

# **Tacpac™: a tactile approach to communication through touch**

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Paper presented at South Pacific Educators for Visual Impairment (SPEVI)  
Biennial Conference, Jan. 2007, Perth

## **Introduction**

Tacpac™ is a structured tactile play format for children with profound and multiple learning difficulties. It aims to heighten levels of awareness and intentional communication through responses to stimuli. These responses may be reflexive, for example sucking, grasping, Moro (startle) reflex, or they may be perceived as a response to the stimuli. It encompasses a tactile approach to communication.

## **Rationale**

The Tacpac™ activity pack is based on the notion of tactile, heuristic (real object) play experiences that are a recognized and established part of Te Whāriki, the New Zealand Early Childhood Curriculum. The introduction of Tacpac™ to a child's routine underpins and extends their ability to respond to external stimuli through the sense of touch. The skin is the largest sensory organ in the body. It is covered in receptors of varying densities. For the child with profound learning difficulties and additional sensory impairment, touch may be the primary means of contact. Such primal responses or behaviours, although perhaps limited in range, are the beginnings of pre-intentional communication. That is, the child does not intend to convey meaning through his/her responses, but the adult interprets these responses as having meaning.

## **Background**

Tacpac™ is a learning experience developed within the special education field by Hilary Wainer and two colleagues. In Hilary's own words:

"Tacpac™ was created in response to the total lack of tactile/music resources for the kind of children I was working with at that time: children with severe learning disabilities, autism, Down Syndrome, communication difficulties, and a host of other syndromes. The way it all started was that a colleague, the movement specialist, was running a movement session in the hall of the school we were working in. Her tape recorder broke down. She ran into my room (where I had my first free non-contact time in months!) and asked me to wheel the old piano into the hall, to improvise some music so that her lesson could still progress. The result was very exciting. The improvised music, with the feely sensations we gave to the children, was a hit. To cut a long story short, we repeated the session for many weeks. The other staff became enthusiastic, and asked us to make it into something more permanent, easy to use and transport, so they could do this too. It took some time, but we eventually recorded the improvisations, and hence Tacpac™! A tactile pack for sensory awareness. It was great fun, and very rewarding to see how many children responded so positively to the pack".

## **Why Tacpac™**

Tacpac™ is a portable and simply structured play activity that can be performed (ideally) while the child is lying supine on the floor, although other positions may be equally

rewarding and appropriate dependant on a child's individual need. A variety of everyday articles such as fans, spatulas, little mops, kitchen scourers and aromatherapy oil are used, while the child listens to set pieces of music. The music is designed to reflect the sensation of the object on the skin. As the child becomes more familiar with the music, so he or she can anticipate the tactile feeling associated with it. The conditions are now set for optimal learning, bonding, listening and the growth of confidence.

Parent and caregiver participation is encouraged with the view to Tacpac™ being included in the home routine. For example, the mother of a child with severe sensory impairment, complex neurological, physical and cognitive needs and global developmental delay, describes her initial exposure stating: "When I first did Tacpac™ I sat fighting back the tears. Finally I had found something that was specifically designed to meet the needs of my child." Furthermore she added that after a period of exposure to Tacpac™ once a week for three terms this mother felt that she was, "...just beginning to see some small reactions", and says she enjoys doing Tacpac™ because it gives her child, "... a chance to explore the world". The father of this young boy adds "We have been concentrating on his feet when doing Tacpac™ over the last term, and I believe he is beginning to show some awareness of this".

Tacpac™ is one way in which we can bring the world to the child. It reflects the theories that inform the work of Dr Lilli Nielsen, whereby the adult is responsible for providing the learning environment and there is the expectation that all children can learn. (Nielsen, 1993).

There are three Tac Pac activity packs, each requires its own set of objects. The programme is designed to be carried out the same way with the same tactile objects and music introduced in the same order. That is to say, it is a structured, repetitive, consistent and predictable play activity that enhances a child's sense of anticipation. This is an important first step for the child in making cognitive links such as cause and effect and rudimentary choice making skills.

Children with severe learning and sensory impairments need this type of predictable, structured programme in order to develop reciprocal interactions and intentional communication. In addition we are providing them with a valuable opportunity to develop such cognitive notions as body awareness and their bodies in space while building an understanding of different sensory information from a variety of sources. During Tacpac™ these sources include visual stimuli, auditory input, tactile information, even taste!

Serpa, 2001 argued that, 'Body stimulation with different gentle textures will help the child to understand that s/he is 'something' apart of the world and is an important initial communication strategy.'

## **Language acquisition**

As adults we interpret and assign meanings such as: like, dislike, want, rejection, known and unknown to an infants communicative responses. An infant's gestures, babbling, body language or early reflexive responses and behaviours are termed pre-intentional communication. If interpretation of these responses is consistent, the child learns that there is a connection between his or her actions and the consequences of those actions. As children interact further with others in their environment their speech progresses from the pre-intentional stage to become a concrete, intentional form of communication (in other words saying what they mean).

Tacpac™ shapes these communication behaviours to become consistent and reliable. Tacpac™ facilitates this process and as a result the child's communicative intent and their responses are according to Wainer, Stormont and Marks (2000), "... elicited, responded to, more clearly defined and developed into intentional communication", thus supporting the child's language acquisition skills. The child conveys meaningful responses to key adults in their environment. This is an important part of early language development and the establishment of reciprocal, responsive communicative interaction and language acquisition. This begins to occur once the initial contact and interaction between the child and adult is established. In using their voice, auditory input, touch and *waiting* for the child's response are vital points in the development of communication.

### **Therapists' perspectives**

The following is a summary of the benefits associated with the use of Tacpac™ with blind or low vision children including those with additional special needs.

#### Speech and Language Therapist

##### Benefits

"Through consistent adult responses to communicative behaviours, the child begins to understand they have the ability to control and to manipulate the world around them. This is essential in developing cause and effect and anticipation. The first steps in developing intentional communication". Stella Ward and Clare Lawrence, Speech and Language Therapists, Blind and Low Vision Education Network NZ (BLENNZ).

It is a consistent routine that helps develop anticipation of what is coming next. If used as a part of the child's daily routine, Tacpac™ may assist with routine cues for example, after Tacpac™ is morning tea.

The pause between each piece of music, allows time for the child to process and prepare for the next step.

It allows the child and adult to form a bond and to begin to increase their understanding of each other.

Tacpac™ is multi-modal; providing music/sound, touch/massage, visual and tactile exploration.

##### Be Aware

The pause between each piece of music may be too long for some children. Tacpac™ requires the adult to interpret and respond to the child's communicative intent. Ability to 'read' the child's responses is dependent on the adult's sense of intuition and knowledge of the child. As bonding and trust develops, this is often easier.

#### Occupational Therapist

##### Benefits

Tacpac™ is alerting and often increases levels of awareness.

It allows opportunity to develop turn taking, socialization, and anticipation skills

One object at a time is used during each musical piece, and each music piece is reasonably long, so this allows time for processing the tactile/sensory information.

The silence between each piece of music allows time for the child to process, anticipate what is coming next, and the adult has time to wait for any response from the child.

It improves discrimination of tactile/sensory stimuli and uses many receptors and different sensory pathways e.g. temperature and pressure of touch. The variety of objects used provides opportunity to experience different materials on the skin such as wood, metal, fabric and water.

Children become more aware of tactile sensation (one object at a time and anticipation of the next object coming) and sensation is heightened.

Music allows the child who is tactile sensitive to stay calm and be less defensive to the introduction of tactile stimulation.

Consolidation of socialisation, turn-taking and cause and effect concepts are more likely to occur.

Tacpac™ improves body awareness and proprioception (a sense of body position/body awareness from information received through receptors in muscles and joints). This helps the child to relate to their environment.

#### Be Aware

There maybe some sensory overload for some children which needs to be monitored.

The adult needs to be aware of reactions from the child that show dislike of an object or tactile resistance on a certain part of the body.

#### Physiotherapist

##### Benefits

Tacpac™ can be done in any position and the child can be encouraged to move into a position that they prefer e.g. the child may roll to the side to indicate that they want the action on their back.

The flexibility of Tacpac™ supports individual need and reinforcement of good positioning for the child e.g. a child may require physical support such as rolled up towels to minimise thrusting or a child that has reflux may need a wedge to bring them to 45°.

Tacpac™ is holistic and allows individual needs to be met.

#### Be Aware

The adult needs to be focused and ready to respond to the child.

#### Music Therapist

##### Benefits

Tacpac™ is great for presenting auditory and tactile stimulation simultaneously. More than one sense is being stimulated at the same time.

It assists with sensory integration.

It increases awareness of 'something happening' in the surrounding environment.

Each selection of music is matched with its own specific texture.

Children feel an emotional response to the stimulation i.e. pleasure, surprise, interest, challenge etc.

## Be Aware

Responses to music are very individual.

One selection of music which may be stimulating or relaxing for one child may not be for another.

## About the creators

Hilary Wainer B.Mus., M.Ed, Mth

Born and educated in South Africa. Hilary has had many years experience in teaching and music therapy, with children with a wide range of learning difficulties, in different settings. Hilary's particular interest lies in enabling everyone to access their own musical skills.

Bobbie Stormont Cert. Ed, Dip. S.E.N.

Born and educated in New Zealand, Bobbie has been teaching and working in both mainstream and special education for many years. She teaches children and young people across a wide age and ability range. Bobbie is particularly interested in developing practical on-site inset sessions in the area of music for staff and their pupils with severe and profound learning difficulties.

Christine Marks Cert. Ed, B. Ed (Hons).

Born and educated in England, Christine teaches children with a range of learning difficulties including children with profound and multiple learning difficulties (PMLD). She also has many years of experience within senior management in a special school. Christine's particular interest lies in relevant curricula developments for children with severe and profound learning difficulties.

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