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Musical responses in 3-6 year olds with profound cognitive impairment – in song, with instruments and in movement.

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APPENDICES

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Abstract

The topic of my dissertation was to note any musical responses that emerged from a small group of young children with profound cognitive impairment hereafter known as PCI. By focusing on what transpired musically I hoped to shed light on what musical progress was possible *despite* and not *because of* a disability.

The method of enquiry involved two methods of defining responses from this type of group. Three participants with different skills documented the evidence. As this research unfolded, so did the parallels between music therapy and music education. Within the body of this dissertation the two disciplines are discussed, drawing on literature evidence and possible shortcomings in this area of research.

From the original focus of this research project three significant factors for consideration emerged. These were

a) What music lessons mean to early childhood practitioners working with young children with PCI
b) The differences and similarities between music therapy and music education
c) The need for further clarity and training in music education for this type of group

All participating adults presented different perceptions in what they considered in music for young children with PCI. The different philosophies and approaches to music education and music therapy revealed the same overarching desire by the children and practitioners to enjoy a positive experience together. When given regular music lessons with skilled music practitioners the responses were educationally progressive. Music skills can be nurtured in young children with PCI through regular music lessons if sufficient time and space were allowed.

CHAPTER ONE

Introduction

1.1 Rationale for the topic

In the UK approximately 7.3% of all children are moderately or profoundly disabled (Blackburn *et al*, 2013). Out of this 141,455 are between 0 – 6 years old. In this age group approximately 3,170 are classified as having a profound cognitive impairment, requiring round the clock care (DfE, 2012). A London special school receives a 10% increase in new nursery aged, disabled pupils annually, the intake being higher then the national average due to the nearby proximity of three specialist hospitals. The increasing number of young children with disabilities now entering mainstream school was one factor in my decision to explore music with this type of group.

I wanted to highlight any music that existed for young children in the category of PCI, and to see how they responded to weekly musical experiences. The number of 0 – 2 year olds registered as having special educational needs (SEN) increased from 305 in 2011 to 9,615 by the time the children were 5 years old. Paradoxically there is increasing interest and studies in music and health (MacDonald *et al*, 2012) that coincides too, with extensive research in brain plasticity. Recent outcomes suggest a disabled child can be musically trained, and in some cases improve life chances (Gruhn and Rauscher, 2008, Flohr and Trevarthen, 2008). However, the opportunity for this type of group to experience musical engagement has not corresponded with the alarming rise in statistics (Department for Education (DfE), 2011). Despite the wealth of research that suggests music therapy as a positive means of intervention and support, music provision for young children with PCI is at best, tokenistic (Ockelford and Markou, 2012).

The need to offer enjoyable activities to disabled children coincides with the increase in placement of disabled children into mainstream schooling. The SEND Green Paper (DfE, 2011) makes a

recommendation for schools to accommodate educational facilities and activities for disability. Reflecting on curriculum provision in nursery schools I refer to young children registered with SEN. They are given specialist individual support that might include music therapy, but not necessarily music education. Either this, or families must find alternative, costly options elsewhere. Children with PCI are placed in specialist schools since the care and equipment support required is complex, costly and requiring more then one specialist support worker.

1.2 Pre-birth aural development

Altenmeuller suggests that almost all brain regions contribute to musical experience when considered as a holistic entity (2008:234). He writes of the effects of brain plasticity and ability to change when activities are experienced in early childhood (Altenmuller *et al*, 2008). We know that the foetus is able to 'perceive and learn sounds just past mid gestation' (Flohr and Trevarthen, 2008:75). It would therefore be reasonable to assume that a child born with PCI may have already experienced pre-birth aural-sensory communication.

By pursuing musical learning in early childhood there is a logical pathway towards retaining the limited communicative pathways that young children with PCI have. Knowing this, we can then build on his/her existing motor, psychological and sensory ability with time allowed. Musical experiences offered to this group serve as a building block of learning in the socio-physiological attributes such as fine and gross motor movement, vocal utterance, and the finer nuances of communicative learning which, in itself is musical (Dissanayake, 2009:23).

1.3 Music provision for children with profound disabilities

At the turn of the 21st century there appears to have been no common music curriculum in place for pupils with profound cognitive impairments (Ockelford, 2012). This shortcoming coincides with the increase in the number of children surviving complex and multiple disabilities over the last thirty years. Barnes discusses the increasing survival rate due to improved personal care and rehabilitation procedures in young children with multiple learning difficulties since 1984 (Barnes, 2007). The survival rate can also be attributed to improved medical and neurological knowledge and early detection with new equipment available. In parallel, and only since the 1990's, is the advancement of 'using modern brain imaging techniques that help us to understand the neurological processes involving music engagement' (LaGasse and Thaut, 2012:153).

Documented music provision for different disability groups in schools across the UK is fragmented. Up until 2010 there was little coherence or flexibility to meet the specific needs of each disabled child. Ockelford suggests in his report (2012) that although 36% of schools provided music therapy but around 2% of the population of disabled children actually received any. When they do, it is the therapeutic outcomes that take (understandable) prominence over musical aims. Music education is rarely mentioned in general literature for this type of group. One reason may be the reluctance of music specialists to adapt their approach, and perhaps even, the assumption that profoundly disabled children 'cannot learn' music. The second factor in undertaking this research was to clarify from an educator's perspective rather than a therapist's, any musical outcomes noted from young children with PCI.

In UK state schools music lessons consists of a minimum of 30 minutes per week. Of all 93 special schools in the country just 4 were commented on as engaging effective music practice for 3 – 18 year olds (OFSTED, 2012:44). Just one was registered as outstanding. In the EYFS document only one line mentions music in early childhood (2012:9). No mention is made of music lessons for disabled

children. Music provision for young children is often dependent on the philosophy of a head teacher (Vranch House, 2013), or committed classroom teacher (Ockelford, 2012).

Schoolteachers are currently ill-equipped to provide musical opportunities to PCI groups. Music provision for older children with PCI is often a watered down version of music provision for younger, able-bodied children (Ockelford and Markou, 2012). We can argue too, that the lack of coherent training by educators in teaching specialist groups needs addressing.

As a consequence of literature study (Chapter Two), I noticed how little has been researched in music projects relating to children with PCI, and in particular with nursery aged children. As a specialist music educator who happened to be deaf, I was curious to see how young children with PCI would respond to music lessons for learning's sake. As a recipient of many years at a specialist music school I found that the support from having regular music input undoubtedly gave me the communicative and vocal confidence to move into later adult life. A third factor, and with this knowledge in mind, I wanted to see if similar outcomes could occur in children with other types of disability.

1.4 Dissertation outline

In Chapter Two I review relevant literature involving young children with profound disabilities. With the limited practical research and literature available I make comparative observations on music therapy and music education. Chapter three looks in detail at the chosen research methods, and examines the information and footage collated by each of the three professionals. Chapter four draws together all evidence from jottings, film footage, meetings, and analyses findings. Chapters five and six examine in detail the findings that emerged that correspond to the core aims of music learning in young children with PCI. Chapter seven concludes this dissertation with implications for future research and development in this field.

CHAPTER TWO

LITERATURE REVIEW

2.1 The relationship between young disabled children and music

The relationship between music making and disabled children is well established in the field of therapy and intervention (Salmon, 2008; Pothoulaki et al, 2012; Guerrero and Turry, 2012). Progressive musical learning however continues to struggle with a coherent foothold in the complex minefield of profound disability. The distinction between therapy and learning is often blurred (Rocca, 2008), with music programmes being diluted to fit with the latest government's Special Education Needs (SEN) agenda (Ockelford and Markou, 2012). Furthermore, a classroom teacher may have inappropriate training in how to deliver music lessons for a child with PCI.

The debate for music therapy and music education is highlighted to ascertain current thinking in how music is perceived for young children with PCI. This chapter reviews literature that provides research, study and debate on the provision of music for young children with disabilities. Consideration is given to literature that looks at music activities to children with a range of needs, and any outcomes that emerged. A brief summary of the disability groups is given, describing the rationale for musical experiences and intervention that can facilitate musical responses.

2.2 Statistics

Over the last two decades literature offering in-depth analysis of music for disabled groups has increased with more coherence provided in the comparison of different methodologies and research outcomes. It is notable that research studies with young able-bodied children and those with profound disabilities have shifted from a more positivist or detached (hands-off) approach of a child's musical experiences, to one that is more subjective and interpretive (Muckherji and Albon, 2010). One reason as suggested by the same authors is the need to reach further into a truthful analysis of

real people and real events with more respectful methods of drawing out responses and conclusions whilst retaining clear ethical principles.

Literature that looks in depth at music with disabled groups encompasses a complex, and extremely varied subject since disability covers such an immense variety of needs. In particular, diagnosis in younger children is often ambiguous, with the full extent of a disability not evidenced until the child reaches primary age. In the UK there are increased efforts to try to ascertain early detection so as to consider options of helping a child to cope – in many case through musical intervention (Braun and Bock, 2008, Alternmueller, 2008, Kern, 2012, MacDonald*, et al*, 2012).

Statistical evidence shows that the number of children with SEN attending maintained nurseries has risen from 4,230 in 2008 to 5,155 in 2012 (DfE, 2012). The steady increase is reflected too, in private, voluntary and independent (PVI) early years settings. This increase is not reflected in primary and secondary ages, which remains constant. I suggest that the increase in registered children with SEN reflects the increased interest and research in looking at intervention options, with particular reference to music. Mary Hartshorne, Head of Quality and Outcomes for I CAN (www.ican.org.uk) indicates in her speech at the Lost for Words conference (June 15th, 2011) that despite improvement in detecting children's needs since 2000, more work still needs to be done. With new methods of screening and monitoring, early diagnosis in developmental delays is now much more efficient (Department of Health, Social Services and Public Safety, 2006). Children with PCI are given increased life-chances due in part to sophisticated medical support, and skilled post birth care both at home, and in schools.

2.3 Research in music provision for children with SEN

Educational activities involving the SEN Code of Practice only became effective in January 2002 after 'intense consultation with LA's, schools, SEN voluntary bodies, the health and social services and others' (DfE, 2011). This set out areas of educational opportunities that children with SEN could expect, as well as the opportunities for independent schools to provide for specific needs.

The last decade has experienced a time of intense music research for children with profound needs, yet there is still relatively little documentation on the subject of music education easily available. The aforementioned increase in SEN statistics combined with interest in the benefits of music is reflected in The Promise Research Project (Ockelford *et al,* 2002 cited in MacDonald *et al,* 2012). However, the project highlighted shortcomings in music provision for this type of group in schools despite the obvious increase in SEN statistics. The report also questioned the expected aims and outcomes that quickly followed with the 'P Levels', as published by the UK government's Qualifications and Curriculum Authority (QCA). This method of assessment was intended to assist classroom teachers in enabling their pupils to 'access a broad and balanced curriculum'.

However as Ockelford suggests, the angle from which responses were deciphered represented a mainstream educationalist (many of whom adopted a music therapist's philosophy as another strand to assessment)'s viewpoint. The confirmed outcomes did little to acknowledge the music and personal achievements of the child with profound disabilities. Indeed, music used for primary ages was often noted as a watered down version of early childhood material (Ockelford and Markou, 2012b).

2.4 Music therapy versus music education.

I reflect on the disciplines of music therapy and music education. Much of the literature available refers to the benefits of music as a holistic provision to children with PCI. The perception of music offerings as music therapy has persisted by support units working with this type of group. In the majority of literature currently available music is notable as a predominantly therapeutic activity, rather than an activity to be enjoyed for its own sake, or to support positive learning. Altenmuller suggests:

'Music education focuses on progress in a specific skill. Music therapy is commonly used to support communication' (2008:262).

The understanding of music as a therapeutic subject rather than educational is often assumed because the client/pupil is disabled. To illustrate this point I refer to a short survey taken from an earlier research project (Hutchinson, 2012). The survey was distributed to an SEN unit working with young autistic children. Their responses revealed the following assumptions:

'Music therapy deals with feelings brought about by sounds. Music education is practical information'.

'The therapist can bring a song to life…our therapist was brilliant, gave each child as much or as little as she/he wanted'.

Even though the SEN support unit was aware that the music educator was not a music therapist their assumption of music learning as therapy persisted. The music educator's aims were entirely musical in delivery, and in what she expected from the children. The implications of what a support unit or parent thinks their disabled children need and what is possible for them to learn is an ongoing debate (Ockleford and Markou, 2008). So how might we define music therapy and music education?

2.5 Music therapy

When analysed, 'therapy' is the application of healing, remedy, or the rehabilitation of a person with key health related issues. Music therapy employs a skilled musician working with a person in need of therapeutic support in musical ways. We might refer the relationship of therapeutic sessions as a crucial element in the facilitation of responses by patient as a consequence of the therapist's activities. Nordoff-Robbins is one such national charity organisation researching, advocating and delivering music therapy since 1959. The focus of their work is to draw out responses using a musician who would traditionally play the piano in response to the patient's moving and vocalising. More recently other instrumentalists now provide similar experiences. A relationship then develops from the basis of the instrument, the therapist and the patient.

2.6 Using instruments

In this research project active participation by using a variety of instruments was a key component in looking how the group responded to music making. Responses were then documented as music improvisation with educational aims in mind. Finding literature that referred to instrumental participation by disabled groups for educational purposes is thin on the ground. Available literature continually referenced a focus on therapeutic benefits of instrumental use as opposed to educational use. Wigram and Elefant suggest that music therapy can offer a free space for expressive improvisation (2000) including experiences with instruments. In centres such as a national Rett therapy clinic (since 1992) the piano as a music tool was a starting point for compelling responses in disabled groups. Instruments become the choice of the client as they (client and therapist) 'settle into musical patterns of interaction' (Wigram and Elefant, 2009:440). By using music (piano and voice) as a vehicle for communication, the client is able to make sense of their world, and 'is fundamental to his/her sense of self and wellbeing' (Ockelford, 2012a:322).

2.7 Music education

We know that the aim and objective of music education is musical. The music educator will actively seek, and draw out musical responses using a range of resources and music guidelines as dictated by a curriculum, personal training or recognised teaching method. Musical achievement in the UK is predominantly associated with national curriculum aims in mind. Music lessons together with all other subjects studied in schools are then subject to OFSTED visits to assess quality and standards (DfE, 2011 and OFSTED, 2011). Reference to children with special needs is extremely limited, simply stating 'equality of opportunity for all pupils' (DfE, 2001:9).

In the Early Years Foundation Stages (EYFS) profile 'reasonable adjustment to the assessment process for children with special education needs must be made as appropriate.' Also, 'to consider specialist assistant to help…' (DfE, 2011:12). In this respect no acknowledgement is made to early years practitioners being equipped with the skills to include PCI children in the same activities as mainstream children, including music.

2.8 Cross-pollination of music therapy and music education

The cross-pollination of music education and therapy is the subject of popular debate (Podmore et al, 2013), particularly given the increasing statistics of disabled children. The compulsory requirement of UK schools to offer places and support to children with specific needs means that classroom and music teachers have to consider more flexible approaches to the material and delivery structure. Ockelford makes reference to music therapy developing musical ability in addition to being responsive to other areas of need (Ockelford, 2012b:396). Rocca advocates music therapy and education working 'in synthesis' (Rocca, 2008:268). Furthermore Altenmueller suggests that children with Attention Deficit Hyperactivity Disorder (ADHD) will develop 'a more rhythmical and balanced sense of self through learning a musical instrument' (Altenmueller, 2008:251) thereby combining the need for two areas of knowledge.

2.9 Using music components to nurture response

LaGasse and Thaut suggest that 'rhythmic entrainment can be used in rehabilitation of non-musical sensorimotor, cognitive and communication function' (2012:157). The multi-aims (therapeutic and educational) of musical activities with disabled children suggests that as a consequence of motor synchronisation because of musical moments, participants are able to engage in a similar musical experience as an able-bodied child. The paradox of education input versus therapy input in effect could be considered as an equalised musical experience as measured by output. A musical experience is achieved by applying appropriate early childhood modules to draw out mutual musical motor empathy and rhythmic auditory stimulation.

Another approach to music analysis was to look at the separate musical components e.g. pitch, rhythm and tempo. Known as a reductionist approach, this idea was developed to provide a foundation for germination of a more holistic experience (Edwards and Hodges, 2008). However little ongoing research appears to be evidenced as to whether this approach might have been useful in accessing musical responses to children with profound learning difficulties. What we do know is that music has been a critical ingredient for health and wellbeing throughout history. Therapeutic music and music intervention has been studied and delivered since the early twentieth century (MacDonald *et al*, 2012). I argue that practice and literature evidence on music with disabled children is also disjointed because of the quantity of varied and complex disabilities. The statistics are increasing year by year.

2.10 Transfer effects of music

More recently much of the literature written discusses the positive, transfer or variable effects of music on young children with multiple learning difficulties. Research and practice pays close attention to music intervention that provides positive outcomes in other areas, including arts, humanities, in communities, in health and learning (MacDonald *et al*, 2012). Ockelford, LaGasse, Thaut and Robbins

all refer to music learning in various journals and research papers. In particular Ockelford draws on the parallels of musical learning and therapy. He questions whether or not the two methods are 'inextricably linked' (2012b:398). More recently and perhaps because evidence of music education for disabled groups is so thin on the ground, there is increasing interest on the facilitation and cross-pollination of music therapy and education. Comments have emerged from the 'Teaching Music Forum' (Podmore et al, 2013) indicating the following requirements, but making no mention of therapy to provide appropriate music lessons for this type of group.

2.11 Age restriction in early childhood music studies

Further shortcomings in literature findings was the discovery that many studies were undertaken with primary ages, or were on an individual basis. Gaining parental consent to document groups of young children with PCI is a likely, and justified reason for the dearth of research based literature available for this age group. Other difficulties in accessing literature that refers to studies with young children with PCI and musical learning could be attributed in part to the following:

* Agreement by families and schools to allow music lessons without a therapeutic aim since their perception is that music can only be therapeutic to be of benefit
* Potential distress brought about as a result of physical needs, spontaneous emotive and functional responses to the time (of day) and the environment, and other, cognitively related influences
* Little or no training for early years educators in teaching music to young children with PCI

2.12 Other disabilities and the influences of music intervention

With respect to other disabilities, research and theory has been documented in recent years of children with Attention Deficit Hyperactivity Disorder (ADHD), of which there are many different strands. Authors include Kranowitz (2005) who makes the case for music as an intervention for

supporting areas of communication and social integration with this type of need. Musical experiences can help a child to manage their disability or in some cases, reduce the problem (Kranowitz, 2005, Shore, 2013). In some cases too, musical intervention has not only improved socio-emotional ability, but has revealed an emerging and serious talent in music on the part of the child (Ockelford, 2012b). Other disabilities that have benefited from music intervention include speech and language delay, emotional trauma and partial paralysis (LaGasse and Thaut, 2012).

Exploratory study in musical learning with multiple learning difficulties is hard to find either in paperback, or via the internet. Music making studies present a therapeutic focus on specific areas such socio-motor support, using a range of tools to build on and develop existing motor-sensory initiatives offered by the child. In many examples too, emotional wellbeing is a primary focus of music therapy initiatives. In music therapy activities for individuals, the parent might be indirectly or directly involved to build mutual companionship and shared enjoyment (Pothoulaki *et al*, 2012).

2.13 Positive impact of music experiences

The available literature confirms that positive impact of music in children with PCI greatly outweighs any negative impact. With this in mind and by determining a format for music making with adopted, recognised methods of analysis, we could see what musical responses transpire.

2.14 Approaches in early childhood music teaching

The focus of this research project was on a specific age group. I considered a number of approaches to music lessons. These helped to define a robust template and that could potentially be adapted to the group's ability and responses. Kodály's approach to quality musical experiences included appropriate singing with musical games and hand symbols as a music practitioner's tools for delivery (Flohr, 2005). Orff's approach to using high quality instruments was another consideration for

drawing out responses in young children with PCI. He provided a range of specially made, frequency based instruments, and explored improvisation techniques (Flohr, 2005). Another pioneer in early childhood methodology influencing the lesson template was Dalcroze. He believed that music emerged from the body as a rhythmical tool for musical understanding and learning (Bachmann, 1991). Dalcroze's philosophy sits well with profoundly disabled children since moving to music stimulates all the sensory mechanisms and awakens possibilities for responses in areas that might be overlooked (eyes and fine motor movement). Positive outcomes from an earlier research study (Hutchinson, 2013) helped to further define a structure with musical outcomes as a principal aim.

In the ensuing chapter I describe the methods used to collate evidence of musical responses from young children with PCI. I describe the process leading up to 6 weekly music lessons. I confirm how research data was collated, the data template and other methods of recording responses that took place.

CHAPTER THREE

3.1 The research method

The qualitative research design was a useful approach for this research project since my focus was on a small group of children with PCI. Analysis was drawn from predominantly written observations and video evidence (Denscombe, 2003, cited in Mukherji and Albon, 2010). By acknowledging personal influences combined with respect for early childhood behaviour patterns, a reflexive, interpretive approach helped to prevent misleading assumptions (Mukherji and Albon, 2010), and was entirely appropriate. Data evidence was collated from three different professionals. Comparing and combining the different sources of data, is known as triangulation (Roberts-Homes, 2005). The practice of triangulation gave this research validity and helped to retain a balanced analysis.

Responses from the children as a consequence of musical experiences were recorded by adopting aspects of the Ockleford/Markou model (2012) in conjunction with the Nordoff-Robbins' numerical data for analysing responses in children with special needs (1980).
A weekly music template from an earlier research project with young deaf children was applied each week. If music could facilitate avenues of communication and positive engagement to children with a disability such as deafness, perhaps comparative music delivery could emerge in other types of disability. These include autism, dyslexia, attention deficit hyperactive disorder (ADHD), and PCI.

Offering music lessons using a tried and tested template could elicit positive responses, and consideration for future use by other groups with different disabilities (Hutchinson, 2011). Any positive responses as a consequence of an educational delivery could be perceived as a 'holistic rather than as a therapeutic music experience' (Edwards and Hodges, 2008:7).

3.2 Roles and responsibilities

My role as Music Researcher (MR) was to analyse disabled children's responses with musical objectives in mind. An experienced music educator (hereafter known as Kitty) delivered the lessons each week. As a specialist in early childhood music education Kitty also had some experience in managing groups with SEN. A Music Trainee (MT) was invited to help Kitty with lessons, and to participate in noting down observations each week. The Classroom Leader (CL) was invited to play an active part in this research project. Other supporting staff remained on hand to help with any physical needs as required. The primary data in this research was provided by the three professionals i.e. the MR, MT and CL. Kitty was not involved in data collection since she remained focused on delivering the lessons each week. As the music educator Kitty's perspective was a valuable part of the discussion team. As well as delivering lessons, her main objective was to establish the outline of all lessons, the material and resources used. Research material on each child and outcomes from regular discussions helped Kitty to adapt her approach and material according to the responses deciphered.

3.3 Approaches to the research design

Young children are generally most responsive when in familiar and positive surroundings with people they know and love. With respect for the particular vulnerabilities of each child I was keen to ensure that the physical environment was as normal and comfortable as possible. I adopted a reflexive, interpretive approach for this research (Mukherji and Albon, 2010). This approach also helped provide a transparent picture of what emerged. The research design was underpinned by a qualitative approach to reflect a more keyhole viewpoint to observing individual children with specific needs. Subsequently the emphasis on drawing out evidence was placed on the gathering up of rich, descriptive notes or jottings, rather than rows of numbers and empirical data (Mukherji and Albon, 2010).

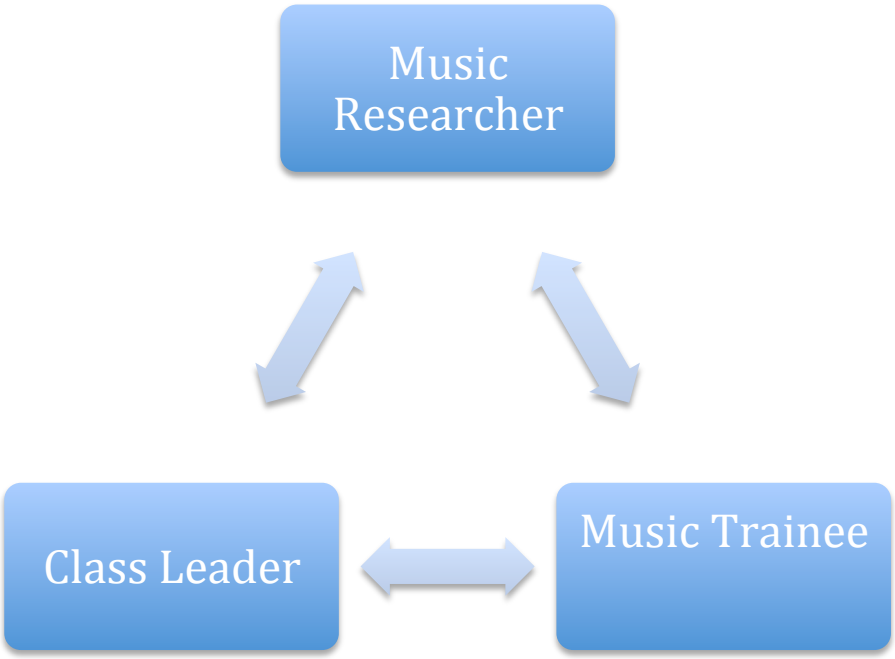
I chose to collate all data from three active participant observers. These consisted of the CL, the MT and myself as MR. The triangulation was established to taking field notes (Mukherji and Albon, 2010)

since a shared practice of combining data helped to draw on the perceptions of three relevant professionals. Early diagnosis of a young child with severe brain damage may not be fully understood. In this respect a triangulation helped to bring together different perspectives as a consequence of different professional skills in order to create a coherent and truthful analysis.

Being active participant observers (Mukherji and Albon, 2010) meant that we could participate actively during lessons, and also make notes whenever a significant activity took place. The different perspectives helped to provide a better understanding of what actually occurred (Roberts-Holmes, 2005). The CL, MR and the MT were all given the same logging template in which they jotted down what they saw (App:99). At the end of 6 weeks, all information was collated and analysed by the MR. The different professional backgrounds provided equal validity and helped to make the findings more convincing (Roberts-Holmes, 2005:40), and helped avoid bias.

Model of Triangulation

Music Trainee/Classroom Leader/Music Researcher



Each participant's perception to the different responses was helpful in building up a clear picture of what actually occurred. If I was to retain the perception of this research as a consequence of a musical experience and not as a therapeutic experience, the analytical focus had to be clear. This was made possible by appropriate measures being taken to ensure that all active participants had some background history of each child's needs. The musical aims for the CL, MR and MT, also had to be understood in order to create a unity in observing and documenting. A pre-session meeting confirmed the outline of each lesson, any musical responses to be aware of and the intentions of this research design overall.

3.4 Background of each child

Background information on each child was collated by the CL and made available to each participant observer. Kitty was given the same information to help design a appropriate set of activities each week. Within the allocated time of 5 minutes per module each activity had to be sensitive to specific needs whilst being able to accommodate the whole group. Attention in particular, was made to sensory-motor ability, and to any adverse reaction that could occur as a result of a musical event. One

example is Car's susceptibility to epileptic fits. We were also informed of Abe's habitual rocking forward and backwards motion, and that Ann rarely made eye contact. Knowledge of, and then ways of shifting habitual modes of behaviour (Nordoff and Robbins, 1980:190) could demonstrate emerging musical responses as a consequence of an experience. Knowing about these characteristics helped to define what could musically evolve and change.

The research objectives were as follows:

a) To examine in detail, responses from each child by using the data log templates, video snippets and jottings.
b) To analyse all findings keeping in mind musical learning as a core aim.
c) To draw conclusions that might have an impact on future music making for this type of group.

3.5 Gathering data evidence

Gathering data information required a coherent and quick process of jotting throughout each music lesson. A lengthy process could delay the ability of each participant observer to participate. Any notable absences could affect the natural flow of lessons and influence responses by the children. I chose two templates from a combination of Ockelford's and Nordoff-Robbin's score chart (2012b and 1980 respectively) together with descriptive snippets of what was noted. Video recordings were taken of week 2 and week 6 by myself as MR to decipher any detailed sound and visual responses. These findings could then be examined alongside the written data evidence. The musical intentions for the CL had to be collectively understood so as to create a unity of participation, observation and documentation.

The three participating observers were made aware of Kitty's approach to lessons prior to the start. Simultaneously Kitty needed to respect the needs and specific areas of disability of her participating pupils. The MR had to confirm the intentions of this research and resources that would be used. Both objectives were achieved in pre-lesson meetings. These included discussing appropriate ethics, possible musical preferences by each pupil and ideas from each participating observer.

3.6 Choosing the group

Although there were up to nine children present in the music lesson each week, five children formed the main subject for this music research. This small group reflected the CL's decision to work with her own class group. The CL could then benefit from findings in other ways as attributed to her own observational notes. The sixth child, also from her group was not part of the monitored group because his family was uncomfortable about video observation. The children were all pupils at a London special school.

The five children had profound cognitive impairment (PCI) and complex needs that required physical manoeuvre, and active support. Each child had varying degrees of disability, with some as yet undiagnosed. All the names have been changed to respect their right to confidentiality. The information given to Kitty, the MT and MR helped to define what we should be aware of when delivering a sensory enhancing experience since, excessive noise or movement could result in distress such as epilepsy or emotional trauma.

Name	***Disability***
Ann (5 yrs)	vulnerable to epilepsy and complex medical needs

Car (6 yrs)	cerebral palsy and microcephaly (weakness in movement, impaired motor functions and speech delays), epilepsy.
Abe (4 yrs)	complex medical needs.
Luc (4 yrs)	global developmental delays and limited visual ability.
Soph (5 yrs)	complex heart condition, central hypotonia (decreased muscle tone due to disrupted nerve signals in the brain) and hypermobile joints.

There are two boys and three girls (App:100)

All participants are in wheelchairs and are supported in mobility, feeding and general care by their classroom teacher and a designated carer. Notably the CL suggested that deciphering details of each child's disability was difficult due to their young age and potential changes that could occur at any time. The ambiguous description of each child's individual needs reflected sensitivity required by Kitty in deciphering each child's engagement and any preferences noted. Being aware of any behaviour habits was useful in avoiding assumptions of response that may be unrelated to the activity (Nordoff and Robbins, 1980).

3.7 *The environment*

Prior to lessons starting I discussed preferred options in where the five children would be placed. Being mindful of the group's complex needs the CL confirmed their own classroom to minimise disruption and to retain an ambience of familiarity as far as possible. The area was spacious and light. During music lessons the tables were moved back, and the children faced into each other in a loose circle, with a gap to enable entry by Kitty. Chairs were placed at either side of each wheelchair so that carers could participate and support each child. Moving furniture around was a normal procedure as other activities took place throughout the nursery day, also requiring general adjustment.

3.8 Weekly music lessons

This research project was hitched onto an existing, weekly music lesson that had already been running for two terms. As the music educator Kitty continued to deliver these lessons and was happy for her lessons to be used as a part of a research project. By keeping the momentum of normality and routine, implementing the research design was relatively straightforward, and respectful to the group's ongoing needs. By carefully considering the needs of the children, the class routine and supporting staff, positive initial outcomes included;

a) Lessons included every child including those not part of the research

b) The classroom team saw the project as part of a weekly event

c) The children already knew Kitty

e) As active participants the MT, MR and CL were mutually respectful (Mukherji and Albon, 2010:107)

3.9 Ethics

Consideration had to be given to several parties before this research project could go ahead, so as to respect the right of each child to participate as little, or as much as he/she wished. Given that the complexity of each child's needs included little or no language, parental consent was imperative, in addition to consent by the CL, the head teacher and Kitty. A letter informing families of the project was sent out, together with a permission slip for photographic evidence to be taken. This also confirmed changing the names of each child to respect their right of confidentiality. Due to the age of the children in addition to the sensitivity of each child's needs, the CL acted as a gatekeeper (Mukherji and Albon, 2010). This role provided the CL with an opportunity for immediate action or guidance needed as a consequence of unexpected issues or responses from the group.

Background information on each child helped Kitty to be mindful of any potential distress or preferences. As a settling in period the first two weeks enabled the group to become familiar with the

presence of the MR, the MT, the beginnings of data jotting and video use. In total nine children were present.

3.10 Inclusion

So that no child was excluded from music lessons the five participating children were positioned next to each other. This allowed for unobtrusive filming and written jottings to take place, and respected the other children's right to privacy. Only one child's family did not consent to any filming at all.

The perception and understanding of what music meant to the children and their supporting staff was discussed, as well as information volunteered by the CL on any music provision that currently taking place. The most notable musical input each day was the morning welcome activities. Each day the class weaved familiar melodies such as "row your boat" into simply worded lyrics to depict the daily weather, and acknowledgment of each other. Other music lessons included music therapy with individual children throughout the term.

3.11 Creating the music project

Each lesson was 30 minutes long, with 10 minutes allowed after each session to enable feedback from the participant observers. The three participant observers were chosen to reflect their varying skills in working with this group, and to support the process of research. The MR (myself) had evaluated other special needs groups and years of experience in early childhood music making. These skills were useful in noting responses and referring to any musical progressions that might transpire. The CL brought her specialism in managing, and knowing the children to the documenting process. This helped to avoid assumptions made on the part of involuntary or unrelated behaviour. Other attributes that helped the research process run smoothly included

* Three pairs of hands to assist with moving the children around and handling resources.

* Agreement by the CL to adapt the position of wheelchairs for each lesson
* Being able to move in and out of the group so as to jot down what was noted

The MT, CL and MR sat between the children in a semi-circle, facing inwards. This enabled easy access to support the group, and to move wheelchairs without difficulty. Kitty chose not to sit, but moved continuously around the semi-circle in each lesson. A table was placed in the gap in the circle from which Kitty could access resources and instruments. The 5 children in this research were seated at one side of the semi-circle with the participant observers (MT, MR and CL) seated in between. Other supporting staff sat between the remaining participating children.

3.12 Lesson Template

A fixed lesson template was used throughout the project (App:99). A similar template has been used in music lessons with able-bodied children and later, for a group of profoundly autistic children. Each module represented a specific activity. A brief description on how each child responded each week was applied to each large box (Fig 1) together with application of a letter* or number*. These represented the Ockelford and Nordoff-Robbins approach to recording responses (p.28-31). The letter or number was written down in the smaller box for each child.

Fig 1. Log template

Name	Hello	L N	Warmup/ Thematic	L N	Instrumental	L N	Moving/Dancing	L N	Listening	L N	Farewell	L N
Luc												
Ann												

Soph												
Car												
Abe												

*** L = letter.** This refers to the 'Level Descriptors' approach (Ockelford and Markou, 2012b)

*** N = number logged.** This refers to the 'Level Indicator' approach (Nordoff-Robbins, 1977)

See data explanation below.

3.13 Data input

Each headed section represented a module of music activity. Each module was approximately 5 minutes each, with the total length of each lesson being approximately 30 minutes. Two main influences on data logging with special needs groups were adopted for this research.

3.14 Ockelford's 'Level Descriptors'

Ockelford's final report from his findings in his 'Sounds of Intent' project highlighted the scarcity of appropriate music provision for this type of group, and the dumbing down of material used by the Qualifications and Curriculum Authority (QCA)'s 'downwards' approach' (2012:388). I was keen to subjugate the QCA material, and to adapt tried and tested approaches with musical aims in mind. Components from Ockelford's 'Sound of Intent' research project provided one idea for recording data. In his 'Education *in* Music' model (2012b:387) a group of practitioners noted in short descriptions, the responses, actions and interactions of each child with PCI. These descriptions were then catalogued into one of three dimensions via a single letter:

R = Reactive – Listening and responding (to musical experiences)

P = Proactive – Causing, creating and controlling (their musical experiences)

I = Interactive – Participating with others (in musical experiences)

In his analysis Ockelford looked at responses from the perspective of musical achievement. The primary objective was to note intrinsically musical responses (2012b).

In this research project, each letter from the level descriptors (henceforth known as LD) was used as a shorthand means of noting responses within each module of activity (Fig 1). Any musical responses were deciphered within the realms of each child's ability (cognitive, visual, aural and texture (touch and taste)), and then logged in the appropriate letter symbol to reflect the type of response category. As long as the meaning of each letter was clearly understood by each participating observer in this research project, inputting data for each of the five children being observed should have been relatively straightforward. In his model for interpreting responses, Ockelford continued to develop and analyse evidence through additional, detailed description and levels. As the MR I chose to use the LDs as a snapshot indicator of what occurred in this research project since we were constrained by time.

3.15 Issues arising with data logging

The pre-sessions meetings helped to clarify exactly how each participant observer was to jot down what they saw with this approach in mind, and what the method of logging meant to each one. The time allowed for appraisal after each lesson was also useful in adapting or changing our collective approach to this research project. From the outset however, the CL struggled with Ockelford's LD system. She had been participated in an introductory training course on Ockelford's 'Sound of Intent'

programme and found it hard to follow. The CL acknowledged however, that this method would be helpful on an individual basis.

3.16 Assessing responses

With the three LD components of assessing responses (Reactive, Proactive and Interactive) the CL felt there was too much detail to absorb and remember and deciphering what category each child's response went in was complex and time-consuming. Finally, as a specialist in children with PCI, she had no music training. Even though she was aware of the value music held for her children, and the musical basics to look out for, the CL struggled to shift her perspective to assessing responses relating to social and communicative engagement. Paradoxically Ockelford directly refers to the transfer effects of musical learning, attributing music to improving memory, communication and social interaction (2012b:395-6).

After the two introductory lessons the CL suggested providing an alternative, numerical approach so as to give each child marks out of 5 for their responses. This led to the consideration of another, alternative approach to logging that might work effectively alongside the level descriptors. In the meantime, the MT and MR (myself) were happy to log responses using Ockelford's LDs to log data since we understood the musical options to look out for.

3.17 Nordoff-Robbins' 'Level Indicators'

The second influence in logging responses was the Nordoff-Robbins method of 'Level Indicators' (henceforth known as LI) This approach to assessing responses involved nine-level scale numbers as 'instruments of clinical perception' (1980). As an organisation specialising in music therapy, the Nordoff-Robbins numerical method was created with therapeutic responses in mind. The numbers

were established to assess development of their pupil's communication and each one's ability to socially progress. Number 1 was classified as 'non-response'. Number 9 represented whole engagement in musical understanding.

However, because of the CL's discomfort in using the Ockelford 'level descriptors', I chose to use both methods alongside each other. We agreed to adopt this model but going from level 1 up to 5 only. The lowest number represented apparent disinterest in the activity presented. 5 represented significant interest with a clear musical focus. The CL was reminded of the continued importance of viewing responses wherever possible, as musical.

3.18 In-depth analysis

Both methods of recording data shifted from the basic logging templates to which we referred into an intricate, in depth system. In the many studies recorded by these gentlemen time was clearly a greater friend than with this research, since logging sessions could take place over a number of months or even years. By contrast we were limited to 6 weeks and 6 lessons (after the initial 2 trial lessons) from which to record what we saw. Using the fixed music template (App:99) the three participant observers wrote down what they saw in each of the six modules. The written descriptions were kept to a minimum, with a reference then made to either the numerical or letter system.

3.19 Deciphering responses as they occurred

The three participant observers wrote descriptive snippets in each module box with the following four objectives in mind:

a) Moving – how and specific pattern or rhythm noted

b) Vocalising – how and when, and in response to what

c) Using instruments – how (with moving/vocalising in mind)

d) Resources – how (with moving/vocalising in mind)

The first three refer to objectives as established by Nordoff-Robbins (Robbins, 1980). With all three objectives the music educator encouraged creative exploration within the realms of a clear lesson plan. This made sense to the participant observers and became familiar to the children (Young, 2011). In this research we offered *resources* as a fourth module. In this we could then collectively ascertain any musical responses through a child's interpersonal relationship with an object such as a bird puppet. This multi-sensory approach is a prerequisite of specialists working with deaf children as an example. Materials such as puppets, ribbons and bubbles encourages 'every form of dialogue' (Salmon, 2008) and are playful ways to draw out musical responses.

3.20 Combining two approaches to data input

Taking constructive feedback from each of the participating observers was useful to gauging their ability to log what was seen, and importantly, a desire to log data effectively. The advantages of providing two different logging methods was not so much about the methods used, but about the people applying the method. What actually occurred was the use of a therapeutic method of logging by a specialist in early childhood disability and the use of an educational approach to logging by music specialists. Combining these two approaches created more analytical work for the MR since she had to consider the musical implications behind both. However, by providing two options to logging, the professional integrity of each of the three participant observers was respected, and helped to retain the status quo.

3.21 Music activities and songs

The MR and music educator chose specific music activities and songs with guidance from the CL prior to the start of the project. We wanted to build a sense of familiarity and empowerment in each child as a result of hearing and experiencing the same songs and thematic elements (Fig 2) throughout the six weeks. Furthermore, the same musical offerings helped the CL and her team to quickly familiarise themselves with each activity, thereby singing along, and musically engaging with their pupils. With the group's capability in mind each activity progressively developed.

Fig 2. Songs, activities and resources used

Welcome	Warm up/Thematic	Instrumental	Dancing and movement	Listening	Farewell
Sing hello	*Dicky birds* *A bluebird/Big blue train*	*High in the air*	*Round the mountain* *Boogie woogie*	*Yellow bird* *Sounds of instruments*	*Sing goodbye*
RESOURCES USED	RESOURCES USED	RESOURCES USED	RESOURCES USED	RESOURCES USED	RESOURCES USED
Voice and Kitty's ukulele	*Bird puppets* *Train, ribbons*	*Chime bars, ukuleles*	*Kitty's ukulele and voice*	*Voice and Kitty's Ukulele*	*Voice and ukulele*

The following chapter discusses analytical approaches of all data and descriptive jottings submitted.

CHAPTER FOUR

4.1 Analysing the evidence

Focusing on physical and sensory mechanisms for responses helped me to retain a robust analysis of collated data. I am reminded of Dalcroze's theory of the ear and the body being the primary focus of (musical) instruction (Flohr, 2005). I analysed what the children looked at and touched. Being mindful of each child's different needs I also made a note of any other sensory awakening that occurred, for example using their tongue to enjoy a tactile experience in much the same way that an able-bodied child might enjoy but with their fingers (Vid3).

4.2 Analytical approaches

Analytical approaches for this research dissertation acknowledged a short time scale of six weeks after the introduction period. Both the Ockelford and Nordoff-Robbin's data analysis model allowed children to choose whether to participate (or not). By offering a fixed template of 6 modules within a 30 minute period

a) Analysis of musical responses between each child was possible
b) Analysis of the relationship between each child and specific music modules was possible
b) Preferences and peer influences could be gleaned over the ensuing weeks

Ockelford's LD guidelines helped the MT and MR to decipher how each child responded to each module throughout the six weeks. From the impetus of response the MR then teased out any music development that may have emerged because of a consistent music experience. By using all three levels of response (Reactive, Proactive and Interactive) we could see how each child made a decision that was characteristic of their personality and emotional being, coupled with an 'innate desire to learn' (Gruhn, 2008:41).

The role of Kitty as the music educator included making her group comfortable and interested, so as to draw out interest, curiosity and the will to learn, so to recite, 'the parallel of emotional wellbeing and learning undoubtedly has a bearing on what might occur' (Braun and Bock, 2008:45). An introduction period of two weeks helped to establish a positive relationship with the MR and MT as well as fine tuning the overall structure.

As MR I paid particular attention to any fine motor responses (for example, a brief look, a movement of the leg and so on) each week. Building up patterns of specific responses could indicate whether they occurred not as a consequence of the 'now', but from an experience of musical learning.

4.3 Data collection

Data collated from the three participant observers included video clips and personal jottings. This evidence helped to deciphered findings that might demonstrate musical preferences and engagement because of weekly lessons, as a result of, or despite any movement, vocal or sensory limitations each child may have. Musical preferences noted could be anything from sounds that they heard, the elements of music as a form (tempo, pitch, rhythm) to the more general ambience of music (phrasing, aesthetic, style). Furthermore we considered elements of composing that emerged, by allowing time for each child to explore sound making and repeat musical patterns.

4.4 Repetition and memory recall

Many research projects have emerged from a tried and tested formula from which to take notes, videotapes and to reflect on what was seen (Guerrero and Turry, 2012). Each child's memory of what was done before was helped by the repeated music formula together with a consistent involvement on between Kitty, her pupils, the MT, MR and the CL. I recall Gardner's theory of multiple intelligences. By opting for 'depth over breadth' (Palmer, 2001:276) each child has the capacity to

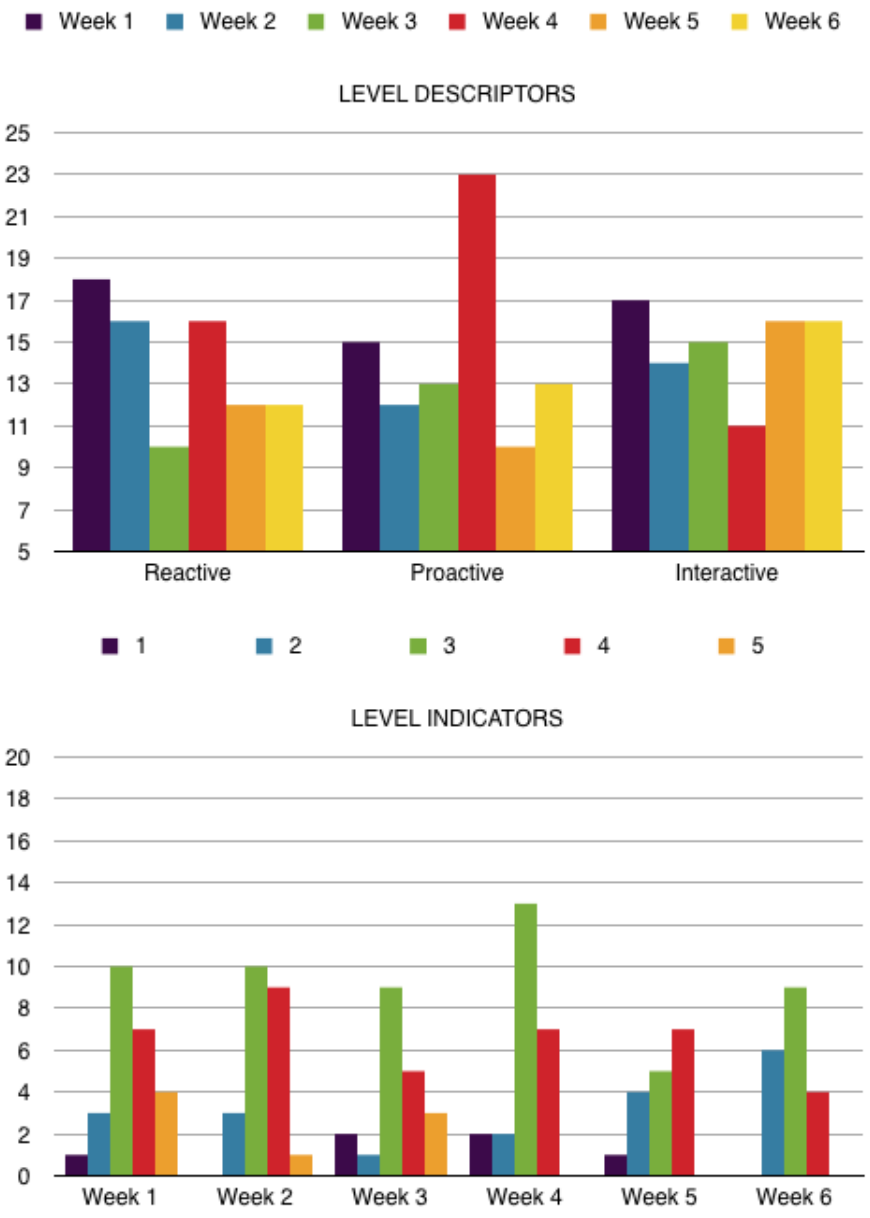
understand what her or she learns. Within the template of 6 modules Kitty wove the possibilities of a musical story. By choosing simple, short songs and activities with a thematic thread musical interaction and interrelations occurred, and responses jotted down in the 'descriptive' boxes.

The following chapter now draws analysis from the six modules, vocal recordings, written jottings, the LD and LI methods of logging, video clips and pre/post meetings. The sub-headings help to map responses within a specific framework of music activity.

CHAPTER FIVE

5.1 Findings that emerged - analysing the log charts

The weekly progress of the children logged using the LD and LI's looked initially disjointed. However, when transferred to a skyscraper chart we could see a pattern emerging (App:93-8)



The outcomes as demonstrated in the two log charts (figs 4a and 4b) show the group being on average actively consistent, and indicated a genuine interest. Interactive engagement was at play, and the children were generally alert. In the LI chart, the lower numbers coincided with personal

issues such as tiredness, hunger or pain as confirmed by descriptive snippets written alongside. Each child had a log template. This meant that a great deal of information was compiled making analysis extremely time consuming. However deciphering responses had to be applied on an individual basis because the need of each child was so diverse.

The action of inputting the LD formula helped the MT and MR think about what they were actually seeing, and why. As a discipline the process was methodical and undoubtedly helpful in avoiding bias, being over-elaborate or making assumptions. Likewise, the LI gave the CL the chance to reflect on her group's actions.

5.2 Responses - *repeating modules of activity*

Personal acknowledgement is intrinsic to a child's desire to feel wanted, loved, and wish to communicate. A mother will intrinsically enjoy proto-conversations with her newborn baby (Flohr and Trevarthen, 2008, BjØrkvold, 1989). Over time repeated patterns of musical exchanges help a baby to develop expression and vocal repertoire. In parallel, and by reaffirming a sense of belonging in the repeat welcome song offered we could be retaining some notion of earliest musical exchange pre and post birth, however small (vid9).

The weekly *welcome* song helped to create a mutually agreeable exchange. As a group we shifted progressively from one musical activity to another. The final module of *Farewell* reflected a time for calm, contemplation, collective acknowledgement and closure. In vid10 we note Ann (in red shirt) waving, then clapping, and finally, uttering her own special farewell song. This transpired after 6 weeks of repeating the same farewell song. The CL commented on the value of repetition, not just for the children, but for her team too. Even though she was nervous about new songs, the introduction of new songs occurred within tried and tested activities, and linked directly to the current theme ('Two little dicky birds' then later in 'high in the air I fly').

5.3 Communication through emotional attachment

Emotional attachment and communication appeared to be a key component in positive musical learning (Flohr and Trevarthen, 2008). An example is taken from jottings made by the MR of mutually expressive exchanges occurring between the classroom assistant and Luc. Both were absorbed with the sound of a chime bar.

'She strikes the chime, then leans it beside her ear. She then passes it to Luc who does the same. They listen, then (she) shifts the chime bar for both to listen with the other ear together. Luc's arms go up and down as the chime rings out.'

Notably the arm action is not a habitual motion. Luc is normally still and watchful. In this activity Luc is clearly happy. His action could be spontaneous, and as a consequence of hearing the sound of the chimes. Or perhaps he is joyfully accompanying the sound he hears, thus indicating early signs of composition. Whichever impulse provokes response Luc is happy.

5.4 Mirroring the able-bodied child and the child with PCI through music

Rhythmic entrainment can be used in rehabilitation of non-musical sensorimotor, cognitive and communication function (LaGasse and Thaut, 2012:157). One theory that could be explored further is, that as a consequence of motor synchronisation the children are able to musically engage in a similar experience to an able-bodied child. This idea may be considered as equalised musical learning i.e. in mutual musical rhythmic auditory stimulation or motor/auditory empathy. Even though as observers we might not actually *see* a response due to severe restriction of movement the experiences could be perceived as relevant for a child with PCI as for an able-bodied child (Ockelford, 2012, Flohr and Trevarthen, 2008:69, Nordoff and Robbins, 1980). By creating modules that included dancing the participant observers noted responses that could be deemed as musical, however small:

* *Ann moved her eyes sideways as her wheelchair moved, then smiled and looked up, then down.*
* *As we danced with the wheelchairs, Abe stopped her customary forward and backward jerk. She was completely still, as though the rhythmic movement from the chair flowed through her, the music being immersed within.*

Musical interpretation occurred through eye movement and stillness as a relevant strand to musical learning and development.

5.5 Sensory response shift

A young child with PCI draws on other sensory/motor areas to experience music as an able-bodied child might also experience. Bjorkvold describes a young child drawing and vocalising as 'singing the drawing' (Bjorkvold, 1989:69). A sensory response shift is noticed in Vid7. Soph (on the blue ukulele) touches, strums, touches then moves the strings with her face. She is singing in her feeling or perhaps feeling her singing as she participates with the singing that she hears.

5.6 Developmental learning over time

In music activities anything could happen since music is not definitive. In Vid2 Soph is seemingly vacant in her first "hello" with the ukulele. She shows no apparent focus and randomly touches the ukulele then looks away. In Vid2b Soph is focused, then plays, then touches her hands together. In Vid2c notably she waves her hand. Each one was taken approximately two weeks apart. The CL affirmed that the significance of repeat and familiar activity over a period of time might help her children to remember and to acknowledge the activity, however small acknowledgement may be. We notice this later in Vid20 with Abe's tiny wave in Vid20.

5.7 Empowerment

Empowerment was enabled because of recall that may have been compelled by sensory awakening. In week 2 Soph assumes disinterest in a chime bar in (Vid7). By week 6 Soph is entirely focused on the ukulele (Vid8). Her increased interest and concentration is likely due to a number of factors including

a) Routine and expectancy of instrumental time

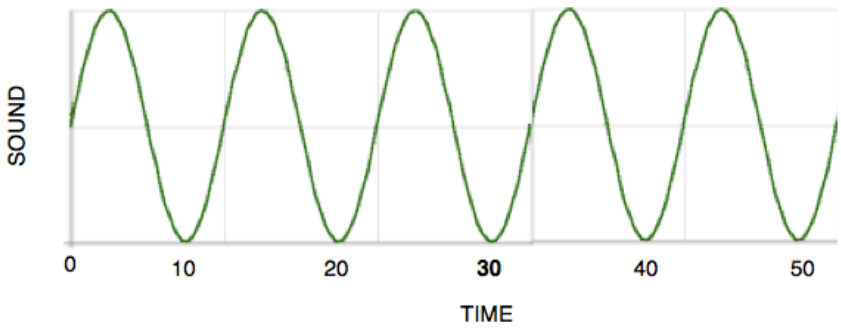
b) Shift in engagement due to preferred sound frequency shifts (from single pitch sounds to multiple pitch sounds)

c) Ability to take responsibility of sound making and holding (instrument)

5.8 Sound waves

Sound waves are a powerful tool in exciting a child's interest and attachment to its source. If we were draw a sound wave (Fig. 2) we could see how a sound heard might move.

Fig. 2



The nature of sensory awakening as a consequence of the sounds heard, evokes musical nuances. If cognitive motion is restricted then another movement source including vision is a realistic alternative. An example is noted from jottings (Wk 4:MT). As the 'sound waves of guitar playing shifted up and down Soph's eyes move simultaneously'. In this, Soph's eyes were responding to what she heard, unlike the chimes heard two weeks earlier. The pitch of the chime and one ukulele string is the same

(G). A likely reason for Soph's lack of response could be her preferences to the different notes played together, or multiple sounds. Her interest was held due to the repetition of rich chord sounds she heard when Kitty strummed. Musical progress ensued since preferences were clear to see.

5.9 Resources as a tool for musical engagement

The *Warm up/Thematic* module involved sounds that related to a song subject by using an instrument or prop such as a bird puppet. The song was offered to the group, with Kitty taking cues from the children when repeating, moving and shifting sound shapes. By using a thematic linked prop such as a bird musical responses could be teased out of a child. The tactile property of a toy awakens multiple senses including taste. In Vid3 during 'high in the air I fly', Abe feels the bird with her tongue, her face, and her hand. She wiggles it then turns her eyes towards Kitty. Abe then lifts the bird up high and low, in a graceful, curve in time to the musical phrase. Is this her way of re-enacting the music? Or perhaps she is creating her own music at this point. I am reminded of Young's references to the use of toys in musical play, and in many cases doubling up as an instrument, or in the drawing out of a new song (2003).

In the first few sessions noted Ann's initial resistance to handling any kind of resource (bird, train, ribbons). Over time with repeated familiar songs she begins to relax. Despite her resistance to touching things Ann begins to make sense of a resources through melodic repetition. Frequently I reminded myself that in music, not just one area (aural) was awakened and stimulated, but many including the body, the eyes (looking for the perceived sound) and emotion. Schlaug and Bangert (2008:112) make interesting observations on multimodal neurones responding to a range of musical experiences that in turn complement each other.

5.10 Engaging through resources and rhythm

Developing the group's musical experience refers to the thematic element introduced in *Warmup/Thematic*. This module reflected a musical aim such as pitch. The chosen song might use a syncopated melody or one with dotted rhythm. The shift in pitch might reflect a sense of travel, or extension of time in a rhythmical way, as shown by using a mouth organ (Vid14). By using a train and ribbons we hoped to offer a sense of purpose and understanding in a musical experience. The combination of pulse and rhythm was complemented by spontaneous motion on the part of the children (Vid15). Over time, similar responses were noted in the dance module. In this, I reflect on LaGasse and Thaut's comments on rhythmic intervention or entrainment to draw out positive responses (2008:156-7).

5.11 Rhythmical stimulus elsewhere

LaGasse and Thaut (2012:154) suggest too, that rhythmic stimulus engages areas beyond the auditory cortex. In the case of moving wheelchairs in rhythmical time to what they heard, other sensory areas were stimulated and activated. Gruhn and Rauscher indicate that other, positive results include social engagement, singing, memory and musical elements (2008:275). I am reminded of the intrinsic responses the sensory system makes to a rhythmical experience. In time, the cortical area for motor movement is activated. Within the dance and movement module, detailed moving rhythmical patterns were evidenced as a direct consequence of a music and movement experience. In Vid4 we note fine motor responses from Ann, and similar pulse motion from Car (fingers and body). These occurred during wheelchairs being moved, and in moments when their wheelchair was suddenly stilled at the end of a phrase or song.

5.12 Moving and dancing

This brings me to discuss the value of moving to rhythmic melodies with children who are cognitively disabled. With permission from the CL we moved the wheelchairs in time to the music played on a ukulele and sung by everyone. The chosen songs reflected melodies that were both rhythmical and

lively. By moving (their chairs) we tried to give the group a similar experience to what able-bodied children might feel when moving to music. The responses were illuminating.

Contrary to mutual expectation, negative reaction such as epileptic fits did not occur. Rather, in many cases at least two children remained still and calm as their chairs were moved vigorously around including Car who suffers from fits. Notably in Vid18 Car and Abe (who both have habitual motor motion i.e. moving up and down and back and forth respectively,) were calm**.** Both looked down with a thoughtful expression as they were moved in their chairs. Rather then simply sitting and feeling they were probably deciphering a kind of inner, subjective musical play. The combination of mutually agreeable movement and rhythmic melody had gone into another place where we could not see, but only imagine. Over time, broad smiles emerged, perhaps too, as a consequence of a repeat experience and subsequent empowering of a musical event as earlier suggested. I am reminded of Flohr and Trevarthen's reference to tacit moving in spite of enforced immobility (2008:69). The value of a lively musical experience to an immobile child is equal to the actual physical responses of an able bodied child. In both categories they are musically responding or are musical.

Notably, by the fourth week the average LD mark was 'I' or 'P' (Fig. 4). Being interactive ('I') indicated making a choice to engage. This was noted in the smiles and eye contact from Luc as well as in movement from Ann and active participation from Car with his helper (App:93-8).

5.13 Instrumental moments

Offering each child a chance to explore and respond to the sounds of their instrument gave scope for personal responsibility as well as musical exploration. Referring to the earlier relevance of tactile toys to music making, instruments present a direct musical message to the children, particularly when given one each. They are in charge of their own instrument, and the sounds that emerge are from their instrument, achieved by them alone (Vid17). In ownership exists a private moment, an

awakening of other senses that may not be evidenced always, by those assisting (Vid7). The looking, staring, touching and acquisitions of different muscular activity on a thing that makes sounds triggers another type of musical experience. Time allowed for exploration on an instrument draws out elements of composition, and one that is deeply personal.

We can reflect on Rocca's belief that music and performance is a 'natural part of (their) lives' and is a 'personal, private and individual experiences that they can either choose to share or to explore individually' (2008). The CL's commented several times on the learning and participatory value of having an instrument or resource to hold, explore, hear and see. The MT spent more time interacting with pupils (Vid16a) as a consequence of interacting with instruments. As MR I reflect on the choice of having a few key resources or instruments to reinforce the thematic element as a process in musical learning.

5.14 Compositional elements

Kitty considered instruments that could be explored without risk to a child with multiple learning difficulties, and with restricted physical movement or uncontrolled motor activity (Car flinging his arms in the air). With guidance from the support staff, Kitty considered how compositional elements could arise as a consequence of a personal, tactile, and aural experience. The point of the *Instrumental* module was not so much about mirroring musical activity and response, or group (orchestral) control as with able-bodied children's instrumental sessions. Analysing this module involved noting any vocalising or musical patterns emerging from that experience that could be perceived as compositional as earlier suggested. The video clips confirmed positive responses with instruments. Written jottings helped to see how the group made progress in the handling (of instruments) and coping with the different sounds (Vid17).

5.15 Imitation and empathy

'Imitation and empathy are two important components to musical learning' (Altenmueller, 2008:235). Arguably these components relate to most areas of learning. Given that emotional wellbeing is a prerequisite for positive response, Kitty created a rapport with her group in the first module, *Welcome.* We look too, at repetitive format of the template for providing a feeling of familiarity since there is a repeated beginning, middle and end.

During the first week Soph acknowledged the ML's singing hello directly to her by looking away. She then put one hand on the ukulele throughout the song, and then the other at the end of the song. She then looked up. Her musical response was within, and clearly internalised as a phrasing pattern (Vid2) and what she saw. Six weeks later Soph looked directly at the ukulele, and brought both her hands up to play, and to correspond with the ML singing "hello (Vid2b). Logging data as adopted from the LD and LI earlier indicated awareness and responsiveness by the group over time.

5.16 Layered learning

As the weeks rolled by I was struck by the significance of responses from each child to a musical experience, however slight. Vygotsky's theory of auditory scaffolding (1978) sits comfortably with what I saw in this respect. Within a weekly music experience of 'layered learning' (i.e. small adjustments being made to the same song or activity), the children were progressively musically experiencing step, by tiny step. Perhaps even too, a child would simultaneously construct meaning out of what he experienced for himself (Flohr, 2005). Vid6 captures Luc (on the left) and Car (with the ribbons) responding to the mouth organ. We note how Kitty gives time for responses however small. We might assume the responses we see are musical since they are evoked musically.

Several comments from all three observers referred to apparent of joy or pleasure in a child at various times throughout a music session. They included

MT: '…*Smiled, laughed a lot*'

CL: '…*Showed good eye contact with Kitty*'

MT: '…J*umped up and down, he pulled the strings, he looked at Kitty*'

MR: '…B*eats chime bar twice, then several times, up and down. Misses, then hits, other hand in mouth, looks pleased. Tries to eat beater. Beats again. Repeat pattern for a few minutes'.*

Able-bodied children and children with PCI demonstrate an overarching desire to learn. This desire is embedded with an insatiable curiosity to discover. The discovery is then 'rewarded with a feeling of wellbeing once an activity has been experienced or accomplished (Braun and Bock, 2008:40-42)'. This was evidenced throughout the life of this research. In example Vid1 we see Abe (on the right) and her neighbour playing the chime bar then responding with a sudden shift in motor motion, and then a smile. Perhaps Abe is experiencing the "dopamine kick" that Braun and Bock suggest (2008:41). Here, we might suggest that learning is more efficient when linked to emotions (Braun and Bock, 2008:45). Many times an activity given was evoked intense stares and silence by Abe. She would then burst into a fit of giggles.

5.17 Routine and repetition

Engaging musically through repeated patterns, sounds and song created a sense of ritual that is celebratory and in turn, familiar, reassuring and affirmative. Later a familiar song is adopted then adapted. A child hears, hears again and absorbs, hears again and recognises, then understands. She/he becomes competent and is in turn acknowledged (Merker, 209:52). In Vid12 Ann hears, sings, and pats her knees. Car takes his bird and uses it to indicate continuing or perhaps to be part of the song. Luc retains, and moves with his bird, always watching Kitty carefully.

In the context of a routine framework, and repeated songs, the MR noticed the child's desire to participate, and re-engage with what he/she now knows. In the absence of language Kitty translated and tried to make sense of a response. She drew together, made sense of the fragmented layers of cognitive/ritual/sound responses. As with a jigsaw, Kitty took little bits of what she saw and heard and glued them together to create a coherent, progressive whole. With this information Kitty provided new ideas from which to continue the process of musical learning, thereby avoiding complacency. The repeat ritual of the template, the same songs with slight adjustments here and there empowered the children's feeling of musical engagement. In turn they made progress. Normal musical aims and objectives generally work to a restricted time frame with expected, recommended outcomes. As a group with such an extensive range of needs, a musical outcome was whatever we discovered within the musical template created.

5.18 Time to enable

Since our aims were to draw out, and build on musical skills, we tried to retain clear and coherent music-developmental pathways that might not be evidenced with music delivery in other special needs groups (Ockelford and Markou, 2012b:385). As music educators we know that time is music. With this group we enabled plenty. The CL commented on the prevailing sense of calm throughout the music sessions because of allowing time to explore. I reflect on the CL's suggestion that disabled children can take up to three times longer then a mainstream child to respond to a given experience. With this in mind, we could ask ourselves whether enough time is ever allowed for young children to respond to a musical experience providing they, and not the music teacher, is ready.

CHAPTER SIX

6.1 Points of view from the participant observers

Information on each child with the fixed music template enabled the active participants work from the same starting point even though two methods of data logging were given. However each participant's perception of responses was sometimes quite different:

"She vocalised repeated pitch changes" (MR)

"Her sounds seemed to go up and down" (MT)

"She is communicating well. Good listening!" (CL)

6.2 Classroom leader (CL) - challenges and initiatives

The CL's perception of her pupils' responses was to decipher continuing focus or eye contact on what occurred. Whereas the MR noted Ann's 'graceful phrase-like curve' the ML wrote 'Ann was engaged with Kitty's activity. Good looking.' Her jotted LI was 3, was an average mark, and not necessarily musical in its output. Paradoxically and despite our initial meetings the CL's logged comments persisted in looking at how each child communicated, rather then how they musically responded. Comments included observing responses through an eye movement, motion of a limb, making sounds, or how the children held their instrument. The CL looked for whether fine or gross motor movement was at play. The tiniest response noted was translated as a positive move since motion, however small confirms a desire to move; that the child was interested, engaged and actively participating.

According to the CL engagement was an important component of emotional contentment during music lessons. Of notable significance for the CL was the use of repeated, familiar activities to evoke positive responses. Clearly the group was enjoying music and in turn, they were able to make sense of their world through the familiar songs and activities offered provided a balanced music diet to

awaken the senses. For example the *Instrumental* module might include fine and gross motor activity (Vid6 for gross and Vid17 for fine). Later, *Moving/ Dancing* incorporated a sense of whole sensory engagement. Using various resources such as a bird puppet or toy train helped to define a theme. They also teased out a child's personal preference for different resources. By building on a child's preferences they were encouraged to choose preferred sounds and demonstrated a desire to communicate through instrumental and sound making. In her written jottings the CL writes of 'playing and exploring', 'being willing to have a go' and 'being involved (and focused)'. As MR I note that these written snippets refer to the EYFS document (DFE, 2013:20).

Another example of the CL's observation is in the repeated activities with different children. During the "High in the air I fly" song Ann dismisses the puppet bird by turning away, lifting her arm up in front of the bird. By contrast Abe held the bird, turned then twisted it, before lifting up the bird and 'feeling it rhythmically with her tongue' (MT). The CL acknowledged 'good looking', 'she was mesmerised'; 'she was distracted'. The MT on the other hand noted 'she created musical sounds, "baaa baaa baa" '. Both perceptions are valid in the capacities of the MT and CL's professional training.

6.3 Music and additional benefits

The CL stressed that her professional area was not in music. Therefore she could not see the *musical* difference that music lessons made to her children. Simultaneously however, she attributed wellbeing and enjoyment by evidence in the increased confidence her children were given when managing new experiences. This was notable particularly with different instruments (chime bars and ukuleles). By having one each the CL noted preferences to an instrument, and how they were handled and the child's subsequent response. Paradoxically the MT and MR noted preferences to instruments for the child's ability to compose or during an orchestral moment (Vid17) i.e. playing together. The different professional training defined viewpoints that are hard to shift.

6.4 Transfer ability

The CL's assessment of managing new experiences relates to consideration of the transfer effect (Catterall and Rauscher, 2008:178). The CL was interested in the association of a place and time that is linked to an enjoyed musical experience. Being able to transfer a skill learnt from one area (music) to another area (playground or lunchtime) is extremely difficult for a child with PCI, and something that teachers take for granted as a normal procedure in the case of an able-bodied child. I refer to Johnson's theory of transformation (1987, cited from Faulkner and Coates, 2011:188-9). The CL acknowledged that even with profound disabilities, over time, skills developed from musical activities could re-emerge elsewhere at a different time and place.

6.5 Examples of transfer effect

Over the period of 6 weeks, responses to the different modules resulted in notable comments such as with Luc (wk 6, *Welcome*) 'looks at ML;' 'follows her with his eyes'. Then, (wk 6, *Instruments*) 'looks intently at his ukulele'; 'plucks with fingers'. The CL noted Ann (wk 4, *Warmup/Thematic)* ' shook arms to blue bird puppet, when music stopped, uttered "aaarrgh" and clapped her hands'. Then (*wk 4, Instruments), '*pats knees in time to song on chimes', 'utters "daaaa" to song and pats knees.' The CL's level indicator mark was 4 – 6. She confirmed that a high level of interest and response was maintained.

A young child with PCI might demonstrate apparent disregard for one instrument (Vid13), then acknowledge another, completely different instrument (Vid21 in the red shirt). Musically she shows preference for an instrumental sound. In Vid9 the MR noted Ann waving in the *Welcome* module (in the red shirt). In Vid22 she lifts hands up during the train song. In both Ann was participating musically. Furthermore she demonstrates 'a graceful motion sideways, then later up and down' (MT), thus creating a musical phrase or pattern. A kind of transfer effect occurs when Ann uses her arms

and hands to connect with a different song. The adjustment of her motion suggests an intrinsic understanding of the thematic element of each activity, although the CL might refer to these examples as another kind of shared experience.

Insofar as music offering transfer skills, the CL noted that music is a vehicle to help her children to make sense of things. Music is more than just words. It is a whole sensory experience. For these children who struggle to vocalise, or make coherent sense, music provided a rich multi-sensory filling to enable reflection and response in each child. The transfer effect of a musical experience bounced from reflection to response and back again, according to the sounds and songs absorbed. When reciprocated, the shared experience is not just sociable but follows a musical pattern. Intrinsic musical games are at play. We are reminded here, and many times before, that positive pathways in relationships combined with the pre-birth, or innate musical beginnings are a prerequisite for formalised music lessons since there is enjoyment and response occurring. From the documented evidence it would appear that musical progress ensued.

6.6 Musical aims and objectives - *responses from the perspective of a MR and MT*

When teaching music the music educator is immersed in the business of achieving musical aims and objectives. By working with a small group with such diverse needs Kitty commented,

'…the group became a group of young children making music, rather than a group of young children with profound disabilities being supported by music.'

From the start of the project the MR, Kitty and the MT were aware of the highly vulnerable nature of the group, and that a certain amount of unpredictability would transpire in responses to offered music experiences. Complex issues can impact negatively on a child's progress. Personal issues impact

on able-bodied children too. This was taken into consideration when analysing data. One example is Soph coming in from swimming and expressing resistance to any form of activity.

As participant observers we acknowledged that a child with PCI demands more intensive professional responsibility and initiative than for able-bodied children. One reason is that even the slightest physical or emotional distress had to be quickly intercepted without disruption to the remainder of the group. The material had to reflect possibilities for continuing *despite* a possible negative reaction either from an individual, or the group. When new sounds appeared to be objectionable to a child, Kitty gently re-introduced the same sound over time since managing different frequencies was part of the music learning process, and unwanted experiences too.

In Vid13 Ann demonstrates resistance to holding or listening to the chime bars. The MT's corresponding LD or 'Reactionary' (R) confirmed this response. On closer observation the MT noted that Ann's aural responses appeared to manifest the sound through turns and graceful hand turning shapes. Ann's resistance to the tactile action of holding a chime bar was less significant then her movements to the sounds she heard. The MT's persistence helped Ann to manage what she visually appeared to disregard. In accordance with Ockelford's analysis of 'R' Ann then creates (her own music). When teaching music to able-bodied children we might remove the offending instrument only to lose the ability for time to draw out musicality in other ways.

In her jottings the MT was concerned with what happened musically. In her capacity as participant observer she demonstrated sensitivity to individual responses, and a willingness to recognise musical elements that was then referred to the LD data.

By contrast to the CL's interpretation of what emerged, the MT's written observations were driven almost entirely by what she saw emerging musically; 'graceful phrasing with his arm',

'repeated pattern'. However, despite the different perceptions post-sessions discussion revealed that the MT and the CL enjoyed music because the children all had a lovely time. In this case mutually positive engagement is a consequence of contentment between two parties. Trevarthen refers to felt aesthetic principles that defy reason in the judging of the quality of musical performances (1999).

The MT's input was helpful since her jottings were impartial. Assessment and analysis was not evidenced as within her role as participant observer the MT was simply affirming what actually took place in musical ways. Other comments included

'Rocks backwards and forwards to the sound of the ukulele'.

'Back and forwards, rocked to the sound of the chimes and smiled'

'To the train whistle sound, shakes head, looks at train, follows it up and down.'

Referring to our prominence given to visual experiences (Young, 2011) the MR realised 'other senses such as the kinaesthetic and proprioception, that 'helped to consider deeper implications in the MT's comments' (taken from MR jottings). An example is noted in the MT's observation of Abe's rocking actions that coincided with the sound of an instrument. Later, during the $4^{th}/5^{th}$ week, the MT writes 'Abe was still during the instrumental sounds'. This new response suggests that the habitual action of rocking may have been a comfort motion during times of unfamiliar sounds or activity. With musical implications in mind we can see that Abe is now making a choice as to participate consciously, by the slight raising of an arm or hand to the sounds she heard.

In the same video Ann (in red shirt) looks, sees what her friends are doing and vocalises. Her expression is one that cannot be deciphered as 'disinterested' since her facial muscles and eye motion do not respond in the same way as an able-bodied child. MT's developing skill was in

appreciating Ann's idiosyncrasy. Ann is making sounds, or perhaps, singing since she is responding to the compositional elements she hears. Over time the MT noted Ann elaborating vocal utterance as well as movement, particularly when the focus (by Kitty) was on another child.

6.7 Time to want, and time to action

Abe (in pigtails) wants to play the chime bar held by the ML (Vid1). The ML enables this by holding it and giving her time. The following actions ensued:

Abe responds.

She tries.

She repeats her action.

She explores her beater.

She repeats her chime sounds.

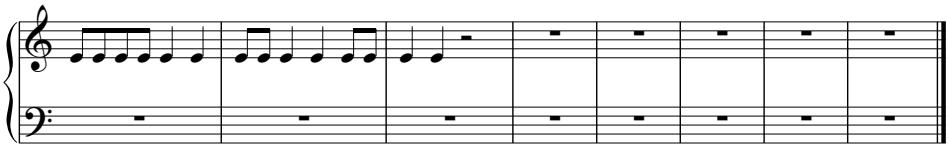
Abe beats her knees.

She beats the chimes.

She taps the beater on her face.

She taps her hands.

The MR noted that as with the written description Abe's responses constituted a sort of mini-phrasing pattern. Exploration and sensory shifting is at play. With a therapist hat on we might assume that the benefits of this experience is socio-motor interspersed with active engagement, that in turn is providing Abe with motor and mental stimulation – an important life component. On the other hand with musical objectives in mind Abe's melodic-like phrasing and rhythmical patterns occur through instrumental playing and body percussion Fig. 5).



With multiple sensory awakening in mind I am reminded of Young's article on creativity within time, space and intensity (2011). Young explores the predominance of western culture over visual preferences, and the lack of documented evidence in organic energies within time and space. Over the six weeks the MR and Kitty reflected on two key areas of skills acquisition:

Pace (of lessons)

Enabling (of responses)

6.8 Being aware of the space

A component of presenting activities was Kitty's physical presence to the group. During the welcome song she welcomed each child in turn through the same song, and changing the name to the recipient child. The MR noted she had her back to the group thereby reducing the relevance of the activity to other pupils. Equally, once the song had been sung to a child, she/he lost interest. Kitty was encouraged to shift her physical presence and randomly acknowledge each one, thereby initiating musical exchange. The *Welcome* activity then became meaningful to every child since each was respected throughout. Over time, Ann's initial resistance to any form of dialogue or visual acknowledgement with Kitty appeared to relax, to sing in response and to make eye contact. Bang (2008:119) writes of music as a form of communication. Ann's music experience was positive, compelled imitative responses (call and response) and was musically communicative (Vid4).

6.9 Enabling musical play

Analysis of Ockelford's LD data suggested that pupils as well as teachers encourage musical play. There are moments of reflective behaviour by both Luc and Car recorded in descriptive snippets as being watchful, still, 'leant his head on one side', 'leaning forward intently', 'stared'. Ann also maintains a watchful presence, presenting the occasional compelling and rather picturesque faces in response to a new musical experience (Vid13). The responses from all three were from watching Kitty begin a new module of activity e.g. welcome. The logged 'R' (Reactionary) was appropriate to each one's response since he or she then something different. Car shook from side to side, with arms waving, Luc's arms went up and down, and Ann shut her eyes, turning her head to one side. Each one's response became a miniature and repeated pattern that was musical by virtue of repetition.

Another example is when Abe rocks back and forward on hearing the sound of the ukulele and Kitty's voice (Vid20). She stops when Kitty sings to her, rocking her head gently from side to side, then waves. This decisive act could be perceived as an interrelationship within a musical moment. Robbins suggests that client-therapist's relationship as it develops in this practice of music therapy is 'essentially an active interrelationship and takes expression in the musical and personal interresponsiveness of client and therapist' (Robbins, 1980).

6.10 Responses enabled through silence

During music lessons classroom teachers often assume that children must be able to hold an instrument correctly, and play or sing in a certain way. This is noted in Vid25. The CL (on the left) and the class assistant are both showing the children how to play their chime bar. The teacher-led focus contrasts with Vid24 where we see Kitty playing and stopping, and going with the children according to their responses. Kitty's use of time and silence is a skilful tool in showing this group how the chime bars work, and what they sound like, then enabling the children to have a go. She gives them time to explore and compose. The later (Vid25) perception of handling and sound making is a continuation of musical engagement. The example from Vid1 informs us of how we might view music making in young children with PCI. In this, you

will observe listening, exploring, creating, focused, being guided, acknowledging, socialising musically, and using other (less obvious) senses such as eyes to participate. The assistant and Kitty (blond hair) are enabling, vocalising, leading and then releasing.

The final chapter draws conclusions from the findings, and comments by the participant observers.

CHAPTER SEVEN

7.1 Conclusion

My intention in this research dissertation was to see what musical responses transpired from young children with PCI as a consequence of weekly music lessons. From the data collated, together with pre and post-sessions meetings and the evidence gathered from video clips and descriptive jottings, a number of musical benefits emerged including

1) Being able to discriminate sounds
2) Creating their own sounds
3) Relating sounds to source (instruments)

I refer also to comments on the motives behind music therapy (Chapter 1). Other benefits that emerged that were not specifically musical blossomed despite or because of clear musical aims being established from the outset.

With a familiar and clear template sound making creates its own intentional structure with a rise and fall (of pitch), phrase patterns, and a beginning, middle and end. All this enables a child to participate in a musical journey. Within the music template applied vocalising, spontaneous gross and fine motor motion, independent response and interactive musical engagement was noted. With the limited psycho/motor ability available engagement empowerment and emotional response became positive experiences with clear developmental pathways.

7.2 Implications of analysis

The enormous quantity of evidence made analysis of musical responses from each of the participating children time-consuming and somewhat complex. However, close analysis revealed a recurring pattern of perception and response. The professional background influenced each participant

observer's analysis of their group's responses. Despite pre-project meetings and assessment guidance, the CL essentially responded in her capacity as an early childhood educator within a special needs school's criteria. Her interest was drawn towards the social engagement of her pupils' rather than in musical achievement.

7.3 Overarching agreement by participant observers

One unanimous agreement emerged as a consequence of this research project. The positive responses by each child encompassed by a personal sense of achievement were all noted. What each child experienced as part of a routine school day was undoubtedly musical and valuable because of an intrinsic desire to experience and learn. Additionally the participant observers, the classroom assistants, children and the music educator could draw on the benefits of the weekly experience and learning outcomes from each other.

7.4 Personal benefits

Personal benefits evidenced for each child included motor, social and aesthetic acknowledgement and understanding. Core skills in musical learning evidenced included compositional, orchestral (playing together), solo performance, imitative musical exchange, phrases and pattern development. Musical milestones as suggested by the national curriculum included

- Explores music and dance in their own way
- Experiment and change sounds and movements in their play
- Represent their own ideas (being imaginative) through music

(DfE, 2011:30)

From the evidence collated I suggest that these milestones were woven into the lesson template from the outset. The more detailed aspects of musical learning that emerged included dynamics, pitch, and tempo, and instrumental experiences. Whether or not each participating child made progress was dependent on three factors:

- Time and space allowed
- Repetition (of songs/activities)
- Emotional state

This research dissertation highlights possibilities for further exploration in the ability of young children with PCI to learn music. A predictable outcome of musical achievement at the end of six weeks was impossible since the levels of response logged were not consistent (App:93-98), nor did the musical progressions create an obvious pattern, as they might do with able-bodied children. What did emerge with these factors in mind, were snippets of emerging musical progression.

7.5 Musical learning and therapeutic benefits

The current thinking in music learning for children with PCI does not correlate with the responses as confirmed by this research dissertation. The theoretical values of providing additional support in life skills through musical offerings are numerous, and respectful to individual needs. Instrumental play, singing, composing, moving (to music), and listening were all underpinned by strong educational musical elements including performance, genres (of music), rhythm, phrase patterns, turn taking and playing together.

In the relevant literature available the agenda for musical learning was largely therapeutic and in many cases focused on just one or two music principles at any time e.g. instruments or vocalising. The

aims and objectives are respectful of individuals with specific needs, but negate the educational and sometimes holistic value of musical learning that emerged time and again during the life of this project.

The ability to learn music must be matched by the will and want of the educator to provide each child with PCI with tools to do so. The cross-pollination of music therapy and music learning is inevitable (Ockelford, 2008, Salmon, 2008, Gruhn and Rauscher, 2008, Macdonald et al, 2012) and each can be mutually respectful. More in-depth research needs to be done to demonstrate the intrinsic value of music education, encompassed by the right of the disabled child to learn and to enjoy musical learning with sensible, skilful adaptation to accommodate the different needs. Learning outcomes could then reflect the value of young children with PCI engaging in music as a curriculum subject, with musical aims and objectives.

7.6 Music from the beginning

Finally, I reflect on Dissanayake's suggestion that a tiny infant is richly endowed with communicative musicality (2009:23) before even any vocal exchanges occur from the mother. A disability may occur at birth or post birth. Respecting the ability of a young disabled child to engage and to develop musically and with a musical goal in mind is therefore plausible. The participant observers confirmed in their findings enrichment that music brought to the group. By adjusting the current trend towards therapeutic principles and pursuing the idea of a thoughtfully designed music education programme with proper time and space offered, the benefits of ongoing musical learning could provide enrichment not just for curriculum study but in other areas too.

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APPENDICES

Key responses (taken from collated written jottings and notes)

Level Descriptors

Level Indicators

ABE

WELCOME

WEEK

1/ Quiet, engaged, watched but not active	RP 3	
2/ Moved back and forward. Stopped when K sang to her	PP 3	
3/ Signed "hello". Rocked to music, stop when it stopped.	I / 5	
4/ Looked at ukulele. Focused on Kitty. Swayed when it was her turn.	P/ 3	
5/ Rocks back and forward on the sound of ukulele.		I/ 2
6/ Looks at K, is still, watches uke. Taps her table in time.	PI 3	

WARM UP/THEMATIC

WEEK

1/ Looks up then down. Fantastic looking. Smiled when sung too. Rocked.		RP 4
2/ Moved forward, back, waved. Looked, then waved right hand. Rocked, swayed to song. Hummed and rocked at the dicky bird intro.	RR 4	
3/ Blew raspberries when she heard dicky bird song. Fantastic looking. Focused.		RI 5
4/ Lovely looking at music box. Listening. Waved when the birds came out singing. Then rocked.		PI 3
5/ Rocks while K moves around circle with music box. Looks down. Looks at box, sways side to side. Does not attempt to take out bird. Sways when box moves around. Took bird puppet, wiggled, forward and back, tongue out, licking, moves it up and down on her tongue. Pats knees with bird.		PI 3

Looks at K when beat becomes syncopated.

6 / Pats table to big blue train, lifts ribbons up and down, looks sideways. RR 3

Taps. Waved hand too.

INSTRUMENTAL

WEEK

1/ Moves back and forth in time to Zoom song. Still licking bird puppet. PI 4

Moves back and forth more vigorously. Tactile with tongue. Smiles when whistle played, looked around, big smiles.

2/ Back and forth to chimes, rocked and smiled. Held chime bar. Waved PI 3

3/ Rocks in her chair, explores bird puppet. Turns it round and round. Dances II5

when rocking.

4/ Rocked, explored bird puppet. Turning it round and round, danced in her chair P/ 4

with wiggles, bird, and when rocking.

5/ Keeps rocking, moving to Zoom song then doubles speed. Wiggles her bird. RP /

Lifts it up high, stretching sideways. Rock back and forth to Zoom, then double tempo to same song. Wiggled her bird, lifted it high, rocked back and forth (double tempo) lipped bird, lifted it up.

6/ Giggles at 5,4,3,2,1. Anticipates blast off on Zoom song. Wiggles her ribbons on RI 4

blast off. Faster moving when repeated.

MOVING/DANCING

WEEK

1/ Holds beater, eats beater, lots of rocking.

2/ Played chime bar, held out to her, then stopped. Then played again RP 3

3/ no comment II 4

4/ Tries to hit chime bar. First time got it. Watches K then tries to copy.

Swops her hands to hold beater. Experiments with beater. /// /

5/ Looked up at the sound of chime bar. Hears g and c in rhythm., hits chime bar. RI 4

Explores, then hits many times with beater

6/ Uke holds it, looks at it, sees L strumming, holds and strokes. RI 4

LISTENING

WEEK

1/ Looks up and wiggles. I / 3

2/ Smiled to the sound of song. Moved back and forth. Laughed at the song. II 4

3/ Big smiles as she is moved around during "round the mountain". Still P/ 4

4/ During dancing lots of smiling to song and chair movement. P / 4

5/ Calm, appeared to be concentrating on moving chair or music she hears. ///

6/ Still when chair was moved and looked down. Waves one hand as moved. PI 3

FAREWELL

WEEK

1/ Dancing, giggling, looks at everyone, giggled. II 4

2/ Repeatedly moved back and forth. Stopped, waved, repeated all of this. RP 4

3/ no comment // 4

4/ Quiet, rocked. ///

5/ no comment ///

6). No comment ///

LOG TALLY

R = 13 P = 17 I = 21 Number average = 4

ANN

WELCOME

WEEK

1/ Clapped in time. Waved, looked at uk. Vocalised. Looked up. II 5

2/ "earg, earh". Fingers in her mouth. RI 3

3/ Pat knees, sings at pitch, more vocal then usual. I/ /

4/ Pat her knee, hand in mouth, waved down, held hands then waved rh. Eye contact IP 4

5/ Paid attention when others were sung to. Did not try to touch uke. PR 2

6/ Pays attention when others are sung to. PR 3

WARM UP/THEMATIC

WEEK

1/ "aaa, a a a".

2/ Looked around. "muma" many times. Clapped, Pat knees, hummed during music box I/ 4

3/ Leans towards box, looks at sound source. Vocalises when song stops. PR 3

4/ Held music box, opened, shut it. Vocalised for more. Hummed, squeaked. Clapped, PP 3
then pet the bird puppet.

5/ Uttered "eeeear". Pat chair edge and uttered "eearh" higher. Pat knees and gave RI 4
soft hums, and turned away from music box.

6/ Puts hands together, moves as whistle plays repeated note. Wiggles fingers, moves II 4
arms forward and back. Claps hand to big blue train in time to music/song. Holds big train. Looks at K, reaches up toe moving train, looks up, drops ribbons.

INSTRUMENTAL

WEEK

1/ Side head movement "yeh, yeh, ah ah" going up in pitch. Does not hold claves iR 5

2/ Looked at whistle being played, then turned away. Held chime bar, dropped it.
Lifted up her head and clapped hands. "hmmmm" at the introduction of the melody RP 2
(high in the air). Clapped during the silence.

3/ Shakes arms, vocalises, shivers, repeats shivers throughout Zoom song. Shook body 1/ 3
when K played up close.

4/ Shook arms to bluebird puppet. When music stopped "aaaghhh". Clapped hands. PI 3

5/ Looked up at Zoom song. Pats knees in time. Wiggles hands side to side. Looks at K. R/ /
Looks away, looks down, looks at friends. Hand in mouth "eeeeaaah". Chair is moved,
looks down, eyes shut, pat knees, serious. Wiggles head. Repeats.

6/ Drops ribbons at end of zoom song. Utters ddaa, daaa as K waits for response II 3
to 5,4,3,2,1. Claps in time to song again. Looks up high. Lifts hand vaguely sideways on blast off.
Brings hands to mouth when K has mouth organ. Claps hands with "MO" sound.

MOVING/DANCING

WEEK

1/ Clapped hands, ate claves, felt claves. Talking up pitch PR 1

2/ Clapped hands and wiggled fingers in an off beat to song. Beat in time. II 5
Pat knees and clapped hands in silent moment. "here we go round the mountain"
– Ann stopped clapping, then repeat this.

3/ Gestures with lh and leans towards K as she plays chimes. RR 3
Looking, listening, some flapping with hands.

4/ Pats knees in time to the sleep birds sleep song on chimes. Says "dad a da". PI 3
Clapped, sung to sleeping song, moved arms and pat knees.

5/ Hears chime bar. Soh do. Looks down, looks up, pats knees "eh eh eh eheh". PI 4
Looks at hands in front of her face. K approaches Ann with chime who looks down. Lifts arms up/down

to others playing. Twists hand round in front of her face. Looks at others. Looks away when L tries to give her a chime bar. Yawns. Shivers arms and grimaces as L tries to give her the chimes.

6/ More vocal but does not attempt to hold beater. Vocalises back to K. Pat her knees, Clapped her hands during silence. PI 3

LISTENING

WEEK

1/ Utters "bab bab" 7 times during slide whilste. "eargh" at bottom note. Blew when she saw the slide whilste. II 3

2/ Anna laughed as chime bar sounds went up. Put her thumbs up. Waved hello and studied her hand. Pat knees. PI 4

3/ Pat knees, looks at K, waves her hand. PI /

4/ Puts arms up and down, pat knees, repeated as she felt her chair moved to song. Vocalises when K stopped. RI 3

5/ No video ///

6/ Quieter, still. Pat knees and smiled. Bounced and was vocal. Pitched the F chime bar when played to her. I/ 3

FAREWELL

WEEK

1/ Touched L's hand. Nodded head to moving song. I/ 4

2/ "aaaahh" "brrr". Said bye bye I/ 4

3/ pat with LH then raised RH to gesture goodbye. II 3

4/ Put hand to mouth, then out. Pat knees. RP /

5/ Quiet, then sings, then pat knees. II 2

6/ lifts hands up and waves, then claps, the 'aaaa'. I/ 4

Musical Snippets noted

No interest in props/touch/tactile of 'other' thing. Aware, vocal and rhythmical in repetition of what she hears and sees and own offerings (Vid 11). Singing during song – takes letter sound – "baa baa" eeeearrr, aa aa aaa. Singing to song. Moving (pat etc.) to uke/chimes. Vocalises when song stops.

Preferences to self activity (vocal, body percussion) rather then props.

During 5/6th week laughed. During slide whistle blew (understood physical action that motivates sound and tried to do the same. CAR – suggests that she was 'not listening'. However, Music educator observed motion as a notion of musical understanding. Later (week 3) laughed when (chime) sounds went up.

Put thumbs up.

LOG TALLY

R = 13 P = 15 I = 32 Number average = 3

CAR

WELCOME

WEEK

1/ Hand in mouth, prod uke, looked at uke. Smiled. RP 3

2/ Shook, smiled, shook arms, touched uke. Jump up and down on chair. PI 3

3/ No comment ///

4/ Looked as neighbour, looked at uke, plucked one string, lifted himself up and down, looked at other neighbour. Touched uke. Pulled strings. PI 3

5/ Plucked string, takes uke with both hands. Let's go when song stops. Claps helper's hand in time to song. PI 4

6/ Listens, turns towards K, tries to hold K and points to uke. PI 2

WARMUP/THEMATIC

WEEK

1/ Hand in mouth, excited and flapped hands together. RR 3

2/ Leant forward to birds and music box. Gives bird to K. V focused. Bounced, then calmed. Reached to bird and gave back to K. RI 3

3/ Looks at K, smiles, looks up. Moves forward and back. PR 3

4/ Completely still, then pointed to music box when he heard it. Leant forward, took bird from K, gave back with "yeh, yeh". Gave and took again. Still and calm. PI 4

5/ La la la – he reaches and plucks uke in time to "la" PI 4

6/ Points to whistle sound. Puts ribbons in his mouth, reaches them out to Ann (neighbour). Lifts up ribbons as soon as he hears Zoom tune. PI 3

INSTRUMENTAL

WEEK

1/ Looked at chimes. Bounced up and down, looked again. RI 3

2/ Moved constantly up and down to the melody (up in the air I fly). Lifted his arm up and struck the chime bar. Tries to dissemble chime bar. Handed base of chime bar to E. hit it with beater. Took base and handed L to do the same. Danced during bird song. RI 4

3/ Still when K stopped playing chimes. Smiled when it began again. Lifted arms up. Danced during the uke playing. Bounced in time to beat. PI 4

4/ Looks at helper and gives her the bird. Gives back, gives to L. Gives back, lifts up high, repeats giving, taking, lifting up and down. RI 4

5/ Vocalises for more bird song. PI 4

6/ Turns towards the sound of the chimes. Dissembles the bar and puts together again. PI 2

MOVING/DANCING

WEEK

1/ Bounced up and down on E chime. Repeated. Broke chime, put it together, listened to it, repeated. RI /

2/ Moving in his chair vigorously. Stopped, studied K, when demonstrating different sounds from the chime bar. PR 3

3/ Looked at neighbour. PI 3

4/ Played fast on the chime bar. Took off bar. Bounced up and down. Broke off bar from base. Bounced when music stopped. PI 4

5/ Touches K. Jumped up and down in chair. Hits chime bar. Looks at carer. PI2

Given chime bar, breaks, repeats. Then takes beater and beats it. Value of visuals. Tactile, drops beater.

6/ Lifts ribbons up. Lifts arms up. Reaches and giggles on mouth organ. PI 2

LISTENING

WEEK

1/ Bounces, one arm went straight up. Excited. Arms towards sounds. RR 5

2/ Reaches out a fist when we all waved during dance. R/ 4

3/ Observes, looked, smiled, moved one hand during dance. Calm. P/ 3

4/ Felt his chair move, did not move. Looking down throughout. Chair stopped RP 3

he bounced.

5/ Jumps up and down. Gets quieter as the music plays and chair moves. ///

6/ Ukes. Reaches and holds. Strums, does the same for another. Strokes and PI 3

looks at Luc. Puts helper's hand on uke. Strokes again. Pushes away. Given another. Repeats pattern.

FAREWELL

WEEK

1/ Waited, moved, then stopped. Waved. R/ 5

2/ Bounced, smiled, calm. PR 4

3/ Reached out, looked, bounced and smiled. ///

4/ Watches playing. PR 3

5/ Lifts arms up. ///

6/ n/a P/ 3

Musical Snippets Noted

Vocalising and socialising. Giving and taking, repeat patterns as with phrasing patterns).

Comfortable with resources but responds generally with others enjoying the same resources.

Stopping (moving) when chair moved during dancing. Watching, doing, feeling. Visual, turning,

expectancy (with helper), boundaries (breaking chime bar and doing again). Always responding with

adult or child – giving and taking, own means of deciphering information – dismantling and putting together a chime bar. Body motion. Involuntary motion (up and down) gave way to stillness during rhythmical play.

LOG TALLY

R = 17 P = 23 I = 20 Number average = 3

LUC

WELCOME

WEEK

1/ Watched mouth open. Arms up. RP 2

2/ Absent ///

3/ Looks at K directly. Wiggles. Reached out Uk and touched. P/ /

4/ Looks at uke intently. Stares at neck, strums and stops when K stops. PP3

Silence. Strums with other hand. Good eye contact.

5/ Touches uke. Looks at K. Looks and plucks uke. II 4

6/ Follows K round with eyes. Reaches out to uke. Strums uke, looks, P/ /

plucks string. Preferences to strumming / multiple sounds (ukulele).

WARM UP/THEMATIC

WEEK

1/ Looked. Played shaker with both hands. Very engaged with instrument. PR 4

2/ Absent ///

3/ Touches box. Pats box, wants to open. Looks away. P/ /

4/ Looked at robin. Looked ahead. Threw it on floor. Held again, looked RI /

at Jonah, patted box. Tapped box.

5/ Looks, listens with eyes outwards. Mouth open. Stares at fingers, PI 3

looks at box. Pats box. K opens. Luc takes out bird, then puts back. Watches her move to sof

6/ To train whistle sound, shakes head, looks at train, follows it up and R/ 2

down. Tracks resources (props), then holds, feels, looks at. Is given

something/song, appears to contemplate then responds.

INSTRUMENTAL

WEEK

1/ Hand held chime bar. The other hand shook, then made the move (shook it). PP2

2/ Absent ///

3/ Held bird. Appears happy as he smiles. Beautiful looking and listening. P/ /

4/ When he heard the chimes he was completely still, watching the uke and K's RR 3
face all the time. He focused on K and her movements when she sang and played the chimes.

5/Claps at end of song. Looks at K. Keeps looking when she is quiet. Waits as RR /
she strums. Looks up, waits, claps hands. Constantly watching uke and K.

6/ To mouth organ singing the same song (big blue train), smiles, shakes head, RI4
shakes arms, wiggles fingers, wiggles body when mouth organ goes up and down.

MOVING/DANC

ING

WEEK

1/ Laughs at the slide whistle sound. Engaged, listening to up and down. RI 4

2/ Absent ///

3/ Watching, very still, looks down, looks at chimes then plays. P/ /

4/ Looked towards chimes and watched. PR /

5/ looks at chimes, leans towards sound. Takes beater. Beats twice, then lots, up II 4
and down. Misses then hits. Other hand in mouth. Tries to eat beater. Beats again,
drops beater. Looks at chime, smiles, moves, listens, smiles. Helper plays it by his ear. Listens, happy, giggles, listens then giggles.

6/ Ukulele. Looks intently at his own. Plucks, whilst holding it with other RP /
hand. Plucks with both hands, face close to the uke.

LISTENING

WEEK

1/ Put finger in his ear on slide whistle sound. Puzzled, then smiled.		RI 3
2/ Absent		///
3/ bounced, gestured to the melody, looks.	II3	
4/ Still during riggety jig song, looked up at K. Reached for the uke as K played.	RP3	
5/ No further video	///	
6/ as above	///	

FAREWELL

WEEK

1/ Looked at L's fingers	P/ 2	
2/ Absent		///
3/ Looks pleased. Waving arms and shaking hands at end.	PI 4	
4/ In own world, quiet, smiling, listening, waving.	RR2	
5/ No comment	///	
6/ No comment	///	

Musical snippets noted

Stillness during lively movement (moving chair) song. Focus, absorb, repeat. Music opens pathways to focus, absorb (aural experiences) recap. The repeat nature of a formalised template helps to remind or reaffirm a past activity or song and builds on those skills to respond musically, whether tactile (fine motor - Luc), aurally (as with Ann), gross (Carr), or in mixed response (move, sound and shape using resources, body and vocals/eyes) – Ann.

LOG TALLY

R = 16 P = 17 I = 12 Number average = 3

SOPH

WELCOME

WEEK

1/ Both hands on uke. Shook head. Reached out for instrument. Looked away. RI 3

2/ Smiled, stroked uke and looked. Reached out. Eye contact PI 3

3/ Touches neck of uke and pulls towards her. Reached out and played uke. R/ 2

5/ Stretches rh out to play uke. Serious look. Looks up. Held with both hands. RR 3

6/ Looks at K. Watches, touches uke. Strums. Watches, does not look away. R/ 3

WARM UP/THEMATIC

WEEK

1/ Uttered "burm" when uke stopped. Looked down, sideways, uttered "aaa a a a". PI 4

2/ Looked at Ann and smiled during bird whistle. Uttered "hmm ba ba". Reached for RR3
bird puppet. Put in her mouth.

3/ Looked up at the music box when she heard it. Opened and closed it. R/ /

4/ Looks up at music box when she heard it. Opens and closes the box, really interested RP 4
in the sound. Close box each time K opened the music box lid.

5/ La la la la Ooh! Looks up high. Keeps looking up at sound. K gives her the box. RR 3
She looks at, then holds music box. Explores it by turning it around. Fiddles with key. Turns it.
Shuts lid. Does not acknowledge birds. Looks away.

6/ Watching, still and quiet to "big blue train' and train moving up and down. RR 2

INSTRUMENTAL

WEEK

1/ Put arms up, then down. Threw the beater away, then held, and put in her mouth. I/ /

2/ Put bird puppet in mouth and bit it. Studied chime bards. Put it to her mouth, smiled. RP 3
Turned it again. Threw the birds away. Did not look again at K.

3/ Looked at hands, holds uke, neck and strums strings. R/ 4

4/ Looks sideways, looked forward, hand in mouth. Soft hum, pat my paper R/ 1
(observational report).

5/ Distressed – did not want to participate. R/ 1

6/ Pats table on Zoom, zoom, feels ribbons. R/ 3

MOVING/DANCING

WEEK

1/ Looked sideways. Sensory seeing. P/ 3

2/ Gave an instant smile when hearing the chimes play. Bent over for a moment, studied RI 2
chime bar intently, put to her mouth. Smiled, turned it again.

3/ Makes high sound. Moaning, crying, tired, chimes appear to calm her. PR 1

4/ puts her hand in her mouth. P/ 1

5/ calm. Looks, plays, hands beater to A. Takes chime bar, beats again, drops it, looks PI 3
up. Plays with beater and helper's hand on her hand. Turns her head side to side as she does so.

6/ Ukulele. Looks at her own. Touches with both hands. Touches with mouth, puts on PI 3
table, explores strings with rh, touches with lh on strings. Does this for some time.

LISTENING

WEEK

1/ looks up and moved sideways. P/ 1

2/ no comments ///

3/ Looked sad, so left as distressed. Sleepy too. R/ 1

4/ smiled, watched l and moved forwards and back, touching toes to riggety jig. PR 3

Moved back and forth, with hands in the air.

5/ No video ///

6/ Is still when chair moved to Coming round the mountain. Moves, then still again P/ /

to song.

FAREWELL

WEEK

1/ Looks at L's fingers. Tired. P/ 1

2/ Turned away during bye song. Vocal at end and clapped. R/ 2

3/ Came back from distressed moment, and was vocal. ///

4/ Sat up as farewell song sung. Watched K. PR /

5/ No comments ///

6/ No comments ///

Preference for singular sounds (fife). Stillness to moving (via chair).

Musical Snippets Noted

Less about interacting directly, more about responding to a situation. Absorbing, then doing/feeling, experiencing.

LOG TALLY

R = 23 P = 14 I = 7 Number average = 3

RESPONSES TOTALS

LEVEL DESCRIPTORS CHART

Week 1 – 6 on the bottom line x 6 boxes (marked 1,2,3,4,5,6)
On the side going up, Level descriptors x 3 boxes (marked Reactive, Proactive, Interactive)

Week 1
ABE
R P R P P I R P I I I
ANN
II IR PR II I
CAR
RP RR RI RI RR R
LUC
RP PR PP RI RI P
SOPH
RI PI I P P P

TOTAL:
R = 18
P = 15
I = 17

Week 2
ABE
PP RR PI RP II RP
ANN
RI I RP II PI I
CAR
PI RI RI PR R PR
LUC
ABSENT
SOPH
PI RR RP RI R

TOTAL
R = 16
P = 12
I = 14

Week 3
ABE

I RI II II P
ANN
I PR I RR PI II
CAR
PR PI PI P
LUC
P P P P II PI
SOPH
R RR P R R
TOTAL
R = 10
P = 13
I = 15

Week 4
ABE
P PI P P
ANN
IP PP PI PI RI RP
CAR
PI PI RI PI RP PR
LUC
PP RI RR PR RP
SOPH
RR RP R I P PR PR

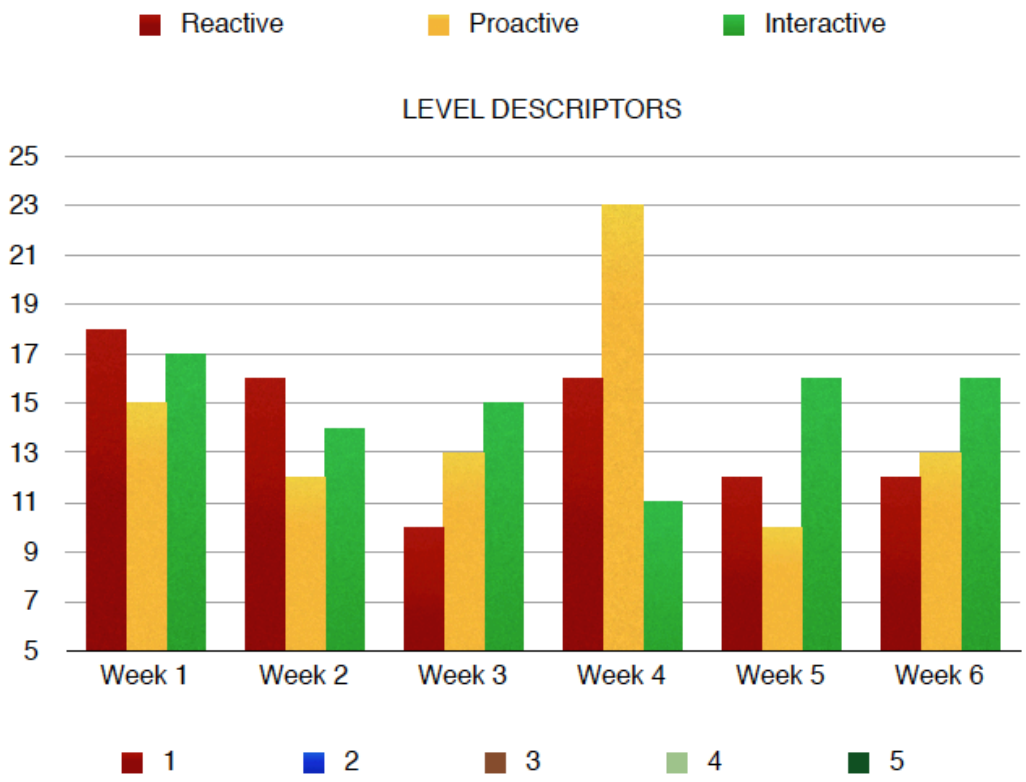
TOTAL
R = 16
P = 23
I = 11

Week 5
ABE
I PI RP RI
ANN
PR RI PR PI II
CAR
PI PI PI
LUC
II PI RR II
SOPH
RR RR R PI

TOTAL
R = 12
P = 10
I = 16

Week 6
ABE
PI RR RI RI
ANN
PR II II PI I I
CAR
PI PI PI PI PI P
LUC
P R R RP
SOPH
R RR R PI P

TOTAL
R = 12
P = 13
I = 16



LEVEL INDICATORS CHART
Week 1 – 6 on the bottom line x 6 boxes (marked 1,2,3,4,5,6)
On the side going up, level indicators x 5. (marked 1, 2, 3, 4, 5)

LEVEL INDICATORS
Week 1
ABE
334 34
ANN
5 4 51 34
CAR
3 3 3 5 5
LUC
2 4 2 4 32
SOPH
34311

TOTAL
1 = 1
2 = 3
3 = 10
4 = 7
5 = 4

Week 2
ABE
3434 44
ANN
332544
CAR
334344
LUC
NONE
SOPH
3332 2
TOTAL
1 = 0
2 = 3
3 = 10
4 = 9
5 = 1

Week 3
ABE
555444
ANN
3333
CAR
3433
LUC
34
SOPH
2311

TOTAL
1 = 2
2 = 1
3 = 9
4 = 5
5 = 3

Week 4
ABE
3344
ANN
43333
CAR
344433
LUC
3332
SOPH
24113

TOTAL
1 = 2
2 = 2
3 = 13
4 = 7
5 = 0

WEEK 5
ABE
234
ANN
2442
CAR
4442
LUC
43
SOPH

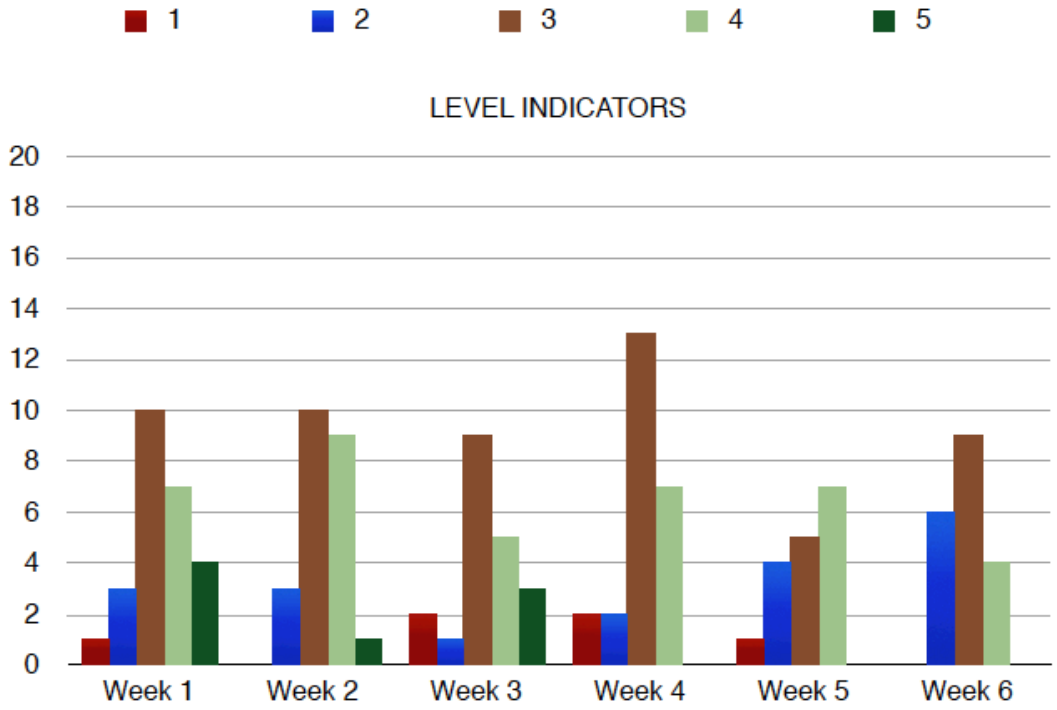
3313

TOTAL
1 = 1
2 = 4
3 = 5
4 = 7
5 = 0

WEEK 6
ABE
33443
ANN
342
CAR
23223
LUC
24
SOPH
3233

TOTAL
1 = 0
2 = 6
3 = 9
4 = 4
5 = 0

November 1, 2013



Emma Hutchinson EDU7133
3rd Year Dissertation 2013

MA in Early Childhood Music
Birmingham City University
Monitor Template

Monitor	Welcome		Warm up/Thematic		Instrumental time		Moving/Dancing		Listening		Farewell	
Wk		M		M		M		M		M		M
LUC												
SOPH												
ANN												
ABE												
CARR												

M = Marks from 1- 5. Responses: R - P - I

1=No reaction.
2= Little reaction.
3= Some response.
4= Focus and response.
5= Completely engaged.

Proactive/P= Responding without external prompt.
Reactive/R=Reacting to another.
Interactive/I=Engaging directly with another.

Emma Hutchinson EDU7133
Week 1

Musical responses in 3 – 6 year olds with profound cognitive impairment: in song, with instruments and in movement.
Emma Clare Hutchinson
EDU7133. MA in Early Childhood Music. Birmingham City University

Name and d/o/b	Gender	SEN diagnostic	Characteristics	Vocalising - sounds	Moving - patterns	Instrumental preferen	Prop interest
Ann - 5 yrs	Female	Complex Medical needs. Epilepsy, allergic reactions.	Likes mouthing things. Loves 'row your boat' (compound time). Pre-verbal. Vocalises, eye contact. Likes to be touched on her hands.Giggles when happy. Shakes head when does not want something. Laid back.				
Abe - 4 years	Female	not yet known	Likes moving/spinning visual toys. Giggles when happy. Unresponsive to her name, more interested in sounds that objects make. Very rare voalising. She will bite her hands if unhappy.				
Car - 6 years	Boy	Cerebal palsy and microcephaly. Little movement in legs. Support in all areas required. Epilepsy.	Very happy boy, and active. Loves sensory activities and curious. Enjoys peekaboo games. Likes to interact. Good eye contact. Vocalises with word sounds very occasionally. If over-excited will bite. Likes contact.				
Luc - 3 years	boy	Global developmental delay.	Laid back, happy. Inquisitive. Likes music. Likes the mirror bell merry go round. Likes to copy his peers. Communicates with simple gestures, and vocalises. Makaton familiarity. Makes sounds similar to words.				
Soph - 5 yrs	Girl	Complex heart condition, central hypotonia and hypermobile joints.	Inquisitive and affectionate. When happy she will smile, giggle and babble. Plays alongside her peers but does not acknowledge them. Vocalises. If under-stimulated she will play with her hands.				

The Music House for Children
Data of observation

MAINTAINED NURSERY, STATE-FUNDED PRIMARY, STATE-FUNDED SECONDARY AND SPECIAL SCHOOLS (1)(2)(3)(4):
NUMBER OF PUPILS WITH SPECIAL EDUCATIONAL NEEDS (SEN) BY AGE AND PRIMARY NEED (5)(6)(7)
January 2012
England

	Specific Learning Difficulty			Moderate Learning Difficulty			Severe Learning Difficulty			Profound and Multiple Learning Difficulty			Behaviour, Emotional and Social Difficulties			Speech, Language and Communications Needs		
	School Action Plus	Statement of SEN	Total	School Action Plus	Statement of SEN	Total	School Action Plus	Statement of SEN	Total	School Action Plus	Statement of SEN	Total	School Action Plus	Statement of SEN	Total	School Action Plus	Statement of SEN	Total
Pupils Aged:																		
less than 1	0	0	0	0	0	0	0	0	0	0	0	0	0	x	x	0	0	0
1	0	0	0	x	0	x	5	0	5	5	5	10	x	0	x	5	0	5
2	25	5	30	50	5	55	100	60	160	105	95	200	50	0	50	465	5	470
3	185	45	230	605	55	660	350	340	690	165	330	500	1,125	15	1,145	6,535	130	6,665
4	550	210	755	2,010	455	2,465	210	1,160	1,370	130	700	830	3,895	220	4,115	14,670	1,365	16,035
5	1,325	230	1,555	4,620	620	5,240	215	1,420	1,635	75	765	835	6,300	550	6,850	16,355	1,780	18,135
6	2,715	245	2,960	8,325	825	9,145	215	1,605	1,815	70	725	795	7,785	995	8,780	13,855	2,185	16,045
Total aged 0 to 6	**4,795**	**735**	**5,530**	**15,605**	**1,965**	**17,565**	**1,090**	**4,580**	**5,675**	**545**	**2,625**	**3,170**	**19,155**	**1,785**	**20,940**	**51,885**	**5,460**	**57,345**

(1) Includes middle schools as deemed.
(2) Includes all primary academies, including free schools.
(3) Includes city technology colleges and all secondary academies, including free schools.
(4) Includes maintained and non-maintained special schools and special academies. Excludes general hospital schools.
(5) Includes pupils who are sole or dual main registrations.
(6) Age as at 31 August 2011.
(7) Pupils with a statement of SEN and pupils at School Action Plus provided information on their primary need and, if appropriate, their secondary need. Information on primary need only is given here.
(8) Includes pupils where primary type of need was invalid or not supplied.

Totals may not appear to equal the sum of the component parts because numbers have been rounded to the nearest 5.
x 1 or 2 pupils

Hearing Impairment			Visual Impairment			Multi- Sensory Impairment			Physical Disability			Autistic Spectrum Disorder			Other Difficulty/Disability			**Total (8)**		
School Action Plus	Statement of SEN	Total	School Action Plus	Statement of SEN	Total	School Action Plus	Statement of SEN	Total	School Action Plus	Statement of SEN	Total	School Action Plus	Statement of SEN	Total	School Action Plus	Statement of SEN	Total	**School Action Plus**	**Statement of SEN**	**Total**
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**x**	**x**
x	0	x	0	0	0	0	0	0	x	0	x	x	0	x	x	0	x	**20**	**5**	**30**
40	20	60	25	5	25	0	x	x	75	20	100	115	20	135	70	5	75	**1,115**	**240**	**1,355**
215	130	345	150	45	200	20	20	35	505	250	755	975	315	1,290	455	60	520	**11,290**	**1,740**	**13,030**
455	315	770	320	135	455	35	25	60	1,080	700	1,775	1,460	1,975	3,435	1,070	270	1,340	**28,880**	**7,525**	**33,405**
570	395	965	445	180	630	50	45	95	1,186	835	2,020	1,525	2,450	3,975	1,400	345	1,745	**34,055**	**9,620**	**43,675**
670	420	1,090	470	195	670	50	30	75	1,255	940	2,200	1,590	2,720	4,310	1,765	315	2,085	**38,765**	**11,200**	**49,965**
1,950	**1,280**	**3,235**	**1,415**	**560**	**1,975**	**150**	**115**	**270**	**4,100**	**2,745**	**6,845**	**5,670**	**7,475**	**13,145**	**4,760**	**1,000**	**5,760**	**111,125**	**30,330**	**141,455**

Source: School Census