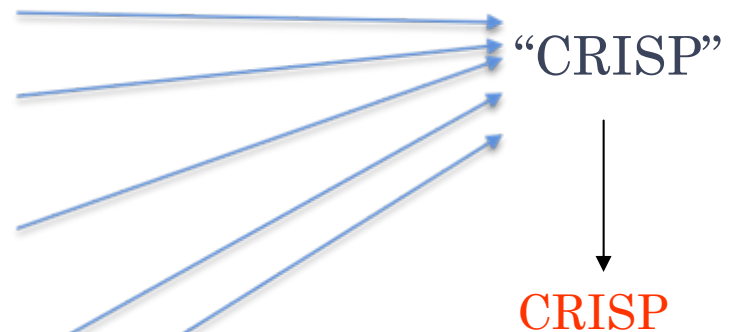
Model prompt

Signs

CRISP

Manual prompt

HoH



CHOOSING SIGNS

- We generally recommend starting with 5 iconic signs (the sign “looks” like the item)
 - 1 or 2 favourite foods
 - 1 drink
 - 1 toy
 - 1 physical activity

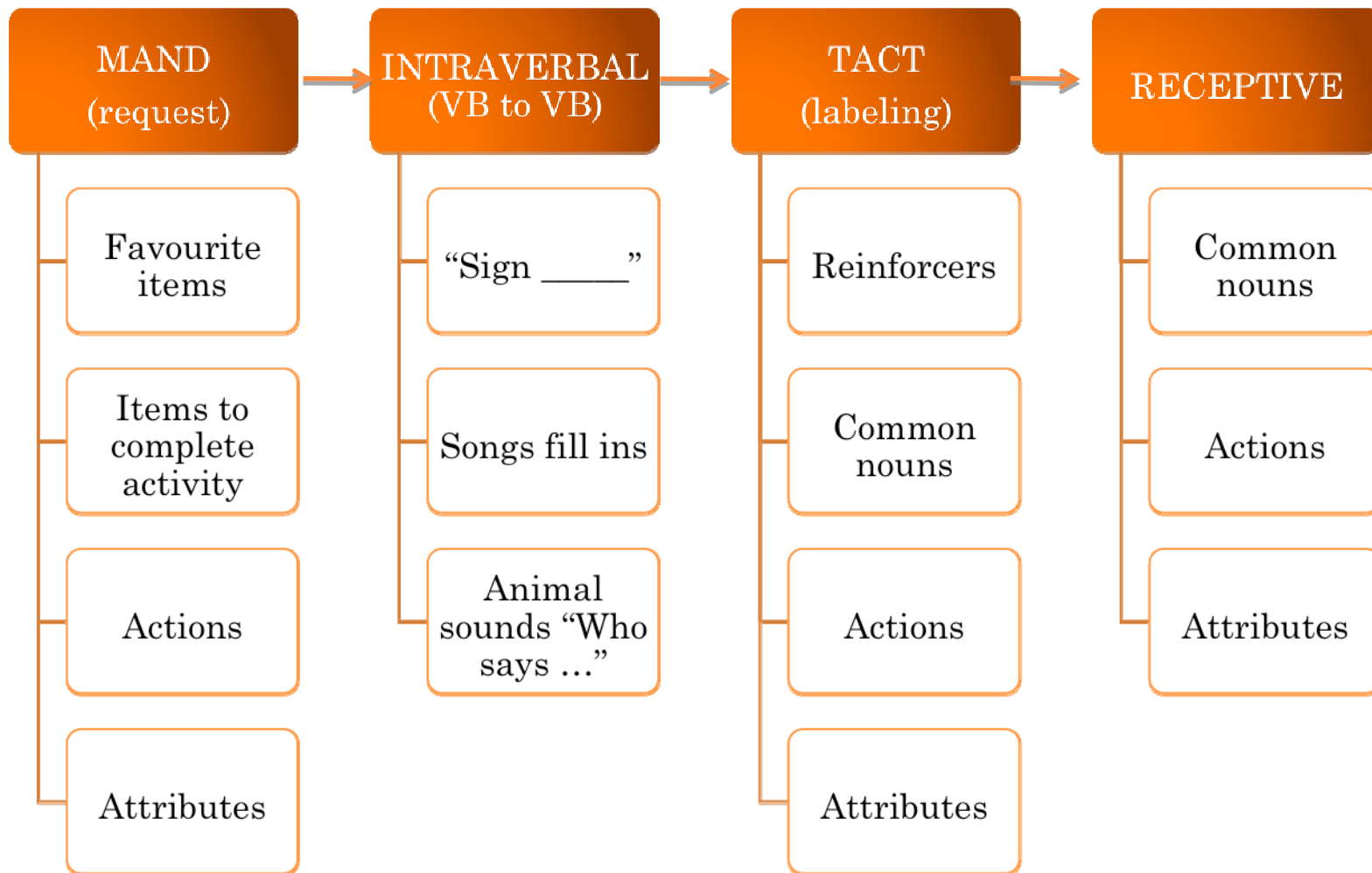


EFFECTIVE TEACHING

- Begin in the Natural Environment
- Provide hundreds of learning opportunities
- Try to be at least 20 signs ahead of the student
- Correct scrolling



EARLY CURRICULUM PROGRESSION



IMPROVING VOCALISATIONS

- Based on the research on stimulus-stimulus pairing and automatic reinforcement
- By pairing signs and spoken words and reinforcers during communication teaching words or speech sounds may become conditioned reinforcers or even automatic reinforcers.
- If sign and word become paired, the emission of the sign may evoke the word, thus becoming a self-prompt for the student to say the corresponding word



SUMMARY OF PROCEDURE

- When teaching sign language always say the word when the student emits the sign and when reinforcement is delivered
- As the student begins to make sound approximations, reinforce differentially
- As the student makes that sound reliably when producing the sign, delay the delivery of the reinforcer and attempt to shape a better approximation. Deliver on third attempt anyway.



WHEN TO FADE SIGNS

- If signs stop being reinforced before speech is intellegible, the student will cease to use signs, with the result of loss of vocabulary and continued absence of discriminable speech.
- One should cease teaching new signs only when speech is comprehensible on most occasions by a stranger not familiar with the student.





**THANK YOU FOR YOUR
ATTENTION!**

fde@soton.ac.uk