SALTMusic Research Report

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SALTMUSIC







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Leading the SALTMusic research has been a privilege, I am indebted to the adults and children who have participated in the project and whom I hope to represent faithfully in this report. Without the support of the SALTMusic team of practitioners there would have been no data to analyse. Thank you, Charlotte Arculus for your vision and inspiration, thank you Sophie Fox, Mary Lovett, Jo Chapman, Harriet Jarvis, Vanessa Barnes, Rose Bishop, Lisa Farmer, Donna Fordham, Abby Page, Jaz Crampton, Natalie Willis and Molly Barrett. Not only did these colleagues deliver the programme of activity, but they also kept on top of all the requests for information, forms and paperwork – a wonderful team. Lyndall Rosewarne with assistance from Freya Turner kept us on track while Andrew Forrest gave wise advice and overview. Dr. Evangelos Himonides was a critical ear at the right moment and finally, grateful thanks to Professor Welch and Josephine Borradaile for their support and organization of the Summit event.

Dr Jessica Pitt, 2018

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	, ,
S&L	Speech and Language
SLT	Speech and Language Therapist
SLTA	Speech and Language Therapy Assistant
SLCN	Speech, Language and Communication Needs
ECCH	East Coast Community Healthcare
EY	Early years
EYP	Early years practitioner
SALTMusic	Speech and Language Therapy-Music Practice
MERYC	Music Educators and Researchers of Young Children
RQ	Research Question

Throughout the report the following acronyms are used:

SALTMusic has delivered:

- 1. An example of interdisciplinary pedagogical practice with the potential to become a transdisciplinary communicative approach; able to be used in other contexts including working with people with dementia, those with Profound Multiple Learning Disabilities and more widely as a method to examine what happens when we 'interact'.
- 2. Seventeen programmes of SALTMusic with nearly 100 children regularly attending SALTMusic sessions
- 3. One programme of SALTMusic for children and EYPs in a nursery setting
- 4. SALTMusic approaches used in small group sessions for Children's Centre's target families
- 5. Empowered parents with strategies and ideas for interacting with their children in musically playful ways, that follow the child's lead and are based on SLT principles of 'Observe, Wait and Listen.'
- 6. A series of bespoke CPD sessions for the team and Great Yarmouth Community Trust nursery staff.
- 7. Five Cycles of Action Research developing the Community of SALTMusic Practice and SALTMusic Pedagogy.
- 8. Three Speech and Language Therapy practitioners, two speech and language therapy assistants, three early childhood music-arts practitioners and four early childhood music-arts practitioner assistants all skilled and knowledgeable in the shared repertoire they have devised together that combines theories, resources, ideas and practices from both disciplines.
- 10. The creation of a replicable, theoretically informed pedagogical approach to SALTMusic practice.
- 11. A theoretical framework to support the SALTMusic pedagogy that can be articulated by the practitioners.
- 12. The creation of the SALTMusic scale for recording children's communication and for improving quality of practice through joint reflection.
- 13. Four presentations at major events in England: MERYC17; SSBN18 (Small Steps, Big Noise): Taunton; SALTMusic Summit; Emerging Musicality Conference: Newcastle University.
- 14. Tools and resources for practice.
- 15. The creation of training models for a variety of settings.
- 16. An article for *The Bulletin* (The Royal College of Speech and Language Therapists professional journal).
- 17. A chapter (forthcoming) for The Oxford Handbook of Early Childhood Music Learning and Development based on this project.

The main challenges faced by the project:

- 1. The Speech and Language Therapy service was in transition, having taken on a large new contract. The service faced the double challenge of making its new contract work and also coping with high levels of demand. This made it difficult to engage the management and wider service in the project.
- 2. Support from and communication between Great Yarmouth Community Trust and East Coast Community Healthcare was compromised as a result of the changes at ECCH outlined above.
- 3. Negotiation of expectations and understanding of different working practices and professional identities.

Recommendations

- 1. The creation of a programme of workforce development for early years practitioners to use SALTMusic pedagogy in their practice.
- 2. The use of the SALTMusic 'ALIVE' characteristics of communication in observations in settings to create effective musical play environments for communication.
- 3. Co-delivery for all music-communication groups to enable both leading and observation that is a hallmark of the most effective practice.
- 4. The development of a professional, accredited SALTMusic training programme for musicarts practitioners and speech and language assistants
- 5. Continued financial support for the development of resources and tools for practice that have emerged from the project
- 6. The development of multi-agency initiatives on county-wide bases to integrate SALTMusic approaches as an early intervention for families with children with identified communication difficulties from 24 months of age.
- 7. Funding for a larger-scale research study of the SALTMusic pedagogical approaches used in a variety of contexts.

Key comments

SALTMusic pedagogy

The project has delivered on its aim to develop a transformative pedagogy that combines the expertise of early childhood music practitioners with speech and language therapists. This is evidenced through a variety of data collection tools and materials that present rich accounts of the changes and benefits for individual children and families who accessed the project. Almost 100 children took part in SALTMusic and each child's experiences has been captured in detail via the SALTMusic scale and film data to describe how their communication developed over time. These findings have shaped the development of the successful pedagogical approach.

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Parental anxiety about their child's communication difficulties was found to make it difficult for them to step back, take the pressure off the child to answer their questions and to relax and enjoy playful activities where speech is not required, so that other forms of interaction could develop and be enjoyed. When sufficient trust and understanding about the SALTMusic approach had been grasped, their ability to relax improved, and they were better able to follow their child's lead and become aware of their child's competence, and the child in turn interacted and expressed more.

> Funding for early years music activities

Youth Music has been a faithful and loyal supporter of young children's music making over decades, seeking to fund projects that can make a difference for children and their families. The difficulty is sustaining long term activity beyond the lifetime of such projects. Early years music needs a different model of funding so that the benefits of a funded project enrich existing work. The freelance model of early childhood music practice means that the community of SALTMusic practice developed through this project cannot be sustained now funding has ended. There is a social justice call for quality early childhood music practice for every child in the country at all times.

The SALTMusic Project

In 2014/5 Charlotte Arculus (EY music-arts practice leader at GYCT) observed mutualities and similarities in the ways of working with children that might be effectively combined in a collaborative project for children with SLT referral. She says:

"The GYCT children's centres are multi agency/multi-disciplinary hubs for families. The organization has been particularly effective in this way of working and of course the Music-Arts offer is embedded in this. I found myself in multi-agency meetings talking to SLTs about the same children, the same issues and very similar approaches. I realized that there was great potential for interdisciplinary working and the creation of a new, combined pedagogical-therapeutic approaches.

On the one hand my team's highly specialized, musical work could gain new ground, new perspectives and the potential for more formal recognition of our work and on the other hand our playful, joyful, aesthetically rich approaches would provide a 'non-clinical' space where SLTs would be able to engage with families more effectively."

One SLT describes the history of the project from her perspective, "The Speech and Language team soon crossed paths with the Great Yarmouth Music Team at Priory Children's Centre and heard about their music groups which were oversubscribed and very popular with families in the area. Our team was able to shadow the work of the music team and we soon found that the activities carried out in these groups were approached in a fun, motivating and child-led way which is exactly what we were trying to achieve within our language groups. Through my work, I have particularly noticed how a child who feels relaxed, where there is no pressure on them to 'talk', is likely to use more language during that session and this also puts them in a better place emotionally to take on new language modelling. I was very excited when Charlotte Arculus proposed the project which was to be joint between the Music team and Speech and Language Therapy. I had the opportunity to be part of the initial planning of this project and the implementation of one round of joint groups." (SLT case study, 2017)

Youth Music – the principal funder of music projects in England with young children – required the project to be shaped around outcomes, with indicator and source evidence to accompany these. The submitted bid was returned for amendment, suggesting that music in early childhood (that is dependent on funding) is in some way shaped by this organisation which, in turn, is required to deliver certain outcomes to its principal funders - Arts Council England and The National Lottery. It has led to some innovative practice and is certainly not short of enthusiastic and diligent practitioners trying to meet the outcomes they have been set, but does this build a sustainable and long-lasting music landscape for the youngest children? Or rather, does it bounce from one project for two years here and another project for two years over there, not really changing grassroots practice in a sustainable way. This is not a criticism of the funder without whom so much that is great in the field would not have happened! It questions the status quo: quality early childhood music education is not being delivered for every child in the country at all times. A different funding model is needed so that the Youth Music projects add to the established, ongoing core-funded work, bringing additional benefits for the development of children, parents and practitioners.

SALTMusic Aims and Outcomes

The aim of SALTMusic is:

- To create a transformative pedagogy which marries speech and language development practice with music to increase the life chances of under-fives and prepares them to become resilient and engaged learners of the future.
- To demonstrate how this work can be replicated by using music to support the whole child.

SALTMusic Outcomes

Through SALTMusic there will be:

- 1. Increased musical behaviours, contributing to language development, in children referred to the S&L team (who also receive music team input),
- 2. Increased social and personal development demonstrated through confidence. communication and playfulness in children who attend music / language sessions.
- 3. Increased engagement by parents / families including a continuing ability to implement strategies to support language development in their children.
- 4. Increased shared understanding and practice between music practitioners and S&L practitioners.
- 5. Increased understanding of the value of adopting music-based strategies for speech and language development in:
 - a. Non-musician workforce (S&L and EY workforce)
 - b. Practitioners (Music and EY professionals)
 - c. Managers in both teams
 - d. Wider EY sector

Research Questions

- How do two different professional disciplines (speech and language therapy and early childhood music-arts education) combine their practices and understandings to form a community of practice?
- What are the characteristics of the new pedagogical approach that emerges as a result of joint-working?
- How can we record the experiences of children and families during their attendance at SALTMusic?
- How does the new pedagogical approach affect the SALTMusic children's communication?
- What is the impact of the SALTMusic programme on parents/caregivers who attend with their child to the sessions?

Background and Context

The Social Context

A decade ago the Bercow review of speech, language and communication services summarized their recommendations into five areas: "*Communication is crucial; Early identification and intervention are essential; A continuum of services designed around the family is needed; Joint working is critical; and the current system is characterized by high variability and a lack of equity"* (Bercow, 2008, p.6).

Ten years on, findings suggest that, although some positive changes have been made, the picture for children with SLCN is still largely a difficult one that affects areas of *educational attainment; social emotional and mental health and life chances* (Bercow, 2018, p.6). It reports the impact of individual children's communication difficulties on their wellbeing, increased challenges with everything in- and outside school and a lack of understanding from the adults around them (2018, p.11). There are examples in the report where local initiatives based in Children's Centres have had significant impact (2018, pp.12-14). Both reports recommend *Early intervention* and the need for *Joint working.* These two recommendations coupled with some examples in the report of local, successful initiatives contribute to the rationale for the SALTMusic project's design and outcomes.

Parents and the home environment

The Millennium Cohort study of 12, 644 children born in UK between 2000-01 provided a dataset that Jane Waldfogel and Elizabeth Washbrook (2010) used to find statistical associations between poverty and cognitive development. They found that by the age of four-five years old children in the lowest income band were about 11 months behind their peers in the middle-income band in terms of expressive vocabulary. Parenting and the home environment were factors suggested by the researchers as possible contributory factors.

A plan to improve social mobility (DfE, 2017) suggests that injustices arise from individuals' geographical location and the varied opportunities that exist across the country. The plan proposes to level out the landscape to make sure "no community is left behind" (Justine Greening's Foreword, DfE, 2017, p.5). To this end the report has four life-stage 'Ambitions', the first of which is to "Close the 'word gap' in the early years" (2017, p.8). Within each of the 'Ambition' categories a number of challenges are listed. Challenge One focuses on a young child's home; what happens at home can be very influential in supporting a child's early language, the report advises (p.12). It includes evidence that a parent's education level can impact on children's early outcomes, acknowledging that there is a lack of effective models for working with parents. Solutions are not focused on the children but rather on developing infrastructure for knowledge of what works and how to identify and measure those who are falling behind. This government document conflates communication difficulties (word gap) with disadvantage and poor parenting. Furthermore, although there were no clear contributory factors in the Waldfogel and Washbrook (2010) study they suggest that parenting and the home environment might be responsible. There are clear messages from research that the problem is the child's home and the parents. This approach to childhood puts responsibility for a child's linguistic capacities and future failure in life on parents and the home, rather than social and economic factors (Blum, 2017; Burman, 2017).

Erica Burman (2017) suggests that the obsession with getting children talking as quickly as possible is unsubstantiated by theory. She points out that while adults are supposed to 'bathe children in language' (Bullock, 1974 p.58) there is no clear idea as to what this actually does

to help children talk; what specific features of child-directed speech (adults directing their speech at children) helps children's language. Research is too limited in its methodological and interpretational scope to truly understand the complexities of the linguistic process in early childhood and therefore existing research oversimplifies it.

The Tyranny of Talk

The word-gap, attainment and school readiness agendas focus on words and their acquisition as the most important achievement point in the early years, with the role of parents viewed as increasing the number of words their child can use. This can cause anxiety for those working in early years, for parents and for the children. This dominant discourse of 'Wordism' (Blum, 2015, p.74; 2017, p.6) conceives of words as the size of the units to signify language. This project challenges that. The perception that language is words and more words are better can lead to a sense of pressure and a feeling of blame within those families whose children don't have the words that they feel they should. This discourse is just one way of thinking about language. By focusing on other modes of communication children can be seen as competent with a varied interaction palette. Susan Blum (2017) tells of linguistic anthropologists' understanding from other cultures that the first unit of language is interaction, manifesting through sound in various patterns. This has been a helpful way for us to conceive of communication. Musical play offers a sound-rich, talk-poor environment where social interaction and expression can be explored. The tyranny of talk can be less dominant in this space and the focus can be turned towards interaction between parent and child, between peers, and between child and practitioner.



Music and speech

Neuroscience perspectives

The information conveyed by music and speech is very different, yet there are similarities and neural overlaps (see Peretz, Vuvan, Lagrois & Armory, 2015). Both are organised temporally and have rules and structures (Lerdahl & Jackendoff). The ways in which the brain processes and integrates the structures of music and speech have similar neural responses (Patel, Gibson, Ratner, Besson & Holcomb, 1998). Indeed, the same area in the brain is activated during music and spoken stimuli, the Sylvian Fissure, which suggests an auditory-motor interface (Hickok, Buschbaum, Humphries & Muftuler, 2003). Stroke patients with injuries to the speech area of the brain have been able to regain tonal and rhythmic aspects of speech with the use of musical approaches (Thompson & Schlaug, 2015). Although there is no conclusive evidence that the two domains are either distinct or collaborative (see McMullen & Saffran, 2004) it is clear from the literature that there is a relationship in the brain between the spoken word and music.

Biological and psychological perspectives

Stephen Malloch and Colwyn Trevarthen's edited book on communicative musicality (2009) brings together a variety of perspectives on the communicative affordances of human musicality. It focuses on infant-parent interaction and draws upon Daniel Stern's work on human intersubjectivity.

Stern uses the term 'affect attunement' to describe a mutual intersubjective connection and vitality affect to describe the expression of strong experience. His later work extended his theory of intersubjectivity to examining the importance of the present moment and the temporal arts. Dance and music focus on the present moment as well as on interconnectedness between players. Stern described how participating in group-rituals - such as dancing or singing - result in self-identity and belonging. He suggested that intersubjectivity can only happen in the present moment.

Musicality from infancy

The first sense to develop in humans is hearing. The foetus has demonstrated an ability to hear from 30-35 weeks in utero (Lecanuet, 1996, Lecanuet and Schaal, 2002) and as gestation continues so does the ability to perceive both pitch and timbre (Parncutt, 2009; Särkämö, Tervaniemi, and Huotilainen, 2013).

Infants in their first year of life after birth have been shown to demonstrate musical preferences (e.g. Nakata & Trehub, 2004; Ilari and Sundara, 2009; Corbeil, Trehub, and Peretz, 2013) and the ability to discriminate between subtle pitch changes (e.g., Plantinga & Trainor, 2009; Chao, Hotson, & Trainor, 2009). They have also been found to prefer the human voice to other sounds (Fernald, 1992). Amazingly, with no training, caregivers accurately repeat lullaby melodies time and again at the same pitch when interacting with their infant (Bergeson and Trehub, 2002). These all point towards the importance of musicality in young children's early interactions and learning.

Music and language acquisition

Music can positively influence perception, understanding and imitation of the sounds within speech. The construction of receptive vocabulary begins at around 12 months old, along with an emergent perception of phonemes (Werker & Lalonde, 1988). Children aged eight who attended music classes were significantly better at identifying speech segments than those who attended a painting group (Chobert, François, Velay, & Besson, 2014; François & Schön, 2011; François, Chobert, Besson, & Schön, 2012). Nursery Rhymes have been found to help with phonological

awareness (see Harper, 2011). Phonemic segmentation fluency (the ability to break words down into individual sound components) was improved in kindergarten children who attended music instruction for four months when compared with a control group (Gromko, 2005). This study indicated that these skills of segmentation would be of transfer value to learning to read. The prosodic aspects of speech (rhythm, tone, contour, pauses) and music perception are found to be equally affected in children with speech and language impairment (Sallat & Jentschke, 2015). Music perception and phonological awareness have been found to be linked to the auditory mechanisms required for reading with significant findings between music perception, phonological awareness and reading ability in young children (Anvari, Trainor, Woodside & Levy, 2002; Bolduc & Montésinos-Gelet, 2005). A review of studies of young children's emergent literacy and music (Bolduc, 2008) found that musical activities promote auditory perception, phonological memory and metacognitive knowledge, all three of which are also important in the development of linguistic skills.

We must add a note of caution here to temper music's transfer benefit claims. The experimental research studies upon which many general beneficial claims are made have limitations which may not always reach the public domain. Results are based on averages; correlation does not imply causation; there may be bias in recruitment of participants and deficiencies in the experimental design - all of which are reported in the original papers but neglected to be mentioned in the general statements that are made more widely (see Odendaal, Levänen & Westerlund, 2018).

Musical Play

The Early Years Foundation Stage Curriculum (DfE, 2017) has play-based approaches to teaching and learning at its heart. In play, children are able to use their imagination, think critically, explore and experiment, discover the impact of cause and its effect, take risks, repeat and rehearse ideas, express themselves multi-modally, adopt roles, act out stories. The characteristics of effective learning (EYFS, 2017) of: "Playing and Exploring; Active Learning; Creating and Thinking Critically" are all apparent when a child is absorbed in play.

Danette Littleton (1998, pp.27-28) observed children's free musical play and identified six different types: co-operative music play, functional music play, constructive music play, kinaesthetic music play and games with rules. The SALTMusic project was based on creating environments where all these types of musical play could be explored by the children (and adults). Amanda Niland (2009) points out that in early childhood visual arts education it is commonplace for children to be encouraged to explore the materials, tools and media without needing to be instructed in how to use them, allowing time to think as well as explore. She argues that early childhood music education can frequently focus on acquiring the skills necessary for later learning to play an instrument. Margaret Barrett (see e.g., 2006;2009); Susan Young (see e.g., 2008); Claudia Gluschankof (2002); and Patricia Shehan-Campbell (2010) all suggest, through studies based on observation, that children's music play is distinct from the adult world of music making. The SALTMusic pedagogy is built on the notion that children's musical play is a crucial element of communication and the pedagogical choices and actions must be grounded in observation, interaction and reflection on the process.

The social-emotional-cultural learning space of the music group in a community context

There has been a slow demise of the integrated services model for young children and families, that was a hallmark of Sure Start local programmes in the early years of Children's Centres. Joint working and interdisciplinary early intervention are more difficult to initiate. Kathy Sylva, Pam Sammons et al.(2018) report that by 2010 the ring-fenced budget originally promised to

Sure Start had been merged with other programmes. 2013 saw the core purposes of Sure Start moved towards targeted work with families considered 'high need'. Fortunately, Great Yarmouth Community Trust (GYCT), home to a Trailblazer Sure Start local programme since 1999, has continued to nurture links with health, social care and education so that joint working projects are still a possibility, built on established professional relationships and a legacy of close joint working. Through the lifetime of this project however, budgets have been cut and some of the Children's Centre core work is facing an existential threat.

Early years music and arts have been an integral part of the holistic approach that GYCT takes to its work with families; a dedicated team of EY music-arts practitioners has been present since 2003. An American study of an arts enrichment program for preschool children from low income families, found that the delivery of core EY learning - when enriched with culturally-sensitive and appropriate daily music, creative movement and visual arts classes - led to increases in pride, happiness, interest, positive emotions and greater emotional regulation amongst those children who attended than their peers. The implication from the study was that arts enrichment may help low income children's social-emotional readiness for school (Brown & Sax, 2013).

The approaches to group musical activity that have been found to be most effective in this context are social constructivist in nature. Susan Young (2003) talks about the creative process with interaction, in the moment, as the key aspect. This leads to an approach that is improvisatory, child-led with the adult role seen as either 'guide', or play partner in the process. The integration of multi-modal activities that incorporate movement and sensory materials with the sound play is fundamental.

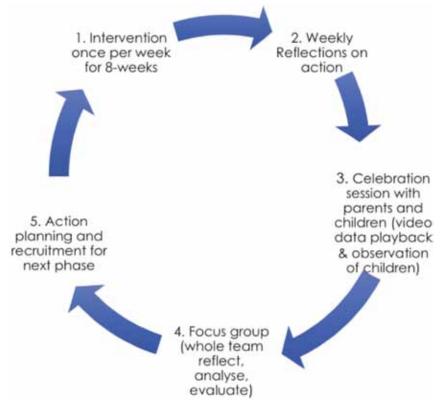
Research Design

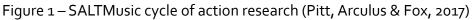
<u>Methodology</u>

Action research was selected as the most useful design for the study. Action research has an underlying tenet of influence or change; this was a fundamental facet of our project, to discover a new pedagogy through changes made to practice through interdisciplinary team-working. Colin Robson (2002, p.215) outlines three elements of action research: improvement of practice, improvement of understanding of practice, and improvement of the situation where the practice occurs. Clearly, practice is at the heart of action research, and was central to the SALTMusic research proposal. Crucial to action research is the active involvement of all participants in the research process.

At the heart of the project is collaboration and the establishment of a self-critical community of practice (Cohen, Manion and Morrison, 2008). There is an epistemological root in critical theory; communication is seen as an intrinsic element in building a community of equals (Grundy and Kemmis, 1988, p.87). Action research is conducted in real world circumstances and ethical considerations are important as the project is built upon open and in-depth communication between all participants. Parents and children have been included in the cycles of action research. The children and their parents/caregivers watch edited film data collected through one cycle of 'intervention' and their reactions are observed as evidence of their 'voice'. The parents' views are sought throughout the process and the data they provide helps triangulate data collected from the team of their observations of the children.

We adopted cyclical processes of planning, acting, observing, reflecting, then planning afresh in the light of the discussions, then repeating the cycle. Schön's Reflective Cycle (1983) was reinterpreted for our project. Figure 1 shows the various stages of the cyclical process of SALTmusic action research.





Participant groups

The *professional* participants comprised: three speech and language therapists (SLT), two SLT assistants, three early childhood music practitioners, four trainee early childhood music practitioners, strategic project lead, researcher and a project manager (n=15). The SALTMusic programme of activity took place in three different group sessions per week in term-time. Each group included up to eight children with communication difficulties and their parents / caregivers and any younger siblings: these make up the *family* participants of the research (children n=93, n=49 parents completed evaluation forms).

Family participants were invited for at least one term. This began with a taster session for families to decide if the 'research' group would be suitable, that was followed by the programme of SALTMusic sessions, concluding with a celebration session. The programme was extended by two weeks in the final couple of terms and proved more effective in terms of seeing changes in children's communication. In a few cases children attended for two terms (n=5). One group recruited children with specific speech and language difficulties, and the other two groups recruited children with additional social interaction difficulties. As these children are between 24-36 months of age, few of them have a diagnosis at this stage.

The involvement of the two groups of participants (*family* and *professional*) the action research could not be described as equal. The professional participants contributed to the cycles of action research in ways that were not possible for the family participants. Every attempt was made during the project to 'listen' to the children: what they enjoyed, what seemed to stimulate communication, their interests and preferences and to learn from this and incorporate these observations into the pedagogical approach. The voice of the parents was also captured informally in conversations and discussions at the beginning and end of sessions and these were conveyed to the rest of the team, as well as the more formal completion of parent evaluation forms, the content of which were also shared with the professional participants. Short

conversations with parents were recorded to add to the focus group discussions. There was the intention and desire to build a respectful and democratic community, with an awareness that power and the politics of knowledge were not equally available to all (MacNaughton, 2005).

Retention of participants

There was an understandably high drop-out rate between the taster and the regular sessions: many families didn't want to be involved in a research project. Although each group could accommodate around eight children and their parents / caregivers, it was difficult to retain that number of families throughout the 8-week period. Attendance was patchy. We tracked these cases where possible and found that the reasons for it may speak more to the family situation (high levels of economic deprivation, insecure work and accommodation, parental ill health and mental illness, inability to travel). Children of this age naturally get childhood illnesses and families going through this kind of intervention may need to attend conflicting appointments-all in all- this accounts for the high level of drop off. We worked together to mitigate some of these causes and in later terms attendance improved.

Concept of the child

Central to the SALTMusic approach is the understanding that **young children are competent and capable of creative expressions that are valuable and integral to the group's overall aesthetic experiences that are considered necessary for all human thriving and belonging**. The artistic team are committed to work with young children precisely because there is exchange of aesthetic skills and perspectives – such as young children's enhanced ability to improvise across modes. This discourse pervaded the approaches used, the environments created, the responses and interactions offered, and the opportunities that were enabled in the sessions. It was a fundamentally important foundation to the project.



RQ: How do two different professional disciplines (speech and language therapy and early childhood music-arts education) combine their practices and understandings to form a community of practice?

The short excerpt that follows epitomises the way the team established working practices. Initially, the music team stuck to what they knew worked and the SLTs, who were new to facilitating a music group, were more reluctant. The resulting reflections indicate an attempt to move forward and negotiate a different sort of practice. The suggestion of joint planning before the sessions was significant and then deciding to talk together before the 8-week programme and after every session was also acknowledged as important and the articulated desire to share practice, not just offer a great music group.

Musician 3: "I thought it went well, it was pretty much what we'd normally do in a session so perhaps you'd have more...(tailed off)"

SLT: "No...I thought it was really good. The only thing was establishing the speech and language roles within that very well-established group. It was so lovely, but it was almost so... what (laughter) would you like us to feed into that? Whether you want to adapt a few of the songs and things..."(heard in background "yup, yes")"

SLT: We wondered about that planning time before the group. Whether we could have a set collaborative planning.

Musician 1: That would be really useful

Musician 2: it's not just useful it's essential. It's as important as running the group because otherwise we just run a load of great groups.

Musician 1: so it's time before and after.

Musician 2: yes, and it is about the shared practice. It's not about - this is music and it's really great. It's about how we move together, and how we influence each other's practice."

Second focus multi-team group meeting (Sept, 2016)

Etienne Wenger (1998, pp.72-85) talks about three dimensions at play when practice becomes the way that a community develops: mutual engagement, a joint enterprise and a shared repertoire. Each of these dimensions has different aspects that enable individual practitioners to coalesce as a community.

- 1. Mutual engagement is an essential component required of all participants if practice is to become shared and a community develop. Practice is not abstract, it "resides in a community of people and the relations of mutual engagement by which they can do whatever they do." (Wenger, 1998, p.73). Mutual engagement depends on interactions and negotiation of the meanings inherent in the actions that they do together. This was particularly relevant for the SALTMusic team. The comments in the extract above demonstrate the subtle ways that the SLTs were negotiating their role within the established session and the helpful response of the musicians that this negotiation was welcome. Through this conversation it seems that they are beginning the process of developing a shared meaning about the purpose and format of the music group sessions, which have to change to include the SLTs.
- 2. A joint enterprise "The enterprise is joint not in that everybody believes the same thing or agrees with everything, but in that its communally negotiated" (Wenger, 1998, p.78). This was evident in the SALTMusic team. The professional experiences and expertise of the individuals were diverse, with different understandings about working with children and families. The group of professionals united around the common aim of the project to

coordinate their various views together to form a unified approach that characterises the emergent SALTMusic pedagogy. Wenger highlights the fact that communities of practice do not exist in isolation, practices can be shaped by conditions external to the community. This was the case with our project. The SLT organisational practices meant that the SLT personnel that regularly attended the sessions was changed early on in the project which caused a rupture to the fragile developing community because it was unexpected and not communicated to the music team beforehand. In some respects, this affected the way that the team developed thereafter. The joint enterprise was constantly evolving based on negotiating "what was important, what to do and what not to do...when artifacts are good enough and when they need improvement or refinement" (Ibid., p.81). It was a dynamic process that became the rhythm (Wenger, 1998, p.82) of the project.

The following extract from the SLT case study describes the process of improvement / refinement:

"I found the music team to be very skilled at what they do. Their activities enabled children to explore, build confidence and inspired a sense of musical playfulness. The music team already had the basis for creating a good communicative environment for children. The music team were open-minded and receptive to suggestions from the Speech and Language Therapy team. We worked with songs and activities already well known to the music team and together made some tweaks to further promote communication development"

SLT case study

3. Shared repertoire - Through joint endeavour, the community develops and creates resources which are their shared repertoire. These resources can be "routines, words, tools, ways of doing things, stories, gestures, symbols, genres¹, actions or concepts that the community has produced or adopted in the course of its existence." (Ibid., p.8₃). For the SALTMusic project the Data Collection tool or SALTMusic Scale was revised and adapted to meet the perceived requirement to accurately measure every action of a child in a session. The negotiation and discussions that brought about these adaptations were, in many ways, evidence of the community sharing joint enterprise and mutual engagement to produce a shared repertoire artefact that may have application and benefits far wider than the project.

At the conclusion of the project the practitioner participants participated in an anonymous exit questionnaire. Asked to speak about their experiences of being part of the project in relation to the collaboration between music practitioners and S&L therapists and assistants the responses were positive:

- "Slowly the team has grown together. The different personalities have taken time to share their expertise with each other, Glad it was two years, not just one."
- "This has been a very positive experience and I have learned an awful lot by working together. Two quite different approaches in the outset have complimented each other very well and led to really effective practice."
- "It has been wonderful to share experiences and skills with other practitioners. I feel a great deal of mutual respect has developed for each other's work. Working with S&L practitioners has had a very positive effect on my music practice and has also affirmed my beliefs in the broad ranging benefits of music education and play."
- "What a rich experience it has been. Thank you so much for the opportunity to be involved in such treasure."

¹Wenger uses this term to mean a class of artefacts or actions similar in style (p.288).

A timeline of the project was produced at the final focus group meeting where the team charted the project's journey in pictorial form. A table has been produced from this 'Road Map' and can be found in Appendix A.

Impact of the project personally and professionally

In order to test the replicability of SALTMusic approaches, two musicians worked in a nursery setting with nursery practitioners and a small group of children with SLT referrals. These two musicians had never previously worked together (they had been music apprentices with different SALTMusic groups). When asked about working together in a new context they said:

D: I have found it very natural to work with A just feels like we've always worked alongside each other. It has really flowed really naturally. Normally takes several weeks.

JP: So do you think there's a shared pedagogy or a way of being in these groups that is an unsaid understanding?

A: It helps that we've both worked within the same team, shared practice and an understanding about how it's going to work and how we approach the children... it's learning from each other, that's what splitting the role down the middle helps with - you are building all the time rather than one way of doing things. Co-delivery and the reflecting as well. There are things that you both notice that might be different and there is the joy that you've both noticed the same thing.

JP: Shared experience

D: Yes, when you can both say - oh did you see that.

J: Affirming in a way?

D: Yes, it is as the work can be insular

A: I think also you can take for granted what you do and then when someone points it out you can go oh yes I suppose that is something I do well and I hadn't really thought about that.

D: That's nice isn't it

JP: And that's important for your professional identity isn't it?

D: Yes as you say your professional development. I did do a good job there.

This interview extract shows the importance of co-delivery in multiple ways. Two people see more than the one person delivering the session and the shared reflection encourages deep thought about the session. Co-delivery allows for growth in professional development, through affirmation that something was done well, noticed by a colleague. This positive feedback is acknowledged as important. The insular nature of the normal working practice is mentioned and the opportunity to work together is valued.

Implication for practice: Co-delivery is important for raising the quality of practice

The following extract from the SLT case study clearly articulates the impact of the project from both a personal and professional perspective.

"I found this project to be very meaningful both professionally and personally. Professionally I could see what a positive impact these groups were having on the communication skills of the participants and how it was offering a much-needed service to families who often appear quite vulnerable and need support, especially when they are first exploring the possibility of their child presenting with additional needs. Previously I had always felt unable to give enough support to these families. Personally, I found it to be very meaningful to feel as though I was directly involved with effecting positive change to the families. Previously I often felt as though I had to rely on the wider workforce around the child to effect the change, often only seeing children for one-off assessments and giving recommendations to home and nursery[...] This project has made me feel more confident to incorporate music making in my work with children and made me realise that everyone is inherently musical and you don't have to be the best singer to make music. It has made me appreciate the value of incorporating humour into practice with children and how this can help children feel at ease, develop confidence and ensure children are having fun while they are also learning. It has helped me understand how important it is to follow a child's lead during play. It has given me first-hand experience of how powerful it can be when a child is able to take ownership of an activity and how they are much more likely to learn from this experience compared with an activity that has been directed by an adult."



Final Focus group: most of the SALTMusic team

RQ:How can we record the experiences of children and families during their attendance at SALTMusic?

We used a range of data collection methods in order to capture as many views as possible, trying to include all participants, which also helped with triangulating data.

Methods of data collection

The qualitative design included the collection of some numerical data to support and augment the rich qualitative data that was collected. The range of data collection tools selected helped overcome some of the weaknesses inherent in each of the data collection methods. The tools used were:

- Reflexive journals
- Evaluation forms. Parents were invited to complete an evaluation form which provided both numerical and text data for analysis
- Celebration session
- Film data. In the celebration session at the end of each term we showed an edited film of the group activities over the 8-week period. Sometimes, these sessions were filmed to observe children's reactions to seeing themselves and their peers on screen.
- Audio data
- Focus group including a variety of data collection methods such as creating a road map of shared experiences
- Interview
- Questionnaire
- Case study. Several (n=5) *professional* participants were asked to create a case study of a particular child; these offer in-depth accounts and insights about an individual from the practice perspective (see Appendix F)
- Observation
- SALTMusic Scale for each child's emerging communication and expression

The SALTMusic Scale

This data collection tool was devised, developed and used by the professional participants to gather information about each child, each week. The SALTMusic scale was based on pre-existing materials: Ferre Laevers (1994) scales of wellbeing and involvement and a reflection tool designed by the music and arts team at GYCT as part of Adventures in Music - a previous 2-year Youth Music funded project (subsequently funded for a further 3 years by BBC Children in Need). During this time the scales were rooted and developed through the particular communicative music practice of the team and further developed through SALTMusic with additional perspectives of the SLT specialists. They grew out of observations of significant events in order to track the emergence, development and multiple application of particular communicative, interactive, expressive, musical competencies. At the first planning focus group team meeting the existing tool was considered and some additional categories were added by the SALT team. There were four iterations before the final version was agreed by the team to capture everything that they were observing in the sessions (see Appendix B). The final version was used for two full terms and has provided numerical data that support the other findings. The SALTMusic scale was used by the team (usually comprising one musician, one music assistant, one SLT and / or one SLT assistant) at the end of each session to guide reflection and discussion about each child that had attended.

The team agreed how to score each category on the form, adding a commentary for additional information. The forms were photographed, and the images were sent to the researcher for analysis.

The SALTMusic Scale Categories

Wellbeing & Involvement

Designed as a self-assessment tool for settings to look at quality experiences for children, the Leuven scale (Laevers, 1994) was developed to assess a child's levels of wellbeing and involvement as indicators of quality practice. "Wellbeing refers to feeling at ease, being spontaneous and free of emotional tension and is crucial to secure 'mental health'. Involvement refers to being intensely engaged in activities and is considered to be a necessary condition for deep level learning and development." (Laevers, 2005, p.3). Assessment is based on observation, reflection and discussion amongst the team to arrive at a score on the scale from 1-5: 1= extremely low, 2=low, 3=moderate, 4=high, 5=extremely high.

In SALTMusic each child was given a score on this scale for their levels of wellbeing and involvement at both the start of the session and at their highest point.

Social interaction

The variables devised for this category were:

Own agenda

This started out as one category, to describe children following their own agenda (interests, preferences) during the session, irrespective of what was happening around them. It became clear by the second focus group that some of the team felt that a child having their own agenda was a positive thing to observe and others felt the opposite. Discussions in the focus group revealed the nuances within this category. It was felt to be welcomed and positive by all professionals during freeplay; revealing perhaps a level of confidence, trust and that the child's ideas were valued. In the group activities it was felt to be perhaps less positive by some, as the purpose during this time was to participate as a group member. Thus, it was decided to create two categories for the 'own agenda' item.

- o Own agenda freeplay
- o Own agenda group
- Watching with interest

Children were observed watching what others were doing, sometimes from a distance. This showed interest in others and an awareness of the social context.

Comfortable with attention

At the start of the programme of sessions some children clearly demonstrated with body language or gesture that they did not want attention from others, nor to be a focus for attention during any part of the session. In most cases this gradually eased, and children would demonstrate with their body language, eye contact and gesture that they were more comfortable with others showing an interest in them. They would be happy for example to be included by name in a 'Hello' song.

• Group participation

Careful observations were needed to notice joining-in with group activities, as participation could be quite subtle to perceive in those who were not comfortable with attention and preferred to watch from a distance. Tuning-in to the individual child and having several

observers in the room helped with this. The following categories were perhaps easier to define, although we had to bear in mind that 'interaction' could include subtle moments of: eye contact, touch, sharing of an object. Interactions could be observed in the following ways:

- Family interaction
- Practitioner interaction
- Peer-to-peer interaction
- Child-initiated interaction

Expression

The variables devised for this category were:

Laughter

Charlotte Arculus coined the term 'communicative musical funniness' (2011, p.34), a phenomenon she observed between two-year-olds as they played. 'Funniness' is both emotional and communicative (Reddy, 2010). She found in her work in early childhood music that her comedic skills are more useful than playing an instrument. Physical funniness helps develop playfulness (Arculus, 2011). Laughter has not been considered an integral part of linguistic processes, the meaning implied through laughter can be varied, and it does not have the same constraints as the rules of speech. However, it is thought to be an important component to social interaction (Nwokah & Fogel, 1993). It is a vocalisation – a sound, and utterance. It is something we elicit and value from babies as a fundamental communicative interaction. Funniness has rhythm and turn taking and can be framed as musical. Arculus suggests that laughter is a building block to communication.



• Vocalisations

These included any sounds, sounds patterns or vocal play that were not attempts at words. Some vocalisations were complex, melodious and communicative.

- o Symbolic noises e.g., Moo (for a cow)
- o Natural gestures e.g., pointing
- o Single signs / words
- o Sign / word combinations
- o Singing

There were instances where children sang their own beautiful composed songs in a session. One such occurred when the group had gathered around a piece of lycra, as part of the informal group time. This was enabled by the music practitioner holding the space, allowing the silence and expecting something to happen.

Margaret Barrett (2006) found that young children's invented songs showed examples of belonging, finding and making meaning, and developing competence and elaboration. Jon Bjørkvold (1992) suggests that spontaneous singing may be linked to the development of language and a desire to express thoughts, feelings and a sense of self. The songs were often quite complex in their melodic contour, as Bruno Nettl (2000) argues, early human music may have moved around a glissando-like vocal range which he describes as "like emotional speech." (2000, p.471).

• Rhythmic activity

This was one of the most commonly observed activities. Children would move or play with objects in a rhythmic fashion, sometimes before any other form of expression was observed.

• Actions to songs

Performing known actions (e.g., wiggling fingers at the start of 'Twinkle, twinkle little star') to songs demonstrates an understanding of a) the cultural practices of the group, b) memory of the actions in the correct sequence, c) joining the 'community' through song singing and, d) demonstrable knowledge of the song (Pitt, 2014; Huhtinen-Hildén & Pitt, 2018).

For Social Interaction and Expression variables, each child was scored using a scale of 1-5: 1=never, 2=occasionally, 3=sometimes, 4=frequently, 5=always.

A commentary box was included on the data collection form for practitioners to note anything a parent may have said about the child's progress during the week, comments from other family members or to clarify the numerical scores.

Ethical considerations

Participation in action research should be an emancipatory and positive experience (Robson, 2002, p.215). Ethical guidelines for educational research (BERA, 2011) and Great Yarmouth Community Trust's ethical position informed the framework for the ethical dimensions of the project: it was essential to be transparent about these. Voluntary, informed consent was sought from all adult participants via an information letter and consent form (See Appendix C). In some cases, verbal explanation of the research was also given to ensure fully informed consent was achieved. The children's informed consent was more difficult to achieve, we had to acknowledge that the parents' consent included their child as participants. Every attempt was made to explain

to the children where appropriate, what we were doing and to seek their approval. Some children gave clear signals that they did not want to be filmed and we took this very seriously and stopped videoing. The presentation of the children in the videos was always from a positive, capacity viewpoint, to show them at their best. Children were assigned a letter or a number in the data collection, so their anonymity was preserved. Adult participants' anonymity was preserved by using the terms: parent, speech and language therapist or musician when using direct quotations. No participant is identifiable through the reporting of the research. Pseudonyms were assigned to children represented in the case studies included in this report.

It was made clear to all *family* participants at the point of invitation that the sessions were part of a research project and we offered a 'taster' session at the start of each term for interested families to attend prior to consenting to participate. *Family* participants could withdraw from the research at any time although none asked for their data to be removed from the study. It was more difficult for *professional* participants to withdraw their consent, as the sessions were part of their employed and freelance work. We tried to ensure there were opportunities to raise concerns and issues, although hierarchies and power inequalities may have made these conversations more difficult for some *professional* participants than others. The speech and language therapy team work according to NHS structures and hierarchies, whereas freelance music arts practitioners are less used to layers of hierarchy in their working practices. The tacit power aspects may have presented a difficulty to overcome for some and have been less obvious to others when contributing opinions in group meetings.

Participation in video / audio interviews with parents and / or professional participants was voluntary, with fully informed verbal consent sought specifically for these events.

All data - written, video, audio - is stored on secure, password-protected electronic devices. Hard paper copies of letters and SALTMusic score forms are stored in a lockable filing cabinet. Identifying materials about participants are kept in a separate location. These data will be kept for a maximum of five years, although the dataset derived from the SALTMusic forms may be used beyond this time.

The professional team were aware that for some *family* participants, attendance at the group sessions was not easy, some felt vulnerable and anxious and many were emotional and concerned about their children. The children were also sometimes vulnerable and anxious. The notions of ethics of care (Gilligan, 1982; Noddings, 1984) that empathy and compassion are part of relational ethics and important to recognize when working with families were central to the team's approach.

RQ: What characteristics of the new pedagogical approach emerged as a result of joint-working?

This section focuses on research findings and seeks to answer the research question and the project aim: To create a transformative pedagogy which brings speech and language development practice together with music to increase the life chances of under-fives and prepares them to become resilient engaged learners of the future.

The SALTMusic pedagogical approach

As team members grew more accustomed to each other, they became skilled at using the data collection tool, they made amendments and revisions, to ensure that every observable aspect of communication was captured. This assisted the team's 'interthinking' as they spoke together and, in the process, created new knowledge and understanding (Mercer, 2000, p.15) that was fed into subsequent planning.

Over time the practice became pared down until eventually the SALTMusic practice revolved around vocal anticipation games based on integrating the theoretical ideas from speech and language therapy of the Communication Pyramid: OWL - Observe, Wait, Listen (Girolametto, Greenberg & Manolson, 1986), and approaches from intensive interaction (Nind, 1996; Hewet & Nind, 2013). By the start of the second year the team seemed to have developed the pedagogical approach that was most effective.

The approach is based on:

- Understanding that children are competent, creative, social and affected by things in the world
- Understanding that adults are competent, creative, social and affected by things in the world
- An increasing overwhelming realisation that children's communication hangs on parents' / caregivers' actions.
- EY arts practice (developed at GYCT over many years of working with young children and parents / caregivers, and in early years settings):
 - o Musical freeplay in an immersive sound / play space
 - o Improvisatory, flexible practices based on following a child's interest
 - o 'Breathe out'
 - o Micro-songs
 - o Multi-modal opportunities of expression
 - o Laughter
 - o Fun
- Speech and Language therapy practice:
 - o The Communication Pyramid
 - o Observe, Wait and Listen
 - o Approaches influenced by Intensive Interaction
 - \rightarrow (C) See the offer
 - → Copy the offer
 - → Celebrate the offer

An extract from a music apprentice's reflection at the end of the project reveals the impact of using Intensive Interaction approaches learned from the SLT practitioners:

"If we were to teach other practitioners one thing I think the most essential is intensive interaction. Without meaningful interaction with another person there is no desire from the child to want to communicate and I feel we have seen children pass through who were initially locked in their own bubble and unable to give anything of their personality from a lack of ability to interact. For this reason, the intensive interaction is the seed that we sow and that everything else grows from. Of course, the SLTs know this and have demonstrated this so ably both in their CPD session and in their practice and have been a great example for us to build into our own practice. I think as practitioners we probably do this instinctively, but it has been so valuable to gain a solid understanding of it.

If the project were to be repeated in anyway, I would suggest that the information given from the SLTs in their CPD session should be introduced to practitioners from the beginning [...]as it gives huge confidence to us to be able to communicate why we do certain things."

- o Choices
- o Keyword objects
- o Simple signs
- o Visual timetable
- Materials and resources:
 - o Bubbles
 - o Balls
 - o Lycra
 - o Pitched percussion: xylophone, chime bars, hand bells
 - o Open-ended objects (e.g., large plastic yarn cones, sponges)
 - o Target word objects (e.g., animals, tea set, transport)
 - o Emergency blankets
 - o Egg shakers
 - o Ukuleles
 - o Drums
 - o Guest musicians (good improvisers)
 - o Piano
 - o Recorded music e.g., Brian Eno (1978), Dr Rachel Drury (2011)

We suggest this is an example of an interdisciplinary pedagogical practice emerging from multidisciplinary practices of speech and language therapy, music practice, improvisation and aesthetic practices which focus on Early Childhood. It has the potential to become a transdisciplinary communicative approach beyond this particular focus and could potentially be used in many other contexts such as working with people with dementia or PMLD and more widely as a method to examine what happens when we 'interact' with the world.

The Sessions



1. Preparation – creating an immersive sonic-play space

The room was prepared in advance with instruments, e.g., xylophones, child-friendly hand-bells, shaky eggs, individual chime bars, gathering drum, small drums and objects for play were laid out to create an inviting play space. Fabric was sometimes hung across room to create different spaces to play in. Empty plastic yarn cones in various colours were used to create towers with egg shakers added to the top. Piles of sponges were artfully constructed and a pile of emergency foil blankets with hidden egg shakers were placed in corners. Large plastic teapots made containers for shakers and large plastic animals or tea sets were laid out on drums or xylophones for play possibilities. Quiet background music was used to create a sound environment that was calm and welcoming. Essential oil fragrances were sprayed in the room to add to the sensory experience from time to time.

2. Musical Freeplay

Children and their parents / caregivers entered the room and were invited to remove their shoes before diving into the play environment. No instructions were given although practitioners modelled non-spoken interaction, allowing and encouraging the child to lead the play and then following. Many parents quickly copied this approach although sometimes the practitioners gave some guidance to support them to speak less. Laughter was sought from the children during this freeplay time, with the emphasis on fun, experimentation, exploration, curiosity, using voices and bodies with no pre-determined outcome in mind.

The practice draws from Dramaturge John Wright's notion of `finding the game' (2006):

- Find the Game
- Play the Game
- Recognise when the game is over
- Find a new game

Practitioners followed children's initiatives, adding and scaffolding by mimicking and elaborating gestures, sounds, actions from the children. The freeplay time lasted a flexible 20 minutes. Transition to the next phase of the session was guided by the leader when they felt the time was right.

3. Tidy-time

Moving from the freeplay part of the session to the group activity required careful thought and sensitive leading. In some groups an upbeat recorded tune indicated the start of tidy-time and everyone helped gather up the objects, instruments and toys to clear a space for a short dance / movement activity with 'tickly sticks' that led into the group time. In the Norwich-based group a tidy-up song was used. Transitions can be stressful for some children (and adults); enabling a smooth move from freeplay to a more structured activity helped keep children's attention and engagement in the group session.

4. Informal group time

In this part of the session there was a chance to rehearse and repeat many of the songs, rhymes and activities of SALTMusic. Breathing out with a long, vocal sigh many times at the start of this session was valuable in settling everyone to the activity. The music practitioners incorporated clowning techniques of overemphasising and laughing as they held an in-breath before breathing out. The children picked this up quickly and could begin vocalising as they enjoyed the game. This was one of many rituals that were adopted as part of the practice. Hello songs were used, often with ukulele accompaniment, the children loved the ukuleles and we had enough sometimes for each child to play a ukulele. Movement games, stories, scarves, balls and lycra were selected depending on what the particular children in the group most enjoyed; and these became the group's rituals. The following extract from Paul's case study reveals individual preferences:

"In marked contrast Paul has shown little interest in choice-making when given the opportunity to choose: "Boing / Bang" or Bubbles?" He drifted away from the group activity during this time leaving his parents to initiate a choice for him, there were a couple of exceptions to this, on one such occasion he banged the lollipop drum.

The bear hunt song has produced some lovely reactions from Paul, he has appeared delighted and immersed in being picked up and moved about by his parents in time to the rhythmic actions of swishy swashy grass, the splash splosh water and being held high for over and low for under.

The week the saxophonist visited, the usual planned routine was changed. Paul withdrew from the circle perhaps disappointed by the absence of the balls. He placed his hands over his ears and stayed close to his parents. He did a brief dance movement with his feet to one of the saxophone songs. Paul frequently looked at the visual timetable displayed in the room and would make strong eye contact with the practitioner in the hope of being chosen to place a card into the bag when the activity had ended."

The team were able to plan the activities incorporating these detailed observations and understandings of the needs and preferences of the children that they were working with at the time.

5. Micro songs

Charlotte Arculus and the team have developed the term and concept of the 'micro song' to describe short, vocal pieces that have become an integral part of SALTMusic practice and beyond. These micro songs often have what Ian Cross (citing his previous work) describes as a "floating intentionality" (1999, cited in 2010, p.68), a fairly abstract, but widely applicable meaning such as anticipation and release (of scarves, of our bodies, of time, of movement). They consist of two or three notes, frequently with a glissando upwards to a pause and then a release downward glissando or staccato word such as 'ping!'

The micro songs are framed around anticipation and release. Jessica Pitt (2014) found in her research that smiles and laughter occurred at the end of songs where there had been movement, jumping or lifting-up with a rallentando or rubato over a dominant chord, building a feeling of suspense with a resolution to the tonic and a release of tension, after which the smiles seemed to occur. The microsongs are built around build-up and release (the cadence). David Huron (2006) describes *'feelings*

of anticipation' being built around the knowledge that some events have a "very strong tendency to be followed by other events" (2006, p.306), the expectation of this happening can cause a feeling of tension. The device employed in the micro-song is therefore helpful in eliciting a response from even the most reluctant communicator, who desires the tension they feel in the build-up to be released. This extract from a case study of Paul describes the power of the micro song:

"Paul's eyes would light up when the balls were brought out of the cupboard. He delighted in the anticipation, pause and release activity from the very beginning. His parents advised that he likes to repeat the ritual daily at home. He makes strong eye contact and will vocalise and show clear signs of joy with the release of the balls in time with the other children and parents in the circle. He seemed to recognise and enjoy the anticipation-pause-release similarities in the scarf play with the blow... blow ... blow it... down song. "

6. Choices

Each child, in turn, was invited to choose between two objects e.g., bang (drum) or bubbles. In a gentle and enjoyable way this forces the child to interact with another, sometimes giving eye contact, being part of the group and being able to give and receive attention. Once the choice has been made a short micro song based on the choice of object is sung to reinforce the choice and celebrate the interaction.

7. Signs

Simple signs alongside the words that were used in the session added impact to their use. Signs such as: more, finished, stop, go, bubbles, ball, wants, and hello were used. 'Twinkle, twinkle little star' was sung and signed every week.

8. Visual timetable

A very simple visual timetable was used in some groups most effectively and in other groups it was found to be troublesome and inconvenient. Images for: Freeplay, Circle time, Goodbye and shoes, coats and home were pegged to elastic strung across the room. When it was time to move to the next activity a child volunteered to unpeg the visual and put it in a cloth bag.



RQ: How does the new pedagogical approach affect SALTMusic children's communication?

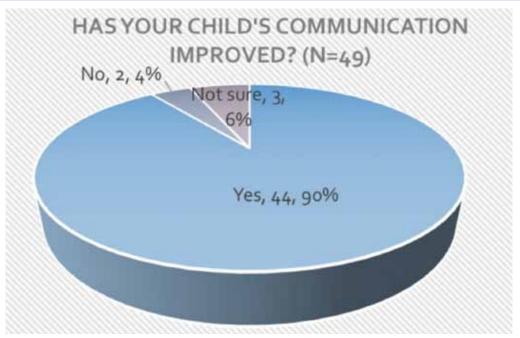


Figure 2 Parents' perception of their children's communication

Figure 2 shows that 90% of those parents who completed an evaluation form (n=49) felt their children's communication had improved. Two parents said there was no change to their child's communication even though their children had benefitted from the sessions in other ways, and three respondents were not sure about improvements to communication although they too believed that their children had still benefitted from attending the groups.

Next, they were invited to talk about how their child benefitted from the SALTMusic group sessions.

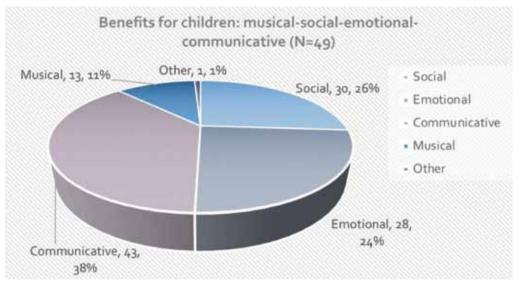


Figure 3 Parents' perceptions of benefits for children

Themes that emerged from the data were categorized as Communicative, Social, Emotional and Musical:

• **Communicative (38%)** - benefits include increased / improved speech, signing, increase in vocabulary, more focused attention, talks about group at home.

- **Social (26%)** benefits include improved socialisation, interaction with others, friendly group, tailored interaction for each child, e.g., "*Nursery says she loves playing with the scarves, seeing her interacting with other children.*"
- **Emotional (24%)** benefits include increased confidence, coming out of their shell, enjoyment, less afraid of sounds, talks about group at home, friendly group
- **Musical (11%)** benefits include singing more, learning to appreciate music, sound, movement, e.g., "*Singing hello daddy I've never heard a song before..."*
- Other item (1%): "Haven't seen a change (although group has helped my child). He is the same still running and gathering."

Benefits for children - professional perspective

These two extracts reveal that children were found to be able to engage in the sessions on their own terms; being allowed to explore, to lead, to interact with others.

"I noticed that the children attending became more and more **confident** to engage with activities each week. They appreciated having the clear boundaries to indicate transitions, however they also appreciated being given the freedom to explore and not be confined to adult direction. Their joy was evident when adults in the room **followed their lead** in something that they had instigated; enabling them to **take ownership and feel proud** of their chosen activity. They **began to form links with the other children** in the form of **following the movements of others** around the room, bringing other children objects and **beginning to learn how to take turns** with other children. This was great progress for these children who tended to find managing social relationships difficult." SLT Case study

"He began to **enjoy running** through the carnival sticks and bubbles. **Attempts to say individual words came more readily** but with his unclear speech he was unable to make himself understood. J **made clear choices** when asked. J **appeared to be happy and relaxed**, smiling and laughing and increasingly **interested in other children** sometimes bending down to see into their faces. He struggled to know how to engage them until eventually a couple of the boys joined him in a game of chase which he was delighted by." Case Study of Child J

A third extract describes how musical activities directly helped a child's participation, interaction and leading of the group despite them not having any spoken language:

"By **repeating songs and creating rituals** Michael has become familiar with simple songs and motifs that we use week to week. He has shown an **understanding and expectation** of some repeated musical voice play that uses pauses and anticipation and release. Through marrying the musical elements with either hand actions or props such as balls or scarves Michael, who isn't vocalising at the moment, **can be part of the musical creation and expression** by using his hands or props and **through very subtle cues** can become the 'conductor' through body language, eye contact etc. **He has started to use some sign language** in the groups, indicating 'more', when he would like to repeat a song and tentatively we have seen some two sign sentences." Case Study of Michael

SALTMusic Scale findings

Three children, with the best attendance record, were selected from each group, to generate a graphical report for the staff team's focus group at the end of the term in question.

Change over time in many areas of social interaction and expression were evident but what became clear was that the improvements were individual to each child and affected by multiple factors: who attended with the child each week, how they seemed to be feeling at the start of

the session and which practitioners / peers were present. The content of the music session could influence participation, involvement and expression. The numerical data tell us something about the child's experience and communication but the information provided in text and video was more important in helping to understand the holistic experience of the child during a particular session and across time.

Examples of the graphical representations of the various categories recorded on the SALTMusic scale each week are included in Appendix D. They detail one child's growth in communication across two programmes of SALTMusic and clearly show the impact of longer engagement.

<u>Case Study – Celia</u>

Pre-group

Celia is an only child and there is no family history of speech and language difficulties. Her mum reported that she was born prematurely by Caesarean Section due to poor foetal growth, and spent her first ten days in a Neonatal Intensive Care Unit. She was referred to the group by a Speech and Language Therapist and attended a twelve-week SALTMusic programme between September and December 2017. There was a high level of parental anxiety around her language development, exacerbated by the family's frustration over the long time they had waited for the referral.

At the time of referral, *Celia* was 2 years 5 months. At the screening assessment, she was reported, by parents, to be **using a small vocabulary of about five words but was mainly silent**. Her comprehension of language appeared to be at a higher level than her expressive language but needed further assessment.

Mum responded well to the advice and handouts offered and through this **we realised the importance of giving time in the groups to talk to parents about the strategies that we use** and to allow time for them to talk about their progress and difficulties. Mum seemed to find it difficult at first to follow *Celia's* lead in free play. The difference in the play after spending time talking to all the parents together was significant. Mum was much happier knowing the theory behind the practice. She said that she just needed to know what to do.

Mum began to relax and was more able to follow *Celia* and we saw some very positive interactions with much less language from Mum. Mum also reported using some of the strategies and activities used in the group at home, like marching to the drum and making choices. Towards the end of the sessions *Celia* could clearly make choices and attempt the words "ball" and "bubble" She had grown a lot more confident and was able to venture around the room more and explore with Mum following her lead.

Post-group

The Speech and Language Therapist carried out a home visit following the sessions, to assess *Celia*'s communication and language skills in more depth.

Mum reported that *Celia* had made pleasing language development during her time in the group and that **she was now using a larger vocabulary of over fifty single words to communicate her needs**. Mum said that this marked a positive contrast to her development three months prior to this, at which point she was largely silent. In addition, Mum reported that she and her husband felt they had learnt more about appropriate strategies to use with *Celia* to support her language development and were feeling less anxious. *Celia's* attention, play, social interaction and comprehension skills were assessed to be age appropriate on this visit.

Team reflections

The team felt that the **biggest impact of intervention was on the parents**, particularly for Mum who attended the group. The group created a 'safe' place for Mum to explore her concerns around *Celias's* development and through observing the practitioner's modelling of play and communication strategies, she started becoming less directive, allowing a more child-led approach to play. She also enjoyed gaining knowledge about the best strategies to use with *Celia* to support her language development. As she became less anxious herself, we saw a positive change in *Celia's* interaction with her and an improvement in her language development. Practitioners in the team felt that the group has given parents a positive package of care, a resource which would not have been available in the community Speech and Language service.

Celia's SALTMusic scale data told the story of her development over the course of the 11 weeks (see Appendix E). Her confidence grew and with it her social interaction and expression.

By combining the numerical and qualitative data it is possible to give a rounded description of *Celia's* journey through SALTMusic, demonstrating the significance of the intervention in terms of the work with parents. In summary these are:

- Becoming aware of and supporting the parent's level of anxiety.
- Providing background theory to support the practice in the group helped the parent to understand, relax and gave her strategies to use at home.
- The parent's attendance with her child made a difference, both positive and negative. In the long term, working with both members of the dyad makes the impact of the intervention stronger.
- It takes time for a child to build confidence and trust.
- Taking the pressure off parent and child to communicate by promoting the value of freeplay and following a child's lead can be transformative for both in the dyad.



RQ: What is the impact of the SALTMusic programme on parents / caregivers who attended sessions with their child?

It became apparent that the parents / caregivers who attended the sessions with their children were equally as important participants in the group as their children. The SALTMusic practice evolved over time to take the parents' needs into account. By July 2017 (see timeline Appendix A) the team discussed the need for a 'parent-talk' session at the mid-point of a programme. During this talk, the SLT therapist explained the theoretical ideas behind the SALTMusic sessions, the importance of the freeplay activity, what the practitioners were doing and why this was important. They suggested that parents try to follow their child's lead and to reduce the amount of talk. This often led to a change in the parents' behaviour during sessions and an increase in the children's communication.

At the celebration sessions at the end of each 8-10 week-programme, parents were given an evaluation form. Around half of the parents completed it. The project seemed to be a positive experience for every respondent. Everyone said that they had benefitted from attending the sessions (100%, N=49). Responses have been grouped under the following categories:

1. Quality time with child

"Spending quality time with [Child] in a completely child-focused environment."

"I have enjoyed coming and playing together."

"I have greater communication and relationship with [child].

2. Practical help and strategies

"I feel more confident to encourage him. I have found strategies to engage him to say words..."

"really helpful, gives you ideas of how you can help through fun activities."

"It was great, and my daughter loved that I was playing along. It has given me ideas and actions to copy to improve speech."

"I've thought of new ways to communicate with [Child] through play which I can take to the classroom for others to do the same." (Child's one-to-one learning assistant)

3. Adult Support

"Meeting other children and mums. It's a chance to get out of the house."

"Meeting new people."

"Seeing other children lacking speech. Confidence, ideas and advice."

4. Seeing their child positively

"Seeing [child] behave in ways he doesn't usually at home."

"It has helped encourage positive behaviours in my son."

"Seeing [child] come on is really encouraging and her interaction with other children."

"I've really enjoyed watching [Child's] confidence grow."

5. Impact of team

"Very cool to have empathetic and understanding staff." "Friendly group, staff are friendly and it's been a very nice time."

Professionals' perceptions of benefits for parents

"The group that I was a part of running involved families of children with additional needs, often where they were presenting with social difficulties as well as communication difficulties. There are often behavioural difficulties associated with these additional needs which contributes to a certain level of anxiety for the children's parents when it comes to attending groups; they are often worried about how their child will react to the activities and worried about them doing the 'wrong' thing. I noticed that over time these families appeared to become more relaxed as the groups aimed to foster a culture that there was no 'wrong' answer and we celebrated the individuality of children rather than trying to get them to conform to adult direction. This enabled the families to feel more at ease and opened up opportunities for more informal conversations to discuss strategies to develop their child's communication skills." SLT case study

This above extract describes the process that we often saw: parents gradually relaxing, gaining skills and knowledge through advice and theoretical understanding, thereby enabling the children to feel more able to interact.

Professional participants were asked in the exit questionnaire, "To what extent do you agree with the following statement? Parents / Caregivers have an increased ability to implement strategies to support their child's language development from attending SALTMusic sessions."

More than half the professional participants (n=6) felt that SALTMusic had equipped parents to a great extent to implement strategies to support their children's communication and the remaining three participants indicated this has largely been achieved.

Similar responses to the parents' were given when asked whether there were any additional benefits for parents:

Seeing their child positively, Practical help and strategies: "They have been able to appreciate their children's abilities rather than disabilities. They have been able to relax and enjoy their children and been equipped with ways to continue the work at home."

Adult support: "By being supported and having the strategies modelled and explained. Being with other parents with children with similar issues."

Quality time with their child: "- shared joy with their child - A place/ group (outside of the home) to go where their child's behaviour is accepted, understood and positively supported..."



Assessment of the project – SALTMusic team perspective

The professional participants were invited to complete an exit questionnaire to assess how successful the project had been in meeting its outcomes from their perspective. Participation was anonymous, it is therefore not possible to identify responses according to discipline (SLT or music). Table 1 shows the Likert Scale questions that respondents were asked to score on a five-point scale, 1=no extent, 5=great extent, and their respective scores. There were no 1 or 2 point responses. See Table 1 The SALTMusic team's assessment of the project against its outcomes.

The team felt the most successful outcome of the project was the increase in shared understanding that had been made possible through working together. There was clear evidence of the growth of the relationships and the working practices at each focus group meeting.

There was less agreement about the musical behaviour and corresponding language improvement. Perhaps the wording of the outcome is an issue? It may be difficult to say that increased musical behaviour directly corresponded to improved language acquisition. The way the practice developed meant that the whole SALTMusic approach is more holistic and integrated; one cannot separate the different aspects in this way. We have discovered that it is more entangled and less easy to separate what is music and what is communication because the whole practice is built around inter-action through sound and play.

There was more agreement about the least successful aspect of the project. Unfortunately, East Coast Community Health experienced a period of transition between the time the application to Youth Music was made and the project starting. This meant that some aspects agreed to at the outset e.g., a SLT attending every session and active interest from the management team, had to be amended during the first year. This caused some upset through misunderstanding at the delivery level. Through the trust and rapport built over the lifetime of the project, team members were able to overcome these difficulties and achieve the project aims and outcomes. However, the work of the project was known about by SLT colleagues and the benefits of the approach were understood and valued.

ECCH were generous with their in-kind support by exceeding the commitment of man-hours stated in the project agreement by a considerable amount. The staff team showed a high level of commitment in terms of their time.

Impact of SALTMusic to wider ECCH Speech and Language Therapists

When asked (via questionnaire of the entire ECCH SLT team)

92% (n=12) had heard about the project;

67% (n=12) had referred families to the project because, "..it is a great way to develop early language skills and because SLT is very limited in the community".

100% of the sample (n=12) felt that an ongoing SALTMusic group available to refer families to would be beneficial and that training for EY settings in SALTMusic approaches would be valuable.

Final comments indicated that they could trust referring families to the group, "It's a group I can refer children to knowing that it has been designed with a SLT and with early communication in mind. The alternative is often to give a hand-out with the advice on, however many parents need to see and practice the activities in order to carry them out effectively."

Question	5=great extent	4	3	Comment
To what extent do you feel we have achieved outcome one of our project bid, to create a transformative pedagogy that brings together SLT and EY music practice to increase the life chances of under-fives and prepares them to become resilient engaged learners. this outcome?	n=6	n=3		
To what extent do you agree with the following statement? There has been an increase in the social and personal development - through confidence, communication and playfulness - in at least 80% of children who have attended the SALTMusic sessions.	n=6	n=3		
To what extent do you agree with the following statement? Children in SALTMusic show increased musical behaviour with 60% of children showing a corresponding improvement in language acquisition.	n=4	n=5		
To what extent do you agree with the following statement? Parents/ Caregivers have an increased ability to implement strategies to support their child's language development from attending SALTMusic sessions.	n=6	n=3		"the barriers have been that some parents are unable or unwilling for whatever reason to grasp the skills needed to connect with their child to encourage the development of language."
To what extent do you agree with the following statement? There has been an increase in shared understanding and practice between music practitioners, S&L therapists and assistants	n=7	N=2		Most successful "I have gained a greater understanding of the building blocks involved in levels of communication as displayed by the SLT and assistant team and the shared practice of the music team has given me greater understanding of how a music practitioner can use play and intuitive relationships with the children to increase an awareness of communication" "Inspiring! This joint project has taught me so much. I now incorporate musical aspects of learning into my therapy sessions wherever possible. I am also much more aware of the therapeutic environment and how this may impact a child/parent's ability to engage."
To what extent do you agree with the following statement? The SALTMusic project has increased understanding of the value of adopting music-based strategies for S&L development amongst managers in both teams.	N=1	n=6	N=2	Least successful "S&L staff feeding back to managers. Manager attending groups. Barrier - manager not involved 'first-hand' until final stage of project." "Barriers being an NHS service in funding crisis. Difficulty in being able to have Managers to come and see the work at the outset."

Table 1 The SALTMusic team's assessment of the project against its outcomes.

<u>Conclusions</u>

1. What did the intervention show us?

It showed the importance of creative musical approaches as part of education, health and wellbeing. Setting up this kind of collaborative, interdisciplinary work takes time but has the potential to become more than the sum of its parts - for instance the approach could be used in a variety of different contexts.

It demonstrated the 'beautiful risk of education' (Biesta, 2013) - space was always created for the unknown to happen and it often did! In this possibility space we experienced some treasured moments when children showed us, through their invented songs and musicking, how competent and capable they are. **Talk less**.

By adopting a musically playful, 'possibility' approach, the children were able to engage in sessions on their own terms, being allowed to explore, lead, and interact with others. This led to increased confidence that transferred to an increase in the use of spoken words or signs. **Allow children to take the lead**.

The intervention showed we can pare down our practice to the essentials and still have all that we need and all that was necessary. **Keep it simple.**

We discovered the power of the micro-song (and the anticipation and release that are its inherent qualities). **Use of micro-songs.**

It showed the importance of **knowing the theoretical ideas that underpin practice**, these give confidence to practitioners (and parents) and is a **hallmark of quality practice**.

Sadly, it highlighted funding cuts and pressures within health services.

2. Why were the approaches helpful for children?

The improvisatory, child-led, in-the-moment approach to the practice helped to resist the tyranny of talk. By adopting multimodal forms of communication in response to children rather than 'at' them, they grew in confidence and as a result of less adult talk began to talk more themselves.

The importance of freeplay: focusing on the process rather than any product is an important feature of play and creativity (Bruce, 2011). Young's (2003) social constructivist approach to practice led to improvisatory creative processes, rather than focusing on children achieving specific musical or speech related outcomes / products.

3. Why were the approaches helpful for parents?

By creating a joyful aesthetic space where parents could be alongside their children they could relax and tune-in to their child. They were offered practical and theoretical advice as well as the time and space to model the practical and theoretical. This proved to be a winning combination for many parents who, as a result, felt more confident to help their children at home.

4. Strengths of the project design

The practice was tested through the action research process with robust methods of data collection which enabled complex developments to be seen without being reduced to a single outcome. The reflection tool was vital to the process, with plenty of time to reflect and discuss. There was the opportunity to test the replicability of the approach by trying out different models: number of weeks, different personnel (reduced numbers), different resources, in different settings.

Implications for Practice

1. SALTMusic Characteristics of Communication

An implication for practice from the project is the knowledge generated through the joint working of the team. They have created the acronym, 'ALIVE' to describe the main characteristics of communication that have emerged from the SALTMusic sessions:

- A Attention: children being comfortable with attention and being able to give attention to others; peers, adults and / or objects
- L Laughter: was found to be an important signifier to high levels of wellbeing and involvement which frequently gave rise to increases in the levels of interaction and expression.
- I Interaction: once a child started to interact with a family member, peer, practitioner or object, this was a sign they were comfortable in the session and building their confidence, a prerequisite to any form of communication. Interaction includes making eye contact, gesture, passing an object, looking for a play partner.
- V Vocalisation: all vocal sounds that were not laughter or a clearly identifiable song with words.
- **E Expressive movement:** it became evident that children's movements in the sessions were not random but were forms of communication. This understanding was helped by one of the music apprentices, who was a dancer. The knowledge she shared of the language of dance, helped the team to understand the significance of repeated movements that were an invitation to play.

A recommendation for practice is to observe children during musical freeplay, or other freeplay scenarios, with an awareness that the SALTMusic characteristics of communication are an indication of willingness to inter-act. By developing this awareness practitioners can create environments that encourage children's communication and confidence.

2. Co-delivery

"I have valued the opportunity to work with a number of different practitioners and to be able to learn from each other in this way. Although it is expensive it is useful to have those who lead, and those who observe, as significant moments pass so quickly and are often not repeated in the same session..." Music Apprentice

An implication for practice is for music sessions to be delivered by at least two practitioners. The quote above highlights the benefits of the observing role and the leading role for the most effective working of the session. A recommendation is for music leaders to work with an apprentice wherever possible and for projects to include this cost as part of the work that they plan to undertake.

3. SALTMusic Tools and Resources

The SALTMusic team have developed a range of practical outputs as a result of the project:

- A variety of CPD workshops
 - o Working with SALTMusic pedagogical approach
 - o Communication resources
 - o Movement practice as part of SALTMusic
 - o Creating an immersive musical play space

- A series of short explanatory videos demonstrating aspects of the SALTMusic pedagogical approach
- The SALTMusic Scale is available for practitioners to use in their observations of children.
- A website with links to useful resources and information URL?
- A Facebook group for those interested in speech, language and music for discussion and dissemination of ideas and events.



Implications for Research

• A previous longitudinal study (PACT, 2010) working intensively with families over 12 months (24-36 mo with SLT referral) offers an exemplar for developing a similar study based on SALTMusic approaches. This would involve revisiting children and families at end of Nursery, at the end of Reception and at the end of Key Stage 1.

For more information:

Website: https://bit.ly/2Pu3Z6o Facebook group: https://bit.ly/2PB9Maf Follow us on twitter: @saltmusicEY

References

Anvari, S. H., Trainor, L. J., Woodside, J., & Levy, B. A. (2002). Relations among musical skills, phonological processing and early reading ability in preschool children. *Journal of Experimental Child Psychology*, *83*(2), 111-130. doi: 10.1016/ s0022-0965(02)00124-8

Barrett, M. S. (2006). Inventing songs, inventing worlds: the 'genesis' of creative thought and activity in young children's lives. *International Journal of Early Years Education*, 14(3), 201-220.

Barrett, M. S. (2009). Sounding lives in and through music: A narrative inquiry of the "everyday" musi- cal engagement of a young child. *Journal of Early Childhood Research*, 7(2), 115–134.

Bercow, J. (2008). *The Bercow Report: A review of services for children and young people (0-19) with speech, language and communication needs.* http://dera.ioe.ac.uk/id/eprint/8405

Bercow, J. (2018). Bercow: Ten Years On: An independent review of provision for children and young people with speech, language and communication needs in England. London: ICan charity www.bercow10yearson.com.

Bergeson, T. R., & Trehub, S. E. (2002). Absolute pitch and tempo in mothers' songs to infants. *Psychological Science*, 13(1), 72-75.

Biesta, G. J. (2013). The beautiful risk of education. Routledge.

Bjørkvold, J. R. (1992). *The muse within: Creativity and communication, song and play from childhood through maturity*. New York: Harper Collins Publishers.

Blum, S. D. (2015). Wordism": Is there a teacher in the house. *Journal of Linguistic Anthropology*, 25(1), 74-75.

Blum, S. D. (2017). Unseen WEIRD assumptions: The so-called language gap discourse and ideologies of language, childhood, and learning. *International Multilingual Research Journal*, 11(1), 23-38.

Bolduc, J., & Montésinos-Gelet, I. (2005). Pitch Processing and Phonological Awareness. *Psychomusicology: A Journal of Research in Music Cognition*, 19(1),3.

Bolduc, J. (2008). The Effects of Music Instruction on Emergent Literacy Capacities among Preschool Children: A Literature Review. *Early Childhood Research & Practice*, 10(1), n1.

Brown, E. D., & Sax, K. L. (2013). Arts enrichment and preschool emotions for low-income children at risk. *Early Childhood Research Quarterly*, 28(2), 337-346.

Bruce, T. (2011). *Cultivating creativity: for babies, toddlers and young children*. 2nd Edition. London: Hodder Education.

Bullock, A. (1974). A Language for life: Report of the Committee of Enquiry Appointed by the Secretary of State for Education under the Chairmanship of Sir Alan Bullock, London: HMSO

Burman, E. 2017, *Deconstructing developmental psychology*. 3rd edition. London: Routledge.

Campbell, P. S. (2010). Songs in their heads: Music and its meaning in children's lives. New York: Oxford University Press.

Chao, H., Hotson, L., & Trainor, L. J. (2009). Development of infant mismatch responses to auditory pattern changes between 2 and 4 months old. *European Journal of Neuroscience*, *29*(4), 861-867. doi: 10.1111/j.1460-9568.2009.06625.x

Chobert, J., François, C., Velay, J. L., & Besson, M. (2014). Twelve months of active musical training in 8-to 10-year-old children enhances the preattentive processing of syllabic duration and voice onset time. *Cerebral Cortex*, 24(4), 956-967.

Cohen, L., Manion, L., & Morrison, K. (2008). Research Methods in Education. London and New York: Routledge.

Corbeil, M., Trehub, S. E., & Peretz, I. (2013). Speech vs. singing: Infants choose happier sounds. *Frontiers in Psychology*, 4. doi: doi:10.3389/fpsyg.2013.00372

Cross, I & Morley, I (2014) The evolution of music: theories, definitions and the nature of the evidence in Malloch, S. & Trevarthen, C. *Communicative Musicality:Exploring the basis of human companionship*. Oxford: Oxford University Press (pp.61-82).

Department for Education (DfE). (2017). Statutory framework for the early years foundation stage: Setting the standards for learning, development and care for children from birth to five.

Department for Education (2017). Unlocking Talent, Fulfilling potential: A plan for improving social mobility through education. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/667690/ Social_Mobility_Action_Plan_-_for_printing.pdf accessed (10.6.18)

François, C., and Schön, D. (2011). Musical Expertise Boosts Implicit Learning of Both Musical and Linguistic Structures. *Cerebral Cortex*, 21(10), 2357-2365. doi: 10.1093/cercor/bhr022

François, C., Chobert, J., Besson, M., and Schön, D. (2012). Music Training for the Development of Speech Segmentation. *Cerebral Cortex*. 2038-2043. doi: 10.1093/cercor/bhs180

Girolametto, L. E., Greenberg, J., & Manolson, H. A. (1986, November). Developing dialogue skills: The Hanen early language parent program. In *Seminars in Speech and Language.* 7(4), 367-382. © 1986 by Thieme Medical Publishers, Inc..

Gilligan, C. (1982). In A Different Voice, Cambridge: Harvard University Press

Gluschankof, C. (2002). The Local Musical Style of Kindergarten Children: a description and analysis of its natural variables. *Music Education Research*, 4(1), 37-49. doi:10.1080/14613800220119769

Gromko, J. E. (2005). The effect of music instruction on phonemic awareness in beginning readers. *Journal of Research in Music Education*, 53(3), 199-209.

Grundy, S., Kemmis, S.(1988). The Action Research Reader. In S. Kemmis & R. McTaggart (eds.) *The Action research reader*, (pp.321-324). Deakin University Press: Geelong

Harper, L. J. (2011). Nursery Rhyme Knowledge and Phonological Awareness in Preschool Children. *Journal of Language and Literacy Education*, 7(1), 65-78.

Hewett, D., & Nind, M. (2013). Interaction in Action: reflections on the use of Intensive Interaction. London: David Fulton Publishers.

Hickok, G., Buchsbaum, B., Humphries, C., & Muftuler, T. (2003). Auditory–motor interaction revealed by fMRI: speech, music, and working memory in area Spt. *Journal of cognitive neuroscience*, *15*(5), 673-682.

Huhtinen-Hildén, L., & Pitt, J. (2018). *Taking a Learner-Centred Approach to Music Education: Pedagogical Pathways*. London: Routledge.

Huron, D. (2006). Sweet anticipation: music and the psychology of expectation. Cambridge Mass. USA: MIT Press.

Ilari, B., & Sundara, M. (2009). Music Listening Preferences in Early Life: Infants' Responses to Accompanied Versus Unaccompanied Singing. *Journal of Research in Music Education*, *56*(4), 357-369.

Laevers, F. (1994). The Leuven Involvement Scale for Young Children. Manual and video, 44.

Laevers, F. (2005). SICS [ZIKO]: Wellbeing and involvement in care: A process-oriented self-evaluation instrument for care settings. KInd & Gezin & Research Centre for Experiential Education, Leuven University.

Lecanuet, J. P. (1996). Prenatal auditory experience. In I. Deliege and J. Sloboda (Eds.), *Musical Beginnings: Origins and Development of Musical Competence*. Oxford: Oxford University Press.

Lecanuet, J. P., and Schaal, B. (2002). Sensory performances in the human foetus: A brief summary of research. *Intellectica*, 1(34), 29-56.

Lerdahl, F., & Jackendoff, R. (1983). An overview of hierarchical structure in music. *Music Perception: An Interdisciplinary Journal*, 1(2), 229-252.

Littleton, D. (1998). Music learning and child's play. General Music Today, 12(1), 8-15.

Mac Naughton, G. (2005). Doing Foucault in early childhood studies: Applying post-structural ideas. London:Routledge.

Malloch, S., & Trevarthen, C. (Eds.). (2009). *Communicative musicality: Exploring the basis of human companionship*. Oxford University Press, USA.

McMullen, E., & Saffran, J. R. (2004). Music and language: A developmental comparison. *Music Perception: An Interdisciplinary Journal*, 21(3), 289-311.

Mercer, N. (2002). Words and minds: How we use language to think together. London:Routledge.

Nakata, T., & Trehub, S. E. (2004). Infants' responsiveness to maternal speech and singing. *Infant Behavior & Development*, 27(4), 455-464. doi: 10.1016/j.infbeh.2004.03.002

Nettl, B. (2000). An ethnomusicologist contemplates universals in musical sound and musical culture. *The origins of music*, 463-472.

Niland, A. (2009). The power of musical play: The value of play-based, child-centered curriculum in early childhood music education. *General Music Today*, 23(1), 17-21. doi: 10.1177/1048371309335625

Nind, M. (1996). Efficacy of Intensive Interaction: developing sociability and communication in people with severe and complex learning difficulties using an approach based on caregiver-infant interaction. *European Journal of Special Needs Education*, 11(1), 48-66.

Noddings, N. (1984). Caring: A Feminine Approach to Ethics and Moral Education, University of California Press, Berkeley

Nwokah, E., & Fogel, A. (1993). Laughter in mother-infant emotional communication. *Humor-International Journal of Humor Research*, 6(2), 137-162.

Odendaal, A. Levänen, S. & Westerlund, H. (2018) Lost in translation? Neuroscientific research, advocacy, and the claimed transfer benefits of musical practice, *Music Education Research*, DOI: 10.1080/14613808.2018.1484438

Parncutt, R. (2009). Prenatal development and the phylogeny and ontogeny of music. In S. Hallam, I. Cross and M. Thaut (Eds.), *The Oxford Handbook of Music Psychology* (pp. 219-228). Oxford: Oxford University Press.

Patel, A. D., Gibson, E., Ratner, J., Besson, M., & Holcomb, P. J. (1998). Processing syntactic relations in language and music: An event-related potential study. *Journal of cognitive neuroscience*, 10(6), 717-733.

Peretz I, Vuvan D, Lagrois M-E', Armony JL. (2015). Neural overlap in processing music and speech. *Philosophical Transactions of the Royal Society*. B 370: 20140090. http://dx.doi.org/10.1098/rstb.2014.0090

Pitt, J. (2014). An exploratory study of the role of music with participants in children's centres. (Unpublished doctoral thesis), University of Roehampton, London. http://hdl.handle.net/10142/321585

Pitt, J., Arculus, C., & Fox, S. (2017). SALTMusic - Speech and Language Therapy and Music Practice: Emerging findings from action research. In J.Pitt & A. Street (Eds.) *Proceedings of the 8th Conference of the European Network of Music Educators and Researchers of Young Children*, 20-24th June, 2017, Cambridge, UK. 236-247. ISBN 978-1-5272-0922-0

Plantinga, J., & Trainor, L. J. (2009). Melody recognition by two-month-old infants. *Journal of the Acoustical Society of America*, 125(2), EL58-EL62. doi: 10.1121/1.3049583

Reddy, V. (2010). How Infants Know Minds. USA: Harvard University Press.

Robson, C. (2002). *Real World Research: A Resource for Social Scientists and Practitioner-Researchers*. Oxford, UK; Madden, Mass.: Blackwell Publishers.

Sallat, S., & Jentschke, S. (2015). Music perception influences language acquisition: melodic and rhythmic-melodic perception in children with specific language impairment. *Behavioural Neurology*. 2015, 1-10.

Särkämö, T., Tervaniemi, M., and Huotilainen, M. (2013). Music for the Brain Across Life. *Sound-Perception-Performance Current Research in Systematic Musicology*, 1, 181-194.

Schön, D. A. (1983). The reflective practitioner: How professionals think in action (Vol. 5126): Basic books.

Small, C. (1998). Musicking: The meanings of performing and listening. Middletown, CT: Wesleyan University Press.

Smith, G., Sylva, K., Smith, T., Sammons, P., Omonigho, A. (2018). *Stop Start: Survival, decline or closure? Children's centres in England, 2018*. The Sutton Trust: London

Stern, D.N. 2004, The present moment in psychotherapy and everyday life. New York: W.W. Norton,

Wright, J. 2006, Why is that so funny?: a practical exploration of physical comed., London: Nick Hern

Smith, G., Sylva, K., Sammons, P. & Omonigho, A. (2018). *Stop Start: Survival, decline or closure? Children's Centres in England*. A report for The Sutton Trust, London.

Thompson, W. F., & Schlaug, G. (2015). The healing power of music. Scientific American Mind, 26(2), 32-41

Waldfogel, J., & Washbrook, E. V. (2010). "Low income and early cognitive development in the UK": A report for the Sutton Trust. London: Sutton Trust.

Wenger, E. (1998). Communities of practice. Cambridge: Cambridge University Press.

Werker, J. F., & Lalonde, C. E. (1988). Cross-language speech perception: Initial capabilities and developmental change. *Developmental psychology*, 24(5), 672.

Wright, J. 2006, Why is that so funny?: a practical exploration of physical comedy. Nick Hern, London.

Young, S. (2003). The interpersonal dimension: a potential source of musical creativity for young children? *Musicae Scientiae*, Special issue 10th anniversary conference issue, 175-191.

Young, S. (2008). Collaboration between 3- and 4-Year-Olds in Self-Initiated Play on Instruments. *International Journal Of Educational Research*, 47(1), 3-10.

Music

Brian Eno (1978). Ambient 1: Music for Airports London. Polydor Records.

Rachel Drury (2011). Ocean Soundscape. Unpublished.

Appendix A

Table 2 Timeline of the SALTMusic Project September 2016- July 2018

Dates	Event	Where	Learning at end of period	Differences between the different groups
Sep – Dec 16	First programme of SALTMusic sessions (10-weeks: taster, 8-week programme plus celebration session)	Great Yarmouth & Gorleston	Used different theme every 2 weeks (e.g., transport, animals etc.) • Too many words • Too many handouts • Strategy-heavy • Not enough time for parents to absorb what was going on • Reduce to one strategy per week e.g., choices, follow the child, model language.	GY Morning group did 'take home games' all the way through GY afternoon group stopped 'take home games' here. The children weren't ready for the activities and they caused more trouble than they were worth.
Jan – Mar 17	New group added. Gorleston group moved to GY	Norwich (Earlham) GY	SLT: "I learned so much from you, the music team, about how to set up a room. We talk about creating environments for our children but actually to do it in a group form was just lovely, to see that powerful learning effect. So that was a big learning thing for me anyway." (Final Focus group project reflection 3rd May 2018.)	
Jan – Mar 17	New music apprentice joined team	GY	Impact of a dancer "[Name] changed the 'river' to a moving river. She spotted things in the children's movement that really helped." (Final Focus group May 3rd 2018 using the metaphor of the project as a river.)	
Jan 17	One SLT left the service Two SLTs in GY reduced their involvement to 4 times per programme: start, mid-point, end, and celebration session.	GY	External pressures upset the team spirit • However, SLTs reported that they could more easily see changes and identify what the children were responding to. If immersed they felt it was only possible to see the big changes.	

Jan – Mar	Second	GY	• From different theme	• GY morning group dropped the use of the
17	programme of SALTMusic sessions (10 weeks as above)		 every 2 weeks tried 2 themes over whole term. Noticed correlation (not statistical) between freeplay and laughter and fun. If we can get the freeplay right, then the rest of the session went well. Focus on getting children to laugh. This term solidified what we were doing – depending more on needs of the child, repeat visitors, knew the children, met their needs. Use of anticipation. 	 visual timetable. It was simplified and used flexibly when it helped particular children. 'Choices' experimented with whole group and individuals depending on the children and the group dynamics.
May – July 17	Third programme of SALTMusic sessions (10 weeks as above)	GY	 Pared everything down Parents filling the space with words. Began thinking about movement in the space. Focused on talking to parents about following the child's lead. An increasing awareness of the levels of anxiety of parents – how to contain that? Working on strategies. Through CPD realised it's helpful to know the reasons why and we then thought useful for parents to know. 	 Morning GY introduction of 'tickly time'. Afternoon GY introduction of Bear Hunt (call and response) movement game. Awareness that 'The Solihull Approach' threads through all the working practices.
May – July 17	Norwich group moved location	Norwich (North Norwich)	 Looked at reducing the toolkit. Began thinking about what was absolutely necessary to include. 	N. Norwich team realised how lucky the GY groups were to have Music room.
May – July 17	New music apprentice joined the team	Norwich	 Very intuitive way of working with children 	
June 17	MERYC conference	Cambridge	 Conference Presentation mentioned the power of talking to parents Raised this at the next SALTMusic planning meeting Talking bit at start of the programme wasn't working, no relationship or trust established. Decided on a mid-point talk with 	

				,
			parents in the session, referring to things that the parents did in the sessions that were really good and the reasons why. This was much more beneficial and meaningful. Important that the SLTs did the talk, the 'label' mattered at this point. Also, discussions sometimes followed on naturally with parents about their own child that were important.	
May – July 17	CPD	GY/Norwich	Jazz saxophonist played with children CPD sessions for team and EYPs. Guest facilitators: • Singing • Use of Digital Technology SALTMusic team members: • Movement with young children • Makaton	
Summer 2017	Consultation about Statistical dimensions	IOE	Visit to clarify the Likert scales and statistical possibilities with the dataset.	Added 2 points to the Likert scale for the social interaction and expression variables Realisation that the benefits of the data collection tool may be wider than originally thought.
September 2017	Data Collection Tool final version	GY/Norwich	Addition of categories over the last year to meet the observations of the children. Reflecting together, using the tool is very beneficial for improving practice.	
September- December 2017	Evolution of practice	GY/Norwich	Impact of OWL and Intensive interaction on Practice.	Morning GY group: Ukuleles given to children Bouncing on Lycra Afternoon GY group: Bear Hunt All: Confidence to pare everything right down. Distilled Practice based on varying forms of anticipation: oooh Ping, wheeee or ready, steady, go! Roles changing – more sharing amongst the team – different people leading different sections
September- December 2017		All team members	Talking about training models. What are essential resources?	

January –	Final	GY/Norwich	Reduced the team /session	Some found this change difficult as more
May 2018	programme		to one musician and one SLT Music apprentices co- delivered session in Nursery using SALTMusic approaches.	of the practice had to be covered by fewer people and everyone was used to the way the groups had been working. Felt like less eyes on the children and the observations weren't as thorough.
January 2018	S&L therapists' question- naire	Whole ECCH team	Designed a questionnaire for SLTs not involved in the project to gather their perceptions and attitudes	Positive, supportive and encouraging responses
February 2018	Dissemina- tion meeting IOE Met Professor Welch and Creative Futures team to share project and talk about a shared Summit day	Admin team	Began the planning for a strategic Summit day in June	
January- May 2018	Future planning Planning to continue with a new SALTMusic group with 2 new clinical support SLT worker, referrals from SLT, plus 1 musician and a new music apprentice.	Music & SLT teams	A rocky transition to this group, pretty difficult for freelance team members as uncertainty – about whether the group was to go ahead or not - persisted until the week before the group was supposed to begin.	Continuing to use the data collection tool for reflections. This issue highlighted the difference between freelance and salaried workers. The agony of not knowing if you have work or not is hard to appreciate by those who have a monthly salary.
April 2018	Bulletin article	SLTs and JP	Write a short article for <i>The Bulletin</i> (Royal College of Speech and Language Therapists professional journal)	Something new for the SLTs Working together to write the piece.
June 2018	Summit Day hosted by IOE		35 delegates; active poster session; Discussions towards a strategic statement about music and young children's communication	Dissemination of the SALTMusic project at a high level academic event, raising the profile of the work and provoking wider music and arts sector to consider early childhood arts as an entitlement.

The SALTMusic Scale

Appendix B

Codes for expression: Exp 1 Laughter 2 Vocalisations 3 Symbolic noises 4 Natural gestures 5 Single signs/words 6 Sign/word combinatios 7 Singing 8 Rhythmic activity 9 Actions to song	
Codes for social interaction: SI1Own agenda1Own agenda1a. freeplay1b. group2Watching with interest3Comfortable w/attention4Group participation5Family interaction6Practitioner interaction7Peer-to-peer interaction8Child-initiated	LW High point: LI High point:
Codes for frequency: a Never A Occasionally B Sometimes C Frequently D Always Reflective Journal Questions: What question do I have at the end of the session? What will I try next time?	
SALT Music Project: Year 1 Date: Child pseudonym: Setting: N. Norwich/Priory AM / PM Music specialist: SLT Therapist: SLT Therapist: SLT Therapist: 3 Low 2 Low 3 Moderate 4 High 5 Extremely High	LW Start session: Ll Start session: SI: Exp: Commentary:



Great Yarmouth Community Trust invites you to take part in an exciting project. We have been successful in gaining funding for a 2-year project to investigate whether musical playful approaches will benefit children with identified communication difficulties. This research project will be based in Great Yarmouth and Norwich. You have been given this letter because we are inviting you and your child to participate in this project. The Speech and Language team and the Music team based at The Priory will be working and learning together about each other's working practices and the hope is that new ways of working with children with Speech and Language and Communication difficulties will be devised as a result of this project.

Your speech and language therapist's assessment of your child's communication skills will be shared with music team members. We would like to film sessions and look at them as a joint team to assess your child's language use, musical play and involvement. We would like to ask you from time to time what you feel about your child's involvement in the sessions and your own feelings. We may also show film clips to you and/or your child to enable you to contribute to the research.

We will preserve your child's and your identity by assigning a letter (e.g. Child A or an invented name) and your personal information will not be kept alongside the film or other data. Video vignettes – short clips – may be used to illustrate specific findings at academic conferences and other reporting events. We will make every effort to gain your permission to use the clip before we do so. Statements that you make may be used as examples of positive things we have discovered; your name will not be attached to these statements. The research may be written as a paper for submission to a peer-reviewed journal. The findings will be anonymous neither you; your child, nor the setting will be identified in the writing only the geographical location and general demographic information about the area.

You have the right to withdraw your consent at any point in the research process up until the point that the final report is being written. All materials relating to your participation will be removed from the research and personal information will be securely destroyed. If your child is present in film material that includes another child whose parents have given consent we will blur the face of your child in that film material. We will destroy the research materials after five years but may use certain video clips and other selected data items (such as quotations from parents) for presentations in the long-term.

Please feel free to ask any questions you may have about the research. Your consent is based on the understanding that you have fully understood your involvement in the project and that you will also be giving consent for your child to participate in the research. You are being asked to opt-in to this project by means of this letter. Should you have any queries please contact:

By signing below, I agree that I:

- Understand that the speech and language team will share assessment information about my child with the music team
- Understand that my child and I will be filmed during the sessions and these films will be used for observation of my child's language use, musical play and involvement. Some film clips may be used indefinitely.
- Understand that all my and my child's personal information (name and contact information) will remain confidential
- Understand that I have the right to withdraw from the research project at any point up until the project report is being written.
- Understand that all video and other information collected from me as part of this project will be kept securely and the majority will be destroyed after five years.

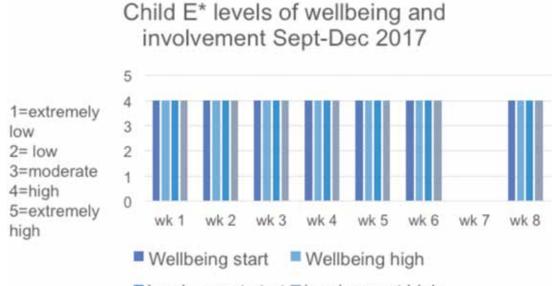
I give my consent for my child and me to participate in the speech and language music project. I have read and understood the details in the information letter

Your Name:
Child's Name:
Child's Date of Birth:
Child's Gender: (Please circle which is most appropriate)
Male / Female / prefer not to say
Home address:
Daytime telephone number:
Email address:
Signed:
Date:
Your preferred contact details: (please tick in the appropriate box below)
Email
Telephone

SALTMusic Scale graphical example

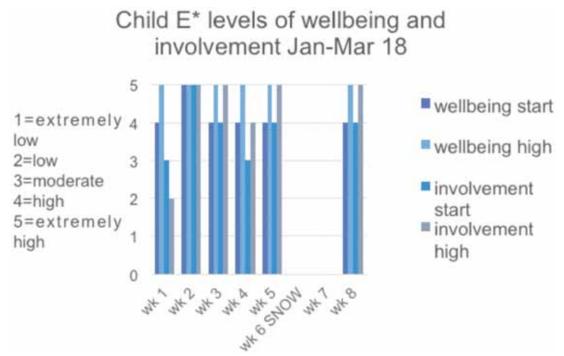
As an example of how data from the form was presented graphically to show changes across the categories is shown below as one child's journey through two session programmes. This allows detailed representation of every aspect of the child's experience and behaviours. It is possible to see the changes that are appearing as the child attends the second programme of eight sessions.

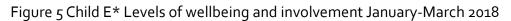
Levels of Wellbeing and Involvement



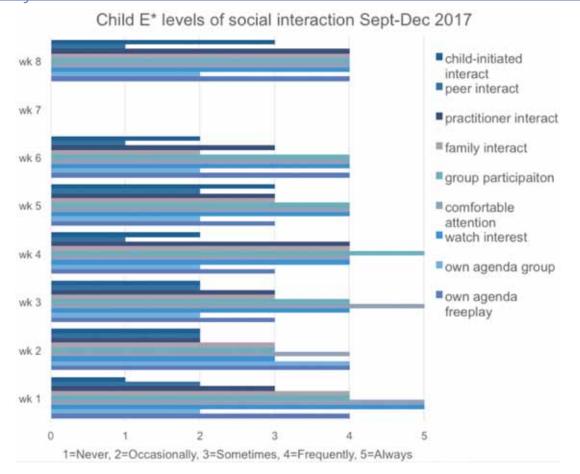
Involvement start Involvement high

Figure 4 Child E* Levels of wellbeing and involvement Sept-Dec 2017





Despite the fact that attendance during the second programme of SALTMusic was affected by snow and absence, Child E* scored highly in both wellbeing and involvement during most of the second set of sessions (see fig C.2). This could be because Child E* already felt comfortable in the space, with the team, and with the practice, beginning therefore in a positive state and increasing their mood and engagement further through the session.



Levels of Social Interaction

Figure 6 Child E* Levels of social interaction E* Sept-Dec 2017

Commentary from Week 1 Sept-Dec 2017, "Big smiles, knew where she was coming 'happy' to be here. Playing with animals - hiding a snake game with J. Moved towards the drum to climb in - indicated choice by reaching playing on the drum and assisted walking/dancing with mum during tickly time."

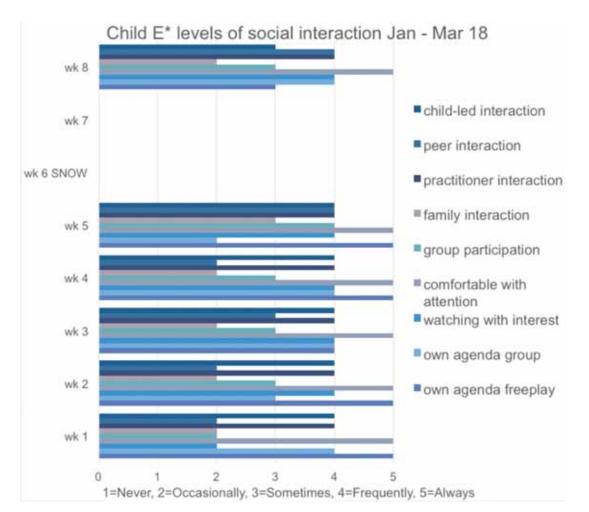
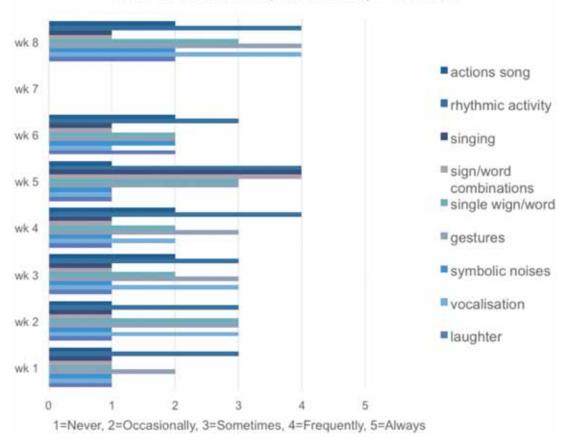


Figure 7 Child E* Levels of social interaction Jan-Mar 2018

The second programme of SALTMusic sessions allowed E* to increase her levels of social interaction from the first programme and maintain 'being comfortable with attention' at level 5 -'always'. A developing confidence and self-esteem are shown by the 'own agenda freeplay' scores in Fig. C.4 which are seen as 'always' during four out of the six weeks that E* attended the group sessions. The first set of sessions (Fig C.3) show 'peer interaction' only ever as 'occasionally' whereas in Fig. C.4 Child E* is interacting with peers, 'Frequently'. Child-led interaction began as 'Never' in the first week of the first programme, moving gradually to 'Sometimes' at the end of that programme. By the second set of sessions child-led interactions are 'Frequently' observed almost every week (Fig. C.4) By the close of the first programme of sessions Interaction with practitioners scored 'Frequently' for the first time (Fig.C.3), this score was maintained throughout the entire second set of sessions, showing increased confidence and trust in the group, the practitioners and the activities. Family interaction is less marked in the second term and this could be due to increasing confidence with the group and the ability to move to interact with others.



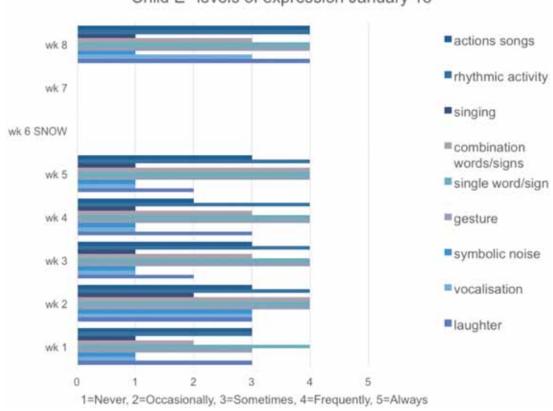
Child E* levels of expression Sept-Dec 2017

Figure 8 Child E* Levels of Expression Sept-Dec 2017

On Child E*'s first visit to SALTMusic the only expressions that were observed were gesture occasionally and rhythmic activity sometimes. Next to emerge were vocalization and single word or signs. By week five, combinations of words or signs, singing and rhythmic activity were seen frequently. This was a special week as there was a guest saxophonist. Importantly, this was the only session over both terms where E* was observed to sing. The commentary states: "Signed 'more, stop, go' Dancing holding mum's hands. Attempting to blow saxophone and got giraffe to blow sax. Moved over to sit in the bucket to be spun"

At the end of the first term of sessions: vocalisation, gestures and rhythmic activity were frequently observed, and other areas of expressions were appearing. Laughter appeared in weeks six and eight.

Commentary week 8 first term: "Came in at start very happy, pointed to something she wanted. Moved to sit next to R, moved to door when mum left room. More vocalisations being used, 'moo' for cow. Lots of pointing at carpet/other children/animals. Not a large range of gestures although lots of kicking legs and signed: giraffe, elephant, more. Sit down dance swinging arms, banging feet, clapping, glocks. Warmed hands on own, supported to wave hands during song"



Child E* levels of expression January 18

Figure 9 Child E* Levels of Expression Jan-Mar 2018

During the second set of sessions, Laughter was seen every week and by week two, every item of expression was observed: gestures, single word / signs, combination words / signs and rhythmic activity all occurring frequently most weeks.

Performing actions to songs shows an awareness of the cultural traditions of that particular song in that place / time (Pitt, 2014; Huhtinen-Hildén & Pitt, 2018) and is evidence of knowledge and understanding. By week eight Child E* frequently demonstrated actions to songs. Their use of words increased during this second term, the commentary from Week 5 clearly demonstrates: "Walks in room and says 'coat off,' shoes off' Really interested in what other children are doing. Attempts to join in with others frequently. A much better session able to take turns, stopped throwing when asked. She got attached to a soft toy today. Mum zoomed her to the moon and played with foil with her." Week 8: "Different Music Leader. Ran round with peer, took turns with peer with musical instruments. Stopped when asked to with stop/go game. Told mum, 'Shoes off and coat off' at the start of the session. Little interaction with mum, came to adult for 'row, row your boat' and 'bear hunt'"

Conclusion

For Child E*, a constant form of expression was rhythmic activity, which occurred every week during both terms. Movement clearly showed involvement and enjoyment, communicating when little, or no other forms of expression were apparent.

Child E*'s journey through two terms (16 weeks) of SALTMusic sessions was significant in terms of their increase across all categories of communication that were collected using the SALTMusic scores. Levels of wellbeing and involvement were high in the second term of sessions which could be an indication of the child's feelings of comfort and ease with a group activity that was familiar and met her (and her parent's) needs. The levels of social interaction increased across many of the variables in particular peer-to-peer, practitioner and child-led interaction. This could be because Child E* is developing their social skills through the group, feels more confident, trusts the others in the group and feels confident to initiate interaction as a result. The expression category shows a real increase in the use of language as well as understanding of cultural norms and behaviours. This child's important communicative tool of rhythmically showing involvement and communication was allowed to persist and develop as the additional means of expression began to emerge. Although this child was never observed singing they performed actions to songs and joined in with rhythmic activity and vocalisations that developed and became more frequent over time. Their musical behaviour was developing along with other forms of communication and interaction.

Comparing two 8-week sessions it is clear that for Child E* the second term demonstrated consolidation of learning and experiences from the first 8-weeks, further sessions might have shown even more progress.

Appendix E

Celia's data sheets

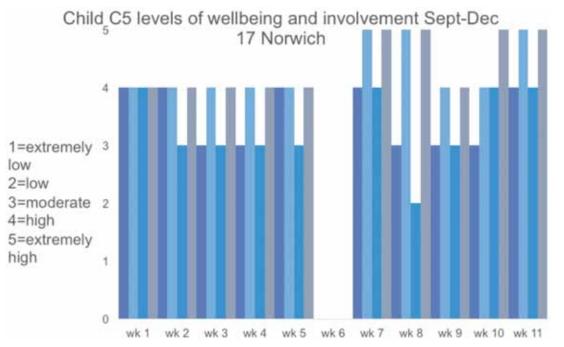
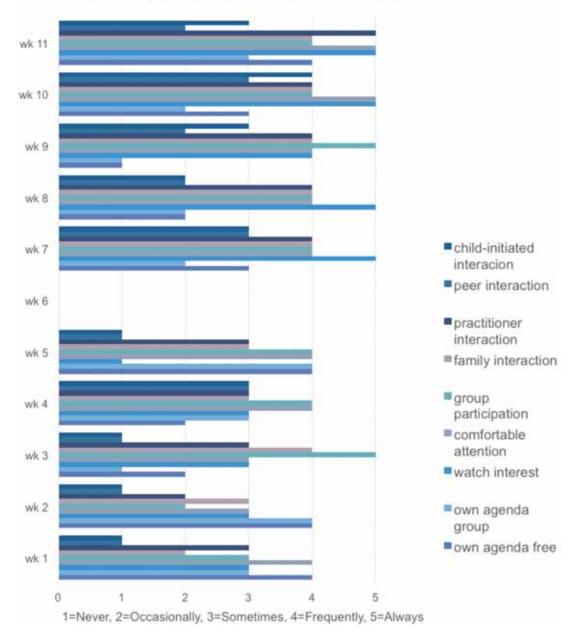
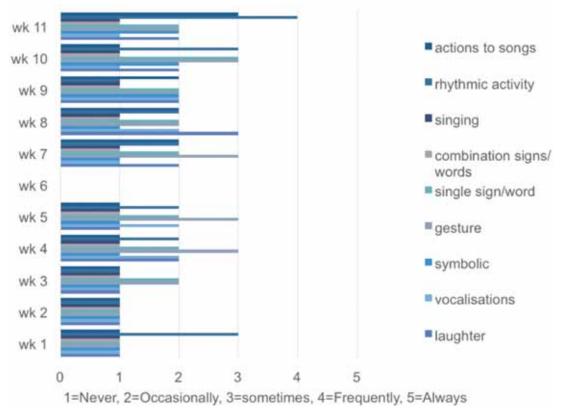


Figure 10 Celia's levels of wellbeing and involvement



Child C5 levels of social interaction Norwich Sept-Dec 17

Figure 11 Celia's levels of social interaction



Child C5 levels of expression Norwich Sept-Dec 2017

Figure 12 Celia's levels of expression

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Case studies

<u>Case Study – 3 The power of movement in building a relationship</u>

SALTMusic introduction

The session is structured so that when the children arrive in the music room they are given space to explore in free play. The room is set up with a mixture of musical instruments and props in an installation which gives opportunity to roam and discover. This part of the session is child led and practitioners respond to how the children want to play. Halfway through the session practitioners, children and parents tidy everything away and 6 inch carnival sticks with ribbons attached are brought out to move with accompanied by some upbeat happy music. The last part of the session is a more structured practitioner led circle time involving songs, vocalisations and rhythmic play with props.

Observations in the group

J was initially nervous about coming into the music room, clinging to his mum and not wanting to engage with practitioners. When he eventually ventured from the safety of his mum's lap he was reluctant to engage with the installation but rather kept to the hard edges of the floor which bordered the carpet, a soft platform for the objects and instruments laid out for free play. J embraced this right-angled border as a form of running track, repetitively motoring up and down it at moderate speed. His eyes were inquisitive, taking interest in the functional details of the room such as the circular window to the office, plug sockets, thermostat and plastic leaflet holder attached to the wall. He explored the corners which he could tuck himself into occasionally. While he took all this in he did so as part of his steady momentum up and down the 'running track'.

Initally, practitioners felt unsure whether to join him or engage him since they didn't want him to feel intimidated and retreat back onto his mother lap since it had taken a while for him to find confidence to explore. However, one practitioner took the plunge and ran up and down with him in order to meet him on his terms which he responded to well and comfortably allowed her and subsequently other practitioners to follow him.

As the weeks progressed, and I joined him on his running track, we began to develop an interaction which became communicative through movement. To begin with I mirrored his movements, taking interest in the objects he stopped to look at and touch on his journey. I began to introduce variations to the journey such as crawling and different pathways across the room, hiding from each other in a peekaboo style game. Sometimes we would take beaters on a crawling journey, making different rhythms on the floor and exploring the variation in sound as we travelled across different surfaces. J progressed from leading the journeys to engaging with my suggestions and following on the journey. There was a to-ing and fro-ing between us as to who would lead and who would follow. He would stop and copy what I was doing with a new object or instrument, sometimes developing ideas of his own before deciding it was his turn to lead me off again.

J made attempts to talk and at times sounded as if he was attempting several words together. However, he was unable to form the words well enough to make himself understood.

In our journeys we started to develop a movement vocabulary which I vocalised (as opposed to previously demonstrating) and he seemed to have a clear understanding of such as 'stop and go'.

I made sounds as we travelled to vocalise the type of movement we were doing. For example, as we crawled using our knees and forearms to support ourselves I would say 'swish, swish' as we slid along the floor. In these moments J would sometimes try to copy my sounds. He would attempt to say 'shhh' and 'boo' in our hiding moments.

Once everything was tidied away J was reluctant to engage with the carnival sticks. He was uncomfortable with the attention and unwilling to follow the lead of the practitioner.

During Circle time, J operated on his own agenda travelling round the edges of room. However, as the weeks went on it was clear that J was engaging from a distance and began to make his way into the circle for key moments. He began to vocalise the anticipation and release exercises as we rubbed our hands together with an 'ooo' rising in pitch, he rubbed his hand maintaining constant eye contact and then as we released the hands and the sound with a 'ping' he would do the same. Over time he would lead the release and then relate it to other anticipation and release exercises vocalising the same 'ping' sound.

As the weeks past J became more comfortable interacting on his own level. He began to enjoy running through the carnival sticks and bubbles. Attempts to say individual words came more readily but with his unclear speech he was unable to make himself understood. J made clear choices when asked. J appeared to be happy and relaxed, smiling and laughing and increasingly interested in other children sometimes bending down to see into their faces. He struggled to know how to engage them until eventually a couple of the boys joined him in a game of chase which he was delighted by. J often communicates through his tactile senses. For example, one day when hit his head and was upset he held intense eye contact with me and rubbed his head and then rubbed his head on my tummy. At other times when he wanted my attention he slapped me on the back. He also communicates through a sense of rhythm engaging me in rhythmic conversations clapping, banging with hands and feet, rhythmic footsteps and using beaters.

Case Study – 4

Background

Charles is a five-year-old boy who has Autism. He has been referred to the speech and language service. He attends Nursery and his Mother said that she was told by his paediatrician that developmentally he is at a two-year-old level. Charles has very little language and his Mother uses a lot of makaton signs to help him understand and communicate.

The structure of the group

The room for the project is set up with a mixture of sensory materials and musical instruments to be discovered and interacted with however the child may choose. The session is divided into two sections; free play and group work. The children freely explore the environment of the room and we encourage parents to follow the lead of their child. We started the first session by briefing parents to follow their child's lead in their play and the practitioners modeled intensive interaction with the children throughout the free play. The whole session is 45 -50 minutes long. Free play lasts around 20-25 minutes then we transition into group work with a tidy-up song. The parents and children gather the instruments and other resources into bags. Cushions are arranged in a circle for everyone to sit on. Group work begins with everyone sitting in a circle on cushions and breathing out and sighing to signal a change in pace and to calm and relax both and children and adults before group work begins. The purpose of group work is to have a shared experience of music making, turn taking, and making choices using a variety of resources that bring the group together such as bouncing a teddy on a large sheet of lycra with an accompanying song.

Play and Progress

The first week of the project Charles arrived with mum and a support worker and they were expecting him to be distressed in a new situation and with people that he wasn't familiar with. He tried to open the door at the very start of the session but soon settled and responded very well to the free play environment, moving freely from one activity to another. His wellbeing and involvement in week 1, scored 3 and 4 on the Laevers scale². He particularly enjoyed playing with a large amount of percussive shaker eggs and posting them through a selection of tubes. The practitioners vocalized his play, for example as an egg was tipped out from a tube the practitioner would say "weeeeeee." The support worker felt confident that he had adapted to the new environment and for the rest of the 7 weeks Mum came alone with him. He enjoyed making towers with the tubes and posting the eggs through the tubes into other containers. He exhibits a transporting schema and free play supports him to be able to explore this. For the next few weeks this was the activity that he went to and remained focused on the longest. In weeks 7 and 8 the practitioners observed a difference in his free play. He had moved away from the tubes and eggs to playing with the toy kitchen. He was involved in imaginative play with his mum and a practitioner, offering them cups to drink from. He played in this way for two consecutive weeks. In group-work, Charles copies the breathing out and sighing that the music practitioner does, He sighs loudly and pitch matches. Charles can struggle during group work as his attention can wane, but over the weeks the routine and ritual has become embedded and he finds it much easier to cope with. Charles is fascinated by the ukulele during the "Hello Song." He was allowed to investigate it and feel the vibrations as it was played. Charles recognizes when he is being sung to and as the weeks have gone by he has began dancing and smiling during the song and attempting to sing hello himself. The first two notes of the melody are (in sol-fa) me-doh, Charles makes a definite attempt at the word and clearly sings the notes in the song. Every week we sing Twinkle, Twinkle little star at the end of the group, by way of winding down just before we sing the goodbye song. On week eight Charles sang most of the song. The words were not all necessarily audible but he was attempting both words and melody. While his Mum beautifully signed the song using makaton³. His wellbeing and involvement on week 8 at the end of the session was scored at 5 and 5 respectively. Charles has progressed not only in his wellbeing and involvement but also in his expression as the table below demonstrates. This environment has supported his emergent speech and musicality to develop.

Expression	Week 1	Week 8
Laughter	Sometimes	Frequently
Vocalisation	Sometimes	Frequently
Symbolic Noises	Occasionally	Sometimes
Natural Gestures	None	Sometimes
Single Signs / Words	Occasionally	Frequently
Signs/Word Combinations	None	None

The data collected for expression to compare week one to week eight.

² Laevers scale of wellbeing and involvement: 1=extremely low, 2= low, 3= moderate, 4=high, 5=extremely high. For more information see: http://www.milton-keynes.gov.uk/children-young-people-families/professor-ferre-laevers.

³ Makaton is a communication system using simple signs: https://www.makaton.org/aboutMakaton/

Case Study – 5

Michael comes to the SALT music group with his mum each week. He is 2 rising 3-year-old and has very little speech. The only vocalisations that were recorded in our first sessions were grunts normally when indicating to something. Michael was very interested in the things we had set out in the room, often flitting from one thing to the next, rarely settling to anything for a sustained period. We used a variety of objects and instruments as provocations to encourage vocalisation, gestures and musical play.

Working in the Music Room allows early years music practitioners to be very responsive to the child's lead. A large neutral room, with easy, instant access to a wide range of high quality 'proper' instruments and large quantities of other props not usually associated with music making but that can provoke vocal play, giggles, free expressive body movements etc. We use sponges, silver foil, tubes, hoses, fabrics along with hand bells, chime bars, drums etc. to create an immersive environment for the children to explore.

It became apparent that in this snapshot of Michael we weren't seeing many smiles or any laughter. His eyes brighten but the smile does not travel all the way to his mouth. He checks in regularly with his mum throughout a session and has gradually developed confidence in the way that he approaches the instruments and props on offer and seeking interaction, however fleeting, from the practitioners and occasionally the other children in the room.

By repeating songs and creating rituals Michael became familiar with simple songs and motifs used week to week. He has shown an understanding and expectation of some repeated musical voice play that uses pauses and anticipation and release. Through marrying the musical elements with either hand actions or props such as balls or scarves Michael, who isn't vocalising at the moment, can be part of the musical creation and expression by using his hands or props and through very subtle cues can become the 'conductor' through body language, eye contact etc. He has started to use some sign language in the groups, indicating 'more', when he would like to repeat a song and tentatively we have seen some two sign sentences.

Game playing is a big part of the session and during the free play part we are looking to find the games that the children themselves are investigating, this then will inform the more structured part of the session where we might sing songs. The first belly laugh that we heard from Michael came from a game that he was playing with his mum during free play. Through observing this game and the positive response it got we copied the play – a part chase, a part peek-a-boo game – and used the elements of it in the structured part of the session with scarves. This play invented by Michael, scaffolded by the practitioners in the room explores further the musical features of anticipation, pauses and release. During last week's session it was noted that Michael's vocalisations, though still limited, where becoming more varied and that his smile was beginning to travel more frequently to his mouth.

