

Multi-Sensory Referencing?



MSR Training Day

9.30 am

Introduction

Defining PMLD

Forms Of Communication

Total Communication

BREAK

MultiSensory Referencing – Defining

Sensory Cueing & Environmental Engineering

12.00– 1.00 pm

Lunch

1.00 – 4.00pm

Objects Of Reference

P Scales and MSR

Tangible Symbols

4.00pm

Finish





Course Tutor:

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Author – ViP, Pathways, Language Learning and
Living, IMPACT, MakPak
Creator/Designer - LIBsyms

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Who are you?

What is your name?

What is your place of employment?

What is your job/position?

Do you have any special skills? (PhD in AAC for example)

What do you want to gain from the day?

Any other information?

Aims for Training Day

Individual course participants will be able to:

- devise a working definition of the client group.
- understand the various forms of (augmentative) communication.
- state what is meant by a Total Communication Environment.
- have an understanding of what is meant by MultiSensory Referencing.
- state what is meant by Sensory Cueing & Environmental Engineering.
- be able to help implement an Objects Of Reference scheme.
- have an awareness of Tangible Symbols and how they be used to support learning.
- be able to help implement a MSR approach within own education environment.

Defining P.M.L.D.

**In small groups, list up to five
'characteristics' of individuals experiencing
Profound and Multiple Learning difficulties
in order of importance ...**

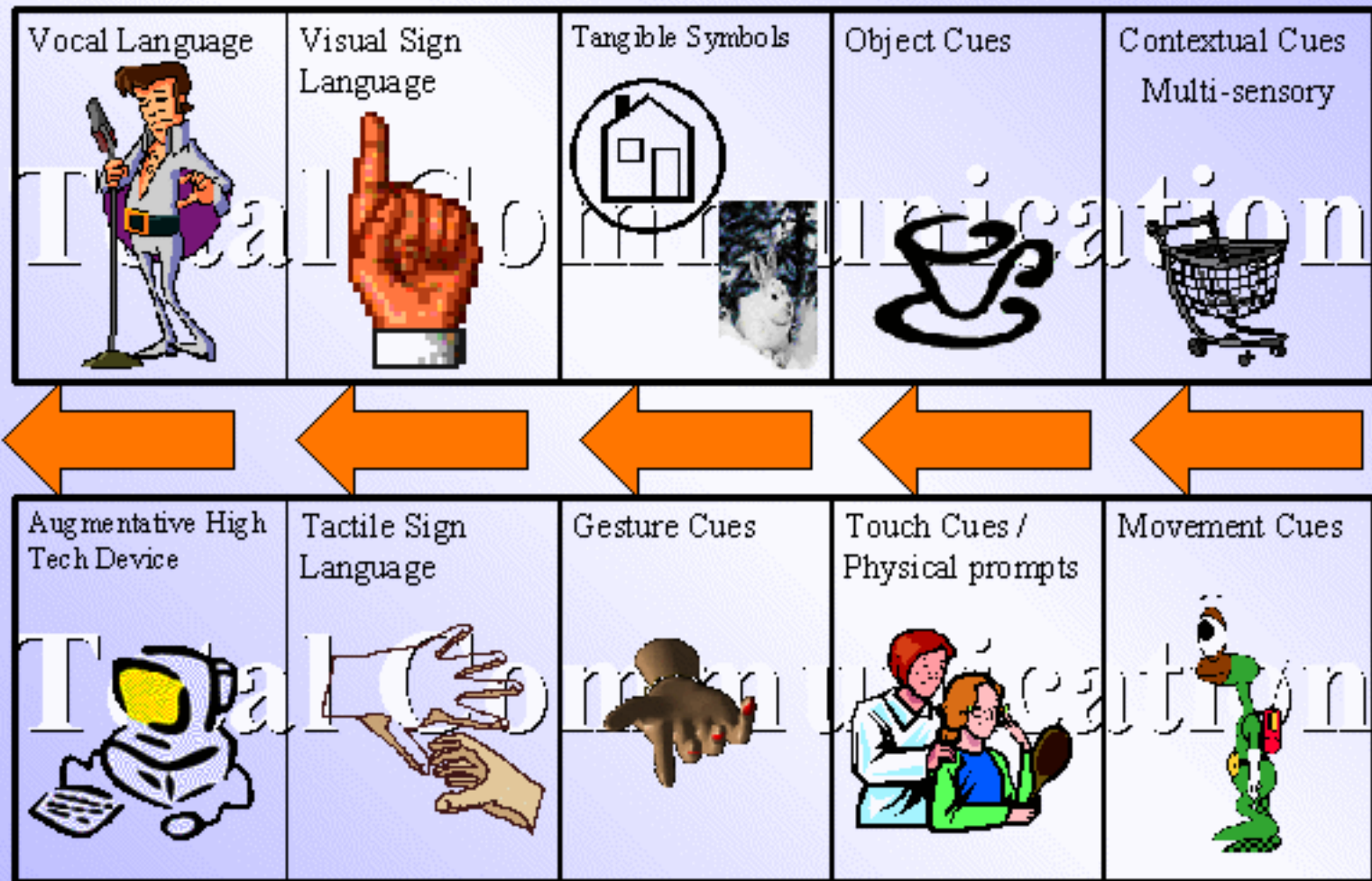
<u>Definitions</u>	PMLD	SLD	MLD
GENERAL	Learners experiencing PMLD, SLD, and MLD may also have physical disabilities, sensory impairments, social or behavioural difficulties and medical complexities. These may impinge upon an individual's ability to achieve any of the below (physically as opposed to cognitively). Individuals may be able to direct an enabler.		
SUPPORT	<ul style="list-style-type: none"> - 1:1 to enable learning - require others to participate in activities - 'attendant' (close) physical and verbal prompting 	<ul style="list-style-type: none"> - 1:1 support required for the greater part of learning - able to work independently for short periods - supervisory support with verbal prompting 	<ul style="list-style-type: none"> - occasional 1:1 support to guide learning -- able to work independently on appropriate tasks asking for help if required - occasional support with verbal prompting
INDEPENDENCE	<ul style="list-style-type: none"> - Continuing (life long) dependence on others. - total reliance on others - no awareness of personal safety 	<ul style="list-style-type: none"> - Continuing dependence on others - able to cater for some of own needs 'independently' - little awareness of personal safety 	<ul style="list-style-type: none"> - some dependence on others - able to manage majority of needs independently - some awareness of personal safety
COMMUNICATION	<p>Pre-verbal communication with reliance on:</p> <ul style="list-style-type: none"> Body language/Gesture Context Immediate gratification 	<ul style="list-style-type: none"> - Basic communication skills - Delayed Language Development with difficulties in <ul style="list-style-type: none"> semantics (meaning) syntax (word order) pragmatics (use of language) 	<ul style="list-style-type: none"> - Communication skills - Possible delayed language development with difficulties in <ul style="list-style-type: none"> semantics (meaning) syntax (word order) pragmatics (use of language)
COGNITION	<ul style="list-style-type: none"> - Very early developmental level - measured in months - Focus on the 'present' - little awareness of object permanence - Greater focus on sensory development 	<ul style="list-style-type: none"> - Early developmental level - 1 - 5 years - some awareness of past and future - some awareness of obj. permanence and continuing existence of objects - Greater focus on self development 	<ul style="list-style-type: none"> - Delayed development - Immaturity - awareness of self & other in space and time - Object permanence established - Greater focus on 'world awareness'

For pupils experiencing learning difficulties the curriculum might aim to:

- enable pupils to interact and communicate with a wide range of people;
- enable pupils to express preferences, communicate needs, make choices, make decisions and choose options that other people act on and respect;
- promote self-advocacy or the use of a range of systems of supported advocacy;
- prepare pupils for an adult life in which they have the greatest possible degree of autonomy and support them in having relationships with mutual respect and dependence on each other;
- increase pupils' awareness and understanding of their environment and of the world;
- encourage pupils to explore to question and to challenge;
- provide a wide range of learning experiences for pupils in each key stage suitable for their age.

Planning, teaching and assessing the curriculum
for pupils with learning difficulties QCA (2001)

Forms of Communication



What is a

Total Communication Environment?

In small groups, write down what you think are the necessary components of a TCE.

A

Total Communication Environment
is an environment
in which ...

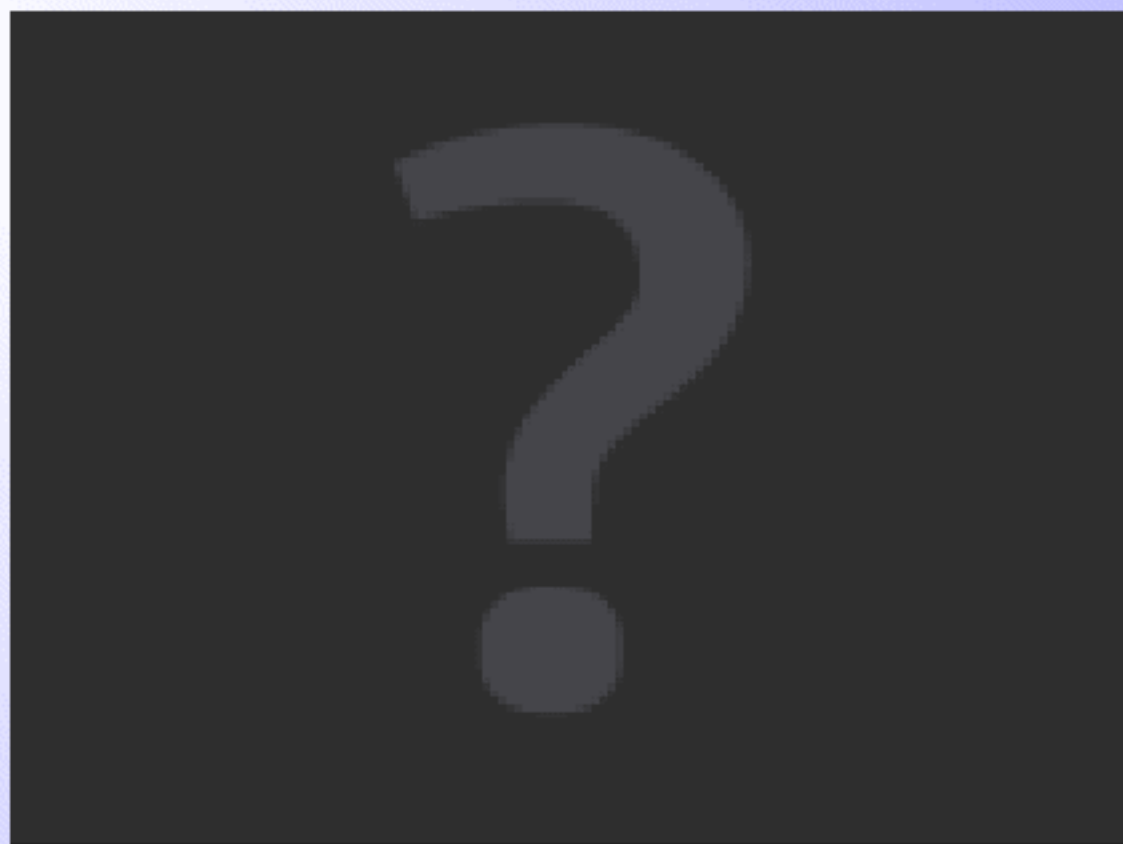
Total Communication



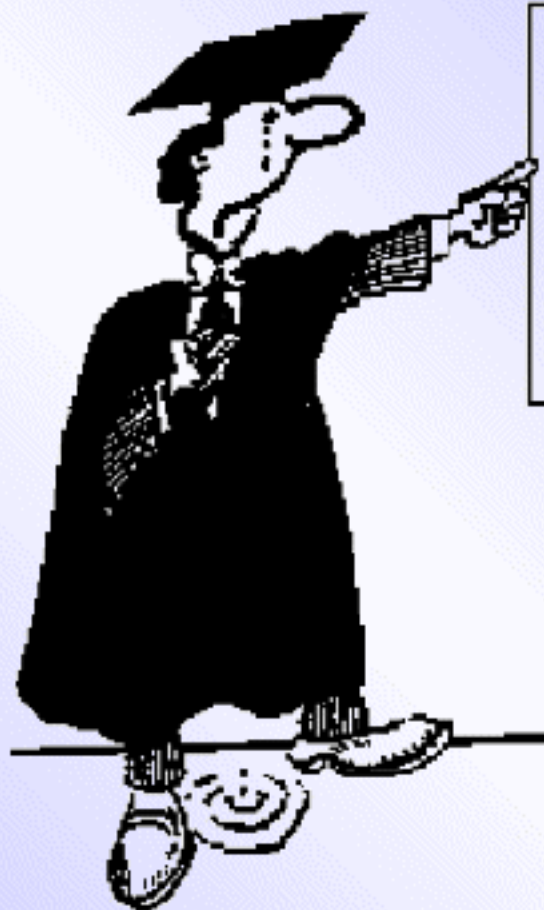
Good God laddie, it's 'Your hat is on fire' not 'hat fire'. Don't you know anything? Say 100 times 'I must use the copula form of the verb'

... all forms of LEARNER communication are valued and encouraged. What about Staff communication?

Total Communication



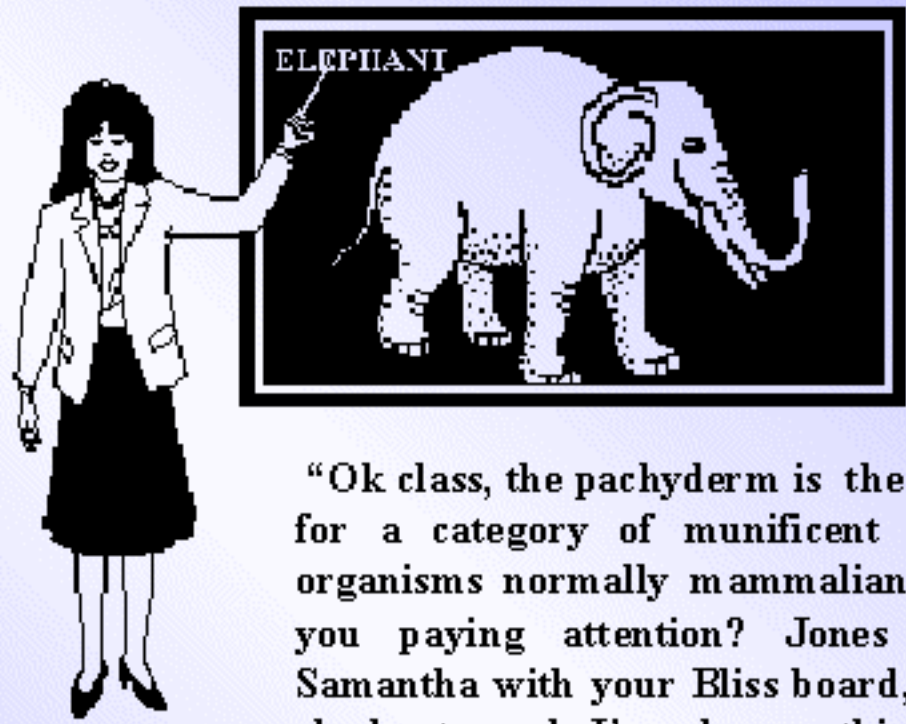
... staff respect learners with communication difficulties.



Dismissals and the
docking of pay will
continue until staff
morale improves.

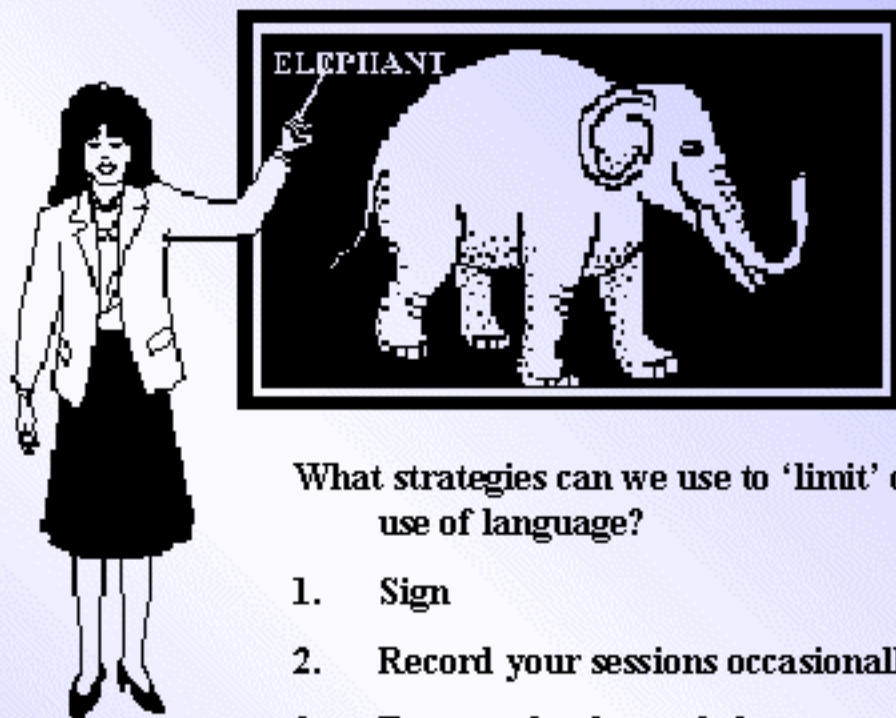
Head teacher

... management actively supports communication.



“Ok class, the pachyderm is the generic name for a category of magnificent integumented organisms normally mammalian, Smythe are you paying attention? Jones stop hitting Samantha with your Bliss board, of which the elephant, and I’ve drawn this one on the board, it took me all morning, so I hope you appreciate the effort I am making here, Jones I’ve told you to put that Bliss Board away this is Biology and you don’t need to talk in Biology, is but one example.”

... staff communication reflects learner needs.

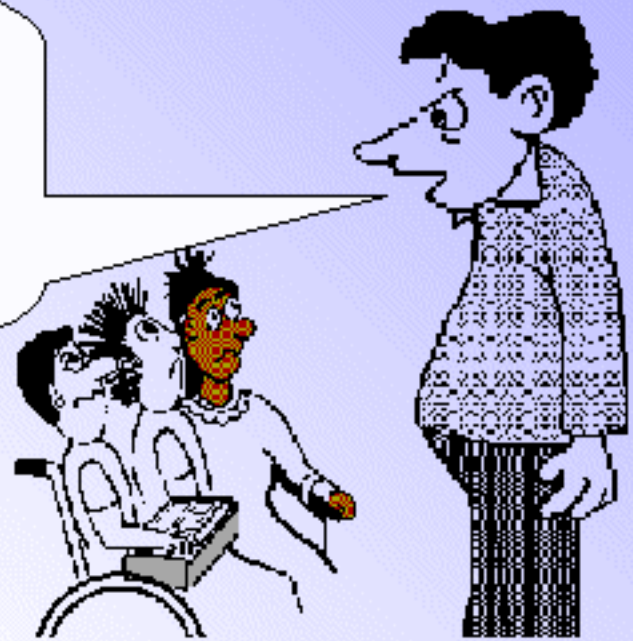


What strategies can we use to 'limit' our over zealous use of language?

1. Sign
2. Record your sessions occasionally
3. Trust each other to help.
4. Make a mental note that you are speaking a foreign language. Think ... "If someone was speaking to me in Hindi or Urdu - what would help me?"

... where less is more ...

Shani, did you blink just then? Well, now I've got to give you another drink!



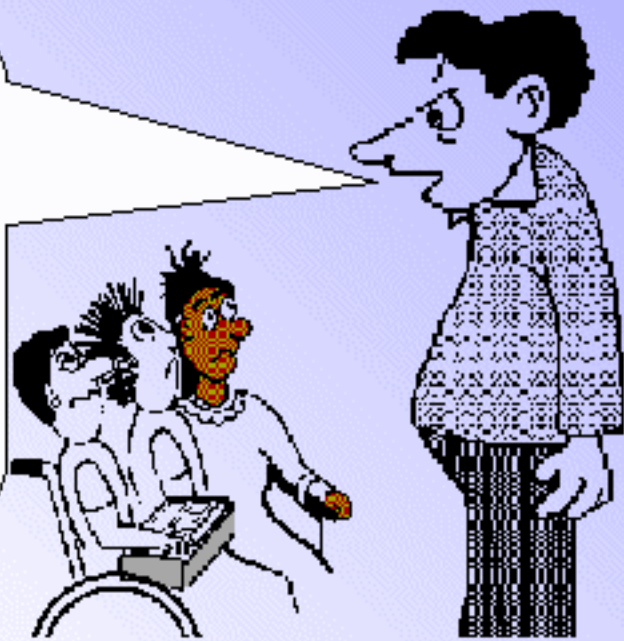
Respond to a 'behaviour' as though it were intentional in order to help promote communication skills.

What factors are involved in this?

... a Responsive Environment has been created ...

Jean Ware said in the 2nd edition of 'Creating a Responsive Environment' - London: David Fulton

"Whether it is most appropriate to respond to all behaviours or selectively to those that are communicatively most sophisticated will depend on the individual's level of functioning"



Ware's Hierarchy of behaviours

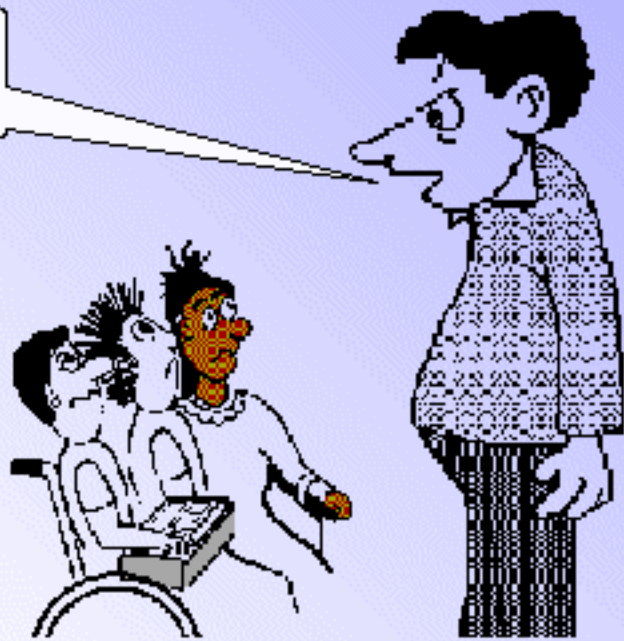
Behaviours that are:

1. easily developed into conventional communication (Vocalisations);
2. easy to observe and therefore more likely to attract a high rate of response;
3. fairly regular so there are plenty of opportunities for responding to them.

... a Responsive Environment has been created ...

Tony's Tips

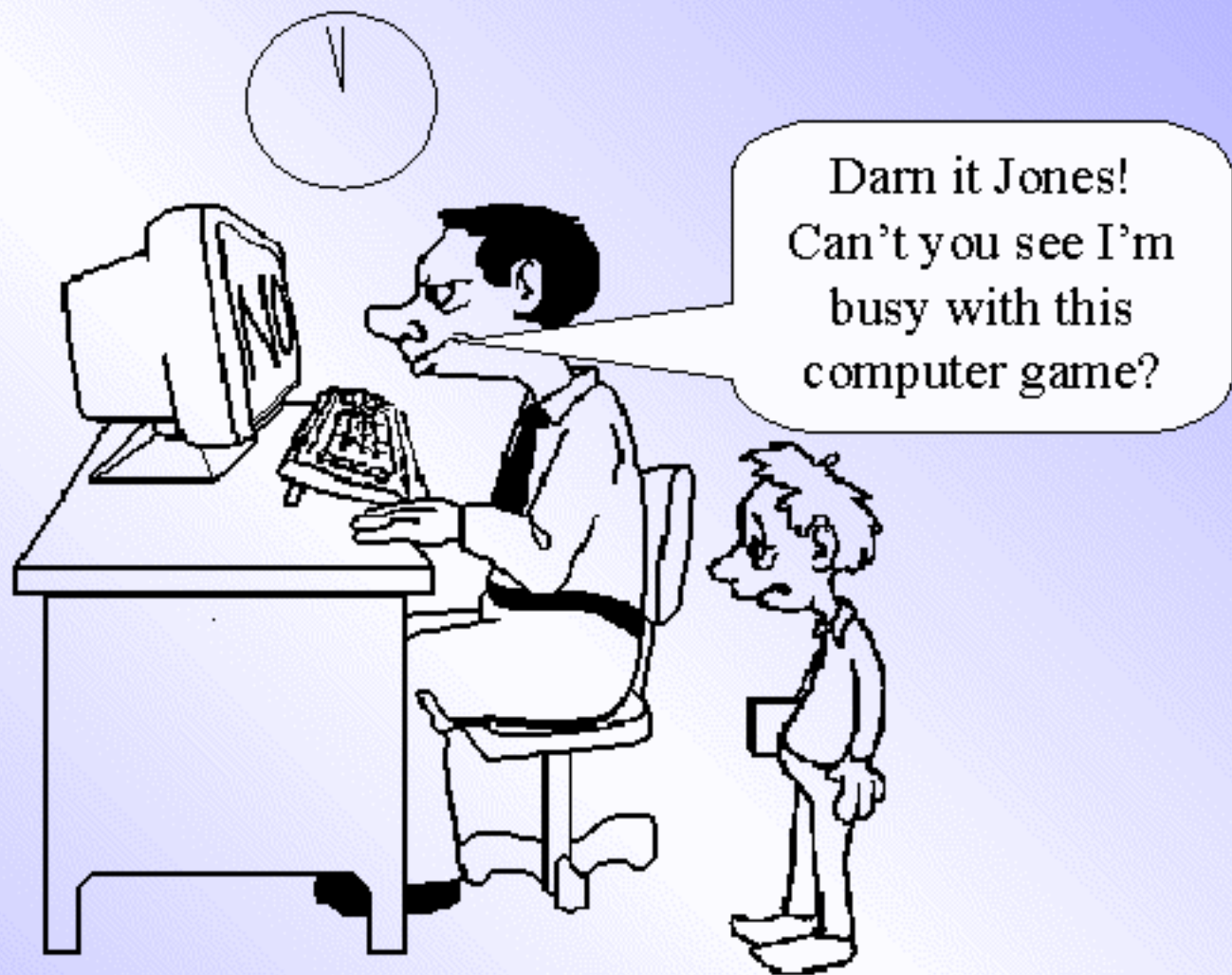
1. Start with a selected individual;
2. Choose a reasonably frequent behaviour;
3. Always respond in a consistent manner;
4. Provide a motivational response;
5. Select a manner of responding that is natural and enjoyable to you;



Turn that annoying squeaky door into a tool for communication progression!

... a Responsive Environment has been created ...

Total Communication



...staff make time to communicate

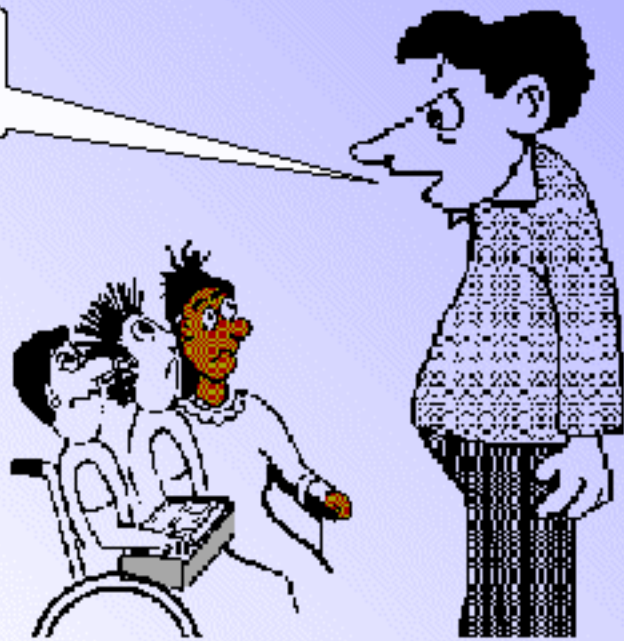


...staff enable learners to communicate for themselves

Tony's Tips

1. Communication is learnt through communicating;
2. Wait for an opportunity to communicate;
3. If the opportunity doesn't arise, interrupt as you would with a member of staff;
4. Adopt a non-threatening posture;
5. Talk about anything (relevant if possible) and pause frequently and give the individual a chance to respond.
6. Respond as though the individual were communicating.

... Create a Responsive Environment ...

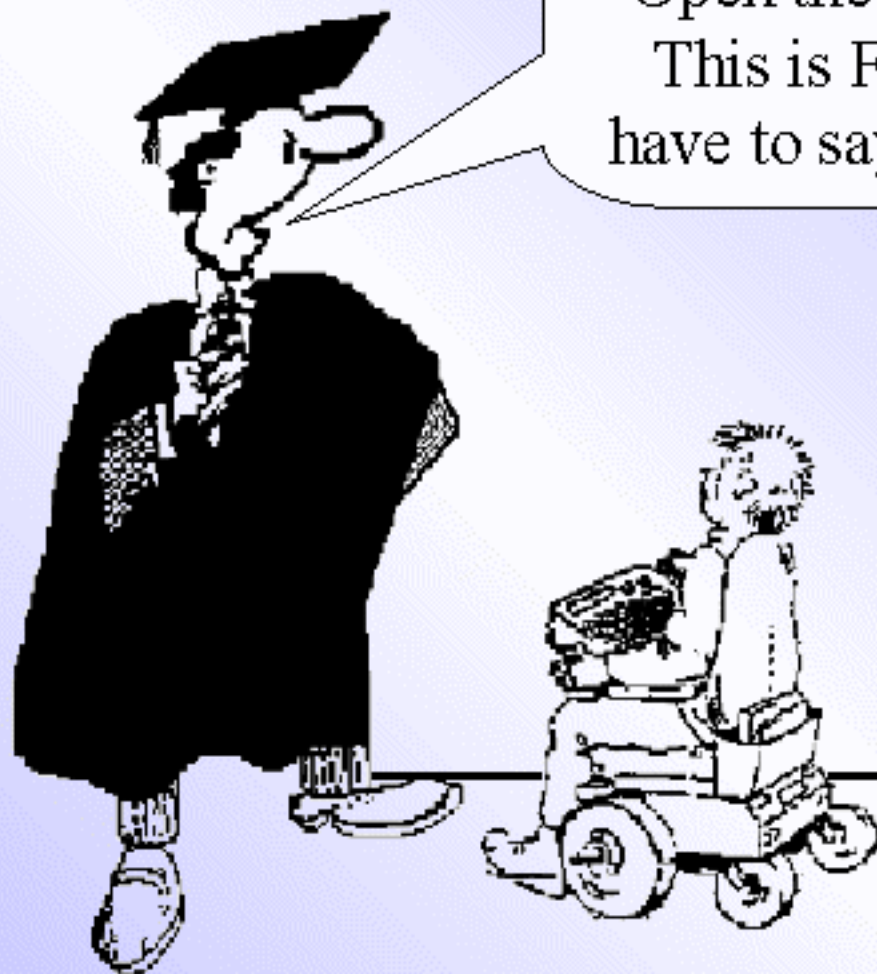


Total Communication



“Ok Shanee has chosen the Tropical Milkshake, shaken not stirred, topped with coconut and chocolate chips. Saul what about you? A coke you say. Is that a diet or a regular? A cherry or plain? In your glass or your beaker? With ice or without? Crushed ice or just plain ice cubes? Oh, I nearly forgot. We also have ice in the shape of little pink elephants if you would like that. Now then, when you’ve sorted that lot out we’ll decide what sort of straw you would like.”

... choice is the norm.



What do you mean
“Open the door please”?
This is French – you
have to say it in French.

... passivity is prohibited.

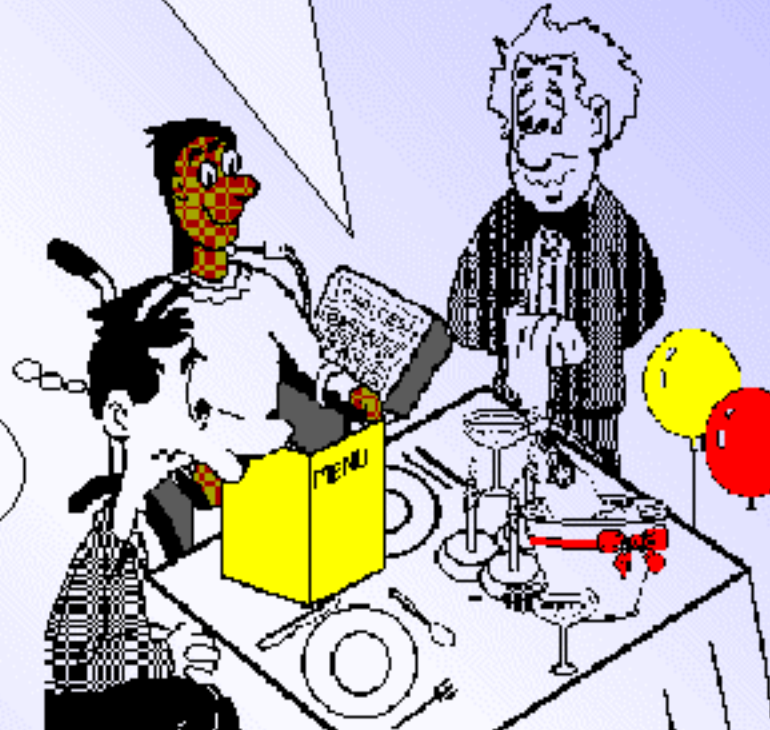
“ The provision of positive control experiences early in life will be a primary factor in helplessness immunization.”

SWEENEY L. A. (1993) Helplessness, Dependency, an explanatory style as variables of employment potential among Augmented Communicators

First Annual Pittsburgh Employment Conference for Augmented Communicators Proceedings Shout Press: Pittsburgh

I knew it was a mistake to give women the vote.

... and for Sir, a piece of dry bread and a little water, et moi, I'll have the lobster with the caviar.



... the learner is allowed to take control.

‘Create’ the repair strategy ...

It's no good screaming
and crying – I can't stay
any longer to find out
what you want.



... the learner is allowed to take control

Create the termination strategy ...

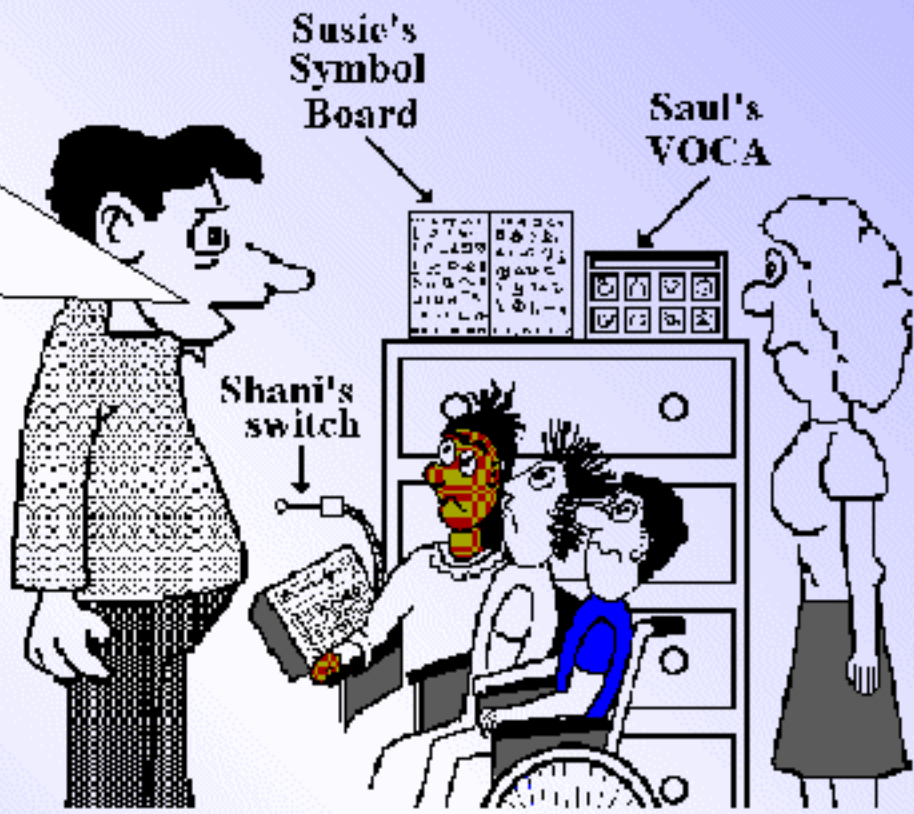
I think she is simply trying to tell you that she has had enough!



... the learner is allowed to take control

Total Communication

Really Mrs Saymore, I don't know why they are not motivated to use the systems in my session. I think they just prefer to listen to me.



...augmentative communication is addressed in all sessions.

Total Communication



...learners have their *own* communication targets & objectives



Come on Sam, it's called Spaghetti Bolognese. Surely you can say that on that silly machine.



... there is an expectation of learner communication.



**“What’s that you say?
I’ve forgotten to put the
straw in it!
Oh silly me, I’m going
batty in my old age. I’ll fix
that straight away.”**

... staff 'create' a need to communicate.

Total Communication

A Now Shanee, I can't be bothered teaching Saul anything today. Would you tell him all about the impact of Romans on Britain?



... inter-peer communication is fostered

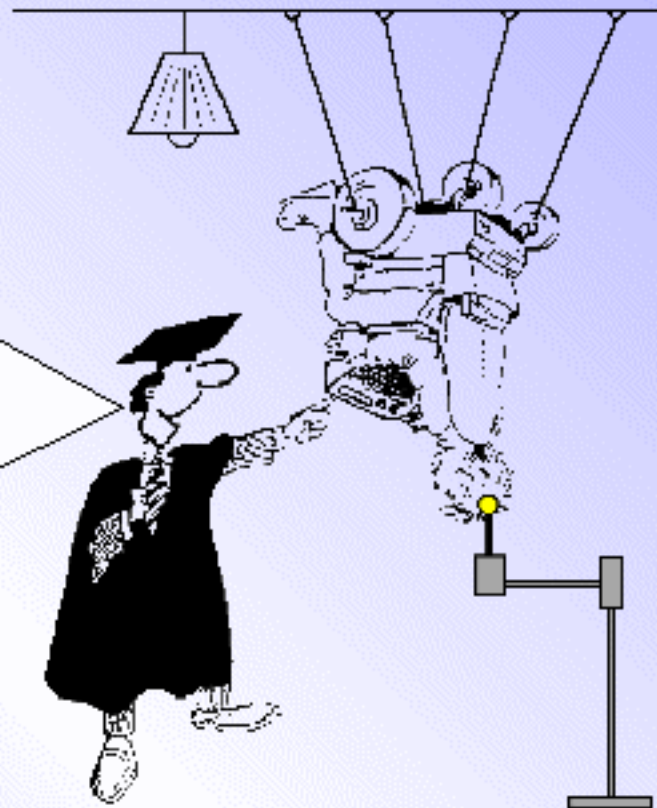
Total Communication

A Now Shani, it=s simple. Use the big red for the PredictaWurd, the little blue for the Mac, the rectangular grey for the environmental control, the hexagonal purple for your chair, the left wobble when you want to play a game, the upper wobble when its raining on a Friday, the lower wobble when you are in trouble and you want to sound the the school fire alarm, the spherical purple... errr, I forget what that does and the oval green - you must never press the oval green. You got that now?@



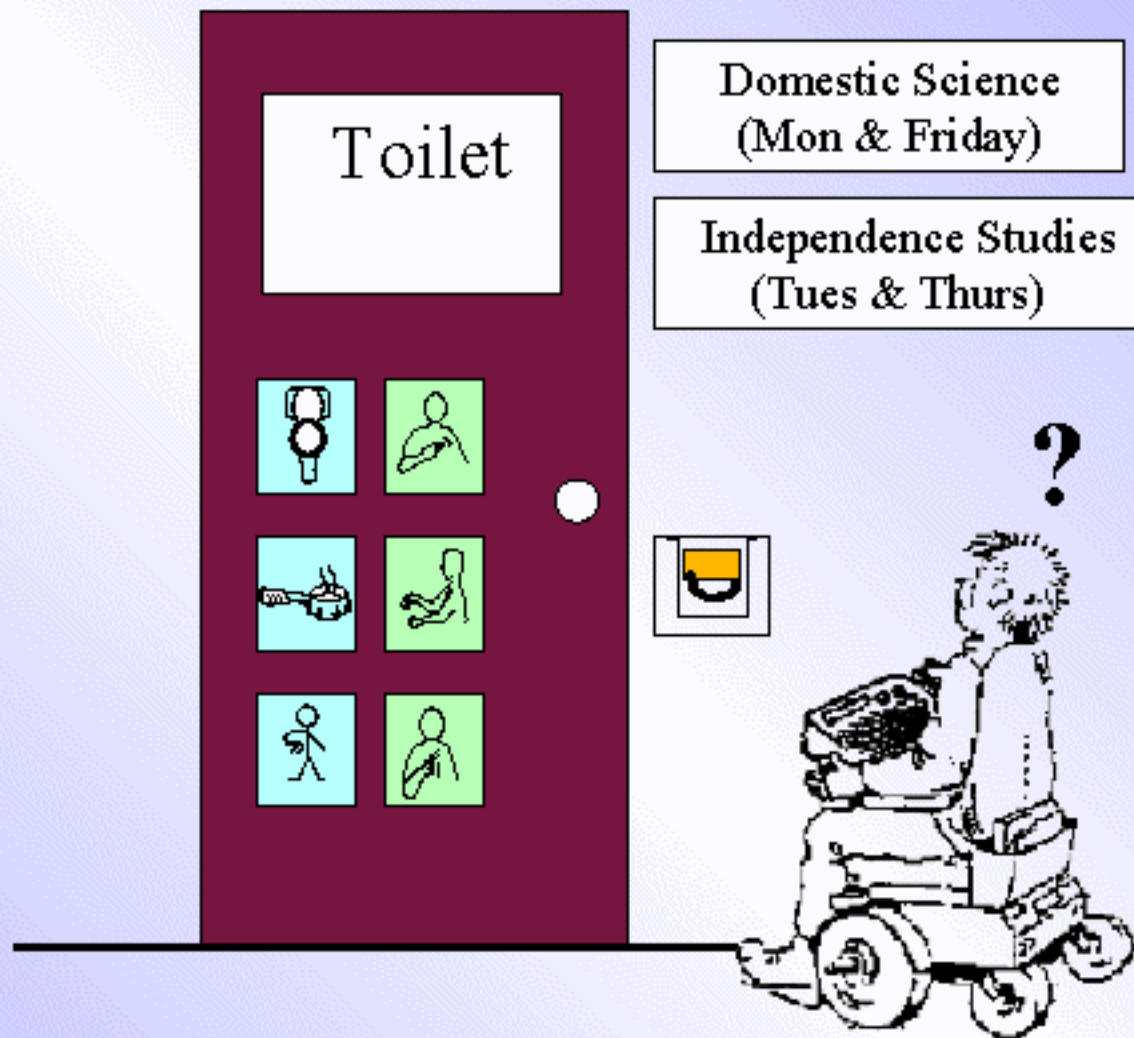
... Assistive Technology is built into the routine

Now then Smith I think we have finally found the optimum positioning for your head switch. Just hold that position while I fetch a camera will you?



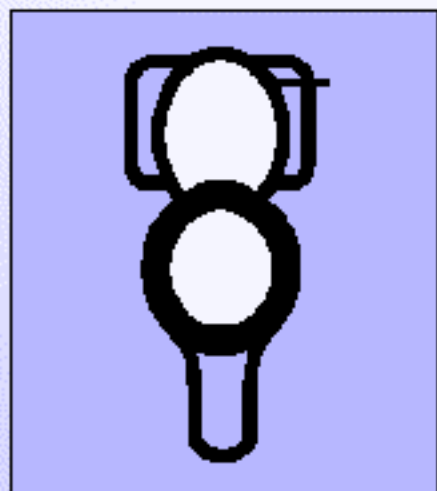
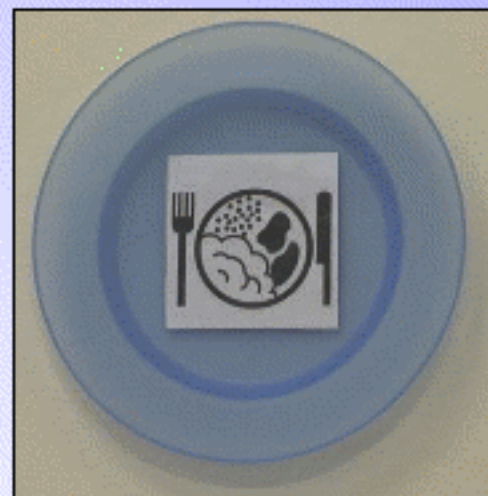
... ways are found to be CONSISTENT

Total Communication



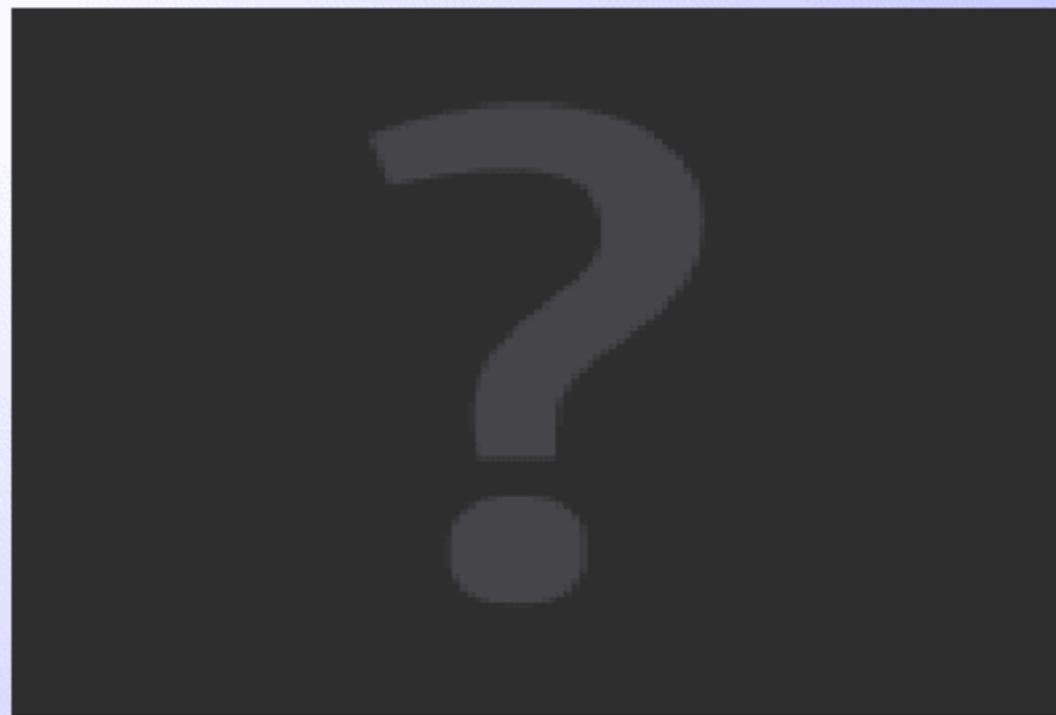
... the environment is labeled.

Total Communication



... the environment can be labelled in many ways.

Total Communication



... the environment is labelled.

Total Communication

Saul, you've had your ten minutes with the Vocaswop. Give it to Shani now!



Share and share alike



... learners have their *own* communication systems.

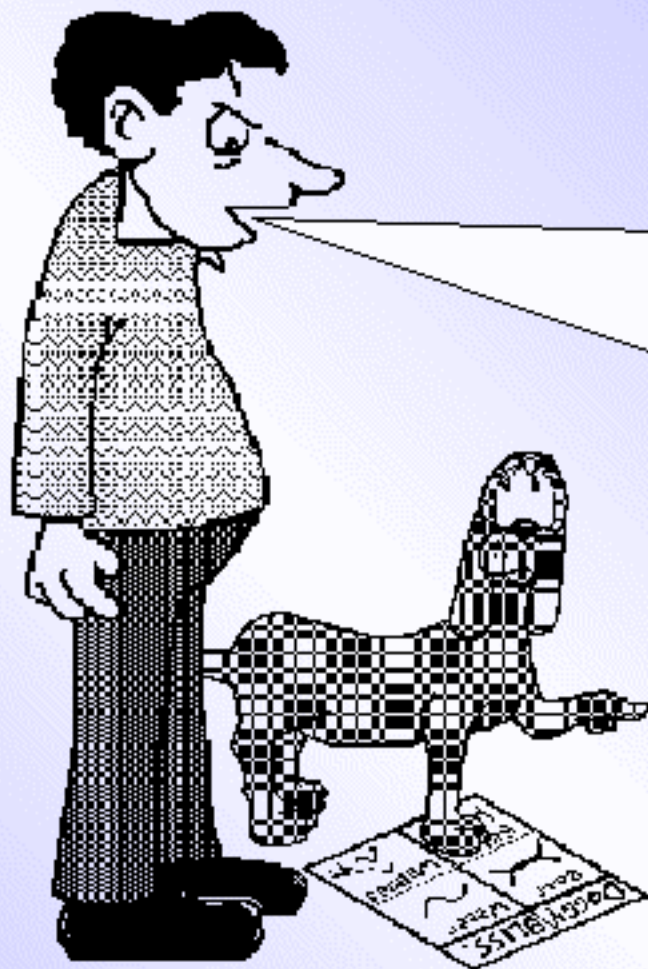
*“If a lion could
speak, what then?”
Wittgenstein*



Roar roar roar, roar
roar roar, roar roar
roar roar.

I wish he would enunciate his
words clearly: I can never
understand a word he says.

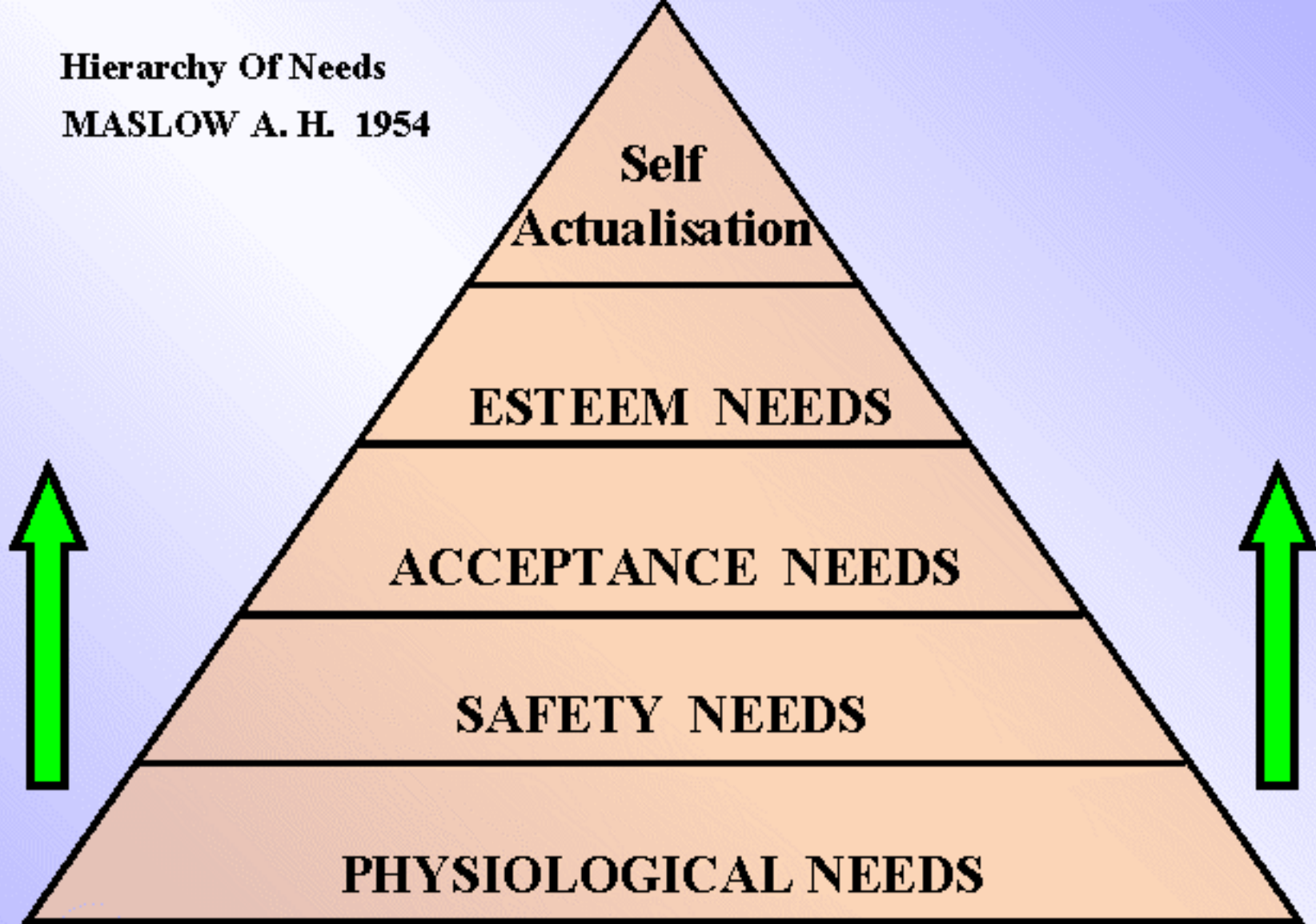
... learners are approached at their own level



Look I know you're a pointer but couldn't you just humour me and use the Doggy Bliss Board I've spent all this time making for you?

... learners are challenged to move beyond their existing communicative level.

Hierarchy Of Needs
MASLOW A. H. 1954



... individual needs are met.

What would a
Total Communication Environment
for individuals experiencing
Profound and Multiple Learning
Difficulties look like?

Total Communication

What is a Total Communication Environment?

In summary, a TCE is an environment in which:

- all forms of LEARNER communication are valued and encouraged;
- all forms of STAFF communication are not viewed as appropriate and/or desirable;
- staff use augmentative communication appropriate to the needs of the learner;
- (augmentative) communication is seen as fundamental by the management and supported throughout the curriculum:
 - regular staff training (staff skilled in signing?);
 - session observation includes reference to AAC;
 - Learners have (core) AAC targets and objectives.

A Nightmare Situation

In small groups:

You find yourself inside a building in a foreign country. There are no clocks and your watch is missing. You don't speak a word of the language and no one appears to understand you. Each room in the building looks alike. You wander from room to room trying to get out but your situation appears to become even more alien. Eventually a person puts you in a room and tries to get you to perform a task...



1. How do you feel?
2. How does it affect your learning?
3. What would help you?

What is a M.S.E?

An environment that :

- ❖ offers a number of sensory experiences/activities;
- ❖ uses light and sound, movement, visual, auditory and olfactory stimuli which can be controlled for specific learning;
- ❖ is purposefully crafted, resourced and staffed;
- ❖ provides individuals sensory experiences - all senses being stimulated;
- ❖ could be anywhere – light and sound room, tutor room, in the park, supermarket, etc.

“The MSE is not fixed but is in dynamic equilibrium with its user. The fullest definition of the MSE can only be determined by that user at that time there’s the actual space, the physical environment – and there’s the impact on the students – with this impact being different for each student.”



Paul Pagliano (1999)

M.S.E & MSR

Why should the benefits of an MSE be confined to the Multi-Sensory room?

They Shouldn't!

MSR takes the benefits of the MSE and makes them available to all learners all of the time and in all locations.

Multi-Sensory Referencing

What is MSR? It is ...

- a part of a Total Communication Environment helping to develop early emergent communicative skills.
- an approach that assists individual awareness of location in space and time;
- not a single technique but, rather, comprises a range of techniques;

- used to address

P.



O.



L.



E.s



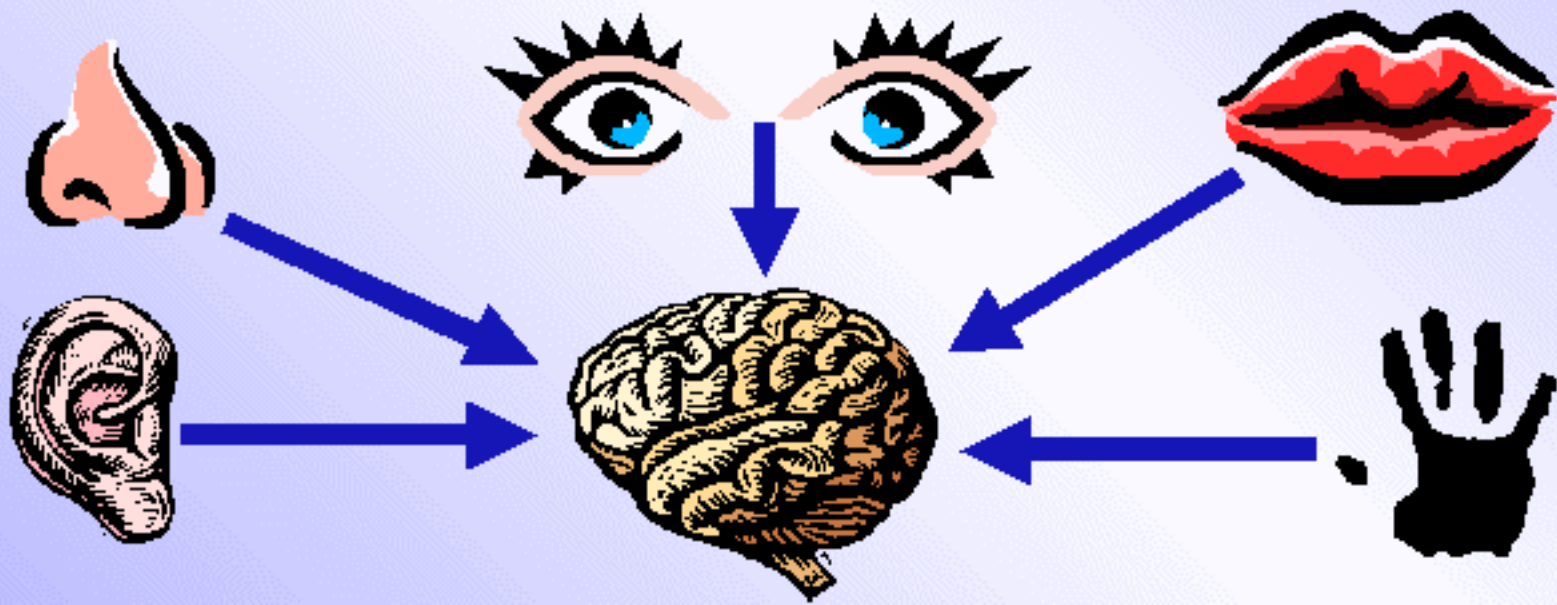
Web pages on **Multi-Sensory Learning**

- 1) Using Multi Sensory teaching methods
<http://www.dyslexia-parent.com/mag30.html>
Article on teaching literacy using the senses
- 2) Multi Sensory Learning
http://www.innovativelearningpros.com/multisensory_learning.html
Working to individual strengths
- 1) Multi Sensory learning and Intelligence
<http://www.learning-forces.org.uk/learn/msensory.htm>
An short article on Honey and Munford's work
- 1) Multisensory Interactive Learning Institute
<http://www.manypaths.org/resources/learning.html>
Details of their newsletter and e-mail group
- 1) Multisensory Learning
<http://www.cerbranetics.com/multisens.html>
Outline of MSL

Multi-Sensory Referencing

... makes use of the simultaneous stimulation of the senses.

The brain receives consistent (multi-channel) information from a range of senses and is forced to process the information in a holistic and consistent manner with less chance for misunderstanding.



Multi-Sensory Referencing

... uses Multi-Sensory Learning
to enable people experiencing
Profound and Multiple Learning Difficulties
to make sense of and progress within their world.

Multi-Sensory Learning
makes best use of the senses to promote
Early Thinking Skills



Early Thinking Skills

Early thinking skills include:

- predicting and anticipating;
- remembering;
- the understanding of cause and effect;
- linking objects, events and experiences;
- **thinking creatively and imaginatively:** *for example, through play and experimentation, through the discovery and application of new connections and ideas and through active exploration.*



Early Thinking Skills

"Developing thinking skills is supported by theories of cognition which see learners as active creators of their knowledge and frameworks of interpretation. Learning is about searching out meaning and imposing structure."

Prof. Carol McGuinness

Queens Univ. Belfast



Early Thinking Skills in Older Learners

Greenenough, Black, and Wallace (1993) have shown enhanced synaptic growth in both young and aging rats raised in complex environments. Karni et al. (1995) have shown expansion of cortical involvement in performance of motor tasks following additional learning. In other words, the cortical map can change even in adulthood in response to enriched environmental or learning experiences.

These findings have implications for educators:

- teaching and teachers can make a difference in brain development
- don't give up on older learners.

Greenenough, W.T., Black, J.E., & Wallace, C.S. (1993). Experience and brain development. In M. Johnson (Ed.), *Brain development and cognition: A reader* (pp. 290-322). Oxford: Blackwell.

Karni, A., Meyer, G., Jezzard, P., Adams, M., Turner, R., & Ungerleider, L. (1995). Functional MRI evidence for adult motor cortex plasticity during motor skill learning. *Nature*, 377, 155-58).

We Learn:

**10% of what we read,
20% of what we hear,
30% of what we see,
50% of what we see and hear,
70% of what we say,
90% of what we say and do.**

We therefore need to ensure that learners see, hear, and do and smell and taste and

Multi-Sensory Referencing

What are the learner prerequisites for MSR?

There are **NO** prerequisites for this approach!
Don't believe those people who say that there are!

MSR helps to take the learner from the
pre-intentional to the intentional.

Over the next few slides think about how MSR
attempts to achieve this.

Multi-Sensory Referencing

What are the learner prerequisites for MSR?



<http://www.ace-north.org.uk/resources/resn.htm>

Pre-requisites for Object of Reference use

In order to establish whether or not an individual will be able to make a link between an Object of Reference and an item or event , it is important to consider whether the individual can:

Make sensory discriminations;

I don't agree!

Has object recognition;

Multi-Sensory Referencing

What are the benefits of MSR?

- Reduction in confusion and apprehension;
- Inclusion for individuals experiencing
... Profound and Complex Learning Difficulties;
- Building anticipation;
- Development of early communication skills;
- Help with development of Sensory Integration (Jean Ayres);
- Development of cognitive / early thinking skills...

“A profound impairment can impede the spontaneous and natural process of development and learning to such an extent that, unless the environment is shaped in certain ways to be supportive, the child will have great difficulty in making sense of the world.” (PAGLIANO P. 2001)

TOTAL COMMUNICATION ENVIRONMENT

(Multi) Sensory Referencing

Techniques

Sensory Cueing
Context
Env.Engineering
Objects OfRef
Tangible Symbols
Photographs
Symbols
Signs

SR – S (Spatial)

Where am I?

Where am I going?



ANTICIPATION

SR – T (Temporal)

What I am going to do next?

Order my session / day



Sensory Cueing

Sensory Cueing is a technique that may be used as a part of a Multi-Sensory Referencing Scheme:

- It provides multi-sensory cues to a location or an imminent event.
- The cueing is provided at the location or at some point prior to the event.
- The cueing is provided by either naturally occurring events OR through Environmental Engineering.
- The cueing is not provided in a previous session (OOR) but rather on route to or an arrival at the the location or event
- We all naturally make use of Sensory Cueing in everyday life.

Sensory Cueing



Sensory Cueing using Touch

Enable the learner to participate using sensory stimulation of the skin. This does not always have to involve the hands!

Idea 1:

At the supermarket, take a few seconds to run the learners hands along the bars of the supermarket trolley.



Idea 2:

Make use of sensory switch caps:

The sand of music, The water bubble, The warm greeting



Sensory Cueing



Use spray adhesive to coat the top of your switch cap.



Create a simple mask out of paper to ensure the spray goes where you want it!

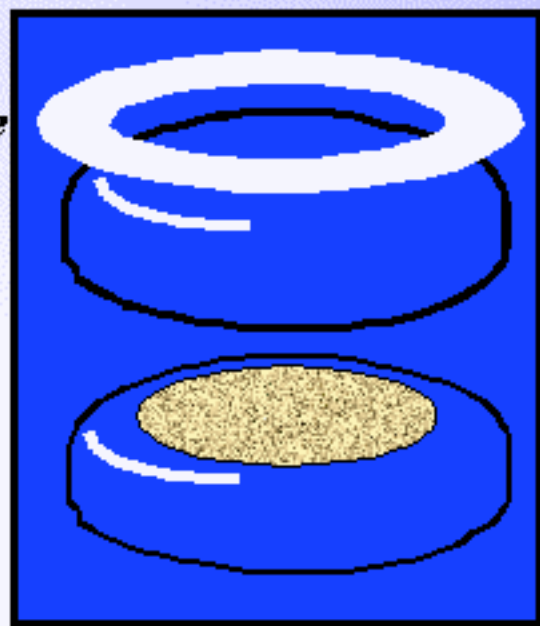
Now 'add' a surface to the cap:

Sand (Sand of Music?!)

Felt (Warm inviting – Greetings?)

Sponge (for all watery events?)

Just use your imagination...



*Tip: Keep a consistent approach for all learners.
Ideally, each learner could have their own set*

Sensory Cueing



Sensory Cueing using Smell



Enable the learner to participate using olfactory stimulation.

Idea 1:

Be aware of the smells in the everyday environment:
Make greater use those that are consistent.

Idea 2:

Create a particular smell for POLEs with fixed reference. For example: the smell of pine in personal care areas.



Web pages on the Olfactory System

- 1) Mystery of smells-Memory and smells

<http://www.hhmi.org/senses/d140.html>

Article on how we remember smell

- 2) Smell and the olfactory system

<http://web.sfn.org/content/Publications/BrainBriefings/smell.html>

A short but descriptive outline of the Olfactory system

- 1) Harvard research on smell

<http://www.news.harvard.edu/gazette/1999/04.08/smell.html>

An article on how we remember smell. Information on the olfactory system

- 1) How rats and mice -and probably humans - recognize smell

<http://www.hhmi.org/senses/d130.html>

Article on facts about the Olfactory system based on experiments on rats

- 1) Mystery of smells-The Vivid World of Odours

<http://www.hhmi.org/senses/d110.html>

Broad outline on the significance of odours



Sensory Cueing



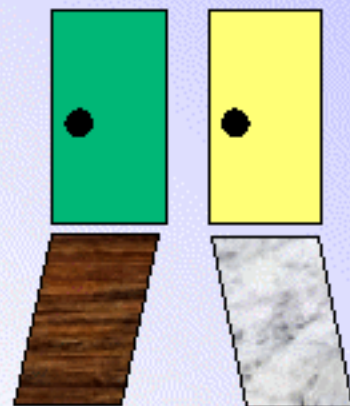
Sensory Cueing using Vision



Enable the learner to participate using visual stimuli.

Idea 1:

Map the environment using colour and form. Give each doorway a unique colour. Give specific areas a unique floor design/surface and texture.



Idea 2:

Create door labels using photographs and symbols



Sensory Cueing



Sensory Cueing using Hearing

Enable the learner to participate using auditory stimuli.

Idea 1:

Start your session with a specific piece of music. It need not be long or intrusive but should be unique.



Idea 2:

Using music to reference particular parts of the day...



Idea 3:

Use sounds to reference specific tasks ...

Sensory Cueing



Sensory Cueing using Hearing

Enable the learner to participate using auditory stimuli.

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Idea 2:

Using music to reference particular parts of the day...



Idea 3:

Use sounds to reference specific tasks ...



Sensory Cueing

While the Sensory Cueing technique is similar to the use of Objects Of Reference, they differ on a number of key points:

- OOR allows for 'unnatural' cues to be utilised (unnatural is *not* used in its pejorative sense here). Sensory Cueing makes uses of 'naturally' occurring events to provide Sensory Referencing.
- OOR allows for cues to be presented in a prior session. In Sensory Cueing the cues are presented on the way to the location or event or at the location itself.
- While OOR may be multi-sensory, these elements are all contained within the OOR itself. Sensory Cues may come from a variety of sources presented simultaneously.

Sensory Cueing

For example:

- going out is often accompanied by the putting-on of coats.
- eating dinner by (in some instances) the wearing of protective clothing and by encounters with knife and fork and the smell of food. Why is the smell of food by itself not a Sensory Cue?

These naturally occurring events are embellished: staff make a point of focussing on the activity to come as they help the individual and assist understanding:

*“You are going out now. Look here is your coat.
You are going out”*



Sensory Cueing

Sensory cueing is seen as easier to implement than an OOR system as it normally makes use of naturally occurring events. Also, as the events are natural, there are no objects to mislay (unless one loses a coat).

However, Sensory Cueing does have drawbacks:

- Do people always put on a coat when they go out?**
- What if the event does not have an easily recognisable naturally occurring item to use as a cue?**
- How can a naturally occurring event be used to prepare an individual in another environment if the event is fixed at its location?**

In support of Sensory Cueing is its 'naturalness' and ease of use. OOR are seen as somehow more 'contrived' and 'unnatural'. While this may be true, each has its place within a Multi-Sensory Referencing approach.

Sensory Referencing - S

Where am I?

Where am I going?

- These can be addressed through the use of Sensory Cueing and Objects Of Reference.
- Sensory Referencing may make use of existing context and Environmental Engineering.
- Sensory Cueing should attempt to make use of an integrated sensory approach in which more than one sense is utilised simultaneously.
- The use of colour, shape, texture, tactile sensations, smells, sounds, tastes ...

Sensory Referencing - T

What am I doing next?

Immediate

Order my session/day

Deferred

- These can be addressed through the use of Routine (Sensory Cueing), Objects Of Reference, and Tangible Symbols.
- The time line may be set out in one or more Tangible Symbol formats for each learner or as a group event.
- Each part of the time line may be referenced by an event which should be delivered consistently. The event may be a sound.
- The learner may take control and influence events— make a choice of what to do next or inform another of a need.

Sensory Referencing - T

Each part of the time line may be referenced by an event which should be delivered consistently....

Start the Day ...

...The PowerPoint way



Sensory Referencing - T

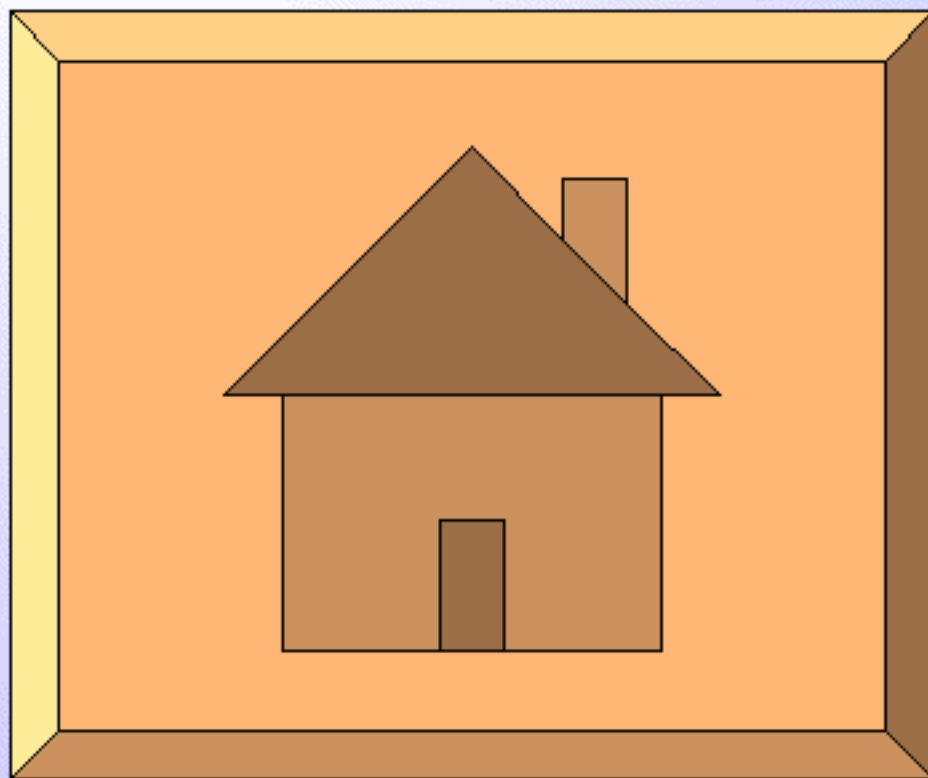
Each part of the time line may be referenced by an event which should be delivered consistently....

End the Day ...


...Another way



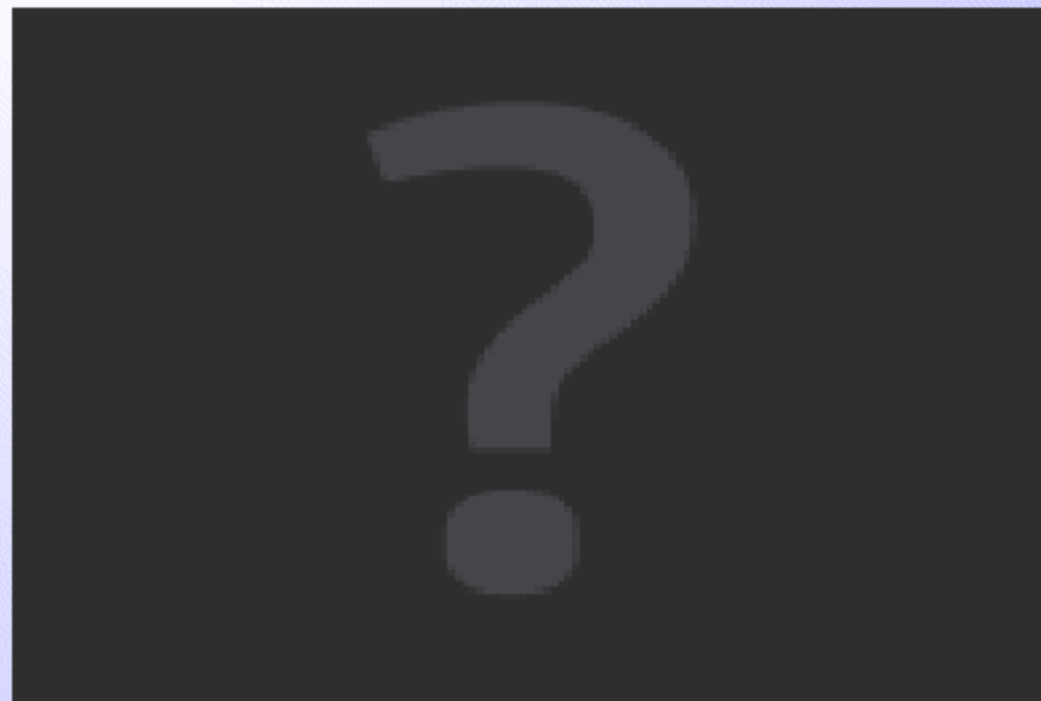
Going Home Now!



Sensory Referencing - T

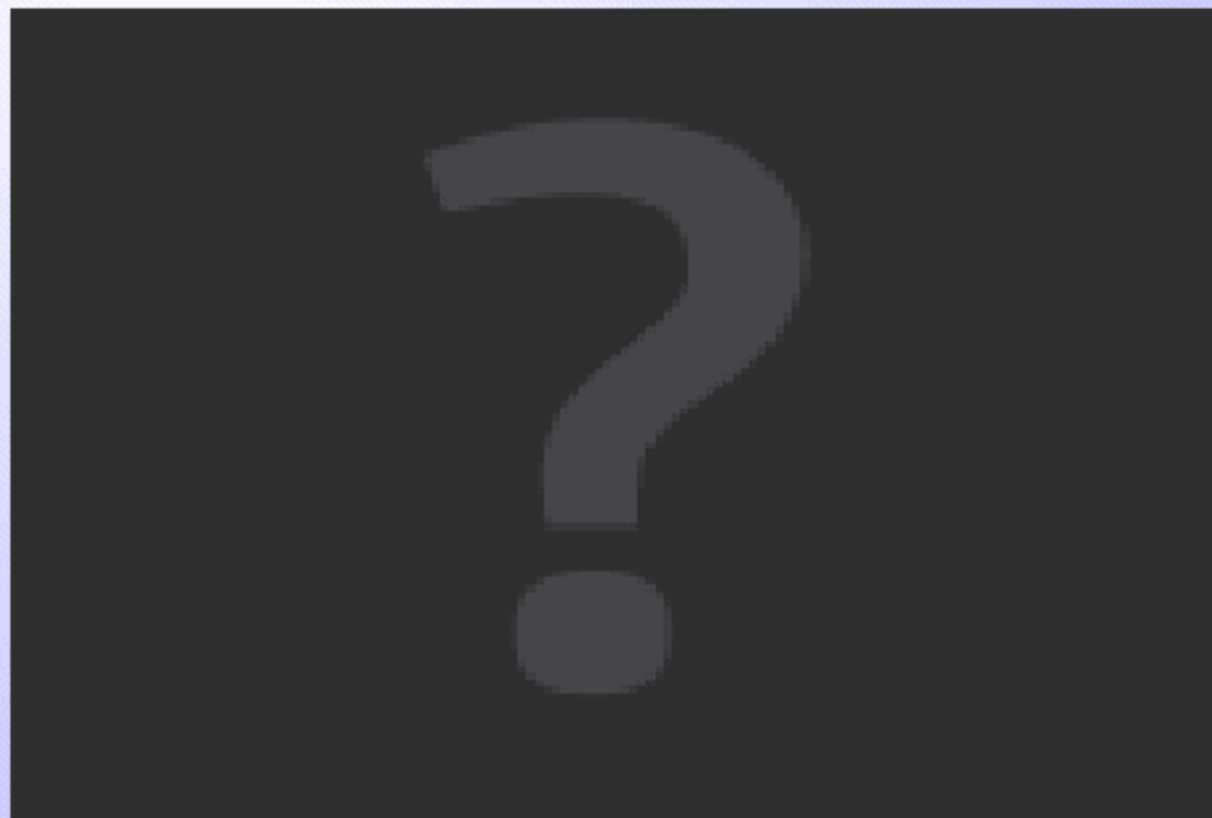
	Immediate	Deferred
Local	<p>Sensory Cueing (I)</p> <p>Moving into an environment with a unique 'feel'.</p>	<p>Events during a session set out as a set of symbols on a carpet strip.</p> <p>Objects in a timeline box.</p> <p>Work in a timeline box.</p>
Global	<p>The school bell – can we extend this idea? </p> <p>All sessions start with circle time.</p> <p>All sessions finish with Diary Time</p>	<p>School Timetable –</p> <p>How do we make it accessible?</p> <div data-bbox="987 971 1629 1177"> </div>

Timeline - For Future Reference



Why did I not use objects?
What might be easier than symbols?

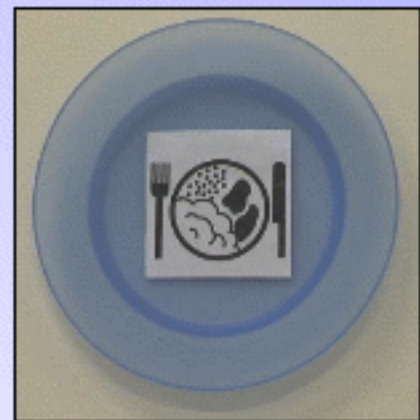
Diary time - The medium is the message



Lunch!



Objects Of Reference



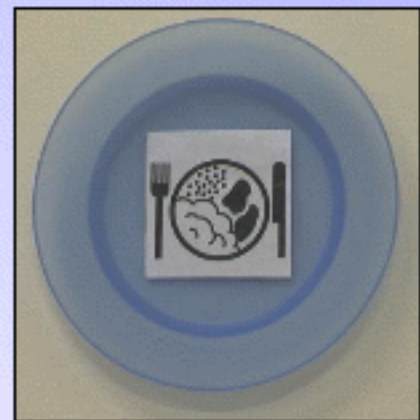
WHAT?

An Object Of Reference is a tangible (multi-dimensional, multi-sensory) ‘symbol’ which is used to represent a P.O.L.E.:

Person, Object, Location or Event.

Ockelford A. (1993) *Objects of Reference*. RNIB London. **described them as:**
“objects that have special meanings”.

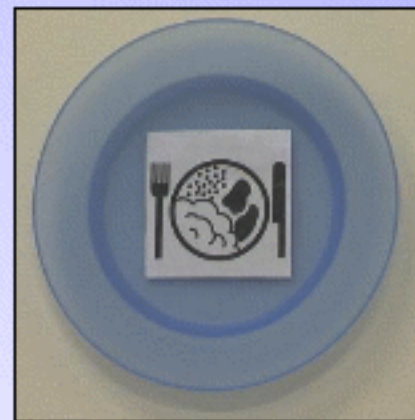
Objects Of Reference



WHAT?

Jan van Dijk, in the mid-1960s, first described Objects Of Reference as a means of communication for people with congenital deaf-blindness.

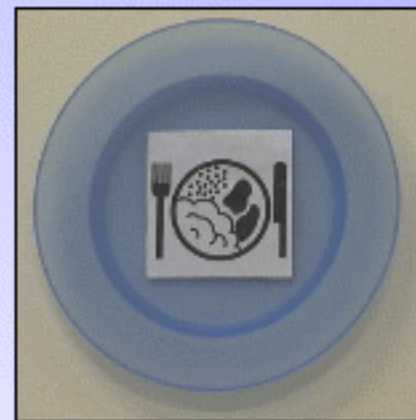
Objects Of Reference



P.O.L.E.

- **Person** referencing - an item is used to represent a specific person (for example a bangle often worn by 'mum' to represent a learner's mother)
- **Object** specific referencing (a model dog represents a dog, a photograph of a dog, a symbol for a dog);
- **Location** referencing - an item is used to represent a place (for example an item from home to represent 'home');
- **Event** referencing - an item from an event is used to represent the event (for example using the individual's coat to represent going out) or the Time Line of an event (you get this at the beginning, this when its time to change the focus, this when its time to stop.);

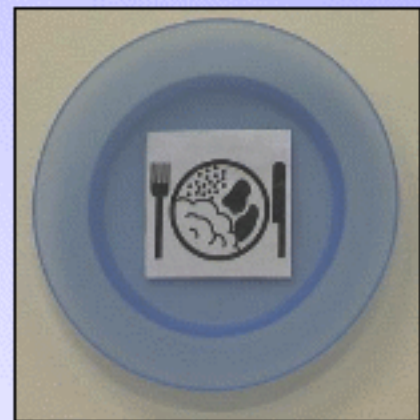
Objects Of Reference



WHY?



Objects Of Reference

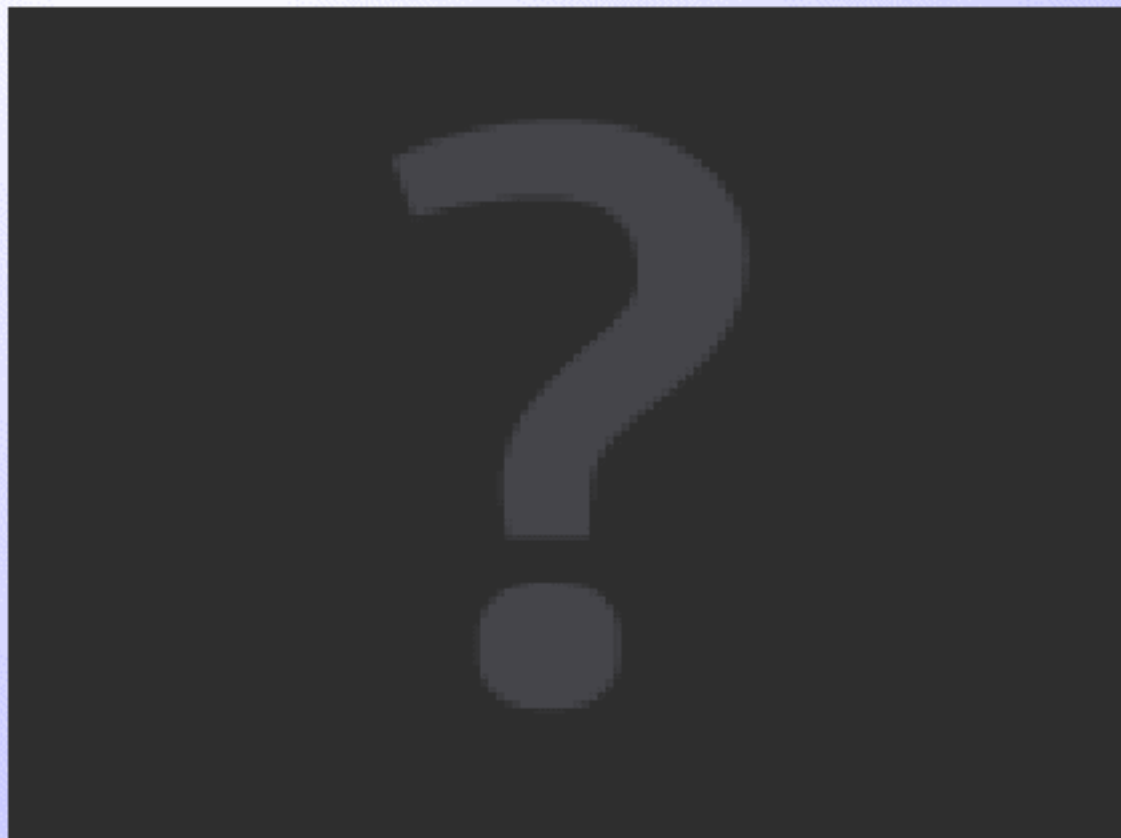


WHY? A Virtual Synesthesia?

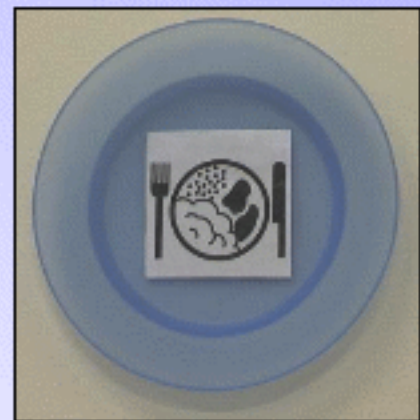
While not attempting to turn our charges into synesthetes, we are attempting to link an impression from one or more of their senses to a POLE in a consistent fashion.

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Objects Of Reference



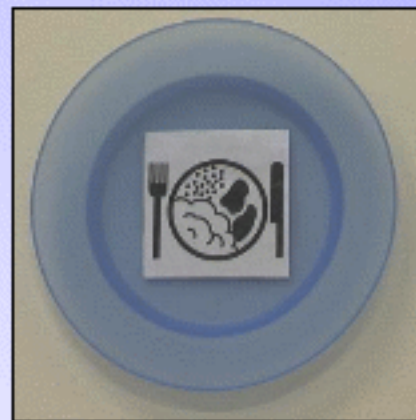
Objects Of Reference



WHY & WHO?

It aims to support understanding and communication in individuals for whom other augmentative systems are (presently) insufficient (or to augment the existing augmentative systems). OOR are but one strand of a more global MultiSensory Referencing approach.

Objects Of Reference

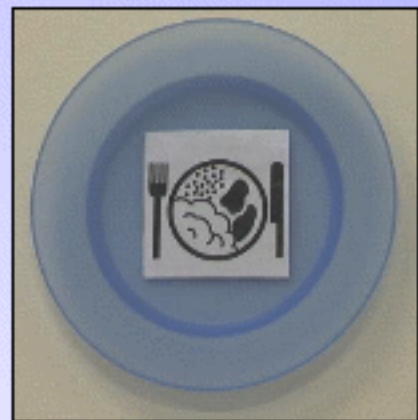


WHY?

Objects of Reference aim to help the learner to:

- Communicate
- Comprehend
- Remember
- Anticipate
- Make Choices

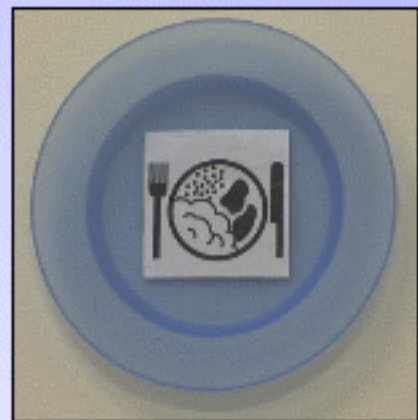
Objects Of Reference



WHEN?

- immediately prior to a change of P.O.L.E.;
- by student (goal) or by staff (means to goal);
- consistency is vital – No U.D.I.

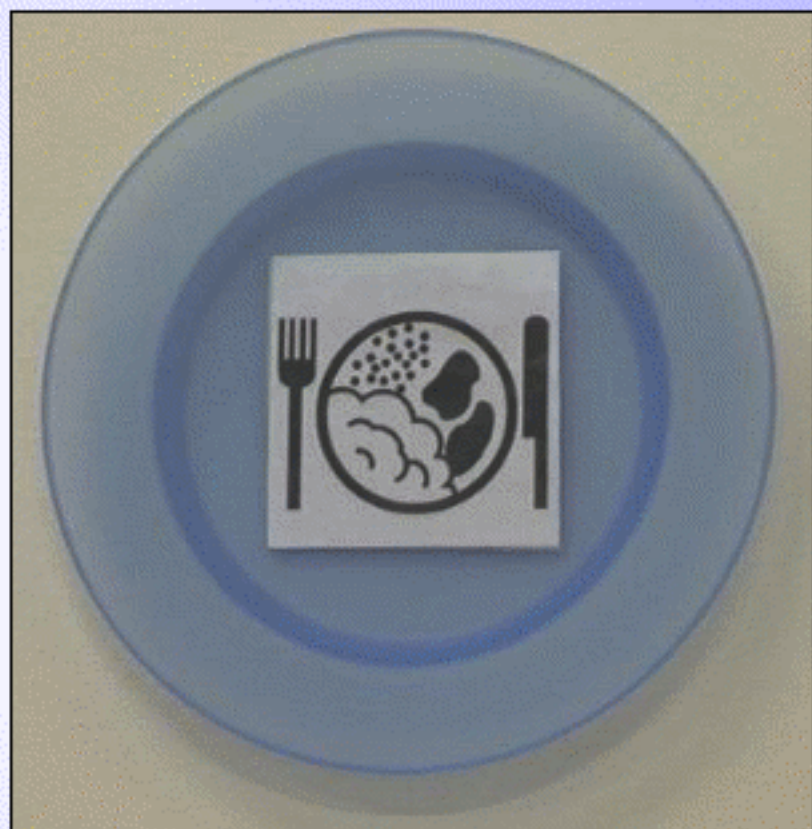
Objects Of Reference



WHERE?

- Everywhere is preferable – school and home ...
- Therefore we should try and involve all Significant Others. This is easier said than done. In small groups discuss the possible reasons for this.

What makes a good Object Of Reference?



In small groups, list the criteria you think would influence your choice ...

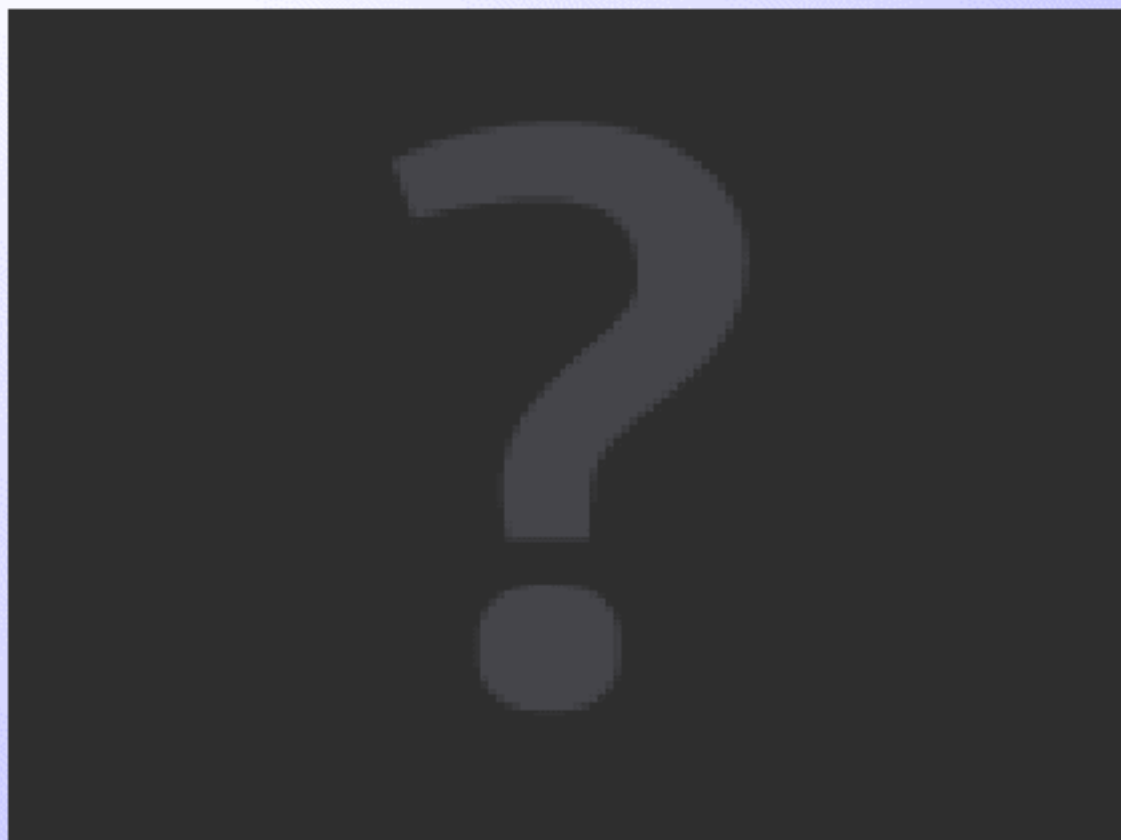
What makes a good Object Of Reference?

- safety
- hygiene
- unique
- iconicity
- durability
- availability
- multi-sensory
- portability & size
- low cost
- adaptability – cut it in half?

Stages of development for Objects Of Reference

Stage	Descriptors		Characterised by
Stage 1	Intolerant Dependent	Difficult to reach Extraneous	Individual shows little tolerance of OOR. Ignores, drops, or throws it
Stage 2	Tolerant Dependent	Hard to reach Extraneous	Holds/carries OOR but demonstrates little understanding
Stage 3	Tolerant Dependent	Receptive Meaningful	Individual begins to show understanding of meaning of one or more OOR
Stage 4	Tolerant Dependent	Expressive Meaningful	Individual will correctly select from a range of OOR on prompt from staff
Stage 5	Tolerant Independent	Expressive Meaningful	Individual selects and uses OOR independently to express a need

Stage One



Objectives for Stages of Development

Stage	Descriptors	Objectives
Stage 1	Intolerant Dependent Difficult to reach Extraneous	<ul style="list-style-type: none"> reach in any way in the presence of a a a a a, acknowledge presence of a a a a a, achieve presence of a a a a a for 100 times per trial, reach in any way with any object/acknowledge its presence, reach in any way with a given object, reach a consistently preferred object on few occasions.
Stage 2	Tolerant Dependent Hard to reach Extraneous	<ul style="list-style-type: none"> demonstrate increased tolerance of OOR, hold or achieve explore the OOR for period of time, reach in any way with a a a a a, reach positively with a a a a a, demonstrate large or increased frequency of reach attempts with a a a a a, demonstrate preference for specific a a a a a (s).
Stage 3	Tolerant Dependent Receptive Meaningful	<ul style="list-style-type: none"> hold/reach/achieve with OOR as reward in POLE, demonstrate consistent positive interactions with a a a a a, demonstrate ownership of one for OOR as POLE, demonstrate some ownership of several one OOR, take any object from preferred OOR bag.
Stage 4	Tolerant Dependent Expressive Meaningful	<ul style="list-style-type: none"> identify OOR by gesture (reach up to mouth), identify OOR by sign or symbol, identify OOR by vocalization, select appropriate OOR from two as request, indicate the location of OOR bag, take OOR from bag (as a few - 1 item in bag), move independently to new POLE as presentation of OOR,
Stage 5	Tolerant Independent Expressive Meaningful	<ul style="list-style-type: none"> select appropriate OOR from a range placed in front of user, select appropriate OOR from preferred bag (choice of two), indicate a need for OOR bag, select appropriate OOR from preferred bag (choice of 4-8), retrieve communication using OOR,

Research by Rowland C. & Schweigert P. (2000) with Tangible Symbols has shown that:

- The use of OOR may promote the development of other symbol systems.
- The development of natural speech is not stifled by the introduction of OOR.
- The introduction of OOR may benefit people with autistic spectrum disorders.
- Those who are already able to communicate (using gestures or vocalizations) are more readily able to learn to use OOR (It does not follow that this is a pre-requisite).

Types of OOR

Shared

Differentiated

Individualised

Types of OOR

Shared OOR are common to all users. A shared OOR is the same for all learners (a blue plastic cup for break for example). Shared referencing allows for the same item to be used for a group of people rather than items specific to individuals.

Types of OOR

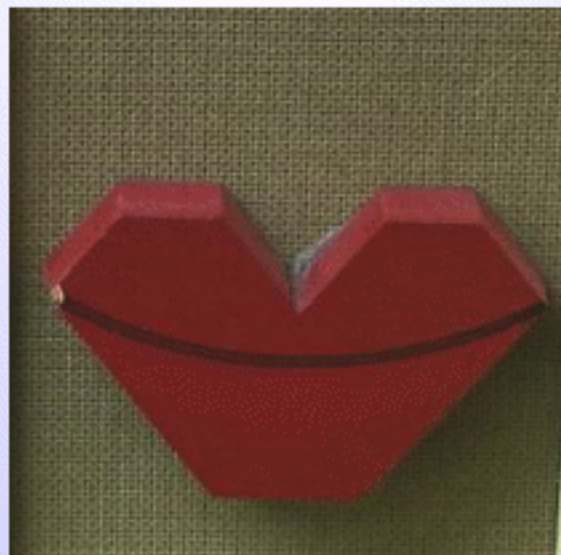
Differentiated OOR allow for individual differences but nevertheless retains the same common element. For example, using a brooch to reference ‘mother’. Each student may have their own individual brooch rather than an identical brooch for all.

Types of OOR

Individualised OOR allow for completely individualised objects to be used. One person may have a brooch to reference ‘mother’ and another a bangle and, yet another, a small item of clothing with a particular perfumed smell.

Types of OOR

What are the advantages and disadvantages of each?



Pros and Cons of OOR

	Advantages	Disadvantages
Shared	Easiest to maintain Easiest for staff Inter-peer communication Communication isn't individualised	Doesn't allow for existing individual strengths. Doesn't allow for individuals arriving with an existing OOR.
Differentiated	Inter-peer communication but with some individuality	Harder to maintain Harder for staff
Individualised	We can use what already has meaning for the individual.	Hardest to maintain Hardest for staff No inter-peer communication



Using Objects of Reference with Individuals with PMLD

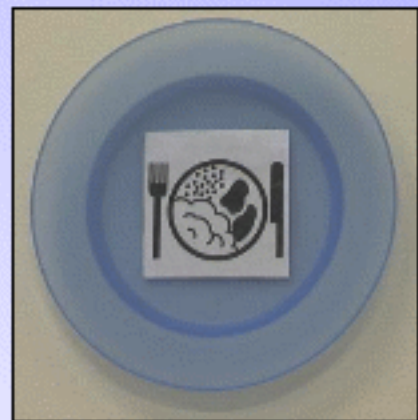
What are they?

Objects of Reference are whole or partial representations of objects, which indicate activities, resources or people and can be used functionally to develop communication skills.

Ockelford (1993) described them as “objects that have special meanings”.

Objects of reference were developed for use with people with dual sensory impairments, but are now used widely with individuals with multiple disabilities. The objects used are unique to each person and should be identified in relation to their individual need i.e. incorporating a specific sensory element for a person with a visual impairment. *The more individualised the Object of Reference is made to be, the better, as this will limit ambiguity and minimise confusion in the user's environment.*

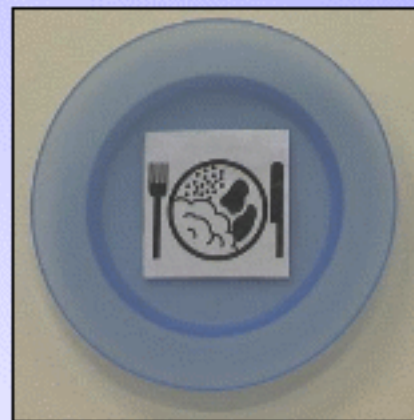
Technique One



Togetherness

My experience suggests an individual bag approach is more efficient than a room approach (when moving around between classrooms) .

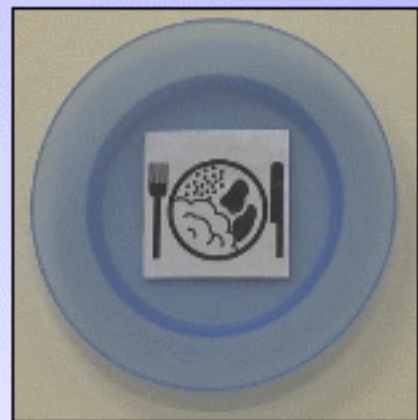
Technique Two



Presentation

Present the OOR immediately prior to movement to the POLE. Get the learner to take it from the bag...

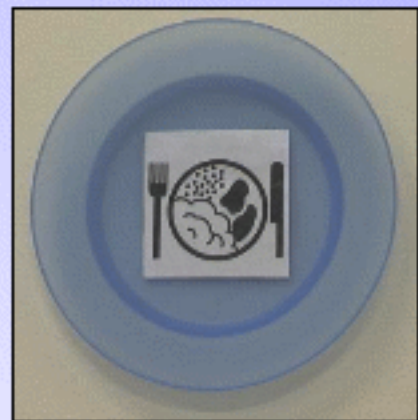
Technique Three



Multi-Modal

On presentation, say and sign the POLE (not the OOR name). In addition, the POLE symbol may be a part of the OOR.

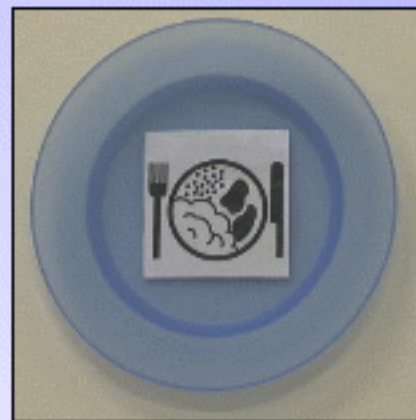
Technique Four



Chance to Communicate

Give the learner the opportunity to indicate an understanding of the OOR by saying, signing, or symbol pointing.

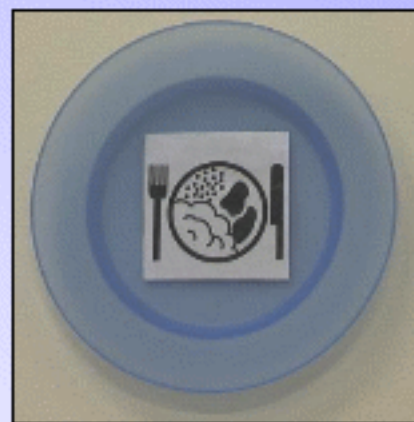
Technique Five



Leading the Way

Allow the learner to lead the way to the POLE with as little direction as possible.

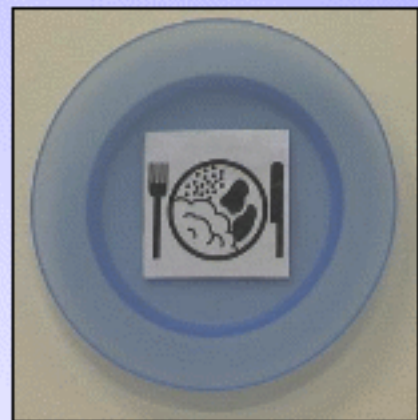
Technique Six



One at a Time

Ensure staff only present one OOR at any one time. No 'go to the toilet and then to lunch' therefore two OOR!

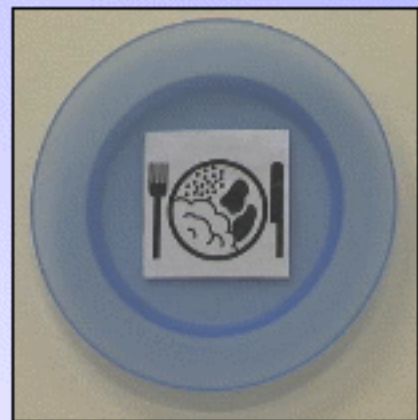
Technique Seven



Perseverance

If the Learner drops or throws the OOR, pick it up and give it back to them. If this continues hold the OOR for the learner.

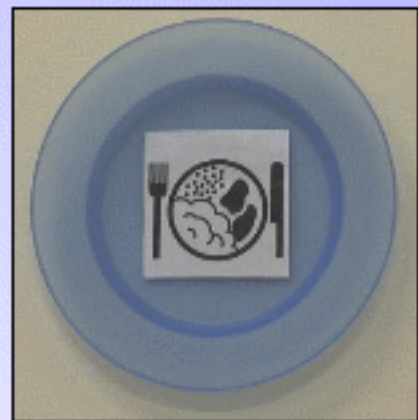
Technique Eight



Removal

Remove the OOR on reaching the POLE. (Get the learner to) Put it back in the bag.

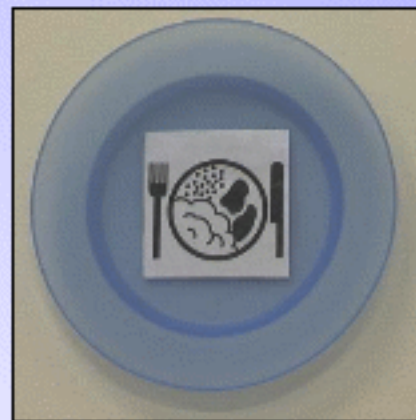
Technique Nine



Consistency

Consistency is vital. OOR must accompany the learner to the POLE on every occasion. Staff must not declare U.D.I.

Technique Ten

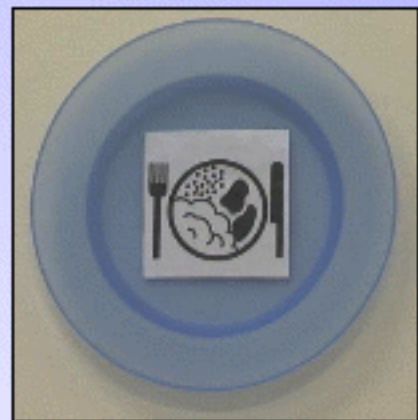


Advanced Presentations

DANGER!

Present the learner with two (or more) OOR.
Ask “Where are we going now?” or “What are we doing now?”. Assist if the learner looks puzzled. (How?)

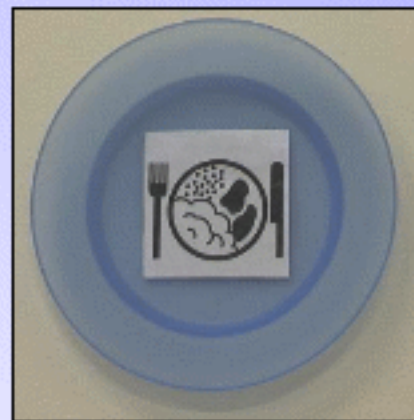
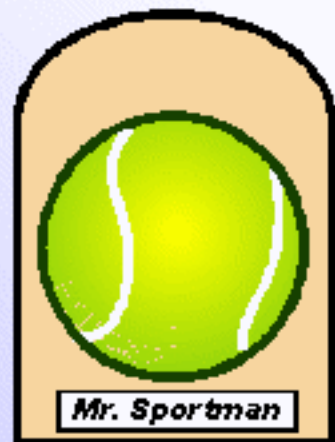
Technique Eleven



Marker OOR

Mark the entrance to rooms with
D-OORS (Door Objects Of Reference)
Learners can then compare.

Technique Twelve

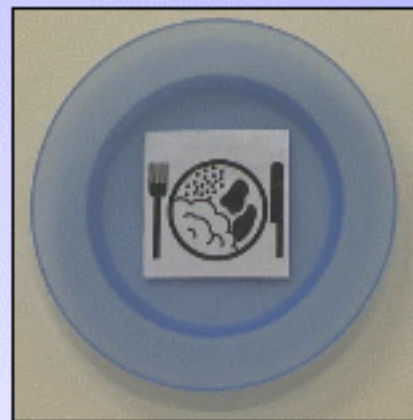


Mounted OOR

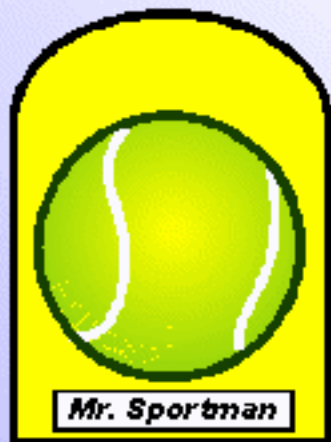
OOR that are mounted on card, plastic or hardboard backboards may help give additional cues

Technique Twelve

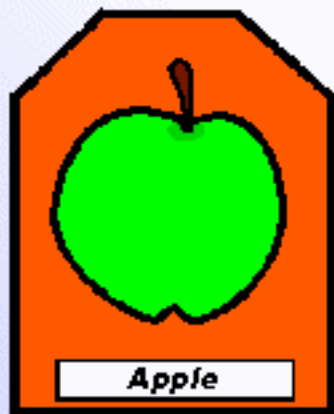
Mounted OOR



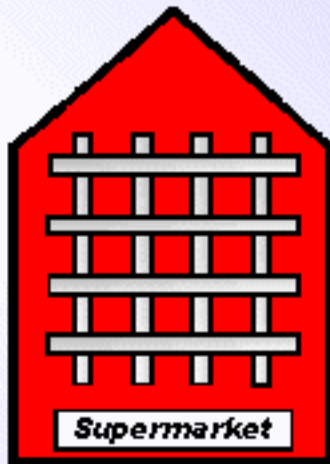
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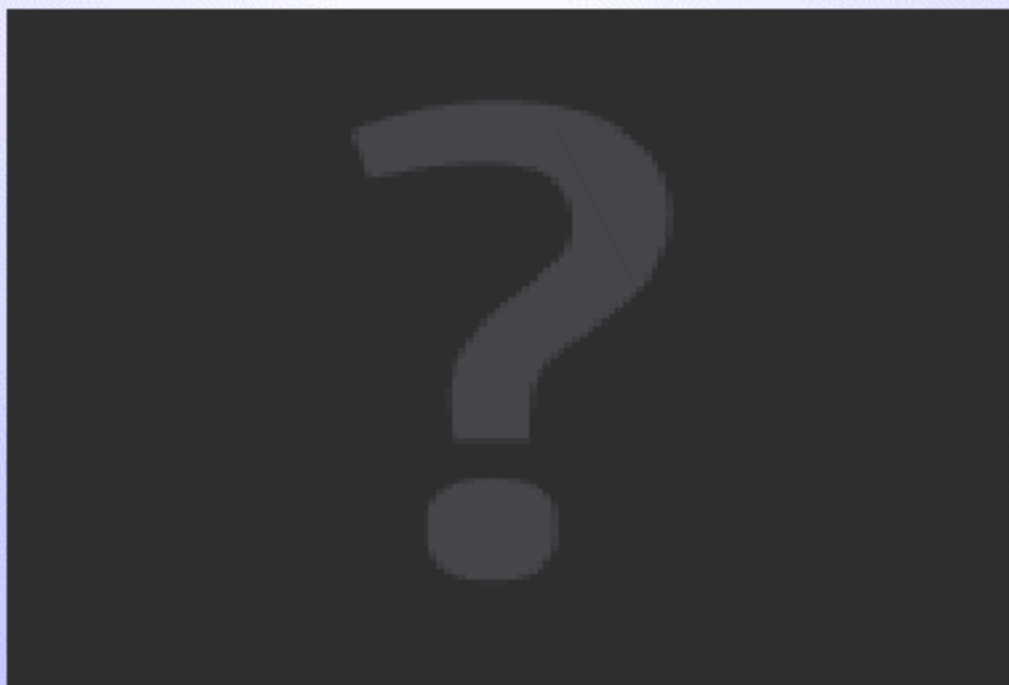
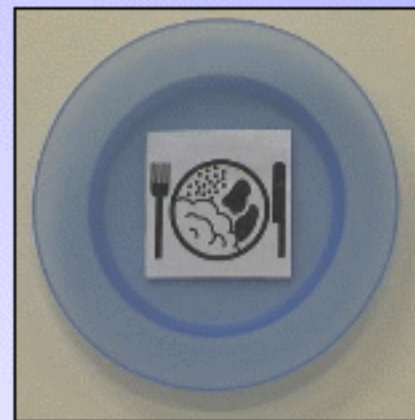
E



May help give additional cues

Technique Twelve

Mounted OOR



Recommendation One



Less is more

*Don't be too over
enthusiastic about
introducing too many
OOR at one time.*

Recommendation Two

KISS



Keep It a Simple Start.

*Decide on no more than five items
the individual will encounter on a
daily basis at least one per day.*

*You may even decide to begin with
a single Learner.*

Recommendation Three



When less is NOT more

If there are X learners on the scheme procure at least $5X$ of each item.

You will not regret the extra effort/ expenditure.

Recommendation Four



Consistency, Consistency, Consistency

*Try to ensure consistency in
approach from day one.*

Recommendation Five



Staff Roles

Delegate responsibilities for quality assurance to staff. For example, each tutor group should have designated staff member to check the OOR sets each morning.

Recommendation Six



Reminders and training

To ensure consistency build in regular training and refresher sessions to your staff development plan. Furthermore, try to ensure that staff get regular reminders of protocol and procedure.

Recommendation Seven



Safety First

*OOB should be safe for
unsupervised individual use.*

Recommendation Eight



Have OOR will Travel

My evidence suggests that individual OOR sets, traveling with the student, endure longer than room-based sets.

Recommendation Nine



Focus

Encourage the individual to focus, look at, smell, and feel the OOR as you move to the POLE.

Recommendation Ten



Immediacy

*Do not present an OOR and then wait 10 minutes before moving....
...go immediately otherwise the meaning is lost.*

Recommendation Eleven



Removal

Remove the OOR when the POLE has been reached and return it to its home.

Individuals should not be returning from a POLE clutching the OOR which means "I am going to the POLE".

Recommendation Twelve



Persevere

*Do not give in..... it may take a long,
long time... the gain is worth the
strain.*

*For some individuals it may initially
be a battle of wills.*

Recommendation Thirteen



Frequency

The more frequently the relationship between the OOR and its POLE can be reinforced the greater the chance of individual understanding.

Early choices for OOR should represent frequently occurring events (at least daily).

Recommendation Fourteen



Availability

Ensure that there is a readily available supply of OOR to replace lost and damaged items. Will you be able to buy more should the occasion arise?

Recommendation Fifteen



Durability

Choose items that will be durable and can stand being bent, dropped, thrown, sucked or chewed ...

Recommendation Sixteen



Avoiding U.D.I.

Ensure that all staff have a channel through which they can voice a concern. A regular team meeting for example.

Recommendation Seventeen



Involve the staff ...

Train them (not just once but ongoing).

Ask their opinions and advice.

*Give them an official avenue to voice
opinions.*

Recommendation Eighteen



Don't use the OOR for real ...

Don't use an OOR cup for a learner's drink for example. Drill holes in it to render it useless for this purpose!

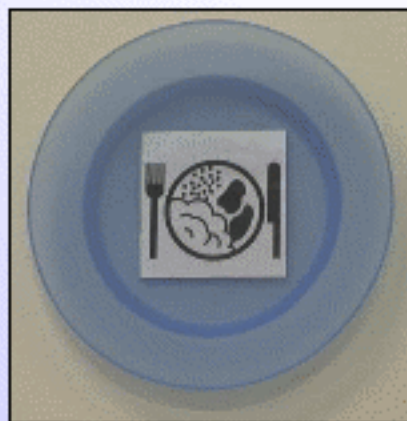
Why shouldn't you use the OOR for real?

Recommendation Nineteen



Build in Progress ...

*Where possible attach symbols to OOR
to provide a progression route.*



P SCALES & MSR

P1 (i) Pupils encounter activities and experiences. They may be passive or resistant. They may show simple reflex responses, for example, startling at sudden noises or movements. Any participation is fully prompted.

Pupils participate in MSR scheme. They may show reflex responses to the presentation of objects or sudden sounds. Staff prompt participation with Sensory Cueing, OOR and Marker OOR for example.

P1 (ii) Pupils show emergent awareness of activities and experiences. They may have periods when they appear alert and ready to focus their attention on certain people, events, objects or parts of objects. They may give intermittent reactions.

Pupils look at OOR fleetingly. They may grasp them briefly, push them away or throw them on occasion. They may appear to show some awareness of sensory cues perhaps by changing behaviour (smiling or laughing), or suddenly becoming excited at a repeated sound.

P SCALES & MSR

P2 (i) Pupils begin to respond consistently to familiar people, events and objects. They react to new activities and experiences. They begin to show interest in people, events and objects. They accept and engage in coactive exploration.

Pupils begin to react in a consistent manner to MSR. They will touch and perhaps explore OOR in a hand over hand partnership with staff. They may briefly show an apparent interest in a new sensory experience: listening to music for example.

P2 (ii) Pupils begin to be proactive in their interactions. They communicate consistent preferences and affective responses. They recognise familiar people, events and objects. They perform actions, often by trial and improvement, and they remember learned responses over short periods of time. They cooperate with shared exploration and supported participation.

Pupils begin to show consistent responses to MSR stimuli. For example, holding and manipulating some OOR but rejecting others. They show apparent signs of beginning to recognise some Sensory Cues, OOR and other MSR. They cooperate by holding the OOR to the next session.

P SCALES & MSR

P3 (i) Pupils begin to communicate intentionally. They seek attention through eye contact, gesture or action. They request events or activities. They participate in shared activities with less support. They sustain concentration for short periods. They explore materials in increasingly complex ways. They observe the results of their own actions with interest. They remember learned responses over more extended periods.

Pupils begin to show awareness of meaning with MSR. They may point to an OOR or indicate a need for the OOR bag. Pupils behave in consistent ways in response to MSR stimuli.

P3 (ii) Pupils use emerging conventional communication. They greet known people and may initiate interactions and activities. They can remember learned responses over increasing periods of time and may anticipate known events. They may respond to options and choices with actions or gestures. They actively explore objects and events for more extended periods. They apply potential solutions systematically to problems.

Pupils will chose an appropriate OOR from a choice of 2 or indicate an understanding by pointing, signing or pointing to a symbol. They can lead the way to a new session on presentation of an OOR. They may move independently to a new location (in the session) when a new MSR is presented.

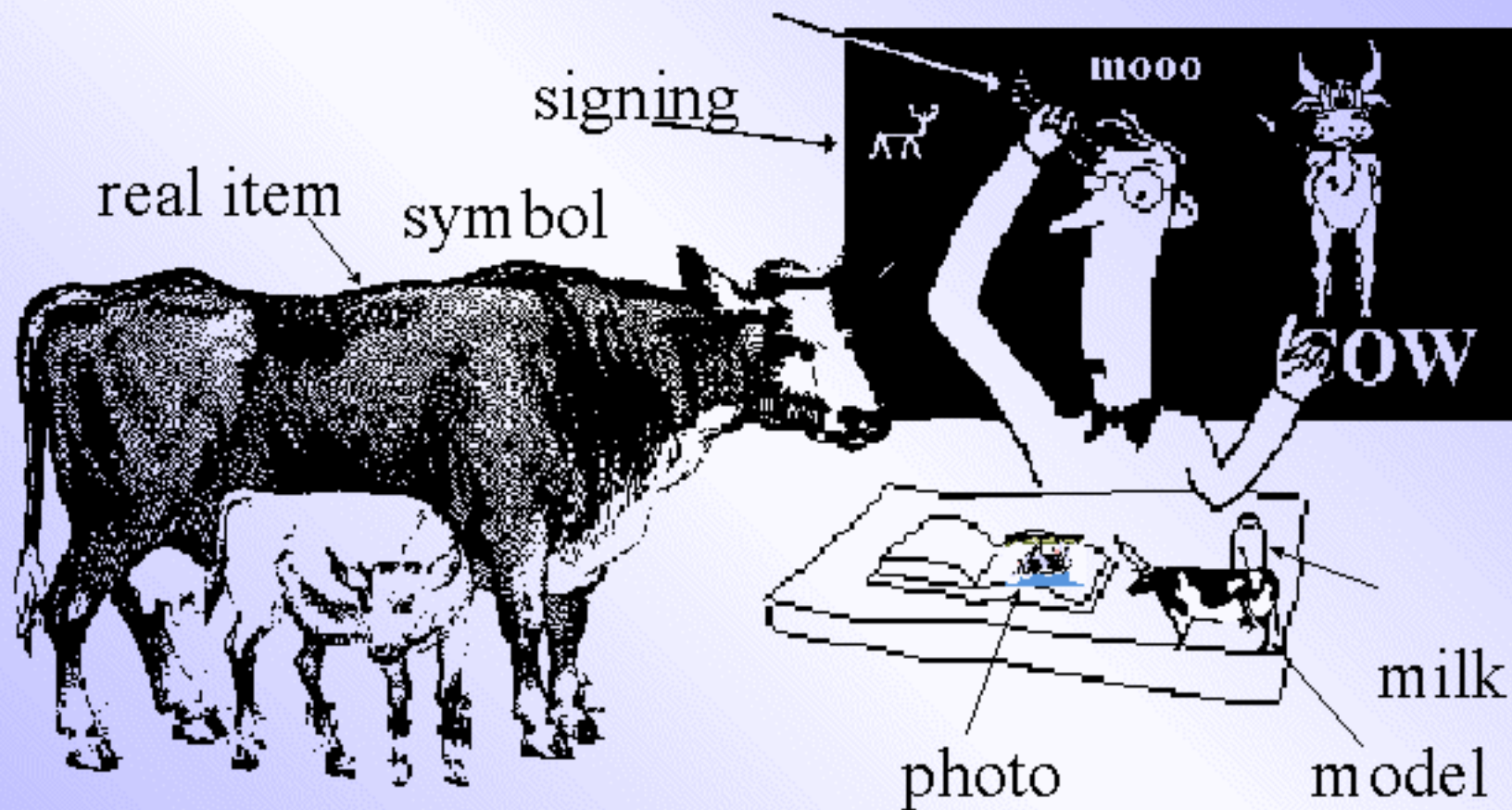


Tangible Symbols



COW

Tangible Symbols



support understanding

Tangible Symbols

Definition:

A communication system that includes three-dimensional symbols (objects) and two-dimensional symbols (photographs and drawings) to support communication and language development. Rowland and Schweigert (2000) include photos and drawings because they are permanent and can be touched and manipulated and may have perceptual link to their referents.

Purpose:

To provide a receptive and expressive means of communication that allows reference to people, objects, places, concepts and events beyond the immediate context, and that fits the individual's sensory and cognitive abilities and experiences.

Tangible Symbols

Tactile Examples

To represent the concept of "drink" using a cup.

Whole object: a cup.

Parts of object: handle of a cup.

Artificially associated object: piece of plastic.



Considerations

Tangible symbols that are tactile must be selected from the child's perspective.

Write the intended message clearly on the symbol to clarify the intent for the communication partner.

Consider the physical ability of the child to explore and manipulate tangible symbols.

Tangible symbols should be displayed to meet the child's learning needs, (e.g., in a calendar box, on a communication board, in a binder separated in categories, or on the place that the symbol represents)

Tangible Symbols

Advantages

- Several symbols can be used together to compose a message.**
- Provide a continuum of communication options to children ranging from identical objects to line drawings.**
- Make relatively low demands on the child's cognitive, memory, and representational skills. Only require recognition from an array of symbols that are permanent.**
- Use of tangible symbols requires only a simple motor response from the child such as pointing, touching, picking up, extending, or looking at the symbol to make the message clear.**
- The size of symbols may be reduced over time to make them more portable.**

Tangible Symbols

Disadvantages

- **Tangible symbols are not a conventional communication method and may not be understood by all communication partners or used consistently with the child.**
- **Artificially associated objects may not be easily understood and associated with referents by some children.**
- **The use of whole objects may not be portable.**

Do we believe that these are correct?

Tangible Symbols

... are objects or pictures that stand for or represent something about which we need to communicate.

Tangible symbols may be:

- Whole objects
- Line drawings
- Associated objects
- Textures or shapes
- Parts of objects
- Colour Photographs
- B&W Photographs

Place these in order of ease of understanding

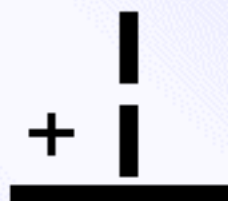
Symbol Hierarchy Table

Stremel K. (2001) adapted Jones

#	Form	Notes
1	Real Objects	Real Objects unsurprisingly have high iconicity
2	Colour Photographs	Colour wins out over black and white
3	B&W Photographs	
4	Miniature Objects	Miniature Objects less iconicity than photographs
5	Symbol Forms	Varying in iconicity according to type
6	Printed Word	Printed form hardest for this body of learners

A note on symbols and symbol usage

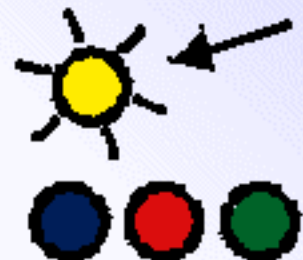
It is generally assumed that some symbol sets are more transparent – that is they are easier to understand.



It is also assumed that coloured symbols are the most transparent – that is they are easiest to understand.



PCS symbols are transparent



PCS symbols are transparent



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PCS symbols are transparent



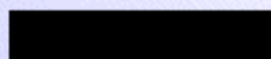
above



You're getting close



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do



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need

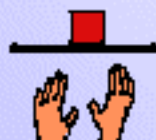
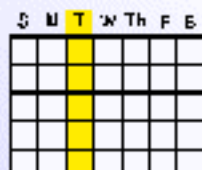


future



favourite

A letter home - What does it say?



A letter home – What does it say?



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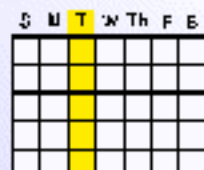
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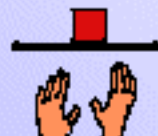
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A letter home – What does it say?



John



has an appointment with



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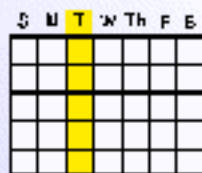
school



OT



next



Tuesday.



Please



make



sure



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comes



in



his



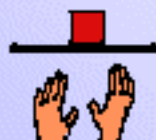
manual wheelchair.



If you're happy



And



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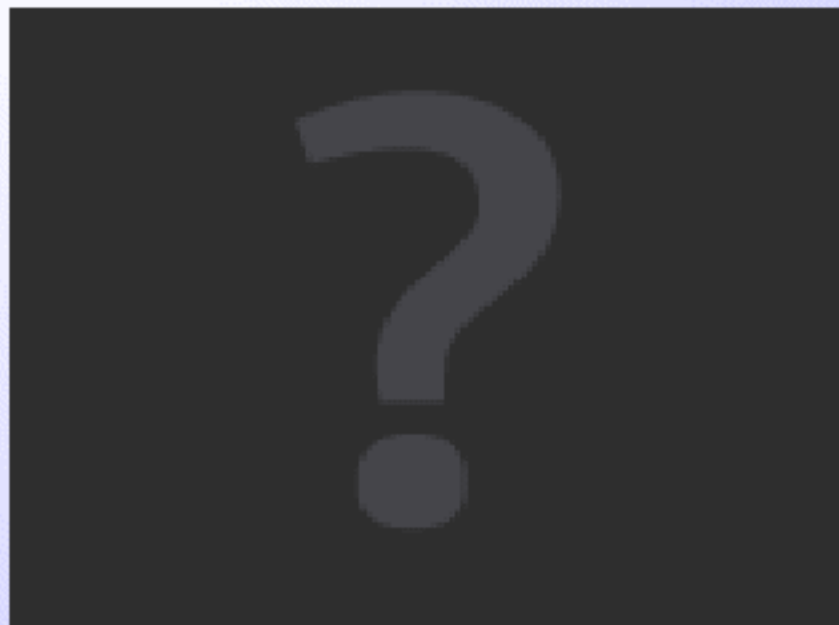
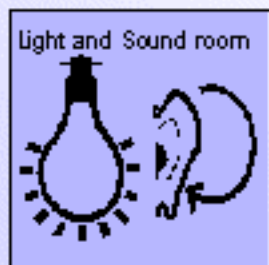


ring



me.

Label the Environment



Using (M)SR in your School or College

How would you:

❖ **provide Sensory References to location?**

❖ **provide a Sensory Referenced timeline?**

This session is beginning

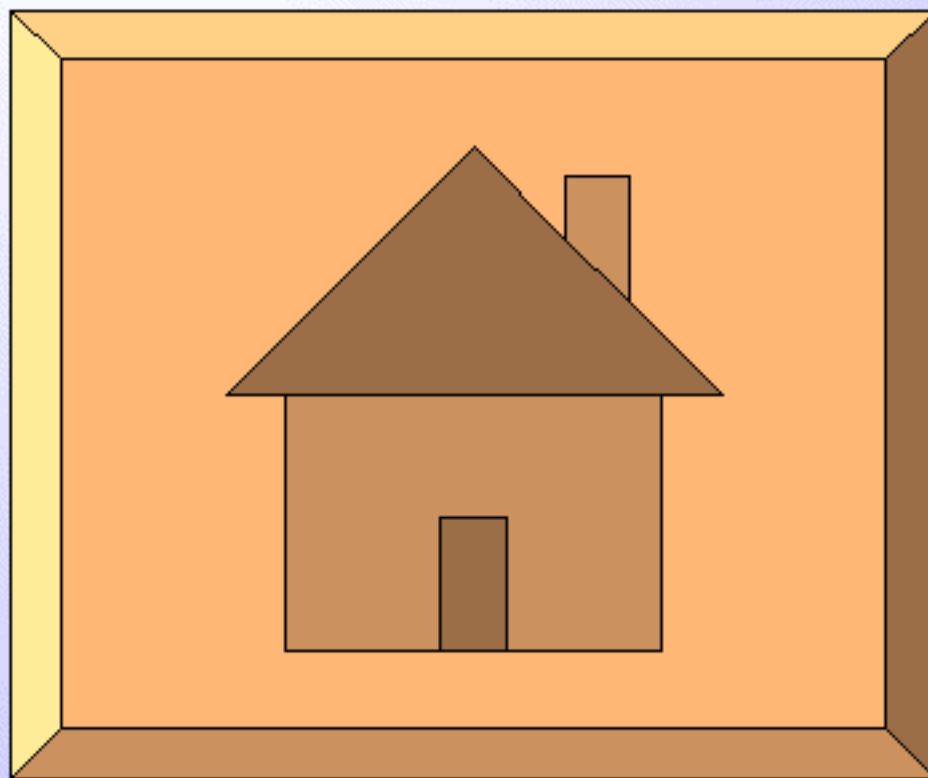
This session is ending

❖ **provide Sensory References to events?**

1st we will do this, then we will do this.....

Collect items and ideas for a short presentation

Going Home Now!



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