Challenges in Communication:

A critical analysis of a student music therapist's techniques in working with special needs children.

A thesis presented in partial fulfilment of the requirements for the degree of

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Abstract

This paper describes the processes under taken by a student music therapist to improve her clinical practice and enhance the quality of service provided to children with profound and multiple disabilities. Using an Action Research model it aims to show how rigorous investigation of one's own practice can improve understanding of the clients and enhance students' abilities and confidence when carrying out placement work. An interview process with three registered music therapists preceded a 12 week action research process. Three cycles were undertaken with each lasting 4 weeks and the interview material informed the initial cycle. Clinical notes, a research journal and video recordings of sessions were three data gathering tools used to evaluate the success of techniques employed. This intensive critical analysis led to a greater awareness of in session communications and an improvement in techniques such as active waiting and repetition of activities. This in turn created increased opportunities for response to musical offerings by this client group.

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Ethics Approval

This study has been given ethical approval by the Chairperson of the Central-region

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Introduction and Background

He Whakatuki: Mā te korero ka mohio, mā te mohio ka mātau, mā te mātau ka mārama, mā te mārama ka ora.

Translation –

Māori Proverb: From communication comes knowledge, from knowledge comes learning, from learning comes enlightenment, from enlightenment comes well-being.

In 2008 I undertook a clinical placement in the Special Education unit of a New Zealand primary school as a part of the Master of Music Therapy programme at the New Zealand School of Music. The current research focuses on this work.

The objective of this research is to identify how to create opportunities for meaningful communication in individual music therapy sessions with children who have communication disorders. In undertaking to answer this research question I wished to gain an understanding of how children with communication disorders attempt to communicate through music (or by other means). In addition to this, I needed to analyse how my interpretation of communication attempts could enhance and promote further opportunities for communication.

My clinical placement was in a special education unit in a primary school, where my client load included 10 students who were all listed as having high or very high needs as set out by the Ongoing and Renewable Resources Scheme (ORRS[1]). The students have varying levels of abilities and disorders, most with severe and multiple disorders or syndromes such as cerebral palsy, Down Syndrome, Autism Spectrum Disorder (ASD) or chromosomal disorders. The nature of the students' disabilities presented a vast challenge as I learnt about their syndromes and how each individual was affected and also how I would work with them in a school environment.

At the time this study was undertaken I had been working as the student music therapist (SMT) with the majority of the students for approximately 2-2.5 school terms (around 20 weeks). Depending on the needs of the child and time slot availability

[1] ORRS is Ministry of Education scheme for the assessment and support of children with high and very high special education needs.

children received either one or two 30 minute sessions of music therapy per week which occurred on Monday and Tuesday.

During individual sessions in the first few weeks, I felt a certain frustration at the lack of musical dialogue occurring between us. Many of the children were behaviourally challenging, and in the role of *student* music therapist it took some time for the music therapy work to begin in earnest. It seemed that even after a settling in period children were testing the boundaries with me. Developmentally 'typical' children "experiment and take initiatives that may sometimes conflict with (the) rules" (Erickson's third stage of personality development in Weiten 2004). Because of their disorders many[2] of the children were apparently unable to acknowledge my presence in the music therapy space. Though the challenges lessened as I gained more understanding of the children's disabilities and how to work musically with them, there were many instances of wondering whether what I was doing was right.

The Collins dictionary describes communication as; The exchange of ideas or feelings. The Concise Oxford dictionary says it is an; 'Act of imparting news'. In an online dictionary I found this description of communication which fits closely with the ideas of communication in music therapy – noun 3. 'something imparted, interchanged, or transmitted'. 7. Biology - 'activity by one organism that changes or has the potential to change the behaviour of other organisms'. (from Dictionary.com website: http://dictionary.reference.com/browse/communication).

Some positive communication indicators (implying the child is enjoying interactions) could be, though are not exclusively limited to, any of the following, quality

[2] Not all of the children involved in the research were attending the school at the beginning of the year).

eye-gaze or eye contact between student music therapist (SMT) and child; vocal response to musical cue; physical action response to musical cue. Where a child may wish to end or not enter into an interaction the child may communicate by putting down or dropping an instrument; turning away from SMT; indicating either verbally or physically that they wish to leave the music therapy room.

During my work with this client group I have developed a holistic and client centred approach. Over the course of the placement the approaches of music therapy that were used most were behavioural music therapy (at the beginning of the placement) and moved to client or child centred music therapy. In behavioural music therapy the therapist uses music "to increase or modify appropriate behaviour and to reduce or eliminate bad or inappropriate behaviours" (Wigram et al. 2002 p.30). This approach was useful at the beginning of my placement in helping to establish boundaries of acceptable behaviours, mostly towards the instruments used in sessions and also with interpersonal interaction. This reflected the way in which the school worked with the children. For example if their behaviour was inappropriate the child would be removed from the activity or classroom, or if they were participating well they would be encouraged and praised and the activity continued. In music therapy sessions the expectation was that a child would focus, within their capacity, on an activity. Using music that was identified as motivating to the child, the therapist seeks to hold the child's attention and have them focused and behaving appropriately to the situation, the music itself is continued as the reward. If the focus is turned elsewhere or the child starts behaving in an inappropriate manner the musical activity was withdrawn, with the aim being that the child would focus on the music and the positive behaviours that cause the music. Once boundaries were established it was possible to adopt a child centred approach following the needs of the individual and, holding their goals in mind, allow them to lead the journey. This

approach requires that the therapist has ‘unconditional positive regard’ for the person and accepts what they wish to explore. It allows the person more power and decision-making in the therapy process (Wigram et al. 2002 p.66),

The research has two phases.

In the first phase of research I undertook an interview process with registered music therapists working with a similar client group. My aim, in interviewing these Registered Music Therapists (RMTs), was to identify their understanding and experiences of communication strategies with children in special education. By asking them to share their experiences with me I was able to build my knowledge base and use this information as a guide for the second phase of the research. Clinical notes that I had made on the individual.

The second phase was the 12 week long Action Research data collection period. For this phase video recordings, clinical notes and a research journal were the media used to plan and track any changes brought about by what was observed during this phase.

Although it is possible that my observations and interpretations would become more accurate over time as I became a more experienced therapist and without undertaking this research, engaging in a rigorous examination of the communication process is likely to benefit me (and therefore the children I work with) and the written report to benefit other music therapy students and music therapists.

Literature Review.

There is a large body of literature encompassing music therapy, special education and communication. The initial searches for literary material include works by Nordoff and Robins 1971; Bruscia 2004; Bunt and Hoskyns 2002; Corke 2002; Holck 2002, 2004; Stevenson 2002; Wigram, Pedersen, Bonde . 2002; and Oldfield 2006

The children I worked with in the Special Education Unit all had severely delayed or disordered language development. Music therapy has a great deal to offer in helping to increase the capacity for communication of children with disabilities (Aldridge 1996; Trevarthan and Aitken 1998; Bunt and Hoskyns 2002; Holck 2004; Wigram and Gold 2006).

In starting with communication perhaps it is best to discuss how normal or well functioning communication is achieved. Daniel Stern is one of the major contributors in the area of early dyadic interactions – that is the parent-infant relationship, and how non-verbal communication begins and develops. In the first six months of their life, a normally developing infant will learn "how to invite his mother to play and then initiate and interaction with her; he will have become expert at maintaining and modulating the flow of a social exchange; he will have acquired the signals to terminate or avoid an interpersonal encounter, or just place it temporarily in a 'holding pattern'. (…) This biologically designed choreography will serve as a prototype for all his later interpersonal exchanges" (Stern, 1977 p.1). Thus they develop the "repertoire of facial, vocal, and other behaviours that the average caregiver provides for the infant as his first and foremost experience with the world of human stimuli" (p.6).

In the case of the disabled or developmentally delayed child this natural process can be impeded and in Archer's paper (2004 p.37) on the parent-child relationship "Up to the point of diagnosis there may have been several years of a developing parent-child

relationship where each has not understood the other." A visually impaired child may hear communicative offerings but is unable to put this together with visual cues; a hearing impaired child may observe the animated visual but not fully comprehend the supporting sounds. In these cases an early diagnosis is probable but with children with autism in particular a diagnosis may not be made until they are several years old. Although this research is not about the parent-child relationship, consideration has been given to how this may affect the ability of the children worked with in this study.

"The music is a language (...) that can be stimulating and comforting. The right music, used with wisdom, can take the disabled child away from the limits of her or his pathology and placing the child on a level of experience and reaction, where he or she will be free of emotional or intellectual dysfunctions" (Nordoff & Robbins 1971, p. 238). My research as a music therapist seeks to explore this idea and find a way of helping those children who are unable to communicate using regular means.

Music Therapy and Communication.

"Every individual no matter how profoundly mentally handicapped or emotionally disturbed, can show some form of response to music" Trevarthan, Aitken Papoudi and Robarts.1998 p.175). This idea gives justification for using music therapy to begin communicating with disabled children. "When a music therapist works with a child (or an adult) with no language skills, he/she can work on communicative levels that developmentally precede language..." (Holck in Wigram et al. 2002 p.183) and in Oldfield (2006a) "It is through non-verbal improvised musical exchanges that I can engage and capture children (and parents) interest and attention (p.20).

"In many cases, music therapy instigates and supports developments in communication (for example, joint attention, intentionality, initiation, imitation and variation, communication of feelings, and use of words" (Trevarthan et al 1998 p.175). "Besides verbal prompts, other cues can be eye contact, nodding, facial expressions and prosody" (Holck 2004 p.46). Prosody being the intonation and rhythm or meter of language.

Holck (2004 p.45) says that encouraging children to play increases the possibilities for use of language, "In working with children with severe communication disorders caused by mental retardation and/or autism, it is important to reinforce the child's desire and ability to participate in social interplay, which is the basis for later language development". In Stevenson's article on 'Music Therapy Assisted Communication' she states, "Vocal production, producing sounds playfully, and intentionally making expressive verbalisations, can be enhanced with music" (Stevenson 2002 p.82). These two articles are focused towards the eventual production of speech but the same assumptions can be made for any of the communicative displays set out in the introduction of this paper.

The benefits of music therapy with children in special education are highlighted by Corke, "When working with those who have little or no speech, or limited comprehension of language, one of the ways forward is to use music" (Corke, 2002 p.3).

Because children with various disabilities "take far fewer initiatives and have a longer reaction time" (Holck p.47) there can often be a break-down of interplay between child and therapist. An interplay that is created from spontaneous or planned actions in which the therapist and child engage is defined by Holck (2004) as an 'Interaction Theme' this is "returned to and developed from session to session (p.48)." In such

interplays where the goal is turn-taking the therapist plans to turn-yield or hand over to the child by "accentuation of the last word (of a phrase), followed by silence as well as physical stillness" (Holck 2004 p.48). The therapist first imitates a child's actions or utterances, and then pauses a moment to check whether the child shows signs of anticipating imitation.

Many writers on this subject comment on the importance of being aware of using silence and listening. "Children with severe and multiple disabilities may show a low level of responsiveness, and the idiosyncratic responses they do make may be ignored or misinterpreted by others. Caregivers may see their role in communication as a directive one, rather than a reciprocal one that follows the interests of the child" (Rainey Perry 2003 p.228). "Actively experienced silences can be provided in the improvisational music-making context as a 'space' in which self-awareness may begin to emerge" (Nordoff and Robbins, 1971 p.209).

Steen-Moller (1996 in Wigram et al. 2002 p.173) describes 5 levels of contact in working with children with disabilities. Level 1: The therapist feels the contact with the client. 2: The therapist hears and sees the contact. 3: The client now controls the contact. 4: Our contact takes the form of dialogue. 5: We contact each other through free, improvised music. It is this authors' opinion that it may be necessary to have a level preceding these in first contact with profoundly disabled children. Having less confidence in one's ability to 'intuit' or 'feel the contact', simply watching and wondering if a child's movements are connected in a reactionary way to the music may be useful in increasing our awareness. Once we develop a sense of who the child is, and what their capabilities are, we increase our background knowledge and refine our observation skills.

When working with autistic children "Maintaining a balance between the familiar and the novel is an important aspect of flexibility and adaptability of response, an aspect of freedom in self-expression and social interaction. In music therapy this can begin to be fostered to lead the child towards more creative and interactive forms of expression" (Trevarthan et al 1998 p.179).

As a clinician, one "…needs to be able to pay detailed attention to the patient and to be vigilant about what is discovered. Through doing this, we can pinpoint features of the person's physical, communicative and social behaviour and begin to ascertain clues about mood and mental state. Before any treatment can be imagined, we need to 'get to know' the patient; to have collected the fine details of how they are (in relation to self and others); to be able to feel 'in their skin' and gradually to make an assessment of their needs" (Bunt and Hoskyns 2002 p 169).

Action Research

"Action Research (AR) is a useful approach for practitioners who want to develop or improve on their everyday activity…" (Rickson 2009) This is an Action research project reviewing subjective data from a personal research journal, objective data from video footage and professional clinical notes. Action provides a basis for learning and knowing, and Action Research (AR) is born from everyday practice. It "constructs new knowledge on which new forms of action can be based" (Brooks and Watkins, 1994, p.11) and is "research on action with the goal of making that action more effective while simultaneously building a body of scientific knowledge" (French and Bell 1995, p.137).

The diverse history of AR is both because of and reflected in "the diversity of sources that inspire action research" (Reason and Bradbury 2001 p.4). It is used in many fields some of which are the healthcare sector, education, community development programmes and business organisations. Reason and Bradbury describe AR as leading to 'better' research "because the practical and theoretical outcomes of the research are grounded in the perspective and interests of those immediately concerned" (Reason and Bradbury 2001 p.4). McNiff (2005) "The process of research becomes the practice, and because we are involved in a research process of thinking, evaluating and acting, the practice is a form of research." Researchers wishing to improve practice and engage in personal development may find AR to be one approach that enables them to do this.

AR is a cyclic approach. The process begins when something happens which causes wondering (Newman, 1998), or there is a dissonance or discrepancy between what is happening and what we might expect will happen in practice (McNiff, 2005). The existing situation is examined before change is implemented, and the intervention is constantly evaluated through a process of critical reflection.

"Action Researchers need to be able to reflect on their actions and interpretations, and be aware of their biases" (Rickson 2009). Reflecting on our past actions may better inform our future actions. By learning about how we approach practice and how we reached a certain point with a client we can integrate it into future activities. Or, if our actions cause an adverse reaction, learn how we might approach it differently or lay it aside altogether. "It can also enable music therapy researchers to generate detailed description of the music therapy process which can in turn be rigorously and systematically analysed" (Bunt 1994 in Rickson 2009).

Rickson (2009) drew on the work of Kemmis (2001) to describe three kinds of AR as "1) a 'technical' form which aims to change particular outcomes of practices, and is considered successful when the defined goal of the project has been attained (this research does not question the goals, or how the situation in which the research is undertaken has been constructed), and 2) a 'practical' form described by Kemmis as one in which "practitioners aim not only to improve their practices in function terms, but also to see how their goals, and the categories in which they evaluate their work, are shaped by their ways of seeing and understanding themselves in context" (Kemmis 2001 p.92, in Rickson 2009) and the researcher's aim to understand and change themselves as practitioners, and finally 3) a 'critical' form which aims to improve outcomes and self understanding as well as assisting practitioners to critique their social or educational work and work settings. This latter type of research recognises that there may be collective misunderstandings about what people do, and aims to help practitioners to understand the way people and settings are shaped by history, culture and discourse" (Rickson, 2009, on line, no page number available).

This action research project requires me to subject my clinical practice to rigorous reflection and analysis and use that analysis to inform any changes needed in the music therapy sessions I conduct. This will greatly enhance music therapy sessions for the client group in my clinical practice and also for personal future music therapy practice.

Methodology

Methods.

Phase One: Interviews.

1. Recruitment for Interview participants.
2. Analysis of Interviews.
3. Clinical Notes and Research Journal (RJ)

Action Research (AR)

Phase Two: Clinical Music Therapy Sessions.

1. Recruiting for Phase Two.
2. Process of Video Analysis
3. Ethical Considerations.

Methods.

These interviews were carried out near the end of August nearly three weeks before the beginning of phase 2. Data collection methods included interviews, reviewing clinical notes, a research journal and video excerpts of music therapy sessions. The clinical notes and research diary were used in an ongoing and reviewable manner throughout the 12 week AR process. Clinical notes were made at the end of each day of sessions or during the day if time allowed. Notes were made in a research journal during morning and lunch breaks and then expanded upon if necessary at the conclusion of daily sessions.

There were two clearly defined phases to this research. Phase one relates to the interview process that took place and phase two involved sessions with clients, recordings of those sessions, clinical notes and research journal entries made regarding those sessions.

Phase One: Interviews.

Initially interviews with Registered Music Therapists (RMT) were undertaken to learn about how experienced Music Therapists understood communication with children who have special needs. The interviews helped to gather information on specific communication tools and/or strategies and were used to create a template to refer back to once the action research phase began. Interviews were conducted over a period of 10 days with a space between each interview for reviewing and transcribing.

Recruitment for Interview participants.

Registered Music Therapists working in New Zealand and who had knowledge of working with children between the ages of 5-14 who were multiply or profoundly disabled were invited to answer some questions and discuss what they understood and share some of their experiences of communication with children in this client group. This was the only inclusion criteria necessary. The request was made via the administrator for Music Therapy New Zealand who placed the information on an internet forum for RMT's. There were three respondents who were sent an information sheet and consent to participate (see appendix 1 and 2 p.82-85). I had anticipated four participants but the three interviews that took place generated plenty of information for the starting point desired.

Analysis of Interviews.

Interviews were transcribed verbatim and, once their meaning had been absorbed, the speech pauses (ah, umm, er etc) were removed for ease of reading in the thesis (appendices 6, 7 and 8 are extracts from each interview p.91-94). Each interviewee was then posted their transcribed interview for checking and editing and then returning to the researcher. There were minimal changes made by the participants and one participant took the opportunity to make additional comments. Once the interviews had been checked and signed off, common ideas and themes were looked for. It was easy to identify the three main categories that could be used for initial data sorting: 1. What do experienced music therapists' look for; 2. What actions do they take; 3. What have they come to understand when working musically with this client group?

These three sections structured the information and in template form allowed me to quickly access specific information when reviewing video footage, clinical notes and research journal, about how I was acting and reacting to, and also how I was coming to understand the communicative styles of the children I worked with in clinical sessions.

Clinical Notes and Research Journal (RJ)

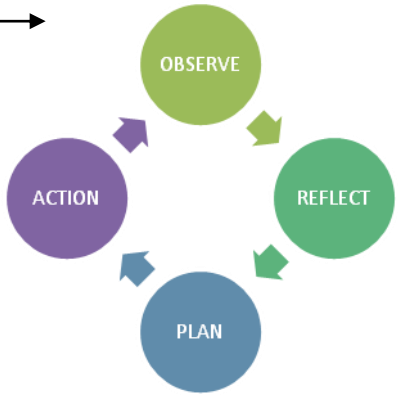
Upon completing the interview process and following advice given by the RMT's concerning goal setting, I made a quick review of my clinical notes looking specifically for goals that had been set for individuals.

Three data sources were used of clinical notes and creating a research journal were primarily to provide a data triangulation tool, with the third data form being video extracts. The subjective findings from the research journal crossed with the objective data from the video extracts and professional clinical notes would help to reduce bias in my dual role as clinician and researcher.

Phase Two: Action Research

The following information will show how I intended to use the AR process and its cyclic nature. The twelve week research period is here divided into three stages. At the beginning of each stage, three steps: observe; reflect; plan – lead to the 'action' of the following cycle.

Cycle One



- Observe:

  In this opening stage I am observing and organising interview data to discover the RMT's views of what happens between a music therapist and a non-verbal child who has multiple difficulties. These ideas were then joined with my understanding of my developing clinical practice. Goals needed to be set before reviewing any video footage so clinical notes were used to cross reference similarities in my practice with the interview findings. The moments identified in the clinical notes highlight areas where I was 'wondering' what something might mean and felt a need for closer examination.

- Reflect:

  I thought about my own practice in light of what was just highlighted in the clinical notes immediately preceding the action research phases, and matched that

against what other (interviewed) music therapists do. I noticed in the notes that I had written "Tried to wait", or "allowed a lot of space" or "it felt like a very long time." It was becoming obvious that waiting felt difficult and that I was not entirely at ease with the silence in sessions. Was this something that could be improved on? One way I thought I might try in sessions was to breath five slow breaths as I discovered this would take just over 25 seconds which I felt would be sufficient processing time for the children I worked with.

- Plan:

For the first cycle of AR I will look at the areas of Observation; Musical Structure and Waiting or Active Waiting.

- Act:

It was then time for cycle one to begin and to try these ideas out in practice.

Cycle Two

- Observe:

The video excerpts were to be viewed at the completion of each weeks sessions, and were to identify any area of strength/weakness or if I could observe any

improvements in the areas of focus. This would then provide strategies to employ for cycle 2.

I observed: that most of my invitations to play were verbal or vocalised instructions; that I may not have provided a clear outline of an activity to some children; a tendency to over-animate myself with 2 children and under-animate with one other.

- Reflect:

I felt much more comfortable in my ability to carry out the strategies from cycle one. I still believed that to be an effective clinician, observational skills still had to be practiced and thought about and that I could carry on with this in mind without it being a focal point.

In video of one session I realised that I had been caught up in the child's excitement and created a situation of too much excitement by my own animation resulting in the child leaving the session physically tired. I then noticed in two other videos that the amount of visual animation used by me may have been counter-productive in our sessions.

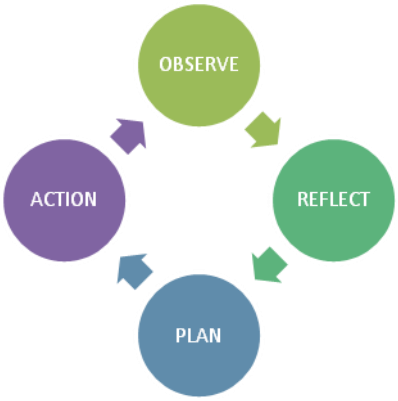
- Plan:

For the second cycle of AR I will look at the areas of: Musical Invitation; Visual Animation; Clarifying Expectation.

- Act:

It was then time for cycle two to begin and to try these ideas out in practice.

Cycle Three



- Observe:

  Animation is now well managed 'in the moment'. There is also a better balance of musical-to-verbal/vocal invitations, however this as well as clarifying expectations will be on-going in thought in the same manner as the observation strategy of cycle one.

  From cycle two I noticed how the school seemed to be 'speeding' towards the end of the year with many organised activities interrupting the usual schedules. I observed some surprising behaviours outside of the norm of some children. I also noticed a poverty of information sharing between music therapist – teachers – paraprofessionals.

- Reflect:

  A general observation was made about school life and winding down to the end of the school year. This was a hectic time and it seemed to affect the pace of the pace of the music therapy room as well. It felt it necessary to get back to basics and keep the space calm, I felt this could be achieved by reflecting on individual's goals and keeping things as simple as possible. Another observation made was concerning information sharing. I completed a few sessions where I felt the

children were ‘not quite themselves’, and when I reported this to their teacher aide’s, I was then given information about their state of health or emotional well-being. It was necessary to remind those involved that this kind of information was important for me to know before sessions so that I could report any changes if necessary. In addition to these goals it was necessary to remind myself what I knew about the children, musically, behaviourally and personally.

- Plan:

  For the thirds and final cycle of AR I will look at the areas of: Information Sharing; Knowing the Child; Keeping it Simple.

- Act:

  It was then time for cycle three to begin and to try these ideas out in practice.

Clinical Music Therapy Sessions.

With the use of a video camera I surveyed my clinical work with six children for a period of 12 weeks. The overall time frame of this twelve week research period was divided into three – four week cycles. A video camera was used to capture a part of each session. It was intended that the video footage be taken at any random point during sessions, but it was less disruptive to have the camera set up for the child’s arrival to their session and then discreetly turned off when changing activity. Around 15 – 20 minutes video footage was taken during each session. During this period I held the three-fold position of the main participant, the researcher and the clinician.

Recruiting for Phase Two.

For this stage of the research I was the main participant as it was my actions that were being observed and analysed. As I was working with children who could be considered vulnerable and may be identifiable in this study, it was necessary to gain parental and/or guardian consent. Information and consent letters (see appendix 3 and 4 p.86-89) were sent home to the parents and guardians of each of the 10 children in the Special Education Unit, seeking permission from them to use data collected about their children's music therapy sessions. Data would include their video recordings taken in their music therapy sessions and also the clinical notes written by the student music therapist. They were also advised that that material would be stored in accordance with the school record keeping facilities.

Seven parents / guardians responded by granting their permission, the three remaining forms never appeared within the allotted time and their data was not included in the study but they continued to receive music therapy intervention. One child's records were excluded from the study just as the 12 week period began, after the child was involved in a traumatic event. The information from sessions with six children was used for the duration of the study. There were a moderate number of absences during the research period with one child absent for a total of 4 weeks (or 8 research days) during the research period, due to health related issues. This had little effect on the study due to the volume of data being collected.

Because of the video excerpts discussed later in this study a nom-de-plume was given to each child for ease of reading. The names selected all begin with J in an attempt to lessen the importance of the individual child and draw focus back to the researcher's interventions.

Process of Video Analysis

The purpose of the video data was to assess how I was acting and reacting to, and also how I was coming to understand the communicative responses or initiations of this client group. As previously stated the video footage was intended to be used at random to be able to provide a generalised cross-section of moments throughout sessions. However it was considered disruptive to start the camera mid-session and possibly having to change an angle to down on the floor. After the first two days of sessions the camera was turned on at the beginning of a session for the child's arrival and was on for at least 10 minutes then switched off during the natural transition between activities. Sometimes that moment never arrived and the entire 30 minute session was recorded. Approximately 18 hours of video footage was taken for the study. At the end of each research week the video data gathered was reviewed first in its entirety to gain an overview. A second viewing was then used to identify important moments related to communication, and the start and finish time of that moment recorded. Most of these 'moments' lasted between 15-20 seconds, but for some it was necessary to record the detail of almost 60 seconds. For some extracts it was only necessary to get an overall feel for the moment but in most it was necessary to record observations in minute detail. Each extract was viewed at least 8 times. For example after going through two viewings to come up with a 20 seconds extract, it would then be broken and watched in 5 second bursts to record necessary information. If that was enough to get all the information into written form the 20 second extract would then be watched for a final overview. Often this wasn't enough and more viewings were needed in order to be sure that what was written was an accurate portrayal of what I was observing in the video extract.

Ethical Considerations.

As mentioned earlier one child who had had permission granted to have their data included, had to be excluded from the study after a traumatic event occurred in their life. The impact of the event was discussed with the Unit's head teacher and on a different occasion with the research supervisor. It was decided the most ethical stance was to exclude the data which could include sensitive information. The possible inclusion of such specific data had the potential to identify this person.

There were two further concerns. A video camera had not been used before beginning the research process. On the rare occasion when a recording device or camera had been in the room there was a noticeable alteration in the behaviours of some children. For three weeks prior to the 12 week study period, a video camera was in the room in an attempt to desensitise the students regarding its presence. With two exceptions this was sufficient time for most children to become accustomed to the camera's presence and to disregard it during sessions. Two children were very interested in the camera and seeing themselves reflected in the view finder. As long as the camera was placed out of reach and the view-finder closed the camera was quickly forgotten and sessions returned to normal. The second concern was that I intended to have my research journal in sessions with me to write a quick note if something struck me as significant at the time. A trial of this prior to the research period proved that in a short thirty minute session it was more distracting to me than it was helpful. The priority was to maintain the quality of service I was providing and as this was a technique I was not fluid with, I left the research journal until the session closed.

Findings.

Phase one: **Interview Findings.**

- **Goals created outlined for AR cycle one.**

Phase two: **Action research**

- **Cycle 1: Video description 1, 2, 3, with supporting clinical notes and Research Journal entries.**
- **Cycle 2: Video description 4, 5, 6, with supporting clinical notes and Research Journal entries.**
- **Cycle 3: Video description 7, 8, 9, with supporting clinical notes and Research Journal entries.**

Phase 1: Interview Findings

Background

During the first year training programme our class talked about the music therapists "tool belt" in reference to the devices we possessed - both as musicians and as compassionate people - which would help us to work with clients in a music therapy environment. As a result of this, I had some expectations going into the interviews of what might be discussed by the RMT's. These expectations were about what strategies might be used and what they would look for in their clients' actions, therefore my questions (see appendix 5 p.95) were aimed at drawing these ideas out.

As a second year student part way through this clinical placement I sometimes felt frustrated that the children might be more able to respond if I changed my approach, or I might be more able to recognise their responses if I knew what I was looking for. I hoped that the interviews would provide the information to help me improve my practice.

Interview Questions

I asked RMT's what they understood of communication strategies, if they could list some, and discuss with me examples of how they used those strategies to facilitate communication. I also asked them about how they worked with the most profoundly disabled children and to discuss what aspects they found challenging and how they might approach such challenges.

Please see appendix 5 for full list of questions p.90.

Interview Results

All the RMT's talked about what they looked for when working with a child, this included: eye-contact or eye-gaze; a physical action such as pointing to an instrument or lifting their head at a sound; a musical response like banging a drum or vocalising; and facial/vocal expression such as smiling or turning away. Equally as important was the time given to reflection, giving some thought to what those actions might realistically mean. For example a smile might be positively purposeful or meaningful or it could actually be a grimace. The music therapists shared why they believed it was what it was and what evidence was there to support those ideas.

NB: In all the following interview extracts, **MT** indicates the registered music therapist and SR the student researcher.

Observing the Student

The RMT's all provided an example of a client making a gesture or sound specific to that child. They also learnt particular communication systems that their students used, for example *Makaton*[3]. This form of communication is a simplified sign language for concepts of core communication that I too use with many of the children I work with.

Interview 2 excerpt: Page 2, lines 5-18

> *"**MT**: And then from the child's point of view, I've got children who use 'Makaton' and other children who use personalised gestures ... for an example I can think of a little boy with cerebral palsy who, um I*

[3] "Makaton is a communication programme based around a core vocabulary, using speech, signs and/or symbols. The Makaton Core Vocabulary was designed to be a small vocabulary of concepts enabling children and adults to better understand spoken communication, as well as develop useful communication with others." (www.makaton.org.nz/about.htm)

*have worked with him individually and with groups, … he can't talk he's got very limited movement but he can understand a lot and he signals yes by moving his arm away from his body (**SR**: Right) and no by holding his arm tight against his body and if I didn't know that from a teacher I might well think he was reaching out to touch the wind chimes or something (**SR**: Sure, yeah) and that when he was pulling his arm back it was just his body tensing. But he can make quite consistent choices of instruments and things that he wants to do or sounds that he wants to hear just with that simple yes and no (**SR**: Mm) which is something that he can use consistently with everybody he works with…"*

The music therapists talked about the importance of observing the students' body position and the quality of their 'body language'.

Interview 1 excerpt: Page 3, lines 9-11

"MT: … but he'll also be communicating through his, like his smile, the way he holds his body is not tense, as it can be. So you can see that it's his way of relaxing into it and enjoying the other persons company."

Interview 3 excerpt: Page 3, lines 5-13.

*"**SR**: … I just wonder, like you said the rain-stick, what did she do that made you understand she was responding to that?*

*MT: Well she could track, she sort of really quite minimally but she could track or follow what was going on with her eyes (**SR**: Yes), not very much because she couldn't really turn her head because her head was very floppy (**SR**: Yeah). Yeah so every little movement that she*

had in her eyes, you know if I put the rain-stick in front of her and moved it left to right, you know very slowly of course but she did appear to be following that. Yeah but it was really very subtle and not always…"

These examples show the extremes of working with this client group from the overt to the very subtle gestures that require a music therapist to be expert in observation and interpretation.

This information along with other examples was then compiled into the following table:

What do experienced MT's look for?		
Physical gestures pointing moving head, arms or legs body posture reaching out for an instrument	**Facial gestures** eye-contact / eye gaze smiling looking toward an instrument looking away	**Personalised gestures** Idiosyncratic language approximations of words. A defined gesture used consistently which has associated meaning. Making a vocalised sound to indicate enjoyment or taking their turn.

Table 1: What do experienced MTs look for?

All of the RMT's emphasised the importance of eye-contact or eye-gaze. Watching for these clues, creating theories about what had been observed in sessions and then testing out those theories in subsequent sessions was integral to discovering how to communicate with children who have disabilities.

Responding to the Student

Actions or interventions music therapists use was a very large area of discussion with these RMT's and generated a huge amount of information. The following examples are ideas that were all mentioned to different extents by the RMT's.

Some commented on the importance of continuing to talk with clients. This demonstrates respect, but also prepares the student for what is going to happen, and provides them with cognitive information that they can draw from if they are able.

Interview 1: Page 2, lines 11-19

> *"**MT**: I always talk to my clients. (**SR**: Mmhm) Even if I'm not sure whether they're going to understand. I think it's really important to let people know what they're doing. So, but for example I have a client who can, she's non-verbal, she's got cerebral palsy, she doesn't move much but I would say to her 'look we're going to play the piano now'... 'I'm going to give you a turn', or sing 'it's your turn to play', 'it's my turn to play', 'Can I hear your sound', um, oh 'Listen to my sound' so it gives plenty of opportunity for a response, so I'll know that they are communicating, or that they understand by whether they make an effort to do what- ever I've asked them to do."*

Interview 2: Page 2, lines 11-19

> *"**MT**: I think just really, really simplify things. Take away lots of the extra things that you might do and just maybe focus on one sound. (**SR**: Yeah) You know maybe your voice and singing, maybe playing a drum, sharing a drum together but not having too many layers of sound or too complex a structure or taking away the words so that you haven't got speech or lyric's as well as the musical sound just try to concentrate on one thing at a time."*

Interview 3: Page 9, lines 9-12

*"MT: I found that you can never wait too long perhaps, that's quite a sweeping statement (**SR**: Mm) but, sometimes it's more like active waiting. I don't usually wait in complete silence although some people might choose to do that."*

Examples of actions taken were then compiled in to the following table:

What actions do they take?			
Awareness of space and time	**Expect a response**	**Reinforce Responses**	**Facilitate Success**
Processing times, allow space for assimilation and comprehension of an instruction. Repetitions of an instruction. Musical invitations. The use of silence Trying something in a different way	Invitation verbal / vocalised "Let's play the drum", show a picture of it (instrument), pointing to it, looking at it. beat it once or in rhythm with the vocalisation, repeat all 2,3 or 4 times Showing a picture of two or more instruments and allowing the child to indicate their preference.	Keep providing verbalised (sung) input even when unsure of the client's receptive intelligence / language. Reflect or mirror the input a clients gives, validating and their actions and showing them they are important. Also use what a client already has, if they have a particular movement or sound, incorporate that into a song or their playing.	Expect reaction within client's capabilities. Keep it simple, using familiar songs maybe only using the tune or just one or two lines of the song repeated. Review notes and video footage to keep in line with goals set and clarify that goals are relevant.

Table 2: What actions do they take?

Therapy as a Process

Finally, the music therapists talked about the importance of time, and patience. They learned about the children they worked with over time. In the interviews they touched on ideas such as clarification of theories, intuition and experience.

Interview 3: Page 4, lines 8-12

*"**MT**: I just had a sense of, you know looking at the big picture with her and of course working with her for many, many months (**SR**: Yep) and I just had the sense that she was able to receive that, receive what I was giving her like say with singing to her, we'd use familiar songs like say the Hello song or Goodbye song always the same ones and I believe that she did grow to recognise those songs."*

Essentially this RMT was talking about how intuition could be the product of thorough observations and experience, whether that is through experience with this population or with a particular client.

Interview 2: Page 9-10, lines 25-3

"MT: ...there are a lot of ways that you can do things right and not very many ways that are completely wrong, I mean some may be more effective than others but you don't necessarily know until you've got the benefit of hindsight of working with a child for a while."

Interview 1: Page 4, lines 10-14

"MT: ...it wouldn't matter how long you've known the client or how well you know the client you don't always get it right. (SR: No, sure). So for the client that becomes a point of reference that you can both kind of go 'Oh…okay so last week this happened but this week we're gonna do this.'"

The following table presents findings with regard to this theme.

What have they come to understand when working musically with this client group?		
<u>It takes time</u>	**<u>Share Information</u>**	**<u>Other Comments</u>**
Build a relationship with individuals and learn what their behaviours might mean rather than jumping to conclusions that fit with a certain diagnosis. When working with someone for many months you can get "a sense of the big picture." and have "the benefit of hindsight". Over time it becomes easier to recognise the very subtle communications, and develop an understanding of a client's basic functions such as breathing rate. Also, when presented with a certain action or communication, recognising that it may not be as it seems. Time enables the flexibility to realise that things won't always be the same on a weekly basis. Always have expectations based on the client's capabilities and the extension of these. A child with more complex needs can mean a longer time is needed to establish a relationship and may take longer to formulate goals.	Clarify own wonderings with other professionals, teachers, carers and where possible the client. Seek information from teachers or parents / caregivers about the clients. With clients who are medically fragile or have behavioural issues a quick overview of their mood-state before each session may be necessary. It's important to recognise outside influences on client behaviours.	A child with very limited communicative skills may be able to track sound. Many different "hooks" may be needed to reinforce a communication.

Table 3: What have they come to understand when working musically with this client group?

Goal Setting and Record Keeping

As a data tool RMT's advised that concise notes should be kept in order to understand how the work is progressing. In writing notes the RMT's all talked about the goal setting process, having specific and realistic goals. Goals have to be flexible as well as reviewable, including anything that is "new or different" and specific reactions to musical content should be detailed. When beginning with a new client a greater volume of more specific information would be likely whereas more generalised information may become more appropriate as time passes.

Physiological Measures

Music therapists also talked about using physiological measures to determine a student's response, but the types of observation they mentioned seemed beyond the bounds of 'usual clinical practice'. For example, analysing pupil dilation as a response to music and Rhythmic Entrainment were mentioned. Observing the breathing rate of a severely disabled child to ascertain whether music was having any affect on levels of agitation or show an increase in animation was something that I had explored with some children before this study began. I had reached the conclusion that with these children their health dictated their breathing rate and any musical intervention had, in these cases, minimal if any effect.

Research Journal Entry 11.09.08: *Even in undertaking the research process where adults of 'normal ability' were discussing a common theme of their profession, in the interview process we experienced moments of confusion or uncertainty in the conversation. From my point of view I wondered if I had given sufficient information for*

my questions. Had I allowed enough time for them to think about the question before thinking that I needed to ask again or try a different way? There was one instance that sticks out to me now where one of the RMT's came to the end of her commentary and after a short pause she asked if she was on the right track. I suppose the pause may have made her think that I was confused as to her answer, but I was simply writing something down but she couldn't see this. As the interviews took place by phone we had no use of visual aide to check each other's body-language and this definitely changed our communication.

Summary

With the information from my interviews presented in this table form I was able to formulate three focus goals for the initial AR cycle. The table was also used in subsequent cycles after reviewing the video footage to create focus goals for cycle 2 and then 3.

The focus goals for cycle one were:

1. Musical structure
2. Waiting / active waiting with expectation.
3. Observation.

A more detailed description for each goal is given in the following pages for phase 2.

Phase 2: Video Findings

Nine video descriptions are presented here along with excerpts from a personal research diary and supporting clinical notes entries. In this section I will introduce the reader to the six children whose parents / guardians gave permission for their children's data to be used in the study. Although the research concerns my own techniques and practices and how I discovered flaws and strengths in my ability to recognise aspects of communication, it is essential to provide some information regarding the children, their syndromes and how they are affected by them in order to present a well rounded picture of how I chose to work with them, why certain goals were necessary and how sessions progressed to achieve or maintain those goals.

Cycle 1

Focus areas chosen for cycle one were:

1. Musical structure. Starting from a place of familiarity creates stability for both client and clinician/researcher. This would include creating a predictable session structure involving pre-composed and new/improvised music.

2. Waiting / active waiting with expectation. To pause (following an instruction or musical invitation) allowing a client sufficient time to absorb the request or information given and work out any response they wish to offer. This should be balanced with repetition or different presentation of the instruction, or sympathetically moving on if the time elapsed becomes more than is comfortable for the client.

3. Observation. Close observation of clients movements, vocalisations and discovering any consistencies or patterns were key to understanding how they attempted to communicate with me in a Music Therapy environment. This would be an ongoing goal over the 12 week data collection period.

*Even with these focus points I still worked towards recognising and implementing other points from the table but to write about each point was beyond the scope of this thesis.

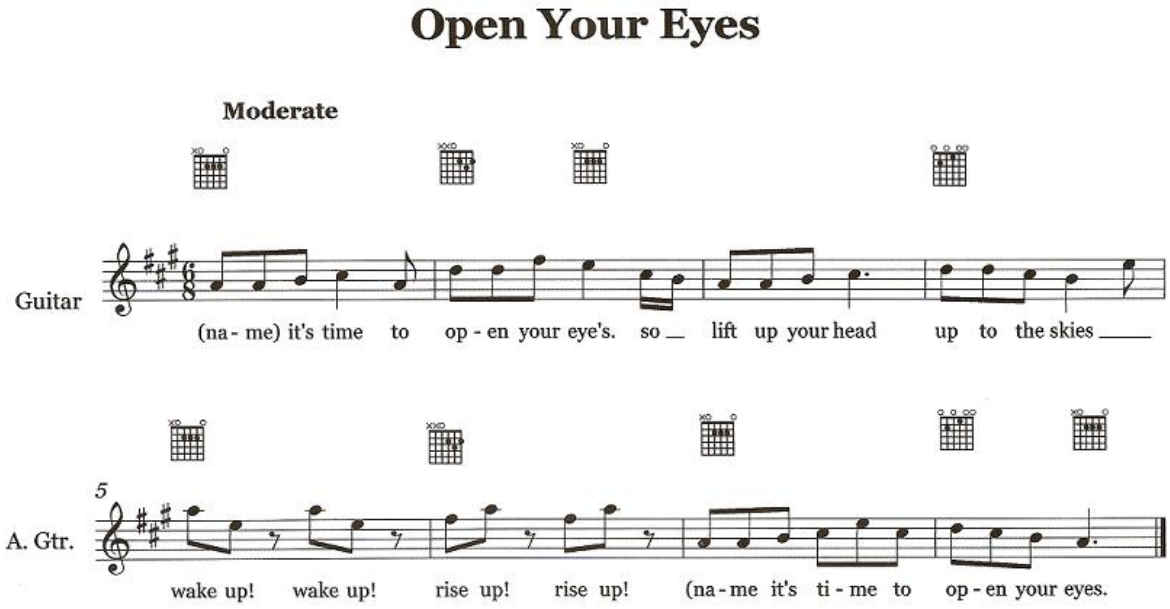
Three extracts from Cycle One.

Research Journal entry: *"focus on waiting", I know that waiting or allowing time or space for my clients to cognitively process information is important. With two of the children I work with I have had little indication of what their processing time may be and have spent a lot of time trying different activities looking for subtle responses, but I feel so often like I am singing at them or sitting waiting for something that might never happen. I mostly feel, not uncomfortable but not at ease either waiting with the two girls and often move on, I'm sure, too quickly. Jade's sessions in particular, sometimes seem to crawl by and I am compelled to fill sessions with more than is necessary so it feels like something is happening…"*

This diary excerpt is one of the initial entries and expresses some typical feelings with this and other children I worked with.

Description 1: The following video description is from the first week with Jade, a 10 year old female with quadriplegic Cerebral Palsy. She has no observable purposeful movement and very little reactionary movement, relies on a teacher's aide for every aspect of her daily cares at school and is peg fed. She also has Cortical Visual Impairment (CVI) and information given me by the head teacher reported that in visual testing Jade has been reactive to light stimuli but as she has no communicative tools there is no exact understanding of what Jade can and cannot see. It is important to note in the following excerpt I mention that Jade 'looks' towards me. It is most likely that she cannot see me but may be seeking the direction of sound origin in looking towards me. This first excerpt explores the focus on waiting. I had thought this would be an easy task to manage but as shown in the following excerpt my thoughts of how long 'waiting' should be and the reality of how much time I was allowing, were at odds.

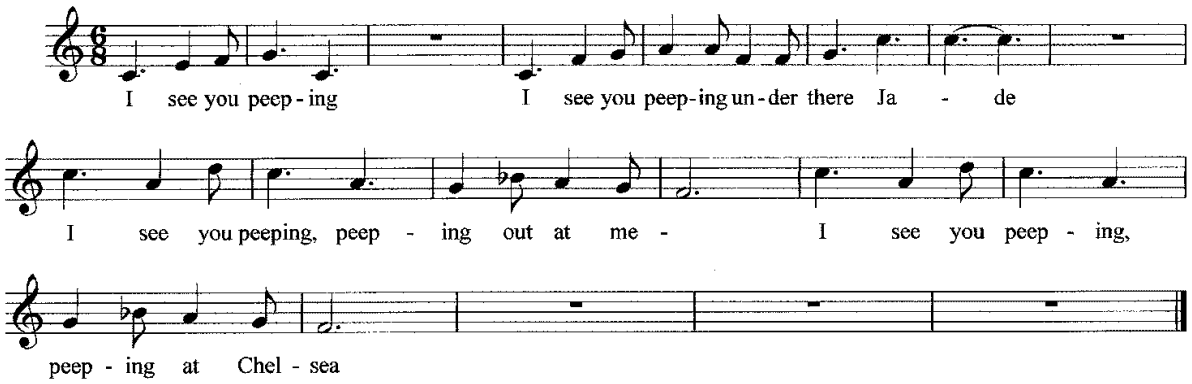
Video: *The moment described is taken from the first week of the first cycle of research and highlighted how my perception of time in the moment is very different from reality. It is taken from the beginning of the session and I had been singing the following "wake up" song as Jade had her eyes closed though every now and then would peep out in my direction.*



Savaiinaea 2008

I began the song with the guitar, and then discarded it so that I had use of my hands to support Jade's arms. The palms of her hands were supine and I supported them in my own hands allowing the weight of both her hands create the down and the 4 beat on her thighs then supported her right hand to tap out the 2,3 and 5,6 beats. To the phrase 'wake-up, wake-up, rise up, rise up' I began to slowly lift her hands up to her face, eventually resting them over her eyes and sang 'Jade it's time…'at which point her head moved slightly from mid-line to the right possibly in an attempt to get her face away from her hands. Her hands were then lowered from her eyes at 'to open your eyes'. I replaced her hands upon her knees and closely observed Jade.

From time marking 2:25 – 2:43 we sat in silence as I watched Jade to see if there were any signs of reaction. It felt as though I had been silent for about a minute but in fact it was less than 20 seconds. I continued to observe Jade's eyes' to see if the silence caused her to look for me. It was quite difficult to see on the video but I was aware at the time that her eye-lids were very slightly open and her eyes occasionally moving to the right. A magnified view of this footage revealed presumption to be correct and I could see her eye-lid slightly parted and the colour of her eye sliding to the left where I was sitting. She peeped out again and I broke the silence by singing:



Improvised 2008

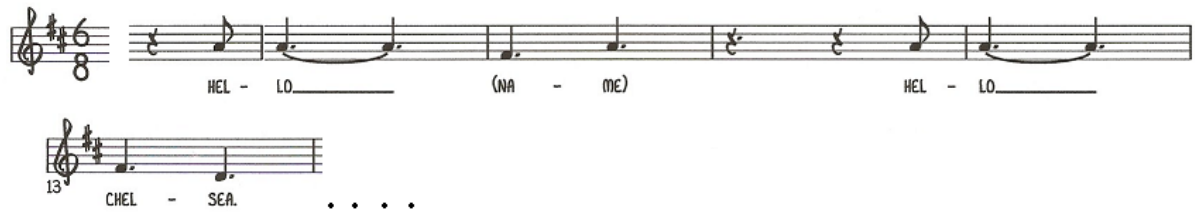
This appeared to be a good example of waiting but within the recorded part of the session it stood alone. There were pauses of 3-5 seconds but there were also plenty more opportunities for me to allow space for Jade to absorb and have some reaction to the activities of the session.

> **Clinical Notes (CN):** *Therapist comment – Pre-session Jade's teacher's aide joked with Jade and myself that it was time to wake up and do some work. I asked her (the TA) if Jade was generally tired today and she replied 'Umm, I don't think so, I think she's just being stubborn.' This comment made me wonder if today was going to be a challenging session but Jade was almost playing a game with me during the beginning of the session.*

The personal goals set included moving through sessions at a pace the child could cope with and not introducing too many ideas in a session. This would allow me time to really understand if an activity was working or not, what was right or what needed adjusting within activities to make them more effective. Putting this into action meant that with certain clients I would be doing a maximum of four activities in the 30minute sessions, including the greeting and goodbye songs. Within those four activities there was certainly room for travelling, for example, if a reaction or movement occurred during the greeting song we/I might improvise around that occurrence. This was important to allow time to follow the child, while ensuring that sessions didn't become stagnant for me as well as the child.

Description 2: 10 year old Joe is a male client with Autistic Spectrum Disorder (ASD) who is motivated by music. He is quick to learn new material and he likes to share songs that are familiar to him though it can be difficult to recognise the song he is singing due to his poor oral-motor development. His speech is mostly approximations of words with almost no consonant sounds. I have chosen to look at this moment a little differently from the first describing the final phrase of our greeting song which Joe and I sung four times through. We did the song twice without the guitar and then twice using the guitar. Joe liked to jump around during the greeting song as the movement provides the proprioceptive input that he seeks, helps me to begin the session by observing how I might meet his needs and join him in his rhythm. Joe has an unusual gait and can lose his centre of balance when jumping so I hold his hands which as well as stabilising him also helps create more eye-contact between us. I am also able to prompt him to stop on phrase endings.

There is a pause in the song where we shake hands and I sing my greeting to Joe then he is expected to reciprocate. When I sing my greeting to him he sings along but looks all around the room as if he wants to wander off, so I use the hand shake to help centre his focus back towards me. This is the phrase we sing each other.



adapted from greeting song used by school

Video: *Joe sang along with my greeting ("Hello Joe") then in his turn he sang the notes of the second phrase but instead of using my name he continued to use his own name singing hello Joe or "e-o O." I sang "Chelsea" to prompt him to use my name and he echoed this using his own approximation of the words, then we began the song again. Joe repeated the phrase as before and instead of correcting him vocally this time I moved my face more into his line of vision and silently pointed to myself with an expectant look on my face . He immediately repeated the gesture, but pointing to me, and sang his approximation of my name "e-o aw-i." The third time we arrived at this phrase I was sitting with the guitar and at the time I felt as if it was more difficult to gain his attention - but in the video it is evident that he is still focused on the task. He repeated his initial pattern once more but this time I made no vocal or gestural prompt but hold his hand firmly in the shake hold and try to gain eye-contact. It only took a second for him to turn, look to me and repeat his own name. So I pointed to myself again. He copied the gesture as before and sang my name but rising in pitch instead of falling. The final time through this phrase I paused, without meaning to, slightly longer than the times before and Joe sang the first greeting in time, "hello Joe." I quickly sang "hello…" pointing to myself*

and Joe sang my name in the descending pitch of the reply. I then followed him singing "hello Joe" and he echoed his name.

> **CN:** *Joe appeared to comprehend the gestures used in this exchange and employed the gesture in the correct manner with some prompting. He did not, however, understand the 'call and response' nature of the greeting. I searched his clinical notes to see if I had ever just sang the greeting song through as a whole several times before having the expectation that Joe would sing the response. The same greeting song was used every week during the group music session which he attended and would generally be sung to each of the seven students belonging to the group, but if adult attention was focused on the other children Joe would be unable to attend to an activity. As there is no clear notation about how this song was introduced to Joe I may have to go backwards a little to give him a better chance at being able to learn or understand (even if by rote) the expectation that one person sings the initial greeting and the other replies.*

This video excerpt has also led me to a possible goal for cycle two of the AR phase. To clarify for the children what is expected of them.

Description 3: Jack is an 8 year old boy with a dual diagnosis of Down Syndrome and Autistic Spectrum Disorder. His communication tools include limited Makaton signs such as more, finished, open, computer, goodbye, and actions that occur in songs such as 'Wheels on the Bus' or 'Incy Wincy Spider' etc. The only words Jack attempted in MT sessions were 'more, please' and 'bye-bye' but he used physical prompting by taking someone by the hand to an object he desired, if it was out of his

reach. In MT sessions he would follow very simple instructions, such as "please sit down" or "find the cymbal" only if he understood that I would play him a song he liked once he had complied. It was always a challenge to engage Jack for a full session without resorting to playing only the songs that fed his Autistic tendencies. He enjoyed the animated response he received when he attempted to hurt someone, even when he got very little in terms of response he knew that he was doing something wrong (this behaviour was well known in the classroom and was being addressed from many angles). If I used unfamiliar music or even improvised around familiar tunes his behaviour would quickly turn destructive and he would try to leave or physically attack me or the instruments in the room until I either let him leave or played music he enjoyed.

Video*:* *I began by verbally preparing Jack, "Are you ready?" I then picked up the guitar and sang "here's the guitar". Meanwhile Jack has begun to clap his hands on his knees which he does to prompt me to begin the greeting song. I took an audible breath in with upward upper body movement to visually cue the beginning of the song and simultaneously gained his eye contact. As I sang part of the first word, "Hel…." I held it momentarily to wait for him to join with the knee pat. He joined in with two strong beats against his knees and then looked away to his right (possibly at the finger-board of guitar) and half-heartedly tapped his fingers on his knees. I matched the amount of energy he was using by singing quietly with a breathy tone for "it's good to see you…" He recognised the drop in energy level almost immediately and made direct eye-contact with me and patted his knees with more energy as if to say "get on with it!" I rewarded this by animating my face, smiling, and matched my vocal energy, volume and speed with his beat. He finished a beat ahead of me in anticipation of shaking my hand. I kept quite still so that he had to initiate shaking my hand.*

CN: *I believe Jack views me as a sort of personal stereo that will play all the tunes he knows for 30 minutes without having to engage anymore than in a listening capacity. Even when I play the songs he enjoys his attention turns inward and he becomes intently focused on his hands, the collar of his shirt or simply lies face down on the floor shutting out all other stimuli. I need Jack to realise that he can directly affect the music in his sessions in a positive way.*

Cycle 2

Focus areas chosen for cycle two were:

1. Do I, or how do I manage musical invitation? To ensure the balanced use of sound and silence; musically instruct with use of visual support.

2. Visual stimulation. Conveying the right amount of visual stimulation – as in pictures, brightly coloured instruments and self animation. Too much animation may over stimulate a client and too little could result in loss of interest or boredom.

3. To clarify expectations to the children. As in the last cycle I identified this as an area of weakness. Although the expected reaction may have been within a clients abilities the knowledge may not have been properly imparted.

Research Journal entry: *Midway through the process now and generally feeling positive about steps taken. Whether we achieve limited success or even have to take a step backwards, the processes are there and I can think about how to use a different or varied approach. I have been thinking about how I animate myself in session and although I feel this is mostly instinctual I do think with certain students this might not be ideal. With Jade I think I am under animating, unconsciously thinking that as she has limited visual ability there is less need to do this. Consciously I am fully aware that my physical actions affect the quality and liveliness in my voice and the animation can reach her auditory sense. In the opposite direction are two of the boys, too much animation can over stimulate them and heighten their arousal. James will begin to rock excitedly to a rhythm and his focus becomes intense, his arms contract into his chest and the exertion shows physically when he finally relaxes.*

Three extracts from Cycle Two.

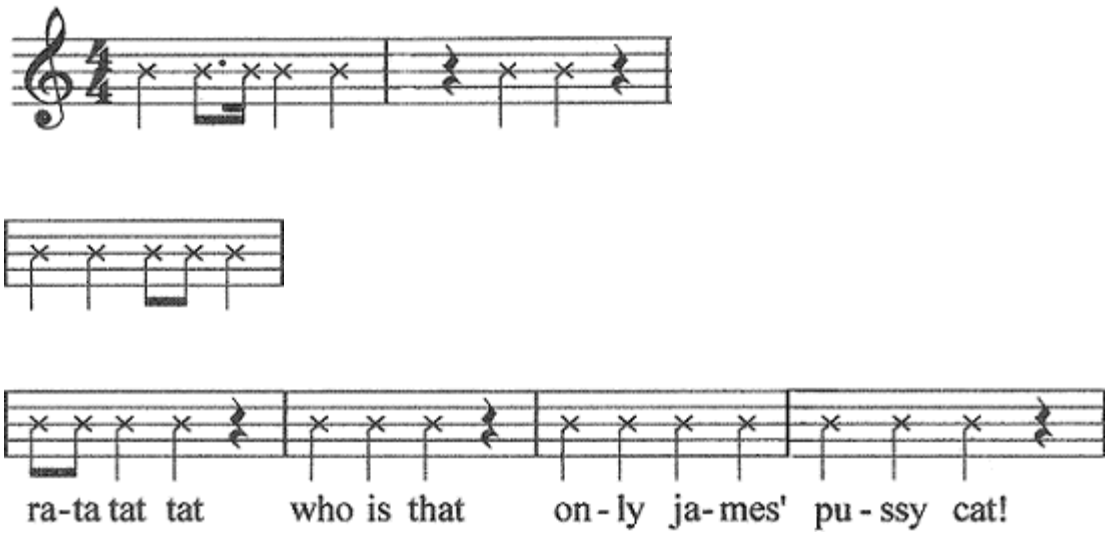
Description 4: Jane is a 9 year old girl with 13q- a rare chromosomal disorder where part of the chromosome is missing. She has mildly dismorphic features, learning delays and behavioural issues, and has a hearing impairment though she benefits from the use of hearing aids. At the beginning of the year the teacher informed me that Jane was showing interest in communicating with speech as the rest of her class peers did but became frustrated easily when she could not make herself understood which happened often. Much of the first half of the year was spent working on behavioural issues such as expressing emotions in an acceptable manner, dealing with frustration and consequent anger and helping Jane comply with the tasks set out for her. Once her behaviour was more settled we were able to work on communicative devices for Jane. We worked on letter recognition and drawing using the alphabet song and other familiar songs to improve her articulation.

We had made up a hand-clap sequence together. This was something that Jane always tried to introduce but usually ended in a confused heap as neither of us knew the 'rules'. So over time we developed our own using some of the word-sounds Jane used with some favourite real words and also movement descriptive words: "O.K. O.K. Going swish, swish, swish. Going up, going down, going up, up, up, Hooray! Me-o-wah. Ju-ju-bah, Ju-ju-bah and finish." Once this was learnt, and we had lots of fun getting it wrong, other language could be used around the activity. Such as "I want fast/slow/loud/quiet" or a combination of two of these and the instruction would always be accompanied by sign language which I had to learn from Jane, her support workers and her Itinerant Teacher of the Deaf (ITD). As Jane was still in the early stages of learning and incorporating sign language into her daily life this was manageable for me.

Video: *Jane and I sat on chairs close together facing each other. We finished the hand-clap activity once at a regular pace about 96 crotchet beats per minute, paused for a moment then without warning Jane launched into a version almost twice that fast. I sat, surprised, for a moment and then asked her verbally and clearly signed "Do you want fast?" She repeated the sign and whispered fast, I repeated the sign and then she nodded and said aloud "Okay." I had my forearms resting on my legs and raised my hand only slightly to point at Jane and said "You say it," then pointed to myself and paused there with my mouth in the shape of the word 'I'. Slowly and deliberately Jane then made the signs and speaking clearly said "I want fast!" After completing that one Jane laughed and wiped her hand across her brow and I mirrored her action adding "phew, that was fast" again using the sign for fast. Jane copied the sign and added "ah-wi ah" signing 'hurry up' and added a dance like movement with her hands. I almost went to copy her movement but stopped myself and watching it back I can't quite remember why I did that, but Jane took that almost movement and extended it into starting the hand-clap over again very slowly. Quietly I spoke "Say, I want…" I made the signs for this but below her eye line and I am fairly sure she did not see this but she began to sign and speak "I want… fast, slow." I turned my head to the right and raised an eyebrow to indicate that I wasn't sure what she was asking and Jane repeated "slow" with sign. I nodded and repeated "slow" to show her that I understood and we began the activity once more.*

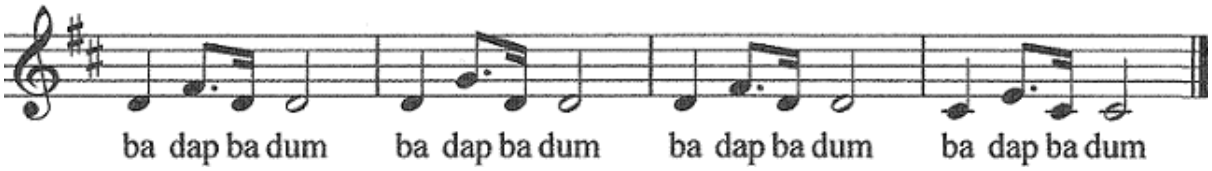
CN: *Ensure that the visual cues used with Jane are carried out in the line of sight and well balanced with verbal cues (don't be too wordy). There have recently been moments of great confusion in her sessions and this is usually when I employ too much spoken word or instruction. I have sometimes tried to explain 'why' to Jane but when the explanation is done it is clear she has not understood.*

Description 5: James is a 9 year old boy with Cerebral Palsy most prominent in his left arm and hand though all limbs are affected. James requires a wheel-chair for transport, and he has a few weight bearing activities as part of his physical therapy programme. He has some recognisable words but generally poor speech. He will sometimes speak in a conversational tone but his meaning is unintelligible. In music, if I am unable to decipher the words that he sings, I am able to recognise songs initiated by James by the rhythm and pitching of his voice. He is very highly motivated by music, partly I think because he can be understood and he is talented when it comes to simple rhythms like:



He can copy new simple rhythms on a drum or by beating his hand on his legs almost immediately using his right hand. If the rhythm is too quick for him to coordinate his hand movement then he will vocalise it using 'Da-da-da' sounds. Earlier in the session we had been using the guitar for the greeting song and then carried on into 'In the Jungle' to promote gross arm movement and finer finger movement in both arms.

Video: *I was holding the instrument and providing the chords while James strummed it, mostly with his right hand as he has most control of coordination in this hand. Then we moved from singing the lyrics to singing a rhythm:*



In his enthusiasm for the activity he would move his whole upper body in a rocking motion to the beat but the muscle contraction would also make him draw his hands in towards his body. I looked around (continuing to sing) for an instrument that he could use with his hands to carry on the activity. As I stood to get the cabassa James followed my movement and looked at the cabassa when I shook it then lay it in his lap. I began the four bar phrase again with the guitar and James stared at the instrument. On the third bar of the phrase I picked up the cabassa and shook it and James smiled and partially reached his right hand for it and said "Ready?" I had to place it into his grasp and had it upside down so that the beaded part of the instrument was pointing down towards his leg. James used it like a shaker so that it sounded on each beat but stopped just short of the four bar phrase completion. I changed it around in his hand so that it now faced upwards, and sang 'Turn it around in your hand' and brought his left hand forward so that he could run the cabassa over it with his right hand. I sang 'and we'll go...' then began singing the phrase while sliding the cabassa back and forth over his left hand. He began smiling at this but I needed to put the guitar down so it wouldn't fall. As I let go of his hands he raised both his hands chest height but then he pouted his lips and attempted to explore the cabassa touching it to his mouth. I redirected him back to the action of sliding the instrument over his left hand and he began to slump over in his chair so on the

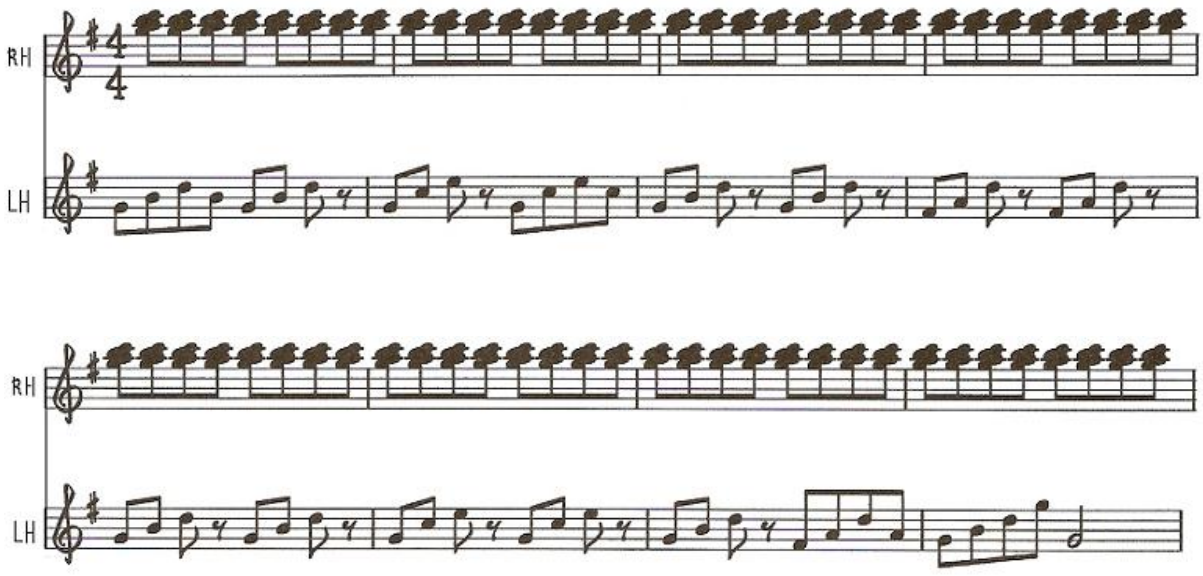
last bar of the phrase I sang 'sit-ting up' which he managed by himself. Finally I placed my hand under the cabassa in order to play together with him. James tried to let go of it, I pushed upwards so that it stayed in his hand. The next few times through the phrase James banged the cabassa on to my hand creating the sharp click sound and then we both drew our hands away from each other to create the rolling bead sound and at one point James also joined in singing the tune which we had done for the first time today.

We made some other rhythmic changes and added other elements to the activity but I was surprised that he managed to hold the cabassa for around four minutes. The instrument is difficult for him to hold, and James demonstrated good stamina - he can get physically tired or frustrated and drop or throw an instrument only a few seconds after receiving it.

> **CN**: *The invitation to play the cabassa was a little haphazard. Although the instrument is familiar to him we haven't used in the context of this song. We jointly found a successful way of playing the cabassa but it will be necessary to start with this instrument as we ended with it today to give him lots of experience at playing the cabassa successfully.*

Description 6: Once again with Joe, the child with ASD in description two, this piece highlights the idea of expecting a response that is within the capabilities of the child. The response I was expecting was that he would ask to repeat the activity by asking "more please" while also using the Makaton signs. He had successfully managed this in two previous sessions using the drum while I accompanied him with the guitar, but I wondered if he would be able to transfer the challenge to using a different instrument.

We began the activity before the video camera had been started and we were using the keyboard with Joe playing the right hand while I supported him with arpeggios in the left.



Joint improvisation 'Joe' and Chelsea

I slowed the last few bars of the piece to emphasis the ending but Joe appeared lost in the sounds, or the repetitive movement, and carried on playing for about another bar before looking at me. He seemed to falter a little but carried on playing until I said and indicated stop. I sat there for perhaps 10 seconds waiting to see if he would ask for more without any prompting but he started again on the same cluster of notes as before, so I held my hand up and said "Stop. We're finished now." He became upset, his voice became whiney and he persevered in playing his notes. I firmly used the 'wait' sign and vocal command and his noise subsided. I held his eye-contact and when he had calmed a little I asked him "Joe would you like *more* playing the piano?" He immediately repeated "more" and used an approximation of the sign. I used the sign for 'please' to remind him of the niceties and he signed it with one finger on his chin and said "eee." I turned the camera on and we continued.

Video: *When the camera was turned on I said "Sorry buddy," as I had interrupted the flow of our session slightly, then I said "Ready…" and Joe followed with "e-i… o!" and we began playing again. Three times during our piece I looked at him. The first time he was watching the keyboard both he and I were playing. The second time he returned eye contact. The third time he turned as I looked away and around the room looking from the door on his left to the window in front and to the right of him, but carried on playing. He looked back at the keyboard for about six notes then turned his head from side to side closing his eyes. We finished the piece while he was doing this and it may have been my holding the final note that caused Joe to open his eyes but I had to whisper "stop" before he stopped playing and echoed "op" leaving his right hand resting on the keys. I had less than five seconds to wait before he requested "o-ma, eee" and put his left hand to his chest and began playing with his right. I knew he could ask much clearer than that. I made the 'mmm' sound but Joe repeated his first attempt twice more. I moved my head up slightly so he was looking and slowly said "Mmmooore" and he articulated the word beautifully adding "eee" to it. I said okay and we returned to the keyboard beginning in the same manner as before.*

CN: *Joe's ability to self-regulate is improving. I am careful to be specific with my intentions and instructions I give to Joe. His receptive language skills appear quite good but he does not appear to retain information for very long. In his speech he manages to get by using close approximations of words and I feel he has the potential to be much clearer. He now easily makes the 'M' sound when prompted and it would be a relatively small step to the other closed lip consonants.*

Cycle 3

Focus areas chosen for cycle three were:

1. Checking with others / information sharing. It had become apparent that I was missing important information pre-session and also it was important for me to share some things that were happening in sessions.

2. Knowing the client. I was at a stage where I could rely on my general understanding of each child to know what was important in observing them while still accepting that they may act outside of my knowledge of them.

3. Back to basics OR Keeping it simple. At this point in the year it was important to start thinking about ending therapy for the children and checking and consolidating the basics felt a good way to bring about the close of sessions.

Research Journal Entry: *The goals I'm thinking about for this last cycle are coming from two points, one of which I hadn't really considered as belonging to the research. Firstly, as with other cycles, the goals have come out of the work of the previous cycle. Secondly it is nearly time to leave these children and I have had to factor this in at the eleventh hour. I am a little concerned about 'finishing' music therapy and how to manage that. Mostly the focus is on the end of the school year and the holiday ahead and that feels quite natural. I plan to tell each of the children that this is my fourth-to, third-to, second-to and last session with them. This too feels natural.*

Three extracts from Cycle Three.

Description 7: Jill is a 12 year old female with Rett Syndrome. She uses a wheel-chair consistently during the day, has chorea type movements and no purposeful speech but will sometimes offer vocalised sounds. She is reliant on others for all her daily cares. Jill displays a lot of hand wringing, a familiar trait of Rett's, and also tries to mouth her hands, so when she is not in one-to-one support she wears mittens to protect her skin. There has been a general regression of her physical movement during her school years and as this is a feature of Rett's, this is expected to continue. Therefore Music Therapy goals support her physical-therapy goals to help prolong movement in her upper limbs using instruments that are of interest to Jill. Goals are also health based as she has a lot of medical complications from bowel problems, sometimes the most important goal for her music therapy sessions is to try and provide some distraction and relaxation for her. It was always a challenge to get Jill to play an instrument as often she would draw her hands away as soon as they were placed on a drum, guitar or keyboard or any hand-held instrument placed in her lap. Almost as soon as she knows it is there, by simply sensing the weight in her lap, her hands would come up to chest height or she would put them out to the side. Yet she would almost always take my hand if I offered it, or happily hold my wrist. I tested the warmth of instruments and used differently textured rattles, such as seeds and beads or soft toys with a shaker in and sometimes Jill would explore the feel of an instrument for a short while and then her hands would deliberately move away from it. Before this excerpt began I was using the drum then the guitar for around 12 minutes with a few seconds of success in having Jill play them independently. There is also a child yelling in a high pitched excited manner outside our room which I believe Jill is aware of because her self-stimulation which can be indicative of her increasing anxiety, increases.

Video: *As I put the guitar aside Jill pulled her hands away to either side of her body. I commented on the noise outside the room, singing "It's not nice to hear the noise outside, but it's there." I reached forward and placed my hands under her elbows to guide her hands back towards her midline, as I did this she lifted the backs of her hands to her forehead which is a usual movement for her. I carried on my sung commentary while holding her hands and gently applying pressure with my fingers. "Squeeze, let go. Squeeze let go." At this point Jill pulled her left hand away to engage in another facial stimulation sliding the side of her index finger back and forth below her cheek bone and under her nose. I retook control of her hand and she yawned widely. I wondered if she was becoming tired or perhaps relaxing slightly and reflected upon this in my singing to her and even yawned myself. Jill began to make a strong throat sound like a door creaking by holding her breath and letting very little air through her vocal chords. I breathed out heavily to encourage her do the same (this has worked sometimes) she held it for four more seconds then let the remainder of her breath out. Breath-holding too, is a feature of Rett's Syndrome. I continued singing about the noise outside and began to lift and beat her hands on top of her thighs rhythmically when another child peered over the window and opened the door. I held up one hand in a STOP position and he moved back from the open door and then came forward to close it. Jill showed no indication that she was aware the interruption had occurred, but I sang about it in the next few phrases in case she had, using the child's name and singing he'd tried to come in and asking "did you hear him over there? He tried to come in over there…Trying to come in to your room." I was now beating her left hand on top of her right and observing whether she might carry on the movement unaided. I changed to using her left hand to clap with mine and as I did this she made the strong throat sound again then began breathing audibly with irregular pattern. I sat up quietly listening to see if it was going to bring about any*

change in her behaviour but there was none so I returned to clapping her hands with mine carrying on for another minute repeating some of the actions we had done.

For a little over three minutes Jill had sat with her hands in mine, still affected by her involuntary movements but not trying to pull away, and when I reintroduced the guitar for our 'goodbye' song she was able to be guided to play along for a further minute without returning to an agitated state.

> **CN:** *Even though I had worked with Jill for nearly a full school year it was still difficult to consistently interpret her actions. I do feel able to assess when she is distressed or anxious. Today when there was something happening outside the music therapy room, putting aside the instruments and using physical contact as well as calming tones and rhythms, whilst still acknowledging the noise outside, really provided reassurance and led to Jill being much more relaxed in the session. I also wonder if the strong throat sound that she uses is a way of self-regulating when she is becoming overwhelmed or anxious and I would like to check this with the TA's that work with her and, if possible, whether her family may have noticed this at home.*

Description 8: At this stage of the research process and the year, 8 year old Jack (with Downs and ASD) is much easier to contain. I have learnt to balance new or evolved and improvised music with the familiar pre-composed songs than Jack demands. Nearing the end of cycle one I introduced a book of songs with picture representations. It was used at first as a reward then, as the need for a reward reduced, it was used as an activity near the end of his sessions. The book held all of the familiar songs (Wheels on the bus, Row your boat, Old MacDonald etc) Jack preferred and, as I used it with other a

children, a few songs with which he was less familiar that were depicted with colourful representative pictures. Changing or extemporising music that is familiar to Jack was an ongoing challenge. I would often try to change lyrics, actions or melody in subtle ways. If it the changes were very subtle this was usually okay with Jack, but if I tried to 'Rock' instead of 'Row the boat' or add animals like snakes to Old MacDonald's Farm he would lose interest almost instantly. What was encouraging was that by the third and final cycle we were managing to include some instrument playing in his sessions. In the beginning if I waited for Jack to help me play the guitar (his favourite instrument) he would either use my hand to play it become distressed and his behaviour inappropriate. While this still occurred, it was no longer the 'norm' and he could be encouraged to play instruments both in a shared manner and independently. He had even initiated this a few times.

This piece of video also highlighted to me how much more vocal he had become in later sessions.

Video: *I played / sang the first phrase of Incy Wincy Spider then stopped playing and waited a few seconds. I then gestured to Jack sitting in front of me then motioned back to the guitar. I repeated the gesture adding a strum of the guitar then pointed back to him. Then I put the guitar slightly closer to him and it took less than four seconds for him to reach over to pick at the higher strings with his right hand. As soon as he made to move for the guitar I began to sing from the beginning. He leaned back as I sang "...climbed" so I paused and he immediately started again with his left hand. We made it to the word spout before he paused again and then became a little fixated on the high E string, so I strummed again for him. We finished the rest of the song as Jack picked out a few random notes on the guitar. At the end he withdrew his hands so after a short pause I began the song again. This time he stopped twice, very briefly, to play with the collar of his polo-fleece but carried on if I paused in the singing at all. When we finished I praised*

him verbally, but he immediately went to my basket of instruments anticipating the next activity. I had to firm up my voice and stop him as I had a different activity planned first, and he listened to the verbal command. "We'll have the book now, book please." Jack immediately repeated the signs and made his approximation of 'book'. I reached for the book and said "Good boy, Book." and again he repeated the sign and word. We moved on to this activity where he chose the songs by their pictures, still including him in playing the guitar.

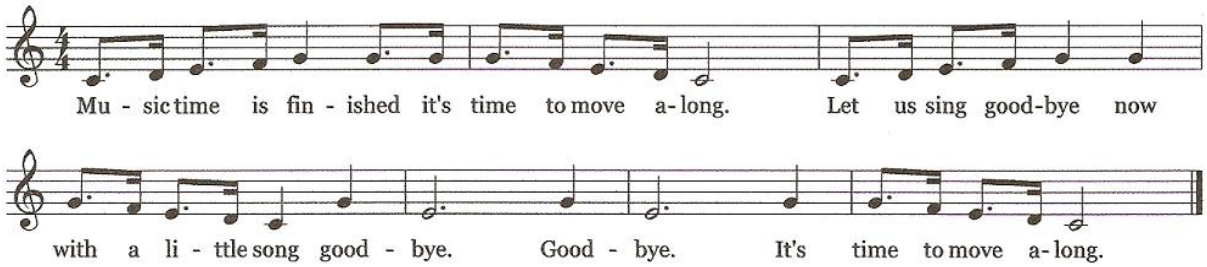
> **CN:** *I realised today how much Jack's inappropriate behaviours have reduced. When he is given clear guidelines and we stick to activities he expects then he rarely becomes distressed. I have been able to make very small changes to some songs that over time have become larger changes over all. I have also observed a few socially acceptable behaviours within the context of group music therapy when highly motivating activities have been used.*

Description 9: This is a very short moment recorded at the end of Jane's session. I purposely turned the video on because her behaviour had become a challenge and I thought my interaction with her would be helpful to include in my research. Jane's session time had been changed once at the end of cycle two and once again near the beginning of cycle three where it was set at 9am. This was to accommodate a change in her mainstream class schedule so she didn't have to miss out an activity that she enjoyed. I hypothesised that it was the change that brought about a regression in her behaviours.

I have tried to wrap up an activity so that we can sing the goodbye song as the allotted time is nearly up. Jane is intent on continuing the activity and as the video is turned on she is marching around the room and singing.

Video: *I sat down with the guitar and began to play the goodbye song.*

Move Along



Christine Archer

After singing the first word Jane growls at me and signs "PLEASE!" I stopped singing and focused her attention back to me saying and signing "Jane. Jane, looking, it's time to stop." Jane nodded but then continued marching away from me. "It's Bill's turn, or is it… no it's Bobby's turn now." Jane shook her head and said something which I took to mean "No, we keep going" as she pointed to me then at herself. I repeated that it was Bobby's turn and Jane continued to point at herself and seemed to disagree with me. I tried to emphasise "We have to finish" signing to us both and signing 'finish.' Jane walked back across the room and used a raised voice pointedly in general disagreement with my statement. I ignored this and said "Ready" and Jane followed with "…steady, Go." Simultaneously I began the goodbye song and Jane marched back to the door as I sang. She turned to me, then to the door, then cheekily looked back at me, put her hand on the door-handle waited a moment and then opened it as I was singing "Let us sing… (then changed words mid-song)… close the door!" She closed it but continued playing with the handle so I motioned and asked for her to come over by me. She eventually jumped closer to me and I took the crook of her arm to bring her closer and quietly requested she "listen". Jane said "two, three, Go!" and again began her own dance. I played softly and made a last attempt to catch her attention by waving and singing

goodbye but she was dancing to her own tune focused on her reflection in the door. I stopped playing put the guitar down and said "Okay, finished" and Jane left. This had backfired. Usually when I said that we were finished Jane would agree or even argue that we hadn't sung the goodbye song and it could be very difficult to get Jane to leave the room. So I was surprised, and looked a little annoyed. The whole moment took 87 seconds.

> **CN:** *Even when you know the child and their reactions you can still be surprised. As a suggestion for the next session if I needed Jane to finish on my terms, and having similar difficulties, put down the instrument take her hands and sing the last phrase of the song. Then open the door saying goodbye.*

Discussion

I will first discuss the merits of working in an Action Research model, and then bring together the interview and clinical findings. I will then discuss in more detail the outcomes of the findings section as well as the limitations of the research and close with how these findings could be used in future practice.

With AR it is as much about the process as the information gained from the findings. The intensive nature of the inquiry into own practice *makes* a clinician vividly aware of their actions, how those actions are made, why those actions are made and what purpose they seek to achieve and whether these process' achieve that purpose. In this study, I learnt about my work with each individual by critically analysing the video footage, the professional notes recorded and my own musing on the work. The Action Research process actually serves to make the researcher a better practitioner. The process of having to write journals and carrying out regular reviews of clinical notes with specific ideas or goals in mind, really focuses the attentions to the possibilities of why particular events are occurring. Similarly analysing the video footage and searching for meaningful moments made the researcher wonder what could be going on. Then the challenge is to reflect on those findings to find the reasons and come to understand why. Uncovering the findings enriched the practice and led to some very exciting subsequent sessions.

During training student MT's are presented with, and seek out, many case studies with a range of clients, across a variety of ages, needs, and abilities which all seem to indicate great positive change. The amount of time spent by the music therapist to reach these high points is not always acknowledged, and/or forgotten. The reality of student practice is that the assimilation of skills learned and applied in 'real' situations with each new person occurs at a much slower pace. This can often be frustrating for students who believe in the principals of music therapy but who have yet to observe the benefits it can bring in their own practice. Action Research uncovers those small steps and clearly

allows the student-clinician to see small improvements made steadily over time by both their clients and themselves. Rather than wondering what happened on a session by session basis we can see a 'bigger picture'. Analysing parts of each session over a four week cycle and then and comparing it to what occurred over a twelve week process allows the student-clinician to see the forward momentum and encourages them on. In this AR project there were many steps sideways and a few backwards but the overall picture created was one of improvement in the researcher techniques which was reflected in children reaching many of the goals set for them.

Careful consideration should be given as to the length of an AR project to make sure that the means justifies the end. The volume of data generated for this project was overwhelming and in future more careful consideration would be given to the amount of data collected and the way in which it would be analysed. A time frame of just six weeks could have generated enough data to understand how to improve practice. However, I will make the argument that the twelve week process allowed the research to be fully realised and strategies were well understood. I also believe that researching my clinical practice with six very different children allowed me to understand similarities, as well as subtle and more obvious differences in my responses to their varying needs and levels of functioning. In the planning stages of this research the idea of only taking ten minute clips of each child's session was almost worrying, what if nothing happened during those minutes.

Interview and clinical findings.

The interview findings were helpful for situating and reinforcing clinical findings. Some aspects of the interview findings were not explored as a focus goal but were still employed in thinking about many of the goals that were set for the students.

In particular the comment presented in the interview table under other comments '*many different "hooks" may be needed to reinforce a communication*' was a well used one. Sometimes the sensory processing systems a child possess may enable them to receive information one way and not another.

Interpretation of the comment should be considered carefully. If a child is unreceptive to one presentation of an activity then it is acceptable to try another but balance this with time allowed for processing. It may not be best to try different ways before the possibility of the initial "hook" has been exhausted. In this research there were sometimes too many hooks provided to one student involved in the study, and with students who cannot provide much in the way of reactionary clues to what motivates them there can be a tendency to over supply them with a range of activities rather than using just one and trying it one way for many weeks. In other examples involving more exuberant children the use of many hooks became a necessity to meet their demanding nature. Particularly with one student who frustrated easily if she couldn't 'get' something very quickly, there had to be many different ways of explaining and the more examples that were given her, gradually her understanding would increase. To begin with her sessions were packed with activity to gain her attention and slowly we were able to lengthen each activity by changing them, or adding to them, or improvising with them. As this continued, session structure was slowly handed back to her so that she was able to initiate activities and we moved in a direction that she led. It can often be a prerequisite that children's sessions are multimodal high energy presentations of music, dance and games with highly organised, goal driven learning aims.

One fault that was discovered post interviews was that I had no recorded video material to draw on to ascertain how clinical work met with the interview findings at the

beginning stage. Having previously made the decision to only start recording in the twelve week AR period there were only clinical notes to research at this stage.

Discussing the Findings.

Before the research began I had studied client notes kept at the school – which included medical, physical and speech language therapy information. I talked to teachers and paraprofessionals and in some cases spoke with children's family members to ascertain the different ways in which the children communicate. Alongside this information I created my own theories drawn on from music therapy observations and tested those theories.

The review of the data was two-fold. I needed to be aware of the goals set prior to each cycle and to search the video for evidence that I was working towards them, while also using the video footage to identify other areas for improvement for subsequent cycles.

This was an interesting process as I held the position of both clinician and researcher and moving between these roles and at times moulding them into one another was a challenging task. Besides the roles of researcher and 'student' music therapist with all the regular report keeping and notes for files, there were other roles and responsibilities, of being a wife and a mother managing regular travel across the bottom half of the North Island. Moving between personal roles required slightly less consideration than that of the professional roles.

Music therapists, and indeed clinicians in other therapies, may often take on dual roles in this way to conduct research in or around their clinical practice, particularly when

seeking to improve an aspect of their practice or in more general terms. Learning to move in and out of the data so that I was being an effective clinician and then step back enough to view it with 'fresh' eyes and gaining a different perspective was a learning curve that had to be undertaken on the job. The role of a researcher is traditionally one of an observer so that they are apart from the data but in this case I had to be immersed in the data because it was my actions under the microscope.

In another joining of roles, many of the music therapy articles, books and reports I have read, and certainly all the references in this study, discuss communication both as a goal and something that is used as a means to achieving that goal. Music is communication. When the goal cannot be realised as verbal responses or a form of sign the music therapist seeks to find what communication means to this individual.

Waiting: Is expectation the key to waiting? With four of the children there could be predictability to their actions. A clinician often has an idea of the response they are waiting for and know that if nothing happens within a certain time frame they can repeat an instruction or musical invitation and for the most part receive the response within their realm of expectations. With Jade and Jill it was always more difficult to make those predictions about possible responses until the therapist client-relationship was very well developed and a realisation of their capabilities had been made. A child with very limited responses is infinitely more difficult than working with a child who over responds and is climbing the walls. Working with children with a limited range of responses needs to be timed to them and the littlest things such as breathing rate, opening their eyes or lifting their head can be wondered about. If this is a voluntary movement then it has probably taken an extremely long period of thought and initiation on their part to achieve the movement, in which case the clinician has to be able to retrace their actions to what it was that caused them to decide to lift their heads or open their eyes. Jade opening her eyes or

Jill making a ‘ffff’ sound were their responses and they might have many different meanings assigned to those actions which were within the capabilities of the child. It was a very different experience working with these two girls compared to working with any of the other children and the use of Steen-Moller’s five levels of contact was helpful to return to in order to re-connect with their levels of responsiveness to the musical experiences provided.

Knowing what responses you can expect can be helpful when waiting for a child to respond. Repeating instructions, or producing a musical invitation are good places to start, but without knowing what to anticipate, it can be hard to know how long to wait. The clinician can worry about whether they have missed a response, and/or whether one is going to come at all. It might be easier to deal with students who offered a lot of responses, whether they seem positive or negative at the time, because it gives the clinician material to work with. The level of containment that students need varies. For example, one of the students in the study would have taken advantage of ‘space’ to distance himself from the therapeutic encounter and it was necessary to keep overtly inviting, encouraging, and challenging him to stay on task. On the other hand the clinician could be overwhelmed with responses and act in a different way deciding with the child which direction would be best to explore and which may be best left for the time being. In another example of a different student in the study, using the same or similar activities, the switch of roles from invitee to inviter could occur many times in the duration of a session, but the chop and change nature of the exchange may not always be beneficial. Again knowing the child and the nature of their responses is imperative to enhancing the goals set out for them.

Confidence: In each of the interviews RMT’s were asked how they managed when they believed they had inaccurately interpreted a student’s response. I remember

this question was, at the time, super important and I had hoped for the answer that this would not always happen, that there would come a time when experience would take over and I would no longer misinterpret communicative attempts. Now through the other side of this research I am less concerned that no definitive answer was given. Perhaps no definitive answer was necessary. Reflecting on the pause given immediately following the question by each of the RMT's, I felt the weight of those breaks in our conversation and wondered if I should somehow know better. But this was the student struggling to learn and know everything and all the great secrets. I have now come to learn what each RMT suggested in answering this question. We are fallible. We will from time to time misinterpret another's actions, but it is what we do with our retrospective coherence that counts. How we reflect and manage to move forward from that point is what gives us the confidence to come through those moments of uncertainty. It becomes a point of reference where child and clinician mutually realise that an activity used one session successfully may be completely different in the next session. There is no harm done. But a situation may become erroneous if a clinician persists with an agenda that does not suit the needs of that child. If one continued to play a cymbal because the goal equated to improved grip or freedom of movement in upper limbs, yet the child clearly rejects percussive noises it would be dangerous to pursue the goal using this method. However it may still be helpful at a later stage to check if an increased tolerance for percussion instruments could be gained. Also it is generally acknowledged that there are many ways in which music therapy clinicians can seek to address the needs of a client. As long as they are undertaken with care, forethought and close observation there are very few ways in which these actions will leave a lasting negative impact on clients. There will certainly be ways that prove more effective than others and this will differ from individual to

individual, but it is not always possible to know this until the client and clinician have worked together for some time and are able to have the benefit of hindsight.

Providing hand to hand contact with Jill at various intervals of her session helped to reduce agitated behaviours. Music therapists provide physical support such as hand to hand contact and this can be a positive way to reinforce the therapeutic relationship.

It was also important for me to have contact with the ITD working with this child who was hearing impaired. The ITD informed me of the amount of New Zealand Sign Language that Jill was able to use and understand was limited due to her additional learning disabilities but praise was to be given (usually in the form of reciprocal signing) for any approximations made at her stage of learning.

Jade had very little opportunity or ability to choose for herself; she could not choose when to eat, when to move, when to go to the toilet or when to have physiotherapy. Everything was done to her, but perhaps in music therapy sessions she could choose when she would or would not listen or be awake for these sessions, or feign just enough interest to keep me believing that MT sessions were beneficial to her and the effort.

Joe's usual routine when he entered the MT space was to vocalise the theme to Te Karere (the Maori News). When I watched him do this on three consecutive video recordings I discovered that he was starting on the same pitch every time and when I checked that with the programme he was using the actual pitch, so I had discovered how good his pitch memory was and began wondering about whether this was the same for spoken word.

During the research process I had a few difficult sessions experiencing some behaviour outside of the norm for the students involved. It was only after the session when I reported these abnormalities to their support workers that I was given information such as, “they didn’t have a good sleep last night”, or “she has a chest infection”, or “his living situation is a bit disrupted at the moment.” It was frustrating to receive such information post session and I was aware that the communication protocol for transitioning to MT sessions needed to be addressed. Informally, I was sometimes told if anything out of the ordinary was happening to these children but with a lack of formalised communication protocol I often missed out on relevant information. Further to this some children were able to attend session’s independent of their support teachers, this was encouraged where independence was a goal. In some cases where the children were able to self report and comment on their emotional state this could be played out using the music to either embrace or move through these emotions as required. I struggled with how to approach the staff about continued information sharing as it was term four of the school year, so I resolved to ask two questions before each session: How had the child been so far today? Was there anything in particular I should know? For future practice, with this and possibly other client groups, I would discuss the importance of information sharing and have strategies in place from the outset.

Comments like this, seen in either clinical notes or research journal, brought my attention back to the interview material and ‘sharing information which led me to use these two questions for the final cycle of research.

Having not sought consent for using information about children’s home life I have not included any specific examples.

When I was working with two children in particular, who had little purposeful or functional movement sessions, I could feel stuck so I had to be careful how counter-transference was affecting sessions.

Consistency and perseverance are important in order to monitor whether goals are realistic and achievable. Some activities will work with particular children, but not with others. With children such as Jill and Jade a protocol could be developed to introduce and trial new activities, and could be used for around four weeks with two half hour sessions per week. There were very clear occasions when music therapy seemed to offer these particular children very little and I would question whether it was useful to them to pursue music therapy. However there were very clear reactions on some occasions to certain stimulus that convinced me to persevere and they were getting much more out of this therapy than they could show.

Limitations

Looking at the video data for six children each week was the most problematic and time consuming area of this research. It was necessary to record the sessions of six children with very different needs (such as non-verbal/verbal, mobile and inactive) to learn how I understood their communicative attempts and what was different or similar about working with each individual. Retrospectively having to view all of the video created was too much for the purposes of this master's research thesis. It may have been best to first assess the written clinical data looking for stand out moments and then looking through the video for them. This may have eased the volume of work by allowing me to select the video extracts of two or three children rather than going through all six. Or perhaps a random selection of two or three children/per week, chosen to record at the beginning of each research cycle.

Conducting this research from the three positions of main participant, clinician and researcher could have some ethical implications. However the entire point of the research was to be better informed in my own practice rather than proving a hypothesis and was therefore in my best interest in all three positions to be as honest, critical and analytical as possible.

Working in the school environment there are lots of interruptions that music therapists have to abide. Some of these can be avoided with clear boundaries set around who can come into the room at what time. However there are those interruptions that MT's must learn to accept. Principal announcements, although rare, came over the speaker in the very small music room. They were loud and Jane, Jill and Joe in particular would get a fright and could become quite confused. Loud sudden noises were possibly seizure inducing for these three children. Other types of interruptions included the children outside the therapy room. Some of the more mobile children liked to walk down the corridor to the music therapy room, and either stand waving through the window or simply walk in. The biggest disturbance was noise carrying on outside the room such as banging doors, other children talking loudly, shouting, screaming or experiencing emotional dysregulation, and objects (such as toys, blocks or even chairs) may be thrown outside the room. When sessions are in progress a clinician does everything in their capabilities to create an inviting and safe space for work to take place. These kinds of distractions occurring outside the music therapy space are difficult to minimise. The goal then becomes managing the distraction. Musically acknowledging and accepting that there is something happening outside is one technique. Ignoring it may cause further distress to a child especially if one or more of their senses is impaired. For example, in one video description a child could hear and possibly sense the vibrations of objects

hitting the walls but in her wheel-chair was unable to get a sense of what was causing the noise.

Future Practice

Action Research is labour intensive and requires an enormous amount of time and energy from a researcher, and yet it is a technique that I will employ use in future practice, albeit on a smaller scale. If, for example, I were to work with this client group and expect to have the same clients for the school year, an Action Research model would be well used in the second term of that year. This will have allowed for the 'Introductory period', of MT and children becoming familiar with each other. Then using the process of observe – reflect – plan – act, an MT could begin to solidify any wondering they held about communicative strategies they or the children used. It encourages a healthy critical analysis of own practices and it highlights both flaws and strengths in technique and understanding.

Having the opportunity to observe children in different environments is advantageous, as I found with one girl with profound hearing loss. Seeing her in a classroom with the ITD and also sharing information with the ITD provided an enhanced picture of her communicative devices. Although it may not always be possible to undertake this work, where possible it is certainly advisable.

Much of the information I gained from interviews with RMT's was invaluable and I thank them again for sharing their experiences with me. They all talked about 'active waiting' in their own words, and explained it from three view-points. It allowed me to better understand the silence or space that we, as clinicians, leave for clients to have a

chance at responding to our communication attempts. Holding on to the expectations or goals that we preset during such spaces, or seeing if a child/client will surprise us with something new turns the experience from the uncertainty of 'what's going to happen?', to 'let's see if this might happen'. It seems a small shift in mind set but it gave me a clear idea of why I leave enough time for a communicative exchange to take place.

The 'five levels of contact' (as defined by Steen-Moller in Wigram, et al 2002 p.173) is another tool that I will take through in to future practice, and it is possible it will be useful in client groups additional to the special education sector. I found this particularly helpful at times in the therapeutic practice when things appeared not to be progressing further. Often with profoundly disabled children, a point would be reached where any forward momentum would cease for reasons unknown. At these times it was useful to go back to the first of five steps and tune into the child being worked with.

The research also highlighted some practices that needed to be in place from the beginning of work within this environment, in particular information sharing. It was important to know if anything significant had happened with any of the children I worked with so that I 'cause no harm', to keep me safe and to keep the children safe. Managing to keep communication going with children's aides was at times a challenge and I felt that by taking on the responsibility to ask them two questions was the best way to manage at that time. It is best to start as you would like to continue. So creating an accessible handout for teachers, and more specifically teacher aids, with information like 'what music therapy is' and 'how to manage transitions from classroom to individual sessions and back', plus allowing some time for discussion and review or reminders on these points. Such handouts could be given out or, be pinned outside the allocated music therapy space.

The process of action research made me a better practitioner. I believe this implicitly. I stated in the introduction that ‘over time’ my practice may simply improve through experience, but I am certain that without this exploration of applied techniques in practice in an action research manner I would not have developed the level of understanding and confidence in my own abilities.

References:

Aldridge, A. (1996). *Music Therapy Research and Practice in Medicine*. Jessica Kingsley Publishers Ltd.

Archer, C. (2004). Music Therapy and Early Intervention: The Parent-Child Relationship is Centre Stage. *New Zealand Journal of Music Therapy. 2* (pp.36-49)

Brooks, A., & Watkins, K. E. (1994). A new era for action technologies: A look at the issues. In A. Brooks & K. E. Watkins (Eds.), *The Emerging Power of Action Inquiry Technologies. New Directions for Adult and Continuing Education* (Vol. 43, pp.5-16). San Francisco: Jossey-Bass.

Bruscia (2004). *Case Studies in Music Therapy*. Jessica Kingsley Publishers Ltd

Bunt, L., and Hoskyns. S. (2002). The Handbook of Music Therapy. London: Routledge

Corke, M. (2002). *Approaches to Communication Through Music*. David Fulton Publishers: London.

Dictionary.com Unabridged (v 1.1). Retrieved from Dictionary.com website: http://dictionary.reference.com/browse/communication

French, W. L. and Bell, C. H. (1995). *Organization Development*, 5th edition. Englewood Cliffs, NJ: Prentice-Hall.

Graham, J. (2004). Communicating with the uncommunicative: music therapy with pre-verbal adults. *British Journal of Learning Disabilities*. Vol 32 (pp24-29)

Holck, U. (2002). 'Music Therapy for children with communication disorders'. In T. Wigram, I.N. Pedersen and L.O. Bonde (eds) *A Comprehensive Guide to Music Therapy*. London: Jessica Kingsley Publishers.

Holck, U. (2004). 'Turn-taking in music therapy with children with communication disorders'. *British Journal of Music Therapy* Vol 18 No.2 (pp. 45-54)

Kemmis, S. (2001). Exploring the Relevance of Critical Theory for Action Research: Emancipatory Action Research in the Footsteps of Jurgen Habermas. In P. Reason & H. Bradbury (Eds.), *Handbook of Action Research. Participative Inquiry and Practice* (pp. 91-102). London: Sage Publications.

Kranowitz, C. (1998). *The Out-of-Sync Child: Recognizing and Coping with Sensory Processing Disorder*. The Berkley Publishing Group.

McNiff, J., Lomax, P., Whitehead, J. (1996). *You and Your Action Research Project*. London: Routledge.

McNiff, J. (2005). HERDZA Workshop, Action Research. Wellington: Victoria University.

Newman, J. M. (1998). *Tensions of Teaching: Beyond Tips to Critical Reflection*. Toronto: Canadian Scholars' Press.

Nordoff, P., Robins, C. (1971). *Music Therapy in Special Education*. St Louis Mo MMB Music Incorporated.

Oldfield, A. (2006a). *Interactive Music Therapy in Child and Family Psychiatry: Clinical Practice, Research and Teaching*. London: Jessica Kingsley Publishers.

Oldfield, A. (2006b). *Interactive Music Therapy – A Positive Approach*. London: Jessica Kingsley Publishers.

Porter, J., Ouvry, C. (2001). Interpreting the communication of people with profound and multiple learning difficulties. *British Journal of Learning Disabilities* Vol 29 (pp. 12-16)

Rainey Perry, M.M. (2003). Relating Improvisational Music Therapy with Severely and Multiply Disabled Children to Communication Development. *Journal of Music Therapy* XL (3) (pp.227-246)

Reason, P., Bradbury, H. (2001.), *Handbook of Action Research. Participative Inquiry and Practice*. London: Sage Publications.

Rickson, D (2009). Researching Ones Own Clinical Practice: Managing Multiple Roles in an Action Research Project. *Voices: A World Forum for Music Therapy*. Retrieved March 18, 2009, from http://www.voices.no/mainissues/mi40009000307.php

Steen-Moller (1996) in Wigram, T., Pedersen, I.N. and Bonde L.O. (2002). *A Comprehensive Guide to Music Therapy*. London: Jessica Kingsley Publishers.

Stern, D. (1977). *The First Relationship*. Harvard University Press.

Stevenson, K. (2002). Music Therapy Assisted Communication with Children With Severe disabilities. *New Zealand Journal of Music Therapy* (pp. 82-92)

Trevarthan, C., Aitken, K., Papoudi, D., Robarts, J. (1998). *Children with Autism: Diagnosis and Interventions to Meet their Needs*. London: Jessica Kingsley Publishers.

Uricoechea, Ana Sheila (2003). Rethinking Music Therapy With the Mentally Handicapped. Retrieved April 27, 2008, from http://www.voices.no/mainissues/mi40003000123.html

Weiten, W. (2004). *Psychology: Themes and Variations*. Belmont, CA Wadsworth/Thomson Learning.

Wigram, T., Gold, C. (2006). Music therapy in the assessment and treatment of autistic spectrum disorder: clinical application and research evidence. *Child: care, health and development.* 32, 5 (pp.535-542.)

Wigram, T., Pedersen, I.N. and Bonde L.O. (2002). *A Comprehensive Guide to Music Therapy.* London: Jessica Kingsley Publishers.

Appendices

Appendix 1:

Challenges in Communication - A critical analysis of researcher's techniques in working with special needs children.

INFORMATION SHEET for REGISTERED MUSIC THERAPISTS

Taking Part in an Interview.

Thank you for replying to the request to take part in an interview for the purposes of an action research project to be undertaken by Chelsea Makere Savaiinaea, for the completion of a Masters of Music Therapy degree with the New Zealand School of Music in Wellington.

Researcher/Music Therapy Student	**Research Supervisor**
Name: Chelsea Makere Savaiinaea	Name: Daphne Rickson
Email: [redacted]	Position: Music Therapy Lecturer/ Coordinator of Clinical Programmes, New Zealand School of Music
Phone: [redacted]	Email: [redacted]
	Phone: [redacted]

About the Project

I am doing a music therapy placement at a Special Education Unit in a North Island Primary School where I am also undertaking an *Action Research* project for a master's dissertation. It is a project that will look at **my** methods of understanding and enhancing the different ways that

children with multiple disabilities communicate in their individual music therapy sessions. As the researcher/student music therapist, I am the main participant of this study. The purpose of the research is to improve the researcher's observational skills and understanding of communication styles, which will be of benefit to myself and the children I work with. It is hoped the report will benefit other music therapy students and music therapists.

I have also chosen to interview registered music therapists to find out how they understand, and some of their experiences of, communicating with children who have special needs. I will also explore with them some of the communication strategies they employ.

You are being contacted because have expressed interest in taking part in an interview for this research project. The data gathered from the interview will be used to create a construct about communication and inform at least the first cycle of the action research project.

Your Rights

You have the right to

- withdraw your permission to be involved up until the time the interview takes place.
- ask any questions about the study at any time during process of the research
- review and edit a transcript of your interview
- be given access to a summary of the project findings when it is concluded
- Your real names will not be used and every effort will be made to keep anonymity.

A transcription of your interview will be emailed to you within 3 days of the interview taking place for checking and verifying.

If you have any questions about the project, please do not hesitate to contact the research supervisor, Daphne Rickson or Chelsea (student music therapist/researcher).

Ethical Approval

This study has been reviewed and approved by the Central Regional Ethics Committee, Ministry of Health, New Zealand. The ethics committee approval reference number is **CEN/08/32/EXP.** If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher, please contact Daphne Rickson (Research Supervisor), or the

Administrator of the Central Regional Ethics Committee: Ph 04 496 2405, Fax 04 496 2191 or email central_ethicscommittee@moh.govt.nz quoting the above reference.

If you are willing to be involved please sign the consent form below.

Appendix 2:

Challenges in Communication - A critical analysis of researcher's techniques in working with special needs children.

MUSIC THERAPIST CONSENT FORM

Agreement to be interviewed

This consent form will be held for a period of five (5) years at the NZSM

☐ I have read the Information Sheet and understand the purpose of this study.

☐ My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

☐ I agree to the information from my interview being used for the purposes of this research project.

Signature: ..... **Date:** .....

Full Name - printed .....

Appendix 3:

Disordered Communication - A critical analysis of researcher's techniques in working with special needs children.

INFORMATION SHEET for PARENTS/CAREGIVER

This information is provided to you as the parents/guardian of a child attending the Special Education Unit at [redacted]. It describes an action research project to be undertaken by Chelsea Makere Savaiinaea, for the completion of a Masters of Music Therapy degree with the New Zealand School of Music in Wellington.

Researcher/Music Therapy Student	Research Supervisor
Name: Chelsea Makere Savaiinaea	Name: Daphne Rickson
Email: [redacted]	Position: Music Therapy Lecturer/ Coordinator of Clinical Programmes, New Zealand School of Music
Phone: [redacted]	Email: [redacted]
	Phone: [redacted]

About the Project

As you may be aware, Chelsea is doing her music therapy placement at [redacted] with the students of [redacted] and is also undertaking a research project for her master's dissertation. It is an *Action Research* project that will look at **her** methods of understanding and enhancing the

different ways that the children in [redacted] communicate in their individual music therapy sessions.

It is important to know that this project is not meant to measure the communication abilities of the children in [redacted], but it is the researcher's actions and reactions to the children's communications that are being looked at. Therefore as the researcher/student music therapist, Chelsea will be the main participant of this study, and information gathered will be centred on her.

The purpose of the research is to improve the researcher's observational skills and understanding of communication styles, which will be of benefit to the researcher and therefore the children she works with.

Chelsea would like to ask you if you would be happy to give consent for her to study what happens within the music therapy sessions with your child.

Parent and Childs' Rights

You and your child are under no obligation to accept this invitation. If you decide to give the permission, you have the right to:

- withdraw him or her from the project at any time, without giving reason, until the end of the data collection period
- ask any questions about the study at any time during process of the research
- be given access to a summary of the project findings when it is concluded

If you have any questions about the project, please do not hesitate to contact the head teacher of [redacted], [redacted], the research supervisor, Daphne Rickson or Chelsea (student music therapist/researcher).

Ethical Approval

This study has been reviewed and approved by the Central Regional Ethics Committee, Ministry of Health, New Zealand. If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher, please contact Daphne Rickson (Research Supervisor), or the Administrator of the Central Regional Ethics Committee: Ph 04 496 2405, Fax 04 496 2191 or email central_ethicscommittee@moh.govt.nz

Appendix 4:

Disordered Communication - A critical analysis of researcher's techniques in working with special needs children.

PARENT/CAREGIVER CONSENT FORM

For review of video recordings

This consent form will be held for a period of five (5) years at the NZSM

☐ I have read the Information Sheet and have had the details of the study explained to me.

☐ My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

☐ I agree to my child's music therapy sessions being videotaped, in accordance with the policy of the [redacted] special education unit at [redacted].

☐ I agree to my child's music therapy recordings to be reviewed by researcher Chelsea Makere Savaiinaea

☐ I agree to my child's music therapy notes to be reviewed.

Therefore, I agree to give permission for my child's music therapy to be reviewed and included in the data of this study under the conditions set out in the Information Sheet.

Signature: ..... **Date:** .....

Full Name - printed .....

Appendix 5:

Questions and thoughts for RMT interviews.

The following is a list of planned questions or statements to be discussed in interviews with participating registered music therapists. The actual interviews brought about many other questions.

1. Can you tell me what you understand of communication strategies in Music Therapy?

   (? What do you mean by that?..... Well I was wondering about something like GESTURE or PHYSICAL PROMPTING as a means of communicating?)

2. Describe some of the communication strategies you use OR your client uses.

3. When you are reflecting on a session what signals you as a Music Therapist to write something down as meaningful?

4. How do you '**KNOW'** these things (communications) are meaningful?

5. How do you manage 'waiting' or silence in sessions with severely disabled children?

6. There's communication from you as a music therapist and from your clients.

7. Can you tell me about any situations of misinterpreting a clients communication attempts?

Appendix 6:

Interview #1 20.08.08 Extract from pages 2 and 3.

Interviewer: Student Music Therapist/Researcher = SR: Interviewee: Registered Music Therapist = MT:

SR: Yep…. How about more with non-verbal and possibly not really able to make sounds … I mean severely (MT: Yep) disabled in communication, in verbal communication. How would you look for communication from them and also communicate to them?

MT: Okay, I always talk to my clients. (SR: Mmhm) Even if I'm not sure whether they're going to understand. I think it's really important to let people know what they're doing. So, but for example I have a client who can, she's non-verbal, she's got cerebral palsy, she doesn't move much but I would say to her 'look we're going to play the piano now'… 'I'm going to give you a turn', or sing 'it's your turn to play', 'it's my turn to play', 'Can I hear your sound', um, oh 'Listen to my sound' so it gives plenty of opportunity for a response, so I'll know that they are communicating, or that they understand by whether they make an effort to do what- ever I've asked them to do. (SR: Ok) So if I leave a gap in a piano thing then are they moving towards the piano. Or do they look at me. or do they kind of make a noise or sound at that point. So that I know that they're trying to do something. And I think that eye contact is really important. (SR: Yes) Making eye contact when you're speaking or when you're singing to a client, and I think expecting some kind of eye contact back. If they're capable of eye contact, because if they're capable of it then generally they'll actually look at you. Especially if you say their name, like if you say or sing their name then you often get eye contact in response or lifting of the head or you know something that resembles eye contact. I think you have to get to know the client so that you can know what to expect from them. (SR: sure) so if they're able to play one specific

instrument then give them heaps of opportunity with that instrument to, like a wind-chime, ah heaps of space. And kind of build it so that you expect them to respond when you leave them space. So that you can kind of have a conversation or communication with that. Like I have one boy who can play the wind-chimes and he, we've got to the point now where I can play the piano and not even look at him playing them but he'll know when it's his time to play and when we're going to stop (SR: Yes) and … but he'll also be communicating through his, like his smile, the way he holds his body is not tense, as it can be. So you can see that it's his way of relaxing into it and enjoying the other persons company.

SR: You sort of… said space a lot when you've just been talking, obviously you have to sit and wait a lot and I wonder what that's like waiting … what is the quality of the period where you have to sit and wait?

MT: Depending on the moment... (SR: Yeah) Sometimes it's ahh, to be perfectly honest, you feel like you're waiting for nothing. (SR: Sure) Like there's this big gap and your 'Umm… do I go, do I go?' (SR: Yes). Other times it's almost like it's just a pause and you can see that something's about to happen and so that's kind of like an expectant…pause if that happens. Yeah and sometimes it is actually 'I should play something now'. And often waiting you have to, like I've learnt to wait for a lot longer than I would have when I was studying. (SR: Yeah) Like I've learnt that the processing time for some people is minutes not seconds and so that waiting to you seems like forever but actually to them it's not that long (SR: Mm) because they go flicking through everything in their head or they're working things out.

Appendix 7:

Interview #2 23.08.08 Page 5 and 6

Something else that you said was eye-contact and sort of thinking about eye-gaze or tilting the head or something and how poignant it seems to be but how, sometimes, difficult it can be to understand. (MT: Yes) Could you maybe just discuss a little bit more about that?

MT: … Well I worked for quite a while with children who are blind or had low vision and it's quite disconcerting in a way, to have no eye-contact at all, (SR: Yeah) that's one thing. And even to have somebody facing the other way from you and not know if they're listening or not. And then, I work with one little girl I can think of in particular who has autism who inconsistently makes eye-contact but often can't look and use her other senses at the same time so she might be looking away while she is listening and that's quite hard to interpret until you really know the child but whether the looking away is lack of interest or rejection or whether it just not being able to cope with both senses (SR: Sure) at once. And then I now work with quite a lot of children with cerebral palsy, who use eye-gaze and eye-pointing as one of their main tools of communication so it's really, really intense then that they'll stare at you or stare at the object that they want. Actually the same little boy that I mentioned with the yes and no with his arms, he loves my violin and I have now started having it the room but in its case not open (SR: Right) and we do other things at the beginning and then sometime during the session he'll start looking around the room and he'll be looking at the violin case and then looking at me and it's his way of asking, either asking for me to play it or for me to get it out and share it with him. It's quite a powerful way of expressing what you want when you don't have any speech (SR: So you've sort of set that up as … almost you expect that that will happen?) I do now after working with him

6 for a while yes.

Appendix 8:

Interview #3 26.08.08

Page 3

5 SR: Yeah, so I wonder, like you said the rain-stick, how, what did she do that
6 made you understand that she, or rather how did you know she was
7 responding to that?
8 MT: Well she could track, she sort of really quite minimally but she could track
9 or follow what was going on with her eyes (SR: Yes), not very much because she
10 couldn't really turn her head because her head was very floppy (SR: Yeah). Yeah
11 so every little movement that she had in her eyes, you know if I put the rain-stick
12 in front of her and moved it left to right, you know very slowly of course but she
13 did appear to be following that. Yeah but it was really very subtle and not always,
14 but … just in terms of the back to the other you know pupil dilation, if I sang to
15 her just really softly into her ear I would notice you know just her pupils dilating
16 sometimes (SR: Oh okay) but in terms of interpreting some people say "oh yeah
17 that's just sort of an involuntary thing" or whatever you know. I think it was hard
18 to say for sure, sort of what her response meant, but there was response definitely
20 to me and my interpretation was that she could hear me she could see me and what
21 I was doing and she was you know processing that.

Appendix 9: Timeline

Timeline For AR Data Collection Period