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SUBMISSION TO THE REVIEW OF THE AUSTRALIAN CURRICULUM

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Summary of argument

This submission is concerned specifically with the curriculum for music and its delivery.

The Australian Curriculum: The Arts has been published after an extended and inclusive process of consultation and now should be tested. Revision should follow upon testing.

There is a problem not with the curriculum, but its delivery, and the review is urged to consider that issue.

The identification of the benefits of a music education has been the purpose of decades of research. The benefits are developmentally important, especially in the early years.

Because of these benefits, every child should be provided with a quality music education throughout the school years. Quality depends upon the relevant skills of teachers.

In most Australian government schools, the national music curriculum will not be delivered if delivery depends upon the classroom teachers, who except by special personal effort or circumstance are musically uneducated.

The accumulated deficit in the music education of more than 100,000 primary school teachers could only be rectified through a program that probably is logistically and financially infeasible.

The countries topping the PISA scores (and substantially outperforming Australia) in 2009 all offer much more music education than do government schools in Australia; music is taught by specialist music teachers or by generalist classroom teachers with up to 20, even 40 times more music education than is provided to Australian classroom teachers.

This provision of music education has not been an obstacle to the performance of our PISA superiors in literacy, numeracy and science and possibly has even contributed to it.

Australia's concentration on NAPLAN results has narrowed the education provided to children and made it less enlivening, with for the most part no measured increase in scores.

The best and most feasible solution to the problem of delivery of a music education to all government primary school children is the training and employment of specialist music teachers.

A broader solution is suggested: the provision of trained specialists for all subjects, working in teams of three or four teachers with complementary skills.

The submission

The Music Trust is a national organisation whose activities are guided by a distinguished Advisory Council. Its mission statement: *The Music Trust works with energy, imagination and authority to support music in Australia.* Its activities include the provision of information and hosting of research through the Music in Australia Knowledge Base which inter alia hosts the most complete collection of statistics on the Australian music sector; support to artists; advocacy for various matters including most importantly, the improvement of primary school music education, which is in crisis.

State and territory governments have committed to implementation of the Australian Curriculum under the National Education Agreement as endorsed by the Standing Council on School Education and Early Childhood. They have thereby committed to the education of all children in the performing and visual arts.

This submission addresses the music curriculum, an element in the Australian Curriculum: The Arts. There are already good music curricula used in some states and available to the others. That said, there are advantages to a national curriculum in music, not least the easier move between states for both teachers and students, the creation of a national market for music education materials which will make commercial provision more feasible and the creation of a national benchmark.

The Australian Curriculum in music has been developed through discussion among the most informed professionals in the country over several years. While passions in the arts can run high, during the course of this process differences have been aired and largely reconciled. ACARA has been very consultative and has managed a difficult process admirably. We now have a curriculum agreed to by all governments and ready to be tested. That testing process is the appropriate professional way to review the curriculum. No doubt it will lead to modifications.

Consequently, we propose to you that your review should turn its attention to the real problem with the music curriculum: its delivery.

Our concern is with primary school music education for reasons that will become clear. We believe that the curriculum sets forward perfectly reasonable expectations for what a primary school student can accomplish through a school music program. These are articulated through the curriculum's definition of minimum standards of achievement, realised through a sequential, developmental, continuous progression throughout the primary school years. The curriculum sets a national benchmark for student achievement – and therefore for teacher competence.

Our concern is that having at last achieved this national curriculum and benchmark, in most public and Catholic primary schools it cannot be taught by most of the teachers officially given responsibility for it, the classroom teachers.

Some relevant statistics

- The national average mandatory music education provision in undergraduate courses is 17 contact hours, or in graduate qualifying courses, 10 hours. This purportedly is intended to equip primary classroom teachers to teach music to years K to 6.¹
- A study found that 63% of Australian schools offer no classroom music. We conjecture that the reason is that most classroom teachers cannot teach it.²
- An extrapolation from another study found that 88% of independent schools offer a sequential, developmental, continuous music education as proposed by the National Review of School Music Education (2005) commissioned by Brendan Nelson and by the Australian Curriculum: The Arts. It found that only 23% of public schools do so. We believe that the public school figure may be a little higher – say 30%. Students at independent schools therefore have triple the opportunity of those in public schools for an effective music education.
- There are music programs in some public primary schools that are comparable to those in independent schools, but they are mostly paid for by parents and are located in affluent areas. Less privileged children miss out.
- Another study found that 87% of Australians agreed that “Music education should be mandated by the states so that every child has the opportunity to study music in school”.³ (51% totally agreed, 36% mostly agreed.)
- Universities have said informally that they are unable to increase the time given to arts education of future primary school teachers. The recent Victorian inquiry into music education more or less threw up its hands over the possibility for achieving adequate music education of primary classroom teachers and proposed other solutions, especially the use of specialist teachers.
- The under-education in music of primary school teachers, which began when John Dawkins moved teachers’ colleges into the universities, has by now resulted in an enormous accumulated deficit of skills. To achieve the skills to deliver the national curriculum in music would require provision of over 100 hours of professional development in music education to tens of thousands of teachers. It probably is not feasible.
- But there are other solutions.

The benefits of music education: the research

Decades of research have shown a wide and surprising range of benefits of music education – both intrinsic benefits and instrumental benefits. These include:

¹ <http://www.mca.org.au/research/research-reports/research-reports/659-national-audit-of-music-discipline-and-music-education-mandatory-content-within-pre-service-generalist-primary-teacher-education-courses-a-report>

² Based upon research by Irina Petrova (2012) <http://www.mca.org.au/research/research-reports/other-research>. Petrova finds that 63% of Australian primary schools offer no music education. Subtract schools known to employ specialist teachers: most independent schools, nearly all government primary schools in Queensland and Tasmania, two thirds in WA, and an unquantified scatter in some other states, the percentage in states such as NSW and Victoria where there is no systematic use of specialists, must be much higher than 63%.

The research sample is small but we suggest that any bias is likely to be towards schools that do offer classroom music and so are more likely to participate in the study. Also, the research question asked only whether a classroom music program is offered; it is likely that many programs do not cover the music curriculum but only “musical experiences”.

Australian Departments of Education collect few statistics on music education provision. A survey by The Music Trust had results shown here:

http://musicinaustralia.org.au/index.php?title=The_Provision_of_Music_Education_in_Government_Schools_in_Australia

³ <http://www.mca.org.au/images/pdf/MCAresearch/mcaRESEARCH%20competent%20music%20ed.pdf>.

Intrinsic benefits:

- Lifelong enrichment through gaining ability to make and respond to an artform that offers entertainment, special skills and capacities, and the most profound experiences and insights.

Instrumental benefits:

- *Brain development* with greater integration of right and left hemispheres, development of brain areas underlying skills in other disciplines. There is a lot of arresting new work in this area. Says researcher Sarah Wilson: “Music primes the brain for learning.” Development in the early years is crucial.
- *Accelerated learning* in literacy, numeracy, academic subjects
- Highly developed *motor skills, listening skills* (the latter also relevant to language learning)
- Increased *creativity* if music is taught in such a way as to build creative skills
- Increased *self-confidence, self-esteem*, supporting better performance generally
- Increased *emotional skills, empathy*
- Improved *socialisation skills*
- *Inclusion of students* who are left behind by the traditional curriculum
- *Reduced truancy, better attendance, retention*, with effects on academic performance
- Better *school spirit, morale, reputation, attractiveness*. Independent schools and some government schools market themselves using their music programs as a major attractor.
- A musically educated populace is the basis for a *strong music industry*, both through training of professionals and discerning audiences.

The Music Trust has prepared a digest of key research (APPENDIX 1) supporting this list of outcomes of a quality music education. ⁴

Some international perspectives

The review will no doubt be familiar with the PISA scores and rankings. Australia ranked 9th in 2009 and 19th in 2012. Here are the combined scores in literacy and numeracy for 2012.

Average overall scores in literacy and numeracy, 2012

Shanghai	613
Singapore	573
Hong Kong	561
Taipei	560
Korea	554
Macao	538
Japan	529
Switzerland	531
Netherlands	523
Estonia	521
Finland	519
Canada	518
5 other countries	
Australia	504

⁴ There are other relevant papers on the Music in Australia Knowledge Base, including nine papers found under the category “Brain Science and Music” (see especially the paper by Sarah Wilson) and the Music Education categories. <http://musicinaustralia.org.au/index.php?title=Special:Categories>

We did some investigation of music education in the five highest scoring countries in the 2009 results: Shanghai, Singapore, Finland, Hong Kong and Korea. In all five, much more classroom time is devoted to music than in even those Australian government systems that have a time requirement. In three countries, music is taught by specialist music teachers. In the other two it is taught by classroom generalists – but the generalists in South Korea, according to our informant, receive 160 hours of music education, and in Finland, 85% of students are taught by generalists with 350 contact hours or more of music education. For more detail, see APPENDIX 2. Professor Brian Caldwell returned last year from a visit to Shanghai schools saying that he had never seen such wonderful music education classes.

Although according to the research, it is quite possible that the high PISA scores in those countries are due in part to the strength of their music programs, we can at least suggest that music education was not an obstacle to achievements in literacy and numeracy.

A two-year Swiss study casts an interesting light on that proposition.⁵ It involved 1,200 children in 50 schools. They were taken from regular classes for three one-hour music classes per week. At the end of the experiment, these students were better at languages, learned to read more easily, had better social relations, demonstrated more enjoyment in school, and had a lower stress level than those who remained in regular classes.⁶

But in some Australian schools, students are withdrawn from music and other instruction for additional study in NAPLAN subjects while the majority of national NAPLAN scores nevertheless are unchanged since 2008 and the students' experience is the narrower and poorer. It is a failing strategy.

Educated educational leaders should be able to plan based on the evidence. Instead, the argument seems to be that if the present great concentration on literacy and numeracy produced no results, there should be even more of it.

Australia's PISA ranking has fallen but so also have its actual scores, which presumably have the same or similar basis as NAPLAN scores. Meanwhile, the top five countries (2012) have all improved. Has music education played a part in that?

Changes in scores, top five countries and Australia, 2012

	Australia	Shanghai	Singapore	Hong Kong	Taipei	Korea
2003	524	-	-	550	-	542
2006	520	-	-	547	549	547
2009	514	600	562	555	543	546
2012	504	613	573	561	560	554

Australia's decline is about 4%. Others' improvement is around 2%. There is a 6% difference.

⁵ In Switzerland, by the way, there has just been a vote by referendum to include a requirement for music education in the constitution.

⁶ Weber, E., Patry J.L., Spychiger, M. (1993). *Musik macht Schule. [Music makes the school]*. Essen, Germany: Die blaue Eule

Suggested course of action

The solution that will produce the best and most feasible outcome for music education in primary schools is that it is delivered by primary school specialist music teachers.

- Given the increased powers delegated to schools in state systems, the decision to engage a specialist music teacher is in most states for the principal to make. This decision is already taken in a number of schools and the teacher is paid from funds assigned to relieve classroom teachers from face to face teaching.
- There will be increased competition for those funds and positions so from the point of view of music education, this is a less than perfect solution.
- But it is a practical one.
- Since in states other than Queensland, where music is mandated and paid for by the state and is taught by specialist teachers in 87% of government primary schools, employment as a primary school specialist music teacher has been a random affair and very few universities offer courses and qualifications.
- Therefore, principals should be encouraged to engage specialist music teachers and universities should be encouraged by the states and the Commonwealth to offer these courses. The courses can be
 - Single complete courses
 - A degree in music followed by a graduate qualification in teaching
 - Less good: a degree in education followed by a graduate qualification in music.
 - The totality should take 5 years or less to complete.

In-service education for generalists to produce a satisfactory result would be well beyond any current provision by the states. Nevertheless, music in-service should still be offered to generalist teachers who would thus be enabled to utilise music to enhance teaching strategies for academic subject. There are new possibilities with use of digital instructional packages, supplementing face to face workshops, that could offer improvements.

The Music Trust has a special taskforce which is engaged in developing the specifications for a satisfactory course for primary school specialist music teachers.

There are other operational issues to consider. The Music Trust can offer more thorough analyses of these possibilities upon invitation.

A wider view of the problem

There are complaints from many disciplines that the primary school classroom teachers do not bring an adequate subject area knowledge.

As knowledge increases, the demands upon generalist teachers become increasingly unrealistic. The model of having each teacher teach all subjects is not working.

We suggest briefly for your consideration a solution extrapolated from the Hong Kong system. Teachers would specialise in a group of subjects. Children would learn from say three or four teachers whose skills are complementary; between them, they cover the curriculum. Pastoral care is still achieved, perhaps better than when children have to depend upon relationships with only one teacher. One of the group of teachers can be appointed as the chief care-giver for a particular classroom. The idea is briefly elaborated in APPENDIX 3.

Thank you for the opportunity to make this submission. We are of course happy to respond to your questions.

Sincerely

Richard Letts AM PhD
Director

APPENDIX 1

A Brief Survey of Research into the Benefits of Music in Education

Mandy Stefanakis and Assoc Prof Robin Stevens, of The Music Trust's working group for a National Strategy for Research in Music Education, have conducted a national and international survey of research in music education to identify research projects demonstrating a broad range of benefits of music education. The references below are to research outcomes supported by research methodology assessed as producing highly reliable results.

Where research reports are available online, links have been given. Otherwise, readers can seek them through the list of references at the end of this report.

Aesthetic development

Music provides the opportunity for aesthetic experiences. An aesthetic knowledge can be described as a deep perceptual understanding in which the senses, the emotions and cognition are combined to make meaning through the experiences of creating, making and interpreting aesthetic forms. (See [Australian Curriculum: The Arts, 2013](#); [Seidel et al](#))

Personal, Social, Cultural Expression and Identity Formation

Music through performance and creative experiences provides a means for personal expression, communication and personal, social and cultural identity formation (See [McPherson and Welch, 2012](#); [Damasio, 2012](#); [Bowman](#); [Australian Curriculum: The Arts](#); [Seidel et al](#); [Dissanayake](#); [Bresler](#); [Storr, 1992](#); [Green, 2011](#); [Hargreaves et al, 2012](#); [Gupta](#); [Campbell et al 2008](#); [McPherson et. al, 2012](#); [Stefanakis](#))

Music provides an opportunity to experience and differentiate emotional responses (see [Juslin and Sloboda, 2001](#); [Hodges](#); [Storr, 1992](#); [Seidel et al](#))

Music contributes to students' personal well-being through developing self-image, self-confidence, self-esteem, etc. (see [Deasy](#); [National Association for Music Education, President's Committee on the Arts and in the Humanities](#); [Seidel et al.](#))

Brain Function

With the introduction of more precise techniques to scan different areas of the brain, there has been a massive interest and increase in the amount of neurological research into brain function when engaged in a whole range of musical activities from passive listening to performing on individual instruments. Research specifically shows that both older and newer areas of the brain inclusive of sensory-motor, emotions, cognition, fine motor, equilibrium, aural centres, and both hemispheres of the brain are used to varying degrees and in different ways when engaged in musical activity with dependence on a range of factors. These include gender, age and experience of the musician, the task being undertaken, for example aural, performance, conducting, individual task, group task, and even the kind of music or sound used in a study. Additionally there are variations among individuals.

Importantly, evidence demonstrates that there is a more pervasive effect on the development of the brain (brain plasticity) when a child starts learning an instrument than learning that takes place as an adolescent or adult, but there is still plasticity in the adult brain. Sustained, structured practice with delineated outcomes enhances this plasticity. (Of note is the work of [Levitin, 2012](#); [Damasio, 2012](#); [Evans et al, 2009](#); [Hodges, 1996](#); [Hodges and Gruhn, 2012](#); [Juslin and Sloboda, 2001](#); [Merrett and Wilson, 2012](#); [Peretz and Zatorre, 2003](#); [Asbury and Rich](#), [Winner and Hetland](#))

The Music Trust also recommends these summarising papers, found on its *Music in Australia Knowledge Base*:

http://musicinaustralia.org.au/index.php/The_Benefits_of_Music_for_the_Brain; and http://musicinaustralia.org.au/index.php/Music_and_Human_Evolution.

Music contributes to students' cognitive development including abstract thinking, aural and spatial awareness, verbal understanding (see above)

Music contributes to students' kinetic / motor skill development (see above)

Creativity

Music contributes to students' creativity when engaged with composing, arranging, improvising tasks which call upon the individual or group to imagine, plan, organise, experiment with and develop sound in an abstract way (see Barrett and Tafuri, 2012; Harwood and Marsh, 2012; Seidel et al; Arts Ed Search, [President's Committee on the Arts and the Humanities](#)).

Learning Outcomes across Disciplines

It is still not fully understood why, but music enhances learning in a range of non-musical domains. Current thinking centres around the fact that music stimulates so many different brain regions, or that it motivates learning through the brain chemical 'rewards' (such as dopamine hits), the joy that music provides, (McCarthy) or that the social connections and self-esteem it establishes in students has a carry-over effect. Although the reasons are not fully understood there is a great deal of evidence to show that there is a correlation between music learning and enhanced abilities in a range of areas:

- Music contributes to students' rational thinking—reasoning, critical thinking, logistical thinking and interpretive skills (see McGarity, 1986)
- Music contributes to learning in other knowledge and skill areas such as numeracy, literacy (see Bahr, 1996; Geoghegan, 1993)
- Music contributes to students' concentration, memory, time management. A plethora of short-term and longitudinal studies, particularly in the US, demonstrate these effects as a result of Arts Education and the suggested sources list many of these studies (see [Burnaford](#), [Arts Ed Search](#), [Fiske](#), [Deasy](#), [Nafme](#) for the above).

Social Cohesion and Skills

Music connects people through sound, so that there is a sense of physical and emotional camaraderie and shared experience. It is what is most unique about the musical experience (see Todd, 2002; Brown, 2000; McNeill, 1995). This 'shared sound' leads to a greater sense of communication with others, team cooperation and enhances social confidence (see Welch and McPherson, 2012).

Music contributes to students' social skills—communication with others, social confidence, team cooperation, leadership potential, etc. (see [Stevenson and Deasy](#), [McCarthy](#)).

Music has therapeutic applications in relation to mental, physical and social disabilities ([Stevenson and Deasy](#), [Gupta](#), [Catterall et al.](#), [Schlaug](#), [McDonald](#), 1999; Stacey, 1983; Weidenbach, 1981).

Music provides a vocational outcome for some students (McPherson and Welch, 2012).

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APPENDIX 2

Music education in the five countries at the top of the PISA rankings in 2009.

The top five countries have scores that are clearly superior to that of Australia. The provision of school music instruction in these countries is as follows:

China (Shanghai) *Music education provision.* 2 hours/week in primary school.

Teacher qualifications. All classes are taught by music specialists except in some rural areas, where teacher training has lagged.

Hong Kong *Music education provision.* Policy is that the primary schools will give 70-100 minutes/week to music, though in this regard schools have some autonomy.

Teacher qualifications. Teachers are specialists in two or more subjects; there are no primary school generalists. See below.

Finland *Music education provision.* 45 minutes/week, sometimes 2 x 45 minutes, to 7th grade, elective thereafter. In 13% of schools, additional special music classes of 3-4 hours/week. Also, there are additional possibilities in the highly subsidised municipal music schools, complementary to schools, ubiquitous in Europe. In NSW, the counterparts are the regional conservatoriums which, however, are not subsidised to provide free or low cost tuition.

Teacher qualifications. In approximately 70% of schools, students are taught by generalist teachers who have had about 350 contact hours of music education in their undergraduate course. Approximately 15% learn from teachers who have had 38 to 75 hours of music and the other 15% learn from teachers who have had over 700 hours of music. Secondary specialists study music for up to 8,800 hours.

Singapore *Music education provision.* Mandatory years 1-8. Years 1-4, two 30-minute periods per week. Years 5-6, one 30-minute period/week. Secondary, one 35-minute period/week. Beyond year 8, music is an elective.

Teacher qualifications. There are generalist primary teachers but increasingly the music teachers have specialist qualifications in English, maths and music; secondary school music teachers have qualifications in music and one other subject. Therefore, there are similarities to the Hong Kong model. Current teachers are encouraged to take music PD courses. However, all music and art teachers are now being trained to specialise in only one subject.

South Korea *Music education provision.* 2 hours per week years 1-7, 1 hour/week grades 8-10.

Teacher qualifications. Primary school music is taught by generalists, with some specialists. During preservice training, generalists can declare a major, including music major. Total hours of music instruction required of a generalist teacher are 158-161. Secondary school music is taught by specialists.

Australia *Music education provision.* Queensland and Tasmania, with their specialist music teachers, offer 30 minutes music per week in primary schools, plus ensemble options and instrumental instruction. In NSW, music is mandatory in years K-8, taught (or mostly not taught) by generalists in primary school, and actually taught by specialists in secondary; 100 hours of mandatory music in years 7-8. Other jurisdictions very variable. Overall, music is much less taught than in the non-Anglo schools in this PISA ranking, and usually by far less qualified teachers.

Teacher qualifications. In public schools, secondary school music is taught by music specialists who have specialist music degrees and pedagogy qualifications. In Queensland and Tasmania, primary school music is taught by specialists. In all other states it is taught by generalists excepting where some principals use discretionary funds to hire a music specialist. The inadequate training has been described above.

APPENDIX 3

The Hong Kong model, adapted to Australia

All primary school teachers would be subject area specialists, each teaching their choice of, say, 3 or 4 subject disciplines. Disciplines would include the arts. Sets of disciplines would be complementary. Children would be taught by say three teachers with complementary sets of disciplines covering the entire curriculum. For instance, a set of disciplines might be mathematics, science, music. English literature, history, dance, drama. English language, geography, visual arts, a foreign language.

Under this scheme, future teachers would choose subjects for which they have enthusiasm and probably some talent in which to specialise. This enthusiasm and skill must carry through to the classroom.

One of the three teachers is assigned in addition to be the classroom teacher for one particular class – the point of greatest stability.

Pastoral care is improved because children are no longer hostage to the success of a relationship with a single classroom teacher; they still have regular contact with a small number of teachers with whom they form relationships.

This is an elegant and cost-effective solution to a situation in which the curriculum is both diversifying and requiring increasing discipline expertise from teachers – to a level which it appears many are unable to achieve.

The costs of teacher training and school operation are not increased. Rather, tasks are redeployed. Teachers are trained in the same number of hours overall. The same number of school students is taught by the same number of teachers during the same time frames.

Implementation would be gradual over a number of years.

Arts teaching provision problems would be solved.

Despite its obvious attractions, the concept departs far from business as usual. It could mean a tremendous revitalisation of primary school education but would require courage and determination on the part of the Minister and senior bureaucrats.

