# "TalkTools Oral Placement Therapy for Feeding and Speech"

Presented by

Helen Woodrow BSc(Hons) cert MRCSLT MASLTIP HPCreg Independent Speech and Language Therapist

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### **Presentation Outline**

- Background
- TalkTools v. Oral Motor Therapy
- TalkTools' place in the SLT world
  - Application of TalkTools
    - Underlying Principles
- •TalkTools OPT How does it work?
  - Evidence based practice
    - The future



## Background

- Sara Rosenfeld-Johnson SLP in America
  - Started working in this field in 1973
  - Sara developed her own techniques in conjunction with OTs and Physios.
- Used for both feeding and speech difficult to separate these two.
- The TalkTools approach is only a small part of any comprehensive programme for speech and / or feeding.

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# Oral Motor Therapy v. "TalkTools" Oral Placement Therapy



Oral Motor Therapy is an umbrella term that covers many different approaches. Talktools Oral Placement Therapy is one specific type of Oral Motor Therapy.



# TalkTools' place in the SLT World

 TalkTools OPT is another tool in the SLT repertoire and is not meant to replace other therapy approaches.

 It is not designed to be used alone and is often used to work on underlying motor and sensory difficulties before other speech or feeding approaches are introduced.



## Application of TalkTools OPT

- •Appropriate for anyone displaying reduced mobility, agility, precision and endurance of the oral structures and musculature that adversely affects feeding and / or speech.
  - Downs Syndrome
  - Autistic Spectrum Disorders
    - Cerebral Palsy
    - Head injury / stroke
    - Dyspraxia / Dysarthria.



# Application of TalkTools OPT

For people who cannot imitate targeted movements using auditory and visual stimuli "Look, listen and do what I do"

For people who cannot follow specific instructions to produce targeted movements "Put your lips together"

For people who need a more tactile approach

# Underlying Principles of TalkTools OPT.

- Three main concepts affecting movements of the jaw, lips and tongue are considered in TalkTools activities:
  - Dissociation
    - Grading
      - Fixing

 These concepts underlie the oral movements necessary for feeding and speech.

Eg (Training)

## **Dissociation**

The separation of movement, based on adequate strength and stability in two or more muscle groups



## Grading

The controlled segmentation of movement based upon dissociation, strength and stability within the targeted muscle group.



# **Fixing**

An abnormal movement pattern which occurs secondary to reduced stability and is used to compensate for the lack of grading within a muscle group.



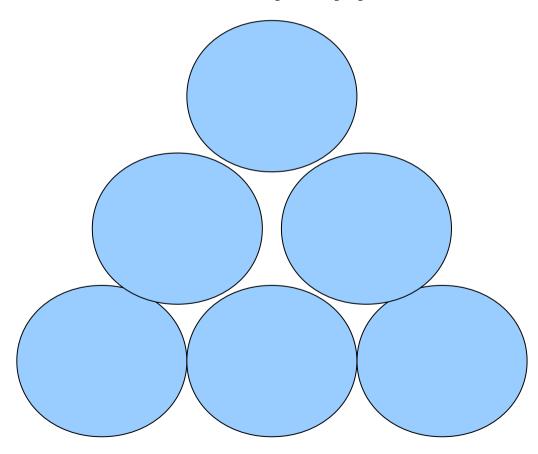
# Underlying Principles of TalkTools OPT.

TalkTools OPT takes a bottom up approach.

Tongue

Lips

Jaw



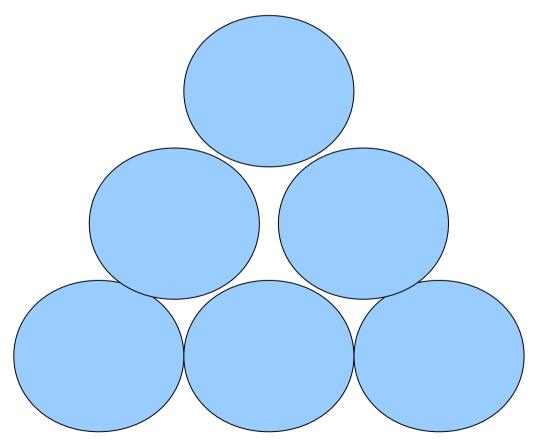


# Underlying Principles of TalkTools OPT.

Word level skills

Single Sounds

Oral motor skills





## Underlying Principals of TalkTools OPT

- Bottom up approach, works on foundations for feeding and speech
- Oral placements training and practice
- Motor planning training and practice
- Sensory awareness and feedback
- Whole body approach
- Tactile, visual and auditory feedback



- Assessment by a TalkTools trained therapist to look at placement, motor and sensory difficulties.
- Hierarchy of activities that can be used by parents and carers to target placement, motor and sensory difficulties.
- Continuing programme lead by a TalkTools trained therapist.
- Programmes are based on clear and functional outcomes with measurable criteria for success.

- Bubble hierarchy
- Step 1 Pop the bubble on lips
- Goals Develop awareness of sensation on lips as a prerequisite for lip closure for feeding, saliva control and speech.
- Achieve lip closure from an open mouth posture
- Build understanding of cause and effect

Criteria for success – client can pop the bubble using lip rounding and protrusion 10x



Step 2 – Breath or blow on the bubble

Goals – Associate abdominal exhalation with movement of bubble.

- Develop controlled airflow for phoneme production
- Develop jaw–lip dissociation

Criteria for success – Client can complete exercise 10x without a break



- Step 3 Blow the bubble off the wand
- Goals Improve controlled airflow volume
  - Work on jaw lip dissociation
  - Develop strength and stability in orbicularis-oris muscles for lip rounding

# Criteria for success – Client can repeat exercise 10x successfully without a break



 Step 4 – Blow a bubble through the wand

Goals – Improve controlled, elongated airflow

- Work on jaw lip dissociation
- Improve lip rounding skills

Criteria for success – client can blow bubbles 10x in this position without support, without a break





Step 5 – Blow bubbles for increasing distances

Goals - Improved controlled, elongated airflow

- Develop jaw stability
- Achieve jaw lip dissociation
- Develop lip rounding / protrusion skills
- Develop tongue retraction skills
- Develop jaw lip tongue dissociation skills

Each step can be further task analysed into smaller steps if needed.



# Example – Sensory Motor Programme for Feeding and Speech

Massage

Suggestions:
Sensory Beanbags
Bare hands
Lotion
Face flannel
Vibration

Use firm long strokes.

1. From the TMJ (in front of ears) to the corners of G's lips.

2. Alongside the nostrils to the outer corners of the lips.

3. Under the nostrils to the upper lip.

Do each set 5 times

Increase sensory awareness and organisation Encourage midline orientation Facilitate increased cheek and upper lip mobility.

Tap and Tone

Fingers or other suitable item

Use firm rhythmic tapping to the beat of a favourite tune or finger play activity.

1. From the TMJ (in front of ears) to the corners of G's lips.

2. On the surface of the lips.

Provide sensory input.
Tone the muscles of
the cheeks and lips.
You can also use
these firm tapping
movements when
wiping G's face.



	Jaw routine 1. Jaw rock	Physio ball	Sit on the ball with G on your lap. Bounce gently to create a rhythmic up and down movement. Provide lip / jaw support and map the rhythmic movements onto G's jaw so that his jaw is moving up and down. Try to achieve 10 repetitions.	Facilitate graded jaw movement.
	Jaw routine 2.Bilateral chewy tubes	Two red chewy tubes	Put the two chewy tubes in G's mouth, one on each side, on his first molars. The tubes should stick out sideways from his mouth. Instruct G to do 5 slow bites using a regular rhythm. Jaw support may be needed.	Increase jaw strength. Increase jaw symmetry. Increase tongue retraction Increase graded movement.
	Jaw routine 3. Stuffed chewy tube	Red chewy tube Chip sticks or puree	Stuff a red chewy tube with a chip stick or some puree. Present the tube on one side of G's mouth as for previous exercise. Provide jaw support	Increase lateral chew.

Instruct G to do 3 chews. Swap to the other side and repeat.

as needed.



Lip routine 1. Upper lip stretch	Z vibe with yellow head. Iced trimmed toothette. Vibrating toothbrush with small head.	Place the Z vibe yellow head under G's top lip and roll from the outside corner to the middle. Stop. Repeat on the other side. Do this 5 times.	Increase sensory awareness. Increase upper lip mobility.
Lip routine 2. Micky mouse /m/	Z vibe and mouse head	Present Micky's ear between G's lips and model a /m/ sound. Encourage G to copy you and close his lips on Micky's ear. Repeat 6 times	Provide sensory input Increase lip closure.
Lip routine 3. Cheek toning / lip rounding	Z vibe with green cylinder shaped head	Present the rounded z vibe head between G's lips. Provide jaw / lip support as needed to facilitate lip rounding. Model a /w/ sound and encourage G to copy. Repeat 10 times.	Provide sensory input Facilitate increase tone in cheeks. Encourage lip rounding.



Tongue routine 1. Lateral tongue to tongue tip	Bite Z vi sma squ
Tongue routine 2. Chewing (pre feeding	Z vi sma squ

e block #6 ibe with all green lare head

Use the bite block to stabilize G's jaw by asking him to bite on it. Stroke along the side if G's tonque from front to back using the Z vibe. As you approach the front, press sideways to encourage the tongue tip to point and move across the midline. Do this 5 times. Repeat on the other side.

Provide sensory input. Facilitate tonque elongation Facilitate tongue tip formation Facilitate tongue lateralization

## chewing hierarchy level 2)

ibe with all green uare head Place z vibe on G's outermost front tooth (lateral incisor) and encourage G to bite. Move back to his canine tooth, then to his first molar. Do this pattern 5 times and then repeat on the other side.

Provide sensory input. Facilitate tongue tip pointing. Facilitate graded tongue retraction. Facilitate lateral chew

#### **Tongue** routine 3. Syringe feeding

Small syringe ( no needle!) Favourite puree

Squeeze 1-2ml of a favourite puree in to the cheek cavity. This should be between the cheek and the gum at about the level of the first molar. Provide jaw / lower lip support. Repeat 4 times on each side.

Increase tongue lateralization Increase tongue retraction.



### Feeding routine 1. Honey bear

Honey bear with favourite juice or water

Present honey bear tube in the corner of G's lips and squeeze a small amount of liquid into his mouth. When G closes his lips. Move the tube to the midline and squeeze again. Repeat alternating starting side. Repeat 5 times on each side Increase lip rounding Facilitate suck

#### **Feeding routine**

2. Chewing hierarchy level 1.

Straws with frozen puree in them, or chip stick, or choc finger, or similar. Place chew food on first molar. Keep hold of the other end. Instruct G to "chew, chew, chew, chew" and facilitate a rhythmical chew to support G to chew the food. Provide jaw support if needed. Repeat several times on each side if G will tolerate.

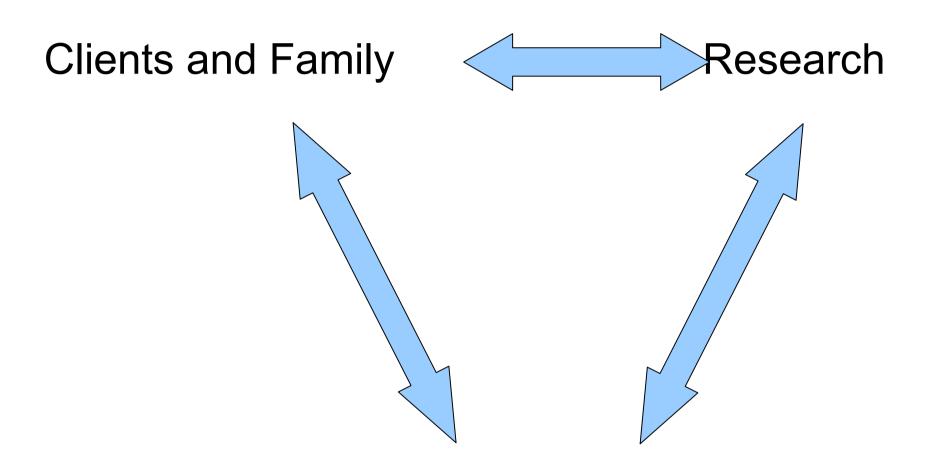
Facilitate lateral chew Facilitate jaw grading Facilitate tongue retraction.
Develop motor plan for chewing.



- Currently there is limited formal research into TalkTools – to prove or disprove efficacy.
- Some articles discrediting Oral Motor techniques in general – often down to personal opinion.
- Many therapists, worldwide, using TalkTools at clinical level with great success.



- Clinical experience is the foundation of our profession
- Much of what we do on a day to day basis in therapy is unproven.
- We are paid to figure out what will work for a particular client, not replicate research projects.
- Very few clients present as "Text book" so we should be able to think outside the "text book"



Clinical Experience



## Clinical Experience

- 3 year old girl severe dribbling otherwise was developmentally normal.
- Clothing always wet, surgeon considering op.
- Mum worked through a TalkTools programme under guidance of TalkTools trained SLT.
- Now has no dribbling less than 1 year later.
- Increased sensation on her chin 'I can feel the tickling on my chin now mummy."
- Jaw is in a different position to before, much higher.

- Young adult with ASD "Severely dyspraxic"
- Achievements:
- Can now isolate nasal / oral airstream.

Achieved using horns, bubbles and traditional approaches

 Can maintain higher jaw position to support lip closure and rounding.

Achieved using jaw grading bite blocks



 Can achieve adequate oral air stream and lip rounding.

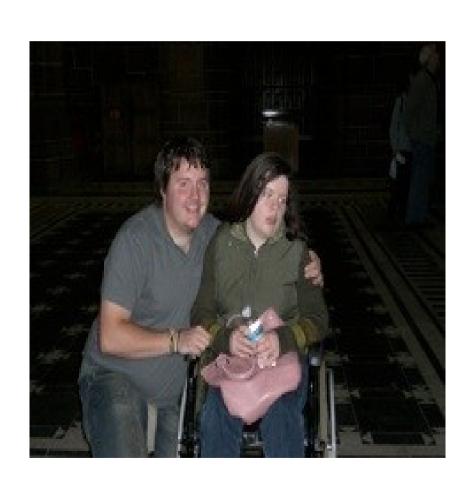
Achieved using horns, bubbles and straws

 Can round lips to create effective lip seal for straw use.

Achieved using horns, bubbles and straws

 General improvement in oral awareness, jaw strength and stability

- Transition to speech sounds
- Improved oral awareness, breath control, jaw control and lip closure has allowed introduction of "apraxia shapes"
- Using visual, tactile and auditory cueing to work on bilabials.
- Can now produce /p/ + /b/. Working on /m/.
- Can produce a loud voiced "uh" which is used functionally in 'puh' to call for attention from another room.







 Refer to research reports describing the benefits of a particular treatment...

"Is this treatment beneficial?"

Select treatments based on theoretical soundness...

"Should this treatment be beneficial?"



## Non functional movements?

- Criticisms based on the use of non functional movements in exercises to work on feeding and speech
- Only functional movements for feeding and speech are used as part of TalkTools OPT Programmes.
- Many of the exercises used in TalkTools OPT use pre speech and feeding movements.



## Developmental Norms?

 TalkTools Therapy incorporates concepts of normal age appropriate motor development to determine appropriate therapy for each child.

### For example:

- Jaw control is achieved before lip control
- Tongue flexion / extension is achieved before lateral tongue movements



# Working in isolation?

- A common misconception is that TalkTools is used in isolation.
- TalkTools therapy was developed to be used in conjunction with other speech and feeding interventions.
- Works on foundation skills necessary to achieve feeding and oral skills, and then be transitioned in to function for feeding and speech.



- TalkTools Oral Placement Therapy is being used worldwide.
- There is a huge amount of single client clinical evidence and experience that shows it is successful when used correctly.
- Most SLT's who attend a TalkTools course find that TalkTools presents a common sense approach to analysing a therapeutic challenge and addressing it practically.



### The Future...

- Research is underway.
- An increasing collection of clinical evidence is being compiled.
- More therapists are learning about the TalkTools Oral Placement Therapy, so they can make an accurate and informed decision for themselves.
- www.talktools.net
- UK equipment supply www.eg-training.co.uk



### TalkTools Courses

- Level 1: A Three Part Treatment Plan for Oral-Motor Therapy"
- Level 2: Oral Motor Therapy: Assessment and Programme Plan development"
- Feeding Therapy: A Sensory Motor Approach
- Childhood Apraxia of Speech: The Oral Motor Component
- Currently in development TalkTools and Autism: A specific approach



## TalkTools U.K Conference

Saturday 4<sup>th</sup> June 2011

**Swindon** 

£65 per person

www.eg-training.co.uk

A great place to start or to update!



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