

Laying the Foundations of Communicative Competence for very Young Children

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How do we ensure that young children with severe physical disability, particularly those who require some form of augmentative communication, eventually become competent as communicators?

The framework for approaching augmentative and alternative communication work with very young children presented in this workshop was one that we put together for a project with some two-year-old cerebral palsied children carried out at Queen Margaret College in 1991. The principal aim of the project was to investigate the requirements of the speech therapy complement to early education groups for cerebral palsied children, particularly for those children with severe speech production difficulties.

There are some important considerations which cause an obvious dilemma both for professionals and families working with these young children.

Firstly, there is the reluctance of any therapist to dismiss, at too early an age, the possibility that the child might eventually be an oral communicator and also an even greater reluctance on the part of parents to believe that their son or daughter will not use the same means as everyone else to communicate.

Against this, however, there is increasing evidence that points to the importance of starting augmentative communication programmes early:

- before the child misses out on rich linguistic and interactional experiences
- before they become frustrated at their inability to make themselves understood at a satisfying level
- before they have settled into the role of a passive spectator

At the start of the Edinburgh project, we therefore wanted to create a framework that would help us to work on a balanced programme of skill areas that *could* lead towards eventual competence in augmentative communication but into which the development of spoken output could *also* fit. First we need to ask:

What makes an AAC User a Competent Communicator?

Janice Light who has written extensively from her research and practical experience in North America, suggests that eventual Communication Competence has four major components:

Linguistic Competence: adequate mastery of the native language (vocabulary and grammar) plus mastery of the code (e.g. signs or symbols) required to operate the AAC system.

Operational Competence: mastery of technical skills required to operate the system - i.e. the motor and cognitive skills required to signal a message or to operate specific device features (pointing, signing, visual scanning, operating switches, controlling cursors, editing, etc.).

Social Competence: knowledge and skill in the social rules of communication, for example making appropriate eye contact, sharing the balance of talking and listening, and using communication for a range of different purposes - social chat, requesting items, responding to others, contradicting people, etc..

Strategic Competence: flexibility in order to adapt communicative style to suit the receiver (e.g. signing more slowly to strangers, turning up the volume on your communication aid for grandad), or learning how to repair and extend the conversation (e.g. if you can't explain something clearly on your *TouchTalker*, you might have a message that says, "Please hold up my Bliss chart, I'd like to explain something").

We felt that if we could highlight some of the essential early skills which need to be developed to support these facets of competence and also widen Light's concept of Operational Competence to include the speech apparatus (as tools with which we communicate), then it should be possible to create a framework for the introduction of a broad spread of early communication skills within which a range of signalling tools (including vocal as well as manual, visual and others) can be facilitated as appropriate.

The eventual model is shown in Figure 1, a pyramid of skills towards eventual communicative competence.

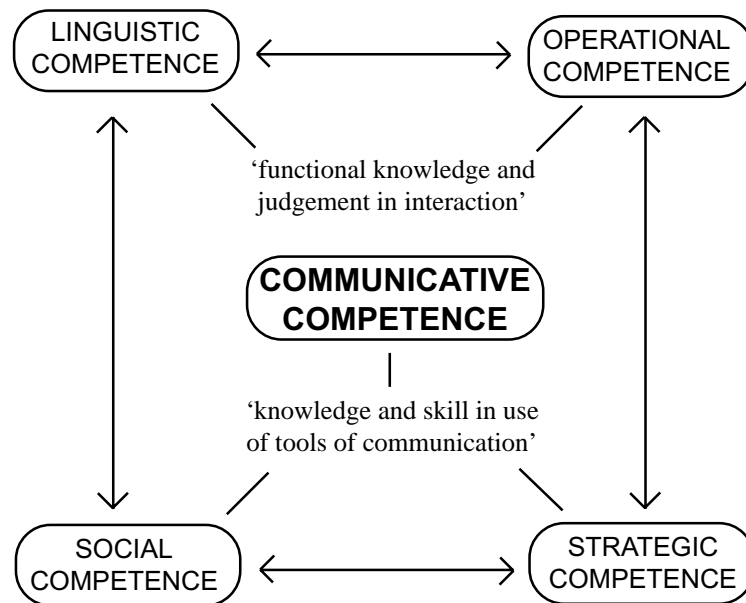
Under Linguistic Competence we feel that it is important to look specifically at the development of Symbolic Understanding as this is going to influence the choice of augmentative system. The stages suggested here

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Figure 1.

Language Development
Symbolic Understanding
System Introduction

Cause and Effect



Vocal: neuromotor
speech processing
Visual: eye pointing
tracking
scanning
E-tran
Manual: chart indication
switch operation
aid operation

Power of communication
Eye-contact
Turn-taking
Greeting
Yes/no signalling
Responding
Requesting object / action

Modality flexibility
Initiating strategies
Signalling
breakdown
Contradiction
Providing
clarification

Alison MacDonald (1991) developed from the original work of Janice Light (1989)

are influenced by the work of Cooper, Moodley and Reynell (1978) and DeLoache (1987). For extension of this model and additional notes see page 26.

Early skills towards Strategic Competence will include fostering the ability to move easily from one mode of communication to another as necessary (e.g. from chart to communication aid), the ability to initiate an interaction and the understanding that it is sometimes necessary to clarify ones meaning in a way that it is clear to the receiver. In conjunction with this model the video clips shown in the original workshop emphasised:

- a) how a range of skills can be targeted without focusing too narrowly on one particular aim
- b) how this can help us to ensure that we are constantly keeping a balance across the different competence areas and that all activities we offer are designed to provide a truly integrated programme

Examples of some early skills that were facilitated in video clip 1:

S R is seen on the video with his mother supporting him and the therapist playing through a sequence of an imaginary meal time, using large doll material. S R is actively involved and at the end 'talks through' this play sequence using photos as a prompt to his recall.

Skill / Aim	Example
Attention	Throughout
Symbolic	Large doll material representing real objects. Matching large doll material to photos
Linguistic	Therapist using variety of words, e.g. nouns, negatives, object functions at 2-word level
Vocal	Vocalises to acknowledge therapist's remarks. Vocalises to make a request to therapist, e.g. 'Ask A for a chair'. Symbolic noises during play, e.g. [m:] blowing on hot dinner. Vocalises to complete therapist's utterance when retelling play sequence
Visual	Eye-pointing to photos in choice making

<i>Skill / Aim</i>	<i>Example</i>
<i>Manual</i>	Fist pointing to reinforce vocalisation and eye-pointing, compensating naturally for lack of intelligibility
<i>Yes/No</i>	Says 'Aye', but no evidence of 'No'
<i>Responding</i>	Looks for lost spoon in response to therapist's comment Smiles at therapist's suggestion to cuddle dolly
<i>Power of Communication</i>	Uses photos to relay information to another person
<i>Object Request</i>	Selects from forced alternatives, from two or three photos
<i>Social</i>	Passes information to a third person using appropriate eye contact, acknowledges therapists comments throughout
<i>Past / future</i>	Reflects on past using photos as a prompt

Examples of some early skills that were facilitated in video clip 2:

On the video, I B is sitting in a corner seat operating a BBC computer using a Wolfson touch switch. The program in use was Brilliant Computing's *Switch On*.

<i>Skill / Aim</i>	<i>Example</i>
<i>Visual</i>	IB has to scan 7 photos on E-Tran frame and eye-point to the correct one
<i>Vocal</i>	Used to confirm adult interpretation of eye-pointing
<i>Manual</i>	Uses Wolfson switch to operate computer
<i>Social</i>	Looks at M to receive her choice
<i>Responding</i>	Passes on information re M's choice to A
<i>Object Request</i>	Indicates own choice
<i>Yes/No</i>	Says 'Aye', but no evidence of 'No'
<i>Anticipation</i>	Looks at computer screen and waits patiently for next step
<i>Attention</i>	Sustained throughout
<i>Cause/ Effect</i>	Understands relationship between switch and computer
<i>Symbolic</i>	Use of photos to represent computer graphics
<i>Power of Communication</i>	Understands use of photos to convey his interests and to get what he wants

References

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