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**Music Education in New Zealand Society:
Exploring a Meaningful Education**

A thesis
submitted in fulfilment
of the requirements for the degree
of
Master of Arts
at
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by
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Abstract

Music has been embedded in cultures throughout history, becoming integral to everyday life. During the last century, scientists have discovered an astonishing link between musical exposure and neurological function. Scientific studies demonstrate that listening to and performing music engages nearly every area of the brain, improving cognitive function, memory and general well-being, suggesting neurological, social and psychological benefits. Despite these discoveries, research indicates that the role of music within New Zealand's education system has stagnated, being underfunded and undervalued by successive governments. Music is now often perceived as an extracurricular activity, and meaningful music education has become a luxury activity for those who can afford it.

This thesis will outline an account of the role of music in ancient and contemporary cultures, providing historical proof of music's pre-eminence in the thinking, philosophy and educational activities of civilisations. The benefits of a meaningful musical education will be explored through a comprehensive literature review based on scientific and statistical research. Governmental, educational and public attitudes towards music will also be explored, in order to question the role and value of music education in New Zealand and more broadly in Western society.

Methodology

This research was composed through a combination of qualitative and quantitative methods, to gain an in-depth understanding of the role and value of music education in New Zealand society.

Quantitative data provided a broad outlook, giving exact figures and percentages. This data was obtained through *New Zealanders and the Arts: Attitudes, Attendance and Participation in 2014*, available through Creative New Zealand, and *A Measure of Culture: Cultural Experiences and Cultural Spending in New Zealand*, available through Statistics New Zealand. These reports provide an understanding of how the arts and specifically music, contributes to everyday life.

Qualitative data provided insight through comments, opinions and explanations. This data was obtained from an anonymous online questionnaire, through the platform SurveyMonkey. The survey was sent to music educators throughout the country, through MENZA (Music Education New Zealand Aotearoa), The Institute of Registered Music Teachers and Musicnet – an online forum. The purpose of this research was to explore educators' perceptions of the value of music in the education system. Educators were asked a series of open ended questions, such as adversities faced, whether a meaningful music education was being taught consistently and whether music education is underestimated, underfunded or undervalued. This questionnaire significantly impacted my research, giving an in-depth understanding of the status of music education in New Zealand, based on the opinions of those who are active in the field.

Contents

Abstract	ii
Methodology	iii
Contents	iv
List of Examples	vi
List of Figures	vii
List of Tables	viii
Acknowledgements.....	ix
Chapter 1: The Role of Music in Ancient Cultures	1
1.1 Introduction.....	1
1.2 Ancient Greece.....	2
1.3 Ancient China	7
1.4 Ancient India.....	13
1.5 Traditional Māori Music	19
1.6 Early Christianity	31
1.7 Function of Music	37
1.8 Censorship of Music	41
Chapter 2: Benefits of Music based on Scientific Research	50
2.1 Cognitive Benefits	50
2.2 Psychological Benefits.....	57
2.3 Benefits for the Developing Brain	64
2.3.1 Literacy	69
2.3.2 Language.....	71
2.3.3 Auditory	73
2.3.4 Predisposition.....	75
2.4 Benefits for Children from Low Socioeconomic Backgrounds.....	77

2.5 Implications for Music Education.....	85
Chapter 3: New Zealand Education	90
3.1 History of Education.....	90
3.2 Purpose of Education	111
3.3 Music in the Curriculum.....	118
3.4 Status of Music Education	130
3.5 Music Education Survey.....	151
3.6 Global Status of Music Education	159
Chapter 4: Societal Attitudes towards Music.....	169
4.1 Governmental Support.....	169
4.2 Local Government	172
4.3 Public Attitudes.....	174
Chapter 5: Conclusion.....	176
Bibliography	179
Appendices.....	211
Appendix A: The Perception of Music Education in New Zealand Society Survey 211	
Appendix B: Ethics Approval.....	213

List of Examples

Ex. 1. <i>Ratio and interval produced.</i>	2
Ex. 2. <i>Greek Modes.</i>	4
Ex. 3. J. A, Van Aalst, <i>Ancient Chinese Pentatonic Scale.</i>	9
Ex. 4. J. A, Van Aalst, <i>Western equivalent notes of scale used through Chou Dynasty.</i>	10
Ex. 5. <i>Notated Drone.</i>	15
Ex. 6. <i>Raag Khamaj.</i>	16
Ex. 7. <i>Ancient Hindu Scale.</i>	16
Ex. 8. Andersen, Johannes C., <i>Range produced by kōauau.</i>	22
Ex. 9. McLean, Mervyn, <i>Ka Mate.</i>	26
Ex. 10. <i>Psalm 150.</i>	32
Ex. 11. Merriam, Alan, <i>Functions of music in society.</i>	37
Ex. 12. <i>Harmonic minor scale in C.</i>	38
Ex. 13. <i>Example of tri-tone.</i>	41
Ex. 14. <i>Music Curriculum in 1878 and 1885.</i>	92
Ex. 15. <i>Music Examination for Teachers in 1883.</i>	94
Ex. 16. E.D. Tayler, <i>Weaknesses in School Music.</i>	98
Ex. 17. <i>Shortcomings in Education System, 1974.</i>	104
Ex. 18. <i>Why teachers struggle to teach art subjects.</i>	109
Ex. 19. <i>Aims for Secondary Schools in 1938.</i>	113
Ex. 20. <i>Fundamental Principles of Education.</i>	114
Ex. 21. Ministry of Education, <i>Level One Achievement Objectives.</i>	124
Ex. 22. Buckton, Roger. <i>Students' preferred subject.</i>	139

List of Figures

Figure 1. Ministry of Education, <i>Comparison of levels of confidence between music specialists and classroom teachers</i>	133
Figure 2. Ministry of Education, <i>Principals' responses of whether their school had teachers with appropriate knowledge to teach music</i>	134
Figure 3. Ministry of Education, <i>Principals' responses about music programme implemented by classroom teachers</i>	135
Figure 4. Ministry of Education, <i>Educators' responses regarding professional development and support</i>	136
Figure 5. Ministry of Education, <i>Educators' Levels of Confidence Teaching Music</i>	141
Figure 6. <i>Educators' response as to whether music education is underestimated, underfunded or undervalued</i>	151
Figure 7. <i>Educators' response to whether a meaningful music education is met throughout New Zealand</i>	154

List of Tables

Table 1. J. A, Van Aalst, Comparative Table of Chinese Lüs and Western Notes. 8	8
Table 2. J. A, Van Aalst, Scale used throughout Chou Dynasty.	10
Table 3. Structure of Rāga.	15
Table 4. Mood associated with svars.	17
Table 5. McLean, Mervyn, Description and purpose of Karakia.	21
Table 6. School Certificate Examination Entries in Subjects associated with the Core Syllabus 1950-1952.	100
Table 7. Comparison between music courses in 1974.	103
Table 8. Ministry of Education, Achievement Objectives by Learning Area.	120
Table 9. Buckton, Roger, Frequency of school music activities.	140

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Chapter 1: The Role of Music in Ancient Cultures

*Music is moral law. It gives soul to the universe, wings to the mind, flight to the imagination, a charm to sadness, gaiety and life to everything. It is the essence of order, and leads to all that is good, just, and beautiful, of which it is the invisible, but nevertheless dazzling, passionate, and eternal form.*¹

- Plato

1.1 Introduction

Music has been featured prominently throughout history, contributing to the culture, religion, education and well-being of all societies.² It has served a multifaceted role, functioning as a form of communication, entertainment, expression and meditation. This chapter will explore the role of music in ancient and contemporary societies and culture, to determine its significance and function. Comparisons will be made between ancient and contemporary societies, highlighting similarities and differences, to demonstrate the vital role that music has in society.

The music of ancient Greece, China and India have been explored due to their rich and diverse histories, documented through literature. The role of music in ancient Greece is particularly important, as Greek traditions have formed the basis of western music. Traditional Māori culture was also investigated to gain an understanding of New Zealand's historic and cultural background and explore whether these traditions are still being practised. Similarly, as music is featured significantly in religious settings, the function of music in early Christianity will also be explored.

¹ "Occasional Notes." *The Musical Times and Singing Class Circular* 30, no. 555 (1889): 271-72. <http://www.jstor.org.ezproxy.waikato.ac.nz/stable/3360277>

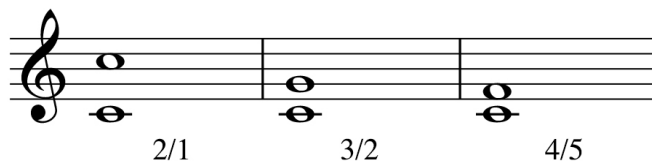
² Merriam, Alan P. *The Anthropology of Music*. Evanston, Ill.: Northwestern University Press, 1964. 223-226.

1.2 Ancient Greece

Music in ancient Greece was fundamental to society and everyday life. It was believed to cultivate citizens and society, while imparting ideals of harmony, community and intellectual thought.

Philosopher and mathematician Pythagoras, (570 B.C – 500-490 B.C)³ contributed significantly to the music of ancient Greece, realising the twelve pitches in an octave through a mathematical relationship between pitch and lengths of vibrating strings. He discovered that if a vibrating string is divided in half, it will produce a tone an octave higher than the original note. Similarly, if the string is divided by one-third, it will produce a tone a fifth higher, and if divided by a quarter it will produce a tone a fourth higher. These ratios are shown below in Example 1.⁴

Ex. 1. *Ratio and interval produced*



An inconsistency in his algorithm was later discovered, as the succession of twelve fifths, exceeds seven octaves by an entire interval, often referred to as the Pythagorean comma. In compensation, the octave was divided equally into twelve semitones, providing an equally tempered scale and the basis of Western Music.⁵

³ *Britannica Academic*, s. v. "Pythagoras," accessed May 16, 2016, <http://academic.eb.com.ezproxy.waikato.ac.nz/EBchecked/topic/485171/Pythagoras>

⁴ Landels, John G. *Music in Ancient Greece and Rome*. Hoboken: Taylor and Francis, 2002. 130.

⁵ Cochrane, Lalage. "equal temperament." *The Oxford Companion to Music*. *Oxford Music Online*. Oxford University Press, accessed May 29, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t114/e2297>

It was believed that these ratios governed the entire universe, representing the movement of the planets and their fixed distances from earth. These movements were thought to create a cosmic sound, inaudible to the human ear, known as the music of the spheres or *musica mundana*.⁶ Similarly, earthly music known as *musica humana*,⁷ was believed to reflect *musica mundana*⁸ and the power it possessed. Music became a powerful force, capable of influencing moral character.⁹ Consequently, new compositions within Greece were carefully examined and censored.¹⁰ Philosopher Plato (429 B.C – 347 B.C)¹¹ explains that:

The overseers must be watchful against [music's] insensible corruption. They must throughout be watchful against innovations in music and gymnastics counter to the established order, and to the best of their power, guard against them....For a change to a new type of music is something to beware of as a hazard toward all our fortunes. For the modes of music are never disturbed without unsettling of the most fundamental political and social conventions.¹²

These beliefs are reflected through fables of Timotheus of Miletus, who performed in court on a lyre with additional strings. The court was outraged, believing that this addition could negatively impact society and ordered that he

⁶ Rumbold, Ian. "spheres, music of the." *The Oxford Companion to Music*. Oxford Music Online. Oxford University Press, accessed May 9, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t114/e6387>

⁷ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 72–77.

⁸ Plato, and A. D. Bloom. *The Republic of Plato*. Basic Books, 1991. 358.

⁹ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 8.

¹⁰ Wang, Yuhwen. "The Ethical Power of Music: Ancient Greek and Chinese Thoughts." *Journal of Aesthetic Education* 38, no. 1 (2004): 89-104.

¹¹ Warren Anderson and Thomas J. Mathiesen. "Plato." *Grove Music Online*. Oxford Music Online. Oxford University Press, accessed May 17, 2016, http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grov_e/music/21922.

¹² Wang, Yuhwen. "The Ethical Power of Music: Ancient Greek and Chinese Thoughts." *Journal of Aesthetic Education* 38, no. 1 (2004): 94.

remove the additional strings at once.¹³

Specific modes were also thought to either positively or negatively impact society, imparting ethical qualities.¹⁴ According to Plato, Ionian and Lydian modes were improper, encouraging qualities of drunkenness, softness, and sloth, which would negatively impact the state. Contrastingly, modes such as the Dorian and Phrygian cultivated proper morals of bravery and peace.¹⁵ These modes are shown in Example 2 below.¹⁶

Ex. 2. *Greek Modes*.



As music was believed to affect one's thoughts, emotions and physical health, it became used for therapeutic purposes within society. Traditionally, healing shrines and temples were situated throughout the empire, containing hymn specialists who prescribed a variety of music for citizens suffering with mental illnesses,¹⁷ as well as speech impediments. The Greeks discovered that speech impediments, such as stuttering often did not affect one's ability to sing and that through singing and the rhythm of speech it was possible to alleviate the

¹³ Sachs, Curt. *A Short History of World Music*. London: Denis Dobson Ltd, 1969. 25.

¹⁴ Sachs, Curt. *A Short History of World Music*. London: Denis Dobson Ltd, 1969. 30.

¹⁵ Wang, Yuhwen. "The Ethical Power of Music: Ancient Greek and Chinese Thoughts." *Journal of Aesthetic Education* 38, no. 1 (2004): 89-104.

¹⁶ Sachs, Curt. *A Short History of World Music*. London: Denis Dobson Ltd, 1969. 40.

¹⁷ William B. Davis, Kate E. Gfeller, Michael H. Thaut. *An Introduction to Music Therapy, Theory and Practice*. Third Edition. ed. Silver Spring, Maryland: American Music Therapy Association, Inc, 2008. 19–20.

disorder.¹⁸ Due to this impact, Greek philosophers such as Plato believed music was essential in the role of shaping a citizen's character and had the ability to teach one "about the complex and vexed roles of emotions and passions in the moral dramas or narratives of great and small human affairs."¹⁹ Consequently, music became an important aspect of education in Greek societies.

Education was fundamental to Greek civilisations, promoting intellect and culture, enabling full participation within society.²⁰ It became the goal of each state to promote "intelligent, civically engaged, ethical, and happy citizens"²¹ through a holistic education.²² The curriculum included aspects of play, debate, music, physical activities, science and philosophy, to form a harmonious body, mind and soul.²³ Over seven years, students received music instruction to develop vocal and instrumental skills,²⁴ required for religious ceremonies and compulsory intertribal competitions.²⁵ Music was seen as an exceptional way to cultivate students of any age. Plato explains that: "one need not wait until a child can walk or speak to start cultivating moral excellence with musical means."²⁶ He continues explaining that: "education in music is most sovereign, because more than anything else rhythm

¹⁸ Sacks, Oliver. *Musicophilia*. London: Picador, 2008. 235.

¹⁹ David J. Elliot, Marissa Silverman. *Music Matters: A New Philosophy of Music Education*. Second Edition ed. United States of America: Oxford University Press, 2015. 92.

²⁰ Mark, M. *A Concise History of American Music Education*. R&L Education, 2008. 1.

²¹ David J. Elliot, Marissa Silverman. *Music Matters: A New Philosophy of Music Education*. Second Edition ed. United States of America: Oxford University Press, 2015, 128.

²² David J. Elliot, Marissa Silverman. *Music Matters: A New Philosophy of Music Education*. Second Edition ed. United States of America: Oxford University Press, 2015. 126.

²³ David J. Elliot, Marissa Silverman. *Music Matters: A New Philosophy of Music Education*. Second Edition ed. United States of America: Oxford University Press, 2015. 128-129

²⁴ Franklin, John. 2011. "Music in Ancient Greece". In *World History Encyclopaedia*, Alfred J. Andrea. Santa Barbara: ABC-CLIO. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/abccliow/music_in_ancient_greece/0

²⁵ Mark, M. *A Concise History of American Music Education*. R&L Education, 2008. 1 -2

²⁶ David J. Elliot, Marissa Silverman. *Music Matters: A New Philosophy of Music Education*. Second Edition ed. United States of America: Oxford University Press, 2015. 91.

and *harmonia* find their way to the inmost soul and take strongest hold upon it, bringing with them and imparting grace".²⁷

Ancient Greek myths and legends also express the significant power of music, as shown through the depiction of Orpheus, an ancient Greek prophet. According to legend, Orpheus possessed supernatural powers, able to charm animals and manipulate inanimate objects through his lyre, kithara and voice.²⁸ The legend of Syrinx provides another example, as the god Pan attempts to seduce Syrinx. After a great chase, they came to the river Ladon, opposite Olympia. The water was too deep for Syrinx to cross, so she prayed to the nymphs to transform her. At this moment, Pan lunged forward, thinking he had grasped her, only to find that he was holding a bundle of reeds of various lengths. Letting out a sigh, his breath passed over the reeds sounding different notes. He tied the reeds together and made a pan-pipe which from then on was his special instrument.²⁹ These fables reinforce the importance of music within Greek culture, expressing strong connections to religion, early cosmogony and human society in general.³⁰

²⁷ Wang, Yuhwen. "The Ethical Power of Music: Ancient Greek and Chinese Thoughts." *Journal of Aesthetic Education* 38, no. 1 (2004): 89-104.

²⁸ Landels, John G. *Music in Ancient Greece and Rome*. Hoboken: Taylor and Francis, 2002. 149-150.

²⁹ Landels, John G. *Music in Ancient Greece and Rome*. Hoboken: Taylor and Francis, 2002. 159-160.

³⁰ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillan Press Limited, 1991. 6.

1.3 Ancient China

Music served a significant role in ancient China, contributing to culture, education, religion and mathematics of each empire, dating back to the Shang dynasty in 1600 B.C.³¹ It was believed that every musical note contained great transcendent energy, capable of manipulating citizens for moral or immoral purposes.³² Music therefore, became a way to enrich citizens, physically, spiritually and emotionally.³³ According to *Yo Ki*, an ancient Chinese manuscript, it was believed that:

Under the effect of music...the eyes and ears are clear, the blood and the vital energies are balanced, habits are reformed, customs are improved, the empire is at complete peace.³⁴

Similar to societies of ancient Greece, Chinese civilisations believed that music represented elements of celestial order which govern the entire universe. These elements were believed to create a Primal Sound, omnipresent, yet inaudible to the human ear. The Primal Sound was divided into twelve audible tones, representing each of the twelve zodiac regions.³⁵ These tones or *lüs*, were discovered by Emperor Huang Ti, through a series of bamboo tubes,³⁶ Author David Tame explains that the “Tones were responsible for the creation and sustainment of everything in the universe.”³⁷ A visual representation of the *lüs* is shown in the table below.³⁸

³¹Sachs, Curt. *The Rise of Music in the Ancient World, East and West*. Courier Corporation, 2008. 105.

³²Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 33-34.

³³Tanner, H. M. *China: A History*. Hackett Publishing Company, 2009. 74.

³⁴Ki, Yo. "Memorial of Music".

³⁵Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 37.

³⁶J. A, Van Aalst. *Chinese Music*. Imperial Maritime Customs. Vol. 6, Shanghai: Statistical Department of the Inspectorate General of Customs, 1884. 6–8.

³⁷Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 38.

³⁸J. A, Van Aalst. *Chinese Music*. Imperial Maritime Customs. Vol. 6, Shanghai: Statistical Department of the Inspectorate General of Customs, 1884. 12.

Table 1. J. A. Van Aalst, *Comparative Table of Chinese Lüis and Western Notes.*

Names of Lüis.	Corresponding Western Notes.	Length of Lüis in Chinese Inches.	Length of Lüis reduced to 120th Parts of an Inch.	Required Length of Tubes to render corresponding Western Notes.
Huang-chung, upper	C	4.3853	526.237	540
Ying-chung	B	4.66	559.2	576
Wu-i	B ♭	4.8848	586.176	607.5
Nan-lü	A	5.3	636	645.3
I-tsê	A ♭	5.551	666.12	683.1
Lin-chung	G	6	720	720
Jui-pin	G ♭	6.28	753.6	768.45
Chung-lü	F	6.5824	789.888	810
Ku-hsi	E	7.1	852	864
Chia-chung	E ♭	7.4373	892.476	910.71
T'ai-tsu	D	8	960	963.99
Ta-lü	D ♭	8.376	1005.12	1024.578
Huang-chung, base	C	9	1080	1080

Of the twelve *lüis*, the foundation note known as *Huang Chung*, was thought to be the purest and consequently became the foundation of each dynasty. Produced by a pipe of mathematically correct ratios, the *Huang Chung* became a standardized unit of measurement for volume, weight and length in each kingdom. This was dependant on how many grains of rice the pipe could hold, how heavy it was and

the overall length.³⁹

The foundation note varied between different dynasties, representing vibrations of the shifting heavens and planets. The quest of each emperor, was to discover the precise pitch of the foundation tone, as they believed that the previous dynasty would not have ended if the kingdom were in tune with the cosmos. Consequently, each time the foundation note changed, so too did the kingdom's form of measurement.⁴⁰

Despite the discovery of the twelve-note scale, up to the time of the Yin dynasty (1300 B.C), only five intervals were in common use as shown below in Example 3.⁴¹

Ex. 3. J. A, Van Aalst, *Ancient Chinese Pentatonic Scale*.

宮 (*kung*),
商 (*shang*).
角 (*chiao*).
徵 (*chih*).
羽 (*yii*).

The five notes in the pentatonic scale represented values of benevolence, righteousness, propriety, knowledge and faith.⁴² Two additional notes were introduced at the beginning of the Chou dynasty (1100 B.C), creating a seven-note scale as shown below in Table 2 and Example 4.⁴³

³⁹ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 55-58

⁴⁰ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 57-58.

⁴¹ J. A, Van Aalst. *Chinese Music*. Imperial Maritime Customs. Vol. 6, Shanghai: Statistical Department of the Inspectorate General of Customs, 1884. 14.

⁴² Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 61.

⁴³ J. A, Van Aalst. *Chinese Music*. Imperial Maritime Customs. Vol. 6, Shanghai: Statistical Department of the Inspectorate General of Customs, 1884. 15.

Table 2. J. A, Van Aalst, *Scale used throughout Chou Dynasty.*

Name of Notes.	Lüs by which the Notes are produced.
Kung	Huang-chung
Shang	T'ai-ts'u
Chiao	Ki-hsi
Pien-chih	Jui-pin
Chih	Lin-chung
Yü	Nan-lü
Pien-kung	Ying-chung
Kung	Huang-chung

Ex. 4. J. A, Van Aalst, *Western equivalent notes of scale used through Chou Dynasty.*



Music held a vital role in Chinese culture and religion, instilled through the legend of Master Wen of Chen, who could control the elements with the four outer strings of his zither,⁴⁴ like the Greek prophet Orpheus. During liturgies and religious occasions, solstices and equinoxes, music held a significant role, releasing cosmic energy that would keep the kingdom aligned with the harmonies of the universe⁴⁵ and even prevent natural disasters.⁴⁶

Musicians of ancient China had an elevated status in society, responsible for manifesting elements of celestial order. They were required to have proficient musical skill, in addition to an in-depth knowledge of science. The courts commonly hired large numbers of musicians, believing that the more minds

⁴⁴ Sachs, Curt. *The Rise of Music in the Ancient World, East and West.* Courier Corporation, 2008. 107.

⁴⁵ Tame, David. *The Secret Power of Music.* Vermont: Destiny Books, 1984. 54.

⁴⁶ Tame, David. *The Secret Power of Music.* Vermont: Destiny Books, 1984. 24.

actively involved would produce greater amounts of cosmic energy. The T'ang dynasty had fourteen court orchestras, comprising between four hundred and five hundred musicians. One orchestra from this dynasty even consisted of 1346 musicians.⁴⁷

Like the civilisations of ancient Greece, music was vital to ensuring the stability of society. Philosopher Confucius (479 B.C – 551 B.C)⁴⁸ stated:

If one should desire to know whether a kingdom is well governed, if its morals are good or bad, the quality of its music will furnish the answer.⁴⁹

This is evident through Emperor Shun, who travelled annually throughout his kingdom to test the accuracy of each territory's five-note scale in accordance with the text *Shu King*, believing that the kingdom was shaped and moulded by the music performed within it.⁵⁰ David Tame explains:

Was a civilization's music wistful, romantic? Then the people themselves would be romantic. Was it strong and military? Then the nation's neighbours had better beware. Furthermore, a civilization remained stable and unchanged as long as its music remained unchanged. But to change the style of the music which people listened to would inevitably lead to a change in the very way of life itself.⁵¹

Education was essential in ancient China, cultivating citizens and promoting social order. During the Zhou Dynasty (1122 - 256 B.C)⁵² schools were primarily

⁴⁷ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 46.

⁴⁸ Froese, Katrin. "The Comic Character of Confucius." *Asian Philosophy* 24, no. 4 (2014): 1-18.

⁴⁹ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 35.

⁵⁰ David J. Elliot, Marissa Silverman. *Music Matters: A New Philosophy of Music Education*. Second Edition ed. United States of America: Oxford University Press, 2015. 307.

⁵¹ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 16.

⁵² "Zhou dynasty." In *Andromeda Encyclopedic Dictionary of World History*, edited by John Haywood. Windmill Books (Andromeda International), 2001. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/andedwh/zhou_dynasty/0?institutionId=781

established to educate the sons of aristocrats, until Confucius advocated an accessible education, open to all citizens regardless of gender or social status. Students were educated on morality, speech, history and government as well as the “six arts”, which included “ceremonies or ritual, music, archery, charioteering, the study of characters or language and arithmetic”.⁵³ The Book of Rites explains:

Rites and music were adopted by the three great former kings in educating their sons. Music was for the cultivation of the inside; rites for the outside. With rites and music combined in the young man’s inside and expressed in the outside, he becomes joyous, pious, and gentle.⁵⁴

Emperors throughout Chinese society advocated music education. Ancient texts *Yue Ji* (Record of Music) and *Yue Shu* (Book of Music) explain:

It is music which provides pleasure to the sages and (it is music) which improves the minds of the people. The ancient rulers used music in education as it influenced the people profoundly and changed their customs and manners...the superior man...uses music in a far-reaching manner to complete the education of his people. When music predominates and people develop their righteous character, one can behold the virtue of the ruler.⁵⁵

In essence, “music produces a kind of pleasure which human nature cannot do without”.⁵⁶

⁵³ David J. Elliot, Marissa Silverman. *Music Matters: A New Philosophy of Music Education*. Second Edition ed. United States of America: Oxford University Press, 2015. 126.

⁵⁴ Wang, Yuhwen. "The Ethical Power of Music: Ancient Greek and Chinese Thoughts." *Journal of Aesthetic Education* 38, no. 1 (2004): 89-104.

⁵⁵ Wang, Yuhwen. "The Ethical Power of Music: Ancient Greek and Chinese Thoughts." *Journal of Aesthetic Education* 38, no. 1 (2004): 89-104.

⁵⁶ Purushothaman, Dr. *What Confucius Said*. Centre For Human Perfection, 2014. 162.

1.4 Ancient India

Music of India is thought to be one of the oldest and most sophisticated throughout the world, dating back to 200 B.C.⁵⁷ Held in high esteem, music is featured prominently in Indian culture, philosophy, the cosmos and religion, being present during all religious occasions, ceremonies and private functions.⁵⁸ Similar to societies of ancient Greece and China, music is believed to contain a cosmic force, capable of empowering religious rituals, influencing character and moulding society.⁵⁹

According to Hinduism, the syllable *OM*, is a natural force, representing elements of celestial order. These elements govern the universe through powerful vibrations which cause atoms to coalesce. Therefore, when *OM* is uttered, it is believed that an alignment occurs between one's consciousness and the celestial tones.⁶⁰ The concept of cosmic energy originated from the Vedas, a series of ancient scriptures containing traditional hymns and rituals.⁶¹ Originating between 1000 B.C – 2000 B.C, the series contains four books known as *Rig-Veda*, *Sāma-Veda*, *Yajur-Veda* and *Atharva-Veda*.⁶² The Vedas are vital to Hindi meditation and worship, performed throughout temples and monasteries,⁶³ to stabilise the universe.⁶⁴ These ceremonies were conducted by priests in utmost secrecy, as it is believed that the

⁵⁷ Hickok, Robert. *Exploring Music*. Fifth Edition ed. University of California-Irvine Wm. C. Brown Communications, Inc. , 1989. 58.

⁵⁸ Bake, Arnold. "The Music of India." In *Ancient and Oriental Music* edited by Egon Wellesz. London: Oxford University Press, 1966. 196.

⁵⁹ Bake, Arnold. "The Music of India." In *Ancient and Oriental Music* edited by Egon Wellesz. London: Oxford University Press, 1966. 199.

⁶⁰ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 170.

⁶¹ Hickok, Robert. *Exploring Music*. Fifth Edition ed. University of California-Irvine Wm. C. Brown Communications, Inc. , 1989. 58.

⁶² Sachs, Curt. *The Rise of Music in the Ancient World, East and West*. Courier Corporation, 2008. 158.

⁶³ Deva, B. C. *Indian Music*. India: Indian Council for Cultural Relations, 1980. 2-8.

⁶⁴ Bake, Arnold. "The Music of India." In *Ancient and Oriental Music* edited by Egon Wellesz. London: Oxford University Press, 1966. 199.

knowledge of each ritual could be disastrous in the wrong hands.⁶⁵ Interestingly, traditional Vedic rituals continue to be performed to this day.⁶⁶

The *rāga*, is a traditional musical art form established in 400 B.C.,⁶⁷ reflecting different colours, days of the week, elements, seasons, zodiac signs, voices of animals and even different temperaments.⁶⁸ Each *rāga* is assigned to a particular time of day, using specific modes, characteristics, tempo, ornamentation and melodic contour.⁶⁹ It is crucial that these are performed at the appropriate time,⁷⁰ as according to legend, a musician of Emperor Akbar's court in the 16th century performed a night *rāga* during midday, resulting in the kingdom turning to darkness.⁷¹ Like the civilisations of ancient Greece and China, strict rules were placed around the composition of *rāga*,⁷² reinforcing beliefs of the overwhelming power of music.⁷³

⁶⁵ Bake, Arnold. "The Music of India." In *Ancient and Oriental Music* edited by Egon Wellesz. London: Oxford University Press, 1966. 202.

⁶⁶ Sachs, Curt. *The Rise of Music in the Ancient World, East and West*. Courier Corporation, 2008. 160.

⁶⁷ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 179.

⁶⁸ "Rāga." *The Oxford Dictionary of Music*, 2nd ed. rev.. *Oxford Music Online*. Oxford University Press, accessed June 29, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t237/e8290>

⁶⁹ Chalmers, Kenneth. "raga." *The Oxford Companion to Music*. *Oxford Music Online*. Oxford University Press, accessed June 29, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t114/e5473>

⁷⁰ Sachs, Curt. *A Short History of World Music*. London: Denis Dobson Ltd, 1969. 27.

⁷¹ Hickok, Robert. *Exploring Music*. Fifth Edition ed. University of California-Irvine Wm. C. Brown Communications, Inc. , 1989. 59.

⁷² Sachs, Curt. *A Short History of World Music*. London: Denis Dobson Ltd, 1969. 21.

⁷³ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 180.

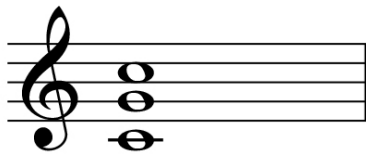
There are five sections of the *rāga* as shown in Table 3 below.⁷⁴

Table 3. *Structure of Rāga.*

Ālāpa	Prelude
Asthai	Theme
Antara	Second Subject
Sañcāri	Development
Ābog	Coda

The *rāga* commences with a slow prelude known as *ālāpa*, establishing the associated ethos and drone.⁷⁵ The drone provides a harmonic basis for the performance and is played continuously throughout the piece.⁷⁶ It is constructed of three notes (*svars*), the tonic (*sa*), dominant (*pa*) and octave as shown in Example 5.

Ex. 5. *Notated Drone.*



The *ālāpa* features improvisation, stressing the main ideas of the *rāga*,⁷⁷ while exploring the ascending and descending nature of the utilised scale. An example is the *Raag Khamaj* shown in Example 6.⁷⁸

⁷⁴ Bake, Arnold. "The Music of India." In *Ancient and Oriental Music* edited by Egon Wellesz. London: Oxford University Press, 1966. 215.

⁷⁵ Bake, Arnold. "The Music of India." In *Ancient and Oriental Music* edited by Egon Wellesz. London: Oxford University Press, 1966. 215.

⁷⁶ Hickok, Robert. *Exploring Music*. Fifth Edition ed. University of California-Irvine Wm. C. Brown Communications, Inc. , 1989. 59.

⁷⁷ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 182.

⁷⁸ Holroyde, Peggy. *Indian Music*. London: George Allen and Unwin Ltd, 1972. 56.

Ex. 6. *Raag Khamaj*.



As *rāgas* are essential to daily life in India, children are educated on the art form at a young age. They are often taught simplified *rāgas*, which exclude the improvisatory elements of the *ālāpa*.⁷⁹

The Hindu scale consist of seven notes (*svars*) as shown in Example 7.⁸⁰

Ex. 7. *Ancient Hindu Scale*.



It is interesting to note that this scale shares a resemblance to the western diatonic scale of C major, however it is not tempered and is characterised by microtones known as *srutis*.⁸¹ It was thought that this scale derived from nature, as:

The peacock utters the note *sa*;
the cātaka-bird *ri*;
the goat the note *ga*;
the krauñca bird *ma*;
the woodpecker with its clear voice *pa*;
the frog, excited by love, the note *dha*;
the elephant, hit on the head with the driver's hook,
utters the last note (*ni*) through its nose.⁸²

⁷⁹ Bake, Arnold. "The Music of India." In *Ancient and Oriental Music* edited by Egon Wellesz. London: Oxford University Press, 1966. 215.

⁸⁰ Hickok, Robert. *Exploring Music* Fifth Edition ed. University of California-Irvine Wm. C. Brown Communications, Inc. , 1989. 59.

⁸¹ Hickok, Robert. *Exploring Music*. Fifth Edition ed. University of California-Irvine Wm. C. Brown Communications, Inc. , 1989. 59.

Each of these *svars* are associated with a mood, as shown in the table below.⁸³

Table 4. *Mood associated with svars.*

Svars	Mood
Sa, Ma	Tranquillity
Re	Maliciousness
Oa	Joy
Ni	Sorrow
Ga, Dha	Pensiveness

As music was believed to be a powerful force, musicians in India were required to undergo intensive training, binding themselves to a guru for ten years or more. Students were expected to be of good moral and spiritual character, vowing to maintain a modest lifestyle. Within the Hindu text *Rāmāyama*, it states, that musicians must accept no money or any form of payment for their music, as it was believed “the knowledge and wisdom he imparts are thought to be priceless and far beyond any conceivable financial remuneration.”⁸⁴ During this time, musicians were expected to memorise more than sixty *rāgas* and rhythmic cycles known as *tālas*.⁸⁵

Music in ancient India was also linked with the supernatural. Legend depicts a girl who averted a famine in Bengal, through the explicit performance of a *rāga*, causing rain to fall on the crops below. Similarly, the legend of Emperor Akbar and the *Dipaka rāga*, also reinforces the idea of supernatural powers associated with music. According to the legend, Emperor Akbar was suspicious of the supernatural powers associated with the *Dipaka rāga*, as it was believed to

⁸² Bake, Arnold. "The Music of India." In *Ancient and Oriental Music* edited by Egon Wellesz. London: Oxford University Press, 1966. 211.

⁸³ Hickok, Robert. *Exploring Music* Fifth Edition ed. University of California-Irvine Wm. C. Brown Communications, Inc. , 1989. 59.

⁸⁴ Hickok, Robert. *Exploring Music*. Fifth Edition ed. University of California-Irvine Wm. C. Brown Communications, Inc. , 1989. 58–59.

⁸⁵ Hickok, Robert. *Exploring Music*. Fifth Edition ed. University of California-Irvine Wm. C. Brown Communications, Inc. , 1989. 58-59.

destroy by fire all who dared to perform it. Therefore, he ordered the famous musician, Naik Gopaul to perform. Being aware of the connotations of the *rāga*, Gopaul asked to be excused, however was granted six months leave instead to farewell his family and friends. Gopaul returned six months later during the winter. Despite icy temperatures, he waded into the Jumna river until he was almost entirely submerged, hoping the cold waters might soothe and protect him. He began singing no more than a few notes when the river grew hot and began to boil. At this point Gopaul begged the emperor to be excused, yet Akbar refused. Gopaul reluctantly continued to sing and consequently burst into flames.⁸⁶

Music of ancient India continues to hold great significance within all Indian societies,⁸⁷ contributing to the culture, religion, education and entertainment. Shankar summarizes explaining that: “The highest aim of our music is to reveal the essence of the universe it reflects”.⁸⁸

⁸⁶ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 172-173.

⁸⁷ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 184.

⁸⁸ Clayton, Martin. *Time in Indian Music*. New York: Oxford University Press, 2000. 10.

1.5 Traditional Māori Music

The Māori are known as *tangata whenua* – people of the land.⁸⁹ It was believed that Māori immigrated to New Zealand from Eastern Polynesia, around 1300 A.D,⁹⁰ sharing a culture similar to other Polynesian islands such as Tahiti, Hawaii, Tonga and Samoa.⁹¹

According to Māori mythology, there are a multitude of gods stemming from the Sky Father, *Ranginui e tū iho nei* and the Earth Mother *Papatūāuenuku*, often abbreviated to *Rangi* and *Papa*. The lineage of *Rangi* and *Papa* gave life to gods such as: *Tānemahuta*, the god of the forests and birds as well as father of man; *Tūmatauenga*, the god of war; *Tāwhirimātea*, the god of winds; *Tangaroa*, the god of the sea and *Rūaumoko*, *Papa*'s unborn child, who created an earthquake through his restlessness. Each of these gods provided the basis for different types of traditional instruments and music.⁹² It was believed that *Rangi* the Sky Father was responsible for melody and rhythm came from *Papa* the Earth Mother's beating heart. Their descendants provided materials for instruments as *Tānemahuta*, the god of the forest, gave trees and *Tangaroa* the god of the seas gave shells.⁹³ It was believed that these gods sang the world into existence: “Kei a te Pō te timatatanga o te waiatanga mai a te Atua. Ko te Ao, ko te Ao mārama, ko te Ao tū roa.”⁹⁴ This has been interpreted as “It was in the night, that the Gods sang the world into existence. From the world of light, into the world of music.”⁹⁵

⁸⁹ Te Ahukaramū Charles Royal. 'Māori - Pre-European society', Te Ara - the Encyclopaedia of New Zealand, updated 3-Feb-15
<http://www.TeAra.govt.nz/en/maori/page-2>

⁹⁰ McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996. 10.

⁹¹ Barrow, Terence. *Music of the Maori: Traditional and Modern Music of the Maori*. Wellington, New Zealand: Seven Seas Publishing Pty Ltd, 1965. 5-6.

⁹² Flintoff, Brian. *Taonga Pūoro: Singing Treasures: The Musical Instruments of the Māori*. Nelson, New Zealand: Craig Potton Publishing 2011. 12.

⁹³ Flintoff, Brian. *Taonga Pūoro: Singing Treasures: The Musical Instruments of the Māori*. Nelson, New Zealand: Craig Potton Publishing 2011. 13-14.

⁹⁴ Flintoff, Brian. *Taonga Pūoro: Singing Treasures: The Musical Instruments of the Māori*. Nelson, New Zealand: Craig Potton Publishing 2011. 12.

⁹⁵ Flintoff, Brian. *Taonga Pūoro: Singing Treasures: The Musical Instruments of the Māori*. Nelson, New Zealand: Craig Potton Publishing 2011. 12.

Music held a special purpose within Māori societies, being utilised in everyday life. It was believed that:

Every occasion had its song or chant which in some way served a useful purpose: it could avert evil, relieve the mind of sorrow when a battle was lost or a loved one killed, or obtain the love of a woman on whom the heart was set. In other words, old Maori music had a magical power which was used to bring about favourable circumstances or secure some objective.⁹⁶

Māori spells and incantations, known as *karakia* which were either sung or recited in a rhythmical monotone,⁹⁷ were used to assist daily activities, providing rhythm and removing monotony from daily tasks.⁹⁸ It was believed that these prayers contained great power, capable of curing injuries and protecting against danger. Interestingly, the efficacy of the *karakia* depended on correct rhythm and intonation of the performer. If performed incorrectly, the *karakia* was rendered powerless and could result in punishment from the gods,⁹⁹ similar to an incorrect performance of a *rāga* in ancient India.

Hundreds of *karakia* were employed throughout different tribes and a selection is shown in the table below.¹⁰⁰

⁹⁶ Barrow, Terence. *Music of the Maori: Traditional and Modern Music of the Maori*. Wellington, New Zealand: Seven Seas Publishing Pty Ltd, 1965. 6.

⁹⁷ Andersen, Johannes C. *Maori Music with Its Polynesian Background* New Plymouth: Thomas Avery & Sons, Limited 1934. 377.

⁹⁸ Barrow, Terence. *Music of the Maori: Traditional and Modern Music of the Maori*. Wellington, New Zealand: Seven Seas Publishing Pty Ltd, 1965. 17.

⁹⁹ McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996. 35.

¹⁰⁰ McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996. 35.

Table 5. McLean, Mervyn, *Description and purpose of Karakia*.

Karakia	Description
<i>aatahu</i>	love charms
<i>hoa</i>	to spilt stones, wither leaves, kill a bird
<i>hoa taupae</i>	to give speed to the feet and to retard an opponent
<i>hono</i>	to unite fractures
<i>kaha</i>	to gain success in fowling
<i>kawa</i>	to remove the tapu from new houses.
<i>kii tao</i>	to give power to spears (weapons); also ‘ <i>reo tao</i> ’
<i>kii rakua</i>	to give power to weapons
<i>ngau paepae</i>	to avert sorcery against a war party
<i>pou</i>	to fix, such as the memory during instruction
<i>raaoa</i>	to expel the foreign body in choking
<i>rotu</i>	to put people or the sea to sleep
<i>taa koopito</i>	to cure abdominal troubles
<i>tohi</i>	to sprinkle a child in the dedication or <i>tua</i> ceremony
<i>tohi taua</i>	to sprinkle a war party proceeding to war
<i>tuuaa</i>	to dedicate children after cutting the navel cord
<i>tuuaa paa:</i>	to ward off ill luck
<i>whai</i>	to cure injuries burns, choking
<i>whakanoa</i>	to make common (<i>noa</i>) by removing <i>tapu</i>

The Māori believed that the world around them was linked to their spirituality. They felt reluctant to utilise any natural resources without the spiritual authority of the tribe’s priest, known as *tohunga*¹⁰¹ and their music was based on the natural world, deriving elements of rhythm and melody from bird songs and the rhythmic chirping of cicadas.¹⁰²

Traditional Māori instruments were constructed from bone, wood, stone or leaves,

¹⁰¹ Royal, Te Ahukaramū Charles. *Māori - Pre-European society*. Te Ara - the Encyclopaedia of New Zealand. updated 3-Feb-15

¹⁰² Barrow, Terence. *Music of the Maori: Traditional and Modern Music of the Maori*. Wellington, New Zealand: Seven Seas Publishing Pty Ltd, 1965. 7.

as provided by the gods.¹⁰³ The main instrument used was the human voice, followed by traditional flutes such as the *kōauau*, *pūtōrino*, *pōrutu* and *nguru*. The *kōauau* was usually constructed from human bones such as the humerus and femur or occasionally wood.¹⁰⁴ This flute consisted of a conical bore, open at both ends, which usually featured three tone holes.¹⁰⁵ The *kōauau* can produce a range of five semitones, however the pitch was dependant on air speed and embouchure position. Example 8 demonstrates the range of a *kōauau* measuring 146mm in length, 22mm bore and a bottom of 16mm.¹⁰⁶

Ex. 8. Andersen, Johannes C., *Range produced by kōauau*.



The *kōauau* was commonly featured during funerals, and was thought to express sorrow. It is unknown why the Māori used this particular instrument, however Taonga Pūoro expert Richard Nunns suggests the timbre of this flute resembles the crying of human voices.¹⁰⁷

The *pūtōrino* is a unique wind instrument, combining timbres of the flute, trumpet and human voice. Constructed of wood, it was believed the *pūtōrino* held great power, and was often depicted in carvings of great ancestors. The instrument originated from the mythological story of the goddess of Arts of Pleasure – *Hineraukatauri*,¹⁰⁸ who made shelter from a woven cocoon of a case moth. Accordingly, she would rise to the top of the cocoon, emitting a siren song, like

¹⁰³ Nunns, Richard. *Te Ara Puoro: A Journey Into The World of Māori Music*. Nelson, New Zealand: Craig Potton Publishing 2014. 32.

¹⁰⁴ Nunns, Richard. *Te Ara Puoro: A Journey Into The World of Māori Music*. Nelson, New Zealand: Craig Potton Publishing 2014. 28.

¹⁰⁵ Andersen, Johannes C. *An Introduction to Maori Music*. Wellington Government Printing Office, 1923. 750.

¹⁰⁶ Andersen, Johannes C. *An Introduction to Maori Music*. Wellington Government Printing Office, 1923. 752.

¹⁰⁷ Nunns, Richard. *Te Ara Puoro: A Journey Into The World of Māori Music*. Nelson, New Zealand: Craig Potton Publishing 2014. 62-63.

¹⁰⁸ Flintoff, Brian. *Taonga Pūoro: Singing Treasures: The Musical Instruments of the Māori*. Nelson, New Zealand: Craig Potton Publishing 2011. 65.

the sound of a flute when she wished to mate. However, once this occurred she would trap the male in the cocoon where his body would provide food for her spawn.¹⁰⁹ It is interesting to note that every song within traditional Māori music, focused on the text. Therefore, the music of the *kōauau* and *pūtōrino* always had words which could be heard through the instrument.¹¹⁰ Several legends depict secret messages breathed through these instruments.¹¹¹ These flutes were highly regarded in Māori society, New Zealand historian, John Mansfield Thompson explains:

Māori people loved the flute and held those who played them in high regard. Wondrous romantic tales were woven around them. It is claimed that players could literally make them talk and that words breathed into them could be carried by the simple notes of the song. Universally, love may be blind, but in the Māori world it apparently had a heightened auditory effect.¹¹²

The Māori people also utilised leaves to create instruments such as the *tuarōtia*, made to imitate bird calls necessary during hunting or to consult the birds as spiritual guardians.¹¹³

Māori societies believed that music possessed unique healing properties. It was believed that if a *kōauau* was constructed from the bone of an ancestor it could ease pain and transmit strength and endurance from their ancestry. The *pūmotomoto*, was often associated with fertility, pregnancy and birth. A common practise was to play the instrument regularly on the stomach of a mother throughout her pregnancy, and after the birth on the baby, until the child's

¹⁰⁹ Nunns, Richard. *Te Ara Puoro: A Journey Into The World of Māori Music* Nelson, New Zealand: Craig Potton Publishing 2014. 69-75.

¹¹⁰ Flintoff, Brian. *Taonga Pūoro: Singing Treasures: The Musical Instruments of the Māori*. Nelson, New Zealand: Craig Potton Publishing 2011. 23.

¹¹¹ Flintoff, Brian. *Taonga Pūoro: Singing Treasures: The Musical Instruments of the Māori*. Nelson, New Zealand: Craig Potton Publishing 2011. 16.

¹¹² Thomson, John Mansfield. *The Oxford History of New Zealand Music*. Auckland Oxford University Press, 1991. 2.

¹¹³ Nunns, Richard. *Te Ara Puoro: A Journey Into The World of Māori Music*. Nelson, New Zealand: Craig Potton Publishing 2014. 32.

fontanelle had completely ossified.¹¹⁴ Different tribes often had different practises associated with each instrument. For example, the tribes of *Te Whānau-a-Apūnī* would often play the *kōauau* over a broken bone, believing that regular playing would assist healing. In *Tūhoe*, instruments such as *porotiti* (*kōrorohū*) were used as healing tools, being played over the head and upper body of a sleeping child suffering from either chest or sinus congestion. Within the *Rutatāhuna* community, the *porotiti* was used by elders suffering from arthritis, as it was believed that the instrument could provide relief to suffering joints.¹¹⁵ Music was also used during medical procedures. The healing expert of the tribe known as the *tohunga rongōā*, would select a stone similar in size and shape of the internal organ to be treated. Placing the stone on the affliction, he would begin to tap the stone with a rod until it was in the correct position. Once positioned a *karakia* began, drawing the infection into the stone.¹¹⁶

The Māori believed that music was vital to the welfare of society, rather than purely a source of personal pleasure.¹¹⁷ As the Māori had no written language,¹¹⁸ music became a vehicle to retell legendary stories and transmit knowledge of the past from each generation. In the *Oxford History of New Zealand Music*, John Mansfield Thompson expresses:

In waiata (traditional songs) both the incidents of the past and their high-born composers live again. Songs are not just formulae of notes and words, however beautiful, but a reforming of the community of the present, and in performance, a recollection of the community of the past. These songs put us in touch with ourselves, our identity, and our roots, for as we sing them the scenes of history and visions of ancestors pass dimly

¹¹⁴ Nunns, Richard. *Te Ara Puoro: A Journey Into The World of Māori Music*. Nelson, New Zealand: Craig Potton Publishing 2014. 59-60.

¹¹⁵ Nunns, Richard. *Te Ara Puoro: A Journey Into The World of Māori Music*. Nelson, New Zealand: Craig Potton Publishing 2014. 58-60.

¹¹⁶ Nunns, Richard. *Te Ara Puoro: A Journey Into The World of Māori Music*. Nelson, New Zealand: Craig Potton Publishing 2014. 61.

¹¹⁷ Barrow, Terence. *Music of the Maori: Traditional and Modern Music of the Maori*. Wellington, New Zealand: Seven Seas Publishing Pty Ltd, 1965. 10.

¹¹⁸ Barrow, Terence. *Music of the Maori: Traditional and Modern Music of the Maori*. Wellington, New Zealand: Seven Seas Publishing Pty Ltd, 1965. 8.

before our eyes and for a brief moment time coalesces and we and they are one. Songs are an indispensable part of community life and culture. They have the power to reach down into us to wrench our inner selves from their moorings and cause the world to glisten and we are reborn, reshaped and revitalized.¹¹⁹

Instruments were also used in Māori tribes for entertainment purposes and instruments such as the *porotiti* (a spinning disc) functioned purely for this purpose. Richard Nunns explains that:

At night, a player in one village would begin a melody on the *kōauau*. This fragment would carry to an adjacent village, where a player would continue the melodic sequence, and so on, until the playing had circled its way around the villages and returned to the original village.¹²⁰

Most traditional songs were accompanied by body percussion, providing rhythm through feet stamping and arm slapping known as a *haka*.¹²¹ A *haka* is a dance with shouted accompaniment, often performed for amusement, welcoming guests or even during war. It was often thought to be the equivalent of western dance rituals, and had strong associations with courting behaviour.¹²² It is interesting to note that variations of the *haka* are still performed to this day, such as the famous *ka mate haka*. *Haka* has become part of New Zealand's identity, being performed during Māori meetings and during international sporting events. The *ka mate haka* is shown below in Example 9.¹²³

¹¹⁹ Thomson, John Mansfield. *The Oxford History of New Zealand Music*. Auckland Oxford University Press, 1991. 1.

¹²⁰ Nunns, Richard. *Te Ara Puoro: A Journey into the World of Māori Music*. Nelson, New Zealand: Craig Potton Publishing 2014. 64-65.

¹²¹ Barrow, Terence. *Music of the Maori: Traditional and Modern Music of the Maori*. Wellington, New Zealand: Seven Seas Publishing Pty Ltd, 1965. 7.

¹²² McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996. 45-46.

¹²³ McLean, Mervyn. *Weavers of Song*. University of Auckland: Auckland University Press, 1999. 327.

Ex. 9. McLean, Mervyn, *Ka Mate*.

♩. = 70

Leader Chorus et seq.

Ka ma-te, ka ma-te! Ka o-ra, ka o-ra! Ka ma-te, ka ma-te! Ka o-ra, Ka o-ra! Te-nei te ta-nga-ta

11
pu - hu - ru - hu - ru na - na i - ti - ki mai wha - ka - whi - ti te ra! (Au - e)

18
U - pa - ne! (Au - e) U - pa - ne (Au - e) U - pa - ne! Kau-pa - ne! Whi - ti te ra!

Various instruments were used to accompany the *haka* such as *poi*. Constructed from flax woven into a ball, *poi* were used to create a rhythmical effect, through the action of striking one's arm or shoulder, to produce a distinctive beat.¹²⁴ Interestingly, the Māori had no traditional drum, unlike their Polynesian cousins in other parts of the Pacific.¹²⁵ The *haka* was also used as a war dance, intended to intimidate the enemy. The most well-known being the *peruperu* and *tūtūngārhu*.¹²⁶ Performed with weapons at any point during a battle, the *peruperu* signalled either defiance or victory. Contrastingly, the warriors performed a *tūtūngārhu* for supernatural purposes, as it was believed the dance could predict the outcome of a battle. The elderly men of the tribe would observe the dancers' feet and if even one man was out of time, it was believed to be a bad omen and the battle would be called off.¹²⁷ Songs were also used during wartime, usually to challenge opponents or celebrate victories, while *karakia* provided support from the gods.¹²⁸

¹²⁴ Nunns, Richard. *Te Ara Puoro: A Journey into the World of Māori Music*. Nelson, New Zealand: Craig Potton Publishing 2014. 52.

¹²⁵ Andersen, Johannes C. *Maori Music with Its Polynesian Background*. New Plymouth: Thomas Avery & Sons, Limited 1934.196.

¹²⁶ Andersen, Johannes C. *Maori Music with Its Polynesian Background*. New Plymouth: Thomas Avery & Sons, Limited 1934. 307.

¹²⁷ McLean, Mervyn. *Weavers of Song*. University of Auckland: Auckland University Press, 1999. 327-328.

¹²⁸ McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996. 27.

In Māori culture, incidental learning was favoured over formal instruction. Situated in a communal society, children would learn knowledge of history, mythology and songs through observing their elders.

To keep their own memories green, the old people in the evenings or early mornings sang through their repertoire of songs while reclining in the tribal meeting-house and the older children learned them so as to join in with the community singing. Speeches were always brightened with appropriate songs or historical dirges, and the speaker often called upon his people to give volume to the song. When the chorus stood up, it was a matter of pride to the younger people to be able to join in. Thus, there were both opportunity and incentive for the adolescents to improve their knowledge of classical language and acquire an extensive repertoire of figures of speech, proverbs and sayings, and chants and songs which would be appropriate for various occasions.¹²⁹

Despite this, esoteric knowledge such as the *karakia* was taught traditionally, through formal instruction in houses of learning known as *whare wānanga*.¹³⁰ However, only young men of high rank were admitted. According to Māori mythology, it was believed that the original house of learning, known as *rangiaatea* was situated in heaven, from which the god *Tānemahuta* received three baskets and two sacred stones of knowledge. The baskets were believed to be *kete uruuru matua* of peace, goodness and love, *kete uruuru rangi* of players, incantations and rituals, and *kete uruuru tau* of war, agriculture, wood, stone and earthwork. These baskets formed the basis of the curriculum within *whare wānanga*.¹³¹

The first encounter between Māori and Europeans occurred in December 1642, when Dutch explorer Abel Tasman anchored off the northwest coast of the South

¹²⁹ McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996. 221.

¹³⁰ McLean, Mervyn. *Weavers of Song*. University of Auckland: Auckland University Press, 1999. 335.

¹³¹ McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996. 224-225.

Island of New Zealand. The first communication was established through musical means, as the Māori and Dutch improvised music on their respective trumpet instruments. Despite music being thought of as a universal language, a musical misunderstanding occurred. Māori trumpets were used to challenge the Europeans, as an invitation to fight, however the European explorers played with friendly intentions as an invitation to meet.¹³² The next day, Abel Tasman sent six men of his crew ashore, of which four were beaten to death by the Māori, giving the name to ‘Murderers’ Bay’. Abel Tasman sailed away disgusted, unaware he probably received and accepted a challenge to fight.¹³³

Over a hundred and thirty years passed before the next encounter of the Europeans and Māori.¹³⁴ In 1769, Cook circumnavigated New Zealand, being met by war canoes, filled with Māori warriors, shouting threats, performing war dances and even attacking his ship.¹³⁵ He recounted in his journal:

Whenever we were Visited by any number of them that had never Heard or seen any thing of us before they generally came off in the largest Canoes they had, some of which will carry 60, 80 or 100 people, they always brought their best close along with them which they put on as soon as they came near the ship. In each Canoe were generally an old man, in some two or three, these use’d always to direct the others, were better Clothed and generally carried a halberd or battle ax in their hands or some such like thing that distinguished them from the others. As soon as they came within about a stone’s throw from the ship they would there lay and call out ‘Haromai hareuta a patoo age’, that is come here, come ashore with us and we will kill you with our patoo patoo’s, and at the same time would shake

¹³² Mantere, Juha Markus, and Vesa Kurkela. 2015. *Critical Music Historiography : Probing Canons, Ideologies and Institutions*. Farnham: Routledge, 2015. *eBook Collection (EBSCOhost)*, EBSCOhost (accessed May 29, 2016).

¹³³ McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996. 23.

¹³⁴ Lodge, Martin. "Music Historiography in New Zealand." In *Music's Intellectual History*, edited by Barbara Dobbs Mackenzie Zdravko Blažekovič. New York: RILM 2009. 267.

¹³⁵ McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996. 23-24.

them at us, at times they would dance the war dance, and other times they would trade with and talk to us and answer such questions as were put to them with all the Calmness emaginable and then again begin the war-dance, shaking their paddles patoo patoo's &c and make strange contorsions at the same time, and as soon as they had worked themselves up to a proper pitch they would begin to attack us with stones and darts and oblige us whether we would or no to fire upon them. Musquetary they never regarded unless they felt the effect but great guns they did because these could throw stones farther than they could comprehend.¹³⁶

Captain Cook's multiple voyages to New Zealand, provided many opportunities to observe Māori life and traditional music. He admired their sense of rhythm, recounting:

In their song they keep time with such exactness, that I have often heard above one hundred paddles struck against the sides of their boats at once, so as to produce but a single sound at the divisions of their music.¹³⁷

Due to the unique sounds produced by traditional Māori instruments, Europeans often thought they were peculiar.

They have sonorous instruments, but they can scarcely be called instruments of music; one is the shell, called the Triton's trumpet, with which they make a noise not unlike that which our boys sometimes make with a cow's horn: the other is a small wooden pipe, resembling a child's ninepin, only much smaller, and in this there is no more music than in a pea-whistle. They seem sensible indeed that these instruments are not musical; for we never heard an attempt to sing to them, or to produce with them any measured tones that bore the least resemblance to a tune.¹³⁸

¹³⁶ McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996. 24.

¹³⁷ Thomson, John Mansfield. *The Oxford History of New Zealand Music*. Auckland Oxford University Press, 1991. 10.

¹³⁸ Andersen, Johannes C. *Maori Music with Its Polynesian Background*. New Plymouth: Thomas Avery & Sons, Limited 1934. 9.

The traditional music of the Maori went into decline after the European colonisation. Early Christian missionaries suppressed the use of Māori instruments, as they held intricate ties to Māori spirituality.¹³⁹ Another possible cause of the decline may be due to the fragile nature of the instruments.¹⁴⁰ During the eighteenth century, European instruments such barrel organs, musical boxes and Jew's harps became common sometimes even used as payment for land in the Wellington region, this was followed by the introduction of violins, flutes and pianos.¹⁴¹

¹³⁹ Lodge, Martin. "Music Historiography in New Zealand." In *Music's Intellectual History*, edited by Barbara Dobbs Mackenzie Zdravko Blažekovič. New York: RILM 2009. 628.

¹⁴⁰ Flintoff, Brian. *Taonga Pūoro: Singing Treasures: The Musical Instruments of the Māori*. Nelson, New Zealand: Craig Potton Publishing 2011. 17.

¹⁴¹ Thomson, John Mansfield. *The Oxford History of New Zealand Music*. Auckland Oxford University Press, 1991. 11.

1.6 Early Christianity

Early Christian congregations developed in synagogues, inheriting cultural traits from the Jewish faith. Christian beliefs were based on Hebrew scriptures known as the Old Testament and share many similarities with the Jewish faith, such as chanting ancient texts and imitating the Passover Feast through the celebration of the Eucharist.¹⁴² Music in the church became a way to praise God, impart knowledge and ensure good moral character, similar to practices of other ancient cultures. Today, music is essential to the mass and is featured prominently in churches around the world.

In Rome, Christians were initially forced to carry out religious practises in secret, for fear of persecution. However, in 312 A.D, Emperor Constantine converted to Christianity and Christians were afforded equal rights in the empire.¹⁴³ Christian churches emerged from underground services and as more citizens converted, larger venues were required, commencing the construction of monasteries and basilicas.¹⁴⁴

Due to the increasing number of Christians, philosophers and theologians of the time attempted to revise the mass and the role of music in the church. Criticism arose, as some believed music to be a product of the devil, bringing corruption, whereas others believed that it represented harmony and provided spiritual uplifting.¹⁴⁵ A group known as The Fathers of the Church, were equipped with the task of interpreting the Bible and guiding the church. The group consisted of writers and scholars who followed Pythagorean tradition, believing that music could establish harmony and influence the character of its listeners.¹⁴⁶ The Bishop

¹⁴² Donald Jay Grout, Claude V. Palisca. *A History of Western Music*. Fifth Edition ed. New York W. W. Norton & Company, Inc., 1996. 18-19.

¹⁴³ Donald Jay Grout, Claude V. Palisca. *A History of Western Music*. Fifth Edition ed. New York W. W. Norton & Company, Inc., 1996. 19.

¹⁴⁴ Donald Jay Grout, Claude V. Palisca. *A History of Western Music*. Fifth Edition ed. New York W. W. Norton & Company, Inc., 1996. 25.

¹⁴⁵ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 60.

¹⁴⁶ Donald Jay Grout, Claude V. Palisca. *A History of Western Music*. Fifth Edition ed. New York W. W. Norton & Company, Inc., 1996. 25-26.

of Constantinople, St John Chrysostom shared similar beliefs, stating: “God ‘blended melody with prophecy in order that, delighted by the modulation of the chant, all might with great eagerness give forth sacred hymns to Him.”¹⁴⁷ . Similarly, St Jerome thought “we ought to sing and to make melody and to praise the Lord more with the heart than with the voice”.¹⁴⁸ This follows the Pythagorean tradition, that silent song links one to the harmony of universe. Other writers such as St Basil believed that music in the church should be presented didactically, in the hope that truths would be more acceptable to the congregation through musical indulgence.¹⁴⁹

In 367 A.D, the Council of Laodicea banned the use of musical instruments and congregations in the church,¹⁵⁰ rejecting the idea of music for enjoyment as they did not want converts to be associated or reminded of their pagan past.¹⁵¹ Despite this, Christians were permitted to use a lyre to accompany hymns and psalms in their homes and during informal occasions. The restricted use of instruments caused complications as many passages in the Old Testament reference the use of instruments, such as the harp and organ to praise God, as shown in Example 10.¹⁵²

Ex. 10. *Psalm 150*.

Praise ye the Lord. Praise God in his sanctuary: praise him in the firmament of his power. Praise him for his mighty acts: praise him according to his excellent greatness. Praise him with the sound of the trumpet: Praise him with the psaltery and the harp. Praise him with the

¹⁴⁷ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 62.

¹⁴⁸ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 63.

¹⁴⁹ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 62.

¹⁵⁰ Sachs, Curt. *A Short History of World Music*. London: Denis Dobson Ltd, 1969. 52.

¹⁵¹ Donald Jay Grout, Claude V. Palisca. *A History of Western Music*. Fifth Edition ed. New York W. W. Norton & Company, Inc., 1996. 18.

¹⁵² Carroll, Robert P., and Stephen. Prickett. *The Bible : Authorized King James Version*. Oxford World's Classics (Oxford University Press). Oxford ; New York: Oxford University Press, 1998. 722.

timbrel and dance: praise him with instrumented instruments and organs. Praise him upon the loud cymbals: praise him upon the high sounding cymbals. Let everything that hath breath praise the Lord. Praise ye the Lord.

As a result, the council promoted a metaphorical interpretation of the scripture, stating that the harp represented our mouth and the organ, our body.¹⁵³ The role of music during the Middle Ages remained unclear as there were two main beliefs. Firstly, that the role of music was to praise God and secondly, that music could also be used for sensory pleasure, as promoted by Aristotle.¹⁵⁴

Roman philosopher and mathematician Boethius (480 – 524)¹⁵⁵ wrote a five-volume treatise on music and metre known as *De institutione musica*.¹⁵⁶ In the heading of the introduction to Book I, Boethius expresses pure Pythagorean beliefs: “Music is related to us by Nature, and can ennoble or corrupt the character.”¹⁵⁷

...music is so much a part of our nature that we cannot do without it, even if we wish to, the power of the mind should nevertheless be directed to the purpose of comprehending by knowledge what is inherent in Nature. Just as, in the study of vision, the learned are not content to behold colours and forms without investigating their properties, so they are not content to be

¹⁵³ Donald Jay Grout, Claude V. Palisca. *A History of Western Music*. Fifth Edition ed. New York W. W. Norton & Company, Inc., 1996. 26.

¹⁵⁴ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 72.

¹⁵⁵ Rumbold, Ian. "spheres, music of the." *The Oxford Companion to Music*. *Oxford Music Online*. Oxford University Press, accessed May 9, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t114/e6387>

¹⁵⁶ "Boethius, Anicius Manlius Torquatus Severinus." *The Oxford Dictionary of Music*, 2nd ed. rev.. *Oxford Music Online*. Oxford University Press, accessed August 29, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t237/e1325>

¹⁵⁷ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 72.

delighted by melodies without knowing by what proportions of sounds these are interrelated.¹⁵⁸

Philosopher and music theorist Cassiodorus, shared similar ideas to Boethius. In his institutions to music he wrote: “If we live virtuously, we are constantly proved to be under [music’s] discipline, but when we commit injustice we are without music.”¹⁵⁹ He believed music and religion were closely tied, as music held supernatural powers able to restore health.

St Augustine, known for his medieval treatise *De Musica*, believed music to be an operation of the soul which could lead to enlightenment.¹⁶⁰ He explains:

The tears flowed from me when I heard your hymns and canticles, for the sweet singing of your Church moved me deeply. The music surged in my ears, truth seeped into my heart, and my feelings of devotion overflowed, so that the tears streamed down. But they were tears of gladness.¹⁶¹

Despite a love of music, St Augustine was conflicted, harbouring guilt for musical indulgences. In his *Confessions*, he states, “It is fitting for a well-balanced person...to enjoy this pleasure at certain times, but it is unbecoming and shameful if he allows himself to be carried away by it, even occasionally.”¹⁶²

For these reasons, The Council of Tours (818) spoke against music due to fear of corruption. As:

¹⁵⁸ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 72-73.

¹⁵⁹ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 77.

¹⁶⁰ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 63–67.

¹⁶¹ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 69.

¹⁶² Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 64.

Everything that can lead the ears and the eyes astray and can corrupt the vigour of the mind is to be kept away from God's priests, for it is by tickling the ear and beguiling the eye that the multitude of sins generally enters into the soul.¹⁶³

Ultimately St Augustine believed that the beauty of music has the right of our attention if we are not dependent on it.¹⁶⁴

The pleasure that beauty can awaken is thus not to be ruled out as long as it is kept within the purview of the intellect, and as long as it is considered merely as a stage or step in the ascent towards, eternal, disembodied beauty.¹⁶⁵

Early Christian music was significantly influenced by ancient Greece and its culture, following similar traditions and beliefs. The church inherited Greek modes,¹⁶⁶ and the idea of the supernatural power of music. An example can be seen through the powers of Orpheus which are now attributed to biblical singer David.¹⁶⁷ The Old Testament of the Bible depicts David and the therapeutic qualities of his harp, which uplift an evil spirit consuming Saul.¹⁶⁸ The power of music is also depicted through the biblical account of Joshua and the walls of Jericho. Joshua was instructed by God to secure the city of Jericho, however a great wall encompassed the city. Therefore, seven priests marched around the city blowing trumpets made from rams' horns, for seven days until the walls

¹⁶³ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 85.

¹⁶⁴ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 67-69

¹⁶⁵ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 69.

¹⁶⁶ Sachs, Curt. *A Short History of World Music*. London: Denis Dobson Ltd, 1969. 58.

¹⁶⁷ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 62.

¹⁶⁸ Carroll, Robert P., and Stephen. Prickett. *The Bible : Authorized King James Version*. Oxford World's Classics (Oxford University Press). Oxford ; New York: Oxford University Press, 1998. 1 Samuel 16: 14 – 23.

crumbled.¹⁶⁹ It is evident that like ancient cultures of Greece, China, India and New Zealand, music holds a significant role within Christianity which is still evident today.

¹⁶⁹ Robert P. Carroll, Stephen Prickett. *The Bible : Authorized King James Version*. Oxford World's Classics (Oxford University Press). Oxford ; New York: Oxford University Press, 1998. Joshua 6: 1–27.

1.7 Function of Music

Music is a universal phenomenon, being an integral part of societies throughout history.¹⁷⁰ It has been a contributing factor to culture, education and religion.

Evolutionist Charles Darwin, was the first to speculate a biological need for music. He believed that music was essential to sexual selection and courting, functioning like peacock feathers to attract a suitable mate. He even suggested that music preceded speech.¹⁷¹ Similarly, ethnomusicologist Alan Merriam (1923-1980),¹⁷² suggests ten prominent functions of music, as shown below in Example 11.¹⁷³

Ex. 11. Merriam, Alan, *Functions of music in society*.

1. Emotional expression
2. Aesthetic enjoyment
3. Entertainment
4. Communication
5. Symbolic representation
6. Physical response
7. Enforcing conformity to social norms
8. Validating social institutions and religious rituals
9. Contribution to the continuity and stability of culture
10. Contribution to the integration of society.

¹⁷⁰ David J. Elliot, Marissa Silverman. *Music Matters: A New Philosophy of Music Education*. Second Edition ed. United States of America: Oxford University Press, 2015. 75.

¹⁷¹ Levitin, Daniel. *This Is Your Brain on Music*. London: Atlantic Books, 2006. 249-255.

¹⁷² Paula Morgan and Bruno Nettl. "Merriam, Alan P.." *Grove Music Online*. *Oxford Music Online*. Oxford University Press, accessed September 25, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/18460>

¹⁷³ Merriam, Alan P. *The Anthropology of Music*. Evanston, Ill.: Northwestern University Press, 1964. 222-226.

Merriam suggests that music functions in all societies as a symbolic representation of ideas and behaviours. An example of this can be observed in the ancient Chinese pentatonic scale, with each note representing a different quality.¹⁷⁴ Symbolic representation also occurs in India, where *rāgas* are used to represent different seasons, zodiac signs, elements and even different temperaments.¹⁷⁵ Similarly, this also occurs in contemporary societies, as sequences of notes are often used to evoke specific emotions. For example, the Western harmonic minor scale as shown below in Example 12,¹⁷⁶ is often associated with sadness.

Ex. 12. *Harmonic minor scale in C.*



Merriam continues suggesting that music is able to elicit physical responses, and is capable of exciting, calming and can even causing involuntary movements. This can be witnessed in ancient cultures marching to the beat of war drums, or even in traditional Māori societies, where tribes would chant songs to paddle in time with one another.¹⁷⁷ Civilisations of ancient Greece also utilised music for physical responses to assist those who suffered from speech disorders.¹⁷⁸ Interestingly, music is still used to provoke physical responses through the practise of music therapy.¹⁷⁹

¹⁷⁴ Tame, David. *The Secret Power of Music*. Vermont: Destiny Books, 1984. 61.

¹⁷⁵ Sachs, Curt. *A Short History of World Music*. London: Denis Dobson Ltd, 1969. 27

¹⁷⁶ Merriam, Alan P. *The Anthropology of Music*. Evanston, Ill.: Northwestern University Press, 1964. 237.

¹⁷⁷ Thomson, John Mansfield. *The Oxford History of New Zealand Music*. Auckland Oxford University Press, 1991. 10.

¹⁷⁸ Sacks, Oliver. *Musophilia*. London: Picador, 2008. 235.

¹⁷⁹ William B. Davis, Kate E. Gfeller, Michael H. Thaut. *An Introduction to Music Therapy, Theory and Practice*. Third Edition. ed. Silver Spring, Maryland: American Music Therapy Association, Inc, 2008. 8.

Music is also used to validate social institutions and religious rituals, as well as informing proper behaviour. Institutions are often validated through songs which depict history or legend while regulating behaviour and thought. This occurred during the establishment of early Christianity, when St Basil promoted a didactic approach towards music during mass, to educate congregations.¹⁸⁰ Similarly, in modern day, hymns, school songs and even national anthems, continue to provide a historical background while instilling specific morals and behaviours.¹⁸¹

Based on these reasons, Merriam suggests that music contributes significantly to the continuity and stability of cultures. He explains that:

If music allows emotional expression, gives aesthetic pleasure, entertains, communicates, elicits physical response, enforces conformity to social norms, and validates social institutions and religious rituals, it is clear that it contributes to the continuity and stability of culture...(music) shares its function with others of the arts. As a vehicle of history, myth, and legend it points up the continuity of culture; through its transmission of education, control of erring members of the society and stress upon what is right, it contributes to the stability of culture. And its own existence provides a normal and solid activity which assure the members of society that the world continues in its proper path.¹⁸²

Furthermore, Merriam states that music contributes to the integration of society. He explains that:

Music... bring(s) both the satisfaction of participating in something familiar and the assurance of belonging to a group sharing in similar

¹⁸⁰ Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991. 62.

¹⁸¹ William B. Davis, Kate E. Gfeller, Michael H. Thaut. *An Introduction to Music Therapy, Theory and Practice*. Third Edition. ed. Silver Spring, Maryland: American Music Therapy Association, Inc, 2008. 68.

¹⁸² Merriam, Alan P. *The Anthropology of Music*. Evanston, Ill.: Northwestern University Press, 1964. 225.

values, similar ways of life, a group maintaining similar art forms. Music thus brings a renewal of tribal solidarity.¹⁸³

Today, music is truly ubiquitous. It is used for heightening emotions and enhancing occasions. Music is featured during religious rituals, chants, hymns and songs across most cultures. It is used for entertainment, through theatre, concerts, radio and personal music devices. Music gives individuals ways to express themselves through songs of protest, war and peace. It is even used to enhance visual media such as films, television, video games and news broadcasts. Most social gatherings contain some aspects of music, such as sporting matches, weddings, funerals, festivals, rituals, night clubs, bars, parties, cafés and restaurants. As a society, we are constantly being stimulated by music.¹⁸⁴ Consequently, “Life without music in this age is almost as inconceivable as life without electricity.”¹⁸⁵

¹⁸³ Merriam, Alan P. *The Anthropology of Music*. Evanston, Ill.: Northwestern University Press, 1964. 226.

¹⁸⁴ David J. Elliot, Marissa Silverman. *Music Matters: A New Philosophy of Music Education*. Second Edition ed. United States of America: Oxford University Press, 2015. 87.

¹⁸⁵ Tait, M. J. *Music Education in New Zealand*. Hamilton: Times Commercial Printers, 1970. 7.

1.8 Censorship of Music

Governments and institutions around the globe continue to instil the ancient belief that music is capable of influencing citizens. This has resulted in music throughout history being regulated and manipulated to promote certain ideals.

The use of tri-tones provides an example of prohibited music due to moral influence. The interval comprises of three whole tones, generating an augmented 4th or a diminished 5th as shown below in Example 13.¹⁸⁶

Ex. 13. *Example of tri-tone.*



The interval was condemned in Christianity throughout medieval times to the end of the Renaissance era, being nicknamed *diabolus in musica* otherwise known as the devil's chord.¹⁸⁷ It was believed that the interval was unstable and promoted evil.¹⁸⁸ Due to these associations, the tri-tone continues to be used to express evil or instability, utilised by various composers such as Wagner, Debussy and Stravinsky.¹⁸⁹

¹⁸⁶ "Tritone." *The Oxford Dictionary of Music*, 2nd ed. rev.. *Oxford Music Online*. Oxford University Press, accessed October 24, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t237/e10439>

¹⁸⁷ William Drabkin. "Tritone." *Grove Music Online*. *Oxford Music Online*. Oxford University Press, accessed October 24, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/28403>

¹⁸⁸ "Tritone." *The Oxford Dictionary of Music*, 2nd ed. rev.. *Oxford Music Online*. Oxford University Press, accessed October 24, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t237/e10439>

¹⁸⁹ Whittall, Arnold. "tritone." *The Oxford Companion to Music*. *Oxford Music Online*. Oxford University Press, accessed October 24, 2016,

Another example can be seen during the Second World War, where German officials manipulated the public consumption of music, to maintain Germany's reputation and instil positive perceptions of the government.¹⁹⁰ German composer Richard Wagner, (1813–1883)¹⁹¹ became a German icon.¹⁹² Through his music he expressed a sense of nationalism, portraying the nation's deepest loves, hates, hopes and fears; basing numerous operas on elements derived from Nordic mythology.¹⁹³ He was admired throughout the country as even the king of Prussia, Kaiser Wilhelm II (1859–1941)¹⁹⁴ had his car horn tuned to one of Wagner's motifs.¹⁹⁵

Alongside his musical output, Wagner was also known for his outspoken political views, stating that: "Jews were only capable of producing money-making music and not works or art."¹⁹⁶ It is believed that Adolf Hitler's (1889–1945)¹⁹⁷

<http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t114/e6939>

¹⁹⁰ Pamela M. Potter. "Nazism." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed October 17, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/42491>

¹⁹¹ Barry Millington, et al. "Wagner." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed October 13, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/29769pg1>

¹⁹² Barry Millington, et al. "Wagner." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed October 13, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/29769pg1>

¹⁹³ Jacobs, Robert L. "Wagner's Influence on Hitler." *Music & Letters* 22, no. 1 (1941): 81-83.

¹⁹⁴ "Wilhelm, Ii Kaiser 1859-1941". 2015. In *Chambers Dictionary of Great Quotations*, edited by Chambers. London: Chambers Harrap. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/chambq/wilhelm_ii_kaiser_1859_1941/0

¹⁹⁵ Barry Millington, et al. "Wagner." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed October 13, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/29769pg1>

¹⁹⁶ *Israeli orchestra to play music of Wagner, Hitler's favorite.* 2010. Electronic World Communications, Inc.

¹⁹⁷ *Britannica Academic*, s.v. "Adolf Hitler," accessed October 18, 2016, <http://academic.eb.com.ezproxy.waikato.ac.nz/levels/collegiate/article/106283>

extermination of the Jewish race was at least in part inspired by Richard Wagner's anti-Semitic views. Scholar Margaret Brearley, explains that:

Wagner's 'Prose Works' specifically develop the idea that Judeo-Christian morality and Jewish commerce must be eliminated so that humanity can regain oneness with Nature and true pagan love. Wagner cast himself as the saviour of the German people through art.¹⁹⁸

Consequently, Wagner is often associated with Adolf Hitler and the Third Reich.¹⁹⁹ Hitler admired Wagner's work and his sense of nationalism, and maintained close ties with the Wagner family.²⁰⁰ During political rallies, the overture to Wagner's *Rienzi* was played, and soon became a signature tune for the political movement.²⁰¹ Hitler even stated: "I recognize in Wagner my only predecessor...I regard him as a supreme prophetic figure".²⁰² Therefore, it was believed that Hitler animated Wagnerian beliefs through his political power.²⁰³ Due to this association, the popularity of Wagner's music declined,²⁰⁴ and performances of his music have long been protested throughout Israel.²⁰⁵

¹⁹⁸ Brearley, Margaret. "Hitler and Wagner: The Leader, the Master and the Jews." *Patterns of Prejudice* 22, no. 2 (1988): 3-22.

¹⁹⁹ Barry Millington, et al. "Wagner." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed October 13, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/29769pg1>

²⁰⁰ Pamela M. Potter. "Nazism." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed October 17, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/42491>

²⁰¹ Vaget, Hans Rudolf. "Wagnerian Self-Fashioning: The Case of Adolf Hitler." *New German Critique*, no. 101 (2007): 95-114. <http://www.jstor.org.ezproxy.waikato.ac.nz/stable/27669199>

²⁰² Jacobs, Robert L. "Wagner's Influence on Hitler." *Music & Letters* 22, no. 1 (1941): 81-83.

²⁰³ Brearley, Margaret. "Hitler and Wagner: The Leader, the Master and the Jews." *Patterns of Prejudice* 22, no. 2 (1988): 3-22.

²⁰⁴ Barry Millington, et al. "Wagner." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed October 13, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/29769pg1>

²⁰⁵ *Israeli orchestra to play music of Wagner, Hitler's favorite.* 2010. Electronic World Communications, Inc.

During this time in Germany, it was believed that jazz was a dangerous form of music with the genre being linked to moral corruption and decadent lifestyles. It was criticised due to the use of timbre and improvisation, contradicting Prussian ideas of discipline. When the Nazi party (National Socialist German Workers' Party) came into government, jazz curriculums were abolished and jazz musicians were advised to flee the country or live in secrecy. In 1935, jazz was officially banned from German radio.²⁰⁶ Following this, the government sponsored an exhibition in Munich of 'Degenerate Art', followed by 'Entartete Musik' in 1938, otherwise known as degenerate music.²⁰⁷ The exhibition was intended to alert the public of dangerous genres of music such as jazz, forms of atonal music and music of Jewish origins.²⁰⁸ The exhibition catalogued a list of Jewish musicians and composers banned due to their racial background and style such as, Schönberg, Hindemith, Stravinsky and Weissmann. The event discredited jazz journals and texts while installing listening booths allowing the public to hear music that was publicly ostracized.²⁰⁹ Consequently, the exhibition forced many composers to leave the country.²¹⁰

After the Second World War, it was commonly believed that romantic ideals, such as nationalism and sensualism, manipulated listeners and therefore contributed to the political and historical downfalls of each civilisation.²¹¹ Composer Arnold Schönberg, (1874-1951)²¹² understood the perils of the diatonic system, as it was

²⁰⁶ Norwood, Doug. "Sprechen sie Jazz? - A GI Digs the 1950's German-Austrian Jazz Scene." *IAJRC Journal* 47, no. 3 (2014): 10-14.

²⁰⁷ Taruskin, Richard. *The Oxford History of Western Music* 5vols. Vol. 5, New York: Oxford University Press 2010. 755.

²⁰⁸ Degenerate music - 'yom hashoah' concert and commemoration. (2016, Apr). *Musical Opinion*, 139, 6. Retrieved from <http://ezproxy.waikato.ac.nz/login?url=http://search.proquest.com/docview/1782261743?accountid=17287>

²⁰⁹ Erik Levi. "Entartete Musik." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed September 18, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/45065>

²¹⁰ Taruskin, Richard. *The Oxford History of Western Music* 5vols. Vol. 5, New York: Oxford University Press 2010. 756.

²¹¹ Bandur, Markus. *Aesthetics of Total Serialism*. Switzerland: Birkhäuser, 2001. 13.

²¹² O.W. Neighbour. "Schoenberg, Arnold." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed October 17, 2016,

virtually impossible to regulate the effects each piece would have on a listener.²¹³ Consequently, modernism was conceived, as sensual pleasure was no longer the prominent feature of music. In 1908, Schönberg experimented with pitches of equal importance, redefining the purpose of the tonic and created what became known as the twelve-tone system. These ideals were inherited by composers such as Boulez, Stockhausen, Stravinsky, Webern and Varèse.²¹⁴ Therefore:

...by resisting an aesthetic that exploited music's power to affirm active collaboration with evil and to encourage passive submission to injustice, exploitation and oppression could 20th-century music realize the inherent liberating power of art.²¹⁵

The music of Russian composer Dmitri Shostakovich, (1906-1975)²¹⁶ provides another example of musical regulations imposed by a government. Shostakovich's operatic career was cut significantly short after his opera *Lady Macbeth* was condemned and banned throughout Russia.²¹⁷ The opera was based on the Russian tragedy *Leskov novella*, following the life of Katerina Lvona, a wife of a wealthy merchant.²¹⁸ The opera was performed for two years throughout Europe and was

<http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/25024>

²¹³ Bandur, Markus. *Aesthetics of Total Serialism*. Switzerland: Birkhäuser, 2001. 30.

²¹⁴ Griffiths, Paul. "modernism." *The Oxford Companion to Music*. *Oxford Music Online*. Oxford University Press, accessed October 13, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t114/e4473>

²¹⁵ Leon Botstein. "Modernism." *Grove Music Online*. *Oxford Music Online*. Oxford University Press, accessed October 13, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/40625>

²¹⁶ David Fanning and Laurel Fay. "Shostakovich, Dmitry." *Grove Music Online*. *Oxford Music Online*. Oxford University Press, accessed September 8, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/52560>

²¹⁷ David Fanning and Laurel Fay. "Shostakovich, Dmitry." *Grove Music Online*. *Oxford Music Online*. Oxford University Press, accessed September 8, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/52560>

²¹⁸ Wells, Elizabeth A. "The New Woman: Lady Macbeth and Sexual Politics in the Stalinist Era." *Cambridge Opera Journal* 13, no. 2 (2001): 163-89.

well received in cities such as New York and St Petersburg, formerly known as Leningrad.²¹⁹ In 1936, the opera was performed in Moscow, where the leader of the Soviet Union, Joseph Stalin exited halfway through the evening. Shortly after an article was published in the Moscow newspaper *Pravda*, titled “Chaos Instead of Music”,²²⁰ condemning the opera. It was thought that the opera failed to convey Soviet beliefs, through the inclusion of jazz instruments and an explicit love scene which was thought to be sexual assault. The article severely damaged Shostakovich’s career and resulted in him never producing another opera for fear of punishment. The opera was banned for three decades due to its perceived degenerate nature.²²¹

Punk rock group, the *Sex Pistols*, provide another example of prohibited music.²²² Formed in 1975, the band inspired the British punk movement, promoting ideals of freedom and equality, while rejecting capitalism and conformity. Their music has been described by the media as, “raw, outrageous and crude”²²³ and “cult rock filth”.²²⁴ In 1977, “God Save the Queen” was released, coinciding with Queen Elizabeth II’s Silver Jubilee. The single became a symbol of the social and political turmoil of the United Kingdom, commenting on the country’s inequality and anarchy.²²⁵ This outraged the public, resulting in the band being unable to book venues and were constantly met by public protests. Despite this, the band’s popularity increased and the single steadily rose to number two on the charts. Due to the magnitude of protests, radio stations refused to play the song and their

²¹⁹ Donald Jay Grout, Claude V. Palisca. *A History of Western Music*. Fifth Edition ed. New York W. W. Norton & Company, Inc., 1996. 702.

²²⁰ Wells, Elizabeth A. "The New Woman: Lady Macbeth and Sexual Politics in the Stalinist Era." *Cambridge Opera Journal* 13, no. 2 (2001): 163-89.

²²¹ Wells, Elizabeth A. "The New Woman: Lady Macbeth and Sexual Politics in the Stalinist Era." *Cambridge Opera Journal* 13, no. 2 (2001): 163-89.

²²² *Britannica Academic*, s.v. "The Sex Pistols," accessed October 24, 2016, <http://academic.eb.com.ezproxy.waikato.ac.nz/levels/collegiate/article/105678>

²²³ Temple, Julien, Julien Temple, Anita Camarata, Amanda Temple, Paul Cook, Steve Jones guitarist, Glen Matlock, et al. 1999. *The Filth and the Fury*. England: Dendy Films.

²²⁴ Temple, Julien, Julien Temple, Anita Camarata, Amanda Temple, Paul Cook, Steve Jones guitarist, Glen Matlock, et al. 1999. *The Filth and the Fury*. England: Dendy Films.

²²⁵ *Britannica Academic*, s.v. "The Sex Pistols," accessed October 24, 2016, <http://academic.eb.com.ezproxy.waikato.ac.nz/levels/collegiate/article/105678>

music was prohibited throughout areas of Britain. Members received death threats, as many believed that “the whole world would be vastly improved by their total and utter non-existence”.²²⁶ To the press, punk rock was viewed as “a bigger threat to British life than Russian communism and hyperinflation”.²²⁷

Gothic rock artist Marilyn Manson (1969) provides another example. Originating from Ohio, Marilyn Manson formerly known as Brian Warner, formed a band with Scott Mitchell in 1989. The band became a sensation of the 90’s, selling over a million copies of their album, *Antichrist Superstar* in 1996.²²⁸ Marilyn Manson accumulated a cult-like following of teenagers, characterised by their use of black clothing and makeup.²²⁹ Due to the group’s dark image and lyrical content, Christian activists blamed the band for negatively influencing teenagers, promoting ideas of suicide, drug use and homicide.²³⁰ They were even believed to be “perhaps the sickest group ever promoted by a mainstream record company”.²³¹ On the 20th April 1999, two students of Littleton’s Columbine High School, Eric Harris and Dylan Klebold massacred a dozen classmates and one teacher before turning a gun on themselves.²³² Controversy rose as it was believed

²²⁶ Temple, Julien, Julien Temple, Anita Camarata, Amanda Temple, Paul Cook, Steve Jones guitarist, Glen Matlock, et al. 1999. *The Filth and the Fury*. England: Dendy Films.

²²⁷ Temple, Julien, Julien Temple, Anita Camarata, Amanda Temple, Paul Cook, Steve Jones guitarist, Glen Matlock, et al. 1999. *The Filth and the Fury*. England: Dendy Films.

²²⁸ Manson, Marilyn (Brian Hugh Warner)." In *Marquis Who's Who in America*, edited by Marquis Who's Who. 70th ed. Marquis Who's Who LLC, 2016. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/marquisam/manson_marilyn_brian_hugh_warner/0?institutionId=781

²²⁹ Childs, David J. "Manson, Marilyn (1969–)." In *Culture Wars in America: An Encyclopedia of Issues, Viewpoints, and Voices*, edited by Roger Chapman, and James Ciment. 2nd ed. Routledge, 2013. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/sharpecw/manson_marilyn_1969/0?institutionId=781

²³⁰ Childs, David J. "Manson, Marilyn (1969–)." In *Culture Wars in America: An Encyclopedia of Issues, Viewpoints, and Voices*, edited by Roger Chapman, and James Ciment. 2nd ed. Routledge, 2013. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/sharpecw/manson_marilyn_1969/0?institutionId=781

²³¹ Moore, Michael. "Bowling for Columbine." 120 min. USA, 2002.

²³² Larkin, Ralph W. *Comprehending Columbine*. Philadelphia: Temple University Press, 2007. 1-2.

that the two students were influenced by Marilyn Manson's music.²³³ This hit the band hard as venues refused to book shows, and they were met by protests from religious activists.²³⁴ Marilyn Manson addressed these issues in *Rolling Stone*, explaining that the events at Columbine were a product of American society rather than the music industry.²³⁵ Ultimately, it is unclear whether the offenders were actual fans of the band,²³⁶ however this event reinforces the idea that members of society still fully believe in the influence of music.

Russian band, *Pussy Riot* provides another example of the consequences of performing controversial music. Formed in 2011, *Pussy Riot* is a protest punk rock group. Their songs discuss ideas of feminism, LGBT rights and opposition to the Russian government. Member Nadezhda Tolokonnikova, explained that their goal "is to change humanity, to transform consciousness...to free society from prejudices and stereotypes, to be the voice of the voiceless."²³⁷ This aim is achieved through public protests and performances, in order to shock the public. In February 2012, the group performed spontaneously within Moscow's Cathedral of Christ the Saviour, in protest of the relationship between the Orthodox Church and the state. This performance shocked congregations and resulted in two of the performers being arrested and sentenced to two years in prison.²³⁸ The pair were charged with trespassing, disrupting social order, acts of hooliganism and disrespect for society which was motivated by religious hate.²³⁹ Due to the controversy surrounding the band, consequent members were forced to live in

²³³ Moore, Michael. "Bowling for Columbine." 120 min. USA, 2002.

²³⁴ *Mediaite: Marilyn manson: Media storm after columbine ruined my career* (2015). Chatham: Newstex. Retrieved from <http://ezproxy.waikato.ac.nz/login?url=http://search.proquest.com/docview/1690721537?accountid=17287>

²³⁵ Manson, Marilyn. *Rock & roll: Columbine: Whose fault is it?*. San Francisco, Calif: Rolling Stone LLC. 1999.

²³⁶ Burns, Gary. "Marilyn Manson and the Apt Pupils of Littleton." *Popular Music and Society* 23, no. 3 (1999): 3-8.

²³⁷ Mike Lerner, Maxim Pozdorovkin. "Pussy Riot: A Punk Prayer." 88 min. Russia, 2013.

²³⁸ "Pussy Riot: The Story So Far." BBC News, <http://www.bbc.com/news/world-europe-25490161>

²³⁹ Mike Lerner, Maxim Pozdorovkin. "Pussy Riot: A Punk Prayer." 88 min. Russia, 2013.

secrecy, while other members were beaten by officials in the streets.²⁴⁰ These acts contradict the human right of freedom of expression and provide another example of musical restrictions implemented by the government.

From these examples, it is evident that contemporary societies still hold the belief that music is a powerful force, capable of influencing citizens and civilizations. For if music held no significant influence, it would not be scrutinised and prohibited in societies around the globe. As these diverse societies hold music in high esteem, it led me to question the benefits of music, and whether like ancient cultures music should be prominently featured within the education system.

²⁴⁰ Mike Lerner, Maxim Pozdorovkin. "Pussy Riot: A Punk Prayer." 88 min. Russia, 2013.

Chapter 2: Benefits of Music based on Scientific Research

*Music training in childhood “fundamentally alters the nervous system such that neural changes persist in adulthood after auditory training has ceased.”*²⁴¹

- Erika Skoe and Nina Kraus

2.1 Cognitive Benefits

It is well established that cultures continue to recognise the significance of music and its ability to contribute to health and general well-being. Despite this, effects of music on brain development and cognitive function have remained unknown until the last few decades.

Neuroanatomist Andrew Arthur Abbie, (1905-1976)²⁴² was the first to speculate on the connection between music and the brain in 1934. He believed that “pathways from the brain stem and cerebellum to the frontal lobes are capable of weaving all sensory experience and accurately coordinated muscular movements into a ‘homogeneous fabric’”.²⁴³ Due to technological restrictions of the time, his theories remained unproven until the 1990’s, when machinery such as functional magnetic resonance imaging (fMRI) and positron emission tomography (PET) scanners were developed. These devices have enabled neuroscientists to observe how the brain functions and where information is processed in real time.²⁴⁴

Neuroscientists have discovered that nearly every area of the brain is engaged during the processing of music,²⁴⁵ unlike similar activities such as spoken

²⁴¹ Nina Kraus, Erika Skoe. "A Little Goes a Long Way: How the Adult Brain Is Shaped by Musical Training in Childhood." *The Journal of Neuroscience* 32, no. 34 (2012): 11507-10.

²⁴² "Abbie, Andrew Arthur (1905-1976)". 2009. In *Biographical Dictionary of Anthropologists*, William Stewart. Jefferson: McFarland. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/mcfanthro/abbie_andrew_arthur_1905_1976/0

²⁴³ Levitin, Daniel. *This Is Your Brain on Music*. London: Atlantic Books, 2006. 210.

²⁴⁴ Collins, Anita. "Bigger, Better Brains." University of Melbourne, 2012. 1.

²⁴⁵ Levitin, Daniel. *This Is Your Brain on Music*. London: Atlantic Books, 2006. 103.

language or reading.²⁴⁶ This occurs through functional segregation, as each dimension of sound, such as pitch, rhythm, timbre and dynamics is analysed in specific areas of the brain. Once processed, aural information is transmitted through the corpus callosum, bridging the two hemispheres of the brain, to the frontal lobe. The frontal lobe consolidates this information, accessing the hippocampus and regions of the temporal lobe, to help decipher each musical pattern.²⁴⁷ This complex process occurs instantaneously whenever musical stimulus is presented.²⁴⁸

Subsequently, neuroscientists began to investigate how the brain functions when one is playing a musical instrument. Researcher Anita Collins, describes playing music as equivalent to a full body work out, engaging the areas outlined above in addition to the motor cortices, responsible for fine motor control. As the motor cortices are controlled in both hemispheres of the brain, fine movement strengthens function and communication between hemispheres.²⁴⁹ Neuroscientist Donna Brink Fox suggests that active engagement in music can even contribute to brain development.²⁵⁰

In 1995, neuroscientist Gottfried Schlaug and his colleagues at Harvard University, investigated the neurological benefits of playing musical instruments. Through a comprehensive study, he explored the neurological differences between professional musicians and non-musicians. To accurately gather information, candidates were selected based on their age, gender and hand dominance. Throughout the study, they discovered that musicians had an enlarged front portion of the corpus callosum and cerebellum, in addition to increased neural activity.²⁵¹ Theoretically, this enables musicians to transmit information between

²⁴⁶ Collins, Anita. "Bigger, Better Brains." University of Melbourne, 2012. 2.

²⁴⁷ Levitin, Daniel. *This Is Your Brain on Music*. London: Atlantic Books, 2006. 130-131.

²⁴⁸ Mannes, Elena. "Music Instinct: Science and Song." 2009.

²⁴⁹ Collins, Anita. "How Playing an Instrument Benefits Your Brain." TED-Ed, 2014.

²⁵⁰ Kim, Chungwon. "Nurturing Students Through Group Lessons." *The American Music Teacher* 54, no. 1 (2004): 28-31.

²⁵¹ Schlaug, Gottfried. "The Brain of Musicians. A Model for Functional and Structural Adaptation." USA: Harvard Medical School, 1995.

each hemisphere more efficiently and through more diverse routes. This can help solve mathematical problems more efficiently and allows musicians to have a higher level of executive function, being able to plan and strategize more effectively.²⁵² This research demonstrates that musicians tend to have higher levels of brain plasticity, verbal memory and an increased level of grey matter - a collection of cells, axons and dendrites, responsible for processing information.²⁵³ Schlaug et al. also discovered a correlation between anatomical changes and age where musical training began along with intensity of practise.²⁵⁴ Due to these neurological enhancements, anatomists could recognise the brain of a professional musician instantaneously.²⁵⁵

During this time, Thomas Elbert and his associates conducted a similar study, exploring the cognitive effects of fine motor control required when playing musical instruments. The study examined nine string players, (six violinists, two cellists and one guitarist) chosen due to the use of fine movements and dexterity required to play stringed instruments. Through magnetic source imaging, they discovered that the cortices which control the left hand were substantially enlarged, allowing musicians complex finger dexterity. Like Schlaug's previous study, a link between the age of instrumental exposure and magnitude of change was discovered.²⁵⁶

In 1998, Researcher Agnes S. Chan et al. at The Chinese University of Hong Kong, discovered that music instruction can also assist with verbal memory. The study compared musicians who had at least six years of training, to those with no musical experience. During the study, participants were read a list of sixteen words three times, having to recall as many words as possible each time the list

²⁵² Collins, Anita. "How Playing an Instrument Benefits Your Brain." TED-Ed, 2014.

²⁵³ Levitin, Daniel. *This Is Your Brain on Music*. London: Atlantic Books, 2006. 226-227.

²⁵⁴ Sacks, Oliver. *Musicophilia*. London: Picador, 2008. 100-101.

²⁵⁵ Sacks, Oliver. *Musicophilia*. London: Picador, 2008. 100.

²⁵⁶ Elbert, Thomas, Christo Pantev, Christian Wienbruch, Brigitte Rockstroh, and Edward Taub. "Increased Cortical Representation of the Fingers of the Left Hand in String Players." *Science* 270, no. 5234 (1995): 305-07. <http://www.jstor.org.ezproxy.waikato.ac.nz/stable/2888544>

was read. This experiment was repeated three times and resulted in musical participants gaining significantly higher results.²⁵⁷ In 2003, Jakobson and colleagues conducted a similar study comparing fifteen trained pianists and twenty-one candidates with little or no musical background. Similarly, musicians showed greater verbal and visual memory skills,²⁵⁸ in addition to a correlation between years of musical exposure and higher results.²⁵⁹ This study suggests that musical training may enhance auditory processing skills, allowing musicians' brains to "use the strategies they learn in musical rehearsal to form neural pathways that make both memory storage and retrieval more effective."²⁶⁰

In 2008, a study was conducted at the University of Michigan to develop an understanding of memory capacity and verbal working memory in musicians. Candidates of varying musical backgrounds were tested against those who had little or no training. The participants were given a series of exercises to test their verbal memory capacity and verbal working memory. The study concluded that there was little difference between the two groups regarding verbal memory capacity. However, a significant difference in verbal working memory was present, aligning with findings of previous studies.²⁶¹

From these studies, it is evident that exposure to music and musical training can be neurologically beneficial, assisting with memory, fine motor control, auditory processing, brain plasticity and executive function. These discoveries led Harvard Professor Alvaro Pascual-Leone, to question how rapidly the brain responds to musical training. In 1996, a study was conducted on subjects performing five-

²⁵⁷ Agnes S. Chan, Yim-Chi Ho, Mei-Chun Cheung. "Music Training Improves Verbal Memory." *Nature* 396, no. 6707 (1998): 128-28.

²⁵⁸ Jakobson, Lorna S., Samantha T. Lewycky, Andrea R. Kilgour, and Brenda M. Stoesz. "Memory for Verbal and Visual Material in Highly Trained Musicians." *Music Perception: An Interdisciplinary Journal* 26, no. 1 (2008): 41-55.

²⁵⁹ Michael S. Franklin, Katherine Sledge-Moore, Chun-Yu Yip, John Jonides, Katie Rattray, and Jeff Moher. 2008. "The effects of musical training on verbal memory." *Psychology of Music* 36 (3): 353-65.

²⁶⁰ Collins, Anita. "Bigger, Better Brains." University of Melbourne, 2012. 32.

²⁶¹ Michael S. Franklin, Katherine Sledge-Moore, Chun-Yu Yip, John Jonides, Katie Rattray, and Jeff Moher. 2008. "The effects of musical training on verbal memory." *Psychology of Music* 36 (3): 353-65.

finger exercises on the piano to a metronome, focusing on fluency and timing. These subjects were observed for five consecutive days and each practise session was followed by a test.²⁶² The research revealed that the motor cortex responsible for muscular activity shows changes within minutes of practising music.²⁶³ These findings inspired Pascual-Leone to extend his research, having his subjects merely think about practising a simple piece of music, holding their hands still while they visualised how they would move their fingers. When the results of the two experiments were compared, the studies shared the same results.²⁶⁴ This study indicates that any amount of musical instruction can be neurologically beneficial.

When discussing the neurological benefits of music, the ‘Mozart Effect’ often comes to mind. The ‘Mozart Effect’ arose when French otolaryngologist Alfred Tomatis (1920-2001) speculated in his 1991 book *Pourquoi Mozart?* (Why Mozart?), that listening to compositions by Mozart (1756-1791) could improve learning and assist with speech and auditory disorders. In 1993, neurobiologists Rauscher, Shaw and Ky investigated whether musical exposure could enhance cognitive and spatial abilities and therefore increase test scores.²⁶⁵ The study was conducted on 36 tertiary students, who were given a series of tests after being exposed to ten minutes of Mozart’s sonata for two pianos in D major K488, a relaxation tape and silence. The results indicated that students who were exposed to Mozart scored significantly higher than those who listening to a relaxation tape or silence. However, it was found that these effects were often short lived, lasting only about fifteen minutes.²⁶⁶ After the study was published, it became headlined in the media across the United States, that listening to Mozart could increase general intelligence rather than improve learning for a short amount of time.

²⁶² Pascual-Leone, Alvaro, Amir Amedi, Felipe Fregni, and Lotfi Merabet. "The Plastic Human Brain Cortex." *Annual Review of Neuroscience* 28 (2005): 377-401.

²⁶³ Sacks, Oliver. *Musicophilia*. London: Picador, 2008. 101.

²⁶⁴ Begley, Sharon. "The Brain: How the Brain Rewires Itself." *Time*, 2007.

²⁶⁵ Rauscher, Frances H., Gordon L. Shaw and Katherine N. Ky. "Listening to Mozart enhances spatial-temporal reasoning: Towards a neurophysiological basis." *Neuroscience Letters* (1995): 44-47.

²⁶⁶ Colman, Andrew M. "Mozart effect." In *A Dictionary of Psychology*. : Oxford University Press, 2015.
<http://www.oxfordreference.com.ezproxy.waikato.ac.nz/view/10.1093/acref/9780199657681.001.0001/acref-9780199657681-e-5262>

Controversy surrounded the study as scientists were unable to replicate similar results. Similar studies suggest that subjects had higher scores when listening to musical stimuli and the relaxation tape.²⁶⁷ It became evident that heightened results were not specific to Mozart, as similar results can be obtained through exposure to “any upbeat moderately familiar rhythmical activity or music.”²⁶⁸ Therefore, the ‘Mozart Effect’ is now generally considered invalid.

Musical experiences can also protect the brain from aging and hearing loss. During the aging process, auditory function declines, resulting in inaccurate processing of audio, making it difficult to distinguish consonants and fast speech. Auditory neuroscientists Nina Kraus and Travis White-Schwoch explain that:

...older adults with hearing loss find speech comprehension in noise especially challenging. These communication challenges are not trivial: from talking on the telephone to ordering in a noisy restaurant, poor speech understanding in degraded listening environments can contribute to stress, social isolation, and depression.²⁶⁹

Studies have indicated that musicians generally have enhanced auditory processing and cognition, as neural circuits overlap when being engaged for speech and music. This results in faster neural responses to consonants, the ability to distinguish and understand a variety of sounds in differing environments, and heightened auditory memory and attention skills.²⁷⁰ Neurobiologist Alexandra Parbery-Clark and her colleagues at Northwestern University observed the auditory function of musicians aged from forty-five to sixty-five to determine the effect of music on aging and auditory processing. Through measuring the auditory

²⁶⁷ Cong, Alexandra. "From Mozart to Myths: Dispelling the "Mozart Effect"." *Young Scientists Journal*, no. 15 (2014): 49-53.

²⁶⁸ "Mozart effect." In *The Penguin Dictionary of Psychology*, by Arthur S. Reber, Rhiannon Allen, and Emily Sarah Reber. 4th ed. Penguin, 2009. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/penguinsyc/mozart_effect/0?institutionId=781

²⁶⁹ Nina Kraus, Travis White-Schwoch. "Music Training: Lifelong Investment to Protect the Brain from Hearing Loss." *Acoustics Australia* 42, no. 2 (2014): 117.

²⁷⁰ Nina Kraus, Travis White-Schwoch. "Music Training: Lifelong Investment to Protect the Brain from Hearing Loss." *Acoustics Australia* 42, no. 2 (2014): 117-23.

brainstem response to complex sounds, Parbery-Clark observed that older musicians had similar neural timing as young adults with no musical experience.²⁷¹ Therefore, she discovered that "...older adult musicians do not exhibit many of the age-related declines in auditory function commensurate with typical aging."²⁷² Parbery-Clark continued exploring how music instruction can affect auditory function and began working with adult musicians with hearing loss. These musicians exhibited the same neurological enhancements as the musicians observed above, however even with their hearing loss they performed higher in speech perception and auditory working memory. Parbery-Clark explains that "Age-related declines in auditory processing are not inevitable. They may be offset by the quality and consistency of everyday auditory experience."²⁷³ and that "Early auditory experiences, such as through music, are investments in healthy aging that pay lifelong dividends for auditory processing."²⁷⁴

²⁷¹ Alexandra Parbery-Clark, Samira Anderson, Emily Hittner, Nina Kraus. "Musical Experience Offsets Age-Related Delays in Neural Timing ". *Neurobiology of Aging* 33, no. 7 (2012): 1483.e1-83.e4.

²⁷² Nina Kraus, Travis White-Schwoch. "Music Training: Lifelong Investment to Protect the Brain from Hearing Loss." *Acoustics Australia* 42, no. 2 (2014): 119.

²⁷³ Nina Kraus, Travis White-Schwoch. "Music Training: Lifelong Investment to Protect the Brain from Hearing Loss." *Acoustics Australia* 42, no. 2 (2014): 121.

²⁷⁴ Nina Kraus, Travis White-Schwoch. "Music Training: Lifelong Investment to Protect the Brain from Hearing Loss." *Acoustics Australia* 42, no. 2 (2014): 121.

2.2 Psychological Benefits

Music has the unique ability to either calm or excite our physiology,²⁷⁵ regulating mood and evoking emotion.²⁷⁶ It is utilised by neurosurgeons to enhance concentration during operations, by athletes to increase stamina and performance and by everyday workers to improve attention and motivation.²⁷⁷ Music is even used in medical settings, to help stabilise breathing of premature babies and cardiac patients.²⁷⁸ The overwhelming influence of sound occurs biologically, through sympathetic arousal as part of the fight or flight mechanism. Music considered alarming, (often dissonant and of fast tempo) can increase pulse, heartrate, perspiration and cause stomach muscles to constrict, as the body prepares to act.²⁷⁹ Contrastingly, relaxing music (generally soft and of slow tempo) mimics natural soothing sounds, such as maternal vocalisations, decreasing sympathetic arousal and in doing so, calming one's physiology.²⁸⁰

It can be argued that these biological responses to specific sounds are learned, through cultural imprinting. Cognitive scientist Steven Pinker suggests that emotional connotations of music can only occur when the listener is familiar with intended cultural idioms.²⁸¹ However, researcher Thomas Fritz disagrees. In 2009, he led an expedition to a remote village in North Cameroon, to investigate whether emotions conveyed in music are culturally bound. The Mafa people who had not been exposed to western art forms, were played excerpts of western music, intended to convey happiness, sadness or fear. The listeners then selected an image which best represented each excerpt, which was compared with results obtained by German listeners. The results indicated that both sets of listeners

²⁷⁵ "Music on the Brain." 29.17: ABC, 2016.

²⁷⁶ Mona Lisa Chanda, Daniel J. Levitin. "The Neurochemistry of Music ". *Trends in Cognitive Sciences* 17, no. 4 (2013): 179-93.

²⁷⁷ Mona Lisa Chanda, Daniel J. Levitin. "The Neurochemistry of Music ". *Trends in Cognitive Sciences* 17, no. 4 (2013): 179-93.

²⁷⁸ Mannes, Elena. "Music Instinct: Science and Song." 2009.

²⁷⁹ Mannes, Elena. "Music Instinct: Science and Song." 2009.

²⁸⁰ Mona Lisa Chanda, Daniel J. Levitin. "The Neurochemistry of Music ". *Trends in Cognitive Sciences* 17, no. 4 (2013): 179-93.

²⁸¹ Pinker, Steven. *How the Mind Works*. New York: W.W. Norton & Company, 1997. 523.

could successfully recognise the intended emotion of each excerpt, suggesting that music is not bound by cultural idioms.²⁸²

Emotional responses to music can also cause physical reactions, such as goosebumps or chills. In 2001, neuroscientists Anne J. Blood and Robert J. Zatorre studied how neural mechanisms processed emotional responses to music. The study monitored several candidates who were exposed to ninety seconds of control music, noise, silence and a personally selected piece of music which continuously gave each candidate pleasurable responses. The control music was another participant's specifically chosen piece. Neuroscientists monitored each candidate's neural responses through heartrate, skin temperature and PET scans. Results indicated that participants' heart rates, nerve responses and respiration depth increased significantly during climatic points of the music which induced chills. Chills were not reported during the control music, noise, or silence, suggesting that emotional intensity must be met before chills are experienced. Imaging indicated a series of similarities between music that induced chills and similar pleasant emotions experienced under the influence of cocaine. Researchers discovered that when participants listened to their selected piece, there were increased levels of dopamine, as neural systems relating to the neural motivation-reward system were activated. This system is a biological necessity, rewarding behaviours essential for survival such as food or sex. The study explains that "This is quite remarkable, because music is neither strictly necessary for biological survival or reproduction, nor is it a pharmacological substance."²⁸³ Perhaps cognitive scientist Pinker was right in naming music "auditory cheesecake".²⁸⁴ A 2011 study obtained similar results, as candidates showed increased levels of dopamine after being exposed to music they found

²⁸² Fritz, Thomas, Sebastian Jentschke, Nathalie Gosselin, Daniela Sammler, Isabelle Peretz, Robert Turner, Angela D. Friederici, and Stefan Koelsch. "Universal Recognition of Three Basic Emotions in Music." *Current Biology* 19, no. 7 (2009): 573-76.

²⁸³ Anne J. Blood, and Robert J. Zatorre. "Intensely Pleasurable Responses to Music Correlate with Activity in Brain Regions Implicated in Reward and Emotion." *Proceedings of the National Academy of Sciences of the United States of America* 98, no. 20 (2001): 11818.

²⁸⁴ Pinker, Steven. *How the Mind Works*. New York: W.W. Norton & Company, 1997. 534.

pleasurable.²⁸⁵ These studies suggest that exposure to music can be psychologically beneficial, improving overall mood.

The psychological effects of music were also examined in a 2001 study where eighty-seven participants were exposed to Pachelbel's Canon in D major, three times, to investigate whether musical experience could reduce stress. During the study, participants' stress levels were monitored through blood pressure, heart rate and saliva, followed by a questionnaire. Like previous studies, findings indicated that music can reduce anxiety and could be used as a safe and effective method to prevent increases in anxiety, heart rate and blood pressure.²⁸⁶

These findings led researchers Tonneijck, Kinébanian and Josephsson, to examine the psychological impact of specific types of music making, such as choral singing. Researchers found that the "choir functioned as a 'platform' where participants felt safe, connected to others, (and) experienced a sense of wholeness".²⁸⁷ Their study indicated that choristers found that singing provided unity, increased energy and relaxation.²⁸⁸ Similarly, researcher Hyun Ju Chong discovered that communal singing also promoted interpersonal relationships and self-expression, allowing participants to communicate emotions non-verbally.²⁸⁹ Comparable studies found that choir participation can also positively influence

²⁸⁵ Salimpoor, Valorie, Mitchel Benovoy, Kevin Larcher, Alain Dagher, and Robert Zatorre. "Anatomically Distinct Dopamine Release during Anticipation and Experience of Peak Emotion to Music." *Nature Neuroscience* 14, no. 2 (2011): 257-62.

²⁸⁶ Knight, Wendy E. J., and Nikki S. Rickard. "Relaxing Music Prevents Stress-Induced Increases in Subjective Anxiety, Systolic Blood Pressure, and Heart Rate in Healthy Males and Females." *Journal of Music Therapy* 38, no. 4 (2001): 254-72.

²⁸⁷ Tonneijck, Hetty I. M., Astrid Kinébanian, and Staffan Josephsson. "An Exploration of Choir Singing: Achieving Wholeness through Challenge." *Journal of Occupational Science* 15, no. 3 (2008): 175.

²⁸⁸ Tonneijck, Hetty I. M., Astrid Kinébanian, and Staffan Josephsson. "An Exploration of Choir Singing: Achieving Wholeness through Challenge." *Journal of Occupational Science* 15, no. 3 (2008): 173-80.

²⁸⁹ Chong, Hyun Ju. "Do We All Enjoy Singing? A Content Analysis of Non-vocalists' Attitudes toward Singing." *The Arts in Psychotherapy* 37, no. 2 (2010): 120-24.

emotional states and immune competence,²⁹⁰ reduce stress,²⁹¹ and promote general well-being²⁹² and mental health.²⁹³

A study conducted in 2000, examined changes in immune function during choral activity, monitoring choristers' levels of; Immunoglobulin A (S-IgA), a blood protein which protects against respiratory infections, and cortisol, a hormone which regulates immune response. The study selected participants from the *Pacific Chorale*, a professional choir who were preparing Beethoven's *Missa Solemnis*. Candidates were tested via saliva samples before and after two rehearsals and one performance. Six samples in total were collected per candidate. Results indicated that concentrations of S-IgA were 1.5 times greater after rehearsals and that more than 90% of singers showed increased levels after performances. Average cortisol levels decreased during rehearsals, however increased in performance settings. These findings suggest a higher immunity rate among those who participate in choirs and that choral singing promotes general well-being. 80.5% of candidates expressed that "singing has made me a happier person" and 68.3% said "singing had contributed to my personal well-being."²⁹⁴

Studies have further examined the chemical and biological effects of music, suggesting that oxytocin is responsible for the social and health benefits of music and adrenocorticotrophic hormone (ACTH) mediates the engagement and

²⁹⁰ Kreutz, Gunter, Stephan Bongard, Sonja Rohrmann, Volker Hodapp, and Dorothee Grebe. "Effects of Choir Singing or Listening on Secretory Immunoglobulin a, Cortisol, and Emotional State." *Journal of Behavioral Medicine* 27, no. 6 (2004): 623-35.

²⁹¹ Ahmet Muhip Sanal, Selahattin Gorsev "Psychological and Physiological Effects of Singing in a Choir ". *Psychology of Music* 42 (2014): 420-29.

²⁹² Grape, Christina, Maria Sandgren, Lars-Olof Hansson, Mats Ericson, and Töres Theorell. "Does Singing Promote Well-Being?: An Empirical Study of Professional and Amateur Singers During a Singing Lesson." *Integrative Physiological & Behavioral Science* 38, no. 1 (2002): 65-74.

²⁹³ Stephen Clift, and Ian Morrison. "Group Singing Fosters Mental Health and Wellbeing: Findings from the East Kent "Singing for Health" Network Project." *Mental Health and Social Inclusion* 15, no. 2 (2011): 88-97.

²⁹⁴ Beck, Robert. "Choral Singing, Performance Perception, and Immune System Changes in Salivary Immunoglobulin A and Cortisol." *Music Perception: An Interdisciplinary Journal* 18, no. 1 (2000): 87-106

effects.²⁹⁵ Oxytocin is a neuropeptide, released into the blood stream as a hormone to mediate social behaviour and regulate stress and anxiety.²⁹⁶ In contrast, ACTH stimulates the release of glucocorticoids and inhibits the release of antibodies which suppress the efficacy of the immune system.²⁹⁷ It is believed that continuous activation of ACTH can contribute to stress related illnesses.²⁹⁸ A 2015 study examined four jazz musicians before and after performing in a vocal quartet. This study explored the differences between standard performance and improvisatory performances through blood samples. The results indicated significant decreases in ACTH and increased concentrations of oxytocin during improvisations, as musicians bonded socially through listening, cooperating, coordinating, and communicating with each other.²⁹⁹

In addition to choral activity, the effects of group drumming circles have also been investigated. Group drumming has gained popularity, requiring little musical knowledge. Music therapist Vanessa Camilleri explains that:

Structured drumming exercises provide a safe and predictable framework within which children learn to come together, becoming positive and active group members. Such social skills as listening, concentration, sharing, cooperating, respecting, risk-taking, and many more, are developed through the fun and motivating medium of drumming. As trust develops in the group through successful experiences of playing together, the way is paved for individual children to be creative, to try new things to

²⁹⁵ Mona Lisa Chanda, Daniel J. Levitin. "The Neurochemistry of Music ". *Trends in Cognitive Sciences* 17, no. 4 (2013): 179-93.

²⁹⁶ Keeler, Jason, Edward Roth, Brittany Neuser, John Spitsbergen, Daniel Waters, and John-Mary Vianney. "The Neurochemistry and Social Flow of Singing: Bonding and Oxytocin." *Frontiers in Human Neuroscience* 9, no. 518 (2015): 1-10.

²⁹⁷ Knight, Wendy E. J., and Nikki S. Rickard. "Relaxing Music Prevents Stress-Induced Increases in Subjective Anxiety, Systolic Blood Pressure, and Heart Rate in Healthy Males and Females." *Journal of Music Therapy* 38, no. 4 (2001): 254-72.

²⁹⁸ Goldberger, Leo, and Shelomo. Breznitz. *Handbook of Stress : Theoretical and Clinical Aspects*. New York : London: Free Press ; Collier Macmillan, 1982. 7-20.

²⁹⁹ Keeler, Jason, Edward Roth, Brittany Neuser, John Spitsbergen, Daniel Waters, and John-Mary Vianney. "The Neurochemistry and Social Flow of Singing: Bonding and Oxytocin." *Frontiers in Human Neuroscience* 9, no. 518 (2015): 1-10.

discover their own imaginative capacities, and to work on important personal issues. Drumming allows children to focus on themselves and others, as it requires both listening and sound production simultaneously. A highly emotional and physical activity, drumming mobilizes mind, body, and heart, creating shared moments of pure connection, joy and surprise.³⁰⁰

Daisy Fancourt and her colleagues explored the benefits of weekly ninety-minute group drumming sessions, over a ten-week period. The study involved forty-five participants suffering from depression or anxiety, of which thirty were allocated to the drumming group while the remaining fifteen established a control group. The music group was taught by a professional drummer, who provided djembe drums for the participants and taught basic rhythms through a series of call and response exercises, in addition to giving improvisatory opportunities. Candidates were monitored through questionnaires and saliva samples to assess cortisol and cytokine levels. The results indicated that participants involved in the drum circle showed increased anti-inflammatory cytokine, and a significant reduction in anxiety and depression, while the control group remained the same. The effects of music instruction were maintained three months after tuition had ceased. These results suggest that drumming circles can be beneficial, improving social resilience and mental well-being even after tuition.³⁰¹

The effects of group based music making for tertiary students has also been explored by education professors Dimitra Kokosaki and Susan Hallam. During the study, sixty-two non-music students were selected from two English universities, and asked to comment on the impact group music making had on their lives. An overwhelming majority of the students found that participating in an ensemble positively impacted their lives, developing social, musical and personal benefits.

³⁰⁰ Camilleri, Vanessa. "Community Building through Drumming." *The Arts in Psychotherapy* 29, no. 5 (2002): 262.

³⁰¹ Fancourt, Daisy, Rosie Perkins, Sara Ascenso, Livia A. Carvalho, Andrew Steptoe, and Aaron Williamon. "Effects of Group Drumming Interventions on Anxiety, Depression, Social Resilience and Inflammatory Immune Response among Mental Health Service Users." *PLoS ONE* 11, no. 3 (2016): 1-16.

The results suggested the group music promoted social bonding and improved self-esteem, resulting in participants feeling rewarded and satisfied. This study suggests that participation in ensembles can be beneficial for musicians and non-musicians alike.³⁰² Similarly, in 2010, two German psychologists investigated whether music education and joint music making, could affect social skills and bonding. A study was conducted on ninety-six pre-schoolers aged four, from mixed socioeconomic backgrounds from various German day-cares. The psychologists discovered that after group music making activities, children of both genders displayed high levels of social bonding, expressing a more empathetic and cooperative nature.³⁰³

These studies referenced, represent a small portion of the research conducted on the psychological and physiological effects of music participation and group music making. All have similar results, indicating that music can be extremely beneficial for all ages, improving general health, mood, reducing stress, promoting social bonding and enhancing immune health. These results have implications on medical and therapeutic settings, as music is becoming a viable alternative to pharmaceuticals.³⁰⁴

³⁰² Kokotsaki, Dimitra, and Susan Hallam. "The Perceived Benefits of Participative Music Making for Non-Music University Students: A Comparison with Music Students." *Music Education Research* 13, no. 2 (2011): 149-72.

³⁰³ Kirschner, Sebastian, and Michael Tomasello. "Joint Music Making Promotes Prosocial Behavior in 4-Year-Old Children." *Evolution and Human Behavior* 31, no. 5 (2010): 354-64.

³⁰⁴ Mona Lisa Chanda, Daniel J. Levitin. "The Neurochemistry of Music". *Trends in Cognitive Sciences* 17, no. 4 (2013): 179-93.

2.3 Benefits for the Developing Brain

Due to the neurological benefits of learning music, many researchers began to question what effect music instruction would have in educational contexts. Neuroscientist Oliver Sacks, (1933-2015)³⁰⁵ explains that “For the vast majority of students, music can be every bit as important educationally as reading or writing.”³⁰⁶

Research suggests music instruction can enhance spatial abilities, leading to enhanced cognitive development.³⁰⁷ There are two different types of spatial abilities, spatial recognition and spatial temporal reasoning. Spatial recognition involves identifying and sorting items dependant on variables such as colour, shape, size and so on. Spatial temporal reasoning, involves retaining mental imagery without visual aid and the ability to transform or combine images. This process is used during activities which require high brain function, such as problem solving, mathematics and playing chess.³⁰⁸ These abilities are used by musicians during musical performance to understand notation.³⁰⁹ Researcher Rauscher explains that:

...playing a melody involves reconstructing a spatial-temporal pattern in which the elements are not puzzle pieces but notes of high and low pitches of long and short duration.³¹⁰

³⁰⁵ *Britannica Academic*, s.v. "Oliver Sacks," accessed November 3, 2016, <http://academic.eb.com.ezproxy.waikato.ac.nz/levels/collegiate/article/473231>

³⁰⁶ Sacks, Oliver. *Musicophilia*. London: Picador, 2008. 102.

³⁰⁷ Orsmond, Gael I., and Leon K. Miller. 1999. Cognitive, musical and environmental correlates of early music instruction. *Psychology of Music* 27 (1): 18-37.

³⁰⁸ Bilhartz, Terry D., Rick A. Bruhn, and Judith E. Olson. “The Effect of Early Music Training on Child Cognitive Development.” *Journal of Applied Developmental Psychology* 20, no. 4 (1999): 615-36.

³⁰⁹ Patel, Peretz, Tramo, and Labreque. "Processing Prosodic and Musical Patterns: A Neuropsychological Investigation." *Brain and Language* 61, no. 1 (1998): 123-44.

³¹⁰ Rauscher, Frances H., Gordon L. Shaw, Linda J. Levine, Eric L. Wright, Wendy R. Dennis and Robert L. Newcomb. “Music Training Causes Long-Term Enhancement of Preschool Children’s Spatial-Temporal Reasoning.” *Neurological Research* 19 (1997): 2-8.

Professor Temple Grandin, suggests that music education from preschool is crucial, as enhanced spatial-temporal reasoning abilities could significantly impact mathematics and science education, making complicated concepts easier to understand.³¹¹ These abilities are integral for a range of professions, such as engineers, archaeologists and surgeons.³¹²

In 1999, Gael I. Orsmond and Leon K. Miller at the University of Illinois, explored whether early music instruction could benefit cognitive development. The study involved fifty-eight pre-schoolers aged three to six, of the same gender and similar ethnicity. Over four months, twenty-nine students were exposed to regular music lessons of Suzuki methods, while the remaining children had no form of musical instruction, establishing a control group. Students involved in the Suzuki program learnt either piano, violin or cello, all which involve finger dexterity and fine motor control. Initially and during the study, students were tested on verbal and spatial tasks, to develop an understanding of how music affects cognitive development. Results indicated that children who were exposed to music instruction had improved spatial skills and demonstrated an enhanced co-ordination between visual perception and fine motor planning, while the control group showed no improvement. The study also found that music education can strengthen and coordinate auditory, visual and motor cortexes, therefore accelerating cognitive development. Similar to previous findings, researchers concluded that music instruction at a young age can vastly impact cognitive development and result in enhanced spatial skills.³¹³

Researcher Terry D. Bilhartz and his colleagues also investigated whether music instruction promotes cognitive development, conducting a study involving seventy-one pre-schoolers, aged between four and five from East Texas. The children were divided into two groups, one which would receive musical tuition,

³¹¹ Grandin, Temple, Matthew Peterson, and Gordon L. Shaw. "Spatial-Temporal Versus Language-Analytic Reasoning: The Role of Music Training." *Arts Education Policy Review* 99, no. 6 (1998): 11-14.

³¹² Hetland, Lois. "Learning to Make Music Enhances Spatial Reasoning." *Journal of Aesthetic Education* 34, no. 3/4 (2000): 179-238.

³¹³ Orsmond, Gael I., and Leon K. Miller. 1999. Cognitive, musical and environmental correlates of early music instruction. *Psychology of Music* 27 (1): 18-37.

while the other group established a control group. The study indicated a significant relationship between early music instruction and cognitive growth, specifically in non-musical abilities. Results revealed that children who had been exposed to music instruction, scored significantly higher in tasks involving abstract and spatial temporal reasoning. Interestingly, children who had minimal exposure to music tuition during the study, also scored significantly higher, suggesting that even a small amount of music education can be vastly beneficial.³¹⁴

In 2006, Takako Fujioka and her colleagues conducted a similar study, exploring the development of the left hemisphere of the brain in children who had been exposed to one year of violin training, compared to those with no musical background. Twelve children aged between four to six participated in the study, half who would receive instrumental training in violin or piano. These children were monitored closely, being measured four times throughout the study using magnetoencephalography (MEG). Parents of the children were also involved in this process, monitoring amount of time spent practising in addition to their involvement in extracurricular activities such as gymnastics and sports, in an attempt to isolate benefits associated with music instruction. The results indicated that exposure to instrumental lessons stimulated the development of specific areas of the brain, while strengthening working memory capacity.³¹⁵ It is important to note that several variables were uncontrolled, therefore the researchers believe that stimulation between groups may have influenced overall findings.³¹⁶

These studies prompted Professor Lois Hetland to question the relationship between music education and cognitive development, discovering several theories. The first theory, known as the Trion theory, suggests that neural centres

³¹⁴ Bilhartz, Terry D., Rick A. Bruhn, and Judith E. Olson. "The Effect of Early Music Training on Child Cognitive Development." *Journal of Applied Developmental Psychology* 20, no. 4 (1999): 615-36.

³¹⁵ Fujioka, Takako, Bernhard Ross, Ryusuke Kakigi, Christo Pantev, and Laurel J. Trainor. "One Year of Musical Training Affects Development of Auditory Cortical-Evoked Fields in Young Children." *Brain* 129, no. 10 (2006): 2593.

³¹⁶ Moreno, Sylvain, Carlos Marques, Andreia Santos, Manuela Santos, São Luís Castro, and Mireille Besson. 2009; 2008;. Musical training influences linguistic abilities in 8-year-old children: More evidence for brain plasticity. *Cerebral Cortex* 19 (3): 712-23.

used during musical and spatial tasks, are in close proximity, and are therefore linked. The second theory known as the neural connections theory, developed through studies which suggest that a small exposure to music instruction can enhance spatial skills. Researchers felt these results suggested a prewired neural connection between processing centres for music and spatial temporal skills. The third theory suggests that complex processing is involved during musical performance, as one is required to understand melody, rhythm, pitch and notation, in addition to having fine spatial relations, motor control and interpersonal and intrapersonal skills.³¹⁷ Hetland concludes that musical reasoning and spatial intelligence use similar cortical patterns, meaning musical exposure can be particularly beneficial for developing brains.³¹⁸

A similar study was conducted in 2010 at Monash University in Melbourne, to explore the benefits of a classroom based instrumental music program compared to regular music classes as part of the school curriculum. One hundred and fifty-two students were selected across nine regional primary schools with the mean age of 8.79 years. Five schools received an intensive string instrumental program in addition to their regular music program of one hour per week. The instrumental program was based on philosophies of string educators Paul Rolland and Sheila Nelson, incorporating improvisation and educational games to encourage broad learning outcomes. The control program was often led by non-specialist teachers, exposing children to basic singing and rhythmic activities for one hour per week. Results indicated that students who were involved in the instrumental program demonstrated improved attention, verbal learning, verbal immediate recall, visual perception and visual recall. This group scored significantly higher than the control group in all areas except for verbal delayed recall. The control group also showed greater improvements in immediate recall in the second year, however declined in visual perception. Contrastingly, the scores of the instrumental group were maintained. This research suggests that the string based program significantly enhanced students' learning, visual perception, and immediate recall

³¹⁷ Hetland, Lois. "Learning to Make Music Enhances Spatial Reasoning." *Journal of Aesthetic Education* 34, no. 3/4 (2000): 179-238.

³¹⁸ Bilhartz, Terry D., Rick A. Bruhn, and Judith E. Olson. "The Effect of Early Music Training on Child Cognitive Development." *Journal of Applied Developmental Psychology* 20, no. 4 (1999): 615-36.

of verbal information, therefore improving auditory skills. This study continues to suggest that the quality, quantity and content of one's music education has a considerable effect on cognitive ability and that specialised teachers may be required to carry this out.³¹⁹

³¹⁹ Rickard, Nikki S., Jorge T. Vasquez, Fintan Murphy, Anneliese Gill, Samia R. Toukhsati. "Benefits of a Classroom Based Instrumental Music Program on Verbal Memory of Primary School Children: A Longitudinal Study." *Australian Society for Music Education Incorporated* 1 (2010): 36-47.

2.3.1 Literacy

A correlation has been found between music skills and phonological awareness, which can be linked to early reading skills.³²⁰ A literature review by researcher Ron Butzlaff, suggests a distinct relationship between musical instruction and standardised measures of reading.³²¹

In 1996, Martin F. Gardiner and his colleagues, studied the effects of music instruction on literacy skills. The study involved ninety-six children, aged between five and seven years old. Participants were divided into two groups, one which would receive Kodály and visual arts instruction, while the other received music and visual arts training through the standard curriculum. After seven months of instruction, the students were given the “First-Grade Metropolitan Achievement Test” and the results were compared with previous scores from kindergarten. The results indicated that majority of the children involved in the specialised art program had lower test scores than the children in the control group however after seven months of tuition, children had not only caught up to their peers but also were ahead in mathematics. The study was repeated the following year, giving similar results. The researchers believed that involvement in the specialised arts program challenged and motivated students, enhancing development of mental skills.³²² This study also suggests that quality and curriculum of music education influence overall results and development.

In 2002, researchers at Canadian university, McMaster, explored the connection between music and cognitive development; specifically, whether music education could impact early reading skills in pre-schoolers. During the study, one hundred children aged between four and five were examined. These candidates were given a series of exercises that focused on elements of music such as pitch, rhythm, melody and harmonic progression. The results indicated that music training aids

³²⁰ Hallam, Susan. "The Power of Music: Its Impact on the Intellectual, Social and Personal Development of Children and Young People." *International Journal of Music Education* 28, no. 3 (2010): 269-89.

³²¹ Butzlaff, Ron. "Can Music Be Used to Teach Reading?". *Journal of Aesthetic Education* 34, no. 3/4 (2000): 167-78.

³²² Gardiner, Martin F., Alan Fox, Faith Knowles, and Donna Jeffrey. "Learning Improved by Arts Training." *Nature* 381, no. 6580 (1996): 284-84.

phonological awareness, as children could differentiate different sounds with ease. They discovered that once a child can differentiate difficult sounds, they are more able to associate phonemes with their visual representation. For example, the sound “ah” with the letter A. The study suggests that music training is beneficial to young children, as language and music are processed in similar ways. Researchers explain that:

Both speech and music involve combining small numbers of elements (phonemes, notes) according to rules (referred to as grammars in music theory) that allow the generation of unlimited numbers of phrases or utterances that are meaningful³²³

Therefore, music education establishes a link which can accelerate the development of auditory analysis skills, needed for processing language as one blends and segments sounds.³²⁴

³²³ Anvari, Sima H., Laurel J. Trainor, Jennifer Woodside, and Betty Ann Levy. “Relations among musical skills, phonological processing, and early reading ability in preschool children.” *Journal of Experimental Child Psychology* 83, no. 2 (2002): 112.

³²⁴ Anvari, Sima H., Laurel J. Trainor, Jennifer Woodside, and Betty Ann Levy. “Relations among musical skills, phonological processing, and early reading ability in preschool children.” *Journal of Experimental Child Psychology* 83, no. 2 (2002): 111-30.

2.3.2 Language

Researcher Dana L. Strait and her colleagues explored whether this neural enhancement of musicians could benefit language related skills. A study was conducted on seventy-six participants of normal hearing, aged between three and thirty. These participants were divided into three groups according to age and then divided by musical ability in each. Throughout this study all musicians received weekly instruction and practised at home for at least four days of the week. To reduce variables participants shared similar socioeconomic status and each age group shared similar intelligence. Candidates of each age group were given a series of tests to monitor their intelligence quotient, working memory, as well as cognitive, auditory and visual abilities. Results indicated that musicians from all age groups performed higher in temporally distinct responses, for example distinguishing the difference between Ba and Ga. They also performed higher on tasks that required working memory and had faster reaction times. These results imply that musicians have enhanced neural coding and heightened auditory processing from as young as the age of three. Research therefore suggests that:

Musical experience prior to 3.5 years of age may be especially influential on speech processing given evidence for the closing of a sensitive period for the development of speech perception at that stage.³²⁵

Furthermore, that:

...music training may offer an efficient means of improving auditory processing in young children. We propose that music training provides a rewarding, acoustically enriched auditory environment during this sensitive developmental period, with the capacity to confer lasting impacts

³²⁵Dana L. Strait, Samantha O'Connell, Alexandra Parbery-Clark, Nina Kraus. "Musicians' Enhanced Neural Differentiation of Speech Sounds Arises Early in Life: Developmental Evidence from Ages 3 to 30." *Cerebral Cortex* (2013): 2516.

on the functional and structural organization of the human auditory system that set the stage for later language skills.³²⁶

Several years later, a similar study was conducted, examining how musical training influences linguistic abilities in eight-year-old children. The study involved thirty-two Portuguese children with no musical experience, over a period of nine months. To reduce variables, candidates selected were of normal hearing, same hand dominance and of similar socioeconomic backgrounds. These children were divided into two groups, one which would receive musical tuition while the control group were involved in painting lessons, to maintain the same level of engagement and stimulation between the two groups. Prior to specialist training and during the study, the children were examined through neuropsychological assessments to monitor skills such as pitch discrimination, reading abilities and general intelligence. The findings indicated that both groups showed improvements, scoring higher than the initial examinations however it is unknown whether this is due to exposure to tuition or general development. The results did indicate however that children who had been exposed to musical training, demonstrated improved reading skills, pitch discrimination and higher general intelligence quotient than the control group. This study concludes that musical training can improve auditory analysis, phonological development and sound sequencing and blending, skills required for the development of reading.³²⁷

³²⁶ Dana L. Strait, Samantha O'Connell, Alexandra Parbery-Clark, Nina Kraus. "Musicians' Enhanced Neural Differentiation of Speech Sounds Arises Early in Life: Developmental Evidence from Ages 3 to 30." *Cerebral Cortex* (2013): 2512-2521.

³²⁷ Moreno, Sylvain, Carlos Marques, Andreia Santos, Manuela Santos, São Luís Castro, and Mireille Besson. "Musical training influences linguistic abilities in 8-year-old children: More evidence for brain plasticity." *Cerebral Cortex* 19 (2008): 712-23.

2.3.3 Auditory

These studies suggest that music education can benefit not only reading skills but also auditory skills involved in speech. In 2005, music education Professor Joyce Eastlund Gromko, conducted a study to assess the benefits of musical tuition during early years of development. As part of the study, Gromko selected two preschools, one to establish a control group, as children received no musical tuition, while the other pre-schoolers received thirty-minute instruction once a week for four months. The two groups of children were tested three times a year for phonemic awareness, using dynamic indicators of basic early literacy skills tests. Throughout the study, it was ensured that the two groups received the same amount of reading instruction. Music tuition was taught by advanced university music students who based their work on Jerome Bruner's theory of cognitive development, discussed in *The Process of Education* (1960, 1977) and *Toward a Theory of Instruction* (1966). During these thirty-minute segments, children learnt basic folk songs, body percussion and had the opportunity to play basic instruments such as shakers, triangles and woodblocks. Results indicated that children who had been exposed to music education, showed a significant improvement in phonemic fluency, developing aural skills faster and more efficiently,³²⁸ reinforcing the idea that:

Even just a small exposure to music lessons as a child creates neural circuits for music processing that are enhanced and more efficient than for those who lack training. Music lessons teach us to listen better, and they accelerate our ability to discern structure and form in music...³²⁹

Similarly, in 2015, researchers Adam Tierney, Jennifer Krizman and Nina Kraus conducted a longitudinal study on adolescent auditory enrichment, to investigate whether music training alters auditory development. The study monitored two groups of high school students, one which received music training and the other

³²⁸ Gromko, Joyce Eastlund. "The effect of music instruction on phonemic awareness in beginning readers." *Journal of Research in Music Education* 53 (2005): 199-209.

³²⁹ Levitin, Daniel. *This Is Your Brain on Music*. London: Atlantic Books, 2006. 194.

which received cadet instruction, both available through the school's curriculum. At the mean age of 14.7, students were tested on language skills and again three years later. The study showed both groups improved phonological awareness, however a more substantial improvement was observed in the music group. The children involved in music instruction also maintained high response consistency, suggesting music tuition can maintain heightened synaptic density in the auditory system. Researchers stressed the importance of exposure to music education during childhood, as during adolescence plasticity declines, suggesting musical training leads to greater gains in auditory and motor function when began during young childhood.³³⁰ Researcher Susan Hallam, suggests that musical engagement can induce cortical reorganisation, responsible for how the brain processes information. Furthermore, that if this occurs during early development, alteration in the brain may permanently change the way which information is processed.³³¹

³³⁰ Tierney, Adam T., Jennifer Krizman, and Nina Kraus. "Music Training Alters the Course of Adolescent Auditory Development." *Proceedings of the National Academy of Sciences* 112, no. 32 (2015): 10062-67.

³³¹ Hallam, Susan. "The Power of Music: Its Impact on the Intellectual, Social and Personal Development of Children and Young People." *International Journal of Music Education* 28, no. 3 (2010): 270.

2.3.4 Predisposition

Scientists and researchers have additionally questioned whether music tuition promotes intelligence or whether brighter students are more likely to study music, as generally musicians are from a higher socioeconomic status.³³² Researcher Glen Schellenberg, investigated the relationship between intelligence and musical instruction on four groups of school children. Two of these groups received music tuition, one instructed on keyboard, the other on voice through Kodály methods. The two remaining groups established control groups, one was exposed to drama tuition while the remaining group received no instruction. The results indicated that all groups involved increased in intelligence quotient due to natural maturation, however, the groups exposed to music instruction had significantly larger increases.³³³

From such studies, it is difficult to distinguish whether these results are purely due to musical training or other variables, such as personality and predisposition.³³⁴ In 2005, a study was conducted by a group of neurologists, to monitor the effects of music education on developing brains, and examine whether elements such as predisposition affected the overall result. The study involved seventy children, aged five to seven, of which thirty-nine students were exposed weekly to half an hour private sessions on keyboard or a stringed instrument, while the remaining thirty-one children established a control group. While the control group did not participate in private instrumental tuition, they were exposed to weekly half an hour music classes at school included in the curriculum. These classes consisted of singing and experimenting with percussive instruments such as drums and bells. To conduct a fair experiment, variables such as socioeconomic status, hand dominance and parental education were considered. Throughout the study

³³² Southgate, Darby E., and Vincent J. Roscigno. "The Impact of Music on Childhood and Adolescent Achievement." *Social Science Quarterly (Wiley-Blackwell)* 90, no. 1 (2009): 4-21.

³³³ Schellenberg, E. Glenn. "Music Lessons Enhance IQ." *Psychological Science* 15, no. 8 (2004): 511-14.

³³⁴ Norton, Andrea, Ellen Winner, Karl Cronin, Katie Overy, Dennis J. Lee, and Gottfried Schlaug. 2005. Are there pre-existing neural, cognitive, or motoric markers for musical ability? *Brain and Cognition* 59 (2): 124-34.

candidates were monitored through MRI scans and given exercises to test auditory skills, verbal memory and fine motor control. The results indicated that despite weekly music sessions the control group remained the same in cognitive function, while the group exposed to private instrumental tuition showed correlations between music perception skills, verbal reasoning and phonemic awareness, necessities to a developing brain.³³⁵ This study additionally proved through MRI and fMRI that there were no differences between children starting musical tuition and the control group concluding that it is unlikely the children who pursued music had any predispositions prior to training.³³⁶

A 2009 study also questioned whether anatomical structures found in adult musicians are a product of nature or nurture. The study investigated the relationship between structural brain changes in children and musical training over a fifteen-month period. Thirty-one children were selected to participate in the study, fifteen of these students received private keyboard tuition, while the remaining sixteen children established a control group, receiving regular music tuition as part of the education curriculum. To reduce variables, children selected were of the same hand dominance, similar age, gender and socioeconomic status. During the study, children were monitored through MRI scans and behavioural tests, indicating that children exposed to private music tuition showed greater behavioural and cognitive developments, showing high levels of neuroplasticity. These results suggest that anatomical changes are a product of music training rather than biological predisposition³³⁷ and that quality of instruction is a significant factor.

³³⁵ Norton, Andrea, Ellen Winner, Karl Cronin, Katie Overy, Dennis J. Lee, and Gottfried Schlaug. 2005. Are there pre-existing neural, cognitive, or motoric markers for musical ability? *Brain and Cognition* 59 (2): 124-34.

³³⁶ Moreno, Sylvain, Carlos Marques, Andreia Santos, Manuela Santos, São Luís Castro, and Mireille Besson. "Musical training influences linguistic abilities in 8-year-old children: More evidence for brain plasticity." *Cerebral Cortex* 19 (2008): 712-23.

³³⁷ Hyde, Krista L., Jason Lerch, Andrea Norton, Marie Forgeard, Ellen Winner, Alan C. Evans, and Gottfried Schlaug. "The Effects of Musical Training on Structural Brain Development." *Annals of the New York Academy of Sciences* 1169, no. 1 (2009): 182-86.

2.4 Benefits for Children from Low Socioeconomic Backgrounds

Socioeconomic status is defined by household income, parental education and occupation, deriving from the idea that parents and caregivers of high socioeconomic backgrounds can provide adequate resources to support their child's growth. Contrastingly, families from lower socioeconomic backgrounds, may struggle to access adequate resources for their child, often resulting in poor nutrition, healthcare and fewer enriching auditory interactions.³³⁸ Factors such as parental education can impact students' academic ability, as highly educated parents are often more able to provide stimulating resources to motivate and promote academic skills.³³⁹ The number of children in a family can additionally affect educational outcomes, as parents are equipped with a finite amount of resources such as money, energy and time. One study suggests that in bigger families these resources are divided, giving subsequent children fewer educational opportunities.³⁴⁰ These factors can significantly affect a child's academic performance, often resulting in higher levels of academic failure and school dropout.³⁴¹

Biologist Nina Kraus discusses that:

Children from disadvantaged backgrounds often face impoverished auditory environments, such as greater exposure to ambient noise and

³³⁸ Bradley, Robert H. and Robert F. Corwyn. 2002. "Socioeconomic Status and Child Development." *Annual Review of Psychology* 53: 371-99. <http://ezproxy.waikato.ac.nz/login?url=http://search.proquest.com/docview/205754355?accountid=17287>.

³³⁹ Teachman, Jay D. "Family Background, Educational Resources, and Educational Attainment." *American Sociological Review* 52, no. 4 (1987): 548-57.

³⁴⁰ Downey, Douglas B. "When Bigger Is Not Better: Family Size, Parental Resources, and Children's Educational Performance." *American Sociological Review* 60, no. 5 (1995): 746-61.

³⁴¹ Kraus, Nina, Jane Hornickel, Dana L. Strait, Jessica Slater, and Elaine Thompson. "Engagement in Community Music Classes Sparks Neuroplasticity and Language Development in Children from Disadvantaged Backgrounds." *Frontiers in Psychology* 5, no. 1403 (2014): 1-9.

fewer opportunities to participate in complex language interactions during development.³⁴²

These factors contribute to impaired reading and cognitive skills, delaying auditory development, essential to linguistic ability.³⁴³ Research suggests a strong correlation between socioeconomic status and verbal language skills,³⁴⁴ often resulting in weaker levels of vocabulary when children begin school.³⁴⁵ This has multiple implications in an educational context, as children from impoverished backgrounds often have deficiencies in neural processing³⁴⁶ and are therefore disadvantaged before the onset of education.

Nina Kraus and her colleagues questioned whether an enriching auditory environment that occurs through music instruction, could counteract auditory deprivation and “enhance the neural processing of speech”³⁴⁷ in at-risk children. Throughout the study, neurologists worked alongside the Harmony Project, a community music program which provides free music tuition to over one thousand at-risk children in Los Angeles. The children involved in this program are from low socioeconomic backgrounds and the majority are eligible for free or

³⁴² Kraus, Nina, Jane Hornickel, Dana L. Strait, Jessica Slater, and Elaine Thompson. "Engagement in Community Music Classes Sparks Neuroplasticity and Language Development in Children from Disadvantaged Backgrounds." *Frontiers in Psychology* 5, no. 1403 (2014): 1.

³⁴³ Kraus, Nina, Jane Hornickel, Dana L. Strait, Jessica Slater, and Elaine Thompson. "Engagement in Community Music Classes Sparks Neuroplasticity and Language Development in Children from Disadvantaged Backgrounds." *Frontiers in Psychology* 5, no. 1403 (2014): 1-9.

³⁴⁴ Mercy, James A., and Lala Carr Steelman. "Familial Influence on the Intellectual Attainment of Children." *American Sociological Review* 47, no. 4 (1982): 532-42. <http://www.jstor.org.ezproxy.waikato.ac.nz/stable/2095197>

³⁴⁵ Kraus, Nina, Jane Hornickel, Dana L. Strait, Jessica Slater, and Elaine Thompson. "Engagement in Community Music Classes Sparks Neuroplasticity and Language Development in Children from Disadvantaged Backgrounds." *Frontiers in Psychology* 5, no. 1403 (2014): 1-9.

³⁴⁶ Kraus, Nina, Jessica Slater, Elaine C. Thompson, Jane Hornickel, Dana L. Strait, Trent Nicol, and Travis White-Schwoch. "Auditory Learning through Active Engagement with Sound: Biological Impact of Community Music Lessons in at-Risk Children." *Frontiers in Neuroscience* 8, no. 351 (2014): 1-12.

³⁴⁷ Nina Kraus, Jessica Slater, Elaine C. Thompson, Jane Hornickel, Trent Nicol, Travis White-Schwoch. "Music Enrichment Programs Improve the Neural Encoding of Speech in at-Risk Children." *The Journal of Neuroscience* (2014): 11913.

reduced lunches, due to their household income being below 185% of federal poverty. Forty-four at-risk children were selected to participate in this study from the program's waiting list. These children were divided into two groups; one which would receive music tuition immediately and the other which would receive tuition after a year. Candidates followed the curriculum set out by the Harmony Project, involving two one hour sessions of musicianship, focusing on pitch, rhythm, notation and basic recorder skills, once a week. Generally, after a six-month period children progressed to instrumental and ensemble training for four hours a week, on either a string, woodwind or brass instrument. Over the two-year period, neural responses were monitored, using *Intelligent Hearing System's SmartEP platform*,³⁴⁸ to monitor short and long term effects on cortical and non-auditory regions. The results showed that both groups demonstrated neural enhancements, however a direct relationship was established between hours of practise and improvement of neural differentiation. This implies that the more music education a child is exposed to, the greater level of neural improvement. This study indicates that music education has the potential to encourage neuroplasticity in at-risk children who otherwise may be subjected to academic and social difficulties.³⁴⁹

A further study was conducted with twenty-six students from the Harmony Project, aged between six and nine years old. The study found that students who were exposed to music education over a two-year period, were more engaged and developed stronger encoding of speech, resulting in increased reading scores. A relationship was also discovered between attendance and neural enhancements, as children who had higher attendance in instrumental classes had stronger neural encoding and higher reading fluency, while those who did not participate were

³⁴⁸ Nina Kraus, Jessica Slater, Elaine C. Thompson, Jane Hornickel, Trent Nicol, Travis White-Schwoch. "Music Enrichment Programs Improve the Neural Encoding of Speech in at-Risk Children." *The Journal of Neuroscience* (2014): 11914.

³⁴⁹ Nina Kraus, Jessica Slater, Elaine C. Thompson, Jane Hornickel, Trent Nicol, Travis White-Schwoch. "Music Enrichment Programs Improve the Neural Encoding of Speech in at-Risk Children." *The Journal of Neuroscience* (2014): 11913-18.

more likely to decrease in reading fluency.³⁵⁰ These studies suggest the importance of music education and how it can significantly impact children's cognitive abilities and academic performance.

Exposure to music education can additionally affect social outcomes, as growing evidence suggests that communal music making can foster social inclusion. Social inclusion is:

...a process which ensures that those at risk of poverty and social exclusion gain the opportunities and resources necessary to participate fully in economic, social, and cultural life and to enjoy a stand of living and wellbeing that is considered normal in the society in which they live.³⁵¹

Factors such as poverty, discrimination, lack of learning opportunities and lack of basic competency can often lead to social exclusion. In 2007, England implemented a national singing program, *Sing Up*.³⁵² The program aims to give every child the opportunity to participate in regular singing experiences, promoting personal, social and educational development. Researcher Graham F. Welch and his colleagues investigated the program in 2014, assessing 13,096 children's singing ability and attitude toward singing. Results indicated a relationship between singing ability, positive self-esteem and social inclusion. Researchers commented that these results were likely due to the group based pedagogy.³⁵³

³⁵⁰ Kraus, Nina, Jane Hornickel, Dana L. Strait, Jessica Slater, and Elaine Thompson. "Engagement in Community Music Classes Sparks Neuroplasticity and Language Development in Children from Disadvantaged Backgrounds." *Frontiers in Psychology* 5, no. 1403 (2014): 1-9.

³⁵¹ Welch, Graham F., Evangelos Himonides, Jo Saunders, Ioulia Papageorgi, and Marc Sarazin. "Singing and Social Inclusion." *Frontiers in Psychology* 5 (2014): 1-12.

³⁵² "National Singing Programme." International Music Education Research Centre, <http://www.imerc.org/j3/research/40-national-singing-programme>.

³⁵³ Welch, Graham F., Evangelos Himonides, Jo Saunders, Ioulia Papageorgi, and Marc Sarazin. "Singing and Social Inclusion." *Frontiers in Psychology* 5 (2014): 1-12.

Researchers Frances H. Rausher and Sean C. Hinton, also examined the effects of music education on children from economically deprived backgrounds. The study was initially conducted in 1997, on seventy-eight preschool students across three institutions over forty-eight weeks. These students were assigned either musical tuition (group singing or piano), computer instruction or no instruction. The students were tested both before and after instruction, on spatial-temporal reasoning and spatial recognition tasks. Initially, children produced similar results, however when tested after exposure to tuition, results indicated that the children involved in piano instruction, scored higher on spatial-temporal reasoning tests compared to the other children. Interestingly, all children showed similar results on spatial recognition tests, however those involved in singing and computer instruction did not improve significantly during any tests.

To further examine these results, another study was conducted analysing how various types of music instruction affected cognitive function, as each instrument requires a different set of skills. For example, singing requires high levels of auditory function to match pitches aurally, while keyboard instruments provide visual representation of distance between pitches, therefore utilising spatial reasoning, while rhythmic instruments require fine motor control. One hundred at-risk children of contrasting ethnicities were given instruction on piano, singing or drums, over a period of forty-eight-weeks. Candidates were tested during the study both before and after receiving musical tuition. The results indicate that students involved in learning a rhythmic instrument scored significantly higher during temporal and arithmetic tasks. Interestingly, all groups performed significantly higher than those who had no instrumental instruction during the initial study.

A third study was conducted to analyse the longevity of cognitive development after music instruction was terminated, compared to children of the same age with no musical history. To determine these effects, students from the previous studies were tested, measuring levels of reading and auditory comprehension, numerical fluency and oral expression. The students from the initial study who had been exposed to music instruction, continued to score higher than their peers in spelling, reading, reading comprehension, mathematics, reasoning and listening

tasks. Similarly, the students who received music instruction in the second study, performed higher than their non-musical peers in tasks which involved hand movements, number recall and arithmetic. These studies firstly conclude that rhythmic instruction has the highest impact on numerical reasoning than other instrumental tuition. Secondly, that learning music can assist at-risk children to academically perform alongside their middle-income peers. Thirdly, that the effects of music tuition are still present two years after tuition has finished, implying that even a small amount of music tuition can be cognitively beneficial.³⁵⁴

Similarly, researcher Philip Yang discovered that parental education was an important factor, as music education had a greater impact in children whose parent or caregiver had a low level of education.³⁵⁵ Like previous studies, these findings imply music education can be extremely beneficial for children from low socioeconomic backgrounds, providing stimulation and development to score alongside peers.

Neurologist Jessica Slater believes that music education can be essential to children from low socioeconomic backgrounds explaining that:

...one of the unique characteristics of music is its ability to engage an individual on many levels, socially, emotionally, intellectually and creatively, promoting other aspects of development such as self-confidence and discipline and fostering social cohesion. These are positive effects in themselves, particularly in at-risk communities, and they may also provide the key to why music is such a powerful teacher. Music engages the emotional circuitry of the brain, which promotes neural plasticity. Importantly, music is a form of enrichment that can be sustained over a lifetime: children who participate in musical activities are more likely to participate as adults; even if they do not continue playing music,

³⁵⁴ Rauscher, Frances H., and Sean C. Hinton. "Music Instruction and Its Diverse Extra-Musical Benefits." *Music Perception: An Interdisciplinary Journal* 29, no. 2 (2011): 215-26.

³⁵⁵ Yang, Philip. "The Impact of Music on Educational Attainment." *Journal of Cultural Economics* 39, no. 4 (2015): 369-96.

the positive biological impact of early music training may be preserved into adulthood, many years after training has ceased.³⁵⁶

These studies suggest that music education can be essential to at-risk children, helping to counteract effects of poverty, educating students and enabling academic achievement. Unfortunately, music education is often inaccessible to children from low socioeconomic backgrounds,³⁵⁷ being prohibitively expensive.³⁵⁸ A study based in the United States showed that students from low socioeconomic backgrounds are less likely to participate in extracurricular musical activities such as learning an instrument or participating in a choir, orchestra or band.³⁵⁹

According to United Nations Agenda 2030, eradicating child poverty is the greatest global challenge and aims to significantly reduce the number of children affected.³⁶⁰ In New Zealand, child poverty actively affects 28% children aged zero to seventeen. This equates to 295,000 children who struggle to access basic needs such as nutritious food, adequate healthcare and heating.³⁶¹ These conditions often lead to chronic illnesses, abuse and developmental deprivation, negatively impacting educational outcomes. National advocacy manager for UNICEF NZ Deborah Morris-Travers, explains the consequences of child poverty as these children are New Zealand's future problem solvers, entrepreneurs, citizens and

³⁵⁶ Slater, Jessica, Dana L. Strait, Erika Skoe, Samantha O'Connell, Elaine Thompson, Nina Kraus. "Longitudinal Effects of Group Music Instruction on Literacy Skills in Low-Income Children." *PLoS ONE* 9, no. 11 (2014): 7.

³⁵⁷ Darby E. Southgate, and Vincent J. Roscigno. "The Impact of Music on Childhood and Adolescent Achievement." *Social Science Quarterly (Wiley-Blackwell)* 90, no. 1 (2009): 4-21.

³⁵⁸ Nina Kraus, Jessica Slater, Elaine C. Thompson, Jane Hornickel, Trent Nicol, Travis White-Schwoch. "Music Enrichment Programs Improve the Neural Encoding of Speech in at-Risk Children." *The Journal of Neuroscience* (2014): 11913-18.

³⁵⁹ Morrison, Steven J. "Music Students and Academic Growth." *Music Educators Journal* 81, no. 2 (1994): 33-36.

³⁶⁰ Nations, United. "Transforming Our World: The 2030 Agenda for Sustainable Development." <https://sustainabledevelopment.un.org> 2015.

³⁶¹ Simpson, J., Duncanson, M., Oben, G., Wicken, A., & Gallagher, S. (2016). *Child Poverty Monitor: Technical Report 2016 (National Report)*. New Zealand Child and Youth Epidemiology Service. Retrieved from <http://hdl.handle.net/10523/7006>

parents.³⁶² These findings lead one to question whether a meaningful music education in New Zealand could counteract effects of low socioeconomic status as shown through various studies and the Harmony Project.

³⁶² Morris-Travers, Deborah. "Hearing the Voices of Our Children." In *TEDx Talks*, 2016.

2.5 Implications for Music Education

Studies have observed that children exposed to a meaningful music education, have enhanced cognitive function, auditory development, spatial abilities and neural responses.³⁶³ Despite numerous studies, governments often still question the educational value of music and the benefits of group music making.³⁶⁴

Pianist Chungwon Kim, suggests that music instruction can provide a holistic education, as through music, students can learn history, science, ethics, anthropology,³⁶⁵ geography, foreign languages, physical education and vocational training.³⁶⁶ There is also a significant correlation between music and mathematics, arithmetic, geometry and trigonometry, as foundations of music are based on ratios and fractions. As discussed earlier, notes, intervals, scales, tuning and harmony are related to mathematical proportions and numerical ratios. Mathematic concepts are additionally used during the performance of music, through rhythm, pitch, time signatures and note duration. Composers such as J.S Bach, Mozart and Messiaen even use geometrical ideas and concepts such as the Fibonacci sequence and the golden ratio. Therefore, advocates suggest that music facilitates cognitive learning, in addition to logical, spatial and abstract reasoning which can be transferred to other subjects.³⁶⁷

Holistic implications of a meaningful music education were observed in New South Wales, Australia, where a choir was established consisting of ninety primary children aged seven to twelve. The choir was led by three generalist teachers with little musical background as:

³⁶³ Hallam, Susan. "The Power of Music: Its Impact on the Intellectual, Social and Personal Development of Children and Young People." *International Journal of Music Education* 28, no. 3 (2010): 269-289.

³⁶⁴ Heyning, Lyndell. "The Enhancement of Musical and Other Learning for Both Teachers and Students through a Weekly Choir Session." *Australian Journal of Music Education* 1 (2010): 58-70.

³⁶⁵ Kim, Chungwon. "Nurturing Students Through Group Lessons." *The American Music Teacher* 54, no. 1 (2004): 28-31.

³⁶⁶ Morrison, Steven J. "Music Students and Academic Growth." *Music Educators Journal* 81, no. 2 (1994): 33-36.

³⁶⁷ Carlos Dos Santos, Luiz. "The Learning of Music as a Means to Improve Mathematical Skills." Unpublished, 2015.

...not one of the teachers had studied music at teachers' college in any depth, and that their 'formal' training and knowledge of musical concepts was through in-service courses and basic classroom experience within their professional teaching time. Generally, respondents thought their initial training and further professional development courses themselves lacked sufficient depth for them to teach music in any depth and all affirmed that though they knew small aspects, they required more guidance in developing and realising these expectations.³⁶⁸

Interestingly, educators initially thought that the arts were of low educational status in their school or community. However, throughout the duration of the year, attitudes shifted, as teachers found themselves to be more confident and explained that the students showed heightened levels of confidence, "memory retention and recognition of various understandings in both musical and visual literacy".³⁶⁹ Teachers expressed that the weekly choir session often would become a literacy and history lesson as they would pursue to discover what each song was about.³⁷⁰

A 2004 study found that after six months' exposure to music education, students grew in self-confidence, self-awareness and self-discipline. Through a series of questionnaires and interviews, the findings suggest that music instruction builds trust, promotes social bonding and musical skills. Results suggest that group music making fosters positive attitude, good study habits and social skills,³⁷¹ while promoting higher levels of self-esteem³⁷² and social bonding.³⁷³

³⁶⁸ Heyning, Lyndell. "The Enhancement of Musical and Other Learning for Both Teachers and Students through a Weekly Choir Session." *Australian Journal of Music Education* 1 (2010): 61.

³⁶⁹ Heyning, Lyndell. "The Enhancement of Musical and Other Learning for Both Teachers and Students through a Weekly Choir Session." *Australian Journal of Music Education* 1 (2010): 66.

³⁷⁰ Heyning, Lyndell. "The Enhancement of Musical and Other Learning for Both Teachers and Students through a Weekly Choir Session." *Australian Journal of Music Education* 1 (2010): 58-70.

³⁷¹ Blandford, Sonia, and Stephanie Duarte. "Inclusion in the Community: A Study of Community Music Centres in England and Portugal, Focusing on the Development of Musical and Social Skills within Each Centre." *Westminster Studies in Education* 27, no. 1 (2004): 7-25.

³⁷² Rickard, Nikki S., Peter Appelman, Richard James, Fintan Murphy, Anneliese Gill, and Caroline Bambrick. "Orchestrating Life Skills: The Effect of Increased

Additionally, music education can develop intelligent and emotional quotient, promote extra musical skills such as communication, inclusive behaviour, supportive nature, higher personal achievement and class attendance.³⁷⁴ Similarly, a study in 1999 monitored 25,000 students' achievement over ten years to examine the relationship between music education and academic performance. The study showed that all secondary school students involved in music had significantly higher test scores, specifically in mathematics and were less likely to drop out, despite differing socioeconomic backgrounds.³⁷⁵

One Finnish study investigated whether there was a correlation between exposure to music education and quality of school life. In Finland, the general curriculum ensures one weekly music lesson for years one to seven, however children can also partake in extended music classes resulting in up to four hours of musical exposure per week. To examine the results of the general music program compared to the extended program, ten Finnish schools were examined, involving four classes per school. The study indicated that students involved in the extended music classes were generally happier and experienced a higher quality of school life, through additional challenges and opportunities for achievement.³⁷⁶

Research from the University of Kansas additionally examined the relationship between music programs and standardised test results. The study analysed test results from 4,739 students in year four, five, nine and ten, from schools with differing music programs. A relation was discovered between the quality of music program and academic performance, as schools with excellent instrumental and choral programs held higher results in English and mathematics. Several variables

School-Based Music Classes on Children's Social Competence and Self-Esteem." *International Journal of Music Education* 31, no. 3 (2012): 292-309

³⁷³ Broh, Beckett A. "Linking Extracurricular Programming to Academic Achievement: Who Benefits and Why?". *Sociology of Education* 75, no. 1 (2002): 69-95.

³⁷⁴ McClung, Alan C. "Extramusical Skills in the Music Classroom." *Music Educators Journal* 86, no. 5 (2000): 37-68.

³⁷⁵ James S. Catterall, Richard Chappleau, John Iwanaga. "Involvement in the Arts and Human Development: General Involvement and Intensive Involvement in Music and Theater Arts." *Champions of Change* (1999): 1-18.

³⁷⁶ Eerola, Päivi-Sisko, and Tuomas Eerola. "Extended Music Education Enhances the Quality of School Life." *Music Education Research* 16, no. 1 (2014): 88-104.

were present in this study such as socioeconomic status and differing quality of school education for English and mathematics; nevertheless, a strong relationship was established throughout the results.³⁷⁷ A 2002 study provided similar results, discovering a relationship between music participation and achievement in mathematics and English. The study also found music participation to be more beneficial than other extracurricular activities measured, such as sports and drama.³⁷⁸

Researcher Robert Legg questioned whether music could be used to assist other subjects, conducting a study on intermediate students learning French at school. Students were randomly divided into two groups, one which would learn French vocabulary traditionally and the other through song. Legg hypothesised that a marriage between melody and words and the use of repetition, could make French vocabulary more retainable. The study found that students who were taught vocabulary through music, learned specific words and phrases faster and could translate English phrases into French with more ease.³⁷⁹ A similar study observed a connection between musical skills and learning a second language, suggesting that musicians can learn languages more easily and efficiently.³⁸⁰

From these studies, it is evident that music education can dramatically affect one's education, increasing cognitive function and academic performance. Music education can additionally aid other subjects in the curriculum and develop a variety of lifelong skills such as communication, social bonding, self-esteem and self-discipline. The results of this literature review suggest an intricate relationship between quality of education and academic performance, as private tuition is often more beneficial than the music tuition available through the

³⁷⁷ Johnson, Christopher M., and E. Memmott Jenny. "Examination of Relationships between Participation in School Music Programs of Differing Quality and Standardized Test Results." *Journal of Research in Music Education* 54, no. 4 (2006): 293-307.

³⁷⁸ Broh, Beckett A. "Linking Extracurricular Programming to Academic Achievement: Who Benefits and Why?". *Sociology of Education* 75, no. 1 (2002): 69-95.

³⁷⁹ Legg, Robert. "Using Music to Accelerate Language Learning: An Experimental Study." *Research in Education* 82, no. 1 (2009): 1-12.

³⁸⁰ Slevc, L. Robert, and Akira Miyake. "Individual Differences in Second-Language Proficiency." *Psychological Science* 17, no. 8 (2006): 675-81.

standard curriculum. Perhaps this is due to a lack of music specialists, (as regular educators often have little musical background) or that instrumental tuition requires more skills, such as finger dexterity and knowledge of the instrument and notation. Regardless, these findings suggest that a curricular review of music education is needed, so that children of all backgrounds are given musically enriching experiences.

Chapter 3: New Zealand Education

*Music is a highway for exploring the emotional and aesthetic dimensions of experience. Education without music short-changes our children and their futures.*³⁸¹

- National Commission on Music Education

3.1 History of Education

New Zealand has a rich, diverse history dating back to 1300 A.D, when Māori tribes first arrived in the country on handcrafted canoes,³⁸² known as *waka*.³⁸³ In 1642, Dutch explorer Abel Tasman became the first known European to discover the country,³⁸⁴ bestowing the name 'Zeeland', after his province in Holland.³⁸⁵ After the events in Murderer's Bay, New Zealand remained a mere line on a map until 1769, when Captain James Cook circumnavigated the country over three voyages.³⁸⁶ From 1800 onward, Europeans began to emigrate to the country, establishing new settlements and lifestyles. Unfortunately, this led to conflict between the two races, as European culture began to dominate native Māori culture.³⁸⁷ In the hope of fostering an egalitarian society, the Treaty of Waitangi

³⁸¹ Education, National Commission on Music. "Music Makes the Difference: Music, Brain Development and Learning." United States of America: The National Association for Music Education, 2000. 106.

³⁸² Te Ahukaramū Charles Royal, 'Māori – The arrival of Europeans', Te Ara – the Encyclopaedia of New Zealand, <http://www.TeAra.govt.nz/en/maori/page-3> (accessed 25 January 2017)

³⁸³ "Waka." In *The Encyclopedia of Tourism and Recreation in Marine Environments*, edited by Michael Luck. CABI, 2008. <http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/cabitrme/waka/0?institutionId=78>

³⁸⁴ McLean, Mervyn. *Weavers of Song*. University of Auckland: Auckland University Press, 1999. 325.

³⁸⁵ Thomson, John Mansfield. *The Oxford History of New Zealand Music* Auckland Oxford University Press, 1991. 10.

³⁸⁶ McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996. 23-24.

³⁸⁷ Te Ahukaramū Charles Royal, 'Māori – The arrival of Europeans', Te Ara – the Encyclopaedia of New Zealand, <http://www.TeAra.govt.nz/en/maori/page-3> (accessed 25 January 2017)

was signed in 1840, entitling native Māori the rights and privileges of British citizens.³⁸⁸

During this time, education in New Zealand was provided by charities, religious institutions and private tutors, dependent on one's financial means and geographical location.³⁸⁹ For many, education was inaccessible and financially demanding, students had poor attendance and schooling generally only lasted three years.³⁹⁰ Consequently, educational bodies often struggled due to financial constraints, limited curriculum and shortage of teachers, resulting in students often unable to understand basic concepts of reading, writing and arithmetic.³⁹¹ Despite this, a primary education was seen as adequate for the work force.³⁹²

Many believed that accessible education could benefit society, as "Education would cure the evil spirit in man and...would pave the way for the new society when crime and pauperism would be no more."³⁹³ These philosophies led to the 1877 Education Act, enabling free, secular and compulsory primary education until the age of fourteen.³⁹⁴ Politician Charles Bowen explained that the "Experience of all countries show, that is absolutely the duty of the State to provide...primary education, which is key knowledge for every child."³⁹⁵ This act resulted in the abolishment of weekly fees as the taxpayer became responsible for

³⁸⁸ Ian Cumming, Alan Cumming. *History of State Education in New Zealand 1840-1975*. Wellington: Pitman Publishing New Zealand Ltd, 1978. 1.

³⁸⁹ Ian Cumming, Alan Cumming. *History of State Education in New Zealand 1840-1975*. Wellington: Pitman Publishing New Zealand Ltd, 1978. 5.

³⁹⁰ Rich, Eric E. *The Education Act 1870: A Study of Public Opinion*. London: Longmans, Green and Co Ltd, 1970. 22.

³⁹¹ Rich, Eric E. *The Education Act 1870: A Study of Public Opinion*. London: Longmans, Green and Co Ltd, 1970. 21-22.

³⁹² Watson, John E. *Intermediate Schooling in New Zealand*. Edited by New Zealand Council for Educational Research Wellington: Whitcombe and Tombs Limited, 1964. 2-4.

³⁹³ Rich, Eric E. *The Education Act 1870: A Study of Public Opinion*. London: Longmans, Green and Co Ltd, 1970. 75.

³⁹⁴ Watson, John E. *Intermediate Schooling in New Zealand*. Edited by New Zealand Council for Educational Research Wellington: Whitcombe and Tombs Limited, 1964. 2.

³⁹⁵ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 2.

the education of children throughout the country.³⁹⁶ This also led to the governor appointing a Minister of Education, school inspectors and administrators to run the Department of Education.³⁹⁷ Objections were heard from some parents deeming compulsory education unnecessary, as generations before survived on minimal education.³⁹⁸

As education became formalised, a national curriculum was established based on the British system. Instruction of the following subjects took place: reading, writing, arithmetic, English grammar and composition, geography, history, elementary science and drawing, object lessons, vocal music, sewing and needlework (for girls) and principles of domestic economy.³⁹⁹ This marks the beginning of music education in New Zealand. The music curriculum for 1878 and 1885 is shown below in Example 14.⁴⁰⁰

Ex. 14. *Music Curriculum in 1878 and 1885.*

Standard One: A sufficient number of easy and suitable songs in correct time and tune, and at a proper pitch. (Aged 5-7)

Standard Two: Songs as before; the places of the notes on the stave, or the symbol used for each note in the notation adopted; to sing the major diatonic scale and the successive notes of the common chord in all keys. (Aged 7-10)

Standard Three: Easy exercises on the common chord, and the interval of a second in common time and in 2/4 time, not involving the use of dotted notes; use

³⁹⁶ Ian Cumming, Alan Cumming. *History of State Education in New Zealand 1840-1975*. Wellington: Pitman Publishing New Zealand Ltd, 1978. 103.

³⁹⁷ Ian Cumming, Alan Cumming. *History of State Education in New Zealand 1840-1975*. Wellington: Pitman Publishing New Zealand Ltd, 1978. 86.

³⁹⁸ *The Oxford History of New Zealand*. Second ed. Auckland: Oxford University Press, 1992. 132.

³⁹⁹ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 3.

⁴⁰⁰ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 27-28.

of the signs *p*, *f*, *cres*, *dim*, *rall*, and their equivalents; songs as before, or in common with the upper part of the school. (Aged 10-13)

Standard Four: Easy exercises on the chords of the dominant and sub-dominant, and in the intervals prescribed for Standard III; exercises in triple time; use of dotted notes; melodies, rounds, and part songs in common with the higher standards. (Aged 13-15)

Standards Five and Six: More difficult exercises in time and tune; strict attention to expression marks. (Aged 15 and older)

Initially, the curriculum was divided into pass or class subjects. Subjects such as reading, spelling, writing, dictation, arithmetic, grammar, composition, geography and English history were known as pass subjects, requiring an annual examination by an inspector. Contrastingly, class subjects such as music, sewing, drawing, object lessons and elementary science did not require examination. This led to the prioritisation of pass subjects, as examination results often defined a teacher's position and possibility of promotion. In 1885, the curriculum was further divided into three groups; pass, class, and additional. Subjects such as singing, reading, recitation and needlework were categorised as additional. Additional subjects were not a requirement in small schools, often being omitted or given insufficient attention.⁴⁰¹ Despite education's elevated status, many felt that music instruction was neglected or limited. One principal shared:

...singing is not always a popular lesson with young teachers - is, indeed, often looked upon as an irksome as well as unimportant kind of subject that may be crowded into an out-of-the-way half-hour in the time-table.⁴⁰²

⁴⁰¹ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 25-26.

⁴⁰² Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 35.

In 1887, a parliamentary committee investigated New Zealand's education system, finding music to be essential to the curriculum as a moral force, which gave pleasure and enhanced reading and speech. Interestingly, inspector John Smith advocated specialist teachers to implement music, drawing and elementary science in the curriculum.⁴⁰³

At this time, trainee teachers were required to be at least fifteen years old and were expected to be proficient in a range of subjects. Admittance to teacher training required examinations in literature, laws of health, domestic economy, needlework, music, drawing, reading, recitation, arithmetic, algebra, composition and grammar, geography, history and school management.⁴⁰⁴ These examinations became compulsory in the 1877 Education Act, ensuring a quality standard of teaching. Musically, basic theory was expected, with the knowledge of either traditional notation or solfège, to be able to teach students how to read music.⁴⁰⁵ The Christchurch Board of Education implemented the annual examination shown below in Example 15.⁴⁰⁶

Ex. 15. *Music Examination for Teachers in 1883.*

1. State fully your method of giving a first lesson in music to children.
2. Explain the use of the staff or stave. Draw the "full vocal stave" and mark thereon the clefs ordinarily used and the names of all the lines and spaces.
3. Describe and illustrate as many terms and characters used in music as you can, including "expression" marks.
4. Show by a table the relative duration values of notes and rests.

⁴⁰³ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 19-22.

⁴⁰⁴ Ian Cumming, Alan Cumming. *History of State Education in New Zealand 1840-1975*. Wellington: Pitman Publishing New Zealand Ltd, 1978. 95.

⁴⁰⁵ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 28.

⁴⁰⁶ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 36-37.

5. Distinguish between “time” and “rhythm,” and give a table of “Rhythm Signatures,” simple and compound.
6. Write the major diatonic scales of F, A, B \flat , C, D, and E \flat , both in the treble and bass staves, inserting sharps or flats where they occur.

It is interesting to note that knowledge of these key signatures is not required until Grade 2 of The Associated Board of the Royal Schools of Music (ABRSM) theory exam and knowledge of simple and compound time signatures is not required until Grade 3.⁴⁰⁷ Similarly, in Trinity College examinations, knowledge and identification of compound time signatures is not required until Grade 3.⁴⁰⁸ Therefore, it is understandable why teachers had difficulty instructing subjects such as science, drawing and music if they had no prior knowledge of the subject.⁴⁰⁹

By 1891, 167,000 children aged between five and fifteen received a public education. State funding resulted in reduced illiteracy rates,⁴¹⁰ improved attendance and students staying in education for longer periods.⁴¹¹ These results prompted Prime Minister Sir Robert Stout (1844-1930),⁴¹² to advocate accessible secondary education and an expanded curriculum to cater for the industrial and commercial sectors of society.⁴¹³ Previously, very few occupations required skills more advanced than literacy and basic arithmetic, however, over the next decade secondary education was required to obtain semi-professional jobs and admission

⁴⁰⁷ Music, The Associated Board of the Royal Schools of. "Music Theory." http://nz.abrsm.org/fileadmin/user_upload/syllabuses/theoryComplete10.pdf

⁴⁰⁸ *Theory of Music Syllabus*. Trinity College London, 2016. 11.

⁴⁰⁹ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 33.

⁴¹⁰ *The Oxford History of New Zealand*. Second ed. Auckland: Oxford University Press, 1992. 132.

⁴¹¹ Watson, John E. *Intermediate Schooling in New Zealand*. Edited by New Zealand Council for Educational Research Wellington: Whitcombe and Tombs Limited, 1964. 11.

⁴¹² Dunn, Waldo Hilary., and Richardson, I. L. M. *Sir Robert Stout : A Biography*. Wellington: Reed, 1961.

⁴¹³ Watson, John E. *Intermediate Schooling in New Zealand*. Edited by New Zealand Council for Educational Research Wellington: Whitcombe and Tombs Limited, 1964.

into university. Education therefore became key to social mobility.⁴¹⁴

Due to technological advances, the purpose of education in the 1900's, shifted to produce citizens who could economically benefit the country and instil patriotism towards Britain.⁴¹⁵ These changes affected music instruction, as students were initially restricted to singing songs which reinforced ties to England such as "There is a Happy Land Far, Far Away; Ring the Bell, Watchman; and, Shall We Gather at the River".⁴¹⁶ Unfortunately, a quality music education was still not being delivered and education inspectors consistently berated teachers for the lack of time devoted to music. One Auckland inspector claimed that often singing in schools was no more than half an hour a week, resulting in lack of progress and ability.⁴¹⁷ These concerns were reinforced by English music educator Dr. Somervell, who feared that many teachers misunderstood the benefits of a quality music education and therefore believed music to be a mere frill of the education system, holding no practical value.⁴¹⁸

As the century unfolded, the syllabus for music education became more detailed. In 1913, the *Regulations for Inspection and Syllabus of Instruction* provided information on notation, sight-singing, pronunciation, voice breaks and modulation, in addition to breathing, vocal and aural exercises.⁴¹⁹ Despite an in-depth syllabus, teachers were given creative control, being able to devise their own lessons. Unfortunately, since the average teacher lacked sufficient musical

⁴¹⁴ *The Oxford History of New Zealand*. Second ed. Auckland: Oxford University Press, 1992. 276.

⁴¹⁵ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 61.

⁴¹⁶ Thwaites, Trevor. "Music Education in a New Key: The Dissonance of Competence, Connectedness, Culture and Curriculum." *Research in New Zealand Performing Arts: Nga Mahi a Rehia no Aotearoa* 1 (2009): 6-7.

⁴¹⁷ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 97.

⁴¹⁸ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 98.

⁴¹⁹ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 73-76.

knowledge, the practice and value of music education remained stagnant,⁴²⁰ as shown through commission reports.⁴²¹

During the 1920's, it was evident that additional support and guidance was required for implementing a quality music education. In 1921, the first Education Gazette was published, providing material and support for educators teaching music. Governmental subsidies were available in 1925 for schools purchasing pianos and gramophones, resulting in music appreciation becoming integral to the curriculum.⁴²² These changes led inspectors to understand that the decline of singing in schools was not necessarily due to lack of resources but lack of efficient teachers. They discovered that the quality of music education varied significantly between schools, due to teachers' lack of skills, knowledge and training.⁴²³ To resolve these issues, English conductor and composer E. Douglas Tayler, was appointed as the supervisor of school music in 1926, and experienced music lecturers were instated in teachers' training colleges.⁴²⁴

Tayler assessed the state of music education, observing around two hundred schools throughout the country. Example 16 below, indicates weaknesses he observed.⁴²⁵

⁴²⁰ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 120.

⁴²¹ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 122.

⁴²² Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 118.

⁴²³ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 141.

⁴²⁴ Tait, M. J. *Music Education in New Zealand*. Hamilton: Times Commercial Printers, 1970. 9.

⁴²⁵ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 147.

Ex. 16. E.D. Tayler, *Weaknesses in School Music*.

1. The absence of systematic teaching of sight reading.
2. The lack of connected instruction between the classes.
3. The limitation of the outlook upon music to the teaching of songs.
4. The haphazard use of music.
5. The lack of sound methods of voice-training.
6. The inability of so many teachers to play piano accompaniments reasonably well, and the lack of good pianos – especially pianos of good quality.

To further assist teachers, Tayler provided support through monthly music articles in the Education Gazette, resource assistances, broadcasting and advanced teacher training.⁴²⁶ Higher education also developed during this time, as Bachelor and Masters degrees were now available in commerce, engineering, surgery, agriculture, architecture, forestry, medical and veterinary science, law, science, literature, philosophy, dental surgery, medicine and music.⁴²⁷

Due to Tayler's efforts, the status and quality of music education began to improve and subsequently the number of children taking music at secondary school significantly increased.⁴²⁸ A director of music in England confirmed that music in secondary schools was either helped or hindered by education given in primary schools.⁴²⁹ Unfortunately, these improvements were short lived. From 1930 onwards, the depression began to take a toll, as the government reduced expenditure, withdrawing subsidies of pianos, gramophones and records, closing

⁴²⁶ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 148.

⁴²⁷ Ian Cumming, Alan Cumming. *History of State Education in New Zealand 1840-1975*. Wellington: Pitman Publishing New Zealand Ltd, 1978. 232.

⁴²⁸ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 182-183.

⁴²⁹ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 183.

teacher training colleges and reducing staff.⁴³⁰ In 1931, Tayler resigned to pursue a career as an organist and composer, however researcher Susan P. Braatvedt suggests his resignation was more likely due to financial constraints of the government. These views were confirmed when the Director of Education commented that it was not possible to appoint a successor.⁴³¹

In 1935, the Labour Party was elected into government under the leadership of Michael Savage. The focus of the New Zealand government shifted from economic gain to social development, aiming to enlarge education and facilitate younger generations.⁴³² Consequently, teacher training colleges were reopened,⁴³³ the age of admission into school was lowered,⁴³⁴ and primary proficiency examinations were abolished, allowing students free entry into secondary schools.⁴³⁵ The government established a national symphony orchestra⁴³⁶ and music became a compulsory subject in secondary school.⁴³⁷ The Labour Party explained that:

when a nation through parsimony and false economy neglects the education of its children it not only deprives them natural rights, but it

⁴³⁰ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 187.

⁴³¹ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 188-189.

⁴³² Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 192.

⁴³³ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 193.

⁴³⁴ *The Oxford History of New Zealand*. Second ed. Auckland: Oxford University Press, 1992. 359.

⁴³⁵ *The Oxford History of New Zealand*. Second ed. Auckland: Oxford University Press, 1992. 329.

⁴³⁶ *The Oxford History of New Zealand*. Second ed. Auckland: Oxford University Press, 1992. 541.

⁴³⁷ McPhail, Graham. "From Singular to over-Crowded Region: Curriculum Change in Senior Secondary School Music in New Zealand." *British Journal of Music Education* 29, no. 3 (2012): 322.

creates a financial and social debt which can never be redeemed.⁴³⁸

Unfortunately, the standard of music education continued to vary between schools, dependant on skills and knowledge of the classroom teacher. In 1946, there were 2,030 primary and intermediate schools and only 100 teachers who had completed third year specialist training in music. In 1948, the third-year program was terminated.⁴³⁹ From 1950 to 1952, only a small number of students participated in music at School Certificate level. A comparison between the number of students taking music and other subjects is shown in the table below.⁴⁴⁰

Table 6. *School Certificate Examination Entries in Subjects associated with the Core Syllabus 1950-1952.*

	1950	1951	1952
English	9,430	9,692	10,570
Geography	5,694	5,869	6,397
History	5,063	5,135	5,446
Drawing and Design	972	1,034	1,093
Music	200	209	224

Braatvedt believes these results indicate the “woeful state of music education” in New Zealand.⁴⁴¹

Music education during this period shared many similarities with early education, as quality was dependant on economic status and geographical location as affluent

⁴³⁸ *The Oxford History of New Zealand*. Second ed. Auckland: Oxford University Press, 1992. 359.

⁴³⁹ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 264.

⁴⁴⁰ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 270.

⁴⁴¹ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 269.

schools had substantially greater musical opportunities. ⁴⁴² In 1958, only one in six intermediate schools had some form of orchestra and in 1961 nearly one quarter of all intermediate schools lacked teachers with professional music qualifications. ⁴⁴³ The lack of consistent quality and opportunities in music, undermines the principles of state education such as cultural uniformity, social integration and most importantly, equality. ⁴⁴⁴ It is interesting to consider whether differences in musical aptitude and attainment would be so easily accepted for subjects such as arithmetic or reading.

During the 1960's, the music curriculum was criticised, due to the rise of popular bands such as *The Beatles* and *The Rolling Stones*. Many educators questioned exposure to pop music, believing it could be detrimental to New Zealand culture and result in shallow musical education. Other teachers, however utilised pop music in the classroom during other activities, as it ensured students were quiet and on task. Despite resistance, the curriculum was reassessed and by 1970, contemporary music became acceptable. ⁴⁴⁵

In 1970, M. J. Tait published research examining the state of music education in schools, colleges, universities and private institutions. ⁴⁴⁶ During this study, he discovered differing curricular content between schools, each focusing on either enjoyment, singing, appreciation or notation. Contrastingly, he discovered that the content of private tuition remained consistent, offering a holistic education, developing performance, improvisation and aural skills, and imparting basic musical knowledge, such as music history, theory and appreciation. Tait believed that the inconsistency of content between schools was due to a vague syllabus,

⁴⁴² Watson, John E. *Intermediate Schooling in New Zealand*. Edited by New Zealand Council for Educational Research Wellington: Whitcombe and Tombs Limited, 1964. 188.

⁴⁴³ Watson, John E. *Intermediate Schooling in New Zealand*. Edited by New Zealand Council for Educational Research Wellington: Whitcombe and Tombs Limited, 1964. 187-188.

⁴⁴⁴ *The Oxford History of New Zealand*. Second ed. Auckland: Oxford University Press, 1992. 466.

⁴⁴⁵ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 308-311.

⁴⁴⁶ Tait, M. J. *Music Education in New Zealand*. Hamilton: Times Commercial Printers, 1970. 4.

leaving teachers unaware of the minimal expectations of a quality music education.⁴⁴⁷

Tait's research indicated that generalist teachers often lack confidence and competence to teach music, lacking music qualifications and receiving little support from district advisors or administration.⁴⁴⁸ District advisors were instated to provide in-service training courses for teachers, and assist and promote music education within each school. However, nearly two thirds of state primary and secondary schools had yet to be visited. Consequently, there was a high dropout rate of music teachers, as they often abandoned teaching music in favour of other subjects. This was mostly due to the status of music education in school and lack of facilities and equipment. Schools stated that employing part-time music teachers who had in-depth knowledge, would be beneficial. However, this role was often voluntary in schools which⁴⁴⁹ reflected the community's attitude towards music. Tait concluded that the main adversities of a meaningful education was: the varying quality between schools, a lack of continuity in the syllabus, incompetent teachers, insufficient time allocation, inadequate teaching facilities, uncoordinated growth and large groups of students.⁴⁵⁰

The inconsistency of teacher knowledge was partly due to teacher training colleges offering differing courses in length and content. The table below shows a comparison between music courses in Hamilton and Dunedin teacher colleges in 1974.⁴⁵¹

⁴⁴⁷ Tait, M. J. *Music Education in New Zealand*. Hamilton: Times Commercial Printers, 1970. 11-18.

⁴⁴⁸ Tait, M. J. *Music Education in New Zealand*. Hamilton: Times Commercial Printers, 1970. 50.

⁴⁴⁹ Tait, M. J. *Music Education in New Zealand*. Hamilton: Times Commercial Printers, 1970. 43-47.

⁴⁵⁰ Tait, M. J. *Music Education in New Zealand*. Hamilton: Times Commercial Printers, 1970. 100.

⁴⁵¹ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 349.

Table 7. *Comparison between music courses in 1974.*

Hamilton Teachers' College	Dunedin Teachers' College
<p>Beginners course in second year. (2 hours per week, two terms and six weeks)</p> <p>Nature of music, i.e. a study of elements through a variety of skills. Writing and aural training using keyboard and classroom instruments.</p> <p>Third year elective programme. (44 hours over terms 1-3 for 96 students)</p> <p>An application of general professional studies (the practices and principles of teaching) to the teaching of music in the primary schools. Scope of music education – aims planning, evaluation, chart and instrument making, music growth in children, voice training, listening, movement, creative music, music reading – teaching to children, repertoire of children's songs.</p>	<p>Compulsory first year course (28 hours)</p> <p>Elementary music knowledge, classroom skills such as playing recorder, auto-harp, chime bars, tuned and untuned percussion, and singing. Teaching method is incidental at this stage.</p> <p>Elective second year course (48 hours, 3 hours' demonstration and 33 hours teaching practice and observation.</p> <p>Skills are developed further. More emphasis on method and principles. A lot of practice teaching in two schools, supervised by three lecturers, and associates in charge of music in the schools. Emphasis on giving students an understanding of how music learning and enjoyment can be developed hand in hand.</p> <p>Compulsory differentiation course (8-10 hours in second and third terms of third year)</p> <p>Students are expected to take music lessons on their six-week posting (after the 8-10 hours) and are provided with complete lesson plans, complete with taped accompaniments.</p> <p>A modified special curriculum course. (first term of third year)</p> <p>Elective course. Along lines of second year course but only half as long.</p>

From Tait's research, it is evident that several aspects of the education system needed to be reassessed. An Educational Development Conference in 1974, also outlined the shortcomings of the education system, as shown below in Example 17.⁴⁵²

Ex. 17. *Shortcomings in Education System, 1974.*

- The failure to provide, for every individual, an equal chance to profit to the limit of his ability from his educational opportunities.
- The failure to appreciate and overcome many of the problems which are causing people to become alienated from the existing education system.
- The emphasis at present placed on narrow academic achievement.
- The limited success of many of the present educational insinuations and teachers in providing an effective learning environment.
- The inability of formal educational institutions to respond by themselves to the problems of society and provide solutions to many of the unreasonable expectations of the community.
- The lack of continuity and sufficient co-ordination in the present education system.
- The limited success of community participation and involvement in education.
- The lack of promotion by the education system of awareness of, and opportunities for, lifelong education.

In attempt to address these issues, the National Advisory Committee on the Training of Teachers "advocated longer training and higher entry standards for teacher education."⁴⁵³

In 1976, a scheme was initiated by the Department of Education and the Composers Association of New Zealand (CANZ), to instate composers in schools, helping teachers gain confidence instructing creative music. The composers were

⁴⁵² "Educational Aims and Objectives." In *Educational Development Conference*. Wellington, 1974. 17-18.

⁴⁵³ Alcorn, Noeline. "Teacher Education in New Zealand 1974–2014." *Journal of Education for Teaching* 40, no. 5 (2014): 447-60.

responsible for helping students compose and arrange pieces and compose works for school groups such as choirs, orchestras and chamber ensembles, sometimes even full musical theatre productions. Unfortunately, this scheme was abandoned by the Department of Education due to financial constraints.⁴⁵⁴ New Zealand Composer Dorothy Buchanan, explained that:

This brings into focus the delicacy of the place of the arts in education, especially when a society is faced with economic decision. It is too easy for bureaucracy to under value the power of art in education, and in life.⁴⁵⁵

In 1985, the scheme was reinstated by the Labour Government, funded by the Department of Education and the Queen Elizabeth II Arts Council.⁴⁵⁶ The composer scheme was initially introduced along a Musician-Teacher policy, to promote continuity between classes in primary and intermediate schools. Musician-Teachers were responsible for assisting classroom teachers in planning and giving demonstration lessons, becoming a semi-specialist. Consequently, students' attitudes and skills improved significantly, in addition to teachers' attitudes.⁴⁵⁷ While both schemes significantly impacted the status of music education, they were limited to only a few schools.⁴⁵⁸ Interestingly, the idea of instating music specialists to provide guidance, was initially advocated in 1909 by generalist teachers.⁴⁵⁹

⁴⁵⁴ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 361.

⁴⁵⁵ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 362.

⁴⁵⁶ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 362.

⁴⁵⁷ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 364-366.

⁴⁵⁸ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 407.

⁴⁵⁹ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 364-366.

In 1984, neo-liberal reforms were introduced by the Labour Party's Minister of Finance, Roger Douglas.⁴⁶⁰ These reforms were based on the philosophy that the market is best suited to catering society's needs, rather than the state. It was believed that: "Through competition, that guiding neoliberal virtue, the market will sort out the efficient from the inefficient, the weak from the strong, and the winners from the losers."⁴⁶¹ The state therefore focused on privatisation, corporation and commercialisation, transitioning public services to private ownership to raise efficiency,⁴⁶² despite resistance from the public.⁴⁶³ Unfortunately, neo-liberal reforms resulted in social inequality, as funding for private schools increased and subsequent governments became overly focused on developing the economy, at the expense of social development.⁴⁶⁴ These policies significantly impacted education, leading to the demise of the Department of Education and to an education system fixated on imparting skills which would lead to future employment opportunities, rather than focusing on the betterment of individuals and society.⁴⁶⁵ Such philosophies resulted in the arts being sidelined for science and technology,⁴⁶⁶ under the guise that certain subjects could further benefit the economy. Many criticised why educational reforms were implemented by politicians, with bias toward economic gains. Education lecturer Stuart

⁴⁶⁰ Douglas, Jonathan Boston and Sir Roger. "Entrenching 'Rogernomics' in New Zealand: Political and Academic Perspectives." In *Delivering Policy Reform: Anchoring Significant Reforms in Turbulent Times*, edited by Sam Vincent Evert A. Lindquist, John Wanna. Australia: The Australian National University, 2011. 99.

⁴⁶¹ McMaster, Christopher. "Working the 'Shady Spaces': Resisting Neoliberal Hegemony in New Zealand Education." *Policy Futures in Education* 11, no. 5 (2013): 524.

⁴⁶² Douglas, Jonathan Boston and Sir Roger. "Entrenching 'Rogernomics' in New Zealand: Political and Academic Perspectives." In *Delivering Policy Reform: Anchoring Significant Reforms in Turbulent Times*, edited by Sam Vincent Evert A. Lindquist, John Wanna. Australia: The Australian National University, 2011. 100.

⁴⁶³ Small, David. "Neo-Liberalism in Crisis? Educational Dimensions." *Policy Futures in Education* 9, no. 2 (2011): 258-66.

⁴⁶⁴ McMaster, Christopher. "Working the 'Shady Spaces': Resisting Neoliberal Hegemony in New Zealand Education." *Policy Futures in Education* 11, no. 5 (2013): 524.

⁴⁶⁵ Abbs, Peter. *Against the Flow*. England: Routledge, 2003. 60.

⁴⁶⁶ Mansfield, Janet E. "Beyond the 'Beauty Full' Classroom: The Arts Curriculum". In *The Arts in Education: Critical Perspectives from Aotearoa New Zealand*. New Zealand: Dunmore Press Ltd, 2003. 74.

Manins, suggested that important changes in any area, should be made from professional debates within the community of people involved.⁴⁶⁷

Professor of Education Michael Peters, explains the detrimental effects of neo-liberal reforms as:

The social and economic effects of the neo-liberal era, with its marketization and privatisation policies, have deregulated the economy and moved us closer to a fully consumer-driven society. At the same time, these policies have opened New Zealand up to the vagaries of the global market, to foreign direct investment and ownership of strategic public assets, and to international competition for goods and services, even in areas like health and education that were previously part of a protected public domain. Education, consequently, has been deregulated, incrementally privatised and opened up to competition from non-traditional providers.⁴⁶⁸

Similarly, former Professor Peter Abbs suggests that an economic fixation threatens the principles of education. He explains:

In the study of English, students now compose advertisements; in media studies they describe the themes of the TV soaps; in art design they invent further glossy packages for shampoo and beefburgers. And, before very long, it is likely that the multinationals will be running the educational 'business' to secure an even greater fix between talent and the market economy.⁴⁶⁹

Author Gordon Rattray Taylor (1911-1981) previously voiced concern over education systems becoming fixated on imparting economic skills explaining:

⁴⁶⁷ New Zealand Society for Music Education. Conference 1999: Hawkes Bay, N.Z.). *Spring into Music : Conference and Workshop Papers*. Havelock North, N.Z.: Organising Committee, 1999. 78.

⁴⁶⁸ Peters, Michael. "What Does It Mean to Be Critical in Arts Education Today?" In *The Arts in Education: Critical Perspectives from Aotearoa New Zealand*. New Zealand: Dunmore Press Ltd, 2003. 10.

⁴⁶⁹ Abbs, Peter. *Against the Flow*. England: Routledge, 2003. 23.

What seems to me much more serious a problem is our present failure to teach our young people how to cope with life. We teach them nothing about themselves, or their identities - and little enough about how to maintain their bodies in a healthy state, let alone their psyches.⁴⁷⁰

He continues explaining that:

education is oriented towards earning a living - it teaches the cognitive components of an adult skill, such as practising as an engineer, an economist or a doctor. Such skills are, of course, necessary. But in a human sense are somewhat trivial.⁴⁷¹

During the 1990's, music education continued to face the same adversities as generations before, such as lack of funding, training and competent teachers in addition to an increasing curriculum.⁴⁷² Labour MP Margaret Austin, concluded that: "We are failing to provide New Zealand children with rightful musical opportunities because many teachers fail to recognise music education as part of their professional role."⁴⁷³ Deirdre Russell-Bowie suggested numerous reasons why classroom teachers struggled to teach art subjects, as shown in Example 18 below.⁴⁷⁴

⁴⁷⁰ Taylor, Gordon Rattray. *Rethink: A Paraprimitive Solution* London: Secker & Warburg, 1972. 165.

⁴⁷¹ Taylor, Gordon Rattray. *Rethink: A Paraprimitive Solution* London: Secker & Warburg, 1972. 164.

⁴⁷² Buckton, Roger. "Music Education in New Zealand Crisis and Challenge." In *Music is a Family Affair*, edited by John Drummond Paul Wheeler. Dunedin: New Zealand Society for Music Education (INC), 1991. 7-8.

⁴⁷³ Austin, Margaret. "Music Education: Crises and Challenge." In *Music is a Family Affair*, edited by Paul Wheeler John Drummond, 13-24. Dunedin: New Zealand Society for Music Education (INC) 1991. 25.

⁴⁷⁴ New Zealand Society for Music Education. Conference 1999 : Hawkes Bay, N.Z.). *Spring into Music : Conference and Workshop Papers*. Havelock North, N.Z.: Organising Committee, 1999. 24.

Ex. 18. *Why teachers struggle to teach art subjects.*

1. Teachers' own poor arts experiences in school.
2. Low priority given to the arts during teacher training.
3. Lack of administration support.
4. Declining centralised curriculum support.
5. Declining use of primary specialists.
6. Devolution of decision-making to schools.
7. Teachers' lack own confidence with the arts.

She also discussed that many teachers work in a crowded curriculum, having over fifteen subjects to teach, often marginalising the creative arts.⁴⁷⁵ Educator Roger Buckton, suggested that visiting music specialists offered the best solution for primary and intermediate school music programs,⁴⁷⁶ while Music Professor John Drummond suggested that entry to teacher training should be restricted to those with proficient skills in music, as the discipline was too complicated to learn in a few years. He further suggested that time allocated to music in teacher training should be significantly increased, so that every teacher can implement a meaningful music education in the classroom.⁴⁷⁷

In 1995, a new arts curriculum was developed. It was published in 2000 and implemented three years later. The Labour Government supported the revised curriculum stating that "a well developed arts and cultural sector was integral to the vision we have for New Zealand."⁴⁷⁸ The education sector was continuously changing, as in 1997, the Auckland College of Education condensed the four-year

⁴⁷⁵ New Zealand Society for Music Education. Conference 1999 : Hawkes Bay, N.Z.). *Spring into Music : Conference and Workshop Papers*. Havelock North, N.Z.: Organising Committee, 1999. 26.

⁴⁷⁶ Buckton, Roger. "Music Education in New Zealand Crisis and Challenge." In *Music is a Family Affair*, edited by John Drummond Paul Wheeler. Dunedin: New Zealand Society for Music Education (INC), 1991. 7-8.

⁴⁷⁷ New Zealand Society for Music Education. Conference 1993 : Hamilton, N.Z.). *Music Building Bridges = Te Aro Puoro : Papers Presented at Music 93, the Sixth Biennial Conference of the New Zealand Society for Music Education Held in Hamilton, New Zealand, August 27th-30th*. Hamilton, N.Z.: Organising Committee of Music 93, 1994. 59.

⁴⁷⁸ Mane-Wheoki, Jonathan. "Culturalisms and the Art Curriculum". *The Arts in Education: Critical Perspectives from Aotearoa New Zealand* New Zealand: Dunmore Press Ltd, 2003. 82.

Bachelor of Teaching into a three-year course, despite the general agreement that four-year degrees should be standard, aligning with international requirements. These changes caused concern, as it was thought that three years was an insufficient amount of time to gain a broad knowledge base or specialist interest.⁴⁷⁹ This started a trend as other institutions began condensing their programs, to maintain students and funding.

In 2002, School Certificate was replaced by the National Certificate in Educational Achievement, otherwise known as NCEA. Practical music subjects such as performance and composition were excluded from the list of ‘approved subjects’ for university entrance, however after substantial complaints it was reintroduced in 2007 as Making Music.⁴⁸⁰

⁴⁷⁹ Alcorn, Noeline. "Teacher Education in New Zealand 1974–2014." *Journal of Education for Teaching* 40, no. 5 (2014): 447-60.

⁴⁸⁰ Thwaites, Trevor. "Music Education in a New Key: The Dissonance of Competence, Connectedness, Culture and Curriculum." *Research in New Zealand Performing Arts: Nga Mahi a Rehia no Aotearoa* 1 (2009): 8.

3.2 Purpose of Education

To the ancient civilisations of Greece, China and India, education was crucial. These civilisations believed education could promote human flourishing, enabling citizens to think critically, act morally and fully participate in all aspects of society.⁴⁸¹ Music education was integral, cultivating citizens and developing both character and intellect.⁴⁸² Philosophers such as Socrates believed that for society to fully flourish, accessible education was key. This chapter will investigate the purpose of education in New Zealand society and whether music instruction aids this purpose.

Education in New Zealand was initially promoted to reduce rates of crime and pauperism through moral instruction.⁴⁸³ During the nineteenth century, the country struggled with crime and pauperism, unable to accommodate the volume of convicts.⁴⁸⁴ Seeking a solution, politician Sir John Pakington researched international criminal statistics and discovered that highly educated countries such as Austria, had significantly less crime.⁴⁸⁵ The importance of education became evident through the 1877 Education Act, which ensured state funded schooling for all citizens.⁴⁸⁶ The legislation aimed to create literate,⁴⁸⁷ peaceful,⁴⁸⁸ moral and efficient citizens⁴⁸⁹ that could contribute towards society, while containing those

⁴⁸¹ David J. Elliot, Marissa Silverman. *Music Matters: A New Philosophy of Music Education*. Second Edition ed. United States of America: Oxford University Press, 2015. 126-128.

⁴⁸² Wang, Yuhwen. "The Ethical Power of Music: Ancient Greek and Chinese Thoughts." *Journal of Aesthetic Education* 38, no. 1 (2004): 89-104.

⁴⁸³ Rich, Eric E. *The Education Act 1870: A Study of Public Opinion*. London: Longmans, Green and Co Ltd, 1970. 77.

⁴⁸⁴ Rich, Eric E. *The Education Act 1870: A Study of Public Opinion*. London: Longmans, Green and Co Ltd, 1970. 76.

⁴⁸⁵ Rich, Eric E. *The Education Act 1870: A Study of Public Opinion*. London: Longmans, Green and Co Ltd, 1970. 75.

⁴⁸⁶ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 2.

⁴⁸⁷ *New Zealand Society for Music Education (Inc) Year Book 1993*. Music Building Bridges Hamilton: Organising Committee of Music 1994. 55.

⁴⁸⁸ Rich, Eric E. *The Education Act 1870: A Study of Public Opinion*. London: Longmans, Green and Co Ltd, 1970. 79.

⁴⁸⁹ Rich, Eric E. *The Education Act 1870: A Study of Public Opinion*. London: Longmans, Green and Co Ltd, 1970. 77-78.

who would disregard social or political conventions.⁴⁹⁰ These beliefs are shared by educator John Dewey (1859-1952),⁴⁹¹ who stated that:

The general aim of education is to train the child to become a capable, useful, and contented member of society. The development of a fine character and of the desire to be of service to humanity are results that lie in uppermost in the minds of the leaders of educational thought. Every school subject is valued in proportion to its contribution to these desirable ends.⁴⁹²

During the first decades of the twentieth century, educational philosophies shifted to promote the inclusion of economic pursuits. These policies aimed to produce citizens who were equipped for roles in the work force and who could economically contribute to society.⁴⁹³ In 1962, the chairman of *The Commission on Education In New Zealand* Sir George Currie, stated that intellectual development was no longer the sole purpose of education, as education had shifted to incorporate political and economic benefits.⁴⁹⁴ Despite changing philosophies, education continued to incorporate intellectualism and a desire for knowledge. This is reflected in Example 19 below.⁴⁹⁵

⁴⁹⁰ *The Oxford History of New Zealand*. Second ed. Auckland: Oxford University Press, 1992. 277.

⁴⁹¹ Boisvert, Raymond D. *John Dewey: Rethinking Our Time*. United States of America: State University of New York Press, 1998.

⁴⁹² Mark, Michael L. "The Evolution of Music Education Philosophy from Utilitarian to Aesthetic." In *Music Education Research: An Anthology from the Journal of Research in Music Education*, edited by Harry E. Price. United States of America: The National Association for Music Education, 1998. 30-31.

⁴⁹³ *The Oxford History of New Zealand*. Second ed. Auckland: Oxford University Press, 1992. 277.

⁴⁹⁴ Organisation for Economic Co-operation and Development. *Reviews of National Policies for Education* Paris: Organisation for Economic Co-operation and Development, 1983. 26.

⁴⁹⁵ Ian Cumming, Alan Cumming. *History of State Education in New Zealand 1840-1975*. Wellington: Pitman Publishing New Zealand Ltd, 1978. 266.

Ex. 19. *Aims for Secondary Schools in 1938.*

1. It should cater for the special needs of adolescence; that is to say: it should be related to the natural activities of the body and mind during that period, and both illuminate and guide the pupils experience.
2. It should develop and harmonise the powers of the body, will, intellect, emotion and conscience.
3. It should not consist to any considerable extent of courses which are only of value if the subjects are carried further.
4. It should stimulate or create the desire to continue some form of study whether or not pupils leave school at 16.

It is interesting to note that the second aim shares similarities with the ancient cultures of Greece, China and India. These cultures all believed that music had the ability to harmonise one's body, mind and spirit, in alignment with the universe.

In 1974, education aimed to:

extend the individual's ability to learn, relate, choose, create, communicate, challenge, and respond to challenge so that he may live with purpose in the community of today and tomorrow and achieve satisfaction in the process and foster a sense of identity for each.⁴⁹⁶

Both primary and secondary school syllabi began to stress the significance of aesthetic and emotional growth,⁴⁹⁷ aiming to enable students to adapt to changing circumstances and environments.⁴⁹⁸ The fundamental principles of education are shown in Example 20 below.⁴⁹⁹

⁴⁹⁶ "Educational Aims and Objectives." In *Educational Development Conference*. Wellington, 1974. 11.

⁴⁹⁷ Tait, M. J. *Music Education in New Zealand*. Hamilton: Times Commercial Printers, 1970. 10.

⁴⁹⁸ *Equality of Opportunity through Education: International Seminar*. Wellington: New Zealand Educational Institute, 1970. 5.

⁴⁹⁹ "Educational Aims and Objectives." In *Educational Development Conference*. Wellington, 1974. 10-11.

Ex. 20. *Fundamental Principles of Education.*

1. The search for meaning, purpose and identity in life is necessary for the health of both the individual and the community.
2. Every individual has a right to develop his abilities and a need to be accepted as a person.
3. The community needs the participation and involvement of its members, who have individually and collectively a responsibility to contribute to their mutual development.
4. Every individual faces the task of reconciling conflicts between personal and community claims.
5. Every person has the right to enjoy being in a community and so develop his capacity for living.
6. Learning to live and work in community is a lifelong process in which every person is to some extent both teacher and learner.
7. The development of skills and knowledge, and the development of social, ethical, and aesthetic attitudes and values are complementary processes.
8. The diversity of cultures in New Zealand's heritage enriches the whole of our multi-racial society, which in turn should meet the needs of all ethnic groups and foster a sense of identity for each.

During the 1980's, public opinion shifted to promote an education which taught knowledge, skills and attitudes needed to cope with everyday life in addition to basic reading, writing and arithmetic. Citizens felt that students needed to be able to successfully communicate and work with people in the community and world to achieve shared goals.⁵⁰⁰ These skills were promoted in the New Zealand curriculum through imparting knowledge of culture, (so students are confident in their own culture and sensitive of others), mathematics, (to enable students to solve arithmetical problems and recognise patterns and relationships), social relations, (to provide insight into conflict resolution and how groups work and relate to each other in political and economic ways) language, (to communicate

⁵⁰⁰ Committee to Review the Curriculum for Schools. *The Curriculum Review: Report of the Committee to Review the Curriculum for Schools*. Edited by Peter Brice. Wellington, New Zealand: Department of Education, 1987. 56.

effectively) and health and safety (to give an understanding of physical, mental and emotional growth). The curriculum aimed to empower students to be creative, insightful and confident.⁵⁰¹ Education therefore became a way of extending students both mentally and physically, providing motivation and aspiration, while fostering cognitive abilities and creativity.⁵⁰² From reviewing scientific research, it is evident that quality music education aids these aspirations, developing cognitive abilities and creativity, while contributing both culturally and socially to all students.

Educational objectives in 1987 were reflected in reports on the curriculum. Researchers found that:

Successful schools will help learners develop the power to be secure in their personal, cultural, and national identity, to accept the responsibilities of interdependence and independence, to form and maintain caring and co-operative relationships, to continue learning through adulthood, and to lead satisfying and effective lives.⁵⁰³

Similarly,

...children and young people must acquire the basic skills, knowledge, and attitudes and values that enable them to go on learning, to function effectively in everyday life, both now and in the future, and to respect themselves and live and work with others. The language skills of listening, speaking, reading, and writing are important basics, as are the skills for solving arithmetical and measuring problems. Also basic are self-esteem, the ability to meet learning challenges, the skills and knowledge needed to look after themselves and others, and the social skills of getting on with

⁵⁰¹ Committee to Review the Curriculum for Schools. *The Curriculum Review: Report of the Committee to Review the Curriculum for Schools*. Edited by Peter Brice. Wellington, New Zealand: Department of Education, 1987. 13.

⁵⁰² Development, Organisation for Economic Co-operation and. *Reviews of National Policies for Education* Paris: Organisation for Economic Co-operation and Development, 1983. 25.

⁵⁰³ Committee to Review the Curriculum for Schools. *The Curriculum Review: Report of the Committee to Review the Curriculum for Schools*. Edited by Peter Brice. Wellington, New Zealand: Department of Education, 1987. 2.

and working with others.⁵⁰⁴

In 1992, the National Curriculum strived to “give students access to the knowledge, skills and understanding needed to participate effectively and productively in New Zealand society and in the economy.”⁵⁰⁵ It is interesting to note that this principle shares similarities with the educational philosophies of ancient Greece, with the exception of economic aspirations.

In 2007, the Ministry of Education released a new curriculum expressing the following key objectives; confidence, (to create positive, motivated, reliable, resourceful, resilient and entrepreneurial citizens), connectivity (to enable students to relate to others, the environment and community), involvement (to ensure citizens contribute to the social, cultural, economic and environmental well-being of New Zealand) and lifelong learners (to create literate, numerate, critical and creative thinkers, who are active seekers of knowledge in order to make informed decisions).⁵⁰⁶ Therefore, the curriculum aims to create creative, energetic, confident, connected and actively involved lifelong learners who will seize opportunities offered by new knowledge and technologies to secure a sustainable social, cultural, economic and environmental future for New Zealand.⁵⁰⁷ It is believed that these values will “shape the responsible, successful and contributing citizen of the future.”⁵⁰⁸

Similarly, the 2014 National Curriculum aims for all students to be confident, connected and actively involved lifelong learners. The curriculum states eight learning areas; English, the arts, health and physical education, languages, mathematics and statistics, science, social sciences and technology. Through these

⁵⁰⁴ Committee to Review the Curriculum for Schools. *The Curriculum Review: Report of the Committee to Review the Curriculum for Schools*. Edited by Peter Brice. Wellington, New Zealand: Department of Education, 1987. 2.

⁵⁰⁵ Education, Ministry of. "Education in New Zealand." Wellington, New Zealand, 1992. 14.

⁵⁰⁶ "The New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2007. 8.

⁵⁰⁷ "The New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2007. 8.

⁵⁰⁸ Benade, Leon. "Shaping the Responsible, Successful and Contributing Citizen of the Future: 'Values' in the New Zealand Curriculum and Its Challenge to the Development of Ethical Teacher Professionalism." *Policy Futures in Education* 9, no. 2 (2011): 152.

subjects, it is hoped that students will develop intellect, empathy, self-management skills, knowledge of language, symbols and texts, while participating and contributing to the community and New Zealand society.⁵⁰⁹

Therefore, the vision of the Ministry of Education is that every New Zealander is:

- Strong in their national and cultural identity
- Aspires for themselves and their children to achieve more
- Has the choice and opportunity to be the best they can be
- Is an active participant and citizen in creating a strong civil society
- Is productive, valued and competitive in the world.⁵¹⁰

⁵⁰⁹ "New Zealand Education System Overview." edited by Ministry of Education, 2014. 20.

⁵¹⁰ "Our Purpose, Vision and Behaviours." <http://www.education.govt.nz/ministry-of-education/our-role-and-our-people/our-purpose-vision-and-behaviours/>

3.3 Music in the Curriculum

From ancient Greece to contemporary New Zealand society – the arts have been a significant feature in education. In New Zealand, arts education aims to give each student an in-depth understanding of the four art disciplines - Dance, Drama, Music and Visual Arts,⁵¹¹ and how they contribute to New Zealand culture.⁵¹²

The Arts in the New Zealand Curriculum states that:

The arts are powerful forms of personal, social, and cultural expression. They are unique “ways of knowing” that enable individuals and groups to create ideas and images that reflect, communicate, and change their views of the world. The arts stimulate imagination, thinking, and understanding. They challenge our perceptions, uplift and entertain us, and enrich our emotional and spiritual lives. As expressions of culture, the arts pass on and renew our heritage and traditions and help to shape our sense of identity. . . The arts develop the artistic and aesthetic dimensions of human experience. They contribute to our intellectual ability and to our social, cultural, and spiritual understandings. They are an essential element of daily living and of lifelong learning.⁵¹³

Furthermore, the arts enable students to:

- affirm their cultural identities and understand their origins and histories;
- clarify and reflect on their attitudes, beliefs, and values in relation to the arts of their own and others’ cultures;
- understand and value the contribution they can make through the arts to their school, whanau, community, or iwi;
- value the contribution of the arts to their lives, their communities, and the society in which they live;

⁵¹¹ "The Arts in the New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2000. 7.

⁵¹² "The Arts in the New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2000. 12.

⁵¹³ "The Arts in the New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2000. 9.

- reflect on the beliefs, values, and attitudes of others and how they may differ from their own;
- develop understanding about how people express their beliefs, ideas, and feelings about the world;
- understand how societies value art works in a variety of contexts.⁵¹⁴

The arts also contribute to students' intellectual and emotional growth, promoting creative, analytical, cooperative, entrepreneurial and problem-solving skills.⁵¹⁵ A meaningful education in the arts can impact how students think and communicate, expanding ways to express "ideas, feelings, beliefs, and values and understand those of others."⁵¹⁶ These skills are vital for effective communication and understanding in contemporary society, and are pertinent skills to any profession.⁵¹⁷ Economically, the arts provide numerous employment opportunities, to "painters, dancers, musicians, actors, writers, weavers, designers, composers, choreographers, architects, film-makers, educators, historians, curators, producers, therapists, and technicians."⁵¹⁸

The curriculum promotes Music - Sound Arts education as a "fundamental form of expression", aiming to help students contribute culturally to the community.⁵¹⁹ Students are taught the rich musical heritage of New Zealand, developing an understanding of music, historical and cultural practises, and aural and theoretical skills.⁵²⁰ Students are taught to "sing, play instruments, create and improvise, read symbols and notations, record sound and music works and analyse and appreciate

⁵¹⁴ "The Arts in the New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2000. 102.

⁵¹⁵ "The Arts in the New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2000. 9-10.

⁵¹⁶ "The Arts in the New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2000. 10.

⁵¹⁷ "The Arts in the New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2000. 10.

⁵¹⁸ "The Arts in the New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2000. 9.

⁵¹⁹ "The New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2007. 21.

⁵²⁰ "The New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2007. 21.

music.”⁵²¹ These practises will lay a “foundation for lifelong enjoyment of and participation in music.”⁵²²

The Achievement Objectives for Music – Sound Arts are shown in the table below.⁵²³

Table 8. *Ministry of Education, Achievement Objectives by Learning Area.*

<u>Level One (Years 1 -3)</u>	<u>Level Two (Years 3 – 5)</u>
<ul style="list-style-type: none"> • Explore and share ideas about music from a range of sound environments and recognise that music serves a variety of purposes and functions in their lives and in their communities. • Explore how sound is made, as they listen and respond to the elements of music: beat, rhythm, pitch, tempo, dynamics, and tone colour. • Explore and express sounds and musical ideas, drawing on personal experience, listening, and imagination. • Explore ways to represent sound and musical ideas. • Share music making with others. • Respond to live and recorded music. 	<ul style="list-style-type: none"> • Explore and share ideas about music from a range of sound environments and recognise that music serves a variety of purposes and functions in their lives and in their communities. • Explore and identify how sound is made and changed, as they listen and respond to the elements of music and structural devices. • Improvise, explore, and express musical ideas, drawing on personal experience, listening, and imagination. • Explore ways to represent sound and musical ideas. • Share music making with others, using basic performance skills and techniques. • Respond to live and recorded music.

⁵²¹ "The New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2007. 21.

⁵²² "The New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2007. 21.

⁵²³ "The New Zealand Curriculum: Achievement Objectives by Learning Area." edited by Ministry of Education. Wellington: Learning Media Limited, 2007. 1-4.

<p style="text-align: center;"><u>Level Three (Years 5-7)</u></p> <ul style="list-style-type: none"> • Identify and describe the characteristics of music associated with a range of sound environments, in relation to historical, social, and cultural contexts. • Explore ideas about how music serves a variety of purposes and functions in their lives and in their communities. • Explore and identify how sound is made and changed, as they listen and respond to music and apply knowledge of the elements of music, structural devices, and technologies. • Express and shape musical ideas, using musical elements, instruments, and technologies in response to sources of motivation. • Represent sound and musical ideas in a variety of ways. • Prepare and present brief performances of music, using performance skills and techniques. • Respond to and reflect on live and recorded music 	<p style="text-align: center;"><u>Level Four (Years 7-10)</u></p> <ul style="list-style-type: none"> • Identify and describe the characteristics of music associated with a range of sound environments, in relation to historical, social, and cultural contexts. • Explore ideas about how music serves a variety of purposes and functions in their lives and in their communities. • Apply knowledge of the elements of music, structural devices, and technologies through integrating aural, practical, and theoretical skills. • Express, develop, and refine musical ideas, using the elements of music, instruments, and technologies in response to sources of motivation. • Represent sound and musical ideas in a variety of ways. • Prepare, rehearse, and present performance of music, using performance skills and techniques. • Reflect on the expressive qualities of their own and others' music, both live and recorded.
<p style="text-align: center;"><u>Level Five (Years 8-12)</u></p> <ul style="list-style-type: none"> • Compare and contrast the characteristics of music associated with a range of sound environments, in relation to historical, social, 	<p style="text-align: center;"><u>Level Six (Years 10-12)</u></p> <ul style="list-style-type: none"> • Analyse music from a range of sound environments, styles, and genres, in relation to historical, social, and cultural contexts.

<p>and cultural contexts.</p> <ul style="list-style-type: none"> • Investigate how music serves a variety of purposes and functions in their lives and in their communities. • Apply knowledge of the elements of music, structural devices, stylistic conventions, and technologies through integrating aural, practical, and theoretical skills. • Use musical elements, instruments, technologies, and conventions to express, develop, and refine structured compositions and improvisations. • Represent compositions and improvisation frameworks, using appropriate conventions. • Prepare, rehearse, and present performances of music, using a range of performance skills and techniques. • Reflect on the expressive qualities of their own and others' music, both live and recorded. 	<ul style="list-style-type: none"> • Consider and reflect on the influence of music in their own music making and in their lives. • Apply knowledge of expressive features, stylistic conventions, and technologies through an integration of aural perception and practical and theoretical skills and describe how they are used in a range of music. • Create, structure, refine, and represent compositions using the elements of music, instruments, technologies, and conventions to express imaginative thinking and personal understandings. • Reflect on composition processes and presentation conventions. • Prepare, rehearse, interpret, and present performances of music individually and collaboratively, using a range of performance skills and techniques. • Reflect on the expressive qualities of music and evaluate their own and others' music, both live and recorded.
<p style="text-align: center;"><u>Level Seven (Years 11-13)</u></p> <ul style="list-style-type: none"> • Research and analyse music from a range of sound environments, styles, and genres, in relation to historical, social, and cultural contexts, considering the impact on music making and production. • Apply their understandings of the expressive qualities of music from a range of contexts to a consideration of their influence on their own 	<p style="text-align: center;"><u>Level Eight (Year 13)</u></p> <ul style="list-style-type: none"> • Research, analyse, and evaluate the production and presentation of music works from historical, social, and cultural contexts. • Apply their understandings of the expressive qualities of music from a range of contexts to analyse its impact on their own music practices. • Analyse, apply, and evaluate significant

<p>music practices.</p> <ul style="list-style-type: none"> • Apply knowledge of expressive features, stylistic conventions, and technologies through an integration of aural perception and practical and theoretical skills and analyse how they are used in a range of music. • Create, structure, refine, and represent compositions and musical arrangements, using technical and musical skills and technologies to express imaginative thinking and personal understandings. • Reflect on and evaluate composition processes and presentation conventions. • Prepare, rehearse, present, record, and evaluate sustained performances of music, individually and collaboratively, that demonstrate interpretive understandings. • Analyse and evaluate the expressive qualities of music and production processes to inform interpretations of music. 	<p>expressive features and stylistic conventions and technologies in a range of music, using aural perception and practical and theoretical skills.</p> <ul style="list-style-type: none"> • Create, structure, refine, and represent compositions and musical arrangements, using secure technical and musical skills and technologies to express imaginative thinking and personal understandings. • Reflect on and evaluate composition processes and presentation conventions. • Plan, rehearse, present, record, evaluate, and refine performances of music, individually and collaboratively, demonstrating interpretive understandings. • Critically analyse and evaluate the expressive qualities of music and production processes in order to refine interpretations of music.
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It is interesting that the Achievement Objectives for Music – Sound Arts give vague learning objectives which are generally established before primary school, such as “explore how sound is made”, “share music with others” and “respond to live and recorded music”. Contrastingly, objectives for subjects such as mathematics, science and English, outline specific and in-depth requirements. Level 1 learning objectives are shown below in Example 21.

Mathematics and Statistics:

Number and Algebra:

- Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions.
- Know the forward and backward counting sequences of whole numbers to 100.
- Know groupings with five, within ten, and with ten.
- Communicate and explain counting, grouping, and equal-sharing strategies, using words, numbers, and pictures.
- Generate that the next counting number gives the result of adding one object to a set and that counting the number of objects in a set tells how many.
- Create and continue sequential patterns.

Geometry and Measurement:

- Order and compare objects of events by length, area, volume and capacity, weight (mass), turn (angle), temperature, and time by direct comparison and/or counting whole numbers of units.
- Sort objects by their appearance.
- Give and follow instructions for movement that involve distances, directions, and half or quarter turns.
- Describe their position relative to a person or object.
- Communicate and record the results of translations, reflections, and rotations on plane shapes.

Statistics:

Conduct investigations using the statistical enquiry cycle:

- Posing and answering questions;
- Gather, sorting and counting, and displaying category data;
- Discussing the results.
- Interpret statements made by others from statistical investigations and probability activities.

Investigate situations that involve elements of chance, acknowledging and anticipating possible outcomes.

Science

Nature of Science:

- Learn about science as knowledge system: the features of scientific knowledge and the processes by which it is developed; and learn about the ways in which the work of scientists interacts with society.
- Carry out science investigations using a variety of approaches: classifying and identifying, pattern seeking, exploring, investigating models, fair testing, making things, or developing systems.
- Develop knowledge of the vocabulary, numeric and symbol systems, and conventions of science and use this knowledge to communicate about their own and others' ideas,
- Bring a scientific perspective to decisions and actions as appropriate.

Living World:

- Understand the processes of life and appreciate the diversity of living things.
- Understand how living things interact with each other and with the non-living environment.
- Understand the processes that drive change in groups of living things over long periods of time and be able to discuss the implications of these changes.

Planet Earth and Beyond:

- Investigate and understand the spheres of the Earth system: geosphere (land), hydrosphere (water), atmosphere (air). And biosphere (life).
- Investigate and understand that the geosphere, hydrosphere, atmosphere and biosphere are connected via a complex web of processes.
- Investigate and understand relationships between the Earth, Moon, Sun, solar system, and other systems in the universe.

Physical World:

- Explore and investigate physical phenomena in everyday situations.
- Gain an understand of the interactions that take place between different parts of the physical world and the ways in which these interactions can be represented.
- Apply their understanding of physics to various applications.

Material World:

- Investigate the properties of materials.
- Interpret their observations in terms of the particles (atoms, molecules, ions, and sub-atomic particles), structures, and interactions presents.
- Understand and use fundamental concepts of chemistry.
- Make connections between the concepts of chemistry and their applications and show an understand of the role chemistry plays in the world around them.

English

Listening, Reading, and Viewing

Acquire and begin to use sources of information, processes, and strategies to identify, form, and express ideas.

Indicators:

- Selects and reads texts for enjoyment and personal fulfilment;
- Has an awareness of the connections between oral, written, and visual language;
- Uses sources of information (meaning, structure, visual and grapho-phonetic information) and prior knowledge to make sense of a range of texts;
- Associates sounds with letter clusters as well as with individual letters;
- Uses processing and some comprehension strategies with some confidence;
- Is developing the ability to think critically about texts;
- Begins to monitor, self-evaluate, and describe progress.

By using these processes and strategies when listening, reading, or viewing, students will:

- Recognise that texts are shaped for different purposes and audiences. (identities

the purpose of simple texts; evaluates the usefulness of simple texts.)

- Recognise and identify ideas within and across texts. (understands that personal experience can influence the meaning gained from texts; makes meaning of texts by identifying ideas in some texts.)
- Recognise and begin to understand how language features are used for effect within and across texts. (begins to recognise that oral, written, and visual language features can be used for effect; recognises a large bank of high-frequency and some topic-specific words; shows some knowledge of text conventions, such as: capital letters, full stops, and word order; volume and clarity; and simple symbols.
- Recognise and begin to understand text structures. (understands that the order and organisation of words, sentences, and images contribute to text meaning; recognises some text forms and some differences between them.

Speaking, Writing, and Presenting

- Acquire and begin to use sources of information, processes, and strategies to identify, form and express ideas. (has an awareness of the connections between oral, written, and visual language when creating text; creates texts by using meaning, structure, visual and grapho-phonetic sources of information, prior knowledge, and some processing strategies with some confidence; seeks feedback and makes changes to texts; is becoming reflective about the production of own texts; begins to monitor, self-evaluate, and describe progress.)
- Recognise how to shape texts for a purpose and an audience. (constructs texts that demonstrate some awareness of purpose and audience through appropriate choice of content, language, and text form; expects the texts they create to be understood, responded to, and appreciated by others; is developing and conveying personal voice where appropriate.)
- Form and express ideas on a range of topics. (forms and expresses simple ideas and information, usually drawing from personal experience and knowledge; begins to support ideas with some detail.)
- Use language features, showing some recognition of their effects. (uses some oral, written, and visual language features to create meaning and effect; uses a range of high-frequency words correctly and begins to use some common spelling patterns; begins to use some strategies to self-correct and monitor spelling; writes most letters and number forms legibly when creating texts; begins to gain control of text conventions, such as: capital letters, and full stops;

some basic grammatical conventions; volume, clarity, and tone; and simple symbols.)

- Organise texts, using simple structures. (uses knowledge of word and sentence order to communicate meaning in simple texts; begins to sequence ideas and information; uses simple sentences with some variation in beginnings; may attempt compound and complex sentences.)

Music – Sound Arts

- Explore and share ideas about music from a range of sound environments and recognise that music serves a variety of purposes and functions in their lives and in their communities.
- Explore how sound is made, as they listen and respond to the elements of music: beat, rhythm, pitch, tempo, dynamics, and tone colour.
- Explore and express sounds and musical ideas, drawing on personal experience, listening, and imagination.
- Explore ways to represent sound and musical ideas.
- Share music making with others.
- Respond to live and recorded music.

It is evident that Music – Sound Arts contribute significantly to educational learning outcomes. Music instruction promotes the development of communication, analytical and creative skills, while developing an understanding of musical conventions and cultural and historical practises. These skills enable citizens to participate in cultural activities and therefore contribute socially, culturally and economically to New Zealand society. In essence:

Music is one of the most valuable subjects in the school curriculum, and the influence of music in the lives of both children and adults is more potent than that of almost any other educational activity. Music affects

human beings favourably, both in their intellectual and emotional lives. Because of its power to "tone up" both mind and body, its beneficial effect in causing increased quickness of perception, its potency to socialize, its possibilities in preparing one for a worthy use of leisure time, and above all, because of its influence in causing an immeasurable increase in human happiness - for all of these reasons, music has come to be more and more commonly regarded as an indispensable subject in all types of schools.⁵²⁴

⁵²⁴ Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002. 124.

3.4 Status of Music Education

Despite the numerous benefits of a meaningful music education, many fear that quality education is inconsistent across New Zealand. Principal Lecturer in Music Education at the University of Auckland, Trevor Thwaites explains:

The arts are powerful agents for the development of knowledge and understanding, for the nurturing of sensitivity and imagination, and as a rubric for socio-cultural representations of meaning and ceremony. However, in globalised educational settings the language of culture is increasingly taking second place to the language of commerce.⁵²⁵

Music Education New Zealand Aotearoa (MENZA) is an organisation which advocates meaningful music education, representing educators throughout the country. Chairperson Tim Carson worries that music education has deteriorated due to the decline of specialist music advisors, limited funding, and inconsistent teacher training courses. He explains that over three years of training, only six to eight hours are specifically dedicated to classroom music.⁵²⁶ Similarly, in 2008, only seven and a half hours were dedicated to music within a Bachelor of Education at The University of Auckland.⁵²⁷ Carson believes that this has resulted in numerous teachers lacking the competence and confidence to lead a class song and believe that students singing along to Taylor Swift constitutes a meaningful music education.⁵²⁸

Carson explains that:

There are amazing things happening in a lot of schools around the country, but actually, it is a lottery now if your kid or grandkid is going to get even a basic singing or classroom instrumental program. Music education at

⁵²⁵ Thwaites, Trevor. "Music Education in a New Key: The Dissonance of Competence, Connectedness, Culture and Curriculum." *Research in New Zealand Performing Arts: Nga Mahi a Rehia no Aotearoa* 1 (2009): 1.

⁵²⁶ "Music Teachers Point to Crisis in Primary Schools." In *Nine To Noon*, 19.33. Radio New Zealand, 2016.

⁵²⁷ Mansfield, Janet. "'Literacies' in the Arts: A New Order of Presence." *Policy Futures in Education* 8, no. 1 (2010). 102.

⁵²⁸ "Music Teachers Point to Crisis in Primary Schools." In *Nine To Noon*, 19.33. Radio New Zealand, 2016.

primary schools has become a privilege for a few, rather than a right for all.⁵²⁹

Teachers have indicated a decline of resources and support from the Ministry of Education, including the abolished annual resource, known as the “Kiwi Kid Song Collection” which aided classroom singing.⁵³⁰ According to a 2003 study initiated by the Ministry of Education, the “Kiwi Kid Song Collection” was the most frequently used resource, as it was utilised by 66.8% of the teachers who participated.⁵³¹

Tim Carson explains that the education system focuses on assessment based numeracy and literacy, leaving limited time for art subjects. The curriculum outlines that there should be a sequentially based music program, where every child in New Zealand has the opportunity to learn about the elements of music in order to foster creativity and compose. However, often this is unachievable, due to students’ lack of basic musical knowledge.⁵³²

Lisa Rodger, Head of Early Learning and Student Achievement at the Ministry of Education disagrees, stating that learning objectives are clearly outlined in the curriculum and therefore are being met across the country. She explains that schools are funded to deliver each part of the curriculum and arts funding has consequently increased. Resources such as the “Kiwi Kid Song Collection” were funded by Education Colleges and had little to do with the Ministry of Education.⁵³³

⁵²⁹ "Music Teachers Point to Crisis in Primary Schools." In *Nine To Noon*, 19.33. Radio New Zealand, 2016.

⁵³⁰ "Music Teachers Point to Crisis in Primary Schools." In *Nine To Noon*, 19.33. Radio New Zealand, 2016.

⁵³¹ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 104.

⁵³² "Music Teachers Point to Crisis in Primary Schools." In *Nine To Noon*, 19.33. Radio New Zealand, 2016.

⁵³³ "Music Teachers Point to Crisis in Primary Schools." In *Nine To Noon*, 19.33. Radio New Zealand, 2016.

Tim Carson's views are reflected in a report entitled "National Monitoring Study of Student Achievement", conducted by the National Educational Monitoring Project. The project involved 4400 students in Year 4 and Year 8, educators and principals to assess achievement and understanding in music education. Students were assessed on six tasks; singing, playing, responding, reading and recording. The study indicated that only half of students at Year 4 were at the expected level of achievement for music.⁵³⁴ Principal Whetu Cormick explained that "schools were spending less time on the arts because they were concentrating on reading, writing and maths due to National Standards, and trainee teachers were getting less preparation in arts teaching than in the past."⁵³⁵

The report indicated that 92% of music taught at Year 4 was conducted by a generalist teacher, who received little or no added support. By Year 8, 60% of music tuition was taught by specialist teachers. Interestingly,

At Year 8, 25 percent of teachers had a specialist music education focus in their initial teacher education programme, compared with only 3 percent of Year 4 teachers. At Year 8, 16 percent of teachers had undergraduate or postgraduate music qualifications compared with 2 percent of Year 4 teachers. Fifteen percent of Year 8 teachers had a music teaching qualification compared with 2 percent of Year 4 teachers. The proportions of Year 8 teachers who reported having worked in the music industry, or as a private music teacher, were more than twice those of Year 4 teachers.⁵³⁶

The confidence of specialist teachers and generalist teachers teaching music to Year 8 students was measured and compared in Figure 1 below.⁵³⁷

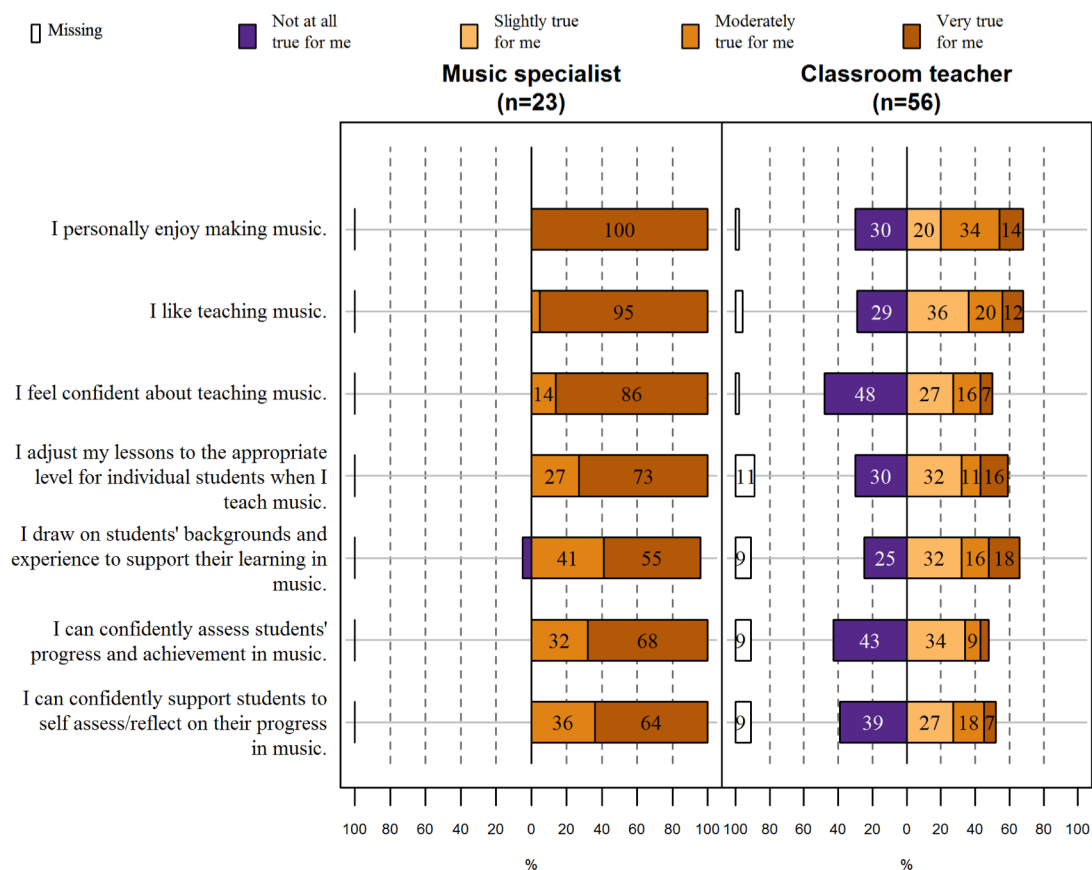
⁵³⁴ "The Arts 2015 - Key Findings." In *National Monitoring Study of Student Achievement*. University of Otago, 2016.

⁵³⁵ Gerritsen, John. "NZ School Kids 'Need More Support' with Music and Drama." <http://www.radionz.co.nz/news/national/328141/nz-school-kids-'need-more-support'-with-music-and-drama>

⁵³⁶ "Music - Sound Arts: 2015- Key Findings." University of Otago: Ministry of Education, 2015. 57.

⁵³⁷ "Music - Sound Arts: 2015- Key Findings." University of Otago: Ministry of Education, 2015. 59.

Figure 1. Ministry of Education, *Comparison of levels of confidence between music specialists and classroom teachers.*



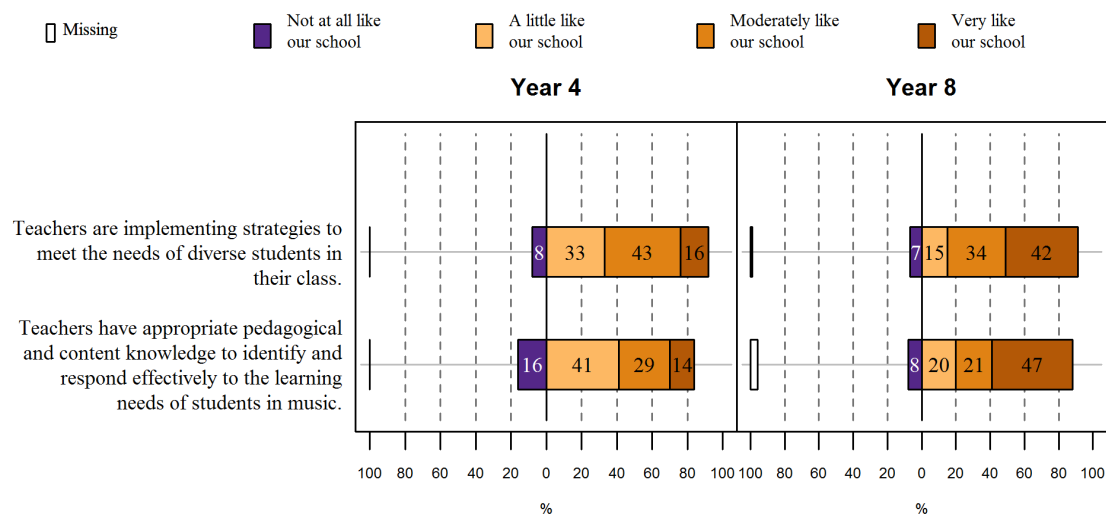
These statistics show a vast difference in confidence between specialist and generalist teachers, which will ultimately affect the standard of learning and achievement. These findings also suggest that a quality music education is only accessible to some students.

Principals were additionally asked to respond to statements about their music program and whether the classroom teachers had “appropriate pedagogical and content knowledge”.⁵³⁸ These responses are shown in Figure 2 below.⁵³⁹

⁵³⁸ "Music - Sound Arts: 2015- Key Findings." University of Otago: Ministry of Education, 2015. 59.

⁵³⁹ "Music - Sound Arts: 2015- Key Findings." University of Otago: Ministry of Education, 2015. 59.

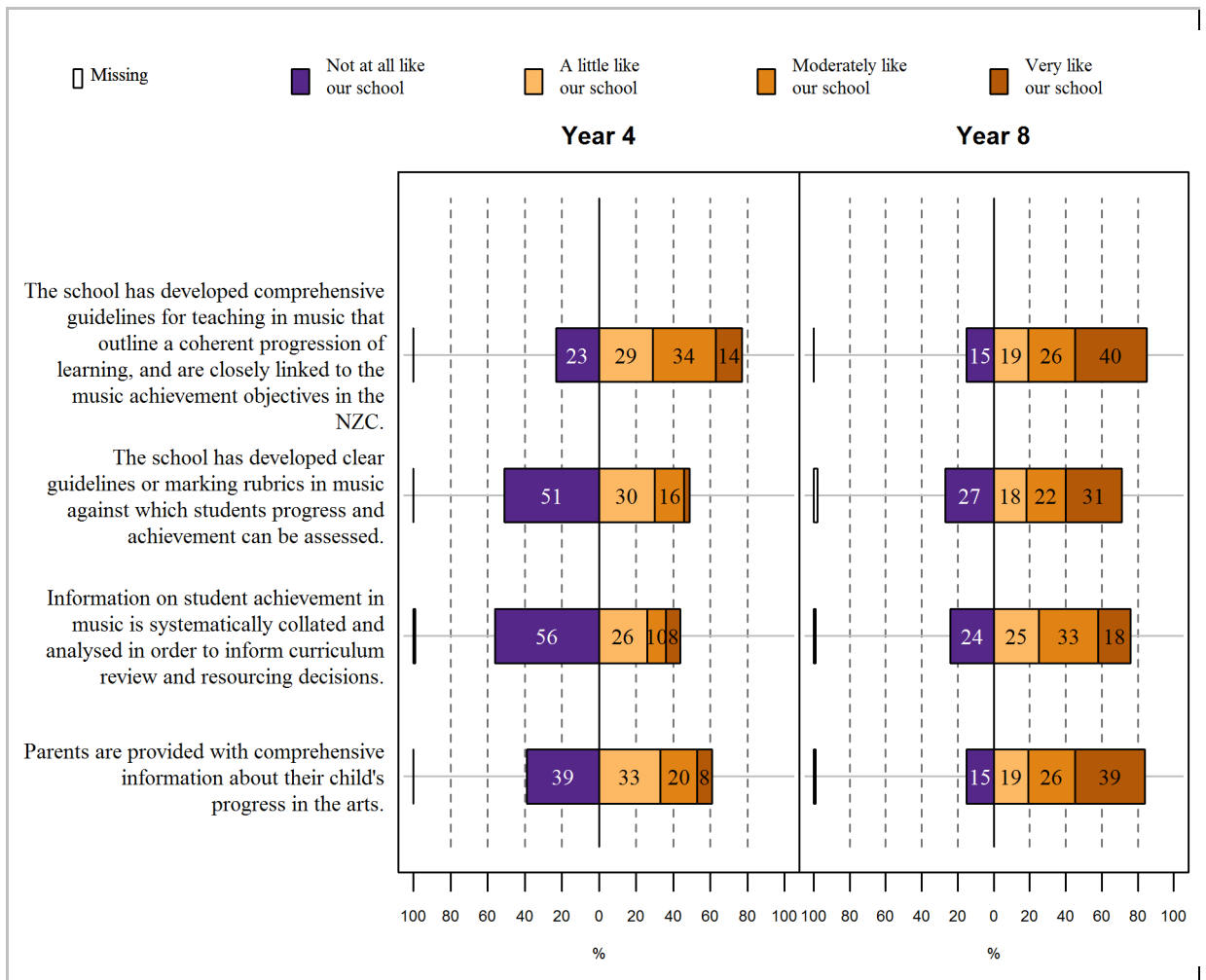
Figure 2. Ministry of Education, *Principals' responses of whether their school had teachers with appropriate knowledge to teach music.*



The participating principals were then asked to respond to statements regarding the curriculum and support of the schools' music programme as shown below in Figure 3.⁵⁴⁰

⁵⁴⁰ "Music - Sound Arts: 2015- Key Findings." University of Otago: Ministry of Education, 2015. 60.

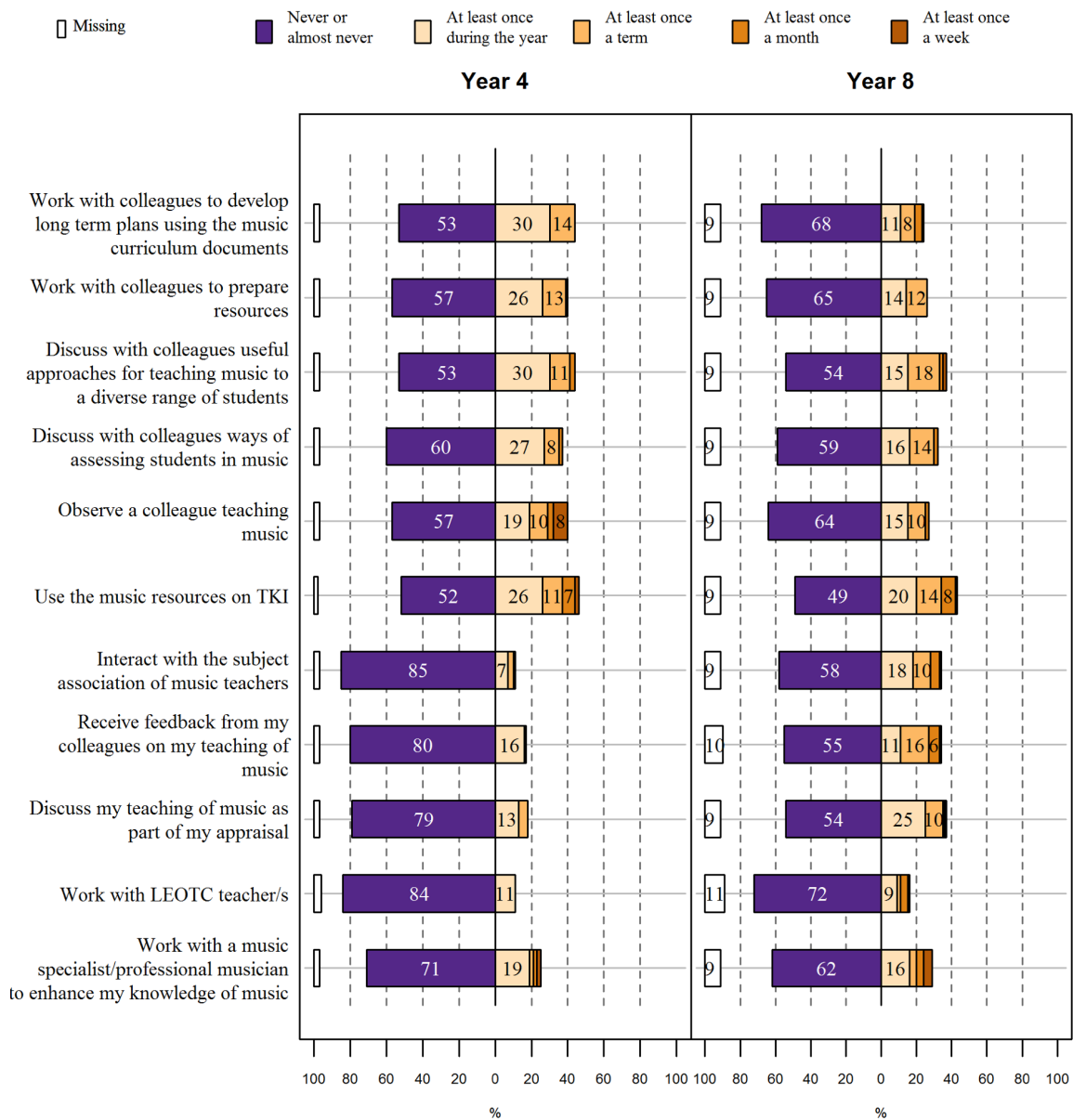
Figure 3. Ministry of Education, *Principals' responses about music programme implemented by classroom teachers.*



Educators were lastly asked to respond to statements regarding professional development and support of the school's music programme. These responses are shown below in Figure 4.⁵⁴¹

⁵⁴¹ "Music - Sound Arts: 2015- Key Findings." University of Otago: Ministry of Education, 2015. 62.

Figure 4. Ministry of Education, *Educators' responses regarding professional development and support.*



These findings indicate lack of support and professional development for those implementing a music programme. When principals were asked of the support given it was evident that:

About 50 percent of all principals indicated that music has not been a focus for development in the last five years. This proportion was greater at Year 4 than Year 8. Seven percent of Year 4 and 17 percent of Year 8

principals said that music had been a major focus for development within the last five years.⁵⁴²

Interestingly, these findings conflict with the “purpose, vision and behaviours”⁵⁴³ of the Ministry of Education as not all New Zealand children have “the choice and opportunity to be the best they can be”⁵⁴⁴ in the arts.

In 2003, Principal Lecturer of Music Education, Trevor Thwaites investigated attitudes and perceptions of primary students towards the arts. The study involved primary schools across Auckland from different ethnicities and socioeconomic backgrounds, in addition to some students in the final year of a Bachelor of Education. According to *The Arts in the New Zealand Curriculum* document published by the Ministry of Education, all primary and intermediate schools are expected to offer all four arts disciplines. However, according to Thwaites, little music, dance and drama instruction was being offered, and were often subjects generalist teachers feared the most.⁵⁴⁵ The majority of schools stated that they offered music tuition through group singing, however this sometimes only lasted ten minutes per week and generally the only instruction offered was “sing louder”.⁵⁴⁶ Thwaites found that generally schools were inconsistent with music tuition and lacked a variety of activities leading children to feel frustrated and bored.⁵⁴⁷

⁵⁴² "Music - Sound Arts: 2015- Key Findings." University of Otago: Ministry of Education, 2015. 64.

⁵⁴³ "Our Purpose, Vision and Behaviours."

<http://www.education.govt.nz/ministry-of-education/our-role-and-our-people/our-purpose-vision-and-behaviours/>

⁵⁴⁴ "Our Purpose, Vision and Behaviours."
<http://www.education.govt.nz/ministry-of-education/our-role-and-our-people/our-purpose-vision-and-behaviours/>

⁵⁴⁵ Thwaites, Trevor. "How Primary School Students View Music and the Arts." *ACE Papers*, no. 13 (2003): 87-102.

⁵⁴⁶ Thwaites, Trevor. "How Primary School Students View Music and the Arts." *ACE Papers*, no. 13 (2003): 88.

⁵⁴⁷ Thwaites, Trevor. "How Primary School Students View Music and the Arts." *ACE Papers*, no. 13 (2003): 92-93.

One student teacher recounted:

I observed fifty minutes of block singing today. The whole block [four classes] join with another block in the school hall for singing. They walk in and sit down and wait for the music teacher to take control. However, all the teacher did was put a tape on. He didn't greet them and in fact did not say one word to them [*the students*]. When the tape started, the teacher yelled out 'SING!' and that was it. Nothing more was said.

The music teacher then stood in front of the children with his hands in his pockets looking utterly bored. He just watched the children without saying or doing anything. The classroom teachers [*of the children*] were walking around handing out 'smiley cards' and encouraging the children to sing as they sang along too.

Eventually the teacher walked over to the tape player and turned the music off. He then shouted at the children telling them that they weren't making enough effort and that they were talking too much. I was watching the children during this process, along with the other block teachers, and we didn't see any of them talking.

When the music was put back on again, the children sang and even did some actions, but the teacher discouraged them [*from physical engagement*] and stood there with a frown on his face and his hands on his hips. He was very intimidating and he looked bored.

I believe with music that children need to have an amount of freedom, but in this lesson, this was definitely non-existent. The teacher didn't even sing along to motivate the children or anything. I have never seen children of any age look so bored and unmotivated for music, and I have never seen a teacher be so discouraging.⁵⁴⁸

These experiences will unfortunately shape how students perceive music

⁵⁴⁸ Thwaites, Trevor. "How Primary School Students View Music and the Arts." *ACE Papers*, no. 13 (2003): 93-94.

education and the value of the arts to society. Despite these experiences, majority of children indicated enjoyment from music, stating that music was their second preferred subject, after Physical Education.⁵⁴⁹

Similarly, The National Educational Monitoring Project conducted a study in 1998 to discover students' attitudes, perceptions and participation in music education both inside and outside of school. This study was conducted through a survey of nearly 500 students at Year 4 and Year 8. It is significant as it is the first study of its kind.⁵⁵⁰ To assess students' attitudes towards music education, participants were asked to rank school subjects in preference. The following results are shown in Example 22 below.⁵⁵¹

Ex. 22. Buckton, Roger. *Students' preferred subject*.

Year 4 Students

1. Art (26%)
2. P.E (17%)
3. Maths (11%)
4. Music (11%)
5. Science (9%)
6. Reading (8%)
7. Writing (7%)
8. Technology (6%)
9. Māori (3%)
10. Social Studies (1%)
11. Health (1%)

Year 8 Students

1. P.E
2. Art
3. Maths
4. Technology
5. Music
6. Science
7. Reading
8. Social Studies
9. Writing
10. Māori

These findings indicate that children generally enjoy music instruction being ranked in the top five preferred subjects in years four and eight. The survey then

⁵⁴⁹ Thwaites, Trevor. "How Primary School Students View Music and the Arts." *ACE Papers*, no. 13 (2003): 96.

⁵⁵⁰ Buckton, Roger. "Children's Attitudes to Music." University of Canterbury Research Consultancy, 1998. 2.

⁵⁵¹ Buckton, Roger. "Children's Attitudes to Music." University of Canterbury Research Consultancy, 1998. 4.

asked participants to comment on the frequency of musical activities during school, which are shown in the table below.⁵⁵²

Table 9. Buckton, Roger, *Frequency of school music activities*.

Activity	Year 4		Year 8	
	Lots/quite often	Sometimes/never	Lots/quite often	Sometimes/never
Singing	56%	44%	52%	48%
Playing	25%	75%	36%	64%
Listening	55%	45%	65%	35%
Dancing/moving	33%	67%	22%	78%

Buckton concludes that:

These figures indicate a sorry state of classroom music in which it appears that a majority of children, at least according to their own perception, experience very little classroom music. For example, at Year 4, playing instruments was the preferred activity - 63% indicated that they enjoyed it very much; but sadly, only 25 % indicated that they did it lots or quite often.⁵⁵³

In 2002, a study was initiated by the Ministry of Education to “investigate how teachers work with the curriculum”.⁵⁵⁴ The findings indicated that around 80% of educators at a primary level taught music, despite only a quarter holding a

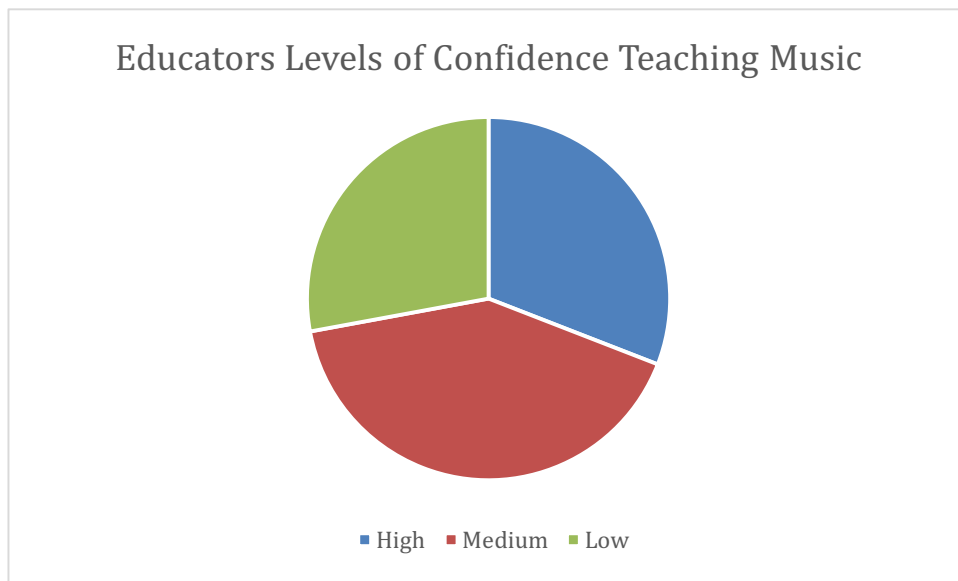
⁵⁵² Buckton, Roger. "Children's Attitudes to Music." University of Canterbury Research Consultancy, 1998. 6.

⁵⁵³ Buckton, Roger. "Children's Attitudes to Music." University of Canterbury Research Consultancy, 1998. 7.

⁵⁵⁴ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alistair Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003.

bachelor's degree or higher in an arts subject.⁵⁵⁵ Consequently, when asked to indicate confidence in teaching music, only 30.9% of participants had high confidence levels, 41.2% indicated medium and 27.9% had a low level as shown in Figure 5 below.

Figure 5. Ministry of Education, *Educators' Levels of Confidence Teaching Music*.



One intermediate educator explained that “I don’t feel I know enough about music myself to feel really confident teaching it.”⁵⁵⁶ Other educators discussed lack of support and resources, believing that music ought to be taught by a specialist teacher.⁵⁵⁷ Unfortunately, many “student teachers, teachers and school principals

⁵⁵⁵ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 81-83.

⁵⁵⁶ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 123.

⁵⁵⁷ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical

are unlikely to have had much exposure to visual art or music education beyond their own primary school experience.”⁵⁵⁸

When asked how the literacies outlined in the arts curriculum document has impacted their teaching one teacher commented that they “Haven’t really looked at this part of the document before.”⁵⁵⁹ Another explained, “I don’t get a lot of time to sit and read non-essential guff.”⁵⁶⁰

Lack of support was additionally apparent through experiences with the Education Review Office, often abbreviated to ERO. The Education Review Office is responsible for reviewing schools every three years and report what is being achieved in order to improve the quality of education and effectiveness of institutions.⁵⁶¹

Educators shared that:

At the end of the discussion with the ERO reviewer, he said that he hadn’t read the curriculum yet, and must do so! He was a non-specialist in the

Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 123.

⁵⁵⁸ Mansfield, Janet E. "Beyond the 'Beauty Full' Classroom: The Arts Curriculum." In *The Arts in Education: Critical Perspectives from Aotearoa New Zealand*, edited by Elizabeth M. Grierson & Janet E. Mansfield. New Zealand: Dunmore Press Ltd, 2003. 75.

⁵⁵⁹ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 98-99.

⁵⁶⁰ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 98-99.

⁵⁶¹ Ministry of Education. "Education in New Zealand." Wellington, New Zealand, 1992. 6.

area who had little or no idea what he was doing, then made many incorrect judgments without evidence, didn't even ask.⁵⁶²

Another educator shared that an evaluation of the arts "didn't appear to even figure on their inspection horizon when they visited our school. No mention was made of it."⁵⁶³ Despite the apparent lack of support, 79.5% of educators involved felt that the arts had a positive impact on achievement in other curriculum areas.⁵⁶⁴

When educators were asked of challenges faced when implementing the arts curriculum, several obstacles were highlighted. Educators expressed a lack of resources such as time, money, instruments and audio material in addition to a lack of space to store them. Many felt that the curriculum was overcrowded and therefore allowed little time for arts subjects with a national focus on numeracy and literacy. One Head of Department at a secondary level explained:

For more than five years, and especially since the draft document was published in 1999, we have sought to address issues of equity of access to students (through curriculum committees, addressing the Board of Trustees, getting assistance from arts advisors, etc.) but to no avail. By the end of Year 10, students will have had half the time in the arts as they will

⁵⁶² Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 146.

⁵⁶³ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 146.

⁵⁶⁴ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 153.

have had for “core” subjects, and a third in any one arts discipline. So much for the seven essential learning areas.⁵⁶⁵

Teachers shared struggles of implementing a quality arts program with little or no background knowledge. Deputy principals shared that:

- In primary schools teachers are expected to be ‘experts’ in too many curriculum areas. In particular, I think that teachers without a musical background struggle to provide lessons that will enable all students to meet the learning outcomes. Primary schools should be funded to provide specialist teachers in music.⁵⁶⁶
- Major challenge has been time; to go into any area in depth requires time. The curriculum is over loaded, and many other curriculum areas have been pushed into secondary position due to the huge commitment to numeracy and literacy.⁵⁶⁷

Pressures of time and lack of background knowledge were often alleviated through the employment of arts specialists. A deputy principal shared the success of a specialist at their school, explaining that “Semi-specialisation has meant that

⁵⁶⁵ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 155.

⁵⁶⁶ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 157.

⁵⁶⁷ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 154-155.

everyone gets regular sessions of music.”⁵⁶⁸ Meanwhile, other teachers lamented over the lack of specialists. One syndicate leader at primary level shared:

I would like to see dance and drama removed from primary school at this level of depth. For the expectations of dance and drama, I believe specialist itinerant teachers (if need be) should be employed if the achievement objectives are to be taught effectively. In our school music is left to teachers with no expertise and no-one is expected to have to teach it to the level demanded of this document. If the arts document is vitally important then all teachers should be up-skilled personally, rather than receiving a watered-down summary. However, I believe that a day course or two would not do it justice anyway. I am sure facilitators are dance/drama experts, have had some private training, have a personal desire/interest in it, and so find it easy to impart. We would not expect the dance expert to have a two-day course on reading and then be expected to fulfil the English reading document. If this analogy is inappropriate then so too is the analogy that drama and dance need to be monitored, achieved, assessed to the document level as it is with reading.⁵⁶⁹

This research indicates pressures educators face when implementing an arts curriculum, along with lack of support from the government and their school community.

Similar research was undertaken in 2009, to understand educators’ perceptions and curriculum delivery. 1100 primary and intermediate schools were selected to participate, questioning principals and music teachers or the teacher in charge of

⁵⁶⁸ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 154-155.

⁵⁶⁹ Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003. 157-158.

music who were asked to fill out a questionnaire. Of the 2494 questionnaires sent, only 325 were returned, 150 from music teachers and 175 from principals. It is interesting to note that the majority of these responses came from state schools.⁵⁷⁰ Participation rates were asked of instrumental ensembles and tuition available in their schools. Results indicated that instrumental groups were only present in 58.8% of schools. Instrumental instruction in group settings was offered at 59.1%, while 45.9% offered private tuition.⁵⁷¹

During general music tuition, 49.9% of schools taught traditional music notation, 11.4% taught tablature and only 50.5% of schools reported any form of notation during instruction. These findings suggest that half of New Zealand children are musically illiterate, receiving no form of musical literacy, despite the outlined requirements in the curriculum. Douglas Nyce suggests:

The *de facto* philosophy of music education is one of music education for the elite and the lucky, as those who receive quality music education do so largely by accident of location or birth. They may have parents with the means and/or priorities which support private music instruction. They may have an outstanding school music teacher, or a well-funded school with a board keen to promote music learning, or a principal with a knowledge of and passion for the arts.⁵⁷²

When participants were asked why they were not fully implementing the New Zealand curriculum, respondents explained that "Music is an expensive subject to do well and also requires instructional time which is often not available to the

⁵⁷⁰ Nyce, Douglas. "New Zealand Music Education: A Promise Broken." Paper presented at the Proceedings of the Joint Conference of XXXIst ANZARME Annual Conference and the Ist Conference of the Music Educators Research Centre (MERC), Melbourne, 2009. 142-145.

⁵⁷¹ Nyce, Douglas. "New Zealand Music Education: A Promise Broken." Paper presented at the Proceedings of the Joint Conference of XXXIst ANZARME Annual Conference and the Ist Conference of the Music Educators Research Centre (MERC), Melbourne, 2009. 146.

⁵⁷² Nyce, Douglas. "New Zealand Music Education: A Promise Broken." Paper presented at the Proceedings of the Joint Conference of XXXIst ANZARME Annual Conference and the Ist Conference of the Music Educators Research Centre (MERC), Melbourne, 2009. 157.

teacher within the normal school day”.⁵⁷³ Principals suggested that increased governmental funding and implementing music specialists to deliver the schools music programme would significantly impact the quality of education which students receive. Nyce concludes that “It is clear that music education in New Zealand is in crisis.”⁵⁷⁴

The decline of music education has been outlined through various news reports. In 2016, The Dominion Post published an article discussing the decline of music education due to schools focusing on numeracy and literacy subjects. This is an outcome of National Standards, as results of subjects such as English and mathematics are publicised, forcing schools to prioritise those subjects. New Zealand playwright Dave Armstrong discusses that this decline is detrimental to society as music instils creativity, a skill that is constantly being promoted by business leaders and politicians.⁵⁷⁵

The status of music and the arts in New Zealand is also reflected in recent staff reductions to Victoria, Otago and Waikato universities. Research co-ordinator Katy Miller, discusses that Victoria University has proposed cutting 7.0 FTE staff in the humanities and language departments due to an increased governmental focus on STEM subjects (science, technology, engineering and mathematics) and a lack of students to justify staff.⁵⁷⁶ Similarly, Otago University has reduced between fifteen and twenty jobs in the arts department during late 2016,⁵⁷⁷ while

⁵⁷³ Nyce, Douglas. "New Zealand Music Education: A Promise Broken." Paper presented at the Proceedings of the Joint Conference of XXXIst ANZARME Annual Conference and the Ist Conference of the Music Educators Research Centre (MERC), Melbourne, 2009. 157.

⁵⁷⁴ Nyce, Douglas. "New Zealand Music Education: A Promise Broken." Paper presented at the Proceedings of the Joint Conference of XXXIst ANZARME Annual Conference and the Ist Conference of the Music Educators Research Centre (MERC), Melbourne, 2009. 156.

⁵⁷⁵ Armstrong, Dave. "Don't Stop the Music at School." *The Dominion Post*, 2016. <http://www.stuff.co.nz/dominion-post/comment/columnists/77566046/dave-armstrong-dont-stop-the-music-at-school>

⁵⁷⁶ The Tertiary Education Union, Te Houtu Kahurangi o Aotearoa. "Tough Times for Humanities and Languages." <https://audioboom.com/posts/5261956-tough-times-for-humanities-and-languages>

⁵⁷⁷ Radio New Zealand. "Otago Uni Confirms Humanities Job Cuts." <http://www.radionz.co.nz/news/national/320912/otago-uni-confirms-humanities-job-cuts>

Waikato University's acting dean of the Faculty of Arts and Social Sciences Professor Allison Kirkman has proposed cutting seventeen positions in arts and humanities. This includes 40% of staff employed in the music department. Kirkman insists that the proposal aims to strengthen the arts and social sciences by amending staff to student ratio. Vice-Chancellor, Professor Neil Quigley explains that:

There is no question that government funding priorities have not helped... We get twice the rate for engineering students as we do for social science students. We can cross-subsidise courses to a point, but there has not been even nominal funding increases for social sciences for seven years, and every year staff salaries go up.⁵⁷⁸

It is curious that Quigley omits to say in this statement that music also receives a higher level of government funding.

Similarly, the Tertiary Education Union states:

the university was no longer willing to cross-subsidise smaller subject departments, despite posting an overall surplus last year. The future viability of all subjects, therefore, comes down to changing market demand, rather than the university as a whole ensuring the provision of a broad range of subjects that would give students in the region access to a variety of learning opportunities.⁵⁷⁹

Sandra Grey, national president of the Tertiary Education Union laments that:

Sadly these changes fit neatly into the current National government's long-term plan to devalue the social sciences and humanities; turning education into a commodity a student should purchase in order to get a job, rather an opportunity to develop a broad understanding of the world we live in and

⁵⁷⁸ Lewis, Geoff. "Staff Cuts Reflect University's Challenges." *New Zealand Herald*, 2017.

⁵⁷⁹ Union, Tertiary Education. "Proposed Job Cuts at Waikato University Prove National's Tertiary Education Experiment Is Failing." <http://teu.ac.nz/2017/03/waikato-arts-job-cuts/>

the skills needed to change it. It is hugely disappointing that 17 peoples' livelihoods will be another price we are forced to pay.⁵⁸⁰

These cuts reflect priorities outlined in *Tertiary Education Strategy: 2014-2019*, imparting skills for the labour force to “build and sustain economic growth”.⁵⁸¹

The document states that:

The Government will...work to ensure that the way it funds tertiary education sends the correct messages to TEOs about investment in key disciplines and essential skills. The priority is to ensure that the skills people develop in tertiary education are well matched to labour market needs. This includes addressing new and emerging shortages in specific areas, such as information and communications technology (ICT) and the science, technology, engineering and mathematics (STEM) skills needed for innovation and economic growth.⁵⁸²

A 2013 article published in the New Zealand Herald, explains how senior enrolments in art subjects have declined as students, parents and administration prioritise STEM subjects. Wellington music teacher Andrew Stopps explains that “music was always put up against a second science subject and he had a hard time convincing parents that music wouldn't harm their kids' chances at university.”⁵⁸³ Support and advocacy for arts subjects has been found through deans at Auckland and Otago University Medical Schools and Otago University's Law School. Professor John Fraser at Auckland University explains candidates with a musical background are generally focused, dedicated, creative and well-rounded.

⁵⁸⁰ Cann, Ged. "Shake-up Coming to the University." http://www.nzherald.co.nz/hamilton-news/news/article.cfm?c_id=1503366&objectid=11730319.

⁵⁸¹ "Tertiary Education Strategy: 2014-2019." edited by Ministry of Education: Ministry of Education and the Ministry of Business, Innovation and Employment, 2014. 9.

⁵⁸² "Tertiary Education Strategy: 2014-2019." edited by Ministry of Education: Ministry of Education and the Ministry of Business, Innovation and Employment, 2014. 10.

⁵⁸³ Bilby, Lynley. "Students Told: Stick with Arts." New Zealand Herald, http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10865845

Interestingly, he explained that “some of the most successful and skilled doctors he knew had continued their musical interests.”⁵⁸⁴

It is apparent that the New Zealand government is investing in skills needed to improve the economy of the country. It is interesting to note that the music industry significantly contributes to the economy as in 2012 and 2013, “the New Zealand music industry directly contributed \$200.4 million and \$204.7 million respectively to national GDP and directly provided the equivalent of 1,694 and 1,670 full-time jobs.”⁵⁸⁵ Furthermore, it must be considered that while STEM graduates may statistically earn more than graduates in the humanities, the arts contribute in other ways to society, and New Zealand needs to look beyond the short term focus of STEM subjects.⁵⁸⁶

⁵⁸⁴ Bilby, Lynley. "Students Told: Stick with Arts." New Zealand Herald, http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10865845

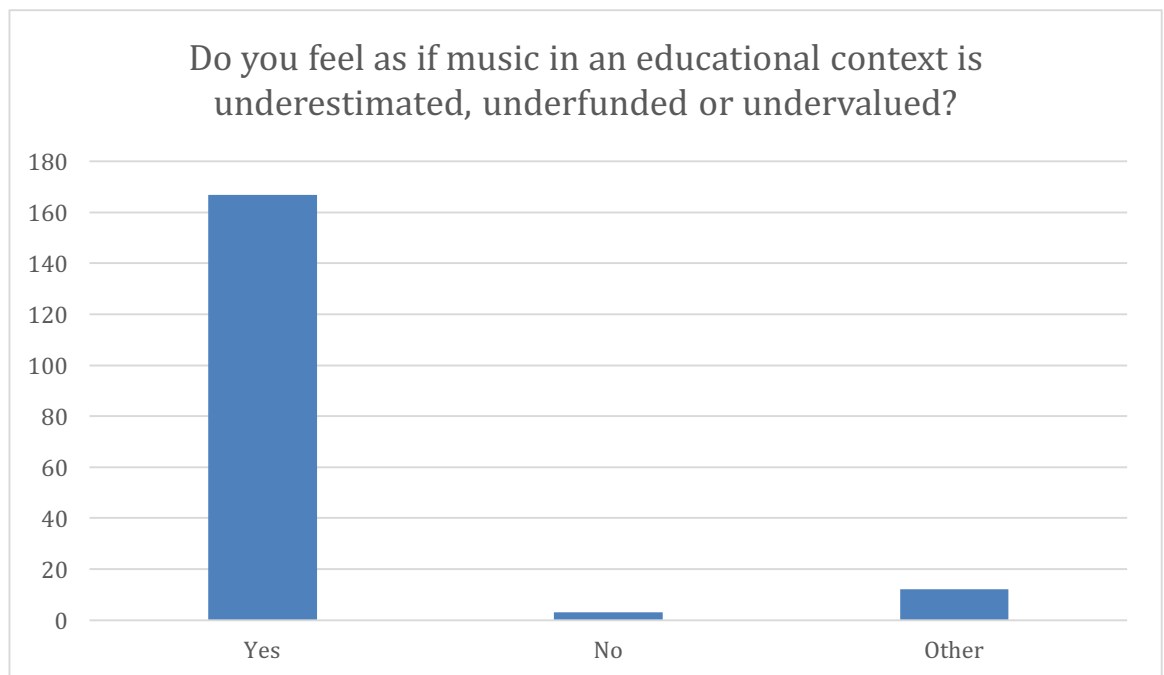
⁵⁸⁵ "Economic Contribution of the New Zealand Music Industry, 2012 and 2013." In *A report for the New Zealand music industry*. PWC, 2014. 4.

⁵⁸⁶ "Don't Forget the Arts." *Education Review*, 2014.

3.5 Music Education Survey

These findings prompted an investigation into the status of music education in New Zealand through an online questionnaire. This survey represented 221 music educators, including classroom music teachers of primary, intermediate and secondary levels, instrumentalist teachers working as itinerants or in a private setting and music professors at tertiary institutions. These participants strongly representing regions of Auckland, Waikato and Otago. This research indicated that 91.76% of participants felt that music in an educational context is underestimated, underfunded or undervalued in New Zealand. 1.65% of participants disagreed while 6.59% who selected “other”, were unable to comment. These findings are shown below in Figure 6.⁵⁸⁷

Figure 6. *Educators’ response as to whether music education in underestimated, underfunded or undervalued.*



⁵⁸⁷ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

The majority of participants indicated that music is often perceived as superfluous to the curriculum and that music as a career, is not viewed as economically viable and therefore of little societal value

Educators explained:

- Parents discourage their kids from taking NCEA music as "music won't give you a career" - they misunderstand the function of music making and learning as an holistic activity. Until more people - teachers, parents, governments, schools, principals, students - understand music as an holistic activity which can have a profound effect on our humanity both individually and collectively, music education will be all of the above - underestimated, underfunded, undervalued.⁵⁸⁸
- We have a government that fails to value the arts and prioritises for artificial levels in numeracy and literacy without realising that the arts, in particular music, will raise these levels more effectively. I think we have a neo-liberal attitude towards the arts as being non-productive financially, which of course flies in the face of current research about the effect of music on learning. Teachers are overwhelmed, under resourced and pushed to deal with too much red-tape to have time to teach creatively.⁵⁸⁹
- The current government focus on STEM, in terms of funding and development, ignores the contribution of arts in general, both as a valuable component of modern society and also the significant size of the artistic industry.⁵⁹⁰

Frustration was additionally expressed around the lack of understanding of the cognitive, psychological and social benefits of a meaningful music education, sharing:

⁵⁸⁸ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁵⁸⁹ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁵⁹⁰ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

- It's seen as something that's nice to have, but not essential to our health, happiness, comfort & wellbeing.⁵⁹¹
- There seems to be a lack of understanding as to what a good musical education can provide a child despite all the research into what music learning can do for your brain.⁵⁹²

From these responses, it is apparent that the majority of educators felt that music in an educational context is underestimated, underfunded and undervalued. It was difficult to understand why 1.65% of respondents felt that music education was appropriately estimated, valued and funded as no explanations were given.

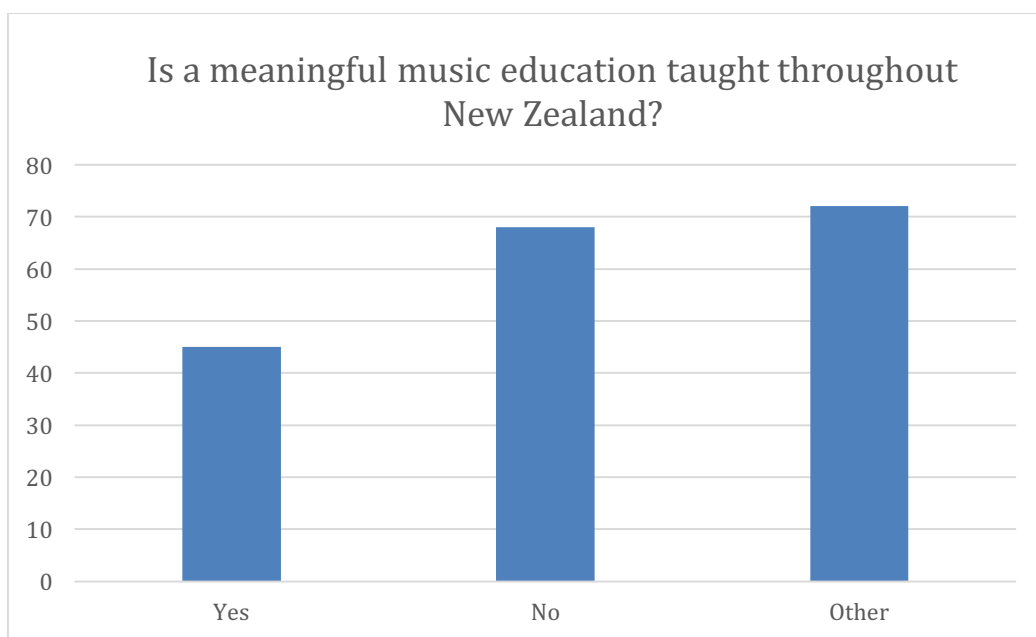
To assess the quality of music education, participants were asked whether they felt that a meaningful music education was taught throughout New Zealand and why. 185 participants responded, 24.32% indicating yes, 36.76% no and 38.92% were categorised in 'other', unable to comment. Results are given in Figure 7 below.⁵⁹³

⁵⁹¹ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁵⁹² Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁵⁹³ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

Figure 7. *Educators' response to whether a meaningful music education is met throughout New Zealand.*



Educators who responded yes, felt that the current curriculum offered a holistic approach to education, through music technology and instrumental tuition of both classical and contemporary styles. The level of musicianship and technique seen at regional and national competitions such as “The Big Sing”, Band and Orchestra festivals and the “Young Singers in Harmony” competitions, provided affirmation that music education is being successfully taught. Educators shared:

- NZ has some amazing music educators. It is a subject which teaches the whole person and encourages young people to explore deeper within themselves and therefore requires a more pastoral approach. Many of the music teachers I interact with are exceptional and caring individuals and NZ is fortunate to have them.⁵⁹⁴
- Across the board teachers are going above and beyond their best to help the younger generations explore their abilities and make connections to their lives so it is relevant.⁵⁹⁵

⁵⁹⁴ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁵⁹⁵ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

Participants who felt that a meaningful music education was not taught throughout New Zealand, highlighted that while many schools provided excellent music programs, most of these are private or a high decile schools and exclude students from low socioeconomic backgrounds. These comments additionally highlighted a perceived inconsistency of education at primary, secondary and tertiary levels. The biggest concern revolved around the quality of education at primary level, as music programs were often non-existent. Most educators felt that primary teachers had little training, professional development or confidence in teaching music which led to “Young people...not experiencing the benefits of group music making and singing or learning music as a subject or learning to perform an instrument other than a ukulele.”⁵⁹⁶ One educator believed that this is due to differing levels of music funding between primary and secondary schools. Consequently, this continues to cause problems throughout secondary education. Teachers explained that:

- (there is) little time to prep students from those who sang a few songs at primary school up to performance level required for NCEA.
- there are huge gaps in some of the students musical knowledge. eg They are expected to compose a piece of music but haven't a clue about time signatures.⁵⁹⁷
- Many schools have no programs from Y9 that will actually take a student through to a level by the end of Y13 that will enable them to begin a university undergraduate music degree. This doesn't seem to be true for subjects such as chemistry or maths.⁵⁹⁸

Participants categorised in “other” felt that the quality of music education varied between schools and regions, often relying on the calibre of individual teaching staff. Many felt that:

⁵⁹⁶ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁵⁹⁷ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁵⁹⁸ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

- There are definitely great pockets of excellent musical education but in general there seems to be a reluctance to value a good musical education in every school setting.⁵⁹⁹

To gain an in-depth understanding of the status of music education, participants were asked to state adversities they face. 191 participants who responded, explained the biggest struggle is being undervalued as music is often regarded as a hobby or extracurricular activity. It was felt that these values are reflected in lack of funding, resources, recognition and respect by schools, administration and the government. Educators shared:

- Music is often seen as an 'extra' and its holistic educational benefits are under-valued.⁶⁰⁰
- There is a perception, not only in society, but in other subject areas that music is not an academic subject and that it is akin to 'play time' and therefore is always under appreciated.⁶⁰¹
- In NZ (and globally) arts education is grossly undervalued. It is the first thing to go in schools that have financial constraints. The arts often come behind literacy, numeracy, 'academic' subjects like science, and of course sport! As a high school music teacher you are seriously over worked and risk burnout. You are expected to perform at the drop of a hat yet you are not prioritised for as a subject because you are a 'frill' for the school - although they happily use you as advertising.⁶⁰²
- Perception that Music is not vocational and gets in the way of 'real' subjects like science, maths and economics...Parents who are fixed in a job

⁵⁹⁹ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁶⁰⁰ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁶⁰¹ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁶⁰² Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

focused view of education that does not reflect the realities of the modern work environment.⁶⁰³

- Students (are) being pressured to take the Math and Science options. I have had senior students told by Careers Advisor that if they aren't going into a Music job when they leave school they might as well drop the subject now.”⁶⁰⁴

Another key explanation arose from New Zealand’s cultural preference of sports over the arts. Often art subjects are viewed as “less important than sport for many of the families.”⁶⁰⁵ Another educator explained that:

Music is (perceived as) a nice recreational pursuit but is not a core subject and therefore not afforded the same status. Particularly in NZ, the Arts are overshadowed by Sports at every educational level. The attitude that Music is a great way to access other curriculum areas, not a subject worthy of study in its own right.⁶⁰⁶

This question also highlighted the difficulties around becoming a teacher through current LAT (Limited Authority to Teach) restrictions, in addition to the lack of support from university programs, who often promoted music performance but not music education. Concern was raised around classroom trainee teachers especially in the primary sector, as it was felt they needed more training and time when it comes to music education. A participant shared that:

Unfortunately, the poor-quality attempts of teaching basic instruments like Recorder, Ukulele etc by primary school classroom teachers who have managed to learn few basic tunes and while having the best intentions, are demoting music education to the level of a short term pastime.⁶⁰⁷

Educators were lastly asked what changes they would like to see in New

⁶⁰³ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁶⁰⁴ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁶⁰⁵ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁶⁰⁶ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

⁶⁰⁷ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

Zealand's Education System, to which 174 participants responded. The most widely held opinion was to increase funding to music education. Many felt that this would enable schools to provide teaching resources, quality classroom instruments and allow more hours for itinerant music teachers. Participants felt that adequate funding would ensure a higher quality education.

Second to funding, educators expressed that they would like to see the arts recognised for the contribution that it brings to New Zealand society and economy. One educator explained that:

Not all educational value can be measured in monetary or economic terms. Education in arts and culture can increase a person's confidence, higher thinking, problem solving, mental health, and other areas that have a wider impact on a healthy society.⁶⁰⁸

Many felt that if the value of music education was recognised that music would be incorporated into the general curriculum. This has already occurred in parts of Europe and the United States through the development of STEM (science, technology, engineering and mathematics) to STEAM (science, technology, engineering, arts and mathematics).

These findings indicate that majority of music educators in New Zealand feel that music education is inaccessible, being underfunded, undervalued and underestimated.

⁶⁰⁸ Browne, Jade. "Perception of Music Education in New Zealand Society" 2016.

3.6 Global Status of Music Education

Unfortunately, the decline of music education is also occurring on a global scale. Professor José Luis Aróstegui, explains that music programs face a global decline, lacking sufficient resources and support, as governments often fail to acknowledge how music can contribute to an individual or society.⁶⁰⁹

The Organisation of Economic Co-operation and Development, often abbreviated to OECD, advocates a knowledge-based economy to focus on the advancement of technology and science.⁶¹⁰ Established in 1947, the organisation involves thirty-five countries including New Zealand, comparing economic data to understand global trends⁶¹¹ and “improve the economic and social well-being of people around the world.”⁶¹² In 2000, the OECD developed international assessments, known as PISA (Programme for International Student Assessment). These assessments involve examinations in mathematics, reading and science throughout seventy-two countries, to ensure students have “acquired key knowledge and skills that are essential for full participation in modern societies”⁶¹³ The exclusion of art subjects such as music, suggests that knowledge in the arts is non-essential for modern society.

When asked of the exclusive subject range of PISA examinations, coordinator Andreas Schleicher explains:

We have a methodological handicap. We know how to measure mathematics, science and literacy, but we do not know how to do it with music. This is not an excuse, it is that, in PISA, we do not have tools to

⁶⁰⁹ Aróstegui, José Luis. "Exploring the Global Decline of Music Education." *Arts Education Policy Review* 117, no. 2 (2016): 96-103.

⁶¹⁰ OECD (2012), *Education at a Glance 2012: OECD Indicators*, OECD Publishing, 13.

⁶¹¹ Castree, Noel, Rob Kitchin, and Alisdair Rogers. "OECD." In *A Dictionary of Human Geography*. : Oxford University Press, 2013. <http://www.oxfordreference.com.ezproxy.waikato.ac.nz/view/10.1093/acref/9780199599868.001.0001/acref-9780199599868-e-1324>

⁶¹² (OECD), The Organisation for Economic Co-operation and Development. "Our Mission." <http://www.oecd.org.ezproxy.waikato.ac.nz/about/>

⁶¹³ OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris. 25. <http://dx.doi.org/10.1787/9789264266490-en>

value music. I repeat, this is not an excuse. I am in favour of PISA spreading the competences evaluated. Notwithstanding, we have carried out studies about competences which predict success in life and we have concluded that science, mathematics and reading understanding are key predictors of professional life.⁶¹⁴

This belief is apparent through governments promoting and subsidising STEM subjects, which are commonly thought to make the “strongest contributions to the economy”.⁶¹⁵ However, it can be argued that skills gained in music such as creativity, problem solving and innovation would further assist a knowledge-based economy.⁶¹⁶ An American National Commission on Music publication explains that “Music education provides critical introduction to reinforce academic and personal skills as critical thinking, problem solving, and learning how to work cooperatively toward shared goals.”⁶¹⁷

Due to an increasingly knowledge-based economy, it is often thought that tertiary education in humanities will disadvantage graduates, making it difficult to find employment. Research conducted at Oxford University, explored the benefits, skills and careers obtained from humanities graduates between 1960 and 1989. The study indicated that humanities imparted transferable skills such as creativity, critical thinking and communication. Consequently, 80% of graduates became a part of occupational sectors in education, media, law, finance and management and therefore expanding economic growth.⁶¹⁸

In 2000, a similar study was undertaken, investigating tertiary graduates after five years, to explore a relationship between course of study and innovative employment. Innovation was defined through technical, analytical, behavioural

⁶¹⁴ Aróstegui, José Luis. "Exploring the Global Decline of Music Education." *Arts Education Policy Review* 117, no. 2 (2016): 98.

⁶¹⁵ Kreager, Philip. "Humanities Graduates and the British Economy: The Hidden Impact." University of Oxford: Institute of Human Sciences, 2013. 30.

⁶¹⁶ Aróstegui, José Luis. "Exploring the Global Decline of Music Education." *Arts Education Policy Review* 117, no. 2 (2016): 96.

⁶¹⁷ Education, National Commission on Music. "Music Makes the Difference: Music, Brain Development and Learning." United States of America: The National Association for Music Education, 2000. 112.

⁶¹⁸ Kreager, Philip. "Humanities Graduates and the British Economy: The Hidden Impact." University of Oxford: Institute of Human Sciences, 2013. 3.

and social skills such as critical thinking, imagination, creativity, communication, persistence and so forth. Results indicated that “graduates in arts and in engineering have the same likelihood of participating in product innovation.”⁶¹⁹ Furthermore, governmental policies exclusively advocating STEM subjects are potentially damaging, as employment in innovation requires employees with diverse qualifications and skills.⁶²⁰

U.S Secretary of Education Arne Duncan, explains that:

Education in the arts is more important than ever. In the global economy, creativity is essential. Today’s workers need more than just skills and knowledge to be productive and innovative participants in the workforce. Just look at the inventors of the iPhone and the developers of Google: they are innovative as well as intelligent. Through their combination of knowledge and creativity, they have transformed the way we communicate, socialize, and do business. Creative experiences are part of the daily work life of engineers, business managers, and hundreds of other professionals. To succeed today and in the future, America’s children will need to be inventive, resourceful, and imaginative. The best way to foster that creativity is through arts education.⁶²¹ Educator Elliot Eisner similarly shares that:

The current emphasis in schools on verbal and mathematical reasoning seriously biases our conception of human intelligence and significantly impedes the development of socially valuable interests and aptitudes.⁶²²

⁶¹⁹ Francesco Avvisati, Gwenaël Jacotin, Stéphan Vincent-Lancrin. "Educating Higher Education Students for Innovative Economies: What International Data Tell Us." *Tuning Journal for Higher Education*, no. 1 (2013): 229.

⁶²⁰ Francesco Avvisati, Gwenaël Jacotin, Stéphan Vincent-Lancrin. "Educating Higher Education Students for Innovative Economies: What International Data Tell Us." *Tuning Journal for Higher Education*, no. 1 (2013): 223-240.

⁶²¹ Duncan, Arne. "Foreword." In *Reinvesting in Arts Education: Winning America's Future through Creative Schools*, edited by President's Committee on the Arts and the Humanities. Washington, 2011.

⁶²² Drummond, John. "Music and the Arts: A Special Kind of Knowledge." In *The Arts in Education: Critical Perspectives from Aotearoa New Zealand*. New Zealand: Dunmore Press Ltd, 2003. 57.

Despite an overwhelming amount of advocacy and scientific research on the benefits of arts education, an OECD publication suggests that: “There is far too little research on the impact of arts education on student outcomes of creativity, critical thinking, persistence, motivation and self-concept, and this prevents us from making strong conclusions about these outcomes”.⁶²³ This seems to contradict an earlier statement that the arts “are important in their own rights for education”⁶²⁴

It is interesting to note that economic and labour markets are constantly changing, therefore skills currently needed may be subject to change. *Educational Aims and Objectives* argues that:

(There is) no way which an education system can deliver the exact mix of skills and competencies of the right kind and in the necessary quantities to meet the needs of economic and labour market systems that are not only essentially unpredictable but which are almost certain to change out of all recognition in the course of a single individuals working life. To be able to do so would imply a capacity to predict economic conditions and technological change in a way quite beyond human reach.⁶²⁵

Perhaps an education system solely based on promoting employment skills is unattainable.

In 2012, an Australian study was conducted to assess the status of music education in primary schools throughout regional Victoria. The study explored the inaccessibility of a quality music education, due to an over-crowded curriculum, a focus on numeracy and literacy, budget restrictions and lack of qualified staff. A survey of regional primary schools indicated that numerous music programs had been abolished. 65% of principals who participated, stated that a music program was no longer viable due to budget restrictions, while 47% explained that it was

⁶²³ Ischinger, Barbara. "Foreword." In *Art for Art's Sake?: The Impact of Arts Education*. OECD Publishing: Educational Research and Innovation, 2013. 3.

⁶²⁴ Winner, E., T. Goldstein and S. Vincent-Lancrin. *Art for Art's Sake? Overview*, OECD Publishing, 2013. 20.

⁶²⁵"Educational Aims and Objectives." In *Educational Development Conference*. Wellington, 1974. 72.

due to a lack of qualified staff.⁶²⁶ This document also highlighted a decline of music electives available at regional universities and a reduction of time allocated to the arts during generalist primary teacher training.

Associate professor Deirdre Russell-Bowie, explains that Australian schools have been struggling to implement a quality arts curriculum over the past thirty years, due to a lack of: music specialists in schools, music resources and facilities, instrumental tuition in primary schools and adequate teacher training.⁶²⁷ Similarly, a state report found:

Generalist primary classroom teachers, because of their own poor arts experience at school, and because of inadequate teacher training, lack confidence to teach the arts. As a result, there is a strong impulse to marginalise the arts in their teaching.⁶²⁸

Researcher Anita Collins laments that:

Music education should be essential for every child. And if you look at our National Curriculum and many National Curriculums around the world it is a core part of it. And yet in a research study recently released here in Australia, 1.4 million children today do not have access to a music teacher in their school. Music education is not for the talented, it is not a luxury, it is not an add on, it is not a bonus, it's not a nice thing if we had some extra money - it is essential. We take deliberate steps to teach our children how to care for this planet, so that they may enjoy it in the future. We take deliberate steps to teach our children how to eat well, exercise, and look after themselves and make good choices, so they may live a full life. Why can't we take deliberate steps to raise the cognitive capacity through music education of the next generation, so they can build a better world for

⁶²⁶ Heinrich, Jennifer. "The Provision of Classroom Music Programs to Regional Victorian Primary Schools." *Australian Journal of Music Education* 2 (2012): 45-58.

⁶²⁷ Deirdre, Russell-Bowie. "What Me? Teach Music to My Primary Class? Challenges to Teaching Music in Primary Schools in Five Countries." *Music Education Research* 11, no. 1 (2009): 24-25.

⁶²⁸ Senate Environment, Recreation, Communications and the Arts Committee (SERCARC). "Arts Education." Canberra, Australia, 1995. 49.

themselves.⁶²⁹

Similarly, in the United States of America, music education is often perceived as “culturally irrelevant and unnecessary”,⁶³⁰ unable to provide skills of economic value.⁶³¹

Arts advocate Sandra Ruppert explains that:

Study of the arts is quietly disappearing from our schools. In schools across the country, opportunities for students to participate in high-quality arts instruction and activities are diminishing, the result of shifting priorities and budget cuts. Poor, inner-city and rural schools bear a disproportionate share of the losses. Studies show children from low-income families are less likely to be consistently involved in art activities or instruction than children from high-income families...Despite convincing research and strong public support, the arts remain on the margins of education, often the last to be added and the first to be dropped in times of strained budgets and shifting priorities.⁶³²

An OCED publication shares that:

The arts play a relatively minor role in most schools all over the world today. By and large, all school systems world-wide, both government-supported and independent, focus far more on training what are considered “academic” skills - primarily reading (and literature in the secondary years), writing, mathematics, science, history and geography (in the secondary years) - and far less on the arts. The opportunity to learn to understand and work in the visual arts, music, dance, and the theatre has been grossly neglected. The arts are usually taught minimally in the early

⁶²⁹ Collins, Anita. "What If Every Child Had Access to Music Education from Birth?" *TEDx Talks*, <https://www.youtube.com/watch?v=ueqgenARzIE>.

⁶³⁰ Kratus, John. "Music Education at the Tipping Point." *Music Educators Journal* 94, no. 2 (2007): 42.

⁶³¹ Kratus, John. "Music Education at the Tipping Point." *Music Educators Journal* 94, no. 2 (2007): 42-48.

⁶³² Ruppert, Sandra S. "Critical Evidence: How the Arts Benefit Student Achievement." National Assembly of State Arts Agencies, 2006. 1-17

grades (e.g. at best students may have music or art class once a week for one period); at older grades, the arts are usually electives and hence only some students gain experience in the arts; and sometimes the arts are relegated to after-school, extra-curricular activities, along with participation in athletic teams. Of course there are exceptions, but we state here the general rule.⁶³³

The United Kingdom is also facing a national decline, as funding for music education has stagnated, despite “creative industries...(generating) 85bn net a year to GDP”.⁶³⁴ A recent article highlights the inaccessibility of music education, being only available through private tuition, as the education sector focuses on academic subjects.⁶³⁵ In 2014, the National Children’s Orchestra of Great Britain discovered that nearly 70% of members in state schools received private tuition. Similarly, in 2012-2013 only 10% of music students at tertiary institutions were of minority ethnicities.⁶³⁶ Therefore:

The long-established central position and general values of the Humanities at the heart of British higher education are being displaced in current educational policy by an approach that sees knowledge as more appropriately generated and governed by markets for skills and technical information that respond to immediate economic needs.⁶³⁷

In 2009, a study was published indicating that Britain continues to face problems similar to New Zealand, as teachers often lack skill, knowledge and confidence to implement a meaningful music education, consequently, children are “denied

⁶³³ Winner, E., T. Goldstein and S. Vincent-Lancrin. *Art for Art’s Sake? Overview*, OECD Publishing, 2013. 27.

⁶³⁴ Gill, Charlotte C. "Music Education Is Now Only for the White and Wealthy." <https://www.theguardian.com/commentisfree/2017/mar/27/music-lessons-children-white-wealthy>

⁶³⁵ Gill, Charlotte C. "Music Education Is Now Only for the White and Wealthy." <https://www.theguardian.com/commentisfree/2017/mar/27/music-lessons-children-white-wealthy>

⁶³⁶ Gill, Charlotte C. "Music Education Is Now Only for the White and Wealthy." <https://www.theguardian.com/commentisfree/2017/mar/27/music-lessons-children-white-wealthy>

⁶³⁷ Kreager, Philip. "Humanities Graduates and the British Economy: The Hidden Impact." University of Oxford: Institute of Human Sciences, 2013. 7.

opportunities to sing and learn instruments.”⁶³⁸ Professor Susan Hallam explains that less than half of primary teachers received musical training during their teaching degree and that many are “unwilling to sing in front of a class of four-year-olds.”⁶³⁹

In 2016, a study was conducted to explore whether music education is accessible to children in plural British communities. The research was conducted through a series of interviews and surveys with educators, community groups, children, families and Music Hub leaders.⁶⁴⁰ The findings suggest that music education remains inaccessible to many due to financial constraints, lack of resources, cultural perspectives and allocated curricular time.⁶⁴¹ The cost of tuition, instruments and resources seemed to be the biggest barrier for children to access quality education and schools to offer it. Cultural perspectives of parents and policy makers, was additionally a large factor as many believed that music is unable to further career prospects. This perspective affected class time allocated to music and the likelihood of students pursuing a career in the arts.⁶⁴² These findings indicate the quality and quantity of music tuition differs greatly between schools and regions and that for many music education remains inaccessible.

These claims led professor Aróstegui to explore the global decline of music education. He suggests that a decline is apparent due to the following reasons:

1. A curriculum model that prioritizes the STEM subjects, inevitably to the detriment of the rest, music and arts at large in particular.
2. An excessive concentration on quantitative measurement as if it was the only way to determine school outcomes, when music education is difficult to be evaluated by these means due to their different nature.

⁶³⁸ Bloom, Adi. "Teacher Skills out of Tune with Music Curriculum." *The Times Educational Supplement* (London), February 06, 2009.

⁶³⁹ Bloom, Adi. "Teacher Skills out of Tune with Music Curriculum." *The Times Educational Supplement* (London), February 06, 2009.

⁶⁴⁰ Andrea Creech, Jo Saunders, Graham Welch. "Musical Pride: Music Education in Plural Communities." UCL Institute of Education, 2016. 16.

⁶⁴¹ Andrea Creech, Jo Saunders, Graham Welch. "Musical Pride: Music Education in Plural Communities." UCL Institute of Education, 2016. 7.

⁶⁴² Andrea Creech, Jo Saunders, Graham Welch. "Musical Pride: Music Education in Plural Communities." UCL Institute of Education, 2016. 9.

3. A lower number of resources available, time and money, for music education.
4. A wrong advocacy approach supported by music educators, too focused on traditional practices, thus ignoring both curriculum demands of the policy reforms implemented and students youth cultures.⁶⁴³

Aróstegui suggests that the wrong type of advocacy is often used to promote music education, as some claim that music can bring peace and calm the body, despite other activities being more effective, such as a warm bath.⁶⁴⁴ Similarly, music education is often justified in national curriculums by assisting other subjects. However, this is counter intuitive as tuition in mathematics will always be more beneficial than music tuition when it comes to achievement in arithmetic.⁶⁴⁵

Associate professor Russell-Bowie suggests that the two biggest problems of implementing a meaningful music education are a lack of knowledge from generalist teachers and a lack of focused curriculum. She suggests resolving these issues through changes in governmental policies to reflect a higher focus and priority on music, followed by each school allocating an appropriate amount of time, resources and facilities to music. Teacher training programmes need to provide appropriate initial teacher training and professional development for every child to participate in a quality music education.⁶⁴⁶

It is apparent that some feel that music education “distracts from those areas that are more relevant in the 'real world' and in terms of developing job skills, the funds required for hiring music teachers, purchasing equipment for their classrooms, and making other budgetary allowances for their programs takes

⁶⁴³ Aróstegui, José Luis. "Exploring the Global Decline of Music Education." *Arts Education Policy Review* 117, no. 2 (2016): 101.

⁶⁴⁴ Reimer, Bennett. *Seeking the Significance of Music Education: Essays and Reflections*. United States of America: The National Association for Music Education, Rowman & Littlefield Education, 2009. 9-10.

⁶⁴⁵ Reimer, Bennett. *Seeking the Significance of Music Education: Essays and Reflections*. United States of America: The National Association for Music Education, Rowman & Littlefield Education, 2009. 10.

⁶⁴⁶ Deirdre, Russell-Bowie. "What Me? Teach Music to My Primary Class? Challenges to Teaching Music in Primary Schools in Five Countries." *Music Education Research* 11, no. 1 (2009): 34.

money away from other areas where it could be more wisely spent.”⁶⁴⁷

English composer Andrew Lloyd Webber concludes that:

...if you empower children through the arts, every penny you spend on it comes back ten times over because it's not about making people into musicians, or about actually making them into actors or actresses. . .It's about getting people to feel that the arts empower. Particularly in this time, at the moment with what's going on in the world and what's going on politically, I don't think there's ever been a time where arts have been more important in schools.⁶⁴⁸

⁶⁴⁷ Slaton, Emily Dawn. "Music Education Budget Crisis." *Music Educators Journal* 99, no. 1 (2012): 34.

⁶⁴⁸ Webber, Andrew Lloyd. By Graham Norton. *The Graham Norton Show* (2016).

Chapter 4: Societal Attitudes towards Music

*...life of the arts, far from being an interruption, a distraction, in the life of a nation, is very close to the center of a nation's purpose-and is a test of the quality of a nation's civilization.*⁶⁴⁹

- John F. Kennedy

4.1 Governmental Support

In New Zealand, the government actively contributes to the education sector,⁶⁵⁰ establishing national priorities, funding and the curriculum.⁶⁵¹ Therefore, it is essential to assess the level of governmental support the arts receive.

Prime Minister Jacinda Ardern, discusses that the state of the arts and art funding in New Zealand is in jeopardy, as funding has stagnated on a governmental level. Organisations such as Creative New Zealand, who rely largely on the Lotteries Commission for funding, has faced an \$11 million deficit, due to a decrease in gambling. Previous Minister of Arts, Culture and Heritage Maggie Barry, suggests art audiences can remedy the situation by buying a lotto ticket. Act party leader David Seymour, rebuts that increasing art funding would mean lowering funding of other departments such as education, health care and tax relief. Seymour claims that “The arts, for all their value, are disproportionately patronised by the middle and upper class...The arts have always thrived on a private and voluntary basis. Business sponsorship contributes \$80 million. Crowd-sourcing makes all this more accessible. Yet still, the arts could perform better.”

⁶⁵² Ardern argues that well-being and community building are just as important as

⁶⁴⁹ John F. Kennedy: "Magazine Article "The Arts in America."," December 18, 1962. Online by Gerhard Peters and John T. Woolley, *The American Presidency Project*. <http://www.presidency.ucsb.edu/ws/?pid=9061>

⁶⁵⁰ Drummond, John. "Music and the Arts: A Special Kind of Knowledge." In *The Arts in Education: Critical Perspectives from Aotearoa New Zealand*. New Zealand: Dunmore Press Ltd, 2003. 53-54.

⁶⁵¹ OECD (2012), *Education at a Glance 2012: OECD Indicators*, OECD Publishing, 425.

⁶⁵² Jacinda V David: "The Arts Are More Than a Nice-to-Have'." *Sunday Star-Times*, 2016.

economic development.⁶⁵³

Organisations such as the New Zealand Opera and New Zealand Symphony Orchestra have faced financial hardship due to governmental support and the reliance on the Lotteries Commission. General director of New Zealand Opera, Stuart Maunder questions whether financial support for the arts should depend on the lottery commission explaining “How can companies such as NZO plan for sustainability in a funding environment that is by definition a gamble?”.⁶⁵⁴ The orchestra faced similar dilemmas, as funding has stagnated despite inflation and increasing living costs.⁶⁵⁵ Chief executive, Christopher Blake confirms that the stagnated funding has impacted the orchestra, however strategies are developing to maintain the core values of the ensemble.⁶⁵⁶ In 2016, the orchestra received an additional \$1.2 million, encouraging additional concerts and tours. Minister Maggie Barry states:

The Government recognises the importance of the arts, and this support shows our commitment to ensuring our leading cultural institutions can maintain their high level of quality and all New Zealanders have the chance to see them.⁶⁵⁷

This statement seems to contradict previous thoughts shared by the minister.

New Zealand politicians Winston Peters and Nick Smith have also shared their opinions of the arts, opposing the inclusion of Māori performing arts in national examinations. National MP Nick Smith, discussed that formal instruction of Māori performing arts is “part of a systematic watering down of academic

⁶⁵³ "Jacinda V David: 'The Arts Are More Than a Nice-to-Have'." *Sunday Star-Times*, 2016.

⁶⁵⁴ Christian, Dionne. "Falling Lotto Spend Cuts Deeply into Art Funding." *New Zealand Herald*, 2016.

⁶⁵⁵ "Statement of Intent: 2015 - 2018." New Zealand Symphony Orchestra, 2014. 6.

⁶⁵⁶ Cardy, Tom. "NZSO Says It Needs More Government Funding to Remain a World-Class Orchestra." <http://www.stuff.co.nz/entertainment/70916756/nzso-says-it-needs-more-government-funding-to-remain-a-worldclass-orchestra>

⁶⁵⁷ Hanify, Janina. "NZSO Receives \$1.2 Million Funding Increase in Budget" <https://www.nzso.co.nz/new-zealands-orchestra/news-and-media/nzso-receives-1-2-million-funding-increase-in-budget/>

excellence that we have in New Zealand.”⁶⁵⁸ The Minister additionally expressed that the arts should remain extra-curricular being taught outside of the classroom.⁶⁵⁹ These views reflect that while the arts are one of the seven curriculum areas, it is not regarded as equivalent to the other six.⁶⁶⁰

⁶⁵⁸ AAP. "Formal Studies of the Haka." <http://tvnz.co.nz/content/153775/2591764.xhtml>

⁶⁵⁹ AAP. "Formal Studies of the Haka." <http://tvnz.co.nz/content/153775/2591764.xhtml>

⁶⁶⁰ Drummond, John. "Music and the Arts: A Special Kind of Knowledge." In *The Arts in Education: Critical Perspectives from Aotearoa New Zealand*. New Zealand: Dunmore Press Ltd, 2003. 53.

4.2 Local Government

The decline of funding towards the arts is apparent in local governments throughout the country.⁶⁶¹ An example of this can be seen through the closure of Hamilton's Founders Theatre. The theatre, initially opened in 1962 by the mayor Denis Rogers was Hamilton's chief performing arts venue.⁶⁶² Fifty-four years later, it has significantly deteriorated and was closed in 2016 for health and safety reasons, despite warnings from Creative Waikato that urgent refurbishments were required.⁶⁶³ Chief executive Sarah Nathan believes that the council have ignored infrastructure of the arts, resulting in the theatre's sudden closure. She explains "You just have to look at the ladies' toilets...there is no hot water and all of the tiling in the original toilets is from the 1960's. You wouldn't find that in many other regionally significant cultural centres in New Zealand".⁶⁶⁴ A year later the theatre still remains out of action.

Another example can be seen in Nelson, where council expenditure focuses on sport and recreation facilities. Annually, the council spends \$6.2 million on sport and recreation and \$1.2 million on arts and culture. Councillor Pete Rainey explains "that there...(is) an unfair imbalance in council (spending) which...(has) been "accepted for decades"."⁶⁶⁵ It is interesting to note that public participation in art and culture is significantly greater than sports and recreation, as the Suter

⁶⁶¹ Kenny, Ailbhe. "Mapping the Context: Insights and Issues from Local Government Development of Music Communities." *British Journal of Music Education* 28, no. 2 (2011): 213-26.

⁶⁶² McRae, Andrew. "Hamilton Left without Major Performance Centre " Radio New Zealand, <http://www.radionz.co.nz/news/regional/300087/for-hamilton,-the-show-can't-go-on>

⁶⁶³ Leaman, Aaron. "City Hall Closes Hamilton's Founders Theatre." <http://www.stuff.co.nz/national/77421366/city-hall-closes-hamiltons-founders-theatre>

⁶⁶⁴ McRae, Andrew. "Hamilton Left without Major Performance Centre " Radio New Zealand, <http://www.radionz.co.nz/news/regional/300087/for-hamilton,-the-show-can't-go-on>

⁶⁶⁵ Neal, Tracy. "Sports, Recreation Spending Trumps Arts." Stuff, <http://www.stuff.co.nz/nelson-mail/news/7252819/Sports-recreation-spending-trumps-arts>.

gallery had around 80,000 participants in one year compared with 22,634 people who used “parks and courts for outdoor sport.”⁶⁶⁶

Cuts in funding to the Christchurch Art Gallery additionally show a decline of support to the arts. In 2015, Christchurch City Council proposed cutting gallery funds for purchasing new artwork from \$250,000 to \$80,000 per annum. These proposed cuts would make the gallery “one of the most poorly funded art collections in the country”.⁶⁶⁷ Art advocates express that these cuts will make the city feel like a “cultural wasteland”,⁶⁶⁸ resulting in fewer exhibitions and reducing the quality and quantity of the gallery’s art.

These examples provide evidence that art funding in local communities has stagnated, often being reduced or neglected. While these examples do not directly affect music education, they do reflect the value local government places on the arts.

⁶⁶⁶ Neal, Tracy. "Sports, Recreation Spending Trumps Arts." Stuff, <http://www.stuff.co.nz/nelson-mail/news/7252819/Sports-recreation-spending-trumps-arts>.

⁶⁶⁷ Gates, Charlie. "Savage Cuts to Christchurch Art Gallery Funding." The Press, <http://www.stuff.co.nz/the-press/christchurch-life/art-and-stage/67475532/Savage-cuts-to-Christchurch-Art-Gallery-funding>

⁶⁶⁸ Gates, Charlie. "Savage Cuts to Christchurch Art Gallery Funding." The Press, <http://www.stuff.co.nz/the-press/christchurch-life/art-and-stage/67475532/Savage-cuts-to-Christchurch-Art-Gallery-funding>

4.3 Public Attitudes

It is evident that the arts often lack governmental support and face numerous financial and cultural adversities. Despite this, public participation and appreciation has remained.

In 2015, a study was conducted by Creative New Zealand, investigating public attitudes towards the arts. After surveying New Zealand households, it was found that 82% of participants believe that the arts help improve New Zealand society through improving personal well-being, cultural identity, the economy and sense of community.⁶⁶⁹ Interestingly, 74% of participants agreed that the arts should receive public funding and 71% agreed that their local council should financially support the arts sector.⁶⁷⁰ Children aged between ten and fourteen participated, promoting a love of the arts bringing “joy, empowerment, a sense of accomplishment, and inspiration for the future.”⁶⁷¹ Overall, a majority of younger participants engaged in at least one art form in their free time, equating to the same proportion as those who engage in multimedia activities, such as watching television or movies (the most common pastime for this age group).⁶⁷² 67% of young New Zealanders are content with their current level of engagement, while one in four young New Zealanders would like to be more involved.⁶⁷³ The research suggests that the greatest barrier to arts involvement in young New Zealanders is lack of time followed by financial constraints.

The document also indicates that over twelve months, 65% of New Zealanders have attended or participated in performing arts.⁶⁷⁴ Interestingly, households with

⁶⁶⁹ Creative New Zealand. "New Zealanders and the Arts: Attitudes, Attendance and Participation in 2014." 2015. 7.

⁶⁷⁰ Creative New Zealand. "New Zealanders and the Arts: Attitudes, Attendance and Participation in 2014." 2015. 7.

⁶⁷¹ Creative New Zealand. "New Zealanders and the Arts: Attitudes, Attendance and Participation in 2014." 2015. 11.

⁶⁷² Creative New Zealand. "New Zealanders and the Arts: Attitudes, Attendance and Participation in 2014." 2015. 11.

⁶⁷³ Creative New Zealand. "New Zealanders and the Arts: Attitudes, Attendance and Participation in 2014." 2015. 12.

⁶⁷⁴ Creative New Zealand. "New Zealanders and the Arts: Attitudes, Attendance and Participation in 2014." 2015. 33.

higher incomes were more likely to attend.⁶⁷⁵

In 2003, research was conducted by Statistics New Zealand and the Ministry for Culture and Heritage, to explore cultural involvement and barriers to attendance. The study indicated that 93% of New Zealanders over the age of fifteen, had participated in at least one cultural activity over the last twelve months. The study estimated that 37% of the adult population attended a live musical performance, equating to 1,021,000 adults. Interestingly, participants with tertiary qualifications were more likely to attend these events. When asked of barriers to participation, time and finances seem to be the biggest obstacle. New Zealanders expenditure on cultural events “exceeded spending on overseas travel, apparel, and domestic fuel and power.”⁶⁷⁶

These findings suggest that the arts are valued and appreciated, being essential to everyday life. While participation rates are high, it is evident that many struggle to attend due to time and financial constraints. It is interesting that tertiary graduates were more likely to attend; perhaps this is due to theoretically earning a higher income, or perhaps as the Greek’s believed, their education has allowed them to fully participate in the country’s culture and society.

⁶⁷⁵ Creative New Zealand. "New Zealanders and the Arts: Attitudes, Attendance and Participation in 2014." 2015. 49.

⁶⁷⁶ Statistics New Zealand, Ministry for Culture and Heritage. "A Measure of Culture: Cultural Experiences and Cultural Spending in New Zealand." New Zealand, 2003. 7-8.

Chapter 5: Conclusion

“...education is the first and fairest thing that the best of men can ever have.”⁶⁷⁷

- Plato

This thesis has explored the contributions of music in ancient and contemporary societies. Historical evidence demonstrates that the ancient cultures of Greece, China, India and New Zealand, believed music to be indispensable, holding immense power, capable of altering one's character and society. Music therefore was key to the culture, religion, health and the education of each society.

In New Zealand, music is perceived to be an essential part of society. In 2014, 82% of New Zealanders indicated that the arts improve society, the economy, personal well-being, community and cultural identity. Consequently, music is a significant feature of the education system, being classed as one of the seven learning areas. A literature review of scientific studies, has revealed a multitude of benefits associated with a quality music education, such as enhanced cognitive function, auditory development and spatial abilities. Several studies have also indicated that after exposure to music education, students showed elevated confidence, self-esteem, self-discipline, sense of community, empathy, memory retention and academic performance. These studies suggest that a quality music education can significantly benefit one's well-being.

Despite the magnitude of research conducted, music education in New Zealand has stagnated, being often perceived as a superficial activity. The decline is evident through lack of resources, funding and support, in addition to current training teachers receive in music, which may in many cases be inadequate. Therefore, it seems unlikely that every child will receive a quality music education despite the objectives of the Ministry of Education and the National Curriculum.

⁶⁷⁷ Plato. *Laws*. Translated by Benjamin Jowett. Cosimo Classics, 2008. 27.

Evidence suggests that an educational decline in Arts education is due to a shift in cultural and governmental philosophies. It would seem that educational imperatives in New Zealand are ideologically driven and are now more commonly referred to as neo-liberalism. The introduction of neo-liberal policies has resulted in value being determined by economic gains, as shown through the promotion of STEM subjects. These subjects have been promoted through the assumption of providing improved financial stability and employment opportunities, despite research indicating that arts graduates have more transferable skills and the same likelihood in gaining an innovative job.

Governmental funding has also impacted on the quality of music education in the curriculum, as unfortunately, many members of parliament believe that arts funding should rely on public generosity rather than governmental funding. It is interesting to note that this attitude seems specific to arts subjects. These decisions seem politically motivated and are the result of changing from the Department of Education to the Ministry of Education, where crucial decisions for the education sector are made by politicians rather than professional educators.

Another contributing factor, is the minimal time allotted to trainee teachers for music education, as often trainee teachers only receive six to eight hours of music instruction. This has resulted in teachers lacking confidence and competence, struggling to implement quality music instruction in the classroom. Consequently, music tuition during school is often omitted or condensed to group singing, with little instruction or purpose. While quality tuition is occasionally being met, this generally occurs in private or high decile schools, dependant on finance and geographical location. It appears that no other subject in the curriculum is dependent on these variables.

The Ministry of Education aims for every child to have the “opportunity to be the best they can be”, and the National Curriculum clearly states that “All New Zealanders have a right to an education in the arts as part of their schooling.”⁶⁷⁸ However, it is evident that a meaningful music education in New Zealand is not

⁶⁷⁸ "The Arts in the New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2000. 10.

being delivered. It has become a gamble whether every child in New Zealand will receive a quality education and until music and the arts are given the value they deserve in the curriculum, these aims cannot be achieved.

Bibliography

AAP. "Formal Studies of the Haka." <http://tvnz.co.nz/content/153775/2591764.xhtml>

"Abbie, Andrew Arthur (1905-1976)". 2009. In *Biographical Dictionary of Anthropologists*, William Stewart. Jefferson: McFarland. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/mcfanthro/abbie_andrew_arthur_1905_1976/0

Abbs, Peter. *Against the Flow*. England: Routledge, 2003.

Agnes S. Chan, Yim-Chi Ho, Mei-Chun Cheung. "Music Training Improves Verbal Memory." *Nature* 396, no. 6707 (1998): 128-28.

Ahmet Muhip Sanal, Selahattin Gorsev. "Psychological and Physiological Effects of Singing in a Choir". *Psychology of Music* 42 (2014): 420-29.

Alcorn, Noeline. "Teacher Education in New Zealand 1974–2014." *Journal of Education for Teaching* 40, no. 5 (2014): 447-60.

Alexandrakis, Aphrodite. "The Role of Music and Dance in Ancient Greek and Chinese Rituals: Form Versus Content." *Journal of Chinese Philosophy* 33, no. 2 (2006): 267-78.

Alexandra Parbery-Clark, Samira Anderson, Emily Hittner, Nina Kraus. "Musical Experience Offsets Age-Related Delays in Neural Timing ". *Neurobiology of Aging* 33, no. 7 (2012): 1483.e1-83.e4.

Andersen, Johannes C. *Maori Music with Its Polynesian Background* New Plymouth: Thomas Avery & Sons, Limited, 1934.

Andrea Creech, Jo Saunders, Graham Welch. "Musical Pride: Music Education in Plural Communities." UCL Institute of Education, 2016.

Anne J. Blood, and Robert J. Zatorre. "Intensely Pleasurable Responses to Music Correlate with Activity in Brain Regions Implicated in Reward and Emotion." *Proceedings of the National Academy of Sciences of the United State of America* 98, no. 20 (2001): 11818.

Anvari, Sima H., Laurel J. Trainor, Jennifer Woodside, and Betty Ann Levy. "Relations among musical skills, phonological processing, and early reading ability in preschool children." *Journal of Experimental Child Psychology* 83, no. 2 (2002): 112.

Armstrong, Dave. "Don't Stop the Music at School." *The Dominion Post*, 2016. <http://www.stuff.co.nz/dominion-post/comment/columnists/77566046/dave-armstrong-dont-stop-the-music-at-school>

Aróstegui, José Luis. "Exploring the Global Decline of Music Education." *Arts Education Policy Review* 117, no.2 (2016): 96-103.

Austin, Margaret. "Music Education: Crises and Challenge." In *Music is a Family Affair*, edited by Paul Wheeler John Drummond, 13-24. Dunedin: New Zealand Society for Music Education (INC) 1991.

Bandur, Markus. *Aesthetics of Total Serialism*. Switzerland: Birkhäuser, 2001.

Bake, Arnold. "The Music of India." In *Ancient and Oriental Music* edited by Egon Wellesz. London: Oxford University Press, 1966.

Barrow, Terence. *Music of the Maori: Traditional and Modern Music of the Maori*. Wellington, New Zealand: Seven Seas Publishing Pty Ltd, 1965.

Barry Millington, et al. "Wagner." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed October 13, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/29769pg1>

Bauerlein, Mark. "Advocating for Arts in the Classroom." *Education Next* 10, no. 4 (2010): 42-48.

Beck, Robert. "Choral Singing, Performance Perception, and Immune System Changes in Salivary Immunoglobulin A and Cortisol." *Music Perception: An Interdisciplinary Journal* 18, no. 1 (2000): 87-106

Begley, Sharon. "The Brain: How the Brain Rewires Itself." *Time*, 2007.

Benade, Leon. "Shaping the Responsible, Successful and Contributing Citizen of the Future: 'Values' in the New Zealand Curriculum and Its Challenge to the Development of Ethical Teacher Professionalism." *Policy Futures in Education* 9, no. 2 (2011): 152.

Biddle, Donna-Lee. "Waikato University Looks to Cut 17 Jobs in the Humanities." <http://www.stuff.co.nz/national/education/90756783/waikato-university-looks-to-cut-17-jobs-in-the-humanities>

Bidwell, Susan. "The Arts in Health" In *Pegasus Health*. Creative New Zealand, 2014.

Bilby, Lynley. "Students Told: Stick with Arts." *New Zealand Herald*, http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10865845

Bilhartz, Terry D., Rick A. Bruhn, and Judith E. Olson. "The Effect of Early Music Training on Child Cognitive Development." *Journal of Applied Developmental Psychology* 20, no. 4 (1999): 615-36.

Blandford, Sonia, and Stephanie Duarte. "Inclusion in the Community: A Study of Community Music Centres in England and Portugal, Focusing on the Development of Musical and Social Skills within Each Centre." *Westminster Studies in Education* 27, no. 1 (2004): 7-25.

"Boethius, Anicius Manlius Torquatus Severinus." *The Oxford Dictionary of Music*, 2nd ed. rev.. *Oxford Music Online*. Oxford University Press, accessed August 29, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t237/e1325>

Bloom, Adi. "Teacher Skills out of Tune with Music Curriculum." *The Times Educational Supplement* (London), February 06, 2009.

Boisvert, Raymond D. *John Dewey: Rethinking Our Time*. United States of America: State University of New York Press, 1998.

Braatvedt, Susan P. "A History of Music Education in New Zealand State Primary and Intermediate Schools 1878-1989." University of Canterbury 2002.

Bradley, Robert H. and Robert F. Corwyn. 2002. "Socioeconomic Status and Child Development." *Annual Review of Psychology* 53: 371-99. <http://ezproxy.waikato.ac.nz/login?url=http://search.proquest.com/docview/205754355?accountid=17287>.

Brearley, Margaret. "Hitler and Wagner: The Leader, the Master and the Jews." *Patterns of Prejudice* 22, no. 2 (1988): 3-22.

Britannica Academic, s.v. "Adolf Hitler," accessed October 18, 2016, <http://academic.eb.com.ezproxy.waikato.ac.nz/levels/collegiate/article/106283>

Britannica Academic, s.v. "Oliver Sacks," accessed November 3, 2016, <http://academic.eb.com.ezproxy.waikato.ac.nz/levels/collegiate/article/473231>.

Britannica Academic, s. v. "Pythagoras," accessed May 16, 2016, <http://academic.eb.com.ezproxy.waikato.ac.nz/EBchecked/topic/485171/Pythagoras>.

Britannica Academic, s. v. "Socrates," accessed May 16, 2016, <http://academic.eb.com.ezproxy.waikato.ac.nz/EBchecked/topic/551948/Socrates>.

Britannica Academic, s.v. "The Sex Pistols," accessed October 24, 2016, <http://academic.eb.com.ezproxy.waikato.ac.nz/levels/collegiate/article/105678>

Broh, Beckett A. "Linking Extracurricular Programming to Academic Achievement: Who Benefits and Why?". *Sociology of Education* 75, no. 1 (2002): 69-95.

Browne, Jade. "Perception of Music Education in New Zealand Society." 2016.

Buckton, Roger. "Children's Attitudes to Music." University of Canterbury Research Consultancy, 1998.

Buckton, Roger. "Music Education in New Zealand Crisis and Challenge." In *Music is a Family Affair*, edited by John Drummond Paul Wheeler, Dunedin: New Zealand Society for Music Education (INC), 1991.

Burns, Gary. "Marilyn Manson and the Apt Pupils of Littleton." *Popular Music and Society* 23, no. 3 (1999): 3-8.

Butzlaff, Ron. "Can Music Be Used to Teach Reading?". *Journal of Aesthetic Education* 34, no. 3/4 (2000): 167-78.

Camilleri, Vanessa. "Community Building through Drumming." *The Arts in Psychotherapy* 29, no. 5 (2002): 262.

Cann, Ged. "Shake-up Coming to the University." http://www.nzherald.co.nz/hamilton-news/news/article.cfm?c_id=1503366&objectid=11730319.

Cannon, John, and Robert Crowcroft. "Darwin, Charles." In *A Dictionary of British History*. : Oxford University Press, <http://www.oxfordreference.com.ezproxy.waikato.ac.nz/view/10.1093/acref/9780191758027.001.0001/acref-9780191758027-e-1017>

Cardy, Tom. "Nzso Says It Needs More Government Funding to Remain a World-Class Orchestra." <http://www.stuff.co.nz/entertainment/70916756/nzso-says-it-needs-more-government-funding-to-remain-a-worldclass-orchestra>

Carlos Dos Santos, Luiz. "The Learning of Music as a Means to Improve Mathematical Skills." Unpublished, 2015.

Castree, Noel, Rob Kitchin, and Alisdair Rogers. "OECD." In *A Dictionary of Human Geography*. : Oxford University Press, 2013. <http://www.oxfordreference.com.ezproxy.waikato.ac.nz/view/10.1093/acref/9780199599868.001.0001/acref-9780199599868-e-1324>

Chalmers, Kenneth. "raga." *The Oxford Companion to Music. Oxford Music Online*. Oxford University Press, accessed June 29, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t114/e5473>

Childs, David J. "Manson, Marilyn (1969–)." In *Culture Wars in America: An Encyclopedia of Issues, Viewpoints, and Voices*, edited by Roger Chapman, and James Ciment. 2nd ed. Routledge, 2013. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/sharpecw/manson_marilyn_1969/0?institutionId=781

Chong, Hyun Ju. "Do We All Enjoy Singing? A Content Analysis of Non-vocalists' Attitudes toward Singing." *The Arts in Psychotherapy* 37, no. 2 (2010): 120-24.

Chris Holland, Dr Peter O'Connor. "'Like Writing Off the Paper': Report on Student Learning in the Arts." Ministry of Education, 2004.

Christian, Dionne. "Falling Lotto Spend Cuts Deeply into Art Funding." *New Zealand Herald*, 2016.

Clayton, Martin. *Time in Indian Music*. New York: Oxford University Press, 2000.

Clive McGee, Ann Harlow, Thelma Miller, Bronwen Cowie, Mary Hill, Alister Jones, Arianna Donaghy. "Teachers' Experiences in Curriculum Implementation: General Curriculum, the Arts, and Health and Physical Education." In *Curriculum Stocktake: National School Sampling Study*. University of Waikato, 2003.

Cochrane, Lalage. "equal temperament." *The Oxford Companion to Music. Oxford Music Online*. Oxford University Press, accessed May 29, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t114/e2297>

Collins, Anita. "Bigger, Better Brains." University of Melbourne, 2012.

Collins, Anita. "How Playing an Instrument Benefits Your Brain." TED-Ed, 2014.

Collins, Anita. "What If Every Child Had Access to Music Education from Birth?" *TEDx Talks*, <https://www.youtube.com/watch?v=ueqgenARzIE>

Colman, Andrew M. "Mozart effect." In *A Dictionary of Psychology*. : Oxford University Press, 2015. <http://www.oxfordreference.com.ezproxy.waikato.ac.nz/view/10.1093/acref/9780199657681.001.0001/acref-9780199657681-e-5262>

Committee to Review the Curriculum for Schools. *The Curriculum Review: Report of the Committee to Review the Curriculum for Schools*. Edited by Peter Brice. Wellington, New Zealand: Department of Education, 1987.

Confucius, Y. Lin, Q. Sima, and H. Gu. *The Wisdom of Confucius*. The Modern library, 1938.

Cong, Alexandra. "From Mozart to Myths: Dispelling the "Mozart Effect"." *Young Scientists Journal*, no. 15 (2014): 49-53.

Costa-Giomi, Eugenia. "The Long-Term Effects of Childhood Music Instruction on Intelligence and General Cognitive Abilities." *Update: Applications of Research in Music Education* 33, no. 2 (2015): 20-26.

Creative New Zealand. "New Zealanders and the Arts: Attitudes, Attendance and Participation in 2014." 2015.

Cross, I. A. N. "Music, Cognition, Culture, and Evolution." *Annals of the New York Academy of Sciences* 930, no. 1 (2001): 35.

Dallek, Robert. *An Unfinished Life : John F. Kennedy, 1917-1963*. 1st ed. Boston: Little, Brown, and, 2003.

Dana L. Strait, Samantha O'Connell, Alexandra Parbery-Clark, Nina Kraus. "Musicians' Enhanced Neural Differentiation of Speech Sounds Arises Early in Life: Developmental Evidence from Ages 3 to 30." *Cerebral Cortex* (2013): 2512-2521.

Darby E. Southgate, and Vincent J. Roscigno. "The Impact of Music on Childhood and Adolescent Achievement." *Social Science Quarterly (Wiley-Blackwell)* 90, no. 1 (2009): 4-21.

David Fanning and Laurel Fay. "Shostakovich, Dmitry." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed September 8, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/52560>

David J. Elliot, Marissa Silverman. *Music Matters: A New Philosophy of Music Education*. Second Edition ed. United States of America: Oxford University Press, 2015.

Degenerate Music - 'Yom Hashoah' Concert and Commemoration. (2016, Apr). *Musical Opinion*, 139, 6. Retrieved from <http://ezproxy.waikato.ac.nz/login?url=http://search.proquest.com/docview/1782261743?accountid=17287>

Deirdre, Russell-Bowie. "What Me? Teach Music to My Primary Class? Challenges to Teaching Music in Primary Schools in Five Countries." *Music Education Research* 11, no. 1 (2009): 24-25.

Department of Employment, Education and Training *New Zealand: A Comparative Study*. Canberra: Australian Government Publishing Service, 1991.

Deva, B. C. *Indian Music*. India: Indian Council for Cultural Relations, 1980.

Development, Organisation for Economic Co-operation and *Reviews of National Policies for Education* Paris: Organisation for Economic Co-operation and Development, 1983.

Donald Jay Grout, Claude V. Palisca. *A History of Western Music*. Fifth Edition ed. New York W. W. Norton & Company, Inc., 1996.

"Don't Forget the Arts." *Education Review*, 2014.

Douglas, Jonathan Boston and Sir Roger. "Entrenching 'Rogernomics' in New Zealand: Political and Academic Perspectives." In *Delivering Policy Reform: Anchoring Significant Reforms in Turbulent Times*, edited by Sam Vincent Evert A. Lindquist, John Wanna. Australia: The Australian National University, 2011.

Downey, Douglas B. "When Bigger Is Not Better: Family Size, Parental Resources, and Children's Educational Performance." *American Sociological Review* 60, no. 5 (1995): 746-61.

Drummond, John. "Music and the Arts: A Special Kind of Knowledge." In *The Arts in Education: Critical Perspectives from Aotearoa New Zealand*. New Zealand: Dunmore Press Ltd, 2003.

Duncan, Arne. "Foreword." In *Reinvesting in Arts Education: Winning America's Future through Creative Schools*, edited by President's Committee on the Arts and the Humanities. Washington, 2011.

Dunn, Waldo Hilary., and Richardson, I. L. M. *Sir Robert Stout : A Biography*. Wellington: Reed, 1961.

"Economic Contribution of the New Zealand Music Industry, 2012 and 2013." In *A report for the New Zealand music industry*. PWC, 2014.

"Educational Aims and Objectives." In *Educational Development Conference*. Wellington, 1974.

Education, National Commission on Music. "Music Makes the Difference: Music, Brain Development and Learning." United States of America: The National Association for Music Education, 2000.

Eerola, Päivi-Sisko, and Tuomas Eerola. "Extended Music Education Enhances the Quality of School Life." *Music Education Research* 16, no. 1 (2014): 88-104.

Elbert, Thomas, Christo Pantev, Christian Wienbruch, Brigitte Rockstroh, and Edward Taub. "Increased Cortical Representation of the Fingers of the Left Hand in String Players." *Science* 270, no. 5234 (1995): 305-07.
<http://www.jstor.org.ezproxy.waikato.ac.nz/stable/2888544>

Equality of Opportunity through Education: International Seminar. Wellington: New Zealand Educational Institute, 1970.

Erik Levi. "Entartete Musik." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed September 18, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/45065>

Fancourt, Daisy, Rosie Perkins, Sara Ascenso, Livia A. Carvalho, Andrew Steptoe, and Aaron Williamon. "Effects of Group Drumming Interventions on Anxiety, Depression, Social Resilience and Inflammatory Immune Response among Mental Health Service Users." *PLoS ONE* 11, no. 3 (2016): 1-16.

Flintoff, Brian. *Taonga Pūoro: Singing Treasures: The Musical Instruments of the Māori.* Nelson, New Zealand: Craig Potton Publishing, 2011.

Francesco Avvisati, Gwenaël Jacotin, Stéphan Vincent-Lancrin. "Educating Higher Education Students for Innovative Economies: What International Data Tell Us." *Tuning Journal for Higher Education*, no. 1 (2013): 229.

Franklin, John. 2011. "Music in Ancient Greece". In *World History Encyclopaedia*, Alfred J. Andrea. Santa Barbara: ABC-CLIO. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/abccliow/music_in_ancient_greece/0

Fritz, Thomas, Sebastian Jentschke, Nathalie Gosselin, Daniela Sammler, Isabelle Peretz, Robert Turner, Angela D. Friederici, and Stefan Koelsch. "Universal Recognition of Three Basic Emotions in Music." *Current Biology* 19, no. 7 (2009): 573-76.

Froese, Katrin. "The Comic Character of Confucius." *Asian Philosophy* 24, no. 4 (2014): 1-18.

Fubini, Enrico. *History of Music Aesthetics*. Translated by Michael Hatwell. United Kingdom: The Macmillian Press Limited, 1991.

Fujioka, Takako, Bernhard Ross, Ryusuke Kakigi, Christo Pantey, and Laurel J. Trainor. "One Year of Musical Training Affects Development of Auditory Cortical-Evoked Fields in Young Children." *Brain* 129, no. 10 (2006): 2593.

Gardiner, Martin F., Alan Fox, Faith Knowles, and Donna Jeffrey. "Learning Improved by Arts Training." *Nature* 381, no. 6580 (1996): 284-84.

Gates, Charlie. "Savage Cuts to Christchurch Art Gallery Funding." The Press, <http://www.stuff.co.nz/the-press/christchurch-life/art-and-stage/67475532/Savage-cuts-to-Christchurch-Art-Gallery-funding>.

Gerritsen, John. "NZ School Kids 'Need More Support' with Music and Drama." <http://www.radionz.co.nz/news/national/328141/nz-school-kids-'need-more-support'-with-music-and-drama>

Gill, Charlotte C. "Music Education Is Now Only for the White and Wealthy." <https://www.theguardian.com/commentisfree/2017/mar/27/music-lessons-children-white-wealthy>

Goldberger, Leo, and Shelomo, Breznitz. *Handbook of Stress: Theoretical and Clinical Aspects*. New York: London: Free Press; Collier Macmillan, 1982.

Grandin, Temple, Matthew Peterson, and Gordon L. Shaw. "Spatial-Temporal Versus Language-Analytic Reasoning: The Role of Music Training." *Arts Education Policy Review* 99, no. 6 (1998): 11-14.

Grape, Christina, Maria Sandgren, Lars-Olof Hansson, Mats Ericson, and Töres Theorell. "Does Singing Promote Well-Being?: An Empirical Study of Professional and Amateur Singers During a Singing Lesson." *Integrative Physiological & Behavioral Science* 38, no. 1 (2002): 65-74.

Griffiths, Paul. "modernism." *The Oxford Companion to Music*. *Oxford Music Online*. Oxford University Press, accessed October 13, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t114/e4473>

Gromko, Joyce Eastlund. "The effect of music instruction on phonemic awareness in beginning readers." *Journal of Research in Music Education* 53 (2005): 199-209.

Hallam, Susan. "The Power of Music: Its Impact on the Intellectual, Social and Personal Development of Children and Young People." *International Journal of Music Education* 28, no. 3 (2010): 269-89.

Hanify, Janina. "NZSO Receives \$1.2 Million Funding Increase in Budget" <https://www.nzso.co.nz/new-zealands-orchestra/news-and-media/nzso-receives-1-2-million-funding-increase-in-budget/>.

Heinrich, Jennifer. "The Provision of Classroom Music Programs to Regional Victorian Primary Schools." *Australian Journal of Music Education* 2 (2012): 45-58.

Hetland, Lois. "Learning to Make Music Enhances Spatial Reasoning." *Journal of Aesthetic Education* 34, no. 3/4 (2000): 179-238.

Heyning, Lyndell. "The Enhancement of Musical and Other Learning for Both Teachers and Students through a Weekly Choir Session." *Australian Journal of Music Education* 1 (2010): 58-70.

Hickok, Robert. *Exploring Music*. Fifth Edition ed. University of California-Irvine Wm. C. Brown Communications, Inc., 1989.

"Higher Education: Students at the Heart of the System." UK: Department for Business, Innovation and Skills, 2011.

Holroyde, Peggy. *Indian Music*. London: George Allen and Unwin Ltd, 1972.

Hyde, Krista L., Jason Lerch, Andrea Norton, Marie Forgeard, Ellen Winner, Alan C. Evans, and Gottfried Schlaug. "The Effects of Musical Training on Structural Brain Development." *Annals of the New York Academy of Sciences* 1169, no. 1 (2009): 182-86.

Ian Cumming, Alan Cumming. *History of State Education in New Zealand 1840-1975*. Wellington: Pitman Publishing New Zealand Ltd, 1978.

Ischinger, Barbara. "Foreword." In *Art for Art's Sake?: The Impact of Arts Education*. OECD Publishing: Educational Research and Innovation, 2013.

Israeli orchestra to play music of Wagner, Hitler's favorite. Electronic World Communications, Inc. 2010.

"Jacinda V David: 'The Arts Are More Than a Nice-to-Have'." *Sunday Star-Times*, 2016.

Jacobs, Robert L. "Wagner's Influence on Hitler." *Music & Letters* 22, no. 1 (1941): 81-83.

James S. Catterall, Richard Chapleau, John Iwanaga. "Involvement in the Arts and Human Development: General Involvement and Intensive Involvement in Music and Theatre Arts." *Champions of Change* (1999): 1-18.

Jakobson, Lorna S., Samantha T. Lewycky, Andrea R. Kilgour, and Brenda M. Stoesz. "Memory for Verbal and Visual Material in Highly Trained Musicians." *Music Perception: An Interdisciplinary Journal* 26, no. 1 (2008): 41-55.

J. A. Van Aalst. *Chinese Music*. Imperial Maritime Customs. Vol. 6, Shanghai: Statistical Department of the Inspectorate General of Customs, 1884.

Joyce, Steven. "199m Boost for Tertiary Education and Research", edited by Ministry of Education. 2014. <http://www.beehive.govt.nz>, 2014.

John F. Kennedy: "Magazine Article "The Arts in America.,"" December 18, 1962. Online by Gerhard Peters and John T. Woolley, *The American Presidency Project*. <http://www.presidency.ucsb.edu/ws/?pid=9061>

Johnson, Christopher M., and E. Memmott Jenny. "Examination of Relationships between Participation in School Music Programs of Differing Quality and Standardized Test Results." *Journal of Research in Music Education* 54, no. 4 (2006): 293-307.

Jourdain, Robert. *Music, the Brain and Ecstasy*. USA: Parper Perennial, 1997.

Keeler, Jason, Edward Roth, Brittany Neuser, John Spitsbergen, Daniel Waters, and John-Mary Vianney. "The Neurochemistry and Social Flow of Singing: Bonding and Oxytocin." *Frontiers in Human Neuroscience* 9, no. 518 (2015): 1-10.

Kenny, Ailbhe. "Mapping the Context: Insights and Issues from Local Government Development of Music Communities." *British Journal of Music Education* 28, no. 2 (2011): 213-26.

Kim, Chungwon. "Nurturing Students Through Group Lessons." *The American Music Teacher* 54, no. 1 (2004): 28-31.

Kirschner, Sebastian, and Michael Tomasello. "Joint Music Making Promotes Prosocial Behavior in 4-Year-Old Children." *Evolution and Human Behavior* 31, no. 5 (2010): 354-64.

Ki, Yo. "Memorial of Music ".

Knight, Wendy E. J., and Nikki S. Rickard. "Relaxing Music Prevents Stress-Induced Increases in Subjective Anxiety, Systolic Blood Pressure, and Heart Rate in Healthy Males and Females." *Journal of Music Therapy* 38, no. 4 (2001): 254-72.

Kokotsaki, Dimitra, and Susan Hallam. "The Perceived Benefits of Participative Music Making for Non-Music University Students: A Comparison with Music Students." *Music Education Research* 13, no. 2 (2011): 149-72.

Konrad Boehmer. "Weber, Max." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed May 29, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/29991>

Kratus, John. "Music Education at the Tipping Point." *Music Educators Journal* 94, no. 2 (2007): 42.

Kraus, Nina, Jane Hornickel, Dana L. Strait, Jessica Slater, and Elaine Thompson. "Engagement in Community Music Classes Sparks Neuroplasticity and Language Development in Children from Disadvantaged Backgrounds." *Frontiers in Psychology* 5, no. 1403 (2014): 1-9.

Kraus, Nina, Jessica Slater, Elaine C. Thompson, Jane Hornickel, Dana L. Strait, Trent Nicol, and Travis White-Schwoch. "Auditory Learning through Active Engagement with Sound: Biological Impact of Community Music Lessons in at-Risk Children." *Frontiers in Neuroscience* 8, no. 351 (2014): 1-12.

Kraus, Nina, Jessica Slater, Elaine C. Thompson, Jane Hornickel, Trent Nicol, Travis White-Schwoch. "Music Enrichment Programs Improve the Neural Encoding of Speech in at-Risk Children." *The Journal of Neuroscience* (2014): 11913-18.

Kraus, Nina, Jessica Slater. "Music and Language: Relations and Disconnections." *Handbook of Clinical Neurology* no. 127. The Human Auditory System (2015): 207-222.

Kreager, Philip. "Humanities Graduates and the British Economy: The Hidden Impact." University of Oxford: Institute of Human Sciences, 2013.

Kreutz, Gunter, Stephan Bongard, Sonja Rohrmann, Volker Hodapp, and Dorothee Grebe. "Effects of Choir Singing or Listening on Secretory Immunoglobulin a, Cortisol, and Emotional State." *Journal of Behavioral Medicine* 27, no. 6 (2004): 623-35.

Kurkela, Vesa, and Juha Markus Mantere. *Critical Music Historiography : Probing Canons, Ideologies and Institutions*. 2015.

Landels, John G. *Music in Ancient Greece and Rome*. Hoboken: Taylor and Francis, 2002.

Larkin, Ralph W. *Comprehending Columbine*. Philadelphia: Temple University Press, 2007.

Leaman, Aaron. "City Hall Closes Hamilton's Founders Theatre." <http://www.stuff.co.nz/national/77421366/city-hall-closes-hamiltons-founders-theatre>

Legg, Robert. "Using Music to Accelerate Language Learning: An Experimental Study." *Research in Education* 82, no. 1 (2009): 1-12.

Leon Botstein. "Modernism." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed October 13, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/40625>

Levitin, Daniel. *This Is Your Brain on Music*. London: Atlantic Books, 2006.

Lewis, Geoff. "Staff Cuts Reflect University's Challenges." *New Zealand Herald*, 2017.

Lodge, Martin. "Music Historiography in New Zealand." In *Music's Intellectual History*, edited by Barbara Dobbs Mackenzie Zdravko Blažekovič. New York: RILM 2009.

Mane-Wheoki, Jonathan. "Culturalisms and the Art Curriculum". *The Arts in Education: Critical Perspectives from Aotearoa New Zealand* New Zealand: Dunmore Press Ltd, 2003.

Mannes, Elena. "Music Instinct: Science and Song." 2009.

Mansfield, Janet E. "Beyond the 'Beauty Full' Classroom: The Arts Curriculum ". In *The Arts in Education: Critical Perspectives from Aotearoa New Zealand*. New Zealand: Dunmore Press Ltd, 2003.

Mansfield, Janet. "'Literacies' in the Arts: A New Order of Presence." *Policy Futures in Education* 8, no. 1 (2010): 100-10.

Manson, Marilyn (Brian Hugh Warner)." In *Marquis Who's Who in America*, edited by Marquis Who's Who. 70th ed. Marquis Who's Who LLC, 2016. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/marquisam/manson_marilyn_brian_hugh_warner/0?institutionId=781

Manson, Marilyn. *Rock & roll: Columbine: Whose fault is it?*. San Francisco, Calif: Rolling Stone LLC. 1999.

Mark, M. *A Concise History of American Music Education*. R&L Education, 2008.

Mark, Michael L. "The Evolution of Music Education Philosophy from Utilitarian to Aesthetic." In *Music Education Research: An Anthology from the Journal of Research in Music Education*, edited by Harry E. Price. United States of America: The National Association for Music Education, 1998.

McClung, Alan C. "Extramusical Skills in the Music Classroom." *Music Educators Journal* 86, no. 5 (2000): 37-68.

McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996.

McLean, Mervyn. *Weavers of Song*. University of Auckland: Auckland University Press, 1999.

McMaster, Christopher. "Working the 'Shady Spaces': Resisting Neoliberal Hegemony in New Zealand Education." *Policy Futures in Education* 11, no. 5 (2013): 523-31.

McPhail, Graham. "From singular to over-crowded region: Curriculum change in senior secondary school music in New Zealand." *British Journal of Music Education* 29, no. 3 (2012): 317-30.

McRae, Andrew. "Hamilton Left without Major Performance Centre " Radio New Zealand, <http://www.radionz.co.nz/news/regional/300087/for-hamilton,-the-show-can't-go-on>

Mediaite: Marilyn manson: Media storm after columbine ruined my career (2015). Chatham: Newstex. Retrieved from <http://ezproxy.waikato.ac.nz/login?url=http://search.proquest.com/docview/1690721537?accountid=17287>

Mercy, James A., and Lala Carr Steelman. "Familial Influence on the Intellectual Attainment of Children." *American Sociological Review* 47, no. 4 (1982): 532-42.

Merriam, Alan P. *The Anthropology of Music*. Evanston, Ill.: Northwestern University Press, 1964.

Michael S. Franklin, Katherine Sledge-Moore, Chun-Yu Yip, John Jonides, Katie Rattray, and Jeff Moher. 2008. "The effects of musical training on verbal memory." *Psychology of Music* 36 (3): 353-65.

Mike Lerner, Maxim Pozdorovkin. "Pussy Riot: A Punk Prayer." 88 min. Russia, 2013.

Ministry of Education. "Education in New Zealand." Wellington, New Zealand, 1992.

Ministry of Education. *The New Zealand Education System: An Overview*. Wellington: International Policy and Development Unit, Ministry of Education, 2002.

Mona Lisa Chanda, Daniel J. Levitin. "The Neurochemistry of Music". *Trends in Cognitive Sciences* 17, no. 4 (2013): 179-93.

Moore, Michael. "Bowling for Columbine." 120 min. USA, 2002.

Moreno, Sylvain, Carlos Marques, Andreia Santos, Manuela Santos, São Luís Castro, and Mireille Besson. "Musical training influences linguistic abilities in 8-year-old children: More evidence for brain plasticity." *Cerebral Cortex* 19 (2008): 712-23.

Morrison, Steven J. "Music Students and Academic Growth." *Music Educators Journal* 81, no. 2 (1994): 33-36.

Morris-Travers, Deborah. "Hearing the Voices of Our Children." In *TEDx Talks*, 2016.

"Mozart effect." In *The Penguin Dictionary of Psychology*, by Arthur S. Reber, Rhiannon Allen, and Emily Sarah Reber. 4th ed. Penguin, 2009. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/penguinpsyc/mozart_effect/0?institutionId=781

"Music on the Brain." 29.17: ABC, 2016.

"Music - Sound Arts: 2015- Key Findings." University of Otago: Ministry of Education, 2015.

"Music Teachers Point to Crisis in Primary Schools." In *Nine To Noon*, 19.33. Radio New Zealand, 2016.

Music, The Associated Board of the Royal Schools of. "Music Theory." http://nz.abrsm.org/fileadmin/user_upload/syllabuses/theoryComplete10.pdf

"National Singing Programme." International Music Education Research Centre, <http://www.imerc.org/j3/research/40-national-singing-programme>.

Nations, United. "Transforming Our World: The 2030 Agenda for Sustainable Development." <https://sustainabledevelopment.un.org>, 2015.

Neal, Tracy. "Sports, Recreation Spending Trumps Arts." Stuff, <http://www.stuff.co.nz/nelson-mail/news/7252819/Sports-recreation-spending-trumps-arts>.

New Zealand Society for Music Education. Conference 1985 : Christchurch, N.Z.). *New Directions in Music Education : Yearbook 1985*. Christchurch, N.Z.: Organising Committee of Music 85, 1985.

New Zealand Society for Music Education. Conference 1993 : Hamilton, N.Z.). *Music Building Bridges = Te Aro Puoro : Papers Presented at Music 93, the Sixth Biennial Conference of the New Zealand Society for Music Education Held in Hamilton, New Zealand, August 27th-30th*. Hamilton, N.Z.: Organising Committee of Music 93, 1994.

New Zealand Society for Music Education. Conference 1999 : Hawkes Bay, N.Z.). *Spring into Music : Conference and Workshop Papers*. Havelock North, N.Z.: Organising Committee, 1999.

New Zealand Society for Music Education (Inc) Year Book 1993. Music Building Bridges Hamilton: Organising Committee of Music. 1994.

"New Zealand Education System Overview." edited by Ministry of Education, 2014.

Nina Kraus, Erika Skoe. "A Little Goes a Long Way: How the Adult Brain Is Shaped by Musical Training in Childhood." *The Journal of Neuroscience* 32, no. 34 (2012): 11507-10.

Nina Kraus, Travis White-Schwoch. "Music Training: Lifelong Investment to Protect the Brain from Hearing Loss." *Acoustics Australia* 42, no. 2 (2014): 117-23.

Norton, Andrea, Ellen Winner, Karl Cronin, Katie Overy, Dennis J. Lee, and Gottfried Schlaug. 2005. Are there pre-existing neural, cognitive, or motoric markers for musical ability? *Brain and Cognition* 59 (2): 124-34.

Norwood, Doug. "Sprechen sie Jazz? - A GI Digs the 1950's German-Austrian Jazz Scene." *IAJRC Journal* 47, no. 3 (2014): 10-14.

Nunns, Richard. *Te Ara Puoro: A Journey Into The World of Māori Music*. Nelson, New Zealand: Craig Potton Publishing, 2014.

Nyce, Douglas. "New Zealand Music Education: A Promise Broken." Paper presented at the Proceedings of the Joint Conference of XXXIst ANZARME Annual Conference and the 1st Conference of the Music Educators Research Centre (MERC), Melbourne, 2009.

"Occasional Notes." *The Musical Times and Singing Class Circular* 30, no. 555 (1889): 271-72. <http://www.jstor.org.ezproxy.waikato.ac.nz/stable/3360277>

OECD (2012), *Education at a Glance 2012: OECD Indicators*, OECD Publishing.

OECD (2016), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris.

(OECD), The Organisation for Economic Co-operation and Development. "Our Mission." <http://www.oecd.org.ezproxy.waikato.ac.nz/about/>

Orsmond, Gael I., and Leon K. Miller. 1999. Cognitive, musical and environmental correlates of early music instruction. *Psychology of Music* 27 (1): 18-37.

"Our Purpose, Vision and Behaviours." <http://www.education.govt.nz/ministry-of-education/our-role-and-our-people/our-purpose-vision-and-behaviours/>

O.W. Neighbour. "Schoenberg, Arnold." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed October 17, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/25024>

Pamela M. Potter. "Nazism." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed October 17, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/42491>

Pascual-Leone, Alvaro, Amir Amedi, Felipe Fregni, and Lotfi Merabet. "The Plastic Human Brain Cortex." *Annual Review of Neuroscience* 28 (2005): 377-401.

Patel, Peretz, Tramo, and Labreque. "Processing Prosodic and Musical Patterns: A Neuropsychological Investigation." *Brain and Language* 61, no. 1 (1998): 123-44.

Paula Morgan and Bruno Nettl. "Merriam, Alan P.." *Grove Music Online*. Oxford Music Online. Oxford University Press, accessed September 25, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/18460>

Peters, Michael. "What Does It Mean to Be Critical in Arts Education Today?" In *The Arts in Education: Critical Perspectives from Aotearoa New Zealand*. New Zealand: Dunmore Press Ltd, 2003.

Plato, and A. D. Bloom. *The Republic of Plato*. Basic Books, 1991.

Plato. *Laws*. Translated by Benjamin Jowett. Cosimo Classics, 2008.

Pinker, Steven. *How the Mind Works*. New York: W.W. Norton & Company, 1997.

Purushothaman, Dr. *What Confucius Said*. Centre For Human Perfection, 2014.

"Pussy Riot: The Story So Far." BBC News, <http://www.bbc.com/news/world-europe-25490161>

Radio New Zealand. "Otago Uni Confirms Humanities Job Cuts." <http://www.radionz.co.nz/news/national/320912/otago-uni-confirms-humanities-job-cuts>

"Rāga." *The Oxford Dictionary of Music*, 2nd ed. rev.. *Oxford Music Online*. Oxford University Press, accessed June 29, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t237/e8290>

Rauscher, Frances H., and Sean C. Hinton. "Music Instruction and Its Diverse Extra-Musical Benefits." *Music Perception: An Interdisciplinary Journal* 29, no. 2 (2011): 215-26.

Rauscher, Frances H., Gordon L. Shaw and Katherine N. Ky. "Listening to Mozart enhances spatial-temporal reasoning: Towards a neurophysiological basis." *Neuroscience Letters* (1995): 44-47.

Rauscher, Frances H., Gordon L. Shaw, Linda J. Levine, Eric L. Wright, Wendy R. Dennis and Robert L. Newcomb. "Music Training Causes Long-Term Enhancement of Preschool Children's Spatial-Temporal Reasoning." *Neurological Research* 19 (1997): 2-8.

Read, Herbert. *Education through Art* England: Faber and Faber Limited, 1958.

Reimer, Bennett. *Seeking the Significance of Music Education: Essays and Reflections*. United States of America: The National Association for Music Education, Rowman & Littlefield Education, 2009.

Rich, Eric E. *The Education Act 1870: A Study of Public Opinion*. London: Longmans, Green and Co Ltd, 1970.

Rickard, Nikki S., Jorge T. Vasquez, Fintan Murphy, Anneliese Gill, Samia R. Toukhsati. "Benefits of a Classroom Based Instrumental Music Program on Verbal Memory of Primary School Children: A Longitudinal Study." *Australian Society for Music Education Incorporated* 1 (2010): 36-47.

Rickard, Nikki S., Peter Appelman, Richard James, Fintan Murphy, Anneliese Gill, and Caroline Bambrick. "Orchestrating Life Skills: The Effect of Increased School-Based Music Classes on Children's Social Competence and Self-Esteem." *International Journal of Music Education* 31, no. 3 (2012): 292-309

Ritchie, John A. "Music in New Zealand Education." *Australian Journal of Music Education*, no. 4 (1969): 52.

Robert P. Carroll, Stephen Prickett. *The Bible : Authorized King James Version*. Oxford World's Classics (Oxford University Press). Oxford ; New York: Oxford University Press, 1998.

Royal, Te Ahukaramū Charles. *Māori - Pre-European society*. Te Ara - the Encyclopaedia of New Zealand. updated 3-Feb-15

Rumbold, Ian. "spheres, music of the." *The Oxford Companion to Music*. *Oxford Music Online*. Oxford University Press, accessed May 9, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t114/e6387>

Ruppert, Sandra S. "Critical Evidence: How the Arts Benefit Student Achievement." National Assembly of State Arts Agencies, 2006.

Sachs, Curt. *A Short History of World Music*. London: Denis Dobson Ltd, 1969.

Sacks, Oliver. *Musicophilia*. London: Picador, 2008.

Salimpoor, Valorie, Mitchel Benovoy, Kevin Larcher, Alain Dagher, and Robert Zatorre. "Anatomically Distinct Dopamine Release during Anticipation and Experience of Peak Emotion to Music." *Nature Neuroscience* 14, no. 2 (2011): 257-62.

Schellenberg, E. Glenn. "Music Lessons Enhance IQ" *Psychological Science* 15, no. 8 (2004): 511-14.

Schlaug, Gottfried. "The Brain of Musicians. A Model for Functional and Structural Adaption.". USA: Harvard Medical School, 1995.

Senate Environment, Recreation, Communications and the Arts Committee (SERCARC). "Arts Education." Canberra, Australia, 1995.

Signorile, Vito. "The Pythagorean Comma: Weber's Anticipation of Sociology in a New Key." *Human Studies* 3, no. 2 (1980): 115-36.
<http://www.jstor.org.ezproxy.waikato.ac.nz/stable/20008752>

Simpson, J., Duncanson, M., Oben, G., Wicken, A., & Gallagher, S. (2016). Child Poverty Monitor: Technical Report 2016 (National Report). New Zealand Child and Youth Epidemiology Service. Retrieved from <http://hdl.handle.net/10523/7006>

Slater, Jessica, Dana L. Strait, Erika Skoe, Samantha O'Connell, Elaine Thompson, Nina Kraus. "Longitudinal Effects of Group Music Instruction on Literacy Skills in Low-Income Children." *PLoS ONE* 9, no. 11 (2014): 1-9.

Slaton, Emily Dawn. "Music Education Budget Crisis." *Music Educators Journal* 99, no. 1 (2012): 33-35.

Slevc, L. Robert, and Akira Miyake. "Individual Differences in Second-Language Proficiency." *Psychological Science* 17, no. 8 (2006): 675-81.

Small, David. "Neo-Liberalism in Crisis? Educational Dimensions." *Policy Futures in Education* 9, no. 2 (2011): 258-66.

"Statement of Intent: 2015 - 2018." New Zealand Symphony Orchestra, 2014.

Statistics New Zealand, Ministry for Culture and Heritage. "A Measure of Culture: Cultural Experiences and Cultural Spending in New Zealand." New Zealand, 2003.

Stephen Clift, and Ian Morrison. "Group Singing Fosters Mental Health and Wellbeing: Findings from the East Kent "Singing for Health" Network Project." *Mental Health and Social Inclusion* 15, no. 2 (2011): 88-97.

Stephen Slawek. "Shankar, Ravi." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed July 24, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/25580>

Swanwick, K. *Music, Mind, and Education.* Routledge, 1988. 107.

Tait, M. J. *Music Education in New Zealand.* Hamilton: Times Commercial Printers, 1970.

Tame, David. *The Secret Power of Music.* Vermont: Destiny Books, 1984.

Tanner, H. M. *China: A History.* Hackett Publishing Company, 2009.

Taruskin, Richard. *The Oxford History of Western Music* 5vols. Vol. 5, New York: Oxford University Press 2010.

Taylor, Gordon Rattray. *Rethink: A Paraprimitive Solution* London: Secker & Warburg, 1972.

Teachman, Jay D. "Family Background, Educational Resources, and Educational Attainment." *American Sociological Review* 52, no. 4 (1987): 548-57.

Te Ahukaramū Charles Royal. 'Māori - Pre-European society', Te Ara - the Encyclopaedia of New Zealand, <http://www.TeAra.govt.nz/en/maori/page-2> (accessed 25 January 2017)

Te Ahukaramū Charles Royal, 'Māori – The arrival of Europeans', Te Ara – the Encyclopaedia of New Zealand, <http://www.TeAra.govt.nz/en/maori/page-3> (accessed 25 January 2017)

Temple, Julien, Julien Temple, Anita Camarata, Amanda Temple, Paul Cook, Steve Jones guitarist, Glen Matlock, et al. 1999. *The Filth and the Fury*. England: Dendy Films.

"The Arts in the New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2000.

"The New Zealand Curriculum." edited by Ministry of Education. Wellington: Learning Media Limited, 2007.

Theory of Music Syllabus. Trinity College London, 2016.

The Oxford History of New Zealand. Second ed. Auckland: Oxford University Press, 1992.

"Tertiary Education Strategy: 2014-2019." edited by Ministry of Education: Ministry of Education and the Ministry of Business, Innovation and Employment, 2014.

"The Arts 2015 - Key Findings." In *National Monitoring Study of Student Achievement*. University of Otago, 2016.

The Tertiary Education Union, Te Hautu Kahurangi o Aotearoa. "Tough Times for Humanities and Languages." <https://audioboom.com/posts/5261956-tough-times-for-humanities-and-languages>

Thinking and Making: Selections from the Writings of John Paynter on Music Education. Oxford Music Education Series England: Oxford University Press, 2008.

Thomson, John Mansfield. *The Oxford History of New Zealand Music*. Auckland Oxford University Press, 1991.

Thwaites, Trevor. "How Primary School Students View Music and the Arts." *ACE Papers*, no. 13 (2003): 88.

Thwaites, Trevor. "Music Education in a New Key: The Dissonance of Competence, Connectedness, Culture and Curriculum." *Research in New Zealand Performing Arts: Nga Mahi a Rehia no Aotearoa* 1 (2009).

Thomas J. Mathiesen, et al. "Greece." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed May 9, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/11694pg4>

Tierney, Adam T., Jennifer Krizman, and Nina Kraus. "Music Training Alters the Course of Adolescent Auditory Development." *Proceedings of the National Academy of Sciences* 112, no. 32 (2015): 10062-67.

Tonneijck, Hetty I. M., Astrid Kinébanian, and Staffan Josephsson. "An Exploration of Choir Singing: Achieving Wholeness through Challenge." *Journal of Occupational Science* 15, no. 3 (2008): 173-80.

"Tritone." *The Oxford Dictionary of Music*, 2nd ed. rev.. *Oxford Music Online*. Oxford University Press, accessed October 24, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t237/e10439>

Union, Tertiary Education. "Proposed Job Cuts at Waikato University Prove National's Tertiary Education Experiment Is Failing." <http://teu.ac.nz/2017/03/waikato-arts-job-cuts/>

Vaget, Hans Rudolf. "Wagnerian Self-Fashioning: The Case of Adolf Hitler." *New German Critique*, no. 101 (2007): 95-114. <http://www.jstor.org.ezproxy.waikato.ac.nz/stable/27669199>

Warren Anderson and Thomas J. Mathiesen. "Ethos." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed May 9, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/09055>

Warren Anderson and Thomas J. Mathiesen. "Plato." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed May 17, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/21922>

Watson, John E. *Intermediate Schooling in New Zealand*. Edited by New Zealand Council for Educational Research Wellington: Whitcombe and Tombs Limited, 1964.

Webber, Andrew Lloyd. By Graham Norton. *The Graham Norton Show* (2016).

Welch, Graham F., Evangelos Himonides, Jo Saunders, Ioulia Papageorgi, and Marc Sarazin. "Singing and Social Inclusion." *Frontiers in Psychology* 5 (2014): 1-12.

Wells, Elizabeth A. "The New Woman: Lady Macbeth and Sexual Politics in the Stalinist Era." *Cambridge Opera Journal* 13, no. 2 (2001): 163-89.

Winner, E., T. Goldstein and S. Vincent-Lancrin. *Art for Art's Sake? Overview*, OECD Publishing, 2013.

Whiteford, Harvey A., Louisa Degenhardt, Jürgen Rehm, Amanda J. Baxter, Alize J. Ferrari, Holly E. Erskine, Fiona J. Charlson, *et al.* "Global Burden of Disease Attributable to Mental and Substance Use Disorders: Findings from the Global Burden of Disease Study 2010." *The Lancet* 382, no. 9904 (2010): 1575-86.

Whittall, Arnold. "tritone." *The Oxford Companion to Music*. *Oxford Music Online*. Oxford University Press, accessed October 24, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/opr/t114/e6939>

"Wilhelm, Ii Kaiser 1859-1941". 2015. In *Chambers Dictionary of Great Quotations*, edited by Chambers. London: Chambers Harrap. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/chambq/wilhelm_ii_kaiser_1859_1941/0

William B. Davis, Kate E. Gfeller, Michael H. Thaut. *An Introduction to Music Therapy, Theory and Practice*. Third Edition. ed. Silver Spring, Maryland: American Music Therapy Association, Inc, 2008.

William Drabkin. "Tritone." *Grove Music Online*. *Oxford Music Online*. Oxford University Press, accessed October 24, 2016, <http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/28403>

Xunzi. *Xunzi: A Translation and Study of the Complete Works*. Translated by John Knoblock. Stanford CA: Stanford University Press, 1999.

Yang, Philip. "The Impact of Music on Educational Attainment." *Journal of Cultural Economics* 39, no. 4 (2015): 369-96.

Wang, Yuhwen. "The Ethical Power of Music: Ancient Greek and Chinese Thoughts." *Journal of Aesthetic Education* 38, no. 1 (2004): 89-104.

"Zhou dynasty." In *Andromeda Encyclopedic Dictionary of World History*, edited by John Haywood. Windmill Books (Andromeda International), 2001. http://ezproxy.waikato.ac.nz/login?url=http://search.credoreference.com/content/entry/andedwh/zhou_dynasty/0?institutionId=781

Appendices

Appendix A: The Perception of Music Education in New Zealand Society Survey

This research project will explore how music education is perceived in New Zealand's society and how its benefits are understood. The project will highlight the benefits of a meaningful music education and question its role and value in society. Through this research, I hope to advocate music education, raising awareness of the benefits and aiding music programs throughout the country. This research project is conducted as partial requirement for a Master of Arts in Music.

The information collected will be used to write a Master of Arts thesis in Music. Once completed and bound this will be available through the library at the University of Waikato, and electronically through the online database. It is possible that articles and presentations may be the outcome of the research. Due to the requirements of a Master of Arts, documents of research will be stored for five years after the thesis has been submitted. After this period, all notes and documents will be destroyed.

The online survey should take no longer than 10 minutes and all participants will remain anonymous. If you have any questions or concerns about the project, either now or in the future, please feel free to contact either:

Researcher:

Jade Browne

027 8440 403

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Supervisor:

Dr. Michael Williams

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By submitting your answers, you agree to the terms outlined above.

This research project has been approved by the Human Research Ethics Committee of the Faculty of Arts and Social Sciences. Any questions about the ethical conduct of this research may be sent to the Secretary of the Committee, email fass-ethics@waikato.ac.nz, postal address, Faculty of Arts and Social Sciences, Te Kura Kete Aronui, University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

Survey:

What region do you teach in?

How long have you been teaching for?

What age group do you usually teach?

Why did you choose a career in music education?

What adversities do music educators face?

Can you comment on the current issue of gaining teachers registration or a Limited Authority to Teach?

Has gaining registration or an Limited Authority to Teach been an issue for yourself, your employees or colleagues?

Do you feel as if a meaningful music education is being taught throughout New Zealand? Why?

Do you feel as if music in an educational context is underestimated, underfunded or undervalued? Why do you feel like this?

Is there anything you would like to see change in New Zealand's Education System?

Is there anything else you would like to add or comment on?

Appendix B: Ethics Approval

Linguistics Programme
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THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Jade Browne
Michael Williams

MUSIC

17 November, 2016

Dear Jade,

Re: **FS2016-67 THE PERCEPTION OF MUSIC EDUCATION IN NEW ZEALAND SOCIETY**

Thank you for submitting your amended application to the FASS Human Research Ethics Committee. We have reviewed your application and the Committee is now pleased to offer formal approval for your research activities, including interviews and an online survey targeting music educators.

We encourage you to contact the committee should issues arise during your data collection, or should you wish to add further research activities or make changes to your project as it unfolds. We wish you all the best with your research. Thank-you for engaging with the process of Ethical Review.

Regards,

Julie Barbour, Chair
Faculty of Arts and Social Sciences Human Research Ethics Committee.