'Music for Change' 2015-18



Collaborating with Speech and Language Therapists: a multi-perspective report

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1. Introduction

'Music for Change' is a multi-year programme which aims to enhance children's early development and improve rates of school readiness among pre-school children in northwest Westminster, an area of multiple deprivation. Devised to meet specific needs identified by the local authority's Early Years Advisory Team, the project has a particular focus on supporting above average numbers of children with speech and language delay.

A key strand of the project is a collaboration with NHS speech and language therapists (SLTs) from Central London Community Healthcare (CLCH), which started with a pilot project in the summer of 2015, and which has since then seen three distinct collaborative interventions in two nursery settings.

This report brings together findings from our own observations of the project, feedback from Early Years Professionals (EYPs), extracts from reports provided by the SLTs and music leaders who co-delivered the work, and a process evaluation by Professor Graham Welch (UCL Institute of Education) and Alice Bowmer.

2. Background research

As with many Creative Futures programmes, Music for Change is strongly rooted in relevant research. In this case, we have devised a project rooted in the notion that certain music activities enhance multiple areas of early childhood development, especially speech and language skills.

There is a growing body of evidence that early engagement in active music-making has a beneficial impact on young children's development. Benefits are evidenced in aural perception and language skills (Anvari et al, 2002; Dege & Schwarzer 2011; Patel 2011; Moreno et al. 2009; Moreno et al. 2011; Putkinen, Tervaniemi, & Huotilainnen, 2013; Williams, Barrett, Welch, Abad, & Broughton, 2015) and specifically children with language impairment (Cumming et al. 2015; Corriaveua & Goswami 2008; Habib et al. 2016). There is also evidence that active music-

making positively impacts on reading (Bhide et al. 2013; Goswami et al. 2013; Schon 2014; Long, 2014; Gordon, Fehd, McCandliss, 2015; Welch et al 2012); verbal memory (Roden, Grube, Bongard, & Kreutz, 2014); spatial reasoning (Hetland, 2000); self-regulation (Winsler, Ducenne, & Koury, 2011); pro-social skills and identity (Kirschner & Tomasello 2009 & 2011; Welch et al. 2014; Williams et al., 2015); and general school attainment (Gillespie & Glider, 2010; Wetter, Koerner, & Schwaninger, 2009).

In addition, arts-enriched preschool environments that include music (particularly singing) are likely to improve children's school readiness and receptive vocabulary (Brown, Benedett & Armistead, 2010), literacy (Phillips, Gorton, Pinciotti & Sachdev, 2010; Hannon et al. 2016), cognitive reasoning (Portowitz, Lichtenstein, Egorova & Brand, 2009; Henriksson-Macaulay & Welch, 2015) and emotional regulation skills. Such impact is evidenced in children at risk in low-income families (Brown & Sax, 2013; Trehub et al. 2015; Corbeil et al. 2016). See also Barrett, 2016; Hallam, 2015; Henriksson-Macaulay & Welch, 2016; Welch, 2006 for reviews of related literature.

3. Project structure and aims

Our collaboration involved one SLT and one musician co-leading a series of weekly workshops. Following a positive 5-week pilot at Katharine Bruce Nursery in the summer of 2015, CLCH and Creative Futures agreed to further exploratory collaboration in the form of two 5-week interventions at Katharine Bruce Nursery then a 10-week intervention at Queen's Park Community Nursery (both London Early Years Foundation nurseries).

Our aim was to impact positively on speech and language development of children with language delay, and in particular to work with EYPs to give them a wider range of music-based tools with which to support and nurture children's language development.

Four detailed planning and development sessions took place, each involving the lead SLT, musician and project manager. Each workshop on the nursery floor lasted approximately 50 minutes and was flanked on-site by an hour for collaborative planning and then up to an hour for reflection involving both leaders and nursery staff. We found this structure to be an invaluable way of reflecting on what had occurred in the session, cementing learning from each other, and agreeing activities which could further support the children's learning prior to the next session.

Overall, this process formed a weekly action research cycle (i.e., plan/act/review) that drew on and sought to combine in some way each of their areas of specialist expertise. Their weekly planning and evaluation sessions, set either side of actual classroom-based activities with children and nursery staff, were designed to allow them, both collectively and individually, to respond to their perceptions of the requirements, priorities, successes and developmental needs of children and nursery staff as the shared programme rolled out. (Welch & Bowmer, 2016)

4. Workshop content

The overarching content focus across each term interweaved musical and related language activities. A major thread was voice and movement activity that was centred on a selected children's book. There were also opportunities within each weekly session for children to explore and lead activities themselves. The programme design allowed for the insertion of musician-led activity into children's already-established free play activities. The use of percussion instruments also featured, as well as singing and other activities that related to the musical and linguistic exploration of physical objects from a specially designed resource collection. As part of her planning, the musician brought in a bag of such resources, including soft toys and simple sound-making objects.

These resources were subsequently supplemented and extended in discussion with the SLT partner, drawing on their extensive craft knowledge of working with young children in similar contexts. Additionally, the resources became increasingly enriched by the inclusion of found items in the classroom, which ensured that the session content embraced materials with which the children were already familiar.



The SLT led the design of a 'visual timetable' of prioritised ingredients for each particular week. These visual prompts allowed the children to interact with a physical symbol of a scheduled activity as it happened. This approach supported the development of aspects of children's executive function, including memory, understanding and temporal-structural awareness, with specific foci included each week that related to their growing language competences and needs.

The programme's weekly sessions typically involved many common elements and included:

- Warm-up activities, such as songs and games;
- Free-play: with instruments and other items being placed around the room that linked both to the chosen term's key storybook and also to the rest of that session's activities;
- Movement and action, such as dancing and using scarves, accompanied by music from a CD or played by the musician;
- Circle time that often used a large, elasticated cloth 'scrunchy' for the children to hold in order to bring the group into a circle; this was also an opportunity to share collective sound making, such as vocal pitch glides to match the movements of the circle as it expanded and contracted, and allowing for different tempi and vocal timbres to be explored;
- A 'Hello' song, in which each child was named;
- The shared use of a 'visual timetable' so that children could see, discuss and revisit the key elements and activities that had been designed into that week's session;
- Listening activities, including story time readings from the focus storybook, often with
 percussion accompaniment at key moments to reinforce underlying rhythmic patterns
 to support children's phonological development; the vocal sounds and movement used
 by each practitioner were also encouraged imitatively from the children to help bring
 the narrative actively to life for them;
- Selected song materials (such as 'Down in the forest' song, 'What's in the bag? and 'Chop, chop, cooking pot');
- Focused vocabulary and phonological activity, such as syllable clapping, with 'What's in the bag' involving vocabulary that was based on the focus storybook's contents;
- Systematic hand gestures (drawing on Makaton) which focused the young children's attention on specific language, including instructions;
- A composing and listening game, in which each child composed a short song based on the creature or sound object that they had taken from 'What's in the bag?'; this song was then repeated and modelled by the adults and then the other children; and
- Turn-taking, such as with 'What's in the bag?' and a goodbye song/game, sometimes accompanied by the rolling of a ball across the group to ensure that every named individual was included.

5. Impacts on children's language development

In terms of impact, a comparison of the data in our research observation notes between the first and final sessions each term revealed evidence of children demonstrating significant musical learning, as well as language development and increased communication skills. (Welch & Bowmer, 2016)

Children were observed collectively and (almost always) individually to be on-task and purposefully and positively involved in the offered programme activities. This high level of collective engagement provided a positive foundation for the development of an observed sense of belonging and the promotion of social inclusion within the group.

The children's sense of ownership of the Music for Change programme was observed in their behaviours, including their comments during the session, such as:

In week 9, children began to predict and request elements of the session, as exampled by Child 1: "I want to do circle time now"; Child 2: "And the rain time is finished"; Child 3: "Now we could do the Gruffalo song"; Child 4: "And the window song, and then the choppy chop"; and Child 3: "We forgot about the bag!"... "Shall we do the ball song to say goodbye?"

Other examples of impact were noted at an individual child level. For example:

- Child 5: No speech or engagement was evidenced in session 1. However, by session 5, the child prepared herself, unassisted, for an upcoming activity by sitting on the floor and getting ready to receive a football when rolled by another child. She participated now in most group activity, moving and making sound, showing particular enjoyment during the dance activity.
- Child 6: Little engagement in session 1, but by session 5 was participating in the whole session, practising repeating spoken phrases to himself, showing great enthusiasm for dance and engaging regularly with other children.
- In relation to the activity 'circle time', children began to explore sound themselves, without prompting. Week 5 observations noted a child-led exploration of sound: Child 1: "bu, bu, bu, bu" to the pulsed moving of the 'scrunchy'. Child 2 copied the sound with a different rhythm five times. Child 3 then joined Child 2 and went on to change the sound to "pa, pa, pa". This lead to "chopperty chop". Keeping the rhythm, Child 3 makes up his own words to the group learnt song 'Chop, chop, cooking pot'. All sounds were rhythmic and kept with a pulse made by the children's up/down movement of the 'scrunchy'. This is an example of children developing musical skills, knowledge and understanding, as well as an increasing mastery of focused language skills and vocabulary development.

"The collaboration with SLTs really worked: it has helped children with pronunciation, helped listening skills for distinguishing sounds and rhythm, and supported children with speech and language delay through sounds and rhymes. Two children have been signed off from Speech and Language Therapy as a result of the improvement made." (Nursery manager) Early Years teachers and assistants involved in the project reported to us that:

- "Children's ability to remain attentive for the entirety of the session increased markedly;
- Children are listening and attending for longer periods during whole class activities;
- Some of the quieter children gradually became more confident in engaging in the music sessions, and this confidence transferred over to other small and whole group activities;
- During the week children were observed acting out the music sessions, with one child taking on the role of the 'teacher' and leading a music session. This occurred during spontaneous play and was child led." (Swain & Blyth, 2016)

6. Impact on EYPS

"[Music is] more embedded across the nursery. Staff have embraced it, and taken on board how music supports children's learning. Children look forward to the sessions and carry on when the musicians are not there." (Nursery manager)

Demonstrable musical and linguistic pedagogical knowledge and skills were evident in the final session from participant nursery school staff in both settings. During this final session, nursery staff members were observed to be able to lead activities, based on their participant observation of mentored expertise in the preceding weeks. They were observed, with various degrees of confidence, to use their own voices musically and positively to promote children's communication and musical skills, knowledge and understanding. There was an impressive range of musical repertoire evidenced by the staff.



In addition, the debriefing discussion after the final music session with nursery assistants demonstrated their growing professional awareness, such as in the ways that they had shared in the organisation and leading of the musical activities in that final week. The assistants stated that:

- Parents were commenting positively on their children singing the focus music repertoire at home;
- All the children and staff had really enjoyed the selected songs and focused musical activities;
- Staff felt that their shared turn-taking in leading the music/language activities was a positive aspect; and
- The assistants were able to recount successes and how individual children had benefitted through the activities, such as the report of a parent phoning the nursery to tell staff how improved their child's communication was at home recently. Another example reported by a nursery staff member was: "Through this project I have observed a child with limited communication initiating his own song, exploring rhyme and understanding the use of syllables".

There was also a positive sense of staff supporting each other and recognising their own development. This was seen as an important feature in the successful management of the activities. For example, one nursery practitioner said about another, "I noticed that she used her singing voice to regain the children's attention during this week. I have not heard her do this before". In another example, two members of nursery staff were filmed running an unaided, 35-minute music and language session during intervention week 10.

Overall, there was a range of positive evidence of the impact of the mentoring on nursery staff:

- Their comments demonstrated a strong awareness of language development opportunities;
- When prompted by the SLT, they had suggestions for extensions, such as the children creating their own songs in play;
- Staff liked the action related activities, including the linked story narratives;
- Overall, they reported that they had really appreciated the whole experience of the programme in terms of their own personal and professional development.

EYPs also completed questionnaires at the start and end of each 5/10-week intervention relating to their use of music as a tool for language development.

- "Practitioners reported feeling more confident in supporting young children's communication and concentration skills through music activities and were more confident in leading such activities.
- Both practitioners stated that they felt empowered to share information and knowledge gained with their colleagues."

(Blyth, 2016)

"I will be more confident in leading music sessions and supporting my colleagues in planning and leading music sessions to support language. I will model this for colleagues to demonstrate how we structure sessions." (EYP3)



Figure 1: Changes in confidence on named activities for the four EYPs in their nursery setting, with preand post-project self-assessments

Figure 1 illustrates the positive shift in levels of perceived confidence for participant EYPs as a result of their experiences in the Music for Change project. Each EYP was asked to rate their level of confidence on a specific target behaviour at the beginning and end of the project, using a ten-point Likert-type self-reporting scale.

7. What we learned & how it is shaping our practice

At a mid-project planning session, the music leader suggested that the shared, action-researchbased experience in previous term had impacted positively on her reflective approach. In particular, she felt that there was a need for her and her SLT partner to allow more opportunity for children to contribute within and across weekly sessions – in her words, for her to become 'less of a performer and more of an expert facilitator'. She also drew on her experience of working with the Spring Term's SLT and the use of principles contained in the 'National Strategies: Inclusion Development Programme' (DCSF, 2008b), which could be used as a basic 'script' for defining programme priorities, including language development and auditory memory.

Professional and appropriately critical self-reflection was encouraged by each specialist. For example, the musician set herself specific targets based on her growing awareness of the programme context related to the SLT's explicit concerns. Targets that emerged included: to focus on speaking clearly, using repetitive language, choosing songs with appropriate vocabulary and finding ways of listening and exploring nouns.

In each successive school, the musician and SLT developed a successful and collaborative music/language programme, drawing on their respective disciplinary strengths and their reflective observations with the children and staff. They also took regular opportunities to

gather useful feedback pre-and post-sessions with the nursery teams on the professional development component.

There was observable evidence of a strong and positive partnership in the planning and execution of the programme that also included the nursery staff who had been empowered to gain sufficiently in confidence that they were willing to lead musical activities that would foster children's social communication and language skills along the lines of their mentored experience. The core professional team also reported that they were enriched and empowered by their experiences.

Reflections by the musician involved in the project:

- Working alongside a SLT has been invaluable in deepening understanding as a music practitioner of the link between musical elements and language skills, and of the different areas of early language and communication development.
- The level and desire to engage in activities, plus the space and time that was musically created, was particularly beneficial in allowing more shy children to find their voice in a safe and creative environment.
- The free-play sections of the sessions led to the formation of spontaneous songs. These
 were generated using fragments of known songs, or composed by the children. This
 shifted the focus away from adult-led group activities into a creative sharing session
 owned by the children.
- The benefits of the SLT model of involving nursery staff in running the groups has been key to the activities continuing between sessions.
- The use of a visual timetable introduces a consistent and repetitive structure to the sessions, which is beneficial.



Reflections by the SLTs involved in the project:

- Following the children's lead and repeating back their spontaneous attempts at singing led to increased confidence and helped develop shared attention.
- Having structured activities grow out of an initial musical free-play period led to increased group attention for the duration of the session and a sense of ownership of the session by the children.
- Strategies normally employed in Early Year's SLT language groups were easily incorporated into the music group's structure, for example, activities relating to vocabulary development and attention and listening skills. It is felt that these activities became further enhanced, and the children more engaged, due to them being embedded in a music group format.
- Using improvised songs to narrate children's play and support their vocabulary development correlates with the adult-child interaction strategy of 'commenting on what children are doing'.
- Music education can support language and communication development in pre-school children.

"We have noticed that singing to children through transitions in the nursery has really supported children with speech and language delays and the children coming up from the baby room." (Nursery manager)

8. Conclusion and next steps

Music for Change strengthens Creative Futures' reputation as a leader in the field of specialised Early Years provision, using carefully crafted, high quality arts programmes to give children (often their first) experiences of participating in an arts activity, as well as enhancing their learning and development. Our programmes, often delivered in areas of multiple deprivation, can have profound and long-term positive outcomes for the children taking part.

This collaboration with Speech and Language Therapists has given us a fascinating insight into another profession, and opened the eyes of professionals from both arts and health disciplines to the similarities in their approach, and how the common ground provides a solid platform on which to build knowledge and extend practice across our work to the benefit of children with language delay and the practitioners who support them. As Music for Change moves into its second full year from September 2016, further collaborations are planned and are likely to take the form of 8-week co-led interventions which will continue to involve staff in a close working model, as well as examining the impacts of the workshops on individual children's speech and language development. Through these interventions we will finalise our approach in the form of a core programme which could be replicated in Early Years settings more widely.

We look forward to continuing our collaboration with SLTs from CLCH and are grateful for their time and commitment to this programme.

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10. 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): 111–30.
- Barrett, M.S. (2016). Attending to "culture in the small": a narrative analysis of the role of play, thought, and music in young children's world-making. *Research Studies in Music Education*, 38 (1), 41–54.
- Barrett, Flynn and Welch (forthcoming). *Music value and participation: An Australian case study of music provision and support in Childcare*. Ms submitted for publication.
- Bhide, A., Power, A., & Goswami, U. (2013). A Rhythmic Musical Intervention for Poor Readers: A Comparison of Efficacy With a Letter-Based Intervention. *Mind, Brain, and Education* 7 (2): 113–23. doi:10.1111/mbe.12016.
- Blyth, A. (2016). Report on collaborative project between Speech and Language Therapy and Creative Futures at Queen's Park Nursery, April July 2016 (for Creative Futures 2016).
- Brown, E. D., Benedett, B., & Armistead, M. E. (2010). Arts enrichment and school readiness for children at risk. *Early Childhood Research Quarterly*, 25, 112-124.
- Brown, E. D., & Sax, K. L. (2013). Arts enrichment and preschool emotions for low-income children at risk. *Early Childhood Research Quarterly*, *28*, 337-346.
- Corbeil, M., Trehub, S.E., & Peretz, I. (2016). Singing Delays the Onset of Infant Distress. *Infancy* 21 (3): 373–91. doi:10.1111/infa.12114.
- Corriveau, K.H., & Goswami, U. (2009). Rhythmic Motor Entrainment in Children with Speech and Language Impairments: Tapping to the Beat. *Cortex; a Journal Devoted to the Study of the Nervous System and Behavior 45* (1): 119–30. doi:10.1016/j.cortex.2007.09.008.
- Cumming, R., Wilson, A., Leong, V., Colling, L.J., & Goswami, U. (2015). Awareness of Rhythm Patterns in Speech and Music in Children with Specific Language Impairments. *Frontiers in Human Neuroscience* 9 (December). doi:10.3389/fnhum.2015.00672.
- DCSF [Department for Children, Schools and Families]. (2008a). Every Child a Talker: Guidance for Early Language Lead Practitioners. Annesley, Notts: DCSF Publications.
- DCSF [Department for Children, Schools and Families]. (2008b). Inclusion Development Programme Supporting children with speech, language and communication needs: Guidance for practitioners in the Early Years Foundation Stage. Annesley, Notts: DCSF Publications.
- Degé, F., & Schwarzer, G. (2011). The Effect of a Music Program on Phonological Awareness in Preschoolers'. *Auditory Cognitive Neuroscience* 2: 124. doi:10.3389/fpsyg.2011.00124.
- DeVries, P. (2006). Being there: Creating music-making opportunities in a childcare centre. *International Journal of Music Education*, 24 (3), 255 270.
- Elena, F., & Lopez, L. (2014). Rhythm Perception and Production Predict Reading Abilities in Developmental Dyslexia. *Frontiers in Human Neuroscience* 8: 392. doi:10.3389/fnhum.2014.00392.

- Gillespie, C. W. & Glider, K. R. (2010). Preschool teachers' use of music to scaffold children's learning and behaviour. *Early Childhood Development and Care*, *180* (6), 799-808.
- Gordon, R.L., Fehd, H.M., & McCandliss, B.D. (2015). Does music training enhance literacy skills? A metaanalysis. *Frontiers of Psychology: Auditory Cognitive Neuroscience*. http://dx.doi.org/10.3389/fpsyg.2015.01777
- Goswami, U., Huss, M., Mead, N., Fosker, T., & Verney, J.P. (2013). Perception of Patterns of Musical Beat Distribution in Phonological Developmental Dyslexia: Significant Longitudinal Relations with Word Reading and Reading Comprehension'. *Cortex* 49 (5): 1363–76. doi:10.1016/j.cortex.2012.05.005.
- Habib, M., Lardy, C., Desiles, T., Commeiras, C., Chobert, J. & Besson, M. (2016). Music and Dyslexia: A New Musical Training Method to Improve Reading and Related Disorders. *Frontiers in Psychology* 7 (January). doi:10.3389/fpsyg.2016.00026.
- Hallam, S. (2015). The power of music: A research synthesis of the impact of actively making music on the intellectual, social and personal development of children and young people. Department of Culture, Communication and Media, UCL Institute of Education, University College, London: Music Education Council and International Music Education Research Centre (iMERC).
- Hannon, E.E., Lévêque, Y., Nave, K.M., & Trehub, S.E. (2016). Exaggeration of Language-Specific Rhythms in English and French Children's Songs. *Frontiers in Psychology* 7 (June). doi:10.3389/fpsyg.2016.00939.
- Henriksson-Macaulay, L., & Welch, G.F. (2015). The musical key to babies' cognitive and social development. International Journal of Birth and Parent Education. 2(2), 21-25
- Henriksson-Macaulay, L., & Welch, G.F. (2016). Early Childhood Music Education From instinct to intelligence: the importance of music learning in building cognitive, emotional and social skills. In: D.L. Couchenour, & Chrisman, K. (Eds.), *The SAGE Encyclopedia of Contemporary Early Childhood Education*. Thousand Oaks, CA: Sage Publications. [to be published October 2016]
- Hetland, L. (2000). Learning to make music enhances spatial reasoning. *Journal of Aesthetic Education, Special Issue*, The Arts and Academic Achievement: What the evidence shows (Autumn-Winter, 2000), 34 (3/4), 179 238.
- Kirschner, S. & Tomasello, M. (2009). Joint Drumming: Social Context Facilitates Synchronization in Preschool Children. *Journal of Experimental Child Psychology* 102 (3): 299–314. doi:10.1016/j.jecp.2008.07.005.
- Kirschner, S. & Tomasello, M. (2010). Joint Music Making Promotes Prosocial Behavior in 4-Year-Old Children. *Evolution and Human Behavior* 31 (5): 354–64. doi:10.1016/j.evolhumbehav.2010.04.004.
- Long, M (2014). 'I can read further and there's more meaning while I read': An exploratory study investigating the impact of a rhythm-based music intervention on children's reading. *Research Studies in Music Education*, 36 (1), 107 124.
- Moreno, S., Bialystok, E., Barac, R., Schellenberg, E.G., Cepeda, N. J., & Chau, T. (2011). Short-Term Music Training Enhances Verbal Intelligence and Executive Function. *Psychological Science* 22 (11): 1425–33. doi:10.1177/0956797611416999.
- Moreno, S., Marques, C., Santos, A., Santos, M., Castro, S.L., & and Besson, M. (2009). Musical Training Influences Linguistic Abilities in 8-Year-Old Children: More Evidence for Brain Plasticity. *Cerebral Cortex* 19 (3): 712–23. doi:10.1093/cercor/bhn120.

- Patel, A. D. (2011). Why Would Musical Training Benefit the Neural Encoding of Speech? The OPERA Hypothesis. *Auditory Cognitive Neuroscience* 2: 142. doi:10.3389/fpsyg.2011.00142.
- Phillips, R. D., Gorton, R. L., Pinciotti, P., & Sachdev, A. (2010). Promising findings on preschoolers' emergent literacy and school readiness in arts-integrated early childhood settings. *Early Childhood Education Journal*, 38 (2), 111-122.
- Portowitz, A., Lichtenstein, O., Egorova, L., & Brand, E. (2009). Underlying mechanisms linking music education and cognitive modifiability. *Research Studies in Music Education*, 31, 107-129.
- Putkinen, V., Tervaniemi, M. & Huotilainnen, M. (2013). Informal musical activities are linked to auditory discrimination and attention in 2-3 year old children: an event-related potential study. *European Journal of Neuroscience*, 37 (4), 654-661.
- Roden, I. Grube, D. Bongard, S. & Kreutz, G. (2014). Does music training enhance working memory performance? Findings from a quasi-experimental longitudinal study. *Psychology of Music*, 42, 284-298.
- Swain, L. (2016). Report on collaborative project between Speech and Language Therapy and Creative Futures at Katharine Bruce Nursery, January March 2016 (for Creative Futures, 2016).
- Trehub, S.E., Ghazban, N., & Corbeil, M. (2015). Musical Affect Regulation in Infancy: Musical Affect Regulation in Infancy. *Annals of the New York Academy of Sciences* 1337 (1): 186–92. doi:10.1111/nyas.12622.
- Welch, G.F. (2006). The musical development and education of young children. In B. Spodek & O. Saracho (Eds.), Handbook of Research on the Education of Young Children. (pp. 251-267). Mahwah, N.J.: Lawrence Erlbaum Associates Inc.
- Welch, G.F., & Henley, J. (2014). Addressing the challenges of teaching music by generalist schoolteachers. *Revista da ABEM [Associacao Brasiliera de Educacao Musical], 22* (32), 12-38.
- Welch, G.F., Himonides, E., Saunders, J., Papageorgi, I., & Sarazin, M. (2014). Singing and Social Inclusion. *Frontiers in Cognitive Science* 5: 803. doi:10.3389/fpsyg.2014.00803.
- Welch, G.F., Saunders, J., Hobsbaum, A., & Himonides, E. (2012). *Literacy through music: A research evaluation*. London: International Music Education Research Centre, Institute of Education [pp77].
- Wetter, O.E., Koerner, F. & Schwaninger, A. (2009). Does musical training improve school performance? Instructional Science, 37, 365-374.
- Winsler, A., Ducenne, L., & Koury, A. (2011). Singing one's way to self-regulation: The role of early music and movement curricula and private speech. *Early Education and Development*, *22*, 274-304.
- Williams, K.E., Barrett, M.S., Welch, G.F., Abad, V., & Broughton, M. (2015). Associations between early shared music activities in the home and later child outcomes: Findings from the Longitudinal Study of Australian Children. *Early Childhood Research Quarterly*, *31*, 113-124.

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