Using Music and Singing within Speech & Language Therapy to Improve Clients' Communication Skills

“Singing in the rain, just singing in the rain…”

Claire Bolton
Churchill Fellow of 2012
Winston Churchill Memorial Trust

Credit: Yousuf Karsh/Camera Press
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The following organisations have kindly allowed me to visit and learn:

- Canadian Association for Music Therapy
- The Laurier Centre for Music Therapy Research, Wilfrid Laurier University, Ontario
- Aphasia Institute, Toronto
- Sunnybrook Health Sciences Centre, Toronto
- The Louis Armstrong Center for Music & Medicine, New York
- Institute for Music and Neurologic Function

Thank you to the following music therapists who have generously shared their knowledge and freely given their time for this project: Katherine Wright, Dr Kevin Kirkland, Dr Heidi Ahonen, Dr Colin Lee, Karie Bilger, Brian Garner, Andrea Lamont, Marisca Baldwin, Thyra Andrews, Cheryl Jones, Sarah Hodkinson, John Mondanaro, Dr Joanne Loewy, Dawn Durrant, Grace Walter, Rosie Axon, Krista Hewson, Jeanette Kennelly and Maggie Leung.

Thank you to all of my Speech & Language Therapy (Speechie) colleagues who have encouraged me to explore how music can be used within our sessions. Many have amateur musical backgrounds and are keen to learn from my experiences of how to work with Music Therapists so that collaboration can be replicated to benefit their own clients.

Thank you to the clients who are ultimately our biggest inspiration. I value the ability to communicate and am prepared to learn more if that knowledge allows me to help others who are struggling.

Thank you to JP and my parents who, for the past six months (since I was informed I had been chosen for a Churchill Fellowship), have tolerated my limited availability whilst I have planned, researched, completed and reported on the experience.

As Churchill himself said, “With opportunity comes responsibility”, and I intend to share the knowledge gained as widely as possible.

Claire Bolton
Itinerary

Monday 16.04.12 – Friday 20.04.12:

- Speech & Language Therapy - Music Therapy Collaboration:
  - Katherine Wright (Music Therapist who works at a Rehabilitation Centre for Acquired Brain Injuries in Vancouver, BC, Canada)

Thursday 19.04.12:

- Speech & Language Therapy - Music Therapy Collaboration:
  - Kevin Kirkland PhD, MTA (Music Therapist at University of British Columbia Hospital, Vancouver)

Sunday 22.04.12: Fly Vancouver to Toronto and train to Guelph

Monday 23.04.12: Greyhound bus to Kitchener-Waterloo (daytrip)

- Speech & Language Therapy - Music Therapy Collaboration
  - Heidi Ahonen PhD, MTA & Colin Lee PhD, MTA
  - The Laurier Centre for Music Therapy Research
    Wilfrid Laurier University, Faculty of Music
    75 University Avenue West, Waterloo, Ontario, Canada

Tuesday 24.04.12 - Friday 27.04.12

- Speech & Language Therapy - Music Therapy Collaboration:
  - Karie Bilger, MSW, MTA
  - Long Term Care, Complex Continuing Care & Outreach Services
    St. Joseph’s Health Centre, Guelph

- Speech & Language Therapy - Music Therapy Collaboration:
  - Brian R. Garner MTA, BMT, BA

Friday 27.04.12: Greyhound Bus to Toronto
Monday 30.04.12:

- Speech & Language Therapy - Music Therapy Collaboration:
  - c/o Andrea Lamont, MMT, MTA
  - Sunnybrook Health Sciences Centre
    2075 Bayview Avenue, Toronto, ON M4N 3M5, Canada

Tuesday 01.05.12:

- Speech & Language Therapy - Music Therapy Collaboration:
  - c/o Marisca Baldwin & Thyra Andrews, BMT, MTA
  - Aphasia Institute
  - 73 Scarsdale Road, Toronto. M3B 2R2

Wednesday 02.05.12: Train to Montreal

Thursday 03.05.12 – Saturday 05.05.12:

- Speech & Language Therapy - Music Therapy Collaboration:
  - Canadian Association for Music Therapy Conference 2012
    Holiday Inn, Mid-town, Montreal

Tuesday 08.05.12:

Train to Ottawa (day-trip from Montreal)

- Speech & Language Therapy - Music Therapy Collaboration:
  - Cheryl Jones, MMT, NMT-F, MTA
  - Music Therapist with advanced training in Neurologic Music Therapy
Friday 11.05.12: Fly to New York

Monday 14.05.12 – Tuesday 15.05.12:

- Speech & Language Therapy - Music Therapy Collaboration:
  - John Mondanaro MA, MT-BC, LCAT, CCLS
  - Dr. Joanne Loewy DA, MT-BC, LCAT, Director
    The Louis Armstrong Center for Music & Medicine
    Beth Israel Medical Center, 5 Silver 18
    First Avenue at 16th St., New York, NY 10003

Tuesday 22.05.12:

- Speech & Language Therapy - Music Therapy Collaboration:
  - Institute for Music and Neurologic Function
    A Member of CenterLight Health System
    612 Allerton Avenue, Bronx, NY 10467

Friday 25.05.12: Fly from New York to London.
Introduction

The profession of Speech & Language Therapy (also known as Speech Pathology, Speech-Language Pathology and Speech Therapy) prides itself on constantly searching for innovative ways of supporting a broad range of people with developing or regaining communication skills. Examples of clients include:

- A toddler with a language delay
- A child learning to listen and talk after being given a cochlear implant
- A preschooler who stammers
- A six-year-old with a lisp
- A ten-year-old struggling with literacy
- A high school student with social language difficulties
- An immigrant requiring accent reduction
- A young adult with cerebral palsy who communicates via alternative and augmentative communication methods
- A university student with a brain injury after a car accident
- A teacher with a voice disorder
- A singer with vocal nodules
- A businessman who wants assistance with delivering presentations effectively
- A middle-aged parent with a soft voice due to a degenerative medical condition
- A retired gentleman who has experienced a stroke and requires assistance with swallowing, speech and using language to communicate
- A smoker who has had surgery to remove a cancerous larynx
- An elderly gentleman with dementia
- A great-grandmother in a nursing home who is dying and needs help with establishing how to eat safely without risk of choking but maintaining quality of life (Speech & Language Therapists also work with swallowing disorders)

Speech & Language Therapists (SLTs) are required to work within the medical model, and simultaneously be creative in their approaches. With each individual responding differently to treatment methods, Speech & Language Therapists are open to expanding
their toolbox of skills in order to provide clients with as many options as possible to communicate. A growing body of research from Music Therapists (particularly those with post-graduate training and skills in Neurologic Music Therapy) indicates that Speech & Language Therapists and Music Therapists working collaboratively, is the way forward for providing our clients with the best outcomes. With an aging population (and therefore increase in strokes and dementia) as well as health services being stretched, it is vital that professionals be given the opportunities to link up and share their skills, for the benefit of the clients.

Benefits of Music

It is well-documented that music is the foundation of communication, a concept that is of great interest to Speech & Language Therapists. Speech includes rhythm in the form of syllables and melody in the form of intonation. Early language development is naturally supported by singing nursery rhymes to young children, as there are limited key words and lots of repetition to encourage imitation. Music is fun and motivating and therefore contributes to social development and rehabilitation.

Professor Jane Edwards, a highly regarded Music Therapist and President of the International Association for Music and Medicine once said:

"It [music] can play a very important part in rehabilitation and treatment. Reports suggest many of the first utterances from children emerging from comas and a high number of the first intentional verbalisations from children with autism are made during music therapy sessions."

Music is an international language that crosses all barriers. It is a way to reach out to people of any background who struggle to express themselves as the result of communication impairments. Communication is the ability to request/reject, socialise and simply participate in life. Without it, one becomes incredibly isolated. Music has been shown to assist communication rehabilitation in people with strokes, brain injuries, developmental delays, autism, language/intellectual/hearing impairments, dementia,
neurological/degenerative conditions (e.g. Parkinson's Disease), voice disorders and stuttering. There are also the endless mental health benefits that arise from both the use of music and the subsequent ability to communicate.

Jean-Dominique Bauby was the editor of a high-profile French magazine who experienced a stroke that left him a severe quadriplegic with Locked-in Syndrome (aware of what was happening around him but only able to blink his eye to communicate). His Speech Therapist created a communication system that involved the alphabet being read aloud in the order of the most frequently used letter to the least frequently used letter. He would then blink on the letter he wanted, and managed to write an inspiring book called, ‘The Diving Bell and the Butterfly’ which has since been made into a movie. Jean-Dominique once spelt out, “The inability to communicate is wearing. Speech therapy is an art that deserves to be more widely known.”

**Background**

As a Speech & Language Therapist (SLT)/Speech Pathologist (SP) who works with both adults and children, I have always been fascinated with how music can complement and support our treatment. Having observed clients post-stroke struggle to speak a word but moments later able to sing phrases, I knew that music and singing was a tool that I needed to learn more about in order to help our clients improve their communication skills to the best of their potential.

I was fortunate enough to study at the University of Queensland in Australia where there is also a strong Music Therapy Department. As a student, I clearly remember working with a gentleman with Broca’s Aphasia (a language disorder following brain injuries, including strokes) who could understand more than he could say. Naturally, this was incredibly frustrating for him, as his speech was limited to simple inconsistently articulated words such as “yes” and “no”. One week, his Aphasia Group was playing
hangman, with the clue being ‘song titles’. My client knew the answer but could not verbalise it …so he spontaneously sang, “Singing in the rain, just singing in the rain…”

This sparked an obsession with wanting to understand more about the link between singing and the possibility of utilising this within speech/language/communication rehabilitation, following a brain injury. .

Another student placement at with the Queensland Paediatric Rehabilitation Service at Brisbane’s Royal Children’s Hospital provided the privileged opportunity to work alongside Jeanette Kennelly, a highly skilled Music Therapist. I was able to appreciate the value of speech & language therapists working collaboratively with music therapists to stimulate and support communication rehabilitation in individuals who have an acquired brain injury.

I have had the experience of working in both Australia and the United Kingdom in a variety of settings. My early professional years in rural Australia’s country music capital of Tamworth in New South Wales gave me the opportunity to work for a health service that provided extensive post-graduate training and supported my interest in using music within Speech & Language Therapy. Unfortunately we did not have access to a Music Therapist. I currently have a private practice in Harley Street (London) which involves working with both adults and children who have acquired brain injuries. In addition, I visit nursing homes and rehabilitation centres.

In 2005 I attended the World Congress of Music Therapy in an attempt to learn more. Despite not being a music therapist, I was warmly welcomed by professionals from all over the world who were only too pleased to discuss and explain the phenomenon that many speech and language therapists and speech pathologists were observing: people
with some types of Aphasia (language disorder following a brain injury) were able to sing better than they could speak, in the same way that people who stammer can sing more fluently than they can speak. It was obvious that the collaboration of music and speech therapy needs to be explored further in order to provide our clients and patients with the best outcomes possible.

My new music therapy colleagues worked in clinics in both Canada and the U.S. which embrace the concept of speech pathologists/speech & language therapists and music therapists working closely together. This is producing incredible results that could not be achieved using speech therapy alone. International research has revealed how music (used correctly by trained professionals, such as music therapists) facilitates the development and rehabilitation of communication skills (a focus of speech pathologists).

A Canadian Music Therapist made the suggestion that I learn about Melodic Intonation Therapy (MIT), which is a method frequently used in that country to assist people regain communication skills. The Canadian and American Music Therapists invited me to visit their clinics in order to learn more, but the reality was that I did not have the finances, nor could afford the time off work. Instead, I remained in contact with them and learnt what I could from books. I also asked my Speech & Language Therapy colleagues to keep me updated with anything they knew about the use of music. Some had heard of Melodic Intonation Therapy but none were confident with how to use and adapt it.

The opportunity to visit clinics and centres across North America that I had been in touch with for so long was made possible by the Winston Churchill Memorial Trust. It has enabled me to further develop my skills and consolidate my learning to the extent that I am now in a position to share this knowledge with colleagues.
Objectives:

- To learn practical skills for using music and singing within Speech & Language Therapy (SLT) to improve clients’ communication and quality of life, particularly of older adults who have experienced strokes, brain injury, degenerative neurological conditions (e.g. Parkinson’s Disease) and dementia
- To understand how Music Therapists and Speech & Language Therapists could work more collaboratively and promote including Music Therapists within Multi-Disciplinary Teams
- To learn more about how to use Melodic Intonation Therapy (MIT) and other Neurologic Music Therapy (NMT) techniques with a range of complex patients
- To use and promote MIT and NMT
- To share knowledge gained with Speech & Language Therapists (SLTs) & Music Therapists (MTs)
- To continue to liaise with new professional networks of SLTs and MTs in Canada and the USA, in order to remain updated with new research
Melodic Intonation Therapy (MIT)

Melodic Intonation Therapy (MIT) is a treatment approach used within communication rehabilitation by Music Therapists and Speech & Language Therapists. It is particularly effective in patients who have experienced a brain injury that affects the left side of the brain (e.g. stroke) and results in non-fluent Aphasia (e.g. Broca’s Aphasia).

MIT is based on the observation that people may be able to sing a phrase from a well-known song that they can recall, but unable to speak that same phrase. Rather than using merely songs, this concept has been shaped so that people sing phrases to communicate functionally. A chapter on Melodic Intonation Therapy by Sparks and Deck (1986) from the book, *Language Intervention Strategies in Adult Aphasia* clearly describes this phenomenon.

Despite struggling to speak a phrase following a left-sided brain injury, some people may find it easier to sing that same phrase. It is hypothesized that this is due to different parts of the brain being responsible for the functions of singing and speaking. The area associated with speaking may be impaired whilst the area for singing is preserved.

An illustration of this fascinating phenomenon is when someone listens to a song that they have not heard for over a decade, but can sing along with the tune, word for word. They are not necessarily consciously thinking of the words, but the lyrics are stored in their brain with the melody and rhythm.

Gabrielle Giffords (the US Congresswomen who sustained a brain injury from a gunshot wound in January 2011) has successfully been receiving treatment from Dr Nancy Helms-Estabrooks, the highly regarded Speech & Language Pathologist who developed a manual for Melodic Intonation Therapy (1989). Her injury affected the Broca’s area (responsible for language) on the left side of the brain, meaning that Melodic Intonation Therapy was an effective treatment approach, as it relies on the right cerebral hemisphere being unaffected. The right-side of the brain in thought to be responsible
for the more musical aspects of verbal communication, such as the melody of intonation and the rhythm of speech.

Therapy requires that patients work through a hierarchy with the support of their Music Therapist and/or Speech & Language Therapist. This involves practising words and phrases that they want to be able to say and pairing this with a tapped rhythm and sung melody (which is eventually minimised to make it more natural). A growing body of evidence is revealing that this method has the potential to allow people to communicate longer phrases than if they attempted to say it with no strategies.

MIT is widely embraced in Canada and the United States of America by Speech & Language Therapists and Music Therapists, with the two professions working collaboratively where possible. Although I had studied the theory of Melodic Intonation Therapy and used it with some clients, I was keen to understand and observe more about how this approach could be adapted when required (since most patients are not straight-forward textbook cases).

Australian Music Therapists, Felicity Baker and Jeanette Tamplin (2006) discuss a range of treatment approaches that utilize music for supporting communication rehabilitation. Felicity Baker developed the idea of Modified Melodic Intonation Therapy (MMIT) for people with severe non-fluent aphasia who were not experiencing success with traditional MIT. Normally in MIT the melodic phrasing imitates speech prosody, but in MMIT a musical phrase that is more easily stored and retrieved in the brain is used (which may not be as subtle as the melody of intonation). The involvement of Music Therapists in modifying the regular MIT approach would be beneficial for Speech & Language Therapists.
Observation of MIT

Several Music Therapists across North America explained that MIT is best used within a session in short bursts amongst other treatment methods, as it is difficult for patients who have experienced a form of acquired brain injury to focus purely on one task for long. Most of these observations and discussions took place in Vancouver and Guelph.

Staff at some of the centres visited explained that both the Music Therapists and Speech & Language Therapists liaised re: MIT, with Music Therapists introducing and trialing the approach and Speech & Language Therapists then building upon the foundation skills taught to the client by the music therapist.

It was interesting to see that clinicians all used MIT in a similar way, in that they would initially attempt to conduct sessions using the formal approach, but then would have to respond to the clients and adapt the treatment approach to a more informal method. For example, a specific target phrase may be chosen (e.g. “I’m thirsty”) but after five to ten minutes, the client’s limited attention span resulted in the clinician changing the activity to something unrelated (e.g. singing a song that was well know to the client and encouraging them to vocalize/sing the chorus). The MIT task would then be re-visited two or three more times during the session, between other more creative activities.

Due to confidentiality issues (as well as not all clients having the mental capacity to consent) I was not permitted to record the sessions, but did take comprehensive notes that will be developed into information to share further amongst Speech & Language Therapists and Music Therapists.
Drumming Circles

Drumming circles are powerful tools for use within group therapy sessions and I observed (and participated in) this at most of the places visited, particularly with people who have experienced strokes, brain injuries and early dementia. Drumming is an activity that can achieve a range of goals simultaneously.

The Music Therapist and Speech & Language Therapists use drumming circles to address emotional/psychological goals associated with quality of life, such as empowerment, decreasing loneliness, feeling connected with others, achievement, success and enjoyment. In additional, many non-verbal communication goals can also be targeted using this motivating method. This include turn-taking (a pre-communication skills for conversations), imitation, following cues and eventually developing confidence to lead others non-verbally. It was enlightening to observe examples of humour being displayed via drumming tasks.

![Figure 1: Karie Bilger (MT) & Aimee Berends (MT intern) leading a drumming circle](image)
Familiar Music

It was fascinating to observe music therapists in all settings tap into the use of familiar music for people with dementia and acquired brain injuries. Goals included (but were not limited to):

- Calming someone who was agitated so that they could more readily engage and interact with others (including the Speech & Language Therapist, who could then provide a more effective therapy session than if the Music Therapist was not present)

- Orientate someone to discuss a time and place that they recall (e.g. The Music Therapist plays live music that has personal significance to that person in order for the Speech & Language Therapist to be able to have meaningful discussions and provide communication therapy). This concept is beautifully illustrated in the movie, ‘The Music Never Stopped’, which highlights the power of music therapy. It is based on a true story described in one of Oliver Sacks’ essays, ‘The Last Hippie’ (Sacks, 1995).

The Laurier Centre for Music Therapy Research, Wilfrid Laurier University, Faculty of Music, Waterloo, Ontario, Canada

Dr Heidi Ahonen and Dr Colin Lee kindly welcomed me to visit the well known Laurier Centre for Music Therapy Research. I attended a student presentation on an Aphasia Group that they had been running and learnt more about group improvisation and rhythmic intonation therapy.
Sunnybrook Health Sciences Centre, Toronto

Visiting the Creative Arts Therapy Department within this centre was a unique experience. It was inspiring to see such a well-resourced organisation that could offer a range of creative art therapies (in addition to the allied health therapies of speech and language therapy, occupational therapy and physiotherapy). These included music therapy, photographic therapy, horticultural therapy and art therapy (complete with a studio with equipment for glass-making, jewellery making and weaving).

A highlight was meeting a gentleman who had been a photographer during World War Two during the D-Day Landings and showed me incredible photographs from the front-line, including one of Churchill himself when he visited the troops.
Aphasia Institute: building communication ramps

Toronto’s Aphasia Institute welcomes visitors and volunteers to observe their valuable work and learn how to support people with aphasia. I enjoyed meeting Thyra Adams (Music Therapist) who allowed me to spend an entire day participating in sessions. These included the Drumming Circle and Singers & Ringers (using handbells). We also discussed how Music Therapists and Speech & Language Therapists work collaboratively, as the Aphasia Institute encourages joint working between these professions.
Canadian Association for Music Therapy (CAMT) 38th Conference 2012

Montreal, Canada

3rd – 5th May 2012

Although the conference was aimed at Music Therapists, many of the presentations were relevant to Speech & Language Therapists, as we all work with similar client groups and experience similar issues. Besides learning about specific treatment approaches, gaining a wider knowledge of the music therapy profession has enabled me to understand other possibilities for collaboration. It was a pleasure to additionally meet Gary Thorpe (General Manager of 4MBS Classic FM/Silver Memories), an Australian Churchill Fellow who has established Silver Memories, a radio station specific for people with dementia.

Here are some the highlights of the CAMT Conference:

**Modeling wellness: the challenge and necessity of teaching self-care to music therapy students (Deborah Seabrook)**

Deborah highlighted the importance of ensuring that students develop good self-awareness, which is vital for self-care to prevent professional fatigue. There are all kinds of stresses involved with entering any caring profession, and burnout is a real possibility, especially amongst students and new-graduates.

Although therapists may work in a variety of environments, they all have associated stress factors. For example, large institutions may have heavy caseloads, time-consuming meetings, audits and office politics, while being self-employed in a private practice can be stressful due to lack of benefits (e.g. sick pay/holiday pay/pension),
professional isolation and having to be a business person (e.g. book-keeping, finding clients, collecting payments).

It is up to supervisors and senior clinicians to model good self-care. This includes seeking support and receiving regular supervision.

**Introduction to music therapy with individuals who have experienced acquired brain injury (Cheryl Jones)**

Cheryl Jones is an experienced Music Therapist with advanced skills in Neurologic Music Therapy (NMT).

The Neurologic Music Therapy Training Institute is part of The Center for Biomedical Research in Music at Colorado State University. They define NMT as:

“...the therapeutic application of music to cognitive, sensory, and motor function due to neurologic disease of the human nervous system. Neurologic Music Therapy is research-based. Its treatment techniques are based on the scientific knowledge in music perception and production and the effects thereof on nonmusical brain and behavior functions. Populations served by Neurologic Music Therapists include, but are not limited to: stroke, traumatic brain injury, Parkinson's and Huntington's disease, cerebral palsy, Alzheimer's disease, autism, and other neurological diseases affecting cognition, movement, and communication (e.g., MS, Muscular Dystrophy, etc).”

As an allied health professional who works with people with all types of neurological conditions, attending Cheryl’s presentation was a highlight of the conference and was exactly what I was seeking to learn more about.

Cheryl inspired an overflowing room full of enthusiastic Music Therapists to learn more about NMT so that they could add to their skills to help people with acquired brain injuries. Footage included a lady who was non-verbal and had previously had speech
and language therapists discontinue therapy as they felt they could make no further progress with her. Cheryl slowly but successfully used music to shape the client’s minimal mouth movements into functional sounds and eventually, simple words (e.g. tongue movements became “la” which could then could be developed into “hello”). An interesting side effect was that the client’s oral skills for eating also improved.

Cheryl very kindly invited me to join her the following week in Ottawa, visiting a range of clients. She also inspired me to contact Dr Thaut himself to find out more about how I could link with Music Therapists in the UK who were trained in NMT, and learnt that they welcome non-music therapists on their training. Both the World Federation for Neurologic Rehabilitation (WFNR) and the International Society of Clinical Neuromusicology (CNM) recognize the NMT qualification.

Music (re)habilitation for cochlear implantees: the role of the community music therapist (Sarah Hodkinson, University of Southampton)

Sarah provided an impressive presentation on behalf of her colleagues (Dr Rachel van Besouw, Prof David Nicholls and Dr Ben Oliver) from the University of Southampton on cochlear implants. Aural rehabilitation (learning to listen) following a cochlear implant is a role usually conducted by audiologists and speech & language therapists. However, Sarah successfully displayed how music therapy can complement this. Hull (1992) explained that:

“The influence of music on our quality of life is multifaceted. It can enhance our expressive and communicative capability and enrich our interactions and relationships with others….Assessment of the impact of the hearing deficit on individual clients is critical for formulating a viable aural rehabilitation program based on the client’s needs”

This team of professionals has designed a computer program that allows people with cochlear implants to reengage with music, in addition to practical sessions such as
drumming circles (which have a wide range of benefits for people with hearing impairments). The visual support on the computer screen supports the aural rehabilitation. Participants strongly agreed that the group sessions using the program were “fun”, “interesting” and “useful”. This project highlights that music therapists have a unique role within multidisciplinary allied health teams to help clients reach their own personal potential.

Wrangling Toddlers (Sarah van Peteghen)
Sarah provided an entertaining presentation on working with toddlers, discussing one of the primary goals being a general progression towards independence (and decreasing dependence). She explained which songs were appropriate for supporting a range of children’s developmental milestones, something that all health/educational professionals associated with child development would be interested in learning more about. This is another example of how including music therapists in teams of health/educational professionals would be beneficial.

Music Therapy in the developmental care of the premature infant admitted at the NICU (Christelle Jacquet, Tanya Lavoie, and Isabelle Milette)
This topic was of particular interest because one of my specialisations as a Speech & Language Therapist is in neonatal dysphagia, which means that we work with infants with feeding/swallowing difficulties, including those in NICU (Neonatal Intensive Care Units). The music therapists who work in NICU receive specific training that enables them to learn how to read subtle cues from the infants. They then become a valuable part of the team who not only provide Environmental Music Therapy, but also support and pace babies during the complex task of feeding, which requires babies to coordinate sucking, swallowing and breathing without fatiguing or choking. This latter task is the perfect example of professional collaboration between speech & language therapists and music therapists within a medical setting.
Research in music therapy: proposal, protocol and process: A randomized control trial using music therapy for persons with Alzheimer disease (Kevin Kirkland and Susan Summers)

This presentation was unique and should be applauded because it included the use of functional MRI tests alongside pre- and post-intervention cognitive tests and a new music therapy assessment tool. The value of using objective measurement tools such as the MRI within a randomized control trial cannot be underestimated. This is because these are research methods with credibility in the medical world and will thus raise the profile of music therapy within the health fields.

Figure 4: Statue of Liberty, New York
The Louis Armstrong Center for Music & Medicine

Beth Israel Medical Center, New York

The music therapists at this centre work in a wide range of departments across the hospital. These include: Paediatrics, Maternity, NICU, ICU, Oncology, Respiratory, Pain Medicine and Palliative care. I was fortunate enough to observe music therapists work in a variety of settings and attend in-services on Orthopedics and NICU. Music therapists also took time out of their busy schedules to discuss their involvement in Radiation Oncology/Tongue & Throat Cancer, Neurology and innovative treatment methods. Speech & Language Therapists also work in most of these fields, so the observations and discussions were highly relevant.

It was an honour to meet Dr Joanne Loewy who had established the department and made it a leader in research. Dr Loewy is also the Editor of ‘Music and Medicine: An Interdisciplinary Journal’, which is linked to the International Association for Music and Medicine (IAMM):

“The International Association for Music & Medicine is a non-profit organisation formed in 2009 to encourage and support the use of music in medical contexts including research into the benefits of music, and its specialised applications in healthcare.”

Environmental Music Therapy

It was interesting to observe and experience the power of environmental music therapy within the hospital setting. It is a concept in which a music therapist provides live music that responds to and interacts with environmental sounds (e.g. beeping monitors, footsteps, noisy trolleys, voices etc). The goal is not to drown out environmental sounds, but rather, alter the soundscape for patients, families and staff to make a harsh and stressful listening environment, more relaxing. Recorded music would not be able to achieve this, as only a live music therapist can respond to the environment.
Conclusion & Recommendations

The main conclusion of this project is that collaborative working between Speech & Language Therapists and Music Therapists is the way forward for clients hoping to reach their potential within communication rehabilitation. This concept is supported by publications such as ‘Integrated Team Working: Music Therapy as Part of Transdisciplinary and Collaborative Approaches’, edited by Karen Twyford and Tessa Watson (2008).

The value of joint working cannot be underestimated, and since returning, I have been using my new skills successfully with clients. I was recently working with someone with a significant brain injury who was difficult to engage in conversation. This was due to her anxiety and hallucinations, as well as inability to orientate herself in time and place. With guidance from a music therapy colleague, I simply hummed the theme tune from the client’s favourite television show and then quietly sang the chorus. As I did this, she calmed and listened. When I repeated the song, she sang along with the chorus. This then resulted in her spontaneously naming the characters from the television show and discussing various episodes with me, which lead us into language therapy. Music took the client back to a place that she could understand and for the next thirty minutes, participated in a lucid conversation that would not have otherwise happened. The advice of a Music Therapist allowed me to a more effective Speech & Language Therapist. This is only one of a growing number of examples of this successful collaboration.

Now that I have realised that Neurologic Music Therapy (which includes Melodic Intonation Therapy) is the music therapy approach with goals consistent with Speech & Language Therapy, I am in the process of establishing professional links with Music Therapists who have post-graduate qualifications and experience in Neurologic Music Therapy. We intend to gather together both Music Therapists and Speech & Language
Therapists who are interested in learning more about collaborative working and sharing skills for the benefit of our clients.

I am already teaming up with suitably qualified and experienced Music Therapists, and we intend to offer training to Speech & Language Therapists so that they too can be empowered by the information gathered on how to use music/singing to improve the communication skills and quality of life for adult clients who have experienced strokes, degenerative neurological conditions, acquired brain injuries and dementia. This will also be extended to the paediatric population (e.g. autism, developmental delays).

Drumming circles are not limited to adults with acquired brain injuries but can be used with both adults and children with a wide range of conditions. For example, many children with special needs need to learn the subtle (non-verbal) aspects of communication. Group therapy for social communication skills with speech & language therapists would benefit from the input of a music therapist to guide musical based activities such as drumming circles.

Furthermore, with a growing body of research emerging on the benefits of Music Therapy, there is potential for allied health teams to utilise the skills of music therapists in a wide range of clinical areas such as hearing impairments, language development, stammering and feeding in Neonatal Intensive Care Units (alongside paediatric dysphagia trained Speech & Language Therapists).

The long-term goal is for more health settings (including hospitals, clinic, rehabilitation centres and care homes) to include Music Therapists trained in Neurologic Music Therapy within their multidisciplinary allied health teams. The Royal Hospital for Neuro-disability in London is already a great example of this.
An alternative would be for Music Therapists to act as consultants, guiding Speech & Language Therapists (and other interested staff members) in implementing simple musical techniques with clients (N.B. This would be classed as ‘music in Speech & Language therapy’, as only input from a qualified Music Therapist with their extensive training can be regarded as ‘music therapy’). Collaboration will be beneficial to both professions, and most importantly, the clients.

*Figure 5: Inukshuk, Whistler, British Columbia, Canada.*

The Inukshuk encourages the human spirit on its journey, providing evidence that we do not take the journey alone and reminding us of the importance of friendship and community.
References & Recommended Reading


