



Music Education

A Sound Investment

EXECUTIVE SUMMARY

A report commissioned by



PREPARED BY
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Mr Aden Date

Alberts is a 135-year-old family business that has played a vital role in the evolution of Australia's media and popular culture since the early days of sheet music and music publishing, through to the birth of commercial radio and television, and the founding of the Australian pop and rock music industry. Founded in 1885 by Jacques Albert, the company is now run by members of the fifth generation under the guidance of fourth-generation member Robert Albert. Alberts was a co-founder of the Australasian Performing Right Association (APRA) in 1926, introduced to protect the rights of writers, composers and publishers. The company is known for its long association with local musicians including AC/DC, The Easybeats, Stevie Wright, Harry Vanda and George Young; and more recent support of Megan Washington, Wally DeBacker and Josh Pyke. Alberts has always believed in the power of music to change lives. In 2012 members of the fifth generation established The Tony Foundation, which strives to improve the lives of young Australians through music.

Dr Anita Collins

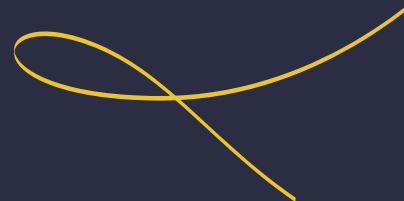
Dr Collins is an award-winning educator, researcher and writer in the field of brain development and music learning. She is best known for her role as on-screen expert and campaign lead for the *Don't Stop the Music* documentary that aired on ABC TV in late 2018. She is internationally recognised for her unique work in translating the scientific research of neuroscientists and psychologists to parents, teachers and students. Dr Collins is an expert education advisor for professional orchestras, state, independent and Catholic school authorities, and Australian and international media production companies. She is also a research expert for universities, advocacy and not-for-profit organisations. A founder of the Bigger Better Brains education program, Dr Collins is a founding director of the Rewire Foundation.

Dr Rachael Dwyer

Dr Dwyer is an educator, researcher and advocate, who is focused on ensuring that all students have opportunities to participate in quality music and arts education as part of their schooling. She spent a number of years as a music specialist teacher in primary schools prior to commencing a career in teacher education. Dr Dwyer is co-editor of the innovative 2016 book *Narrative Research in Practice: Stories from the field* (Springer) and her doctoral work has been published as *Music teachers' values and beliefs* (Routledge). She sits on the editorial board for the Australian Journal of Music Education and is President of the Queensland Chapter of the Australian Society for Music Education.

Mr Aden Date

Mr Date is a social impact consultant who focuses on driving ambitious and innovative projects within the arts and cultural sector. He has worked with performing arts organisations, documentary filmmakers, family foundations, universities and Aboriginal-led organisations. Mr Date also acted as Campaign Manager for ABC TV's *Don't Stop the Music* and runs an improvised theatre company, Only the Human.



Background to the project

The problem: a large proportion of Australian primary school children have little or no access to music education.

Vision: all Australian primary school children need, and have the right to a quality, sequential and ongoing music education.

This report was commissioned by The Tony Foundation to inform their vision to use music to achieve improved life outcomes for young people. Within this vision, a key goal of The Tony Foundation is to ensure all Australian primary school students receive a quality, sequential and ongoing music education. This goal is founded on the belief that music is a core, yet often missing component in a quality education program. To date, The Tony Foundation has supported music programs in schools through the Australian Children's Music Foundation and ABC TV's three-part teleseries *Don't Stop the Music*, produced by Artemis Media; *Musica Viva* and *The Song Room*. Despite the number of fantastic initiatives and organisations such as these working to deliver quality music programs, and the extensive research and evidence of the benefits, the fact remains that a large proportion of Australian primary school children have little or no access to music education. Also, in a number of marginalised schools and communities, the existence of a music program is often heavily dependent on the availability of philanthropic funding.

Given the length of time since the last comprehensive review of music education in Australia (2005), The Tony Foundation determined to fund this research to understand the current state of play, to gather evidence, and to identify barriers in the current system which prevents it from achieving the desired outcomes. It is envisaged to use this research as the foundation for further work towards achieving greater access to music education for all Australian children.

Method of data gathering and analysis

Writing team

The writing team was led by neuromusical educator Dr Anita Collins, and included University of Sunshine Coast education expert Dr Rachael Dwyer, and social change consultant Mr Aden Date. Sustainability and social impact strategist Ms Emily Albert led the project for the Tony Foundation and supported the research team.

Research, data gathering and analysis

The research supporting this document was sourced from the latest education, neuroscience and psychology research. Data was gathered through the expertise of the project team and supplemented by 21 interviews with industry experts from across Australia. Their experience covered all levels (and sectors) of education, music education, music organisations, research and philanthropy. The analysis was provided by the project team with reference to their experience and feedback from the interviews.

The benefits of a quality, sequential and ongoing music education

Practical effects (physical development/practical skills)

Understanding space and time

Music learning is a tool to develop spatial awareness, which in turn assists with the development of logic processing.

Helping attitudes, behaviours and teamwork

Music learning fosters empathy on both an emotional and cognitive level. It also promotes prosocial behaviour and effective teamwork due to the "rich opportunity to nurture positive citizenship skills [through the music ensemble experience] that includes respect, equality, sharing, cohesion, teamwork, and, above all, the enhancement of listening as a major constituent of understanding and cooperation".¹

The benefits of a quality, sequential and ongoing music education (continued)

Cognitive effects (learning development)

Processing sound

Music learning is a tool to train the auditory processing system to function effectively. It is for this reason that many music education methodologies begin at the age of 1 and why music learning is seen as a complementary learning activity during K-2 when children are refining their language skills and learning how to readⁱⁱ.

Assigning sound to symbols

Music learning supports the process from verbal language to reading, writing and understanding language. It is for this reason research has found that musically trained children perform better in standardised tests on language^{iii iv}; acquire language^v including words, syntax and prosody more effectively and earlier; and utilise language more effectively^{vi}.

Logic processing

Music learning is a tool to train the logic and sensory structures and functions of the brain to develop in a highly effective way. It is for this reason that there are strong correlations between academic attainment and music learning^{vii}.

Memory

Music learning encourages the development of working memory, particularly auditory working memory^{viii}. This development is thought to be one of the mechanisms that assists students in processing verbal information quickly and without the need for repetition, remembering multi-step processes and independently managing busy schedules. The development of effective working memory is thought to contribute to the effective creation, storage and retrieval of other types of memories^{ix}.

Non-cognitive effects (human development)

Understanding of self

Music learning improves students' confidence in their sense of self and realistic sense of their capacities and abilities. A strong and well-defined sense of self will inform students' approach to learning and management of relationships.

Regulation of self

Music learning assists students to control their own emotional and behaviour responses while also understanding other student, teacher and parent responses. This promotes independence in learning and the ability to remain on task and work towards set goals.

Healthy development

Music learning promotes healthy development by better integrating the cognitive, emotional, social and physical development of every student^x.

Social cohesion

Music learning promotes social cohesion through the experience of physiological synchronicity, tolerance of diversity and desire to seek out and value novelty and difference.

Best practice in music education

The following factors are identified as core components of a quality music education. These factors have been shown to improve sound musical development and permanent cognitive enhancement. This can be seen through improved results in academic attainment, standardised testing, tertiary study, human development, and musical achievement.

1 Start early

A focus in high-quality music education in preschool will have profound effects on student development.

2 Recognise that all children are musical

Music education is as beneficial for human and cognitive development as it is for the training of expert musicians. Therefore, quality music learning is valuable for students to thrive in all subject areas.

3 Commit to quality music education

Both cognitive and musical development cannot occur without a commitment to quality programs, teachers and pedagogy.

4 Learn a complex musical instrument

Choosing a musical instrument that will provide both musical and cognitive development is important. Instruments such as complex strings, wind, brass and percussion take years to master and require consistent effort, but it is this effort that will result in positive cognitive development. Simpler instruments such as ukuleles, simple percussion and recorders are great starting or gateway instruments to the more complex instruments.

5 Learn music (classroom and/or instrument) over a long period of time (3-7 years)

To achieve cognitive, musical and cultural development outcomes, a music education needs to be ongoing, active, structured and sequential. One-off or short-term music experiences do not constitute a quality music education as they do not result in these outcomes on their own. However, they are an excellent complement to quality, ongoing music programs.

6 Maintain a high level of engagement (age appropriate level of 30 minutes to 7 hours per week during the academic year)

Music learning is a discipline and as such cognitive and musical development needs to happen over time.

7 Support high levels of teacher expertise

Formal qualification and professional development is imperative.

8 Utilise teaching pedagogy that is active, formal and structured

Including activities related to pitch, rhythm, singing, instrumental work, composition and improvisation, and reading notation.

Barriers to the provision of quality music education

The following factors and issues were identified by the project team as the key barriers to the provision of a quality music education to all Australian primary school children. They form the basis for the key insights and opportunities which follow.

1 Systemic inequity

Support of music education is varied and differs across and within educational systems.

2 Teacher education and training

There are currently insufficient numbers of trained and/or upskilled teachers of music in all systems.

3 School leader education and expectations

There is a lack of access to and understanding of cutting-edge research into music education and brain development among school principals and other leaders. A deep understanding of the nature of music education provision within their schools and the opportunities this could provide is also lacking.

4 Australian Curriculum

Resources to inform the structure and interpretation across states/territories and systems of the Australian Curriculum requirements and benefits of music education are not available.

5 NAPLAN and STEM

The ability for the general public to see and compare schools via NAPLAN results (published on the MySchool website) has forced literacy and numeracy into a privileged position over all other subject areas. The impact of a STEM curriculum focus has done the same for STEM subjects and content.

6 Professional collaboration

There are a number of professional organisations, both not-for-profits and representative bodies, which make active representations to policy makers and politicians and deliver professional development. Although there appears to be a willingness to collaborate in the sector, to date these organisations have worked largely in their own spheres.

7 The value of music education

There is not a shared understanding of the value or place and purpose of music in every Australian child's education.

Key insights and opportunities

The following insights and opportunities were identified by the project team and will form the basis for the recommendations and actions to follow this report.

Locating opportunities for systemic change in the states/territories and the schools

- Interventions to effect systems change should be designed on a state-by-state basis.
- Innovation exists where a principal can demonstrate leadership and mobilise human, financial and community resources to achieve an ambitious vision.

From “value” to “place and purpose”

- Discussions of value and the sense that music is undervalued have dominated the discourse within the sector and defined its advocacy strategy for decades.
- Recent research provides an opportunity for a new conversation about the place and purpose of music education within a holistic education framework.

Collaborating for impact

- There is a shared desire within the sector to collaborate and work together on advancing music education in Australia.
- The case of South Australia and the leadership group that created the Music Education Strategy demonstrates that models of collaboration can have a large, material impact on the music education system.

The crisis and innovation relationship

- A shared sense of crisis inspires and propels innovation, as seen in the South Australian Music Education Strategy.
- A challenge in music education is to uncouple the relationship between crisis and innovation, enabling the system to change when it can rather than when it has to.

The skills cliff

- Music education in Australia may be facing a new crisis as the availability of competent and confident music educators steadily diminishes.
- This area may benefit the most from cross-sector collaboration. If we can find an opportunity to collaborate today, we will be in better shape than if we wait for a crisis tomorrow.

ⁱ Majno, M. (2012). From the model of El Sistema in Venezuela to current applications: learning and integration through collective music education. *Annals of the New York Academy of Sciences*, 1252(1), 56-64.

ⁱⁱ Hansen, D., Bernstorff, E., & Stuber, G. M. (2014). *The music and literacy connection*. Rowman & Littlefield.

ⁱⁱⁱ Caldwell, B., & Vaughan, T. (2011). *Transforming education through the arts*. Routledge.

^{iv} Fitzpatrick, K. R. (2006). The effect of instrumental music participation and socioeconomic status on Ohio fourth-, sixth-, and ninth-grade proficiency test performance. *Journal of Research in Music Education*, 54(1), 73-84.

^v Jentschke, S., & Koelsch, S. (2009). Musical training modulates the development of syntax processing in children. *Neuroimage*, 47, 735-744.

^{vi} Patel, A. D. (2008). *Music, language, and the brain*. New York: Oxford University Press.

^{vii} Schellenberg, E. G. (2004). Music lessons enhance IQ. *Psychological science*, 15(8), 511-514.

^{viii} Strait, D. L., Kraus, N., Parbery-Clark, A., & Ashley, R. (2010). Musical experience shapes top-down auditory mechanisms: evidence from masking and auditory attention performance. *Hearing research*, 261(1-2), 22-29.

^{ix} Parbery-Clark, A., Strait, D. L., Anderson, S., Hittner, E., & Kraus, N. (2011). Musical experience and the aging auditory system: implications for cognitive abilities and hearing speech in noise. *PloS one*, 6(5), e18082.

^x Beck, R. J., Cesario, T. C., Yousefi, A., & Enamoto, H. (2000). Choral singing, performance perception, and immune system changes in salivary immunoglobulin A and cortisol. *Music Perception: An Interdisciplinary Journal*, 18(1), 87-106.



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