

Institution: The University of Edinburgh
Unit of Assessment: 35 Music
Title of case study: The Botanics Project: a focused programme of music making for primary school children
<p>1. Summary of the impact</p> <p>Research at the Reid School of Music (RSM) identified the importance of music making for developing creative and social skills for children with educational and behavioural difficulties. This led to the establishment of the Botanics Project, which has provided primary school children from economically deprived areas of Edinburgh with an intense experience of music making and performing, while equipping their classroom teachers with effective techniques for animating interest in and response to the performing arts. The project has involved about 2000 children and 40 teachers, with an audience of around 500 for each event, many of whom were new visitors to the Royal Botanic Garden Edinburgh and National Museum of Scotland.</p>
<p>2. Underpinning research</p> <p>The Reid School of Music has been involved in community music projects for many years, led by the pioneering work of Professor Nigel Osborne (Reid Professor until 2012). Practice-led research in this field followed the formation of the Institute for Music in Human and Social Development (IMHSD) in 2006. IMHSD's founding research strategy was to develop scientific understanding of the cognitive processes involved in music making, and to apply that understanding to experimental work with music as an educational and therapeutic tool. One such application was a series of music theatre events, devised and managed by Dee Isaacs (Lecturer in Music, and Course Organiser for the Music in the Community courses at RSM) in collaboration with Edinburgh's Royal Botanic Garden. Seven such events have so far been staged (the 2012 event, The City Sings, part of that year's Cultural Olympiad, took place in the National Museum of Scotland). The delivery of a live arts experience within schools is central to the Scottish Curriculum for Excellence, and the Botanics project, in contributing to this policy, has drawn on IMHSD research in devising live arts activities for children with significant learning and behavioural difficulties. Botanics events are organised around continuous research investigation into a) the most effective ways teachers can use music in the development of social skills and self-confidence among children with learning and other difficulties and b) how best to enable teachers without musical training to use musical tools.</p> <p>Such research draws on two methodologies. The first of these is psychological and neuro-scientific research into music and the brain, as applied to work with children with various kinds of learning difficulty and trauma (Osborne 3.1; 3.2), including the beneficial effects of musical experiences in terms of enhancing interpersonal communication (Overy 3.3), and the impact of group based musical experiences (Overy 3.4). This work shows the importance of studying every day, non-expert forms of musical behaviour that include social interaction and positive shared experiences as key components.</p> <p>The second methodology utilised is practice-led research involving composition and performance (Isaacs 3.5; 3.6) where music-theatre works are developed through a process of continuous experimental collaboration. In these circumstances, there is an iterative relationship between the 'underpinning' research and the 'impact' as the research process is itself shaped by the creative process: research-based suggestions as to the effect of musical practice on children's ability to concentrate and communicate are tested and refined through such practice.</p> <p>During school sessions, including a period of in-service training with teachers, the children make music, explore the themes of the production, develop listening and collaborating skills and discover how the elements of music, dance, visual art and design combine to create a performance. Process and performance are of equal importance and the performing environment is crucial to the whole experience. The final composition/performance is created through this process of collaboration, which is itself shaped by constant reflection on what engages children's attention</p>

and enables them to concentrate and collaborate, and on what creative methods enhance teachers' confidence and teaching skills. This work is an innovative extrapolation of action research models of investigation which are very influential within social science and health care research.

3. References to the research

3.1 Osborne N. (2010) 'Music for Children in Zones of Conflict and Post-conflict: A Bio-psycho-social Paradigm' and 'Towards a Chronobiology of Music', in S. Malloch and C. Trevarthen ed. *Communicative Musicality. Exploring the Basis of Human Companionship*, Oxford: Oxford University Press, 331-356, 545-564. Peer reviewed book chapters, ISBN: 978-0-19-856628-1

3.2 Osborne N. (2012) 'Neuroscience and "Normal World" Practice: Music as a Therapeutic Resource for Children in Zones of Conflict', *Annals of New York Academy of Sciences* 1252, 69-76. Peer reviewed journal article, <http://dx.doi.org/10.1111/j.1749-6632.2012.06473.x>

3.3 Overy K., & Molar-Szakacs I. (2009). 'Being Together in Time: Musical Experience and the Mirror Neuron System', *Music Perception*, 26 (5), 489-504.

3.4 Overy K (2012) 'Making Music in a Group: Synchronisation and Shared Experience', in K. Overy, I. Peretz, R. Zatorre, L. Lopez and M. Majno eds *The Neurosciences and Music IV: Learning and Memory*, Annals of the New York Academy of Sciences, 1252, 65-68.

3.5 Isaacs D. (2011) 'The Quicken Tree', 17-19 March 2011, Royal Botanic Gardens, Edinburgh. Performance. Evidence held in ECA RKEO Office.

3.6 Isaacs D. (2012) 'The City Sings', 14 March 2012, National Museum of Scotland, Edinburgh. Performance. Evidence held in ECA RKEO Office.

4. Details of the impact

Each Botanic event has involved primary school pupils (200-300 per show) from areas of significant deprivation within the City of Edinburgh. For *The Quicken Tree* (2011), for example, the three schools taking part served the 15% most deprived areas of the City, with Pilton serving one of the 15% most deprived areas of Scotland. Children from these schools live in areas with very high levels of unemployment and local neighbourhood crime and low levels of educational achievement.

The value of this project to the community is reflected in the investment of various trusts and charities in production costs; *The Quicken Tree*, for example, cost £60,000 to develop and stage. It was supported financially by the University of Edinburgh, Lanvern Foundation, Robertson Trust, Creative Scotland, D'Oyly Carte, Robin Leith Trust and the Thornton Foundation.

Its primary benefit is for the children taking part. Following the final public performances of each show, the University of Edinburgh Music in the Community students involved have continued to work with the school pupils for a further 12 months in order to sustain and develop further the skills and interests arising from the performance project, thus helping to achieve an enduring legacy for the schools. The benefit of this activity is that prolonged engagement with the arts as a tool for learning helps the participating children gain confidence and self-esteem, becoming better able to concentrate and apply themselves across all learning areas, and to express themselves and communicate with others more effectively. In the words of the headmaster of one of the schools which has been involved:

"Community music should be available on the National Health Service, it should be an entitlement for communities to have music ... it makes such a difference ... [Community music] is the yeast in the dough ... [it] lifts you above the nitty gritty and takes you out of yourself and makes you really believe in yourself ... It is worth a thousand bottles of antidepressants, and there is just not enough of it. It is a wonderful wonderful thing and children learn things from [community music] which help them with ... maths and language and social studies. They learn to focus, they learn to listen, they learn lower order thinking skills like memory ... but they also learn the highest order thinking skill of creativity. They learn to create something and that helps them across the curriculum. [Community

Music] is just so important when education is being cut ... when music specialists are rare ... when this is happening music in the community is vital and I am terrified that it is just going to fade away ... Every school across the globe would benefit from this.” (See 5.1)

The project also benefits the primary school teachers involved, through its provision of a programme of music-based continual professional development, and parents, by providing experiences that help them see the capacity of their children in a new light.

For the National Museum of Scotland event in 2012, *The City Sings*, an independent report was commissioned which used observation, questionnaires and interviews to evaluate the impact of the show on the participants—the children, the teachers, the participating students and the wider community. Evidence was gathered on the effects of the work on children’s personal and social development—their confidence, social and team building skills and aspirations; on the importance of the musical skills and expertise of the music in the community practitioners; on the importance of partnerships; and on the effectiveness of the professional development involved and its contribution to the delivery of the expressive arts component of the Curriculum for Excellence:

“Active learning is always very, very important and for [the children] to be actively involved in areas of the curriculum where teachers don’t always have expertise is just a phenomenal opportunity. For [the children] to have role models with the confidence and expertise and obvious talent to work with the children has just changed the children’s ideas about music, about singing, about live performance... it has made their studies much more engaging.” P5 teacher

“The City Sings was a great production and my family said “that was amazing!” I am sure that this experience has brought back all my confidence.” (P5 pupil)

“At the end of the performance the parents were saying that they didn’t think their child would ever be able to do that kind of thing. It has had a very, very positive effect on the school.” (P6 teacher)

“As far as the Curriculum for Excellence is concerned [The City Sings] hits all four elements: confident individuals, responsible citizens... successful learners and effective contributors.” (P4 teacher)

(all quotes from 5.2)

Overall, these events demonstrate the transformative power of the arts as a means of social and behavioural change while generating significant interest in and awareness of the pleasure of participation in the arts in schools, amongst parents and within the children’s wider communities.

5. Sources to corroborate the impact

5.1. *[text removed for publication] Hermitage Park School, Leith*

This source can corroborate the impact of the research on community music and the benefit this project had for the participating students.

5.2. *The City Sings Final Report, May 2012.*

This document examines the impact of *The City Sings* on the project participants, namely the children, the school teachers and the *Music in the Community* students. A copy of the report is held ECA RKEO office.