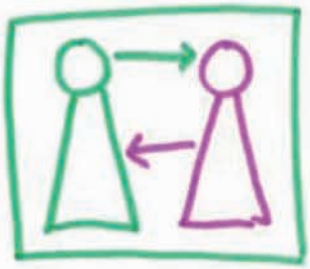


Communicate & Participate

Empowerment of children with disabilities through Augmentative and Alternative Communication

Comenius Project 2013-2015 2013-1-AT1-COM06-09769 1

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

About us

In a 2 years partnership 6 partner schools from 5 countries, dealing with children with special needs in a conductive setting, met 6 times to exchange experience, compare methods and systems, identify problems and find practicable solutions.

Kinderkompetenzzentrum

Therapie Institut Keil - Austria

KOMIT Schule, Therapie Institut Keil, Kinderkompetenzzentrum, Vienna / Austria: conductive early intervention, kindergarten & school for children with motor disorders and sensory needs (including Autism Spectrum Disorder) and for complex learners.

www.institutkeil.at

Coordinator / contact: b.tautscher@stiftung-keil-bastendorff.at

La Famille – Belgium

School and Center "la Famille" - Brussels / Belgium: Early Conductive Education (neurological day nursery and ambulatory for baby and parents). Kindergarten and primary school for motor disabled children (CP, motor development delay, spina bifida etc.).

www.geslafamille.be

Contact: jennifer.moreau@geslafamille.be

The PACE Centre - England

PACE is a family-centred charity which provides an innovative education for life for children with sensory motor disorders. Our programmes are inspired by the principles of Conductive Education and are designed and delivered by trans-disciplinary teams of conductors, teachers, therapists and classroom assistants.

www.thepacecentre.org

Contact: laurel.allen@thepacecentre.org

About the Project

Communication skills are a prior prerequisite for successful inclusion of children with disabilities into the mainstream educational system.

The ability to express thoughts and needs and empowerment are inextricably linked with each other.

The main intention of the partnership was to support teachers – especially those, who are working in a CE (Conductive Education) setting, in how to choose and to use AAC in the classroom.

At the same time we discussed and compared how parents´ involvement and transition into daily living can be organised.

Main activities in the partnership were:

- collect and compare existing and used AAC systems and devices
- collect and compare AAC systems and devices for children with cerebral palsy having severe associated disorders, including visual and hearing impairments
- exchange of experience about AAC in early intervention
- define criteria for choosing a suitable system or device for different children and different syndroms
- discuss and work out best ways of parents´ involvement and support – invite parents and persons in touch with individuals in need of AAC to contact specialists in their mother tongue.

Partnership Website: http://www.conductive-aac.eu/

Percy Hedley Foundation
Achievement for All

Percy Hedley School - England

Percy Hedley School, non-maintained special school, Charity, Newcastle upon Tyne, England. Providing integrated and multidisciplinary therapy and teaching services alongside a conductive education approach. Age: 3 months – 19 years Supporting families through Assessment Service, School for Parents and Residential Service. Population are Complex Learners: Cerebral Palsy, hearing and/or visial impairments, speech, language and communication difficulties, autism, multiple and profound disabilities.

www.percyhedley.org.uk

Contact: c.mcguigan@percyhedley.org.uk

Pfennigparade
Das Rehabilitationszentrum in München

Phoenix GmbH
Konduktives Förderzentrum

Phoenix - Germany

PHOENIX konduktives Förderzentrum der Stiftung Pfennigparade, Munich / Germany: conductive toddlers group, kindergarden, school and residential home for children with motor disorders and for complex learners.

www.phoenix-kf.de

Contact: hanna.antemann@pfennigparade.de

RUSKEASUON KOULU
HELSINKI

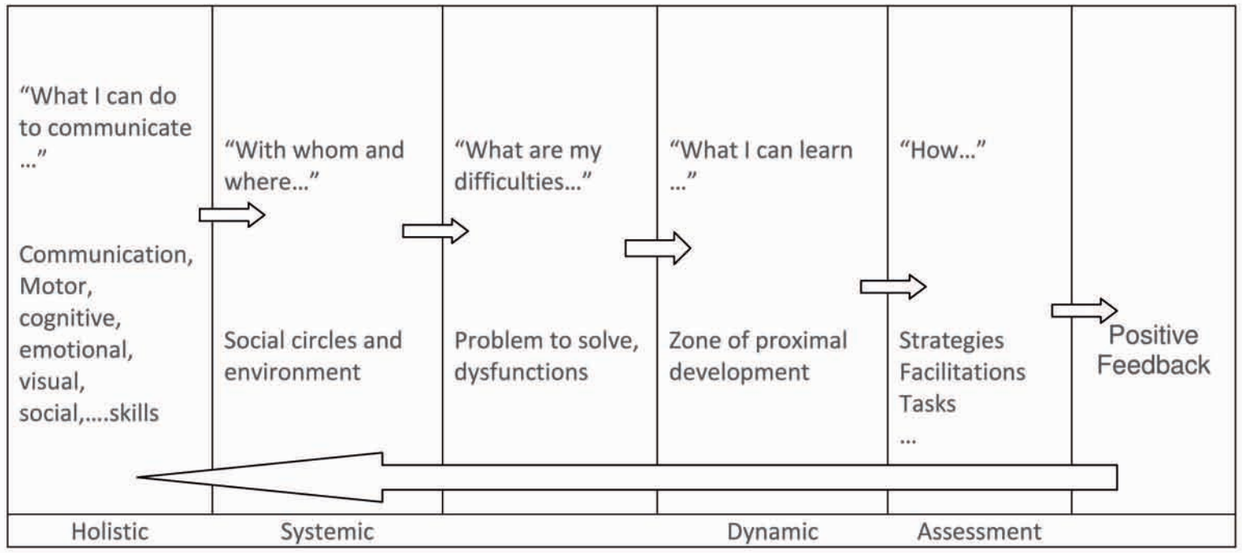
Ruskeasuon Koulu – Ruskis School - Finland

At Ruskis we provide support services for education and participatory activities for physically disabled children and youth, as well as for children and young persons with multiple disabilities or long- term illnesses. We emphasise a holistic approach in which teaching, learning and rehabilitative support services go hand in hand during school day. Our work increasingly focuses on our students and pupil´s own learning environments at their local school in their home municipality.

www.ruskis.fi

Contact: kommunikointi@ruskis.fi

AAC assessment in Conductive Education:
an holistic, systemic and dynamic approach.



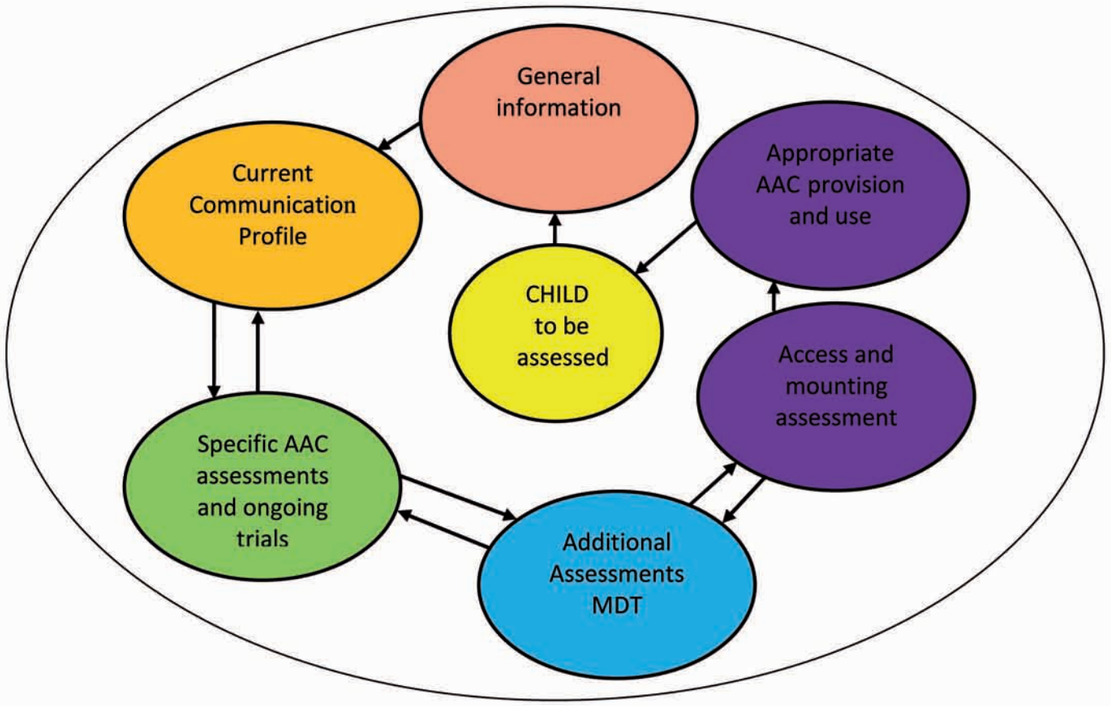
Jennifer Moreau- Comenius AAC in CE 2015

David Tzuriel, an Israeli clinical and educational psychologist, describes a dynamic assessment as follows:

The term *dynamic assessment* (DA) refers to an assessment, by an active teaching process, of a child's perception, learning, thinking, and problem solving. The process is aimed at modifying an individual's cognitive functioning and observing subsequent changes in learning and problem-solving patterns within the testing situation.
Lev Vygotsky's concept of a *zone of proximal development* (ZPD) Vygotsky (1962, 1978) and Reuben Feuerstein's theory of mediated learning experience (MLE) served as the main conceptual bases for most of the DA elaboration. The ZPD is defined as the difference between a child's "actual developmental level as determined by independent problem solving" and the higher level of "potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, p. 86).

Under this umbrella, AAC assessment is a multifaceted process that incorporates the ethos of CE

Continuity (all the time, through all activities) + Integration (the whole child and across disciplines) + Interaction (with peers & adults)



General Information

- Name
- Date of Birth
- Diagnosis
- Relevant History : health, hearing acuity, visual acuity
    - Communication
- Other professionals involved: e.g. psychologist, ophthalmologist, etc.
- Current Motor Skills: Gross motor/mobility
    - Fine motor/hand function
    - Head control/movement
    - Ocular motor control/function
- Family situation
- Preferences & Interests

Current Communication Profile including standardised test results and observational, dynamic assessment

- Communication Function Classification Scale (CFCS)
- Current means of communication (aided, unaided, voice)
- Attention and Listening Skills
- Language Comprehension
- Speech
- Expressive language: including use of photos, pictures, symbols, and/or signs
- Pragmatic ability
- Literacy level
- Social networking
- Family concerns & expectations

Specific AAC Assessment Tools

1. Test of Aided-Communication Symbol Performance (TASP)
   by Mayer Johnson
   www.mayer-johnson.com/tasp

2. Augmentative and Alternative Communication Profile:
   A Continuum of Learning (AAC Profile)
   by Tracy M. Kovach, Lingui Systems
   www.linguisystems.com/products/product/display? item id=10547

3. Communication Supports Inventory: Children and Youth
   (CSI – CF)
   by Rowland, Fried-Oken and Steiner
   icfcy.org/aac

4. Garburger Sprachscreening

Ongoing Trials are part of the dynamic assessment process

- Trialling of page formats of increasing complexity or alternative layouts
- Trialling of symbol sets (e.g. PictureCommunicationSymbols High Visibility)
- Trialling of devices
- Trialling of software options

Additional Assessments (as required) from MultiDisciplinary Team including:

- Cognitive level
- Visual perception (and/or acuity)
- Motor Assessment Scale (MAS) – fine motor
- Hearing
- Auditory processing
- Memory / recall
- Medical
- Other

Access Methods to consider during Assessment

Low Tech – topic boards/symbols/symbol books

- Direct access – touching the symbols in a book on a topic board.
  - Using whole/fist pointing, finger pointing or stylus
  - Need appropriate motor planning abilities, hand-eye coordination,
  - Visual skills need to be considered.
  - Vpen via Voice symbol software allows direct access to a symbol page which will speak out words.
- Indirect access – assisted scanning
  - Indirect access to follow a scan patterns – an assistant to scan the cells using a guide, finger or light source to step through cells and the student to indicate the cell required using an agreed response.
  - Auditory scanning - to listen to auditory cues and follow a scan pattern and the student to indicate the cell required using an agreed response
- Eye gaze /pointing
  - Using e-tran frame or book to eye point to a photograph or symbol
  - Assistant needs to be directly in front in order to be able to read the students responses

High Tech – VOCA's

- Direct access – touching the screen.
  - Need appropriate motor planning abilities, hand-eye coordination,
  - Visual skills need to be considered.
  - Vary the hold and release time of the cell when selecting
  - Can alter acceptance times to reduce multiple hits on cells
  - Consider using a key guard to support access
- Switch access – position and type of switch
  - Look at access and type of switch
  - Look at best means of position, i.e. hand. head, etc.
  - Consider using 1 or 2 switches
- Switch access – scanning
  - Indirect access to follow scan patterns - to wait while the device steps through a scanning pattern and to switch on a required cell
  - Auditory scanning - to listen to auditory cues to follow the scan pattern and switch on the required cell
  - Scan patterns – least number of hits to access a cell can be single cell scan, row/column scan, block scanning,
  - Step scanning – use a switch to move the scan on to the next cell then use 2nd switch to select the desired cell
  - consider vocabulary layout in order to reduce waiting time for frequently used vocab
- Joy stick and switch
  - Use a joy stick to move the mouse around the screen then select the cell using the switch, needs good joystick skills and good switching skills. But can reduce the time of waiting for the scanning of each cell
  - Joystick and dwell time, move the mouse around the screen and pause on cell to select.
- Tracker mouse – direct selection from an infra red camera on the device.
  - Dwell on cell to select or with access from a switch
  - Need good head control but can accommodate for gross or fine head movements
- Eye gaze
  - Use for low or high tech devices
  - High tech – a light source creates a reflection in the pupil which a camera can read where the pupil is looking

Some useful web pages for further information about access:
http://www.prentrom.com – Access methods
http://www.asha.org/public/speech/disorders/InfoAACUsers.htm
http://www.waisman.wisc.edu/aac/podcast14.html
http://www.sc.edu/scatp/expo/expo10handouts/Make%20the%20Switch!%20Switch%20Access%20for%20AAC_%20SC%20AT%20EXPO%202010.pdf

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Principles to guide AAC intervention with young children/early communicators in Conductive Education

Conductive Education is a philosophy

that considers a person as a whole
with all its abilities and needs

throughout the whole day and the whole life.

It aims to build up an interacting, communicating personality.

In order to achieve this, the following principles should be considered:

It is never too early to start to use augmentative communication to support an infant/child's communication.

Communication happens all the time and everywhere, therefore we should provide frequent opportunities for communication across the day and integrated within all activities and play.

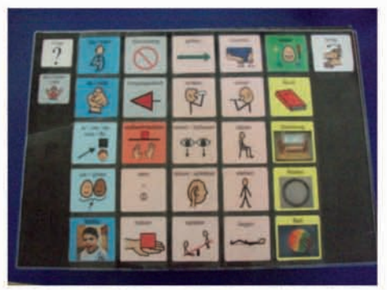
Parents, teachers, therapists, families and everyone around the child should work towards the same goal, independent communication using all means (signs, symbols, objects of reference, speech, voice output devices,etc.).

It is essential to model and show the child how to use all those means of communication s/he may use, again and again and again (as you speak to a baby from birth)

The Communication Partner can support communication development by:

- be present with the child
- talk about what is happening around the child (e.g. when taking the child for a walk, point to the dog as it barks and runs past)
- match signs and symbols to objects and actions in context (e.g. use the sign for dog and/or present the symbol), use multimodal Total Communication

- follow the child´s interests to increase his/her motivation and vocabulary learning and actively look for your child's communicative initiations
- respond and expand the child´s communicative attempts (e.g. add a word, use a sentence)
- encourage and teach initiation and WAIT for the child´s response. EXPECT a response



- watch for the child's feedback and check understanding of both partners
- communication should be fun and spontaneous too

Examples of activities to develop early AAC skills:

- signs and gestures to request 'more' and 'stop' – directions first

- real objects to promote choices, plus symbol matching within context for learning

- communication books or boards with photos of toys, people, actions
  voice output communication devices with sequenced messages to promote participation in songs, stories, plays, and to direct others (e.g. hurry up Mummy, laugh vs. sleep in a simplified Simon says game)

- early social games for eye contact and turn taking (e.g.peek-a-boo)

- songs, rhymes and books – leave meaningful pauses for the child to take his/her turn

- toys (adapted switch or infared toys)

- use visual timetables

Your specialist support therapist/educator will advise you about the augmentative and alternative communication resources your child needs (low and high tech)

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Early Communication
in partnership with Parents

Introducing Augmentative Communication (AAC) for young children with motor disorders/CP (from birth to 6 years)

In the beginning:

- **positive** and **natural interactions** form the general framework for communicating with the child
- the **first tool** is the **adult's support** to build positive social interaction skills
- introduce other **augmentative communication tools (AAC)** as soon as possible (signs, pictures, symbols, etc. as recommended)

Be aware that **parents need**:

- **respect** for their own pace and rhythm
- Professionals to show and go with them **step by step**
- to see the **different** tools, within the range of their child's capabilities, and choose their preferences (e.g. signs, symbols, photos; tablet, paper based)
- to **be trained** to support and use AAC
- to **meet** other parents for support, exchanges and ideas for variety of use and integration at home.

In the earliest communication between parent and child, we need to:

1. Stimulate all communication & language **prerequisites**:

- Gaze shift and eye contact
- Joint attention (with hand or eyes)
- Imitation (motor and vocal)
- Turn taking
- Pointing (with hand or eyes)

2. Maximise **language input**:

- talking about what the child is attending to is important
- good language models are necessary but also these language models in large quantities.
- many repetitions and reformulations are vital; repetition with variation

As early as possible, and whilst continuing 1 & 2 above, we need to:

3. **Introduce** gestures or symbols:

- be aware of the child's position and
- maximise the child's ability to accurately communicate independently as easily as possible with the communication tool/AAC

- be attentive that the parents:
  Play without pressure and with pleasure
  Model ➡ it's vital for the child to learn by example and to see that parents value AAC
  Use variety of functions ➡ e.g. comment on the child's action, not only question the child
  Go for it ➡ build **confidence** for both of you

For further suggestions concerning AAC for early communicators please refer to the respective document!

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Considerations when making Communication Boards

This is intended to give you some help and guidance when making a communication board.

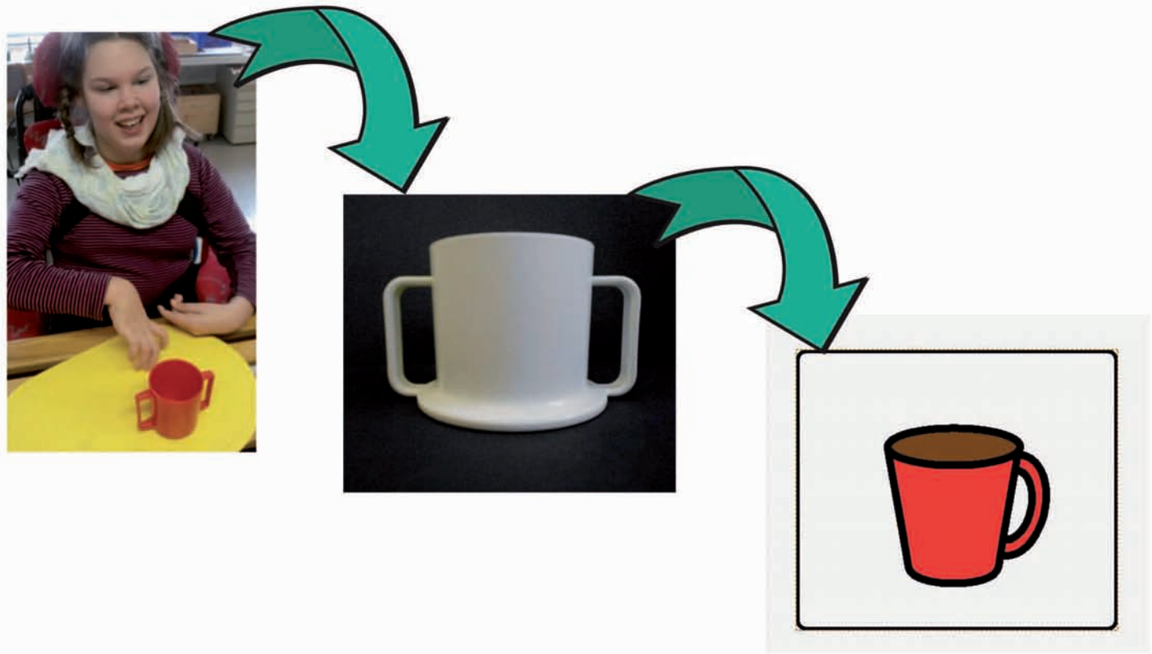
AAC and Conductive Education

Conductive Education, being a system of complex learning,
provides the basis and facilitates
the use of communication boards
by teaching

- direct pointing
- eye – hand coordination
- hand function, hand skill
- head control & movements for eye contact, nod / shake etc.
- arm lifting
- voicing
- sitting balance
- breath control

1. Which medium to use

Objects, photos or symbols?



Can the student recognise objects, photos or symbols?

Does the student have a visual impairment?

Consider:
- black and white symbols/photos or outline drawings
- braille or tactile/embossed symbols
- paper choice – coloured paper or white
- laminating choice – shiny or mat laminating pouches

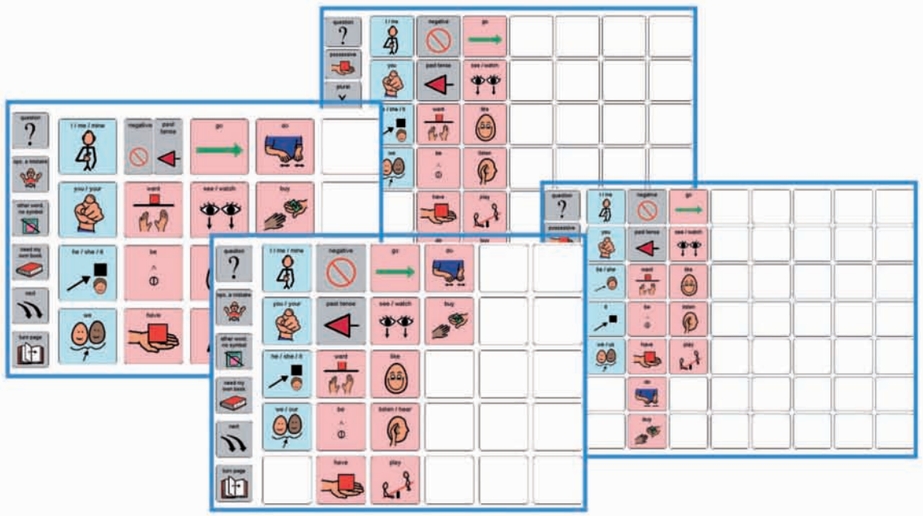
Ensure consistency of symbol sets/pictures

2. Placement and amount of symbols on a board

How many symbols are needed for the activity?

How many symbols can the student cope with?

Consider:
- cognition, vision, access method
- clutter, overlap, thick or thin lines, spacing between the cells
- grouping of symbols; word groups, categories or sentence building

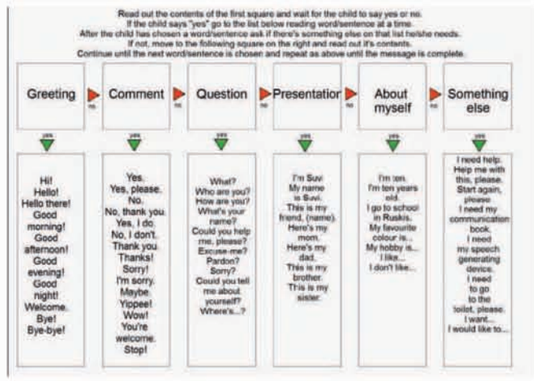


Ensure consistency across the classroom/school and within boards.
Ensure consistency between students high and low tech aids.

Frequently used vocabulary on part of board that is easier to access etc.

3. How will the student access the board?

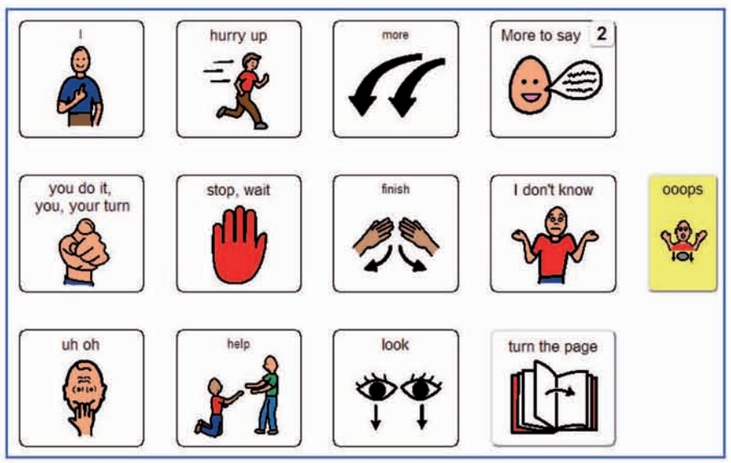
Consider:
- motor skills, (possibly involvement of occupational therapist or physiotherapist)
- Direct access by hand, finger or eye pointing?
- Adult assisted scan



This will also influence the number of symbols, symbol size and layout i.e. spacing needed between symbols.

4. What is the purpose of the board?

Is it context specific e.g. for a particular task such as baking or chatting. Or is it to initiate communication in lots of different contexts so needs the vocabulary to be more core general symbols to facilitate e.g. greeting, questioning, making requests and giving information.



5. What vocabulary to put on the board?

- Core or fringe vocabulary or both?
- Mixture of word classes not just nouns.
- Layout that is conducive to sentence building i.e. sentence starters on left etc.
- Remember to include symbols such as 'not on board', 'something else/different' etc.

6. Further Considerations:

- age
- cognitive ability
- specific impairment and associated difficulties
- context
- appropriate topic choice
- Use boards functionally and with purpose. Make sure there is a communicative intention for functional communication.
- motivation
- attention

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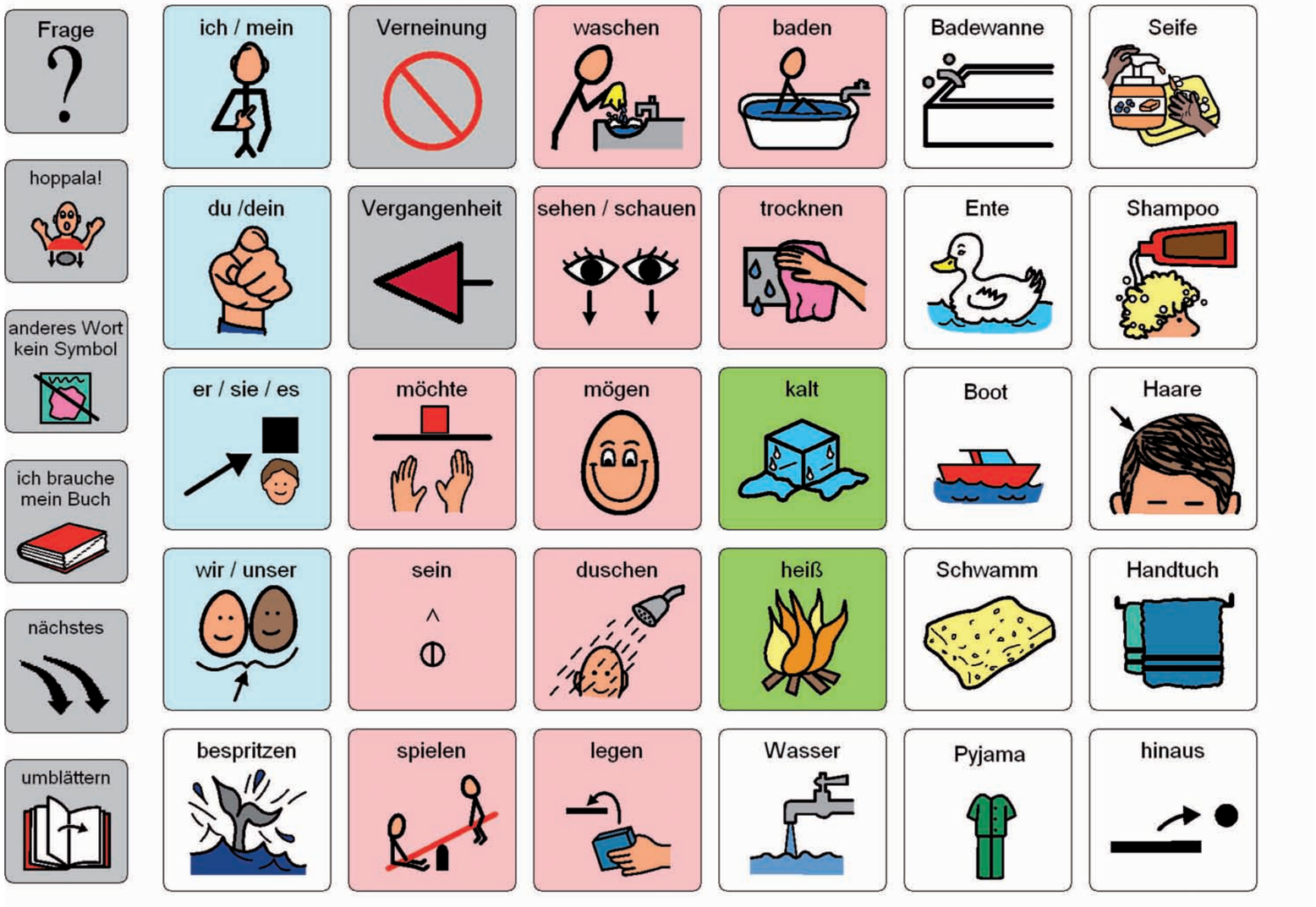
AAC
Communicate
participate
Comenius
fun
development
professional
Sharing
sharing
friendly
new
informative
together
growing
thinking
inspiring
discovery
Informative
interesting
Reflective
exchange
personal
Inspiring

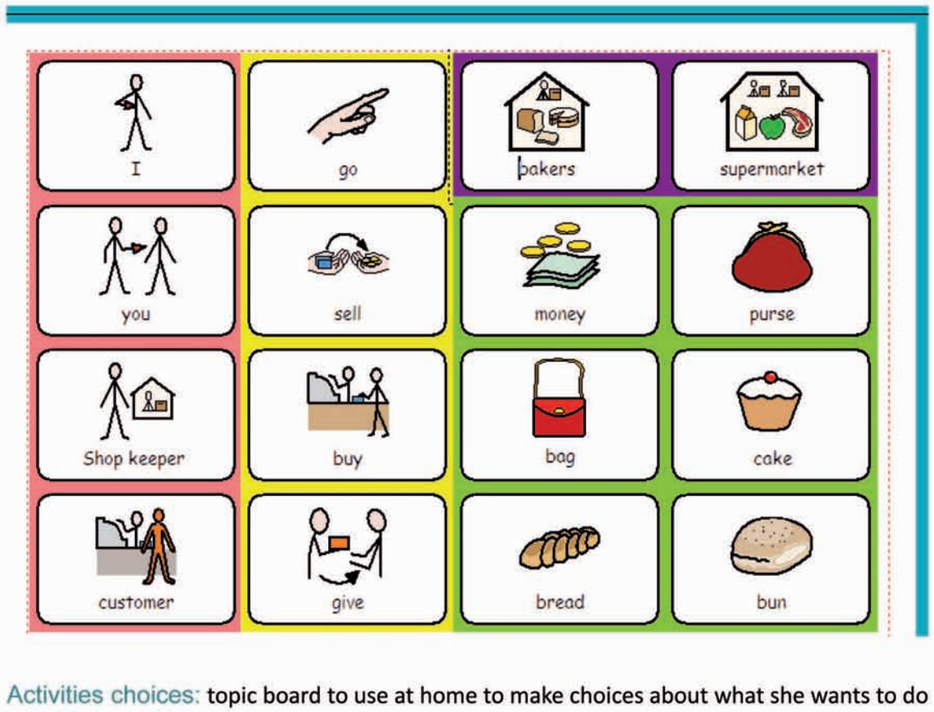

Frage
ich / mein
Verneinung
waschen
baden
Badewanne
Seife
hoppala!
du /dein
Vergangenheit
sehen / schauen
trocknen
Ente
Shampoo
anderes Wort kein Symbol
er / sie / es
möchte
mögen
kalt
Boot
Haare
ich brauche mein Buch
wir / unser
sein
duschen
heiß
Schwamm
Handtuch
nächstes
bespritzen
spielen
legen
Wasser
Pyjama
hinaus
umblättern

question	I / me / mine	negative	wash	bath	bathtub	soap
ops, a mistake	you / your	past tense	see / watch	dry	duck	shampoo
other word, no symbol	he / she / it	want	like	cold	boat	hair
need my own book	we / our	be	shower	hot	sponge	towel
next	splash	play	put	water	pyjamas	out
turn page						

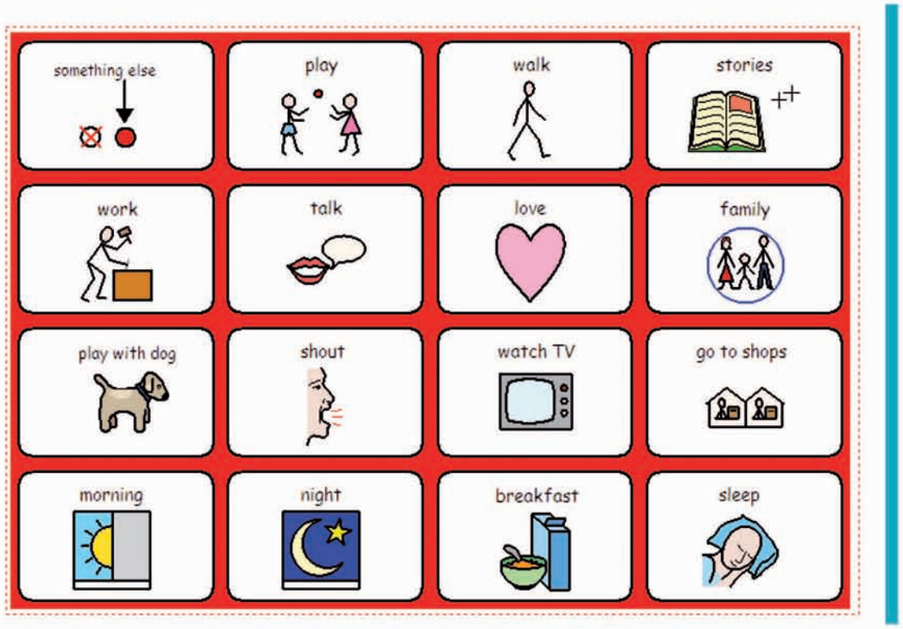
kysymys	minä / minun	kieltomuoto	pestä	kylpeä	kylpyamme	saippua
oho, tuli virhe	sinä / sinun	mennyt aikam.	nähdä / katsoa	kuivata	ankka	shampoo
muu sana, ei merkkiä	hän / se hänen / sen	haluta	tykätä	kylmä	vene	hiukset
tarvitsen oman kansion	me / meidän	olla / omistaa	käydä suihkussa	kuuma	pesusieni	pyyhe
seuraavaksi	loiskuttaa	leikkiä	laittaa	vesi	pyjama	pois
käännä sivua						

Examples for Topic Boards

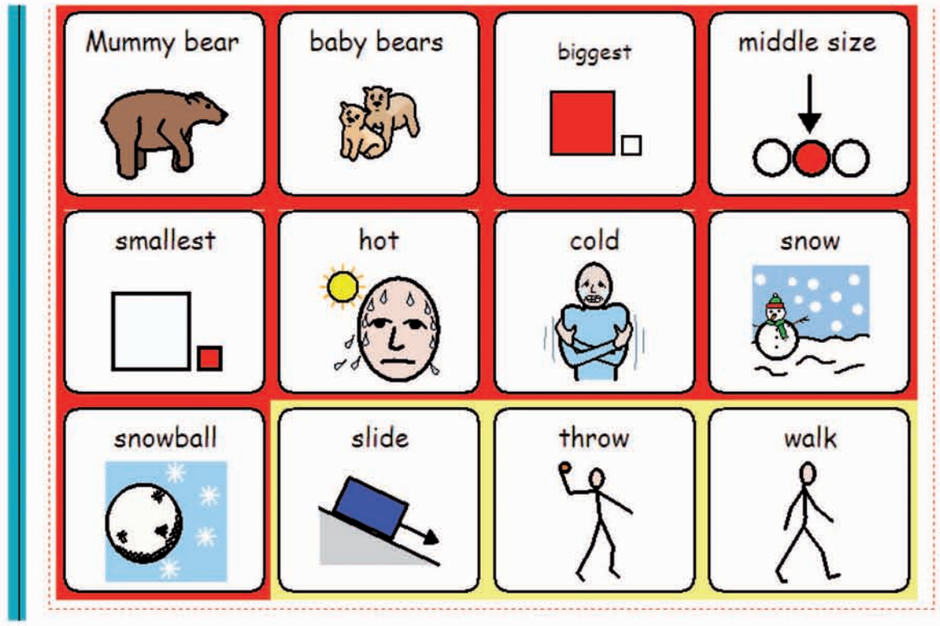
Shopping Games: Topic board to use when playing shops

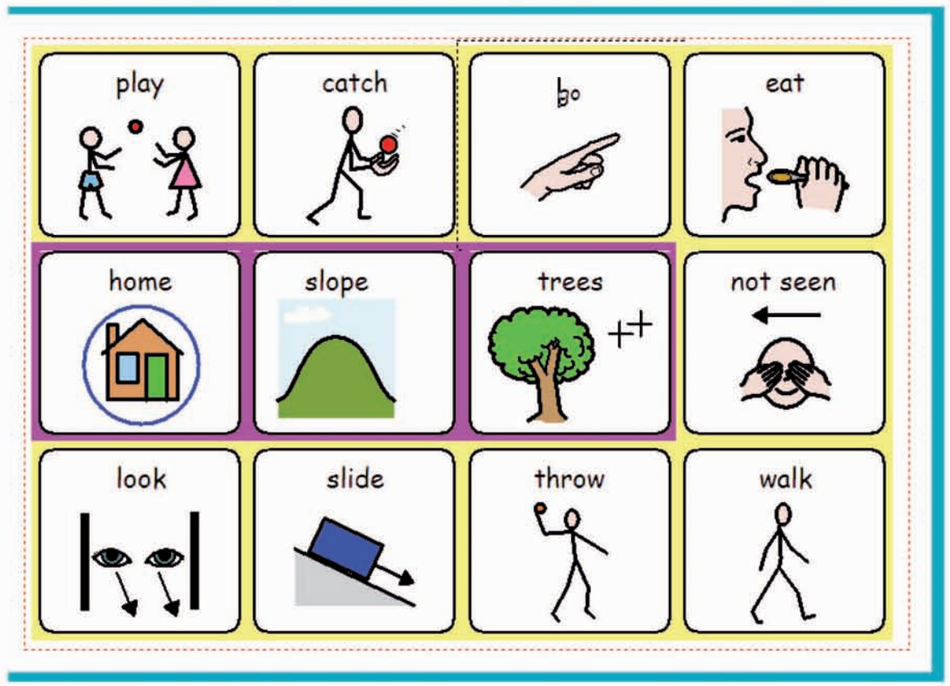


Activities choices: topic board to use at home to make choices about what she wants to do

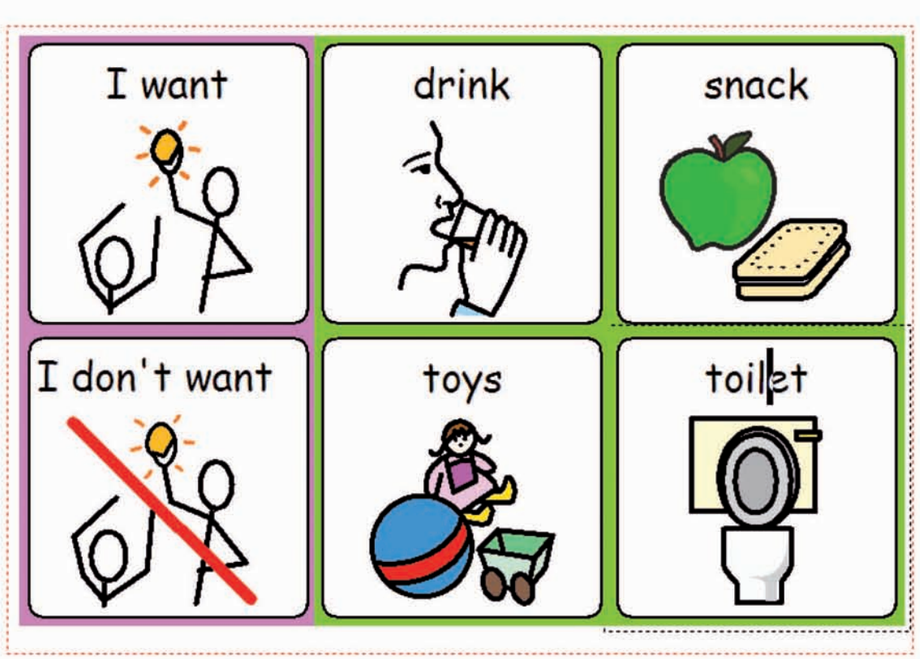


Story topic boards: to join in with a class story saying what is going to happen in a story and to answer questions once they have listened to the story.





Break time board: to make simple choices about wants and needs at break time



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Involving Parents - Example

"La Famille", the Belgium's partners of the project, hand out this booklet in the nursery to all parents, whose children will get in touch with gestures. It will help transaction of the communication system used in school into home setting.

Petite introduction…

Je suis un répertoire de gestes Coghamo. Je contiens tous les petits gestes représentant les mots qui peuvent aider *Augustin* au quotidien.

Oui, je suis là pour soutenir sa compréhension, pour l'aider à anticiper et même à s'exprimer.

Je vous raconte : on peut montrer les gestes à *Augustin* mais on peut aussi lui montrer comment les réaliser et les utiliser !

En aucun cas je ne remplace le message oral (quelle que soit la langue). Donc quand vous utilisez un geste, n'arrêtez pas de parler. C'est avec vos mots que mes gestes vont prendre tout leur sens…

Ces gestes peuvent être utilisés par toutes les personnes -petites ou grandes- de l'entourage d'Augustin.

Je comporte quelques gestes de base. J'espère être enrichi au fur et à mesure de votre utilisation et de vos besoins.

Small introduction …

I am a booklet of Coghamo gestures[1]. I contain gestures which represent the words that can help *Augustin* in his daily routines.

I'm here to support his understanding, to help him to anticipate and even to express himself.

We can show these gestures to *Augustin* but we can also show him how to do them and how to use them himself!

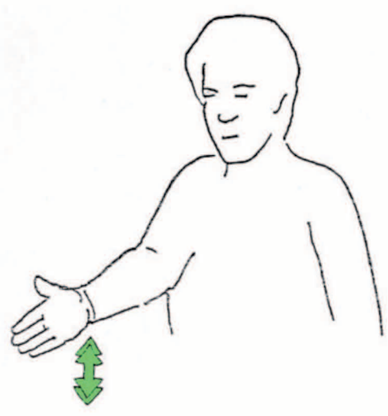
We always use gestures alongside speech (whatever the language). So, when you use a gesture, continue to speak as well. Saying the words helps the gestures make sense.

These gestures can be used by all the people –adults and children - around *Augustin*.

Here are some basic gestures to start. I hope to grow with more gestures, step-by-step according to your needs.

[1] The Coghamo is a signed language created in Belgium for people with cerebral palsy. Accordingly, this register contains gestures for French language.

Bonjour

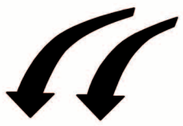


Au revoir

Manger

Boire

Encore

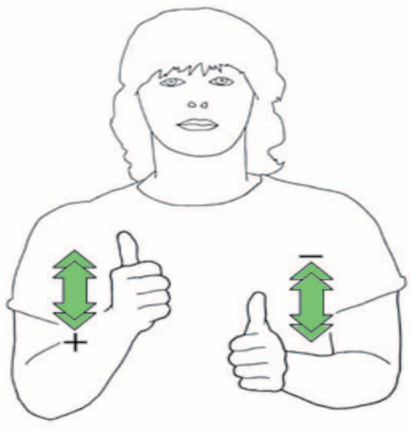


Fini

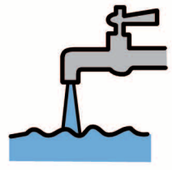
Tartine

Biscuit

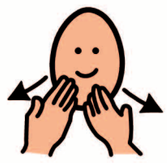
Lait



Eau



Merci



Dodo

Jouer

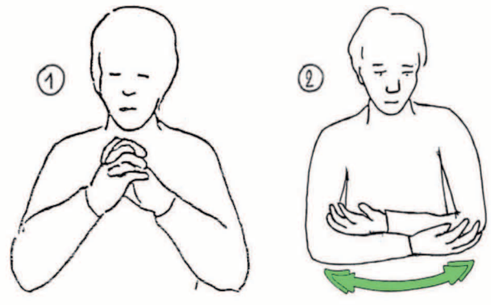
Gentil

Peur

Chaussure

Maison

Crèche



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Notice

Notice

AAC
Communicate
participate
Comenius
sharing
development
fun
professional
friendly
informative
together
thinking
growing
inspiring
Informative
discovery
exchange
personal
interesting
Inspiring
Sharing
new